

UNITED STATES DEPARTMENT OF THE INTERIOR

HAROLD L. ICKES, Secretary

GEOLOGICAL SURVEY

W. C. MENDENHALL, Director

Water-Supply Paper 830

SURFACE WATER SUPPLY
of the UNITED STATES
1937

PART 10
THE GREAT BASIN

NATHAN C. GROVER, Chief Hydraulic Engineer
G. H. CANFIELD, ROBERT FOLLANSBEE, H. D. McGLASHAN
THOMAS R. NEWELL, AND A. B. PURTON
District Engineers

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



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1938

CONTENTS

	Page
Scope of work.....	1
Definition of terms.....	1
Explanation of data.....	1
Accuracy of field data and computed results.....	2
Publications.....	3
Records of discharge collected by agencies other than the Geological Survey.....	8
Cooperation.....	8
Division of work.....	9
Gaging-station records.....	9
Great Salt Lake Basin.....	9
Gages on Great Salt Lake, Utah.....	9
Bear River Basin.....	10
Bear River near Evanston, Wyo.....	10
Bear River at Harer, Idaho.....	11
Bear River at Alexander, Idaho.....	12
Bear River near Weston, Idaho.....	13
Bear River near Collinston, Utah.....	14
Logan River above State dam, near Logan, Utah.....	15
Utah Power & Light Co.'s tailrace near Logan, Utah.....	16
Logan, Hyde Park & Smithfield Canal near Logan, Utah.....	17
Blacksmith Fork above Utah Power & Light Co.'s dam near Hyrum, Utah.....	18
West Side Canal near Collinston, Utah.....	19
Hammond (East Side) Canal near Collinston, Utah.....	20
Devil Creek near Malad, Idaho.....	21
Deep Creek below First Creek, near Malad, Idaho.....	22
Weber River Basin.....	23
Weber River near Oakley, Utah.....	23
Weber River near Coalville, Utah.....	24
Echo Reservoir at Echo, Utah.....	25
Weber River at Echo, Utah.....	26
Weber River at Devils Slide, Utah.....	27
Weber River at Gateway, Utah.....	28
Weber River near Plain City, Utah.....	29
Chalk Creek at Coalville, Utah.....	30
South Fork of Ogden River near Huntsville, Utah.....	31
Pine View Reservoir near Ogden, Utah.....	32
Ogden River near Ogden, Utah.....	33
Jordan River Basin.....	34
Jordan River at Narrows, near Lehi, Utah.....	34
Salt Creek near Nephi, Utah.....	35
Spanish Fork at Thistle, Utah.....	36
Spanish Fork at Castilla, Utah.....	37
Provo River at Forks, Utah.....	38
Provo River at Provo, Utah.....	39
Weber-Provo diversion canal near Woodland, Utah.....	40
South Fork of Provo River at Forks, Utah.....	41
Sevier Lake Basin.....	42
Sevier River near Kingston, Utah.....	42
Piute Reservoir near Marysville, Utah.....	43
Sevier River below Piute Dam, near Marysville, Utah.....	44
Sevier River near Vermilion, Utah.....	45
Sevier River below San Pitch River, near Gunnison, Utah.....	46
Sevier Bridge Reservoir near Juat Utah.....	47
Sevier River near Juab, Utah.....	48
East Fork of Sevier River near Kingston, Utah.....	49
Beaver River Basin.....	50
Beaver River near Beaver, Utah.....	50
Beaver River at Rockyford Dam, near Minersville, Utah.....	51
Escalante Desert Basin.....	52
Coal Creek near Cedar City, Utah.....	52
Salton Sea Basin.....	53
Salton Sea, Calif.....	53
Palm Canyon Creek near Palm Springs, Calif.....	54
Mojave River Basin.....	55
Deep Creek near Hesperia, Calif.....	55
Mojave River near Victorville, Calif.....	56
Mojave River at Barstow, Calif.....	57
West Fork of Mojave River near Hesperia, Calif.....	58
Antelope Valley Basin.....	59
Rock Creek near Valleyermo, Calif.....	59
Little Rock Creek near Little Rock, Calif.....	60
Owens Lake Basin.....	61
Owens River near Round Valley, Calif.....	61
Owens River at Pleasant Valley, near Bishop, Calif.....	62
Owens River near Big Pine, Calif.....	63
Rock Creek at Sherwin Hill, near Bishop, Calif.....	64
Rock Creek near Round Valley, Calif.....	65
Pine Creek at division box, near Bishop, Calif.....	66
Pine Creek near Round Valley, Calif.....	67

SURFACE WATER SUPPLY OF THE GREAT BASIN, 1937

SCOPE OF WORK

This volume is one of a series of 14 reports presenting results of measurements of flow made on streams in the United States during the water year ending September 30, 1937. The work was begun in 1888 in connection with special studies relating to irrigation. Measurements of stream flow have been made at about 7,200 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July 1937, 3,380 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements were made at other points.

In the execution of the work many State and private 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 8.

DEFINITION OF TERMS

The units in which stream-flow data are presented in this report and other terms used herein are defined as follows:

"Second-foot" is an abbreviation for "cubic feet per second." A second-foot is a rate of flow of 1 cubic foot per second, or the rate of discharge of water flowing in a channel when the cross-sectional area is 1 square foot and the average velocity is 1 foot per second.

"Second-foot 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 its 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.

"Second-foot-day" is the volume of water represented by a flow of 1 second-foot for 24 hours.

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

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

EXPLANATION OF DATA

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 nonrecording 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. Typical gaging stations, equipped with water-stage recorder and measuring cable and car, are shown on plate 1.

Rating tables giving the discharge for any stage are prepared from the discharge measurements. The application of the daily gage height to these rating tables gives the daily discharge from which the monthly and yearly mean discharge is computed.

The data presented for each gaging station in the area covered by this report usually comprise a description of the station, a table showing the daily discharge of the stream, and a table of monthly and yearly discharge and run-off. Skeleton rating tables are published except for those stations whose daily discharge for the greater part of the year was determined by shifting-control method or by use of slope or other special methods.

The description of the station gives the type of gage, its latitude and longitude determined from the best available maps, and information in regard to diversions that decrease the flow at the gage, artificial regulation from pondage or storage, and the accuracy of the records. Under "Average discharge" is given the average discharge for the number of years indicated. It is given only for stations for which there are 10 or more complete years of record. Information under "Extremes" gives the maximum discharge and gage height; the minimum discharge if there is little or no regulation; the minimum daily discharge if there is extensive regulation, and also the minimum discharge if useful; and the minimum gage height except when it is of no importance. Unless otherwise qualified, the maximum discharge corresponds to the crest stage obtained by use of a water-stage recorder or a nonrecording gage read at the time of the crest. Likewise the minimum represents the lowest discharge unless otherwise qualified.

The table of daily discharge gives, for stations equipped with nonrecording gages, the discharge in second-feet corresponding to once-daily or the mean of twice-daily readings of the gage. For stations equipped with water-stage recorders the table gives the discharge corresponding to the mean daily gage height except for stations on streams subject to sudden or rapid fluctuation. For stations subject to such fluctuation the mean daily gage height may not indicate the true mean daily discharge, which must be obtained by averaging the discharge for intervals of the day or by using the discharge integrator, an instrument for obtaining the 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 "Second-foot-days" gives the sum for each month of the discharge given in the table of daily discharges. 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.

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 under "Remarks" in regard to the general accuracy of the records. "Excellent" indicates that, in general, the daily records are



A. ARTIFICIAL CONTROL, RECORDER HOUSE, AND MEASURING CABLE ON OLENTANGY RIVER, DELAWARE, OHIO.



B. RECORDER HOUSE AND MEASURING CABLE ON KAWEAH RIVER, THREE RIVERS, CALIF.

TYPICAL RIVER-MEASUREMENT STATIONS.

in error not more than 5 percent; "good", not more than 10 percent; "fair", not more than 15 percent; and "poor", over 15 percent.

The monthly means for any station may represent with high accuracy the quantity of water flowing past the gage, but the figures showing discharge per square mile and depth 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.

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 station must first be satisfied.

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, and that greater degrees of refinement in computations and records may be warranted with increased data and use of improved equipment.

PUBLICATIONS

The results of stream-flow measurements are now published annually in 14 parts, each part covering an area whose boundaries coincide with natural drainage features as indicated below:

- Part 1. North Atlantic slope basins (St. John River to York River).
2. South Atlantic slope and eastern Gulf of Mexico basins (James River to Mississippi River).
3. Ohio River Basin.
4. St. Lawrence River Basin.
5. Hudson Bay and upper Mississippi River basins.
6. Missouri River Basin.
7. Lower Mississippi River Basin.
8. Western Gulf of Mexico basins.
9. Colorado River Basin.
10. The Great Basin.
11. Pacific slope basins in California.
12. Pacific slope basins in Washington and upper Columbia River Basin.
13. Snake River Basin.
14. Pacific slope basins in Oregon and lower Columbia River Basin.

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

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

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

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

Augusta, Maine, Statehouse.
Boston, Mass., 945 Post Office Building.
Hartford, Conn., 203 Federal Building.
Albany, N. Y., 528 Federal Building.
Trenton, N. J., 228 Federal Building.

Harrisburg, Pa., 490 Education Building.
 Charlottesville, Va., University of Virginia.
 South Charleston, W. Va., Naval Ordnance Plant.
 Asheville, N. C., 220 Post Office Building.
 Columbia, S. C., 119 United States Courthouse.
 Atlanta, Ga., Georgia School of Technology.
 Ocala, Fla., Post Office Building.
 Montgomery, Ala., Post Office Building.
 Chattanooga, Tenn., 442 Post Office Building.
 Louisville, Ky., Federal Building.
 Columbus, Ohio, Engineering Experiment Station, Ohio State University.
 Indianapolis, Ind., 319 Federal Building.
 Urbana, Ill., 14 Post Office Annex.
 Madison, Wis., 337N State Capitol.
 St. Paul, Minn., 808 New Post Office Building.
 Iowa City, Iowa, 402 Hydraulic Laboratory, University of Iowa.
 St. Louis, Mo., 906 Customhouse, 1114 Market Street.
 Rolla, Mo., Missouri Geological Survey Building, Missouri School of Mines
 and Metallurgy.
 Topeka, Kans., 305 Federal Building.
 Fort Smith, Ark., Post Office Building.
 Austin, Tex., State Highway Building.
 Santa Fe, N. Mex., 3 United States Courthouse.
 Tucson, Ariz., 210 Post Office Building.
 Denver, Colo., 230 Customhouse.
 Salt Lake City, Utah, 303 Federal Building.
 Idaho Falls, Idaho, 228 Federal Building.
 Boise, Idaho, 429 Federal Building.
 Helena, Mont., 412 Federal Building.
 Tacoma, Wash., 406 Federal Building.
 Portland, Oreg., 606 Post Office Building.
 San Francisco, Calif., 208 Federal Office Building.
 Los Angeles, Calif., 512 Eighth and Figueroa Building.
 Honolulu, Hawaii, 225 Federal Building.

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

Records of flow of streams in the United States have been published in the reports
 tabulated as follows:

Stream-flow data in reports of the 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	.....do.....	1884 to Dec. 31, 1892.
14th A, pt. 2	Monthly discharge (long-time records, 1871-93).....	1888 to Dec. 31, 1893.
B 131.....	Descriptions, measurements, gage heights, and ratings.	1893-94.
16th A, pt. 2	Descriptive information only.....	
B 140.....	Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years).	1895.
W 11.....	Gage heights (also gage heights for earlier years).	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).	1895-96.
W 15.....	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas River.	1897.
W 16.....	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte Rivers, and western United States.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27.....	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28.....	Measurements, ratings, and gage heights, Arkansas River and western United States.	1898.
20th A, pt. 4	Monthly discharge (also for many earlier years)....	1898.
W 35 to 39...	Descriptions, measurements, gage heights, and ratings.	1899.
21st A, pt. 4	Monthly discharge.....	1899.
W 47 to 52...	Descriptions, measurements, gage heights, and ratings.	1900.
22d A, pt. 4.	Monthly discharge.....	1900.
W 55, 56.....	Descriptions, measurements, gage heights, and ratings.	1901.
W 75.....	Monthly discharge.....	1901.

Note.— The reports which contain records after 1901 are given in the table on page 5.

Numbers of water-supply papers containing results of stream measurements, 1899-1937
(For basins included see p. 3)

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1899 a...	35	b 35, 36	36	36	36	36, 37	37	37	d 37, 38	38, e 39	39	39	39	39
1900 a...	47, b 48	49	49	49	49	49, 50	50	50	50	50	50	50	50	50
1901 a...	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1902 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1903 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1904 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1905 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1906 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1907 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1908 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1909 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1910 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1911 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1912 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1913 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1914 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1915 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1916 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1917 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1918 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1919 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1920 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1921 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1922 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1923 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1924 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1925 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1926 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1927 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1928 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1929 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1930 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1931 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1932 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1933 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1934 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1935 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1936 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75
1937 a...	65, 75	b 65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75

a Rating tables and index to Water-Supply Papers 35-39 contained in Water-Supply Paper 39. Tables of monthly discharge for 1899 in 21st Annual Report, part 4.

b James River only.

c Gallatin River.

d Green and Gunnison Rivers and Colorado River above Gunnison River.

e Mojave River only.

f Kings and Kern Rivers and south Pacific slope basins.

g Rating tables and index to Water-Supply Papers 47-52 and data on precipitation, water, and evaporation in 21st Annual Report, part 4.

h Monthly discharge for 1890 in 22d Annual Report, part 4.

i Mississippi and Schuykill Rivers to James River.

j Seito River.

k Loup, Platte, and Elkhorn Rivers and tributaries below Platte River.

l Tributaries of Mississippi River from east.

m Lake Ontario and tributaries to St. Lawrence River proper.

n Hudson Bay only.

o New England rivers only.

p Hudson River to Delaware River, inclusive.

q Susquehanna River to Yorkin River, inclusive.

r Platte and Kansas Rivers.

s Rating tables and index to Water-Supply Papers 53-58.

t Below junction with Gila River.

u Rogue, Umpqua, and Siletz Rivers only.

The foregoing table gives, by years and drainage basins, the numbers of the papers on surface water supply published from 1899 to 1937. The data for any particular station will, in general, be found in the reports covering the years during which the station was maintained. For example, the 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.

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 records obtained prior to 1904 has been published in Water-Supply Paper 119.

From time to time reports have been published that are compilations of records for various areas, usually a single State or drainage basin. These reports contain records previously published (some of which have been revised), as well as some records not contained in the annual series of water-supply papers. The following table gives the numbers and titles of these reports, arranged in alphabetical order by States and drainage basins.

Reports containing compilation of discharge by States and drainage basins

Water-Supply Paper	Year ending	State or drainage basin and title
STATE		
107	1903	Alabama, Water powers of, with an appendix on stream measurements in Mississippi.
298	1912	California, Water resources of, part 1, Stream measurements in Sacramento River Basin.
299	1912	California, Water resources of, part 2, Stream measurements in San Joaquin River Basin.
300	1912	California, Water resources of, part 3, Stream measurements in the Great Basin and Pacific coast river basins.
447	1918	California, Surface water supply of the southern Pacific slope of.
597e	1927	California, Surface water supply of Sacramento River Basin.
636d	1927	California, Surface water supply of San Joaquin River Basin.
636e	1927	California, Surface water supply of Pacific slope basins in.
637a	1927	California, Surface water supply of minor San Francisco Bay, northern Pacific, and Great basins in.
74	1900	Colorado, Water resources of.
197	1905	Georgia, Water resources of.
415	1915	Massachusetts, Surface waters of.
230	1906	Nebraska, Surface water supply of.
370	1910	Oregon, Surface water supply of.
424	1916	Vermont, Surface waters of.
492	1919	Washington, Summary of hydrometric data in.
469	1921	Wyoming, Surface waters of, and their utilization.
DRAINAGE BASIN		
395	1914	Colorado River (Colo., Utah, etc.) and its utilization, 1916.
617	1927	Colorado River, upper (Colo., Utah), and its utilization, 1929.
517	1920	Great Salt Lake Basin, Water powers of, 1924.
618	1926	Green River (Wyo., Utah) and its utilization, 1930.
198	1906	Kennebec River Basin (Maine), Water resources of, 1907.
		Milk River. (See St. Mary and Milk Rivers.)
536	1920	New-Kanawha River Basin (W. Va., Va., N. C.), Surface water supply of, 1925.
279	1909	Penobscot River Basin (Maine), Water resources of, 1912.
192	1906	Potomac River Basin (W. Va., Va., Md., etc.), 1907.
358	1913	Rio Grande Basin (N. Mex., Tex., etc.), Water resources of, 1888-1913.
491	1917	St. Mary and Milk Rivers (Mont. and Canada), Water supply of, 1920.
109	1904	Susquehanna River Basin (Pa., Md.), Hydrography of, 1905.

In addition to the records noted above, records of discharge have been published in State reports. Some of these are not contained in the publications of the Geological Survey or are revisions of records previously published in its water-supply papers. The following table contains a list of these reports.

State reports containing compilation of records of discharge

State	Year ending	Report	Issued by
Alabama....	1915	Bull. 17, Water powers of Alabama....	Geological Survey of Alabama.
Arkansas....	1928	Stream gaging report 1.....	Arkansas Geological Survey.
Georgia....	1920	Bull. 38, Water powers of Georgia....	Geological Survey of Georgia.
Illinois....	1937	Stream flow data of Illinois.....	Division of Waterways.
Do.....	1911	Water resources of Illinois.....	Rivers and Lakes Commission.
Indiana....	1927	Pub. 72, Surface water supply of Indiana.	Department of Conservation.
Do.....	^a 1930	Pub. 112, Surface water supply of Indiana.	Do.
Iowa.....	1932	Stream-flow records of Iowa.....	Iowa State Planning Board
Kansas....	^b 1919	Surface waters of Kansas.....	Kansas Water Commission.
Do.....	^c 1924	.....do.....	Do.
Do.....	^d 1928	.....do.....	Do.
Kentucky...	1920	Surface waters of Kentucky.....	Kentucky Geological Survey.
Minnesota..	1912	Water resources investigation of Minnesota.	State Drainage Commission.
Missouri1..	1926	Reports of Bureau of Geology and Mines, Vol. 20, 2d series, Water Resources of Missouri.	Missouri Bureau of Geology and Mines.
Nebraska...	1914	1st hydrographic report.....	Bureau of Water Power, Irrigation and Drainage.
Do.....	^e 1928	2d hydrographic report.....	Do.
New Jersey..	1928	Bull. 33, Surface water supply of New Jersey.	Department of Conservation and Development.
Do.....	^f 1934	Special Report 5, Surface water supply of New Jersey.	State Water Policy Commission.
New Mexico..	1925	Surface water supply of New Mexico....	Office of the State Engineer.
North Carolina.	1923	Bull. 34, Discharge records of North Carolina streams.	Department of Conservation and Development.
Oregon.....	1914	Bull. 4, Water resources of the State of Oregon.	Office of the State Engineer.
Do.....	^g 1924	Bull. 7, Water resources of the State of Oregon.	Do.
Do.....	^h 1930	Bull. 8, Water resources of the State of Oregon.	Do.
Do.....	ⁱ 1936	Bull. 9, Water resources of the State of Oregon.	Do.
Pennsylvania	1911	Report of Water Supply Commission of Pennsylvania.	Water Supply Commission of Pennsylvania.
Do.....	^j 1932	Stream-flow records of Pennsylvania...	Department of Forests and Waters.
Tennessee..	1924	Bull. 34, Water resources of Tennessee.	Department of Education.
Do.....	^k 1930	Bull. 40, Surface waters of Tennessee.	Do.
Utah.....	1905	5th Biennial Report, State Engineer...	Office of the State Engineer.
Virginia....	1927	Bull. 31, Water resources of Virginia.	Conservation and Development Commission.
Washington..	1933	Bull. 5, Monthly and yearly summaries of hydrometric data.	Department of Conservation and Development.
Wisconsin..	1914	1st report of Railroad Commission of Wisconsin to Legislature on water powers.	Railroad Commission of Wisconsin.
Do.....	^l 1923	2d report of Railroad Commission of Wisconsin to Legislature on water powers.	Do.

a Includes records for the years 1927-30.

b Includes records for the years 1895-1919.

c Includes records for the years 1919-24.

d Includes records for the years 1924-28.

e Includes records for the years 1914-28.

f Includes records for the years 1928-34.

g Includes records for the years 1914-24.

h Includes records for the years 1924-30.

i Includes records for the years 1930-36.

j Includes records for the years 1928-32.

k Includes average weekly discharge for the years 1920-30.

l Includes records for the years 1914-23.

Note.- In addition to the records contained in the reports listed above, the following States have issued annual or biennial reports in which are contained records of discharge: California, Colorado, Idaho, Indiana, Missouri, Montana, Nebraska, New Mexico, New York (also New York City Board of Water Supply), North Dakota, Oregon, Pennsylvania, Utah, Washington, and Wyoming.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

The following table contains a list of gaging stations for the area covered by this report at which records of daily discharge were collected during the water year October 1936 to September 1937, by agencies other than the Geological Survey. The records for these stations are not contained in publications of the Geological Survey.

Records of daily discharge collected by agencies other than the Geological Survey

Stream	Location	Period	Operated by	Remarks
Ana River.....	Below dam, about 6 miles northeast of Summer Lake, Oreg.	1929-37	Oregon State engineer.	1929-36 in Bulls. 8 and 9 Oregon State engineer; 1937 not published.
East Canyon Creek...	Morgan, Utah, above reservoir.	1932-37	Weber River water commissioner.	In water commissioner's annual reports.
.....Do.....	Morgan, Utah, below reservoir.	1932-37	.....do.....	Do.
East Canyon Reservoir.	Morgan, Utah.	1932-37	.....do.....	Do.
Honey Creek.....	Near Plush, Oreg..	1910-15 1921-22 1930-37	Oregon State engineer.	1910-15, 1921-22 in Geol. Survey water-supply papers; 1930-36 in Bulls. 5, 8 and 9 of Oregon State engineer; those for 1937 not published.
Ogden River, main branches and other tributary streams to reservoir area.	Huntsville, Utah, above backwater of Pine View Reservoir.	1935-37	Bureau of Reclamation.	In report of hydrologic investigation of Ogden River project.
Ogden River.....	Ogden, Utah, at mouth of canyon.	1935-37	.....do.....	Do.
Otter Creek (outlet).	Antimony, Utah, former Geological Survey gaging station published as near Coyoto.	*1920-37	Sevier River water commissioner.	In water commissioner's annual reports.
Otter Creek Reservoir.	.....do.....	*1915-37	.....do.....	Do.
Sevier River.....	Delta, Utah, former Geological Survey gaging station.	*1920-37	.....do.....	Do.
Strawberry Tunnel outlet.	at West Portal....	1913-37	Spanish Fork Water Users' Ass'n.	In reports of Strawberry Valley project and of water commissioner.
Thompson Valley Reservoir.	12 miles south of Silver Lake, Oreg.	*1922-28 1930 1932-37	Oregon State engineer.	1922-28, 1930, 1932-36 in Bulls. 8 and 9 of Oregon State engineer; 1937 not published.
Wheeler Creek.....	Ogden, Utah, near mouth.	1935-37	Bureau of Reclamation.	In report of hydrologic investigation of Ogden River project.

*Fragmentary.

Note.- Records of discharge are also collected for many canal and ditch diversions, with miscellaneous and fragmentary records for several natural streams. These records are published in the reports of the projects and of the water commissioners for the following river basins: Bear, Beaver, Carson, Humboldt, Jordan, Ogden, Provo, Spanish Fork, Sevier, Truckee, Walker, and Weber.

COOPERATION

The work in the several States was done under cooperative agreements as follows: In California, with the State Department of Public Works, Earl Lee Kelly, director, and Edward Hyatt, State engineer, and with San Bernardino and Los Angeles Counties; in Idaho, with the Department of Reclamation, R. W. Faris, commissioner; in Nevada, with the office of the State engineer, Alfred Merritt Smith; in Oregon, with the office of the State engineer, Charles E. Stricklin; in Utah, with the office of the State engineer, T. H. Humpherys; and in Wyoming, with the office of the State engineer, John D. Quinn.

Assistance in collecting records was rendered by the following organizations and corporations: In California, by the Walker River Irrigation District; in Utah, by the U. S. Bureau of Reclamation, Utah Power & Light Co., and Logan, Hyde Park & Smithfield Canal Co.

DIVISION OF WORK

The data for the stations in the several states were collected and prepared for publication under the supervision of the district engineers here named. In California (except for stations in Walker Lake Basin), H. D. McGlashan. In Idaho (except for stations on Bear River), Thomas R. Newell. In Oregon, G. H. Canfield, the work being done in collaboration with Charles E. Stricklin, State engineer. In Utah and Nevada and for stations in Walker Lake Basin in California and on Bear River in Idaho, A. B. Purton. In Wyoming, Robert Follansbee.

GAGING-STATION RECORDS

GREAT SALT LAKE BASIN

Gages on Great Salt Lake, Utah

Location.— Staff gages, lat. $40^{\circ}46'30''$, long. $112^{\circ}10'20''$, at Saltair, on southeast shore of lake, 15 miles west of Salt Lake City, and at Midlake, lat. $41^{\circ}13'$, long. $112^{\circ}36'$, on Lucin cut-off of Southern Pacific Railroad, 30 miles west of Ogden, Weber County, Utah. Zero of Saltair gage is 4,196.85 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, and October 1912 to September 1937 in reports of Geological Survey; July 1903 to December 1934 in reports of U. S. Weather Bureau.

Extremes.— Maximum elevation during year, 4,196.45 feet May 15 at Saltair gage; minimum, 4,194.25 feet Oct. 15 at both gages and Nov. 1 at Midlake gage. 1850-1937: Maximum elevation observed, 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, 4,193.75 feet Nov. 15, 1935, at Saltair gage.

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

Gage-height, in feet, of Great Salt Lake, Utah, water year 1936-37

Day	Saltair	Midlake
Oct. 1	-2.55	-3.65
15	-2.6	-3.75
Nov. 1	-2.55	-3.75
15	-2.45	-3.65
Dec. 1	-2.35	-3.5
15	-2.35	-
Jan. 1	-2.25	-3.4
15	-2.15	-3.35
Feb. 1	-2.05	-3.25
15	-1.9	-3.1
Mar. 1	-1.6	-2.85
15	-1.25	-2.35
Apr. 1	-.8	-1.9
15	-.65	-1.75
May 1	-.5	-1.75
15	-.4	-1.65
June 1	-.45	-1.6
15	-.5	-1.65
July 1	-.7	-1.85
15	-.8	-2.0
Aug. 1	-1.0	-2.15
15	-1.35	-2.5
Sept. 1	-1.6	-2.75
15	-1.75	-2.9

Bear River near Evanston, Wyo.

Location.— Water-stage recorder, lat. $41^{\circ}19'$, long. $111^{\circ}01'$, 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 1937.

Average discharge.— 24 years, 242 second-feet.

Extremes.— Maximum discharge during year, 3,420 second-feet Apr. 16 (gage height, 6.30 feet); minimum daily discharge, 0.3 second-feet Sept. 19, 21, 22.

1913-37: Maximum discharge, 3,690 second-feet June 14, 1921 (gage height, 6.35 feet); no flow during some periods in 1924, 1931, 1933, 1934.

Remarks.— Records excellent except those for period of ice effect, Dec. 2 to Mar. 27 (computed on basis of two discharge measurements, available gage heights, and weather records), and those below 20 second-feet, which are fair. Some diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	99	31	43	23	42	178	374	739	120	8.9	12
2	21	76	31	41	24	43	278	514	595	93	8.4	11
3	20	55	37	38	25	43	166	680	577	69	7.9	20
4	22	67	37	40	26	44	173	816	546	58	6.3	17
5	24	86	39	42	26	45	200	924	550	52	5.4	16
6	31	81	41	42	27	46	218	991	469	66	4.9	14
7	40	67	42	40	22	47	197	973	374	118	5.8	12
8	35	61	45	36	20	48	192	1,080	370	178	8.4	12
9	32	69	48	34	19	48	213	1,210	344	244	8.9	9.4
10	30	90	45	32	18	52	316	1,290	322	428	8.4	7.4
11	27	84	47	33	18	56	569	1,240	287	382	6.8	6.8
12	25	74	47	34	19	60	415	1,010	296	390	6.3	5.8
13	23	66	45	34	21	62	559	1,100	293	721	5.4	3.6
14	23	67	47	35	23	68	1,000	1,250	275	622	4.5	1.8
15	26	71	49	36	23	78	1,840	1,440	284	394	4.0	1.7
16	27	84	49	37	20	80	2,400	1,530	290	234	3.6	.9
17	31	90	48	35	22	86	1,080	1,490	378	168	4.9	.4
18	35	84	48	33	25	88	739	1,500	374	145	7.4	.4
19	36	69	51	31	30	90	744	1,480	351	141	7.4	.3
20	61	67	54	26	32	105	852	1,250	351	114	7.9	.4
21	67	72	54	24	33	115	982	1,120	378	91	5.8	.3
22	61	63	56	22	34	118	1,230	1,120	446	72	3.0	.3
23	55	59	54	21	33	120	694	1,100	460	59	3.3	1.7
24	52	53	48	21	33	120	496	996	336	42	2.0	9.4
25	53	56	44	23	34	124	478	838	266	30	2.0	16
26	56	61	46	25	35	126	631	784	239	26	1.4	15
27	52	66	48	27	37	124	748	721	202	22	1.0	13
28	52	74	48	26	39	124	600	730	163	15	.6	13
29	53	66	46	26	-	124	420	716	122	14	10	12
30	53	50	46	27	-	128	366	770	128	12	20	10
31	74	-	45	27	-	126	-	973	-	10	15	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,218	74	20	39.3	2,420		
November.....						2,127	99	50	70.9	4,220		
December.....						1,416	56	31	45.7	2,810		
Calendar year 1936.....						91,557	2,050	18	250	181,600		
January.....						991	43	21	32.0	1,970		
February.....						741	39	18	26.5	1,470		
March.....						2,560	128	42	83.2	5,120		
April.....						18,964	2,400	166	632	37,610		
May.....						31,990	1,530	374	1,032	63,460		
June.....						10,805	739	122	360	21,430		
July.....						5,130	721	10	165	10,180		
August.....						195.6	20	.6	6.31	388		
September.....						243.6	20	.3	8.12	483		
Water year 1936-37.....						76,401.2	2,400	.3	209	151,600		

Bear River at Harer, Idaho

Location.- Water-stage recorder, lat. 42°11'50", long. 111°10'05", in NW¼ sec. 23, T. 14 S., R. 45 E., 400 feet below mouth of Sheep Creek, three-quarters of a mile north of Harer siding on Oregon Short Line Railroad, and 5 miles east of Dingle.

Drainage area.- 2,780 square miles.

Records available.- June 1913 to September 1916, January 1919 to September 1937.

Average discharge.- 21 years, 539 second-feet.

Extremes.- Maximum daily discharge during year, 2,190 second-feet Apr. 22 and 23; minimum, 124 second-feet Sept. 21 and 22.
1913-16, 1919-37: Maximum discharge, 3,860 second-feet June 2, 1920 (gage height, 10.51 feet); minimum daily discharge, 26 second-feet Aug. 21-27, 1934.

Remarks.- Records good except those for periods of ice effect, Nov. 9-13, Nov. 23 to Mar. 31, which were computed on basis of four discharge measurements and records of discharge at Stewart Dam. Numerous diversions for irrigation above station. Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	195	275	160	175	160	200	366	1,200	1,190	396	339	137
2	200	278	160	170	160	200	462	1,110	1,080	393	323	137
3	200	299	160	170	160	205	662	1,030	979	376	298	137
4	205	287	170	170	155	205	786	1,020	908	359	286	135
5	210	278	180	165	140	205	846	1,090	929	349	268	135
6	213	272	180	165	145	210	798	1,210	942	352	256	135
7	213	272	180	160	150	210	730	1,330	900	352	250	133
8	215	269	180	160	155	215	678	1,410	862	366	239	133
9	218	265	180	155	155	220	678	1,520	774	396	228	133
10	218	265	180	150	160	220	582	1,630	750	390	212	133
11	218	260	175	150	160	225	730	1,670	734	379	199	133
12	218	260	170	145	160	235	830	1,700	698	413	186	133
13	218	255	165	*144	160	255	967	1,740	655	424	178	133
14	218	252	*160	145	160	275	1,110	1,800	620	410	170	133
15	218	252	165	145	160	290	1,290	1,710	605	420	170	128
16	228	250	170	145	160	290	1,570	1,680	601	437	168	128
17	239	252	175	150	160	290	1,780	1,720	582	560	163	128
18	241	250	180	155	155	290	1,910	1,750	550	702	163	128
19	241	250	180	155	*144	300	2,080	1,820	516	662	160	128
20	258	247	180	155	155	350	2,170	1,850	509	590	160	126
21	269	244	180	155	160	355	2,170	1,870	505	545	158	124
22	269	244	180	155	170	380	2,190	1,840	502	534	158	124
23	269	240	180	155	175	400	2,190	1,780	494	516	156	126
24	275	225	180	155	175	420	2,040	1,750	480	502	153	126
25	264	210	180	155	180	430	1,800	1,750	458	509	148	126
26	261	195	180	155	185	440	1,620	1,670	434	487	148	131
27	258	180	180	155	190	450	1,490	1,550	417	448	146	131
28	258	170	180	155	195	460	1,380	1,470	403	410	144	131
29	255	165	180	160	-	460	1,300	1,380	393	383	142	131
30	252	160	180	160	-	415	1,240	1,300	393	359	139	131
31	261	-	180	160	-	*358	-	1,240	-	342	137	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						7,275	275	195	235	14,430		
November.....						7,321	299	160	244	14,520		
December.....						5,430	180	160	175	10,770		
Calendar year 1936.....						211,899	3,040	100	579	420,300		
January.....						4,849	175	144	156	9,620		
February.....						4,544	195	140	162	9,010		
March.....						9,438	460	200	304	18,720		
April.....						38,545	2,190	366	1,285	76,450		
May.....						47,590	1,670	1,020	1,535	94,390		
June.....						19,843	1,190	393	661	39,360		
July.....						13,781	702	342	445	27,330		
August.....						6,045	339	137	195	11,990		
September.....						5,927	137	124	131	7,790		
Water year 1936-37.....						168,588	2,190	124	462	334,400		

*Discharge measurement made this date.

BEAR RIVER BASIN

Bear River at Alexander, Idaho

Location.— Water-stage recorder, lat. 42°39', long. 111°42', in NW¼ sec. 17, T. 9 S., R. 41 E., 600 feet downstream from Soda hydroelectric 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 1937.

Average discharge.— 22 years (1911-16, 1919-20, 1921-37), 825 second-feet.

Extremes.— Maximum daily discharge during year, 1,070 second-feet Apr. 21; minimum, 54 second-feet Nov. 22 and Mar. 7.

1911-16, 1919-37: Maximum discharge, 4,590 second-feet May 9, 1922; maximum gage height, 15.95 feet Dec. 11, 1919; minimum discharge, about 28 second-feet, when reservoir gates are closed.

Remarks.— Records good. Discharge for Oct. 1-7, Jan. 6, 7 computed on basis of output of power plant. Numerous diversions for irrigation above station. Regulation caused by storage in Bear Lake Reservoir and operations at Soda hydroelectric plant. Records collected by Utah Power & Light Co. under general supervision of Geological Survey in connection with a Federal Power Commission project.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	150	299	279	274	235	312	217	624	598	846	780	827
2	155	372	218	275	270	393	119	529	706	818	801	783
3	150	235	227	150	320	362	121	482	644	886	657	808
4	100	256	283	311	404	271	88	511	692	1,000	657	650
5	220	271	185	310	419	265	298	560	542	480	625	523
6	240	274	216	395	462	340	383	618	560	834	616	426
7	270	326	296	305	242	54	356	720	618	986	728	641
8	304	365	319	357	239	270	168	672	586	994	608	679
9	264	226	282	391	334	296	243	672	586	833	708	637
10	238	167	296	307	353	228	303	642	560	719	733	571
11	250	156	260	351	301	235	161	573	560	519	622	588
12	335	186	313	374	194	252	239	607	560	680	600	402
13	378	204	330	263	150	277	278	896	560	504	649	564
14	120	329	349	230	198	142	312	550	560	458	701	573
15	193	264	258	262	320	402	346	372	554	347	607	511
16	363	290	316	305	359	435	161	312	560	380	666	472
17	348	274	318	143	190	492	136	562	560	426	649	297
18	406	362	315	196	235	539	88	490	554	461	576	350
19	470	487	302	285	184	555	262	451	560	646	605	475
20	403	573	227	226	161	506	631	578	523	688	656	349
21	374	516	326	273	207	360	1,070	533	517	732	641	278
22	359	54	314	186	223	653	1,030	454	517	743	626	288
23	333	142	312	176	313	489	1,020	278	511	744	800	307
24	329	113	232	148	311	401	847	629	499	656	763	294
25	357	235	68	310	286	305	542	292	482	619	782	220
26	400	137	224	356	262	326	674	327	453	830	816	208
27	336	204	272	582	219	133	764	399	420	809	834	303
28	350	250	312	601	137	92	692	511	553	785	813	143
29	310	206	307	590	-	476	644	453	657	787	649	193
30	511	246	309	277	-	476	638	499	792	798	844	126
31	411	-	338	60	-	459	-	511	-	922	825	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						9,427	511	100	304	16,700		
November.....						8,007	573	54	267	15,880		
December.....						8,613	349	68	278	17,080		
Calendar year 1936.....						168,209	2,450	50	460	333,600		
January.....						9,207	601	60	297	18,260		
February.....						7,508	462	137	268	14,890		
March.....						10,796	653	54	348	21,410		
April.....						12,811	1,070	88	427	25,410		
May.....						16,307	896	278	526	32,340		
June.....						17,044	792	420	568	33,810		
July.....						21,930	1,000	347	707	43,800		
August.....						21,637	844	576	698	42,920		
September.....						13,486	827	126	450	26,750		
Water year 1936-37.....						156,773	1,070	54	430	311,000		

Bear River near Weston, Idaho

Location.- Water-stage recorder, lat. 42°01'50", long. 111°55'15", in SW¼SE¼ sec. 17, T. 16 S., R. 39 E., at Weston-Fairview highway bridge, 3 miles east of Weston.

Records available.- October 1919 to December 1932 and February 1934 to September 1937. October 1889 to January 1917, at site near Preston, Idaho; records equivalent.

Average discharge.- 16 years (1919-32, 1934-37); 996 second-feet.

Extremes.- Maximum daily discharge during year, 1,590 second-feet May 9; minimum, 30 second-feet June 27.

1919-32, 1934-36: Maximum discharge, 6,100 second-feet May 8 or 9, 1922 (gage height, 12.1 feet); minimum daily discharge, 30 second-feet Apr. 29, 1934, and June 27, 1937.

Remarks.- Records fair. Daily discharge for Dec. 12, 13, Mar. 1-13, Sept. 28 and 29 and monthly discharge for January and February computed on basis of records for station at Oneida. 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, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	265	817	331			500	1,030	1,290	505	324	490	812
2	304	713	610			750	706	1,130	378	382	519	930
3	238	334	480			1,070	773	1,150	363	522	416	787
4	301	477	536			530	997	1,310	522	686	382	706
5	295	747	379			650	826	1,430	499	591	372	650
6	229	559	387			640	832	1,120	516	440	375	661
7	413	576	285			870	962	1,530	434	598	586	512
8	456	669	716			360	464	1,390	422	672	458	555
9	447	459	573			680	682	1,590	362	567	540	608
10	349	508	607			480	906	1,550	428	530	540	682
11	512	542	580			560	913	1,200	413	428	481	675
12	346	316	300			540	440	1,300	314	392	406	594
13	432	463	700			590	728	1,470	406	403	238	490
14	508	508	562			564	874	1,130	310	454	334	556
15	607	498	556			706	962	1,430	277	490	468	612
16	262	352	645			689	924	1,180	253	487	522	512
17	370	465	754			969	854	1,150	314	307	522	478
18	682	539	556			1,230	854	1,390	184	265	461	431
19	484	601	494			868	748	1,280	226	250	519	522
20	678	731	754			927	906	983	214	265	522	265
21	638	1,050	515			888	762	962	202	280	530	345
22	607	607	512			644	990	1,000	172	250	577	506
23	441	595	515			1,200	1,460	986	103	317	577	389
24	552	576	617			1,120	1,220	1,150	199	286	612	310
25	750	316	758			1,100	1,200	990	76	378	619	286
26	566	283	382			818	1,510	966	55	519	672	310
27	494	573	453			776	1,220	745	30	357	717	271
28	675	432	768			826	1,350	369	208	345	475	260
29	447	775	484			706	1,330	310	160	505	454	570
30	692	716	524			714	815	487	274	403	605	668
31	518	-	660			976	-	440	-	516	577	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						14,558	750	229	470	28,880		
November.....						16,787	1,050	283	560	33,300		
December.....						16,953	768	265	547	33,630		
Calendar year 1936						236,464	2,990	128	646	469,080		
January.....						18,100	-	-	584	35,900		
February.....						17,500	-	-	625	34,710		
March.....						23,911	1,230	360	771	47,430		
April.....						28,140	1,510	440	958	55,810		
May.....						34,408	1,590	310	1,110	68,260		
June.....						9,839	522	30	295	17,530		
July.....						13,209	686	250	426	26,200		
August.....						15,356	717	238	495	30,460		
September.....						15,932	930	250	531	31,600		
Water year 1936-37						223,693	1,590	30	613	443,700		

BEAR RIVER BASIN

Bear River near Collinston, Utah

Location.- Water-stage recorder, lat. $41^{\circ}49'$, long. $112^{\circ}04'$, in $W\frac{1}{2}$ sec. 34, T. 13 N., R. 2 W., at Wheelon railroad siding, 1 mile below Cutler plant of Utah Power & Light Co., and 4 miles north of Collinston.

Drainage area.- 6,000 square miles.

Records available.- July 1889 to September 1937.

Average discharge.- 47 years (1889-1905, 1906-37), 1,809 second-feet.

Extremes.- Maximum discharge during year, 5,330 second-feet May 12 and 13 (gage height, 5.00 feet); minimum daily discharge, 14 second-feet Aug. 9, 31, Sept. 1, 2.
1889-1937: Maximum discharge observed, 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. Discharge for period of missing gage heights, Oct. 1-31, computed on basis of output of power plant. Numerous canals divert above station. Flow regulated by storage in reservoirs and operation of power plants above gage. Water-stage recorder graph and several discharge measurements furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	408	1,680	1,070	892	932	1,640	2,010	1,890	1,790	33	18	14
2	401	1,902	930	739	744	1,740	1,600	1,010	2,430	33	18	14
3	130	1,150	804	453	986	1,630	1,890	2,040	1,770	30	18	16
4	68	652	1,140	962	1,280	1,580	1,970	2,220	1,410	27	16	16
5	149	972	120	788	1,820	1,400	2,580	2,640	1,310	30	16	16
6	130	1,410	58	790	1,610	1,430	2,120	2,650	1,450	30	16	16
7	498	1,190	43	794	1,220	1,400	2,050	2,890	1,560	30	16	16
8	702	1,840	1,200	1,030	1,350	1,550	2,430	3,650	729	30	16	16
9	536	1,390	977	717	1,150	1,570	1,950	4,020	917	30	14	18
10	254	1,370	728	123	1,050	1,290	1,590	4,420	965	27	16	16
11	471	976	1,010	971	1,150	2,330	1,890	4,540	1,040	27	16	16
12	892	986	1,040	685	700	2,180	2,270	4,490	666	27	16	18
13	396	1,170	931	594	589	2,190	2,380	4,670	870	27	16	20
14	1,340	1,870	1,610	859	918	2,690	1,680	3,750	895	28	18	20
15	890	1,050	1,250	1,110	1,180	2,770	1,580	2,970	806	565	20	20
16	40	612	1,310	925	927	2,880	2,450	3,170	617	1,250	20	20
17	698	321	1,180	1,250	1,340	3,080	2,240	3,540	247	411	20	20
18	655	206	1,150	564	1,170	3,200	2,250	2,880	93	305	20	20
19	1,090	961	921	957	835	3,310	2,690	2,650	25	23	20	20
20	1,230	619	676	756	665	3,290	2,860	2,670	121	27	20	20
21	984	531	1,280	907	1,080	2,460	2,690	2,510	122	23	20	20
22	1,190	1,100	948	971	1,210	1,710	2,070	2,490	174	23	20	20
23	1,140	1,520	1,010	1,340	1,150	2,320	2,350	1,940	64	20	20	20
24	1,080	1,640	1,050	465	1,120	2,830	2,500	1,710	39	20	20	20
25	952	1,030	363	1,010	817	2,710	1,720	1,690	65	20	18	18
26	1,330	761	1,290	1,840	1,120	2,810	2,510	1,750	30	27	18	18
27	394	987	643	1,870	950	2,440	2,880	1,690	30	20	18	18
28	613	1,070	1,890	1,120	940	1,960	3,230	1,810	30	20	16	16
29	1,240	922	1,670	1,130	-	1,810	3,030	625	30	20	16	147
30	1,490	1,670	1,300	1,160	-	1,570	2,420	597	30	20	16	972
31	1,310	-	1,310	610	-	1,640	-	1,110	-	18	14	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				22,691	1,490	40	732	45,010				
November.....				32,558	1,870	206	1,065	64,580				
December.....				30,872	1,880	43	996	61,230				
Calendar year 1936.....				452,660	7,240	18	1,237	897,800				
January.....				28,122	1,840	123	907	55,780				
February.....				29,923	1,820	589	1,069	59,350				
March.....				67,010	3,310	1,290	2,162	132,900				
April.....				67,740	3,230	1,590	2,268	134,400				
May.....				79,962	4,670	597	2,580	158,600				
June.....				20,325	2,450	25	678	40,310				
July.....				3,218	1,250	18	104	6,380				
August.....				546	20	14	17.6	1,080				
September.....				1,621	972	14	54.0	3,220				
Water year 1936-37.....				384,588	4,670	14	1,054	762,800				

Logan River above State dam, near Logan, Utah

Location.- Water-stage recorder, lat. 41°44'40", long. 111°47'00", in NE $\frac{1}{4}$ 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 2 $\frac{1}{2}$ miles east of Logan.

Drainage area.- 218 square miles.

Records available.- May 1913 to September 1937. June 1896 to December 1912, at site a quarter of a mile downstream; flow at present site plus that of tailrace equivalent to flow at former site.

Average discharge.- 24 years (1913-37), 122 second-feet.

Extremes.- Maximum discharge during year, 780 second-feet May 30 (gage height, 4.58 feet); minimum daily discharge, 8 second-feet for several days during the year.
1913-37: Maximum discharge, 2,000 second-feet (estimated) Mar. 21, 1916 (gage height, 5.6 feet); minimum daily discharge, 8 second-feet for several days in 1931, 1934-37.

Remarks.- Records poor. Water diverted from river and springs upstream for power, irrigation, and municipal supply. Flow regulated by operation of power plants above station. Water-stage recorder graph and results of several discharge measurements furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	13	13	11	16	8	21	42	450	94	18	10
2	8	11	13	11	11	9	21	92	390	85	15	9
3	9	11	11	11	11	9	19	145	371	77	13	9
4	10	10	11	11	10	9	19	218	390	72	16	9
5	9	11	15	14	14	9	19	277	360	67	14	10
6	8	10	16	13	14	9	18	271	323	64	14	9
7	8	10	14	11	14	11	14	274	309	61	13	10
8	8	10	14	11	13	9	10	422	290	54	13	10
9	8	8	14	10	11	11	11	462	316	46	13	10
10	8	10	13	14	11	11	11	309	306	40	13	10
11	9	11	12	13	13	14	18	309	313	45	18	15
12	21	11	11	14	13	14	24	261	327	60	14	11
13	10	11	12	19	11	15	22	300	300	42	11	9
14	10	10	15	21	11	15	22	348	274	30	10	10
15	10	11	14	21	11	14	30	402	261	32	10	13
16	11	10	14	15	11	15	26	406	264	29	9	11
17	11	11	14	14	11	14	18	414	271	26	9	11
18	13	12	13	16	11	13	17	466	246	25	10	13
19	12	12	14	16	13	13	18	506	223	31	8	13
20	14	13	13	16	14	13	21	446	215	29	12	12
21	13	13	13	16	14	13	39	418	243	30	23	11
22	12	11	13	16	14	13	60	450	243	26	10	10
23	13	12	12	14	13	11	29	486	235	26	9	12
24	12	11	13	14	14	10	19	490	215	23	8	13
25	11	11	13	14	14	10	24	532	184	21	11	10
26	13	11	13	13	13	10	72	478	161	23	8	10
27	14	12	11	14	12	11	107	490	138	21	8	10
28	10	13	14	14	10	11	63	506	127	16	10	10
29	10	13	13	14	-	12	41	510	123	16	11	9
30	10	11	12	12	-	15	32	560	115	14	11	8
31	12	-	12	12	-	17	-	486	-	17	10	-
Month		Second-foot-days		Maximum		Minimum		Mean		Run-off in acre-feet		
October.....		326		14		8		10.5		647		
November.....		334		13		8		11.1		662		
December.....		405		16		11		13.1		803		
Calendar year 1936.....		63,402		1,240		8		173		125,700		
January.....		435		21		10		14.0		863		
February.....		348		16		10		12.4		690		
March.....		368		17		8		11.9		730		
April.....		866		107		10		28.9		1,720		
May.....		11,786		550		42		380		23,380		
June.....		7,963		430		115		265		15,790		
July.....		1,242		94		14		40.1		2,460		
August.....		372		23		8		12.0		738		
September.....		317		15		8		10.6		629		
Water year 1936-37.....		24,762		550		8		67.8		49,110		

BEAR RIVER BASIN

Utah Power & Light Co.'s tailrace near Logan, Utah

Location.- Water-stage recorder, lat. $41^{\circ}44'40''$, long. $111^{\circ}47'00''$, in NE $\frac{1}{4}$ sec. 36, T. 12 N., R. 1 E., 100 feet below power house of Utah Power & Light Co. and $2\frac{1}{2}$ miles east of Logan.

Records available.- May 1913 to September 1937.

Average discharge.- 24 years, 102 second-feet.

Remarks.- Records good. Gage read twice daily during periods of inefficient recorder operation, May 12-21, Aug. 7-31. Flow is regulated by operation of power plant above gage. Power canal diverts from right bank of Logan River in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 12 N., R. 2 E. Water is returned to river 125 feet below gaging station on Logan River above State dam. Water-stage recorder graph and results of several discharge measurements furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	132	140	115	101	86	79	95	174	174	170	172	129
2	137	135	113	96	85	84	96	174	174	170	172	126
3	137	132	111	92	87	83	97	174	174	170	164	125
4	139	133	107	90	90	81	97	174	174	170	166	124
5	139	135	113	95	93	83	97	174	174	172	166	125
6	139	135	102	92	89	83	96	172	174	172	166	129
7	139	135	112	91	95	87	95	178	174	172	163	128
8	137	130	115	79	93	86	95	66	174	170	166	126
9	132	125	116	87	92	89	95	58	174	172	160	126
10	132	129	112	70	87	91	95	172	174	172	160	128
11	136	129	104	96	85	95	97	172	174	172	154	128
12	146	130	97	96	92	95	97	172	172	170	160	128
13	144	128	95	93	89	95	97	172	172	172	163	122
14	144	126	107	93	97	95	112	172	172	172	151	119
15	144	132	115	95	90	93	142	172	172	174	150	117
16	143	121	112	96	87	95	169	172	172	172	150	115
17	146	122	113	92	87	93	156	172	172	172	146	115
18	140	124	111	91	90	93	150	172	172	172	146	113
19	146	121	112	96	87	92	156	172	172	172	144	115
20	153	121	108	87	84	95	164	172	172	172	132	112
21	150	120	106	72	83	95	169	172	172	172	140	113
22	140	122	104	79	86	93	169	172	174	172	143	113
23	146	122	103	92	86	90	169	172	175	172	143	120
24	143	120	103	92	85	86	165	172	175	172	140	117
25	140	117	106	93	86	84	170	172	175	172	140	116
26	143	113	103	95	86	86	176	172	175	166	140	115
27	136	119	101	96	86	86	176	172	172	170	129	113
28	137	116	106	96	86	86	175	172	172	172	129	113
29	133	116	107	96	-	81	170	172	172	172	132	108
30	133	119	102	96	-	92	169	172	172	172	135	107
31	136	-	101	93	-	95	-	172	-	172	132	-
Month	Second-foot-days						Maximum	Minimum	Mean	Run-off in acre-feet		
October.....	4,342						153	132	140	8,610		
November.....	3,767						140	113	126	7,470		
December.....	3,352						116	95	107	6,610		
Calendar year 1936.....	45,618						180	48	125	90,480		
January.....	2,808						101	87	90.6	5,570		
February.....	2,469						97	83	88.2	4,900		
March.....	2,771						95	79	89.4	5,500		
April.....	4,007						176	95	134	7,950		
May.....	5,123						178	58	165	10,170		
June.....	5,196						175	172	173	10,510		
July.....	5,314						174	166	171	10,540		
August.....	4,654						172	129	150	9,230		
September.....	3,585						129	107	120	7,110		
Water year 1936-37.....	47,373						178	58	130	93,970		

Logan, Hyde Park & Smithfield Canal near Logan, Utah

Location.- Water-stage recorder and concrete rating flume, lat. 41°44'45", long. 111°47'05", in SE¼ sec. 25, T. 12 N., R. 1 E., 1½ miles below head of canal and 2½ miles east of Logan.

Records available.- June 1904 to December 1907, January 1909 to September 1937.

Average discharge.- 14 years (1923-37), 30.3 second-feet.

Remarks.- Records good except those for Oct. 9-29, Oct. 31 to Dec. 5, Dec. 7-29, Dec. 31 to Mar. 29, Apr. 7, 9-24, 26-29, May 1-5, which were estimated and are fair. No diversions above gage. Flow regulated by head gates at diversion works. Canal diverts water from Logan River in NE¼ sec. 31, T. 12 N., R. 2 E., for irrigation and domestic supply in territory north of Logan. Results of several discharge measurements furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	11	5	5	5	5	0	8	0	121	48	34
2	29	11	5	5	5	5	0	8	0	119	46	34
3	25	11	5	5	5	5	0	8	1	116	47	34
4	25	11	5	5	5	5	0	8	18	113	44	34
5	25	11	5	5	5	5	0	8	46	109	43	34
6	24	10	5	5	5	5	0	17	56	108	43	30
7	24	10	5	5	5	5	4	41	56	108	43	29
8	24	10	5	5	5	5	6	54	63	106	45	29
9	24	10	5	5	5	5	6	54	76	103	41	28
10	23	10	5	5	5	5	6	51	75	101	40	28
11	22	9	5	5	5	5	6	54	75	103	39	28
12	22	9	5	5	5	5	6	62	75	91	38	28
13	21	9	5	5	5	5	6	75	74	70	37	28
14	20	9	5	5	5	5	7	81	82	91	37	28
15	20	9	5	5	5	5	7	97	89	89	36	27
16	19	8	5	5	5	5	7	108	104	87	36	27
17	18	8	5	5	5	5	7	119	120	85	36	28
18	18	8	5	5	5	5	7	121	124	81	36	28
19	17	8	5	5	5	5	7	120	122	86	36	29
20	16	8	5	5	5	5	8	121	122	63	34	28
21	16	7	5	5	5	5	8	124	123	56	32	29
22	15	7	5	5	5	5	8	121	124	52	31	29
23	14	7	5	5	5	5	8	122	123	52	33	30
24	14	7	5	5	5	5	8	126	124	51	34	29
25	13	7	5	5	5	5	8	125	124	51	34	29
26	13	6	5	5	5	5	8	121	123	50	34	29
27	12	6	5	5	5	5	8	124	121	50	34	29
28	12	6	5	5	5	5	8	125	119	48	34	29
29	11	6	5	5	5	5	8	126	122	48	34	29
30	11	6	5	5	5	5	8	78	120	45	34	28
31	11	-	5	5	-	0	-	31	-	48	34	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						591	33	11	19.1	1,170		
November.....						255	11	6	8.5	1,506		
December.....						155	5	5	5.0	307		
Calendar year 1936.....						13,315	130	0	36.4	26,410		
January.....						155	5	5	5.0	307		
February.....						140	5	5	5.0	278		
March.....						144	5	0	4.6	286		
April.....						170	8	0	5.7	337		
May.....						2,448	126	8	79.0	4,860		
June.....						2,601	124	0	85.7	5,180		
July.....						2,470	121	45	79.7	4,900		
August.....						1,171	48	31	37.8	2,320		
September.....						883	34	27	29.4	1,750		
Water year 1936-37.....						11,183	126	0	50.6	22,180		

Blacksmith Fork above Utah Power & Light Co.'s dam near Hyrum, Utah

Location.- Water-stage recorder, lat. 41°37'20", long. 111°44'25", in NE¼ sec. 8, T. 10 N., R. 2 E., three-quarters of a mile above diversion dam, 3¼ 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 1937.

Average discharge.- 23 years (1914-37), 129 second-feet.

Extremes.- Maximum discharge during year, 674 second-feet May 8 (gage height, 4.14 feet); minimum daily discharge, 55 second-feet Jan. 22.

1913-37: Maximum discharge, about 1,620 second-feet May 15, 1917 (gage height, 6.5 feet, former site and datum); minimum daily discharge, 29 second-feet Jan. 3, 1935.

Remarks.- Records excellent except those for periods of missing gage heights, Nov. 3, 7-13, Jan. 7-21, Jan. 24 to Feb. 10, Feb. 12 to Mar. 10, which were computed on basis of weather records and records at municipal power plant and are good. No large diversions above station. Low-water flow may be affected by operation of power plant upstream. Water-stage recorder graph and results of several discharge measurements furnished by Utah Power & Light Co.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

1.1	43	2.3	206
1.2	51	2.6	264
1.4	70	3.0	351
1.6	95	3.5	476
1.8	123	4.0	626
2.0	154	4.5	800

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	90	101	81	74	68	65	116	188	223	122	102	86
2	88	99	80	74	66	65	136	240	210	122	101	85
3	90	96	78	74	68	65	110	337	210	119	101	85
4	91	94	78	74	68	65	101	453	214	115	99	83
5	91	92	77	74	68	65	106	490	214	122	98	85
6	91	94	77	74	68	65	99	501	199	122	99	82
7	91	94	77	72	68	70	96	551	190	129	98	82
8	90	94	77	70	68	75	96	554	185	123	99	82
9	88	91	77	68	65	80	103	536	180	120	98	85
10	88	90	77	67	63	85	123	468	174	117	96	83
11	88	89	76	70	71	87	143	444	166	117	96	82
12	87	88	72	73	70	87	122	403	162	116	95	82
13	90	87	74	73	70	87	128	410	157	120	95	85
14	90	86	74	73	68	85	159	410	156	116	95	83
15	87	86	76	73	68	83	212	416	151	115	94	83
16	88	86	80	70	65	87	214	391	148	113	95	83
17	88	86	78	70	65	92	166	379	146	112	94	82
18	87	85	68	68	68	98	182	376	143	113	94	82
19	88	85	76	65	68	98	169	367	140	110	92	82
20	95	85	76	60	65	91	192	330	138	112	92	83
21	91	85	76	57	65	85	221	302	136	108	91	83
22	90	83	75	55	68	85	242	287	130	106	87	82
23	88	82	75	64	68	87	188	279	129	105	88	83
24	88	83	75	70	65	86	168	272	128	105	86	83
25	86	82	75	70	65	86	181	260	128	102	86	85
26	86	82	75	70	65	81	227	246	126	102	86	83
27	86	82	75	70	65	87	266	229	124	102	86	85
28	86	82	75	68	65	88	219	217	123	101	86	85
29	86	81	75	68	-	87	193	214	122	99	87	83
30	90	81	75	68	-	91	178	268	122	102	87	83
31	96	-	75	68	-	95	-	248	-	102	87	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	2,759	96	86	89.0	5,470
November.....	2,631	101	81	87.7	5,220
December.....	2,362	81	72	76.2	4,680
Calendar year 1936.....	58,361	1,120	41	159	115,800
January.....	2,144	74	55	69.2	4,250
February.....	1,874	71	63	66.9	3,720
March.....	2,553	98	65	82.4	5,060
April.....	4,836	266	96	161	9,590
May.....	11,046	554	188	356	21,910
June.....	4,774	223	122	159	9,470
July.....	3,488	129	99	113	6,920
August.....	2,890	102	86	93.2	5,730
September.....	2,500	86	82	83.5	4,960
Water year 1936-37.....	43,857	554	55	120	86,980

West Side Canal near Collinston, Utah

Location.- Water-stage recorder, lat. 49°50', long. 112°04', 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 1937.

Average discharge.- 25 years, 222 second-feet.

Remarks.- Records excellent except those for Dec. 4 to Jan. 4 (computed from daily gage readings), those for period of ice effect, Jan. 5 to Mar. 19 (computed on basis of two discharge measurements and observer's notes), and those for Dec. 8, 28, Sept. 1, 2 (interpolated), all of which are good. 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. Water used for irrigation in eastern Box Elder County. Water-stage recorder graph and several discharge measurements furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	360	101	65	30		13	0	0	318	644	395	560
2	347	87	65	30		13	0	0	350	646	418	560
3	339	76	65	31		13	0	0	382	653	440	561
4	317	76	30	31		13	4	0	391	653	461	564
5	293	76	28	31		13	8	0	428	649	496	561
6	286	76	27	31		13	0	59	446	627	501	549
7	304	75	26	31		13	0	90	448	610	542	554
8	301	74	27	31		13	0	91	470	414	578	557
9	276	73	25	20		13	0	91	506	353	573	566
10	270	73	24	15		13	0	91	504	328	561	554
11	265	72	23	15		13	0	128	501	310	556	549
12	258	72	23	15		13	0	166	504	310	569	542
13	249	72	41	15		13	0	188	512	314	576	527
14	240	72	31	15		13	0	207	510	312	580	518
15	240	72	31	15		12	0	236	495	314	581	518
16	226	71	30	15		12	0	318	488	325	590	506
17	213	71	29	15		12	0	371	486	357	598	499
18	191	71	29	15		12	0	400	502	388	593	496
19	191	72	0	15		5	0	446	537	416	596	488
20	185	70	0	15		0	0	483	544	466	598	472
21	171	69	29	15		0	0	552	542	566	600	456
22	155	69	30	15		0	0	571	539	585	600	448
23	158	69	31	15		0	0	580	542	549	600	436
24	156	69	31	15		0	0	578	557	491	602	404
25	155	70	29	15		0	0	580	571	596	602	388
26	155	69	29	15		0	0	598	600	595	602	364
27	155	70	29	15		0	0	610	627	586	603	360
28	151	67	29	15		0	0	627	632	566	605	357
29	142	67	29	15		0	0	639	634	545	596	342
30	141	66	28	15		0	0	520	636	522	602	325
31	112	-	29	15		0	-	346	-	419	559	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						7,001	360	112	226	13,890		
November.....						2,187	101	66	72.9	4,340		
December.....						942	65	0	30.4	1,870		
Calendar year 1936.....						85,448	646	0	233	169,500		
January.....						596	31	15	19.2	1,180		
February.....						392	-	-	14	778		
March.....						235	13	0	7.6	466		
April.....						12	8	0	4	24		
May.....						9,566	639	0	309	18,970		
June.....						15,200	636	318	507	30,100		
July.....						15,110	653	310	487	29,970		
August.....						17,373	605	395	560	34,460		
September.....						14,581	566	325	486	28,920		
Water year 1936-37.....						83,195	653	0	228	165,000		

BEAR RIVER BASIN

Hammond (East Side) Canal near Collinston, Utah

Location.- Water-stage recorder, lat. $41^{\circ}50'$, long. $112^{\circ}03'$, in SE $\frac{1}{4}$ sec. 27, T. 13 N., R. 2 W., at Wheelon siding on Oregon Short Line Railroad, 3,800 feet below Cutler Dam and 4 miles north of Collinston.

Records available.- June 1912 to September 1937.

Average discharge.- 18 years (1917-21, 1922-23, 1924-37), 51.0 second-feet.

Remarks.- Records excellent. Canal diverts from east side of Bear River in NW $\frac{1}{4}$ sec. 26, T. 13 N., R. 2 W., at same diversion dam as West Side Canal and Cutler power plant. Water used for irrigation in eastern Box Elder County. Water-stage recorder graph and several discharge measurements furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	81	20						0	74	148	136	128
2	83	17						0	72	151	136	129
3	84	12						7	70	154	135	124
4	72	6						8	73	154	135	118
5	64	0						28	72	154	140	116
6	66	0						38	71	150	138	123
7	68	0						47	83	150	138	130
8	64	0						48	93	56	139	130
9	46	0						47	106	15	139	126
10	47	0						47	109	35	138	119
11	42	0						51	109	43	142	119
12	42	0						56	109	43	141	115
13	41	0						70	102	44	141	108
14	41	0						75	94	44	140	110
15	34	0						70	82	49	140	111
16	27	0						66	61	59	140	111
17	30	0						78	96	79	140	111
18	39	0						104	97	40	140	111
19	39	0						112	97	7	141	112
20	33	0						114	107	60	142	111
21	26	0						122	118	114	140	106
22	22	0						134	124	145	139	99
23	21	0						135	134	150	139	80
24	21	0						135	138	151	138	68
25	21	0						139	142	151	140	68
26	21	0						141	142	150	135	68
27	21	0						141	144	150	130	68
28	20	0						147	147	136	129	66
29	20	0						149	144	128	129	66
30	20	0						113	144	140	128	68
31	20	-						76	-	127	127	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				1,276		84	20	41.2	2,530			
November.....				55		20	0	1.8	109			
December.....				0		0	0	0	0			
Calendar year 1936.....				18,672		153	0	51.0	37,040			
January.....				0		0	0	0	0			
February.....				0		0	0	0	0			
March.....				0		0	0	0	0			
April.....				0		0	0	0	0			
May.....				2,498		149	0	80.6	4,950			
June.....				3,184		147	70	106	6,320			
July.....				3,176		154	7	102	6,300			
August.....				4,255		142	127	137	8,440			
September.....				3,119		130	66	104	6,190			
Water year 1936-37.....				17,563		154	0	48.1	34,840			

Devil Creek near Malad, Idaho

Location.- Staff gage and wooden control, lat. $42^{\circ}13'$, long. $112^{\circ}17'$, in sec. 8, T. 14 S., R. 36 E., 400 feet below dam site for proposed reservoir, 0.5 mile northeast of St. John, 2½ miles northwest of Malad, and 9 miles by stream above confluence with Malad River.

Records available.- October 1931 to September 1937.

Extremes.- Maximum discharge during year, 29 second-feet Apr. 15; minimum discharge observed, 2.6 second-feet Mar. 11, 12.

1931-37: Maximum discharge, 60 second-feet Aug. 17, 1936 (from high-water mark made during cloudburst); minimum discharge observed, 0.5 second-foot Sept. 10, 1934.

Remarks.- Records fair. Gage read once daily except during winter, when observations are made three or four times a week. Flow regulated by Evans Dividers (an irrigation diversion works) 3 miles upstream. Several small diversions above station. Stream receives part of flow of Birch Creek above station. Malad power plant and its small reservoir on Birch Creek may cause slight diurnal fluctuation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	3.4	3.0	3.0	3.0	*2.8	3.3	14	17	7.1	5.2	5.0
2	5.3	2.9	3.0	*3.0	*3.0	*2.7	*3.6	14	15	7.1	5.0	5.2
3	5.3	2.9	3.0	3.0	*3.0	2.7	3.8	16	14	5.7	5.5	5.2
4	5.6	3.0	2.9	*3.0	3.0	*2.7	*5.7	16	12	5.7	5.0	6.0
5	6.0	3.0	2.9	3.0	*3.0	2.7	7.6	14	14	5.7	5.0	6.0
6	6.0	3.0	*3.0	*3.0	2.9	*2.8	*7.2	17	10	5.8	5.0	6.0
7	5.6	3.0	3.0	3.0	*2.9	2.8	6.7	18	11	5.8	5.7	5.4
8	5.6	*3.0	*3.0	*3.0	2.9	*2.8	*7.0	*21	11	5.8	4.4	5.6
9	5.6	3.0	3.0	3.0	*2.9	2.8	7.3	*24	11	5.4	4.4	5.6
10	5.4	3.0	3.0	*3.0	*3.0	*2.7	*8.0	27	12	5.1	4.4	7.6
11	5.1	3.0	*3.0	3.0	3.0	2.6	8.8	21	8.0	4.8	5.8	4.8
12	5.1	3.0	3.0	*3.1	*3.0	*2.6	*12	21	9.1	5.2	5.8	4.8
13	5.1	3.0	3.0	3.2	3.0	2.7	15	19	9.1	5.5	5.8	4.7
14	4.8	3.0	*3.0	*3.2	*2.8	3.2	*22	20	8.4	6.5	5.6	3.9
15	4.5	3.0	3.0	3.2	2.7	3.2	29	20	6.5	6.2	6.1	3.8
16	4.5	3.0	*3.1	*3.1	*2.7	*3.2	*22	19	5.7	5.1	6.1	3.5
17	4.1	3.0	3.2	*3.1	2.7	3.2	14	19	5.2	5.1	6.4	3.5
18	4.7	3.0	*3.1	3.0	*2.7	*3.2	*12	14	5.5	4.7	6.6	3.3
19	4.1	3.0	3.0	*3.1	2.7	*3.2	11	16	8.7	4.5	7.2	6.5
20	4.2	3.0	3.0	*3.1	*2.7	3.2	13	14	8.4	5.4	7.2	6.2
21	4.1	3.0	*3.0	3.2	2.7	*3.2	20	13	8.4	5.7	7.1	7.6
22	4.1	3.0	3.0	*3.2	*2.7	3.2	16	12	9.4	4.6	7.1	7.6
23	4.1	3.0	*3.0	3.2	2.7	*3.0	11	10	5.5	4.6	7.7	7.6
24	4.1	3.0	3.0	*3.1	*2.7	2.9	9.6	16	5.2	4.6	7.7	7.6
25	5.1	3.0	*3.2	3.0	2.7	3.0	*9.8	15	6.2	4.6	7.7	5.1
26	3.0	3.0	3.4	*3.0	*2.7	2.9	10	15	5.6	4.7	7.7	5.1
27	3.0	3.0	*3.3	3.0	*2.8	*3.0	17	16	5.4	4.7	8.4	5.0
28	3.0	3.0	3.2	*3.0	2.8	3.0	11	15	6.4	4.7	5.5	5.0
29	3.0	3.0	*3.2	*3.0	-	*3.0	10	15	5.8	4.7	5.7	4.1
30	3.0	3.0	3.2	3.0	-	3.0	11	17	6.4	4.7	5.2	4.7
31	3.4	-	*3.1	*3.0	-	*3.2	-	17	-	5.5	5.2	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						140.0	6.0	3.0	4.52	278		
November.....						90.2	3.4	2.9	3.07	179		
December.....						94.8	3.4	2.9	3.06	188		
Calendar year 1936.....						2,141.5	48	1.1	5.85	4,250		
January.....						94.8	3.2	3.0	3.06	188		
February.....						79.4	3.0	2.7	2.84	157		
March.....						91.2	3.2	2.6	2.94	181		
April.....						344.4	29	3.3	11.5	683		
May.....						525.9	27	10	18.9	1,040		
June.....						265.9	17	5.2	8.86	527		
July.....						155.3	7.1	4.5	5.33	328		
August.....						187.2	8.4	4.4	6.04	371		
September.....						161.9	7.6	3.3	5.40	321		
Water year 1936-37.....						2,240.1	29	2.6	6.14	4,440		

*Interpolated.

Deep Creek below First Creek, near Malad, Idaho

Location.— Staff gage, lat. $42^{\circ}14'$, long. $112^{\circ}11'$, 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 1937.

Extremes.— Maximum discharge observed during year, 172 second-feet July 8, by logarithmic extension of rating curve; minimum discharge, 1.2 second-feet Jan. 12.

1931-37: Maximum discharge observed, that of July 8, 1937; minimum, 0.3 second-foot Aug. 29, 1934.

Remarks.— Records fair. Gage read once daily. Discharge for July 8 determined from high-water mark and reported duration of flood from local cloudburst. Discharge for Aug. 3 to Sept. 4 determined from hydrographic trend and reports of reservoir withdrawals. Small diversions above station. Flow regulated at reservoir $2\frac{1}{2}$ miles upstream.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.7	3.8	3.4	2.9	2.4	3.8	7.8	31	26	16	13	5
2	2.9	3.7	3.6	2.5	2.0	3.5	8.3	32	25	18	13	
3	3.3	3.6	3.2	2.4	2.2	4.0	8.5	34	23	18		
4	2.9	3.0	3.0	2.2	1.8	4.2	9.5	35	23	18		
5	3.1	3.2	3.2	2.0	2.0	4.4	11	39	23	18		
6	3.3	3.4	3.4	2.2	2.2	4.6	12	45	23	20	13	3.1
7	2.7	3.1	3.6	2.5	2.4	4.2	13	52	23	18		2.9
8	3.1	3.0	3.4	2.0	2.0	4.4	15	56	20	28		2.7
9	3.5	3.1	3.7	1.7	2.2	4.6	16	58	17	15		2.9
10	3.8	3.0	3.0	1.5	2.4	4.8	17	56	20	13		2.5
11	3.6	3.2	2.7	1.7	1.8	4.4	20	50	24	13	12	2.2
12	3.4	3.4	2.4	1.2	2.0	4.2	20	49	20	14		1.8
13	3.7	3.6	2.3	1.8	2.2	4.8	20	50	24	14		1.9
14	3.6	3.4	2.0	2.0	2.0	3.8	22	51	23	14		1.8
15	3.4	3.2	2.2	2.2	2.4	4.0	30	48	20	15		2.0
16	3.7	3.4	2.0	2.0	2.4	3.5	34	45	17	14	8	2.2
17	3.8	3.6	2.7	1.8	1.8	3.8	32	45	17	15		2.4
18	3.7	3.7	2.4	1.8	2.0	4.0	32	46	17	14		2.5
19	3.8	3.6	2.5	2.4	2.2	4.2	34	44	17	14		2.8
20	4.0	3.4	2.9	2.2	2.4	4.4	35	40	16	14		2.5
21	3.8	3.6	2.7	2.0	2.2	4.0	34	34	20	14	8	2.3
22	4.0	3.7	2.5	2.2	2.4	4.4	33	30	20	14		2.2
23	3.7	3.6	2.9	1.8	2.5	4.6	32	31	19	13		1.9
24	3.8	3.4	2.4	2.2	2.7	4.8	33	30	18	12		1.8
25	3.6	3.6	2.5	2.0	2.9	5.0	32	29	18	13		1.9
26	3.4	3.4	2.7	1.8	3.1	6.2	31	28	17	13	8	1.6
27	3.2	3.6	2.5	2.2	3.3	5.7	32	27	16	12		1.4
28	3.1	3.6	2.4	2.4	3.5	6.0	31	26	17	12		1.5
29	3.2	3.4	2.5	2.5	-	6.2	31	26	18	12		2.7
30	3.6	3.6	2.7	2.5	-	6.6	30	28	17	12		2.8
31	3.7	-	2.9	2.4	-	7.1	-	27	-	13		-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					107.3	4.0	2.7	3.46	213			
November.....					102.9	3.8	3.0	3.43	204			
December.....					86.3	3.7	2.0	2.78	171			
Calendar year 1936.....					4,988.6	113	1.4	13.6	9,890			
January.....					65.0	2.9	1.2	2.10	129			
February.....					65.4	3.5	1.8	2.34	130			
March.....					144.2	7.1	3.5	4.65	286			
April.....					716.1	35	7.8	23.9	1,420			
May.....					1,222	58	26	39.4	2,420			
June.....					598	26	16	19.9	1,190			
July.....					463	28	12	14.9	918			
August.....					355	-	-	11.5	704			
September.....					77.7	-	1.4	2.59	154			
Water year 1936-37.....					4,002.9	58	1.2	11.0	7,940			

Weber River near Oakley, Utah

Location.- Water-stage recorder, lat. 40°44'10", long. 111°14'45", in NE $\frac{1}{4}$ 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 1937.

Average discharge.- 31 years (1906-37), 242 second-feet.

Extremes.- Maximum discharge during year, 1,910 second-feet May 18 (gage height, 3.80 feet); minimum discharge recorded, 47 second-feet Sept. 19, 20.

1904-37: Maximum discharge observed, 4,000 second-feet July 6, 1907, June 5-7, 1909; minimum discharge recorded, 26 second-feet Aug. 27, 1934, Nov. 21, 1935.

Remarks.- Records good except those for periods of ice effect, Nov. 3 to Mar. 30, Apr. 1-3, which were computed on basis of weather records and records for station near Coalville and are fair. No large diversions above gage. Flow regulated slightly by storage at headwaters in several small lakes that serve as reservoirs and small reservoir on Smith and Morehouse Creek. Total capacity of all reservoirs, about 3,200 acre-feet.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to May 17				May 17 to Sept. 30			
1.2	60	2.3	375	1.1	40	2.0	208
1.4	92	2.6	540	1.2	50	2.3	311
1.6	134	3.0	830	1.4	76	2.6	455
1.8	187	3.5	1,380	1.6	110	3.0	790
2.0	252			1.8	154	3.5	1,440
						3.8	1,910

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69	75					65	256	568	291	105	81
2	69	66					70	297	494	180	90	79
3	72	-					70	357	481	170	89	75
4	75	-					71	430	500	162	87	72
5	78	-					72	498	481	154	86	70
6	78	-					73	566	428	159	94	66
7	70	-					74	682	395	167	96	65
8	69	-					75	857	376	170	94	65
9	69	-					80	980	400	170	87	65
10	68	-					85	1,030	411	159	84	61
11	68	-					90	990	455	149	81	60
12	68	-					84	830	438	149	79	58
13	66	-					100	970	367	149	78	57
14	66	-					125	1,150	433	162	78	56
15	66	-					165	1,320	487	145	78	55
16	66	-					181	1,300	528	136	79	52
17	68	-					159	1,370	584	131	78	50
18	66	-					152	1,530	488	129	79	49
19	72	-					165	1,250	462	120	75	48
20	78	-					179	1,180	450	116	72	48
21	72	-					215	1,150	462	116	78	52
22	69	-					228	1,150	462	112	89	54
23	68	-					196	1,190	376	110	92	76
24	68	-					184	1,050	315	106	89	69
25	68	-					193	867	292	103	86	65
26	66	-					259	856	296	120	82	62
27	64	-					301	834	246	118	79	62
28	63	-					270	960	227	118	79	62
29	63	-					245	836	214	120	87	62
30	66	-					338	1,030	211	110	81	65
31	75	-				60	-	790	-	108	76	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	2,143	78	63	69.1	4,250
November.....	1,950	-	-	65	3,870
December.....	1,705	-	-	65	3,380
Calendar year 1936.....	91,440	1,730	-	250	181,400
January.....	1,550	-	-	50	3,070
February.....	1,400	-	-	50	2,780
March.....	1,705	-	-	55	3,380
April.....	4,464	301	65	149	8,850
May.....	28,656	1,530	256	924	56,940
June.....	12,327	584	211	411	24,450
July.....	4,409	291	103	142	8,750
August.....	2,607	105	72	84.1	5,170
September.....	1,861	81	48	62.0	3,600
Water year 1936-37.....	64,777	1,530	-	177	128,500

Weber River near Coalville, Utah

Location.— Water-stage recorder, lat. $40^{\circ}53'40''$, long. $111^{\circ}24'00''$, in NE $\frac{1}{4}$ sec. 20, T. 2 N., R. 5 E., at bridge $1\frac{1}{2}$ miles above high-water contour for Echo Reservoir and $1\frac{1}{2}$ miles south of Coalville.

Drainage area.— 438 square miles.

Records available.— April 1927 to September 1937.

Average discharge.— 10 years, 215 second-feet.

Extremes.— Maximum discharge during year, 1,740 second-feet May 30 (gage height, 4.15 feet); minimum, 31 second-feet Aug. 23, Sept. 19 (gage height, 0.23 foot).
1927-37: Maximum discharge, 1,960 second-feet June 17, 1929 (gage height, 4.30 feet); minimum, 6 second-feet Sept. 20, 1934 (gage height, -0.23 foot).

Remarks.— Records good except those for period of ice effect or missing gage heights, Nov. 30 to Mar. 31 (computed on basis of records for station at Echo corrected for storage and inflow from Chalk Creek) and those for Nov. 3-7 (interpolated), which are fair. Numerous diversions for irrigation above and below station. Records do not include diversions from Weber River Basin through Weber-Provo Diversion Canal. Flow slightly regulated by several small reservoirs above station.

Rating tables, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to May 15

May 16 to Sept. 30

0.4	47	1.3	238	0.2	28	1.0	136	2.5	725
.6	73	1.6	343	.4	47	1.3	214	3.0	1,030
.8	108	2.0	500	.6	70	1.6	316	3.5	1,320
1.0	155	2.5	740	.8	98	2.0	480	4.0	1,640

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	196					381	460	834	82	56	36
2	72	146					568	532	620	78	54	39
3	78	146					397	630	538	74	52	44
4	76	147					343	730	489	74	49	45
5	75	147					373	812	525	75	46	45
6	78	148					354	894	458	80	47	47
7	75	148					245	972	392	149	52	41
8	73	148					248	1,090	331	199	52	44
9	70	143					339	1,210	298	159	51	45
10	67	148					472	1,270	287	136	50	40
11	63	148					488	1,240	266	154	48	41
12	59	146					351	1,040	277	172	44	46
13	63	151					400	1,060	253	205	42	46
14	65	148					476	1,150	227	246	39	44
15	60	143					605	1,340	255	167	40	40
16	63	143					630	1,360	316	130	40	36
17	67	143					468	1,290	358	122	38	34
18	63	139					436	1,270	398	152	38	33
19	66	131					468	1,300	366	122	36	31
20	61	131					500	1,180	346	112	34	32
21	93	129				-	563	1,120	362	107	32	34
22	93	127				-	605	1,140	366	89	32	35
23	95	123				-	476	1,120	263	78	32	73
24	95	125				*156	416	990	191	73	34	69
25	93	123				-	416	876	154	68	32	60
26	95	121				-	509	804	136	59	32	60
27	97	116				*179	605	752	111	58	32	60
28	98	114				-	558	828	100	55	34	59
29	100	118				*216	500	810	88	55	43	56
30	110	115				-	452	1,270	86	63	38	59
31	174	-				*351	-	1,360	-	58	35	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							2,535	174	59	61.8	5,030	
November.....							4,151	196	114	139	8,230	
December.....							3,565	-	-	115	7,070	
Calendar year 1936.....							106,456	1,700	-	291	211,200	
January.....							3,100	-	-	100	6,150	
February.....							3,780	-	-	135	7,500	
March.....							5,290	-	-	190	11,680	
April.....							15,642	630	245	455	27,060	
May.....							31,990	1,370	460	1,032	65,450	
June.....							9,679	834	96	323	19,200	
July.....							3,432	246	55	111	6,810	
August.....							1,284	56	32	41.4	2,550	
September.....							1,374	73	31	45.8	2,730	
Water year 1936-37.....							84,422	1,370	31	231	167,500	

*Computed from staff gage readings.

Echo Reservoir at Echo, Utah

Location.— Staff gage, lat. 40°57'50", long. 111°26'00", 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 1937.

Remarks.— Echo Reservoir, constructed by Bureau of Reclamation and completed in 1931, has a capacity of 74,000 acre-feet. Gage-height record furnished by Weber River water commissioner.

Capacity table (gage height, in feet, and contents, in acre-feet)

<u>Gage height</u>	<u>Content</u>
5,450	0
5,455	60
5,460	170
5,465	440
5,470	990
5,475	1,930
5,480	3,180
5,485	4,830
5,490	6,890
5,495	9,250
5,500	11,960
5,505	15,100
5,510	18,570
5,515	22,390
5,520	26,660
5,525	31,210
5,530	36,080
5,535	41,380
5,540	47,040
5,545	53,060
5,550	59,530
5,555	66,320
5,560	73,430

Contents in acre-feet, water year October 1936 to September 1937

<u>Day</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>
1	33,840	31,870	31,400	31,490	31,920	37,310	49,640	52,070	73,660	68,200	59,400	45,260
2	33,400	31,770	31,350	31,440	31,920	37,460	50,780	51,940	73,430	67,710	58,940	44,850
3	33,060	31,720	31,300	31,440	32,060	37,670	51,820	52,690	73,360	67,150	58,400	44,510
4	32,730	31,720	31,350	31,400	32,200	37,830	52,620	52,940	73,360	66,740	57,950	44,240
5	32,480	31,720	31,400	31,350	32,390	37,980	53,310	55,220	73,660	66,320	57,560	43,960
6	32,250	31,870	31,440	31,350	32,590	38,200	54,190	56,770	73,660	65,770	57,030	43,660
7	32,100	31,960	31,490	31,400	32,920	38,400	54,580	58,610	73,660	65,420	56,640	43,400
8	32,010	32,060	31,590	31,400	33,310	38,620	54,830	60,730	73,660	65,420	56,180	42,490
9	31,960	31,920	31,680	31,300	33,600	38,880	54,700	62,750	73,660	65,770	55,730	41,880
10	31,920	31,820	31,770	31,300	33,840	39,090	54,700	64,260	73,660	65,700	55,280	41,220
11	31,870	31,680	31,770	31,350	34,090	39,360	55,090	65,910	73,580	65,910	54,830	40,610
12	31,820	31,680	31,820	31,400	34,290	39,680	54,960	67,150	73,580	65,110	54,320	39,900
13	31,720	31,680	31,820	31,490	34,580	40,080	54,700	67,570	73,320	64,420	53,820	39,200
14	31,680	31,680	31,820	31,640	34,830	40,450	54,450	68,130	73,660	63,810	53,310	38,620
15	31,680	31,640	31,870	31,720	35,030	40,780	54,700	68,550	73,560	63,950	52,810	38,040
16	31,640	31,640	31,960	31,820	35,180	41,220	55,470	69,390	73,660	63,810	52,320	37,460
17	31,590	31,590	32,100	31,870	35,330	41,940	55,600	70,100	73,580	63,390	51,820	36,840
18	31,590	31,590	32,150	31,920	35,530	42,660	55,220	70,530	73,380	63,180	51,390	36,230
19	31,590	31,540	32,150	31,920	35,730	43,330	54,700	71,110	73,140	62,040	50,900	35,630
20	31,640	31,490	32,060	31,960	35,880	43,720	54,390	71,320	72,920	65,770	50,420	35,030
21	31,680	31,440	32,060	31,960	36,030	44,180	54,190	71,680	72,620	65,490	50,000	34,390
22	31,640	31,440	32,060	31,960	36,180	44,570	54,320	71,830	72,410	65,080	49,520	33,800
23	31,640	31,440	32,010	31,920	36,340	45,080	54,190	71,970	72,120	64,530	49,040	33,260
24	31,640	31,440	31,960	31,870	36,490	45,540	53,820	72,190	71,760	63,980	48,630	32,960
25	31,640	31,440	31,920	31,870	36,640	45,880	53,190	72,410	71,180	63,430	48,150	32,680
26	31,640	31,440	31,870	31,870	36,840	46,280	52,940	73,290	70,670	62,890	47,740	32,440
27	31,640	31,440	31,820	31,870	37,000	46,690	52,810	73,430	70,250	62,280	47,270	32,200
28	31,640	31,440	31,820	31,870	37,150	47,100	52,810	73,660	69,820	61,600	46,810	31,960
29	31,640	31,440	31,770	31,820	-	47,620	52,690	73,730	69,250	60,860	46,340	31,770
30	31,640	31,440	31,680	31,870	-	48,210	52,440	73,730	68,690	60,330	46,000	31,590
31	31,720	-	31,590	31,920	-	48,980	-	73,940	-	59,800	45,650	-

Weber River at Echo, Utah

Location.- Water-stage recorder, lat. 40°58'05", long. 111°26'15", 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 1937.

Average discharge.- 10 years, 260 second-feet.

Extremes.- Maximum discharge during year, 2,330 second-feet May 30 and 31 (gage height, 5.83 feet); minimum daily discharge, 6 second-feet Mar. 26, 27, Apr. 1, 2.
1927-37: Maximum discharge, that of May 30 and 31, 1937; minimum daily discharge, 3 second-feet Mar. 20-26, Mar. 31 to Apr. 8, 1936.

Remarks.- Records excellent. Discharge for Dec. 5 to Mar. 30 computed on basis of daily gage readings and gate openings of Echo Dam. Numerous diversions for irrigation above and below station. One small diversion between gage and Echo Dam. Flow regulated by Echo Reservoir (capacity, 74,000 acre-feet).

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	268	223	150	151	102	62	6	665	1,150	355	302	256
2	256	203	130	137	85	62	6	405	868	332	295	239
3	253	166	118	137	59	62	8	268	778	335	286	213
4	239	147	99	128	59	49	7	268	585	324	271	213
5	210	151	99	118	59	37	7	268	650	348	286	203
6	157	161	99	118	59	37	99	271	610	335	280	286
7	143	153	99	118	59	37	159	271	528	277	277	377
8	130	198	99	118	59	37	294	348	484	248	277	373
9	115	213	99	97	59	38	391	726	450	245	277	369
10	106	215	99	79	59	38	391	826	454	194	277	366
11	107	198	100	79	59	38	479	844	407	177	283	391
12	104	174	100	79	60	29	600	1,020	384	159	299	399
13	99	174	100	79	60	26	600	1,120	352	161	302	377
14	99	174	113	79	60	26	600	1,250	345	274	302	348
15	99	174	126	79	60	26	600	1,440	366	318	292	348
16	96	174	153	100	60	26	680	1,460	442	373	286	341
17	89	174	166	126	60	26	754	1,480	502	331	274	362
18	86	174	166	126	61	26	748	1,480	546	286	271	362
19	86	174	166	126	61	26	738	1,480	551	299	268	352
20	102	177	166	126	61	14	732	1,330	542	341	268	348
21	116	168	168	126	61	7	721	1,260	528	369	265	348
22	116	151	168	126	61	7	726	1,260	510	387	259	345
23	116	151	168	126	61	7	726	1,200	497	399	253	299
24	116	151	168	126	61	7	710	1,060	497	403	253	226
25	118	143	168	126	61	7	700	650	454	391	253	210
26	116	137	168	126	61	6	690	726	407	383	232	198
27	116	137	168	126	62	6	690	738	394	434	268	186
28	116	131	168	126	62	7	690	776	384	446	268	181
29	116	128	168	126	-	7	685	880	395	377	248	181
30	116	128	168	126	-	7	675	1,420	384	328	231	177
31	149	-	168	126	-	9	-	1,840	-	302	251	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						4,155	268	86	134	8,240		
November.....						5,012	223	128	167	9,940		
December.....						4,275	168	99	138	8,480		
Calendar year 1936.....						115,900	1,620	3	317	229,900		
January.....						3,586	151	79	116	7,110		
February.....						1,751	102	59	62.5	3,470		
March.....						799	62	6	25.8	1,580		
April.....						14,912	754	5	497	29,580		
May.....						29,030	1,840	268	936	57,580		
June.....						15,374	1,130	345	512	30,490		
July.....						9,961	446	159	321	19,760		
August.....						8,484	302	231	274	16,830		
September.....						8,874	399	177	296	17,600		
Water year 1936-37.....						106,213	1,840	6	291	210,700		

Weber River at Devils Slide, Utah

Location.- Water-stage recorder, lat. $41^{\circ}03'40''$, long. $111^{\circ}34'25''$, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T. 4 N., R. 3 E., 500 feet downstream from highway underpass, $1\frac{1}{2}$ miles below Lost Creek, and $1\frac{1}{2}$ miles west of Devils Slide.

Drainage area.- 1,100 square miles.

Records available.- February 1905 to September 1937.

Average discharge.- 32 years, 478 second-feet.

Extremes.- Maximum discharge during year, 2,200 second-feet May 31 (gage height, 5.66 feet); minimum probably occurred during winter.

1905-37: Maximum discharge observed, 8,000 second-feet May 22, 1920; minimum, 18 second-feet Sept. 23, 1934.

Remarks.- Records good except those for period of ice effect, Dec. 28 to Mar. 18, and period of missing gage heights, Oct. 1-9, which were computed on basis of records for stations at Echo and Gateway and are fair. Numerous diversions above station for irrigation and domestic supply. Flow regulated by storage in Echo Reservoir (capacity, 74,000 acre-feet).

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)

1.4	80	2.4	286	3.6	830
1.6	109	2.6	351	4.0	1,080
1.8	144	2.8	428	4.5	1,400
2.0	185	3.0	517	5.0	1,740
2.2	232	3.3	665	5.5	2,090

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	290	272	150			80	187	830	1,290	437	295	266
2	284	258	154			80	317	692	998	412	295	256
3	278	206	140			80	196	580	866	384	286	277
4	268	177	130			80	128	655	720	351	272	225
5	262	187	130			80	128	751	714	370	289	218
6	210	187	131			80	206	770	726	396	286	258
7	170	190	133			80	255	797	660	404	278	377
8	150	230	131			80	327	866	620	366	278	370
9	130	253	133			84	485	1,250	565	351	278	366
10	112	253	126			86	531	1,310	551	308	275	366
11	116	235	121			92	650	1,310	508	283	283	392
12	116	210	123			98	704	1,380	480	275	298	404
13	109	208	123			92	726	1,490	450	253	308	381
14	108	208	123			84	808	1,590	408	377	308	344
15	106	210	121			80	902	1,750	396	396	302	344
16	108	206	166			105	914	1,710	462	428	292	344
17	106	208	194			130	914	1,680	512	412	286	366
18	104	206	192			180	884	1,650	560	344	283	370
19	104	206	187			156	896	1,610	570	327	280	355
20	119	203	185			114	926	1,470	565	362	278	358
21	137	194	183			96	956	1,340	551	392	278	358
22	135	172	181			102	980	1,310	527	396	269	382
23	137	170	179			118	956	1,280	520	400	269	320
24	137	168	177			93	896	1,180	517	408	269	240
25	140	164	177			91	866	842	489	396	269	222
26	140	156	172			86	890	786	454	388	278	213
27	139	156	170			88	956	842	428	424	280	199
28	139	152	170			100	932	802	420	441	280	190
29	139	148	170			111	278	902	454	404	286	187
30	142	148	170			140	848	1,190	503	337	272	181
31	179	-	170			164	-	1,940	-	317	272	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						4,804	290	104	155	9,530		
November.....						5,941	272	148	198	11,780		
December.....						4,812	194	121	155	9,540		
Calendar year 1936.....						159,098	2,180	-	435	315,600		
January.....						4,030	-	-	150	7,990		
February.....						2,240	-	-	80	4,440		
March.....						3,130	164	80	101	6,210		
April.....						20,242	980	128	675	40,150		
May.....						36,535	1,940	580	1,179	72,470		
June.....						17,464	1,280	396	582	34,640		
July.....						11,539	441	253	372	22,890		
August.....						8,772	308	269	283	17,400		
September.....						9,069	404	181	302	17,990		
Water year 1936-37.....						128,578	1,940	-	352	255,000		

Weber River at Gateway, Utah

Location.— Water-stage recorder, lat. 41°08', long. 111°50', in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27, T. 5 N., R. 1 E., 800 feet below Union Pacific Railroad bridge, 2,500 feet below mouth of Strawberry Creek and 2,500 feet above section house at Gateway.

Drainage area.— 1,610 square miles.

Records available.— June 1919 to September 1937. October 1889 to July 1903, at site 1 mile downstream known as Weber River near Uinta; records equivalent.

Average discharge.— 17 years (1920-37), 624 second-feet.

Extremes.— Maximum discharge during year, 3,230 second-feet May 15 (gage height, 5.60 feet); minimum daily discharge, 124 second-feet Jan. 11.

1889-1903, 1919-37: Maximum discharge, 7,980 second-feet May 31, 1896; minimum, 45 second-feet Sept. 24, 1934.

Remarks.— Records good except those for period of ice effect, Jan. 8 to Feb. 28, and for periods of missing gage heights Nov. 29 to Dec. 2, Dec. 3, 6, 7, 9-11, which were computed on basis of kilowatt-hour output of power plant and are fair. Numerous diversions for irrigation above and below station. Flow affected by storage in East Canyon Creek and Echo Reservoirs (capacity, 28,000 and 74,000 acre-feet, respectively).

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to May 15

May 16 to Sept. 30

0.8	146
1.0	202
1.3	299
1.6	413
2.0	594
2.5	875
3.0	1,220
3.5	1,570
4.0	1,950
5.0	2,750
5.5	3,150

1.2	255
1.4	327
1.6	406
1.8	496
2.0	595

Note.— Same as preceding table above 2.1 feet.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	343	339	224	255	182	173	565	1,600	2,230	650	532	512
2	328	262	229	227	177	185	803	1,520	1,700	680	532	522
3	324	306	214	219	168	173	604	1,430	1,540	575	532	493
4	321	268	213	221	144	190	455	1,660	1,370	580	512	489
5	317	272	202	208	165	173	451	1,920	1,310	585	527	482
6	282	275	205	205	197	185	477	2,140	1,310	635	536	470
7	259	275	205	205	248	196	508	2,250	1,210	667	532	475
8	239	282	202	156	232	246	508	2,380	1,110	605	527	470
9	227	317	208	132	199	269	728	2,720	1,070	590	522	470
10	211	321	197	130	165	265	927	2,830	1,010	536	517	461
11	208	321	178	124	204	317	1,150	2,800	927	508	517	457
12	208	292	205	135	186	317	1,160	2,720	851	493	522	448
13	208	289	224	154	182	324	1,260	2,850	785	466	527	443
14	205	285	221	158	220	285	1,600	2,890	678	480	536	408
15	202	285	211	148	211	268	1,900	3,120	605	489	532	395
16	196	285	246	162	196	343	1,830	3,030	585	498	536	387
17	196	285	272	171	173	490	1,730	3,000	515	546	527	395
18	190	285	265	201	181	555	1,700	2,960	656	546	522	391
19	193	285	259	203	168	430	1,750	2,870	667	517	517	383
20	208	282	259	194	167	350	1,830	2,630	678	527	512	383
21	218	282	262	162	163	317	1,980	2,360	667	541	503	387
22	221	265	262	163	168	306	2,020	2,240	645	556	508	395
23	221	259	259	169	165	343	1,850	2,210	615	556	508	408
24	218	250	259	186	167	289	1,730	2,110	610	566	498	327
25	221	249	259	186	171	282	1,750	1,770	610	570	489	301
26	221	239	259	178	174	265	1,880	1,540	630	536	498	301
27	227	235	259	195	172	272	2,000	1,600	615	561	503	294
28	227	239	262	189	172	317	1,790	1,490	605	570	498	294
29	227	228	262	197	-	354	1,600	1,600	615	575	546	276
30	226	226	259	203	-	369	1,580	1,920	678	570	541	276
31	243	-	259	200	-	451	-	2,810	-	551	517	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	7,345	343	190	237	14,570
November.....	8,384	362	226	279	16,630
December.....	7,300	272	178	256	14,480
Calendar year 1936.....	274,371	4,180	105	749	545,020
January.....	5,636	255	124	182	11,180
February.....	5,107	248	144	182	10,130
March.....	9,309	558	173	300	18,460
April.....	40,116	2,020	451	1,371	79,570
May.....	70,970	3,120	1,430	2,289	140,800
June.....	27,197	2,230	585	907	53,940
July.....	17,225	667	466	556	34,170
August.....	16,128	546	469	520	31,990
September.....	12,193	522	276	406	24,180
Water year 1936-37.....	226,908	3,120	124	622	450,100

Weber River near Plain City, Utah

Location.— Chain gage, lat. 41°16'42", long. 112°05'30", in NW¼ sec. 8, T. 6 N., R. 2 W., at county highway bridge, 1 mile below mouth of Fourmile Creek, 1½ miles south of Plain City and 6 miles above mouth.

Drainage area.— 2,060 square miles.

Records available.— May 1905 to September 1937. Records collected in 1904 by State engineer.

Average discharge.— 30 years (1906-19, 1920-37), 828 second-feet.

Extremes.— Maximum discharge observed during year, 4,390 second-feet May 11 (gage height, 17.38 feet); minimum, 8 second-feet Aug. 28 and Sept. 4, 1904-37: Maximum discharge observed, 7,580 second-feet June 6, 1909 (gage height, 19.1 feet); practically no flow during latter part of several summers since that of 1915.

Remarks.— Records fair. Gage read once daily. Discharge for Oct. 20, Dec. 25, May 25, July 5 interpolated. In summer practically entire flow of Weber River above station is diverted for irrigation. Flow is affected by storage in Echo, East Canyon Creek and Pineview Reservoirs.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	468	240	351	477	454	1,040	2,140	2,560	147	35	18
2	45	554	253	321	468	511	1,480	2,040	1,690	78	28	13
3	48	515	255	275	449	525	1,280	1,820	1,560	53	19	11
4	48	360	304	287	399	525	1,120	2,020	1,000	50	17	8
5	50	344	287	304	395	536	1,110	2,570	1,290	55	20	14
6	48	364	271	279	413	539	1,140	2,760	1,210	59	28	18
7	50	431	263	263	525	592	1,160	3,180	1,070	90	19	15
8	50	436	267	248	515	645	1,150	3,510	923	137	13	15
9	50	431	263	236	496	716	1,230	3,960	706	114	17	17
10	51	426	255	218	482	730	1,420	4,290	647	90	18	26
11	50	539	236	215	463	744	1,780	4,390	579	63	17	30
12	47	501	208	174	417	758	1,890	4,310	479	57	16	30
13	46	472	181	211	431	824	1,770	4,060	404	49	16	33
14	50	436	204	259	468	890	1,740	3,940	357	45	15	36
15	53	408	267	251	501	758	2,520	4,070	220	32	18	34
16	56	399	360	259	382	751	2,680	4,100	159	33	19	32
17	59	338	426	271	440	1,070	2,510	3,910	89	35	19	30
18	184	329	386	283	413	1,180	2,480	3,740	96	41	20	28
19	197	317	351	292	395	1,100	2,510	3,550	82	46	19	22
20	216	308	346	296	399	968	2,570	3,220	89	33	21	19
21	244	304	342	304	355	938	2,640	2,780	94	28	17	18
22	240	283	338	304	304	378	2,800	2,530	76	30	14	24
23	240	275	329	308	338	884	2,620	2,150	64	33	16	28
24	251	263	351	334	355	938	2,420	2,980	72	35	14	37
25	229	255	342	329	373	824	2,330	2,200	63	39	14	45
26	222	229	334	317	382	727	2,340	1,410	59	43	10	48
27	218	233	342	329	404	716	2,520	1,300	59	43	10	45
28	222	240	358	354	431	744	2,500	1,060	59	45	8	46
29	229	226	346	421	-	878	2,330	1,060	56	45	13	48
30	259	233	346	449	-	890	2,170	1,550	56	40	19	48
31	325	-	357	472	-	968	-	2,840	-	37	26	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						4,107	325	38	132	8,140		
November.....						10,917	554	226	364	21,650		
December.....						9,368	426	181	302	18,680		
Calendar year 1936.....						319,653	6,050	5	673	634,000		
January.....						9,224	472	174	298	18,290		
February.....						11,870	525	304	424	23,540		
March.....						24,190	1,180	454	780	47,980		
April.....						58,250	2,800	1,040	1,980	117,500		
May.....						89,440	4,390	1,060	2,890	177,400		
June.....						15,868	2,560	56	528	31,470		
July.....						1,725	147	28	55.6	3,420		
August.....						554	35	8	17.9	1,100		
September.....						836	48	8	27.9	1,660		
Water year 1936-37.....						237,349	4,390	8	650	470,700		

WEBER RIVER BASIN

Chalk Creek at Coalville, Utah

Location.- Water-stage recorder, lat. 40°55'10", long. 111°23'55", in SE $\frac{1}{4}$ 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.

Drainage area.- 253 square miles.

Records available.- October 1904 to December 1905, April 1927 to September 1937.

Average discharge.- 10 years (1928-37), 53.1 second-feet.

Extremes.- Maximum discharge during year, 588 second-feet Apr. 16 (gage height, 2.58 feet); minimum, 4.0 second-feet Aug. 23.
1927-37: Maximum discharge observed, 696 second-feet May 4, 1929 (gage height 4.00 feet); minimum, less than one second-foot for several days during June to November 1934.

Remarks.- Records fair. No diversions below station. Flow regulated by diversions above station for irrigation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	26	14	17	*15	*17	41	104	216	37	14	11
2	8	20	16	17	15	*16	84	184	209	36	14	12
3	9	*16	14	16	*15	*19	44	219	214	33	12	12
4	10	11	17	16	*16	*20	66	281	202	33	12	12
5	9	*15	17	17	*17	*21	69	313	195	34	11	12
6	10	*19	19	17	17	21	63	360	176	37	10	12
7	10	23	19	16	*20	*22	50	366	188	60	10	11
8	10	*21	18	15	24	*23	40	424	147	72	10	10
9	9	*19	20	15	*23	*24	53	454	145	62	9	12
10	9	*17	15	*15	*22	*25	68	427	137	86	9	10
11	10	14	14	14	*20	*26	99	403	128	90	8	10
12	10	*16	14	15	*19	*28	79	363	120	99	7	9
13	9	*18	15	15	18	29	112	397	112	97	7	8
14	9	19	17	*16	*18	*35	204	415	108	122	7	8
15	10	*20	18	*17	*18	41	366	463	100	88	7	8
16	12	*21	20	18	*17	*43	403	421	93	68	6	8
17	14	22	22	*18	*17	*45	130	394	83	62	6	7
18	15	*20	21	*18	*17	48	72	397	74	62	5	7
19	14	*18	17	18	*16	*37	114	357	66	58	5	7
20	18	*17	18	*16	16	26	130	307	62	51	5	7
21	18	16	20	15	*16	*28	158	270	57	45	4	7
22	17	*16	18	*15	*16	29	192	239	53	42	4	7
23	17	*14	16	15	*17	*24	108	229	45	39	4	10
24	16	*13	18	*15	*17	20	81	219	41	37	4	10
25	16	12	18	15	*17	*19	83	185	40	33	5	9
26	16	*13	20	*15	*17	*18	122	172	40	28	5	9
27	18	14	*18	15	17	17	178	160	38	26	5	9
28	16	14	17	*15	*17	*19	128	154	37	20	4	10
29	17	14	18	*15	-	21	99	162	38	19	15	9
30	18	14	16	15	-	*30	90	219	39	16	15	9
31.	24	-	18	*15	-	39	-	260	-	15	10	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						403	24	8	13.0	799		
November.....						511	26	11	17.0	1,010		
December.....						542	22	14	17.5	1,080		
Calendar year 1936.....						27,093	594	7	74.0	53,740		
January.....						491	18	14	15.8	974		
February.....						494	24	15	17.6	980		
March.....						832	48	17	26.8	1,650		
April.....						3,526	403	40	118	6,990		
May.....						9,278	463	104	299	18,400		
June.....						3,173	216	37	103	6,280		
July.....						1,607	122	15	51.8	3,180		
August.....						249	15	4	8.0	494		
September.....						282	12	7	9.4	559		
Water year 1936-37.....						21,388	463	4	58.6	42,420		

*Interpolated.

South Fork of Ogden River near Huntsville, Utah

Location.- Water-stage recorder, lat. 41°16', long. 111°40', 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 1937.

Average discharge.- 16 years, 110 second-feet.

Extremes.- Maximum discharge during year, 1,090 second-feet May 8 (gage height, 4.30 feet); minimum discharge recorded, 23 second-feet Nov. 23.
1921-37: Maximum discharge, 1,780 second-feet May 4, 1936 (gage height, 5.45 feet); minimum discharge recorded, 20 second-feet Nov. 25, 1931, July 28, 1934.

Remarks.- Records good. Discharge for periods of ice effect, Dec. 10-16, Dec. 30 to Feb. 27, computed on basis of weekly gage readings and weather records. Discharge for Nov. 3-5 interpolated. Only small diversions above gage.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)

0.9	27	1.8	143	3.0	505
1.0	34	2.0	191	3.3	625
1.2	51	2.2	244	3.6	755
1.4	74	2.4	302	4.0	940
1.6	104	2.6	366	4.5	1,190

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	45	36	36	37	41	135	244	201	72	44	36
2	38	41	35	36	40	43	145	314	188	69	45	36
3	38	41	36	36	40	46	132	466	186	66	44	36
4	39	40	35	36	40	47	118	657	191	64	43	36
5	40	40	34	36	41	49	118	746	191	62	42	36
6	39	40	35	36	40	52	118	783	184	72	43	36
7	37	39	36	36	40	53	108	845	176	68	43	36
8	38	38	36	36	39	56	108	920	168	67	41	36
9	40	37	40	35	39	60	124	910	161	63	40	36
10	39	38	38	35	38	62	174	850	154	62	40	36
11	37	39	36	36	39	66	212	809	148	64	40	36
12	38	39	36	38	40	73	184	764	141	69	39	35
13	37	39	36	40	40	81	199	760	132	68	39	35
14	38	39	36	40	40	77	278	791	126	65	40	35
15	39	39	36	40	39	75	336	791	122	59	40	35
16	39	36	36	40	39	91	314	737	117	56	40	35
17	39	37	36	40	39	94	247	688	111	55	40	35
18	38	40	35	40	40	96	230	674	106	53	40	35
19	38	35	36	40	39	84	239	597	101	52	40	35
20	41	30	36	40	39	78	269	513	99	51	40	35
21	40	37	36	36	40	72	318	449	94	50	37	35
22	38	38	36	36	40	70	333	410	93	49	38	36
23	37	38	35	36	40	72	266	380	90	48	40	40
24	38	40	36	37	40	68	222	343	88	47	39	36
25	39	38	36	37	39	69	229	308	85	47	38	36
26	38	32	36	37	39	69	308	281	80	46	38	36
27	39	35	36	38	39	74	370	255	71	46	36	36
28	39	36	36	38	39	82	302	256	73	46	36	37
29	39	35	36	38	-	93	282	225	73	45	38	36
30	40	35	36	38	-	99	233	250	74	47	37	37
31	44	-	36	38	-	109	-	222	-	45	36	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,201	45	37	38.7	2,390		
November.....						1,136	45	30	37.9	2,280		
December.....						1,117	40	34	36.0	2,220		
Calendar year 1936.....						65,310	1,640	30	173	125,700		
January.....						1,160	40	35	37.4	2,300		
February.....						1,104	41	37	39.4	2,190		
March.....						2,201	109	41	41.0	4,570		
April.....						6,521	370	108	221	13,130		
May.....						17,217	920	222	555	34,150		
June.....						3,824	201	73	127	7,580		
July.....						1,771	72	45	57.1	3,510		
August.....						1,236	45	36	39.9	2,450		
September.....						1,076	40	35	35.9	2,130		
Water year 1936-37						39,664	920	30	109	78,660		

Pine View Reservoir near Ogden, Utah

Location.- Staff gage, lat. 41°15'20", long. 111°50'25", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 6 N., R. 1 E., at trash rack at Pine View Dam, 7 miles northeast of Ogden.

Records available.- November 1936 to September 1937.

Remarks.- Pine View Dam, completed by Bureau of Reclamation in 1937, has an impounding capacity of 41,000 acre-feet. Record furnished by Bureau of Reclamation.

Contents, in acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			1,550	-	2,910	619	2,270	11,790	25,100	24,930	20,830	14,500
2		-	1,680	-	2,640	622	2,680	12,280	25,440	24,790	20,680	14,280
3		-	1,750	-	2,370	616	3,050	13,260	25,560	24,630	20,560	14,040
4		-	1,650	4,960	2,120	597	3,030	14,850	25,700	24,500	20,440	13,810
5		-	1,850	5,060	1,870	586	2,880	16,630	25,820	24,380	20,250	13,600
6		-	2,080	5,160	1,640	584	2,780	18,340	25,700	24,240	20,030	13,430
7		-	2,150	5,280	1,470	583	2,690	20,200	25,750	24,250	19,820	13,280
8		-	2,280	5,240	1,280	599	2,620	21,460	25,820	24,230	19,620	13,060
9		-	2,370	5,200	1,040	619	2,530	22,400	25,870	24,180	19,480	12,870
10		-	2,450	5,160	776	666	2,670	22,680	25,870	24,080	19,280	12,710
11		-	2,560	5,110	476	799	2,960	22,610	25,870	24,020	19,120	12,490
12		-	2,650	5,080	190	903	3,260	22,600	25,840	23,960	18,900	12,370
13		-	2,770	4,940	132	903	3,430	22,590	25,870	23,870	18,730	12,160
14		-	2,820	4,900	126	560	3,660	22,960	25,960	23,770	18,450	12,110
15		-	2,890	4,860	113	403	4,470	23,140	25,930	23,640	18,190	11,930
16		0	3,030	4,810	99	518	6,450	23,240	25,900	23,550	18,000	11,750
17		350	3,160	4,760	105	518	6,140	23,300	25,870	23,440	17,880	11,610
18		473	3,270	4,720	117	830	6,410	23,360	25,880	23,330	17,690	11,480
19		552	3,390	4,660	80	1,080	6,640	23,530	25,950	23,220	17,440	11,360
20		639	3,520	4,590	102	1,160	6,910	23,670	26,000	23,050	17,240	11,200
21		734	3,670	4,520	286	1,190	7,350	23,660	26,040	22,960	16,980	11,000
22		830	3,640	4,440	411	1,140	7,970	23,680	26,040	22,830	16,740	10,890
23		907	3,740	4,350	503	1,250	8,430	24,130	25,920	22,660	16,470	10,780
24		1,000	3,630	4,280	633	1,230	8,840	24,190	25,820	22,510	16,260	10,700
25		1,070	3,970	4,220	654	1,300	8,670	24,280	25,670	22,340	16,060	10,560
26		1,160	4,020	4,170	677	1,360	8,970	24,240	25,580	22,100	15,860	10,460
27		1,280	4,170	4,100	662	1,410	9,680	24,320	25,470	21,860	15,600	10,360
28		1,360	4,230	3,690	647	1,560	10,510	24,510	25,340	21,640	15,380	10,290
29		1,420	4,330	3,660	-	1,660	11,070	24,840	25,260	21,410	15,130	10,180
30		1,460	4,430	3,420	-	1,850	11,580	25,360	25,090	21,200	14,940	10,090
31		-	4,580	3,160	-	1,980	-	26,430	-	21,000	14,730	-

Note.- Gates closed at 2 p.m. Nov. 16, 1936. Records furnished by U. S. Bureau of Reclamation.

Ogden River near Ogden, Utah

Location.- Water-stage recorder, lat. 41°15'17", long. 111°50'47", in NE $\frac{1}{4}$ sec. 16, T. 6 N., R. 1 E., 1,500 feet below Wheeler Creek, 2,000 feet below Pine View Dam (now under construction), and 6 $\frac{1}{2}$ miles northeast of Ogden.

Records available.- 1895-96, January 1904 to October 1912, October 1931 to September 1937.

Average discharge.- 13 years (1904-9, 1910-12, 1931-37), 263 second-feet.

Extremes.- Maximum combined daily discharge (flow in river and through Pine View pipe line), during year, 1,850 second-feet May 11; no flow (regulated) Nov. 19, 20, 22, and Dec. 15.

1904-12, 1932-37: Maximum discharge, 3,700 second-feet Apr. 24, 1936 (gage height, 11.48 feet) at river station only, new pipe line under construction; no flow Nov. 19, 20, 22, Dec. 15, 1936, when reservoir gates were closed.

Remarks.- Records fair. Water first diverted through new Pine View pipe line Jan. 5, 1937. Records give combined flow of Ogden River below Pine View Dam and Pine View pipe-line diversion. Flow affected by storage in Pine View Reservoir (capacity, 41,000 acre-feet) and by diversions for irrigation and municipal supply. Records of daily discharge furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	109	1	2	178	74	541	658	499	183	143	138
2	41	106	1	2	179	75	628	524	376	182	140	141
3	39	65	1	2	180	78	630	529	449	172	144	148
4	42	22	1	2	179	78	623	670	475	169	154	135
5	43	5	1	12	169	79	616	849	538	162	149	132
6	49	87	1	10	175	79	614	906	481	162	153	128
7	45	85	1	55	168	79	588	1,260	436	132	159	121
8	44	66	1	83	168	80	562	1,770	430	142	153	119
9	44	23	1	65	166	85	546	1,670	385	141	146	124
10	42	1	1	82	171	86	593	1,920	378	134	129	120
11	44	48	1	65	166	109	632	1,930	350	136	140	117
12	46	117	1	35	116	174	635	1,800	283	135	155	110
13	44	103	1	83	82	345	644	1,660	245	147	158	113
14	43	60	1	82	78	317	682	1,640	244	148	157	116
15	43	52	0	82	76	236	706	1,770	234	155	157	116
16	42	31	1	84	73	234	720	1,720	202	150	157	121
17	42	1	2	84	70	306	719	1,580	140	154	162	116
18	40	1	2	82	72	347	718	1,540	110	155	164	109
19	41	0	1	82	80	385	732	1,370	107	147	165	111
20	55	0	1	85	55	391	740	1,250	123	154	163	108
21	48	1	1	87	36	384	740	1,140	136	151	159	103
22	44	0	1	87	33	320	720	894	149	160	155	102
23	43	1	1	87	30	320	703	845	163	157	150	100
24	44	1	1	73	45	295	693	823	189	157	157	82
25	42	1	1	66	64	294	658	811	173	153	150	68
26	41	1	1	88	72	301	668	718	187	147	150	65
27	41	1	1	129	77	310	644	574	189	124	152	65
28	41	4	1	160	74	335	641	480	187	142	157	65
29	18	7	1	166	-	309	504	360	186	152	139	62
30	12	1	1	178	-	418	735	630	192	156	136	69
31	66	-	1	184	-	475	-	801	-	153	147	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,313	66	12	42.4	2,600		
November.....						1,000	117	0	33.3	1,980		
December.....						32	2	0	1.0	63		
Calendar year 1936.....						139,766	3,430	0	392	277,200		
January.....						2,402	184	2	77.5	4,760		
February.....						3,032	180	30	108	6,010		
March.....						7,397	475	74	239	14,670		
April.....						19,575	740	504	652	36,830		
May.....						35,352	1,930	360	1,140	70,120		
June.....						8,237	538	107	275	16,340		
July.....						4,710	183	124	152	9,340		
August.....						4,702	165	129	152	9,330		
September.....						3,224	148	62	107	6,390		
Water year 1936-37.....						90,976	1,930	0	249	180,400		

Jordan River at Narrows, near Lehi, Utah

Location.- Water-stage recorders, lat. 40°26'40", long. 111°55'20", in SE¼NW¼ sec. 26, T. 4 S., R. 1 W., at Narrows, 5½ miles northwest of Lehi.

Drainage area.- 2,610 square miles.

Records available.- October 1934 to September 1937 May to December 1904 and July 1913 to September 1934, at outlet of Utah Lake, 7½ miles upstream.

Average discharge.- 24 years (1913-37), 387 second-feet.

Extremes.- Maximum daily discharge during year, 727 second-feet July 5; minimum, 6 second-feet Dec. 4-6, Feb. 13-18, Apr. 11.

1913-37: Maximum daily discharge, 1,370 second-feet June 8, 1923 (gage height, 7.78 feet, at former site).

Remarks.- Records excellent. They give the combined flow of Jordan River, Utah & Salt Lake Canal, and East Jordan Canal. Flow completely regulated by gates and pumps at outlet of Utah Lake, pumps at Pelican Point, and diversion dam at Narrows.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	377	12	48	10	8	29	20	14	461	660	648	619
2	366	12	28	10	8	45	10	74	392	702	640	654
3	365	14	20	10	8	79	13	216	384	721	643	681
4	362	15	6	10	8	51	8	372	367	726	649	677
5	363	15	6	10	7	28	8	417	380	727	649	672
6	362	15	6	10	7	28	8	438	366	647	641	633
7	359	14	7	10	7	28	8	453	384	643	616	664
8	343	13	7	10	7	27	9	459	493	656	627	674
9	354	13	7	10	7	24	8	475	557	542	629	665
10	313	13	7	10	7	25	7	494	574	400	645	658
11	304	13	7	10	7	23	6	599	582	575	657	660
12	303	13	7	10	7	23	8	649	588	654	660	657
13	304	13	7	10	6	22	22	685	587	520	664	645
14	312	13	7	10	6	20	26	662	578	679	664	644
15	265	13	7	10	6	20	37	675	578	654	658	645
16	228	13	7	10	6	17	34	681	585	655	664	647
17	152	14	8	10	6	19	60	663	569	646	660	646
18	167	14	8	9	6	18	47	679	578	662	651	647
19	170	14	8	9	7	30	42	565	578	676	651	652
20	61	14	8	9	15	23	51	629	567	674	653	632
21	20	14	8	9	23	20	32	612	562	673	651	596
22	18	14	8	9	24	19	55	614	586	668	647	640
23	15	14	10	9	25	14	43	608	593	657	649	593
24	14	14	10	9	25	19	28	610	593	657	651	466
25	13	14	10	9	28	16	10	612	599	654	648	429
26	13	15	10	9	29	16	8	609	602	652	647	436
27	13	16	10	8	29	16	20	615	600	654	649	434
28	19	18	10	8	29	15	33	615	603	651	652	432
29	14	18	10	8	-	16	74	604	607	648	634	434
30	14	18	10	8	-	15	37	592	600	654	649	434
31	13	-	10	8	-	18	-	522	-	655	652	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						6,016	377	13	194	11,930		
November.....						425	18	12	14.2	843		
December.....						322	48	6	10.4	639		
Calendar year 1936.....						76,585	615	4	209	151,900		
January.....						291	10	8	9.4	577		
February.....						358	28	6	12.8	710		
March.....						763	79	14	24.5	1,510		
April.....						772	74	6	25.7	1,530		
May.....						16,492	681	14	532	32,710		
June.....						16,093	607	366	536	31,920		
July.....						20,042	727	400	647	39,750		
August.....						20,103	664	616	648	39,870		
September.....						17,969	681	429	599	35,640		
Water year 1936-37.....						99,646	727	6	275	197,600		

Salt Creek near Nephi, Utah

Location.- Staff gage and Farshall rating flume, lat. $39^{\circ}43'$, long. $111^{\circ}47'$, in NW $\frac{1}{4}$ 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, $2\frac{1}{2}$ miles below mouth of South Fork, and $3\frac{1}{2}$ miles east of Nephi.

Drainage area.- 95 square miles.

Records available.- April 1925 to September 1937.

Average discharge.- 12 years, 25.2 second-feet.

Extremes.- Maximum discharge observed during year, about 270 second-feet July 28; minimum, 6 second-feet Jan. 9.

1925-37: Maximum discharge observed, about 800 second-feet July 17, 1932; minimum, 3 second-feet Dec. 2, 4, 1935.

Remarks.- Records fair. Gage read twice daily. Discharge for Oct. 31, July 28, 29 computed from graph based on several gage readings. A few small diversions above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	22	12	10	11	15	30	105	73	38	24	17
2	13	16	12	10	11	15	33	117	65	37	23	19
3	14	13	12	9	12	15	30	102	63	39	22	17
4	14	13	12	10	12	15	29	144	56	40	22	16
5	13	13	12	12	12	16	31	154	57	40	21	15
6	13	13	12	12	21	17	32	161	57	40	22	15
7	13	14	12	8	32	20	28	175	55	56	26	14
8	13	14	12	7	14	20	29	170	57	51	22	14
9	13	13	11	7	12	24	34	177	58	43	21	14
10	13	13	9	8	12	27	41	159	57	40	20	14
11	13	13	10	8	14	34	50	150	55	41	18	13
12	13	13	11	9	14	36	63	159	54	43	19	13
13	13	13	12	10	14	34	68	149	53	53	19	14
14	13	13	12	11	14	33	98	159	50	37	19	14
15	13	13	12	11	14	30	152	168	46	32	19	14
16	13	13	13	11	14	32	170	166	44	32	20	14
17	13	13	13	11	14	32	120	161	42	33	17	14
18	25	13	12	11	15	29	98	166	45	36	16	14
19	24	13	12	11	14	24	106	149	48	30	16	14
20	18	13	11	10	14	24	119	141	46	26	16	14
21	14	13	11	8	13	24	144	139	52	26	16	14
22	14	13	11	8	14	24	136	133	55	26	16	28
23	14	13	11	7	14	24	112	125	50	24	16	29
24	14	13	12	8	14	26	91	125	44	24	19	16
25	14	13	12	8	14	26	105	122	43	24	16	16
26	13	12	12	9	13	24	134	116	43	24	16	16
27	13	12	12	10	13	24	130	92	45	48	16	16
28	13	12	12	10	14	24	117	117	41	50	17	15
29	13	12	12	11	-	24	110	109	39	60	18	15
30	16	12	12	11	-	24	109	128	39	28	16	16
31	40	-	12	11	-	25	-	86	-	26	17	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						467	40	13	15.1	926		
November.....						399	22	12	13.3	791		
December.....						363	13	9	11.7	720		
Calendar year 1936.....						14,317	241	7	39.1	28,400		
January.....						297	12	7	9.6	589		
February.....						399	32	11	14.2	791		
March.....						761	36	15	24.5	1,510		
April.....						2,551	170	28	85.0	5,060		
May.....						4,304	177	86	139	8,540		
June.....						1,534	73	39	51.1	3,040		
July.....						1,147	60	24	37.0	2,280		
August.....						585	26	16	18.9	1,160		
September.....						474	29	13	15.8	940		
Water year 1936-37						13,281	177	7	36.4	26,350		

Spanish Fork at Thistle, Utah

Location.- Staff gage, lat. $40^{\circ}00'$, long. $111^{\circ}30'$, in SW $\frac{1}{4}$ sec. 28, T. 9 S., R. 4 E., at Thistle, 600 feet below confluence of Soldier Fork and Thistle Creek to form Spanish Fork and $2\frac{1}{2}$ miles above Diamond Fork. Gage washed out by high water May 10, 1937, and replaced May 12 on the opposite bank at different gage datum.

Drainage area.- 940 square miles.

Records available.- January 1908 to September 1925 and October 1936 to September 1937 in reports of Geological Survey; January 1933 to September 1937 in reports of Spanish Fork water commissioner.

Average discharge.- 21 years (1908-25, 1933-37), 103 second-feet.

Extremes.- Maximum daily discharge during year, 750 second-feet May 10; minimum discharge observed, 13 second-feet Dec. 31.

1907-25, 1933-37: Maximum discharge observed, 1,250 second-feet May 26, 1922; minimum observed, 10 second-feet Sept. 17, 22, 25 and Oct. 25, 1934.

Remarks.- Records fair. Daily discharge for Oct. 1 to Dec. 31 furnished by Spanish Fork water commissioner. Discharge for period of ice effect, Jan. 1 to Feb. 2, and for periods of missing gage heights, Feb. 7-14, May 2, 10, 11 computed on basis of weather records and records for station at Castilla. Some small diversions for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	47	44		35	55	106	220	268	86	49	41
2	64	55	42		40	56	136	240	239	83	50	36
3	73	50	39		42	56	102	292	221	81	37	38
4	71	64	33		39	73	95	361	216	74	40	37
5	50	54	44		39	55	95	432	216	77	40	35
6	45	66	38		46	84	100	610	196	74	40	34
7	38	54	35		100	66	106	610	172	80	39	33
8	36	57	31		65	72	95	676	179	103	38	33
9	32	64	44		60	75	96	741	161	89	36	34
10	31	49	39		50	194	106	750	156	78	42	33
11	36	59	33		45	102	127	620	147	74	45	31
12	35	35	45		45	116	127	595	143	89	40	32
13	45	49	49		45	141	143	656	145	75	51	40
14	31	41	41		45	129	145	675	150	78	41	40
15	41	45	29		42	127	215	700	136	74	40	39
16	33	42	50		50	141	305	722	132	68	42	40
17	49	50	33		52	230	225	690	132	75	40	41
18	39	62	39		51	199	194	660	128	74	37	41
19	35	62	44		48	100	179	565	122	68	38	40
20	39	64	41		51	96	233	547	116	103	36	32
21	39	59	31		48	95	264	452	106	63	37	38
22	31	61	39		48	110	319	437	99	63	36	40
23	36	39	28		51	106	238	388	94	60	36	41
24	33	49	25		55	102	220	408	92	58	32	33
25	41	49	32		60	91	230	377	89	56	31	51
26	38	44	28		58	87	264	305	94	53	36	41
27	38	45	31		54	78	300	273	88	53	34	38
28	49	42	25		55	100	283	257	84	56	33	40
29	57	49	33		-	106	251	239	89	52	94	37
30	52	39	22		-	102	225	260	86	56	41	38
31	52	-	13		-	110	-	308	-	51	41	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				1,319		73	31	42.5	2,620			
November.....				1,545		66	35	51.5	3,060			
December.....				1,100		50	13	35.5	2,180			
Calendar year 1936.....				34,379		558	13	93.9	68,190			
January.....				1,085		-	-	35	2,150			
February.....				1,419		100	35	50.7	2,810			
March.....				3,254		230	55	105	6,460			
April.....				5,524		319	95	184	10,960			
May.....				15,046		750	220	465	29,840			
June.....				4,298		268	84	143	8,520			
July.....				2,224		105	51	71.7	4,410			
August.....				1,272		94	31	41.0	2,520			
September.....				1,127		51	31	37.6	2,240			
Water year 1936-37.....				39,213		750	13	107	77,760			

Spanish Fork at Castilla, Utah

Location.- Water-stage recorder, lat. 40°02', long. 111°32', in SE¼ sec. 12, T. 9 S., R. 3 E., 600 feet above outlet of Cold Springs, 1 mile northwest of Castilla railroad station, 1½ miles above diversion dam of Bureau of Reclamation, and 2 miles below Diamond Fork.

Drainage area.- 670 square miles.

Records available.- May 1919 to September 1925 and October 1936 to September 1937 in reports of Geological Survey; January 1933 to September 1937 in reports of Spanish Fork water commissioner.

Average discharge.- 10 years (1919-25, 1933-37), 232 second-feet.

Extremes.- Maximum discharge during year, 1,010 second-feet May 10 (gage height, 6.78 feet); minimum, 37 second-feet Jan. 4.
1919-25, 1933-37: Maximum daily discharge, 1,520 second-feet May 22, 1920; minimum, 27 second-feet Oct. 26-31, 1934.

Remarks.- Records good. Daily discharge for Oct. 1 to Dec. 31 furnished by Spanish Fork water commissioner. Discharge for June 7, 8, July 12-14 computed on basis of record for station at Thistle and records of water released from Strawberry Reservoir. Several small diversions for irrigation above station. Flow is materially increased by water diverted from Colorado River Basin, which is released by tunnel from Strawberry Reservoir (capacity 250,000 acre-feet) into Diamond Fork of Spanish Fork for irrigation of lands in Jordan River Basin. During the current year 46,360 acre-feet was so released).

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	130	76	56	58	61	97	213	385	367	480	168	218
2	121	84	52	53	70	101	241	412	356	488	164	248
3	116	65	53	45	70	98	185	505	319	463	170	228
4	118	56	56	42	70	99	168	619	307	398	187	213
5	107	60	54	53	76	116	174	706	292	346	215	201
6	110	65	56	58	99	131	178	787	285	362	243	193
7	117	65	56	56	187	139	174	848	270	388	252	189
8	124	65	56	42	119	142	169	898	260	385	224	187
9	153	59	59	40	112	150	185	950	299	309	228	211
10	188	59	54	44	92	168	224	978	316	311	235	211
11	195	59	54	61	91	183	257	960	324	334	239	195
12	231	62	54	64	91	181	259	884	354	288	266	181
13	255	63	54	62	87	183	275	862	369	232	283	174
14	267	62	54	67	88	189	319	880	417	215	302	166
15	217	63	57	67	86	193	444	915	428	185	292	185
16	146	62	65	68	81	228	486	912	438	201	304	191
17	76	62	65	66	82	316	367	852	466	273	331	193
18	63	62	60	66	84	295	344	812	483	266	338	183
19	62	60	57	68	81	191	367	743	441	243	335	168
20	69	62	54	68	79	172	406	646	406	243	321	150
21	62	62	57	68	77	168	480	619	401	262	311	150
22	60	62	57	53	82	183	522	646	406	268	316	163
23	59	60	54	48	84	199	417	643	462	257	328	179
24	59	56	56	53	90	189	382	616	469	232	338	125
25	58	60	59	60	94	155	377	549	469	222	309	116
26	58	62	60	66	90	147	449	502	452	237	287	113
27	58	59	60	66	87	147	525	525	425	248	292	108
28	57	59	62	68	94	176	494	508	436	232	259	102
29	58	58	60	70	-	176	436	483	505	220	262	118
30	62	56	58	73	-	181	388	520	500	197	226	140
31	62	-	57	74	-	183	-	433	-	187	207	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						3,518	267	57	113	6,980		
November.....						1,865	84	56	62.2	3,700		
December.....						1,766	65	52	57.0	3,500		
Calendar year 1936.....						76,630	890	35	209	152,000		
January.....						1,825	74	40	58.9	3,620		
February.....						2,504	137	61	59.4	4,970		
March.....						5,246	316	97	169	10,410		
April.....						9,904	525	168	330	19,640		
May.....						21,598	978	385	697	42,840		
June.....						11,692	505	260	390	23,190		
July.....						8,972	488	185	289	17,900		
August.....						8,233	338	164	266	16,330		
September.....						5,198	248	102	173	10,310		
Water year 1936-37.....						82,321	978	40	226	163,300		

Provo River at Forks, Utah

Location.— Water-stage recorder, lat. 40°22', long. 111°34', in NW¼ sec. 25, T. 5 S., R. 3 E., half a mile below North Fork, three-quarters of a mile above South Fork, and 3,500 feet northeast of Forks and Vivian Park.

Drainage area.— 600 square miles.

Records available.— November 1911 to September 1937. Since 1890, at various sites below mouth of South Fork.

Average discharge.— 25 years (1912-37), 360 second-feet.

Extremes.— Maximum discharge during year, 1,820 second-feet May 31 (gage height, 5.55 feet); minimum observed, 160 second-feet Sept. 18 and 19.

1911-37: Maximum discharge observed, 3,180 second-feet June 11, 1921; minimum, 49 second-feet July 17, 1934.

Remarks.— Records good except those for periods of ice effect, Jan. 7-12, 15, Jan. 18 to Feb. 2, Feb. 8-11, 18-20, 22-27, and of missing gage heights, Oct. 1-13, Oct. 30 to Nov. 5, Dec. 3, 4, 20-22, Dec. 26 to Jan. 5, Apr. 7-10, which were computed on basis of flow in Olmstead Flume, weather records, and records for station at Provo and are fair. Station is below diversions for irrigation in Heber Valley and above those in vicinity of Provo. Flow slightly regulated at headwaters by small lakes that serve as reservoirs. Records include flow of Weber-Provo Diversion Canal. Results of three discharge measurements furnished by Utah Power & Light Co.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)

1.9	149	3.3	535
2.0	170	3.6	645
2.2	215	4.0	815
2.4	264	4.5	1,080
2.6	317	5.0	1,310
2.8	374	5.5	1,590
3.0	435		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	156	300	208	225	200	220	365	426	960	334	259	197
2	160	290	215	215	200	220	487	423	828	314	246	184
3	163	285	210	210	197	217	416	493	792	295	246	192
4	167	280	216	200	199	215	365	633	788	285	244	183
5	165	275	220	225	201	215	360	774	797	285	246	179
6	170	272	232	229	230	220	374	895	738	295	249	174
7	166	269	232	210	300	222	360	1,020	669	298	249	170
8	171	256	229	200	325	232	320	1,100	609	368	246	170
9	172	249	229	180	300	239	350	1,220	580	337	242	172
10	163	249	215	200	290	254	420	1,300	560	312	239	170
11	163	252	199	200	290	282	438	1,300	524	306	229	174
12	163	254	199	210	287	298	380	1,160	518	312	229	174
13	163	249	199	229	280	323	389	1,180	532	328	227	170
14	164	249	208	229	285	339	432	1,280	514	320	227	170
15	170	254	239	235	267	354	518	1,330	510	298	227	168
16	174	254	298	239	264	410	617	1,430	504	280	222	164
17	170	254	323	244	259	490	624	1,440	490	272	220	164
18	174	256	274	240	280	493	470	1,440	461	306	225	162
19	177	249	252	240	250	410	484	1,400	398	285	222	162
20	192	252	240	235	240	366	514	1,250	380	274	220	164
21	190	249	235	200	227	351	563	1,140	395	264	215	174
22	190	244	230	190	225	389	637	1,120	398	244	210	183
23	190	237	225	180	220	423	563	1,120	392	237	213	232
24	190	232	215	190	220	337	490	1,070	389	239	220	206
25	197	227	220	200	220	325	454	975	363	239	215	190
26	197	225	220	210	220	328	514	685	369	239	210	185
27	201	220	220	220	220	331	637	797	386	256	208	181
28	197	220	220	220	217	354	629	802	368	264	208	185
29	192	213	220	215	-	354	552	810	360	285	232	179
30	195	208	215	210	-	351	467	1,160	351	269	227	177
31	250	-	220	205	-	371	-	1,330	-	269	210	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	5,553					250	156	179	11,010			
November.....	7,523					300	208	251	14,920			
December.....	7,077					323	199	228	14,040			
Calendar year 1936.....	137,220					1,590	148	375	272,200			
January.....	6,635					244	180	214	13,160			
February.....	6,893					325	197	246	13,670			
March.....	9,935					493	215	320	19,710			
April.....	14,089					637	320	469	27,950			
May.....	32,703					1,440	423	1,055	64,670			
June.....	15,963					980	351	532	31,660			
July.....	8,909					368	237	267	17,670			
August.....	7,082					259	208	228	14,050			
September.....	5,367					232	162	179	10,650			
Water year 1936-37.....	127,729					1,440	156	350	253,400			

Provo River at Provo, Utah

Location.— Water-stage recorder, lat. 40°14'20", long. 111°41'40", in NE¼SE¼ sec. 3, T. 7 S., R. 2 E., 150 feet below highway bridge, 2 miles west of city hall at Provo, and 2 miles above mouth. June 1933 to September 1934 staff gage used, at different datum, a quarter of a mile downstream.

Records available.— January to September 1937. June 1933 to September 1934, at site a quarter of a mile downstream. May 1903 to June 1905, at site three quarters of a mile upstream. Records equivalent except for two small diversions above present station and one below.

Extremes.— Maximum discharge during year, 1,100 second-feet May 31 (gage height, 4.37 feet); minimum daily discharge, 3 second-feet on many days during June to September. 1903-5, 1933-34, 1937: Maximum discharge observed, 1,620 second-feet May 27, 1904; no flow during several periods.

Remarks.— Records fair. Discharge for July 1 to Sept. 30 interpolated between field estimates made about once a week. Station is below all diversions except two small ditches. At times entire flow is diverted above station for irrigation. Factory Race diverts water above station into Provo Bay, an arm of Utah Lake. Provo River water commissioner furnished following record of this flow for 1937:

Month	Run-off in acre-feet	Month	Run-off in acre-feet
January	240	June	1,480
February	2,000	July	0
March	2,480	August	0
April	2,400	September	0
May	2,360		
		The period	10,960

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				215	270	220	357	144	622	3	3	3
2				207	266	215	395	120	487	3	3	3
3				207	261	215	389	115	321	3	3	3
4				203	268	211	338	155	407	3	3	3
5				207	275	211	321	242	402	3	3	3
6				203	300	211	340	340	335	3	3	3
7				194	383	215	335	469	246	3	3	3
8				186	425	215	300	535	195	3	3	3
9				184	383	220	302	662	158	3	3	3
10				209	316	229	327	739	103	3	3	3
11				209	316	247	380	777	70	3	3	3
12				213	318	270	346	693	59	3	3	3
13				256	295	303	335	641	75	3	3	3
14				282	335	308	354	728	70	3	3	3
15				275	273	318	401	767	64	3	3	3
16				290	242	352	508	842	64	3	3	3
17				280	242	456	456	870	52	3	3	3
18				275	254	495	407	894	44	3	3	3
19				275	258	425	369	894	19	3	3	3
20				266	258	377	357	753	9	3	3	3
21				247	266	352	392	620	6	3	3	4
22				231	235	366	492	542	6	3	3	5
23				220	235	383	428	525	4	3	3	6
24				215	215	349	321	479	3	3	3	7
25				238	220	327	240	383	3	3	3	8
26				247	229	335	220	302	3	3	3	8
27				254	220	340	275	238	4	3	3	8
28				261	215	343	329	218	4	3	3	8
29				270	-	329	268	226	4	3	3	8
30				273	-	354	198	425	3	3	3	8
31				273	-	360	-	978	-	3	3	-
Month					Second-foot-days		Maximum	Minimum	Mean		Run-off in acre-feet	
October.....												
November.....												
December.....												
Calendar year												
January.....					7,365		290	184	238		14,610	
February.....					7,773		425	215	278		15,420	
March.....					9,551		495	211	308		18,940	
April.....					10,480		508	198	349		20,790	
May.....					16,316		978	115	526		32,360	
June.....					3,842		622	3	128		7,620	
July.....					93		3	3	3.0		184	
August.....					93		3	3	3.0		184	
September.....					150		8	3	4.3		258	
The period.....											110,400	

Weber-Provo diversion canal near Woodland, Utah

Location.- Water-stage recorder and Parshall rating flume, lat. 40°36'40", long. 111°18'15", in SW $\frac{1}{4}$ sec. 30, T. 2 S., R. 6 E., 100 feet above confluence with Provo River and 4 $\frac{1}{2}$ miles northwest of Woodland.

Records available.- October 1931 to September 1937.

Remarks.- Records good. Canal diverts water from Weber River in SW $\frac{1}{4}$ sec. 21, T. 1 S., R. 6 E., for irrigation in Jordan River Basin. Records show quantity of water reaching Provo River during periods when water was being diverted from Weber River. Records of daily discharge furnished by Provo River water commissioner.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								(*)	139	56		
2								(*)	137	45		
3								(*)	138	29		
4								(*)	138	29		
5								(*)	139	28		
6								(*)	138	35		
7								(*)	136	39		
8								(*)	136	36		
9								(*)	136	36		
10								(*)	137	30		
11								(*)	137	28		
12								(*)	138	28		
13								(*)	132	26		
14								(*)	135	31		
15								(*)	139	26		
16								46	140	20		
17								78	120	20		
18								78	44	18		
19								74	68	17		
20								73	59	16		
21								74	68	15		
22								99	99	13		
23								130	116	11		
24								139	113	10		
25								142	113	9		
26								140	107	7		
27								137	96	7		
28								141	87	(*)		
29								139	77	(*)		
30								149	77	(*)		
31								128	-	(*)		
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						(*)	(*)	(*)	(*)	(*)		
November.....						(*)	(*)	(*)	(*)	(*)		
December.....						(*)	(*)	(*)	(*)	(*)		
Calendar year 1936.....						8,699	144	0	23.5	17,060		
January.....						(*)	(*)	(*)	(*)	(*)		
February.....						(*)	(*)	(*)	(*)	(*)		
March.....						(*)	(*)	(*)	(*)	(*)		
April.....						(*)	(*)	(*)	(*)	(*)		
May.....						1,767	149	(*)	57.0	3,500		
June.....						3,419	140	44	114	6,780		
July.....						665	58	(*)	21.5	1,320		
August.....						(*)	(*)	(*)	(*)	(*)		
September.....						(*)	(*)	(*)	(*)	(*)		
Water year 1936-37.....						5,851	149	0	16.0	11,600		

*No water being diverted from Weber River.

South Fork of Provo River at Forks, Utah

Location.- Water-stage recorder and Parshall flume, lat. 40°21', long. 111°34', in SE¼ sec. 26, T. 5 S., R. 3 E., a quarter of a mile southeast of Forks and Vivian Park and half a mile above confluence with Provo River.

Drainage area.- 30 square miles.

Records available.- November 1911 to September 1937.

Average discharge.- 25 years, 30.5 second-feet.

Extremes.- Maximum discharge during year, 73 second-feet May 18 (gage height, 1.67 feet); minimum discharge, 13 second-feet Apr. 2.

1911-37: Maximum discharge observed, 123 second-feet May 27, 1922; minimum, 13 second-feet several times in 1934 and 1935, and Apr. 2, 1937.

Remarks.- Records fair. Discharge for Feb. 17-27, Mar. 17-20, Apr. 9-20 interpolated. Station below all diversions. Flow regulated by diversions above station. Results of three discharge measurements furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	32	27	24	24	22	21	28	35	26	26	29
2	25	31	27	25	24	22	19	28	32	26	26	30
3	25	30	26	25	23	22	24	28	32	26	26	30
4	26	28	26	25	22	22	23	32	32	26	26	31
5	26	28	26	25	22	23	24	37	31	26	26	30
6	26	28	26	22	30	23	24	41	30	26	26	30
7	27	28	26	23	28	23	25	46	30	26	27	30
8	27	28	26	21	24	23	23	46	29	26	28	30
9	27	28	26	21	23	23	23	48	30	26	28	29
10	26	28	27	24	23	23	23	51	29	26	30	30
11	26	28	26	24	23	23	23	52	28	26	30	30
12	27	28	26	24	23	23	24	47	28	26	30	28
13	28	28	27	24	23	23	24	46	28	28	30	28
14	28	29	26	24	23	22	24	49	28	30	29	30
15	28	30	27	24	22	22	25	56	26	33	29	32
16	28	32	30	24	23	22	25	61	26	32	30	32
17	28	30	28	24	23	22	25	63	26	32	32	32
18	26	30	26	24	23	23	25	69	26	32	30	32
19	26	30	26	25	23	23	26	67	25	30	28	32
20	26	30	26	25	23	23	26	65	25	28	28	32
21	26	29	26	25	23	23	26	59	26	28	28	32
22	26	30	26	25	23	22	27	52	27	28	28	33
23	26	30	26	25	23	22	28	49	27	28	28	35
24	26	30	25	26	23	21	27	45	27	28	28	32
25	26	28	25	26	22	22	27	43	26	27	28	32
26	26	28	25	26	22	22	28	42	26	26	27	32
27	26	28	25	26	22	22	30	40	26	26	26	34
28	27	28	25	26	22	22	29	40	26	26	28	34
29	27	28	24	26	-	22	28	41	26	26	28	34
30	28	27	24	25	-	22	28	44	26	27	27	33
31	31	-	24	25	-	22	-	38	-	28	28	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						826	31	25	26.6	1,640		
November.....						870	32	27	29.0	1,750		
December.....						808	30	24	26.1	1,600		
Calendar year 1936.....						9,498	54	20	26.0	18,840		
January.....						758	26	21	24.5	1,500		
February.....						652	30	22	23.3	1,290		
March.....						694	25	21	22.4	1,360		
April.....						752	30	19	25.1	1,490		
May.....						1,453	69	28	46.9	2,880		
June.....						839	35	25	28.0	1,660		
July.....						855	33	26	27.6	1,700		
August.....						869	32	26	28.0	1,720		
September.....						938	35	28	31.3	1,860		
Water year 1936-37.....						10,314	69	19	28.3	20,450		

Sevier River near Kingston, Utah

Location.- Water-stage recorder and concrete control, lat. $38^{\circ}12'$, long. $112^{\circ}12'$, in NW $\frac{1}{4}$ 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 1937.

Average discharge.- 23 years, 150 second-feet.

Extremes.- Maximum discharge observed during year, 963 second-feet May 18 (gage height, 2.96 feet), from rating curve extended above 500 second-feet; minimum daily discharge, 13 second-feet Aug. 19 and 20.

1914-37: Maximum discharge, 1,460 second-feet May 21, 1922 (gage height, 4.92 feet), from rating curve extended above 500 second-feet; minimum daily discharge, 5 second-feet June 16-20, 1931.

Remarks.- Records fair. Numerous diversions above station; none between gage and mouth of East Fork.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	115	112		*100	*129	146	324	700	79	79	92
2	29	105	110		*100	*134	168	307	†656	66	66	276
3	29	100	112		*100	*140	154	342	†612	64	49	270
4	25	110	112		*103	*147	140	398	†669	59	36	86
5	19	118	110		*106	*153	135	465	†625	59	43	55
6												
7	15	118	98		*110	*159	152	558	481	68	47	47
8	14	118	*102		*114	165	152	601	439	191	72	44
9	19	115	*106		118	168	159	676	†406	230	57	†51
10	26	115	*106		*120	181	174	736	†373	277	53	†58
11	25	115	*102		*122	188	208	742	†340	212	47	†65
12												
13	26	118	98		*124	198	241	754	†307	236	30	†72
14	32	121	*102		*126	201	†260	†736	†274	215	21	79
15	26	118	*107		*129	201	†280	718	241	201	18	83
16	28	118	112		*131	198	†300	†753	230	159	16	90
17	30	118	*112		*133	194	†375	†788	226	110	15	86
18												
19	35	121	*112		135	188	465	823	201	59	17	77
20	33	123	*112		*126	184	†400	851	†199	55	19	77
21	29	123	*112		*117	188	333	963	†177	46	16	79
22	49	129	*112		*107	184	†320	†885	†164	32	13	72
23	181	126	*112		*97	174	†300	†807	†152	25	13	68
24												
25	121	123	*112		88	152	†400	730	140	19	18	72
26	108	129	112		*97	†158	465	†706	92	23	15	70
27	98	123	*112		*107	†163	†418	†682	70	21	17	115
28	88	123	*112		*117	†169	†371	658	70	21	20	140
29	88	123	*112		*126	†174	324	†600	75	20	20	115
30												
31	88	126	*112		135	†180	360	†550	88	18	19	105
1	96	123	*111		*129	†186	403	†525	90	19	21	105
2	86	123	*111		123	191	439	†540	92	28	29	105
3	88	123	*110		-	162	337	552	92	201	128	105
4	92	123	*110		-	152	337	658	90	152	115	110
5	108	-	*110		-	146	-	†675	-	115	51	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,753	181	14	56.5	3,480
November.....	3,583	129	100	119	7,110
December.....	3,385	112	98	109	6,710
Calendar year 1936.....	31,509	400	7	86.1	62,500
January.....	2,945	-	-	*95	5,840
February.....	3,240	135	88	116	6,430
March.....	5,307	201	129	171	10,530
April.....	8,716	465	135	291	17,290
May.....	20,103	963	307	648	39,870
June.....	8,161	700	70	273	16,190
July.....	3,084	277	18	99.5	6,120
August.....	1,208	123	13	39.0	2,400
September.....	2,869	276	44	95.6	5,690
Water year 1936-37.....	64,355	963	13	176	127,700

*Computed on basis of weather records.

†Computed on basis of records for stations on Beaver River near Beaver and Huntington Creek near Huntington.

Piute Reservoir near Marysville, Utah

Location.- Staff gage, lat. 38°20', long. 112°12', in NW¼ sec. 3, T. 29 S., R. 3 W., at Piute Dam, 9 miles south of Marysville.

Records available.- March 1914 to September 1937.

Remarks.- Gage read to tenths once daily. Capacity of reservoir, 90,000 acre-feet. Gage-height record furnished by Piute Reservoir & Irrigation Company.

Contents, in acre-feet, of Piute Reservoir near Marysville, Utah, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12,600	6,880	9,600	18,530	25,200	34,000	45,720	62,400	79,520	68,240	52,880	33,520
2	12,160	6,860	9,800	18,790	25,500	34,320	45,900	62,500	79,240	67,080	52,680	33,680
3	11,720	7,040	10,000	19,050	26,800	34,640	46,080	62,800	78,960	66,400	52,500	34,000
4	11,200	7,120	10,300	19,310	26,100	34,960	46,440	63,400	78,400	65,600	52,310	34,320
5	10,900	7,200	10,600	19,440	26,400	35,280	46,620	64,200	78,140	64,800	52,120	34,640
6	10,500	7,280	10,800	19,570	26,850	35,600	46,800	65,000	78,140	64,000	51,740	34,960
7	9,800	7,360	11,000	19,700	27,150	35,920	47,180	66,000	78,400	63,600	51,560	35,280
8	9,200	7,440	11,300	19,840	27,450	36,240	47,560	67,320	78,400	63,600	51,170	35,600
9	8,700	7,520	11,610	19,980	27,750	36,570	47,940	68,470	78,140	63,800	50,790	35,760
10	8,230	7,600	11,940	20,120	28,050	36,910	48,320	69,160	77,880	64,000	50,410	35,920
11	7,680	7,600	12,270	20,400	28,350	37,250	48,700	69,850	77,620	64,000	49,840	36,080
12	7,200	7,690	12,710	20,540	28,650	37,760	49,080	70,080	77,360	64,000	49,700	36,080
13	6,800	7,780	13,040	20,820	28,800	38,270	49,460	70,310	77,100	64,000	47,560	36,080
14	6,480	7,870	13,370	21,100	29,100	38,950	49,840	70,540	76,580	64,000	46,440	36,080
15	6,400	7,870	13,700	21,380	29,400	39,460	50,220	70,770	76,060	64,200	45,720	35,760
16	6,160	7,960	14,030	21,520	29,700	39,970	50,790	71,240	75,560	64,000	44,820	35,600
17	6,240	8,050	14,360	21,800	30,000	40,480	51,550	71,720	75,080	63,400	43,560	35,280
18	6,240	8,140	14,690	22,080	30,480	40,990	52,310	72,440	74,600	63,000	42,520	34,960
19	6,400	8,230	15,040	22,220	30,800	41,500	53,070	72,920	74,360	62,000	41,330	34,800
20	6,560	8,320	15,400	22,500	31,120	41,840	53,530	73,400	73,880	60,800	40,310	34,640
21	6,720	8,230	15,760	22,800	31,280	42,180	54,600	73,880	73,400	59,600	39,460	34,480
22	6,880	8,230	16,120	22,950	31,600	42,350	55,600	74,360	72,920	58,200	38,440	34,320
23	6,960	8,320	16,360	23,250	31,920	42,520	56,800	74,600	72,440	56,800	37,760	34,480
24	7,040	8,410	16,600	23,550	32,240	42,860	58,000	74,840	72,200	55,200	36,740	34,800
25	7,280	8,500	16,840	23,850	32,560	43,200	58,800	75,320	71,960	54,600	35,760	34,960
26	7,280	8,600	17,200	24,000	32,880	43,560	59,800	75,800	71,480	54,020	34,960	35,120
27	7,200	8,800	17,560	24,150	33,200	43,920	60,600	76,840	71,000	53,640	34,320	35,440
28	7,120	9,000	17,800	24,450	33,520	44,280	61,400	76,840	70,540	53,260	33,680	35,600
29	7,040	9,200	18,040	24,600	-	44,640	62,000	77,620	69,850	52,880	33,200	35,760
30	6,960	9,400	18,160	24,900	-	44,820	62,200	78,400	69,160	52,880	33,200	35,920
31	6,880	-	18,280	25,050	-	45,360	-	79,240	-	53,070	33,560	-

SEVIER LAKE BASIN

Sevier River below Piute Dam, near Marysville, Utah

Location.- Water-stage recorder, lat. 38°20', long. 112°11', in sec. 34, T. 28 S., R. 3 W., three-quarters of a mile below dam of Piute Reservoir and 8 miles south of Marysville.

Drainage area.- 2,440 square miles.

Records available.- May 1911 to September 1937.

Average discharge.- 25 years (1912-37), 254 second-feet.

Extremes.- 1911-37: Maximum discharge, 2,800 second-feet May 23, 24, 1922; practically no flow at times when reservoir gates are closed.

Remarks.- Records excellent. One small diversion between gage and Piute Reservoir. Flow regulated by operation of gates in dam.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 27 to Aug. 11)

0	3	1.6	258
.1	7	1.8	311
.2	15	2.0	367
.4	31	2.2	425
.6	56	2.4	485
.8	87	2.6	547
1.0	123	2.8	611
1.2	164	3.0	677
1.4	209	3.1	710

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	216	168	87	15	15	15	15	207	538	541	223	292
2	231	137	87	14	15	15	15	216	680	695	274	289
3	248	135	69	14	15	15	15	279	670	585	298	274
4	256	135	46	14	15	15	15	289	631	507	258	258
5	258	135	42	15	15	15	15	279	692	479	253	238
6	311	137	38	15	15	15	15	274	485	516	339	179
7	287	133	36	15	15	15	15	274	440	458	322	182
8	284	117	33	15	15	15	15	345	440	221	305	188
9	284	127	31	15	15	15	15	455	437	279	284	204
10	279	151	27	15	15	15	15	566	428	263	353	204
11	276	151	19	15	15	15	15	651	434	292	425	223
12	279	151	30	15	15	15	15	700	428	219	677	226
13	233	151	24	15	15	15	15	693	443	188	674	231
14	200	151	24	15	15	15	73	690	434	114	670	284
15	110	143	24	15	15	15	115	690	440	155	667	359
16	102	119	24	15	15	15	92	693	419	336	667	379
17	102	123	22	15	15	15	68	687	437	359	674	353
18	102	141	23	15	15	15	68	627	440	422	677	319
19	99	141	25	15	15	15	68	605	395	510	674	350
20	94	156	25	15	15	15	68	608	381	684	667	350
21	94	164	24	15	15	15	66	535	356	670	647	350
22	104	162	24	15	15	15	173	461	317	664	606	319
23	135	153	24	15	15	15	166	481	300	670	573	211
24	151	114	24	15	15	15	166	425	216	631	538	195
25	149	106	23	15	15	15	166	289	221	624	494	195
26	149	84	23	15	15	15	166	271	241	618	416	188
27	149	87	22	15	15	15	168	289	311	504	425	188
28	149	87	21	15	15	15	171	175	387	342	455	207
29	160	87	19	15	-	15	193	274	464	164	455	209
30	168	87	15	15	-	15	207	279	467	117	370	228
31	168	-	15	15	-	15	-	298	-	114	331	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	5,827					311	94	188	11,560			
November.....	3,933					168	84	131	7,800			
December.....	970					87	15	31.5	1,920			
Calendar year 1936.....	49,366					488	6	135	97,920			
January.....	462					15	14	14.9	916			
February.....	420					15	15	15.0	833			
March.....	465					15	15	15.0	922			
April.....	2,389					207	15	79.6	4,740			
May.....	13,585					700	175	438	28,940			
June.....	12,873					680	216	429	25,530			
July.....	12,881					684	114	416	25,580			
August.....	14,694					677	223	474	29,150			
September.....	7,642					379	158	255	15,160			
Water year 1936-37.....	76,141					700	14	209	151,000			

Sevier River near Vermilion, Utah

Location.— Water-stage recorder, lat. 38°52', long. 111°57', in SW $\frac{1}{4}$ sec. 19, T. 22 S., R. 1 W., at highway bridge half a mile below Rockford Dam, 2 miles northeast of Vermilion, and 5 miles above mouth of Lost Creek.

Drainage area.— 3,340 square miles.

Records available.— July to September 1912, July 1914 to September 1937.

Average discharge.— 23 years (1914-37), 116 second-feet.

Extremes.— Maximum daily discharge during year, 387 second-feet June 6; minimum, less than 1 second-foot for several days when reservoir gates were closed.

1914-37: Maximum discharge, 2,400 second-feet May 30, 1922 (gage height, about 8.1 feet, former datum); practically no flow (seepage only) when Rockford gates are closed.

Remarks.— Records good except those for periods of missing gage heights, Jan. 6-16, Feb. 10-14, Mar. 13-21, which were computed on basis of gate changes at Rockford Reservoir and weather records, and are fair. Entire flow usually diverted during low-water season. Flow past station at such times represents seepage and return flow from canals. Flow also regulated by dams and reservoirs above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	56	100	78	64	104	126	99	260	11	2	2
2	1	59	100	78	64	102	120	75	274	6	2	2
3	1	67	95	88	62	104	120	63	298	2	2	2
4	1	75	110	81	56	104	120	18	340	2	2	2
5	1	80	114	81	66	104	120	2	377	1	2	2
6	1	83	99	80	118	104	120	2	387	1	2	2
7	2	84	99	79	139	102	120	2	365	1	7	2
8	2	84	104	77	173	100	120	6	343	2	21	3
9	3	83	102	76	180	99	118	26	292	3	51	5
10	3	83	99	77	182	93	116	35	245	3	51	6
11	3	81	93	78	184	90	112	32	218	37	54	4
12	3	78	86	79	186	81	95	16	168	83	55	2
13	3	76	86	80	187	81	67	50	139	70	55	2
14	2	76	93	80	189	81	34	162	106	51	132	2
15	2	72	104	78	191	81	24	226	81	45	178	2
16	31	62	114	77	196	81	79	251	28	43	186	2
17	48	56	114	76	201	81	91	307	3	40	170	2
18	44	54	108	84	199	81	104	356	3	18	41	14
19	44	51	108	90	188	79	106	359	5	5	5	43
20	46	49	110	90	165	79	110	362	27	4	4	45
21	46	48	110	93	148	79	102	359	43	4	10	45
22	46	48	110	93	137	40	100	346	54	3	6	46
23	44	49	106	95	131	1	99	319	73	3	4	20
24	44	55	106	95	133	2	106	283	104	4	4	2
25	44	57	106	97	133	2	116	231	137	3	4	2
26	49	57	106	99	128	3	116	156	120	3	3	2
27	48	60	106	99	118	6	104	99	83	3	3	2
28	50	63	106	99	110	8	102	35	39	3	3	3
29	54	69	95	95	-	6	102	30	22	3	3	3
30	54	75	102	84	-	16	99	100	17	3	2	3
31	55	-	97	72	-	98	-	170	-	2	-	-
Month	Second-foot-days		Maximum		Minimum		Mean		Run-off in acre-feet			
October.....	776		55		1		25.0		1,540			
November.....	1,998		84		48		66.3		3,940			
December.....	3,188		114		86		103		6,320			
Calendar year 1936.....	20,644		241		1		56.4		40,930			
January.....	2,628		99		72		84.7		5,210			
February.....	4,028		201		56		144		7,990			
March.....	2,094		104		1		67.5		4,150			
April.....	3,068		126		24		102		6,090			
May.....	4,575		362		2		147		9,070			
June.....	4,651		387		3		155		9,230			
July.....	462		83		1		14.9		916			
August.....	1,066		186		2		34.4		2,110			
September.....	276		46		2		9.2		547			
Water year 1936-37.....	28,800		387		1		78.9		57,110			

Sevier River below San Pitch River, near Gunnison, Utah

Location.— Water-stage recorder, lat. $39^{\circ}09'$, long. $111^{\circ}52'$, in NE $\frac{1}{4}$ 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 1937.

Average discharge.— 20 years, 222 second-feet.

Extremes.— Maximum discharge during year, 508 second-feet May 20 (gage height, 2.72 feet); minimum daily discharge, 38 second-feet Oct. 5.
1917-37: Maximum discharge, 2,620 second-feet June 1, 1922 (gage height, 5.32 feet); minimum daily discharge, 8 second-feet July 13-17, Sept. 6, 1934.

Remarks.— Records good except those for periods of ice effect or missing gage heights, Nov. 27, Dec. 30 to Feb. 17, Feb. 20, June 17, 18, July 21, 22, which were computed on basis of records for station near Vermilion and are fair. Flow regulated by operation of reservoirs and by numerous diversions for irrigation above station. Most of flow diverted above station during irrigation season.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	130	170	205	180	235	204	148	325	62	49	108
2	46	133	195	205	175	229	227	153	400	51	48	206
3	38	133	214	206	175	232	214	143	419	47	51	138
4	38	140	206	200	170	227	212	164	427	46	56	95
5	36	161	195	195	165	225	219	164	458	44	58	72
6	44	164	195	190	165	222	242	161	439	49	66	74
7	46	164	190	190	230	217	251	164	438	80	80	69
8	48	161	178	190	250	225	251	198	432	114	85	76
9	52	153	181	185	285	217	247	251	400	117	95	76
10	53	156	178	185	290	204	237	283	370	138	121	74
11	53	158	176	185	290	201	222	258	308	130	112	69
12	53	161	176	185	295	187	201	219	276	190	108	76
13	59	164	176	185	295	193	170	227	237	201	86	66
14	66	164	173	185	295	219	138	258	190	187	89	58
15	64	167	178	185	300	198	133	301	161	167	140	58
16	76	173	198	185	305	187	126	386	138	133	190	64
17	112	167	209	185	310	193	170	419	100	119	198	61
18	138	161	214	185	325	201	161	452	70	112	173	58
19	140	158	217	195	320	209	181	483	53	104	95	58
20	143	153	212	200	300	198	190	503	76	89	64	69
21	143	148	212	200	255	227	193	492	76	70	51	76
22	143	145	217	205	229	269	204	469	32	50	46	89
23	138	133	217	205	227	247	214	441	80	43	61	153
24	133	128	220	205	240	229	164	400	87	40	143	135
25	133	140	214	205	242	235	158	359	112	39	97	104
26	128	148	214	205	242	242	178	328	135	39	81	93
27	130	155	212	210	237	229	201	301	119	48	66	95
28	128	161	212	210	235	225	190	269	99	48	69	104
29	133	161	209	210	-	222	170	244	80	43	80	106
30	130	167	205	205	-	187	153	283	70	43	229	108
31	135	-	210	195	-	167	-	416	-	49	126	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,823	143	36	91.1	5,600		
November.....						4,607	173	128	154	9,140		
December.....						5,173	220	170	199	12,240		
Calendar year 1936.....						50,420	514	23	138	100,000		
January.....						6,081	210	185	196	12,060		
February.....						7,007	325	165	250	13,900		
March.....						5,698	269	167	216	13,290		
April.....						5,821	251	126	194	11,540		
May.....						9,332	503	143	301	18,510		
June.....						6,636	438	53	221	13,160		
July.....						2,692	201	39	86.8	5,340		
August.....						3,013	229	46	97.2	5,980		
September.....						2,688	206	58	89.6	5,330		
Water year 1936-37.....						63,571	503	36	174	126,100		

Sevier Bridge Reservoir near Juab, Utah

Location.— Staff gage, lat. $39^{\circ}22'$, long. $112^{\circ}02'$, in NW $\frac{1}{4}$ sec. 1, T. 17 S., R. 2 W., at Sevier Bridge Dam, 13 miles southwest of Juab.

Records available.— January 1914 to September 1937.

Remarks.— Gage read to half-tenths once daily except during Feb. 27 to Mar. 7, July 24-25, contents for each day of which periods were computed on basis of records of reservoir inflow and outflow. Reservoir capacity, 236,000 acre-feet. Gage-height record and capacity table furnished by Consolidated Sevier Bridge Reservoir Co.

Contents, in acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,300	6,620	16,980	29,150	38,550	54,890	67,970	73,350	47,940	45,180	22,940	15,690
2	7,350	7,010	17,180	29,640	38,990	55,320	68,260	72,320	48,670	44,590	22,760	15,410
3	7,250	7,200	17,570	29,740	39,210	55,740	68,830	71,440	49,410	43,540	22,940	15,270
4	7,250	7,500	17,960	29,930	39,540	56,160	69,120	70,560	50,150	42,490	22,940	15,270
5	7,250	7,810	18,270	29,930	39,990	56,580	69,540	69,840	50,890	41,800	23,110	15,200
6	7,250	8,220	18,660	30,620	40,440	57,000	69,980	68,830	51,640	40,670	23,290	14,990
7	7,250	8,590	19,060	31,000	40,890	57,410	70,410	67,390	52,400	39,540	23,380	14,780
8	7,250	9,020	19,550	31,000	41,460	57,820	70,700	66,270	53,160	39,100	23,460	14,640
9	7,150	9,390	19,880	31,100	41,900	58,350	71,290	65,150	53,540	38,440	23,550	14,430
10	7,010	9,750	20,200	31,710	42,140	58,610	71,580	64,030	53,920	37,670	23,640	14,290
11	6,910	10,120	20,620	32,010	42,610	59,000	71,880	62,380	53,920	36,910	23,640	14,150
12	6,810	10,400	20,880	32,310	43,080	59,410	72,320	61,300	53,920	36,270	23,460	13,960
13	6,670	10,820	21,050	32,610	43,650	59,820	72,610	59,680	53,920	35,630	23,380	13,820
14	6,330	11,230	21,390	32,920	44,480	60,220	72,900	58,610	53,920	35,200	23,020	13,620
15	6,100	11,590	21,980	33,120	45,300	60,760	73,350	57,560	53,670	34,780	22,760	13,360
16	5,720	11,960	22,420	33,530	46,370	61,300	73,500	56,760	53,670	34,160	22,330	13,230
17	5,460	12,340	22,850	33,950	47,460	61,700	73,640	56,240	53,410	33,740	21,980	13,100
18	5,230	12,710	23,290	34,260	48,310	62,110	73,790	55,980	52,650	33,120	21,720	13,100
19	5,140	13,040	23,640	34,680	48,910	62,660	74,090	55,470	51,890	32,510	21,560	13,040
20	5,180	13,360	24,080	34,990	49,780	63,070	74,390	55,080	50,770	31,710	21,380	12,970
21	5,230	13,750	24,530	35,410	50,520	63,620	74,690	54,560	49,900	30,910	20,710	12,970
22	5,500	13,960	25,070	35,740	51,020	64,030	74,690	53,920	48,910	29,930	20,710	12,970
23	5,720	14,290	25,420	35,940	51,520	64,440	74,840	53,410	48,060	28,770	19,550	13,040
24	5,960	14,640	25,790	36,160	52,150	64,860	74,990	52,910	47,700	27,600	19,060	13,360
25	6,180	15,060	26,250	36,480	52,650	65,430	74,640	52,400	46,980	26,420	18,580	13,620
26	6,140	15,410	26,710	36,700	53,280	65,850	74,840	51,390	46,730	25,250	18,190	14,020
27	6,230	15,690	27,170	37,020	53,870	66,270	74,690	50,280	46,490	24,170	17,720	14,290
28	6,230	15,990	27,540	37,340	54,460	66,550	74,690	48,910	46,730	23,640	17,180	14,570
29	6,230	16,290	28,020	37,670	-	66,850	74,240	47,940	46,250	23,460	16,660	14,850
30	6,230	16,580	28,490	37,890	-	67,250	73,940	47,220	46,020	23,290	16,290	15,060
31	6,230	-	28,860	38,220	-	67,530	-	47,340	-	23,290	15,990	-

SEVIER LAKE BASIN

Sevier River near Juab, Utah

Location.- Water-stage recorder, lat. $39^{\circ}22'$, long. $112^{\circ}02'$, in NE $\frac{1}{4}$ 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 1937.

Average discharge.- 26 years, 263 second-feet.

Extremes.- Maximum discharge during year, 948 second-feet May 12 (gage height, 4.72 feet); minimum daily discharge, 1 second-foot during November and December.
1911-37: 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 for period when reservoir gates were closed, Nov. 7 to Apr. 15, estimated. No diversions between this station and station near Gunnison. Flow regulated by Sevier Bridge Reservoir (capacity, 236,000 acre-feet).

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	1					2	473	48	462	122	281
2	53	1					2	607	48	473	59	253
3	103	1					2	566	48	514	8	166
4	27	1					2	523	53	543	8	174
5	48	1					2	572	53	548	8	174
6	48	1					2	692	53	548	8	174
7	48	1					2	766	103	526	8	174
8	85	1					2	766	131	428	8	174
9	128	1					2	752	199	492	35	174
10	122	1					2	860	260	537	55	174
11	122	1					2	916	291	540	125	174
12	140	1					2	948	289	528	166	174
13	234	1					2	858	289	486	216	174
14	256	1					2	738	258	395	268	174
15	251	1					2	717	192	386	297	174
16	249	1					2	610	249	381	319	128
17	247	1					2	607	374	428	344	82
18	201	1					4	607	467	470	315	80
19	166	1					5	656	531	459	293	80
20	166	1					5	769	543	469	291	80
21	94	1					47	829	543	506	308	80
22	43	1					88	758	438	563	328	80
23	43	1					88	695	335	631	323	68
24	43	1					156	695	335	685	319	5
25	82	1					176	790	261	685	317	5
26	172	1					176	878	227	622	315	5
27	176	1					276	925	122	418	312	5
28	172	1					398	805	154	249	308	5
29	169	1					386	451	319	169	306	5
30	166	1					376	328	402	85	302	5
31	63	-					-	91	-	53	289	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						3,921	255	5	126	7,780		
November.....						30	1	1	1	60		
December.....						31	-	-	1	61		
Calendar year 1936.....						45,976	734	1	126	91,200		
January.....						62	-	-	2	123		
February.....						56	-	-	2	111		
March.....						62	-	-	2	123		
April.....						2,215	398	2	73.8	4,390		
May.....						21,231	948	91	685	42,110		
June.....						7,635	543	48	254	15,140		
July.....						14,271	685	53	460	28,310		
August.....						6,380	344	8	206	12,650		
September.....						3,521	281	5	117	6,980		
Water year 1936-37.....						59,415	948	1	163	117,800		

East Fork of Sevier River near Kingston, Utah

Location.- Water-stage recorder, lat. $38^{\circ}12'$, long. $112^{\circ}09'$, in SW $\frac{1}{4}$ sec. 13, T. 30 S., R. 5 W., 1 mile below highway bridge and 2 miles east of Kingston.

Drainage area.- 1,260 square miles.

Records available.- April 1913 to September 1937. March 1913 to April 1914, at site $\frac{1}{2}$ miles above Rockyford Bridge. May to September 1912, at site three-quarters of a mile north of Kingston.

Average discharge.- 24 years, 92.0 second-feet.

Extremes.- Maximum discharge during year, 475 second-feet Apr. 23 (gage height, 4.65 feet); minimum daily discharge, 10 second-feet Nov. 9, 10, 12, 13, 15-22. 1913-37: Maximum discharge, about 2,000 second-feet Aug. 27, 1929, from rating curve extended above 400 second-feet; minimum, 6 second-feet Oct. 30, 1930.

Remarks.- Records fair. Discharge for period of ice effect. Nov. 25 to Mar. 13, computed on basis of weather records and records of outflow from Otter Creek Reservoir. Discharge for May 22, 23 interpolated. Station is above all diversions in vicinity of Kingston. Flow regulated at Otter Creek Reservoir (capacity, 52,600 acre-feet), 8 miles above.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	16				16	16	87	40	29	109	114
2	18	14				16	16	106	35	30	109	123
3	16	13				17	18	205	34	30	109	109
4	16	16				18	16	308	30	30	107	107
5	16	12				18	16	340	30	29	105	105
6	14	12				19	14	340	29	30	107	107
7	16	11				21	15	321	28	33	105	107
8	13	10				21	14	337	28	33	105	103
9	12	10				22	15	347	28	32	105	105
10	12	11				22	16	324	30	31	103	105
11	12	11				23	18	258	29	31	103	105
12	12	10				23	17	199	30	42	103	105
13	11	10				24	15	172	30	44	105	97
14	11	11				24	15	169	30	37	105	96
15	12	10				21	18	177	31	31	105	105
16	14	10				20	117	183	29	30	109	134
17	14	10				22	235	169	28	30	109	139
18	13	10				20	150	144	27	30	109	144
19	17	10				18	108	116	26	30	105	146
20	21	10				17	96	90	26	29	105	146
21	19	10				16	178	57	27	29	105	146
22	16	10				15	327	50	27	27	105	149
23	16	11				15	408	42	26	27	112	151
24	15	11				15	321	35	25	28	112	146
25	15	12				16	266	36	24	30	112	149
26	14	12				17	296	34	25	31	112	151
27	14	12				19	360	31	25	39	107	151
28	13	12				17	370	31	25	70	105	151
29	13	12				18	215	30	26	120	118	151
30	14	12				16	106	42	29	123	112	151
31	16	-				16	-	53	-	115	105	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						450	21	11	14.5	893		
November.....						341	16	10	11.4	676		
December.....						434	-	-	14	860		
Calendar year 1936.....						15,074	252	9	41.2	29,900		
January.....						434	-	-	14	860		
February.....						448	-	-	16	889		
March.....						582	24	15	18.7	1,150		
April.....						3,799	408	14	126	7,550		
May.....						4,833	347	30	156	9,590		
June.....						857	40	24	28.6	1,700		
July.....						1,280	123	27	41.3	2,540		
August.....						3,327	118	103	107	6,600		
September.....						3,798	151	96	127	7,530		
Water year 1936-37.....						20,875	408	10	56.4	40,810		

Beaver River near Beaver, Utah

Location.- Water-stage recorder, lat. $37^{\circ}16'50''$, long. $112^{\circ}34'30''$, in SE $\frac{1}{4}$ sec. 18, T. 29 S., R. 6 W., a quarter of a mile above city diversion dam at mouth of canyon, and $4\frac{1}{2}$ miles east of Beaver.

Drainage area.- 82 square miles.

Records available.- June to September 1906, March 1914 to September 1937.

Average discharge.- 23 years (1914-37), 55.8 second-feet.

Extremes.- Maximum discharge during year, 749 second-feet May 18 (gage height, 7.95 feet) from rating curve extended above 500 second-feet; minimum daily discharge, 14 second-feet Nov. 2.

1914-37: Maximum discharge, 1,080 second-feet July 22, 1936 (gage height, 7.27 feet), from rating curve extended above 500 second-feet; maximum gage height, 7.95 feet May 8, 1937; minimum, about 5 second-feet Aug. 29, 1931 (gage height, 3.19 feet).

Remarks.- Records good except those for period of ice effect, Dec. 6 to Feb. 20 (computed on basis of weather records), and those above 200 second-feet, which are fair. No diversions for irrigation above station. Water diverted by Telluride Power Co. but returned to stream several miles above station. Flow slightly regulated by operation of power plants and storage in several small reservoirs.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	20	24	-	-	20	24	108	227	92	51	34
2	31	14	21	-	-	20	27	144	220	110	48	56
3	31	21	23	-	-	20	24	210	222	108	43	37
4	32	28	24	-	-	19	23	150	230	108	42	33
5	31	23	22	-	-	20	24	256	212	102	42	31
6	31	25	-	-	-	22	23	286	204	95	43	30
7	29	26	-	-	-	22	24	323	204	95	48	31
8	30	26	-	-	-	23	22	393	210	114	46	30
9	30	27	-	-	-	24	25	465	202	92	39	30
10	30	24	-	-	-	26	30	488	202	88	38	30
11	29	24	-	-	-	28	40	481	202	92	38	29
12	30	24	-	-	-	29	49	474	192	86	38	27
13	28	26	-	-	-	29	60	484	185	81	36	28
14	27	29	-	-	-	27	68	468	180	81	38	28
15	28	27	-	-	-	28	112	570	197	77	39	26
16	31	27	-	-	-	27	144	642	190	78	39	26
17	31	27	-	-	-	27	127	678	187	78	41	27
18	31	26	-	-	-	24	114	693	171	73	38	24
19	34	24	-	-	-	23	107	620	159	69	36	24
20	36	26	-	-	-	23	103	498	162	66	40	24
21	33	27	-	-	21	24	164	474	157	65	37	22
22	31	26	-	-	19	24	164	442	150	61	32	24
23	29	25	-	-	19	22	121	378	144	64	33	39
24	31	25	-	-	19	24	107	225	137	58	34	30
25	31	24	-	-	19	23	121	235	123	50	32	26
26	27	24	-	-	19	24	155	286	120	46	30	24
27	24	23	-	-	20	22	152	297	112	48	32	23
28	17	22	-	-	20	24	127	289	107	52	35	24
29	24	22	-	-	-	22	103	286	106	61	38	24
30	23	24	-	-	-	23	96	320	98	59	35	25
31	22	-	-	-	-	23	-	253	-	61	33	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						903	36	17	29.1	1,790		
November.....						756	29	14	24.5	1,460		
December.....						682	-	-	22	1,350		
Calendar year 1936.....						24,928	445	-	68.1	49,440		
January.....						620	-	-	20	1,230		
February.....						560	-	-	20	1,110		
March.....						736	29	19	23.7	1,460		
April.....						2,480	164	22	82.7	4,920		
May.....						11,916	693	108	384	23,640		
June.....						5,211	230	98	174	10,340		
July.....						2,408	114	46	77.7	4,790		
August.....						1,191	51	30	38.4	2,360		
September.....						846	37	22	28.2	1,680		
Water year 1936-37.....						28,289	693	-	77.5	56,120		

Beaver River at Rockyford Dam, near Minersville, Utah

Location.-- Staff gage, lat. 38°14', long. 112°50', 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 1937.

Average discharge.-- 22 years (1914-36), 38.3 second-feet.

Extremes.-- Maximum discharge during year, 668 second-feet May 17-19 (gage height, 3.34 feet); minimum, not determined.

1913-37: Maximum discharge, 727 second-feet June 10, 1921 (gage height, 3.53 feet); minimum, 0.3 second-foot (estimated) Mar. 19, 20, 1914.

Remarks.-- Records good. None for Oct. 1 to Apr. 20. After April 21 gage read about once weekly and before and after each change in gate openings; discharge for intervening days interpolated. No diversions between dam and gage. Flow regulated by operation of gates at Rockyford Dam and affected also by several diversions for irrigation and municipal supply above reservoir.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

0.9	11	1.8	144
1.0	19	2.0	194
1.1	29	2.2	252
1.2	41	2.6	362
1.4	68	3.0	530
1.6	102	3.4	695

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	266	315	121	71	77
2							-	305	352	126	71	71
3							-	304	337	126	71	71
4							-	303	315	126	71	70
5							-	302	315	126	71	65
6						*16	-	294	253	126	71	65
7							-	289	171	132	73	65
8							-	289	117	135	84	65
9							-	218	98	135	86	65
10							-	118	98	135	93	65
11							-	209	89	135	97	65
12							-	288	84	135	118	65
13							-	302	84	131	118	65
14							-	302	84	118	118	65
15							-	360	84	118	118	65
16							-	475	84	118	118	65
17							-	588	84	118	118	65
18							-	668	84	118	118	65
19							-	586	84	108	118	65
20			*46				-	200	84	90	118	65
21							-	127	84	84	118	65
22							98	120	78	84	118	65
23							98	118	74	84	116	65
24							98	118	74	83	102	68
25							98	133	74	73	102	68
26							98	140	86	71	102	64
27							98	140	95	71	102	60
28							98	140	89	71	92	60
29							98	329	106	71	84	60
30							124	594	114	71	84	60
31							-	408	-	71	84	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....					
November.....					
December.....					
Calendar year					
January.....	-	-	-	-	-
February.....	-	-	-	-	-
March.....	-	-	-	-	-
April 22-30.....	908	124	98	101	1,800
May.....	9,033	668	118	291	17,920
June.....	4,100	352	74	137	8,130
July.....	3,311	135	71	107	6,570
August.....	3,025	118	71	97.6	6,000
September.....	1,967	77	60	65.6	3,900
The period.....					44,320

*Discharge measurement.

Coal Creek near Cedar City, Utah

Location.- Staff gage, lat. $37^{\circ}40'25''$, long. $113^{\circ}02'10''$, in NE $\frac{1}{4}$ sec. 13, T. 36 S., R. 11 W., at flood-control dam, $1\frac{1}{2}$ miles southeast of Cedar City and $3\frac{1}{2}$ miles below South Creek.

Drainage area.- 92 square miles.

Records available.- May 1935 to September 1937. May 1915 to November 1919 at approximately same site but not including flow of power canal, which has been abandoned since 1919; records equivalent if flow of power canal is added to those obtained at former site.

Extremes.- Maximum discharge observed during year, 830 second-feet May 17 (gage height, 3.05 feet), from rating curve extended by broad-crested weir formula; minimum observed, 6 second-feet Oct. 11.
1935-37: Maximum discharge observed, 2,910 second-feet July 9, 1936 (gage height, 6.4 feet), from rating curve extended by broad-crested weir formula; minimum observed, 4 second-feet Dec. 15, 1935.

Remarks.- Records poor. Gage usually read once a day; not read on several days and read twice on several other days. Station is above diversions for irrigation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	13	-	12	-	-	-	121	162	40	-	66
2	-	-	-	-	-	-	-	183	145	35	-	-
3	-	-	-	-	-	-	-	229	137	35	-	-
4	7	-	-	-	-	-	-	258	129	34	-	-
5	-	-	-	-	-	-	-	294	121	32	-	-
6	-	-	-	-	-	-	-	315	116	53	-	-
7	-	-	-	-	8	22	-	356	119	38	15	-
8	-	-	-	-	-	-	-	356	114	50	14	-
9	-	-	-	-	-	20	-	346	111	40	-	-
10	-	-	-	10	-	-	-	356	106	35	-	-
11	6	-	-	-	-	-	41	364	97	*35	-	-
12	-	-	-	-	-	17	48	403	89	32	-	-
13	-	-	-	-	-	-	59	431	85	31	-	-
14	-	-	-	-	11	-	66	505	79	26	-	-
15	-	-	-	-	-	14	106	564	76	25	32	-
16	-	-	-	-	-	14	101	569	72	25	-	-
17	-	-	-	-	-	-	70	605	72	24	-	-
18	8	-	-	-	-	-	99	556	66	21	-	-
19	143	-	-	-	-	-	70	378	62	*20	-	-
20	-	11	-	-	-	-	94	350	61	*20	-	-
21	-	-	-	-	-	-	151	335	57	20	-	-
22	-	-	-	-	-	-	83	271	55	*20	-	-
23	-	-	-	-	-	-	53	291	53	*20	-	291
24	-	-	-	-	-	-	59	256	50	*20	-	-
25	9	-	-	-	-	-	94	226	48	*20	14	-
26	11	-	-	-	-	-	119	223	45	20	-	-
27	-	-	-	-	12	-	89	201	47	*20	-	-
28	-	-	-	-	12	-	74	192	41	45	-	-
29	10	-	-	-	-	-	62	195	47	40	-	-
30	-	-	-	-	-	-	57	261	42	*35	-	-
31	-	-	-	-	-	-	-	207	-	*20	-	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							310	-	-	*10	615	
November.....							300	-	-	*10	595	
December.....							310	-	-	*10	615	
Calendar year 1936.....							10,193	600	-	27.8	20,220	
January.....							341	-	-	*11	676	
February.....							336	-	-	*12	666	
March.....							558	-	-	*18	1,110	
April.....							1,895	151	-	63.2	3,760	
May.....							10,145	605	121	327	20,120	
June.....							2,504	162	41	83.5	4,970	
July.....							931	53	20	30.0	1,850	
August.....							465	-	-	*15	922	
September.....							600	-	-	*20	1,190	
Water year 1936-37.....							18,695	605	-	51.2	37,090	

*Computed on basis of weather records and records of North Fork of Virgin River near Springdale, Utah.

Salton Sea, Calif.

Location.— Benchmark set by Imperial Irrigation District, lat. $33^{\circ}26'55''$, long. $116^{\circ}02'20''$, in NW $\frac{1}{4}$ sec. 27, T. 8 S., R. 9 E., 1 mile northeast of Figtree John Spring and about 9 miles south of Mecca. Elevation is 242.44 feet below mean sea level.

Records available.— November 1904 to September 1937.

Extremes.— 1904-37: Maximum stage, 195.0 feet below mean sea level in February and March 1907; minimum since 1906, 250.7 feet below mean sea level in November 1924; bottom of Sea (from 1904-5 determinations) is 273.5 feet below mean sea level.

Remarks.— Area of water surface at elevation 250 feet below mean sea level, 266 square miles; area at 240 feet below sea level, 328 square miles. See Water-Supply Paper 735 for condensed history of Salton Sea. Elevations in the following table, furnished by Imperial Irrigation District, were determined by leveling from the above-mentioned benchmark.

Elevation, in feet, below mean sea level, 1936-37

Oct. 1, 1936	248.7
Oct. 31, 1936	248.6
Dec. 2, 1936	248.2
Jan. 2, 1937	247.7
Feb. 1, 1937	247.2
Mar. 2, 1937	246.8
Apr. 1, 1937	246.5
May 1, 1937	246.5
June 1, 1937	246.5
July 1, 1937	246.7
July 31, 1937	247.0
Sept. 1, 1937	247.2
Oct. 2, 1937	247.23

Palm Canyon Creek near Palm Springs, Calif.

Location.- Water-stage recorder, lat. 33°44'55", long. 116°32'15", in S¹/₄ sec. 11, T. 5 S., R. 4 E., three-quarters of a mile above Murray Canyon Creek and 6 miles south of Palm Springs. Altitude, about 700 feet.

Drainage area.- 94.0 square miles.

Records available.- January 1930 to September 1937.

Extremes.- Maximum discharge during year, 3,850 second-feet Feb. 6 (gage height, 5.60 feet); no flow for several months.

1930-37: Maximum discharge, that of Feb. 6, 1937; no flow for several months each year.

Remarks.- Records fair. Discharge for periods of missing gage heights, Dec. 30 to Jan. 15, Jan. 22-27, Feb. 8-16, Mar. 19-21, 27-29, Apr. 12-20, June 4-15, and July 24 to Sept. 30, computed on basis of nine discharge measurements and records for stations on nearby streams.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0	100	9.0	20	66	23	7.5	1.4	0.8	0.4
2			0	45	8	20	82	22	7	1.3	.8	.4
3			0	30	8.5	25	78	21	6	1.5	.8	.4
4			0	20	8.5	31	73	20	6	1.6	.8	.3
5			0	20	12	34	66	20	5.5	1.9	.8	.3
6			0	40	1,140	37	65	18	5.5	1.6	.8	.3
7			0	25	712	41	58	18	5	1.5	.7	.3
8			0	20	95	45	55	17	4.8	1.5	.7	.3
9			0	20	90	46	51	17	4.7	1.4	.7	.3
10			0	18	90	46	48	17	4.5	1.4	.7	.3
11			0	18	85	45	42	17	4.5	1.3	.7	.3
12			0	16	85	65	40	15	4.3	1.3	.7	.3
13			0	15	100	117	39	14	4.2	1.2	.7	.4
14			.1	14	300	76	37	14	4.2	1.2	.7	.3
15			1.6	13	200	82	37	13	4.1	1.1	.7	.3
16			1.3	14	112	184	36	13	4.0	1.1	.7	.2
17			1.2	14	99	164	35	12	4.0	1.1	.7	.2
18			1.1	13	75	124	34	12	3.7	1.0	.6	.2
19			.9	14	65	120	33	12	3.7	1.0	.6	.2
20			.7	12	54	115	33	11	3.5	1.0	.6	.2
21			.6	10	47	110	32	11	3.0	1.0	.6	1.6
22			.6	9	42	161	31	11	2.5	1.0	.6	1.4
23			.7	8.5	36	122	30	10	2.5	1.0	.6	1.2
24			.7	8	32	108	29	10	2.5	1.0	.6	1.1
25			.9	7	36	139	28	9	2.3	1.0	.5	1.1
26			.7	6.5	35	104	27	10	2.2	1.0	.5	1.0
27			5	6	28	90	30	9.5	2.2	1.0	.5	1.0
28			358	5.5	24	85	26	9	2.5	1.0	.5	1.0
29			139	5.5	-	78	26	9	2.5	.9	.5	.9
30			90	7	-	69	25	8.5	1.9	.9	.4	.9
31			300	13	-	63	-	8	-	.8	.4	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						0	0	0	0	0		
November.....						0	0	0	0	0		
December.....						903.1	358	0	29.1	1,790		
Calendar year 1936.....						1,584.8	358	0	4.33	3,140		
January.....						567.0	100	5.5	18.5	1,120		
February.....						3,618.0	1,140	8	129	7,180		
March.....						2,556	184	20	82.8	5,090		
April.....						1,292	82	25	43.1	2,560		
May.....						431.0	23	8	13.9	855		
June.....						120.8	7.5	1.9	4.03	240		
July.....						37.0	1.9	.8	1.19	73		
August.....						20.0	.8	.4	.65	40		
September.....						17.1	1.6	.2	.57	34		
Water year 1936-37						9,572.0	1,140	0	26.2	18,980		

Deep Creek near Hesperia, Calif.

Location.- Water-stage recorder, lat. $34^{\circ}20'30''$, long. $117^{\circ}13'40''$, in SE $\frac{1}{4}$ sec 18, T. 3 N., R. 3 W., half a mile above junction with West Fork of Mojave River and 8 miles southeast of Hesperia. Altitude, about 3,050 feet.

Drainage area.- 137 square miles.

Records available.- December 1929 to September 1937.

Extremes.- Maximum discharge during year, 6,800 second-feet Feb. 14 (gage height, 9.50 feet); minimum, 0.4 second-foot Oct. 1.
1929-37: Maximum discharge, 7,900 second-feet Feb. 9, 1932 (gage height, 11.30 feet); minimum, 0.1 second-foot at times during 1932-34 and in 1936.

Remarks.- Record good. Discharge for Jan. 9-11 computed on basis of records for stations on nearby streams. Storage in Lake Arrowhead. Hesperia Water Co.'s Canal diverts about 2 miles above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	18	5.5	49	35	207	346	297	71	18	5	0.9
2	.5	10	5.5	40	35	214	385	324	67	16	4.6	.8
3	.6	7.5	5.5	34	40	230	346	338	58	16	4.2	.8
4	.6	5.5	7	30	43	230	333	328	53	14	3.7	.8
5	.5	5.5	9.5	27	88	242	346	315	50	14	3.4	.8
6	.6	5.5	8	33	1,630	254	385	302	49	14	3.1	.8
7	.6	5	7.5	29	3,310	270	395	254	46	13	2.8	.7
8	.6	4.9	7	26	618	292	385	238	45	12	2.8	.8
9	.6	4.7	7	25	414	301	400	238	43	11	2.4	.7
10	.5	4.6	7	25	365	320	460	230	41	11	2.3	.7
11	.7	4.6	6.5	24	320	328	504	222	40	11	2.3	.8
12	.7	4.4	6.5	24	270	912	514	222	39	11	2.2	.9
13	.6	4.4	6.5	25	487	928	509	226	37	11	2.1	1.0
14	.6	4.4	7	28	4,180	595	555	222	36	11	2.1	2.7
15	.6	4.4	251	29	1,340	596	622	210	34	10	2.0	3.4
16	.7	4.4	373	30	710	2,350	608	191	32	9.5	2.1	2.1
17	2.3	4.4	99	30	536	983	518	175	31	8.5	2.2	1.4
18	3.8	4.2	45	31	500	830	490	153	30	8	1.4	1.2
19	3.8	4.1	31	31	460	622	475	141	30	7.5	1.2	1.3
20	5	4.1	25	28	422	522	410	129	31	7	1.1	1.4
21	4.2	4.2	21	27	410	490	426	119	28	6	1.2	1.4
22	3.4	4.4	18	28	375	500	418	111	25	6	1.3	1.4
23	3.0	6.5	16	28	306	485	342	101	23	6	1.3	1.4
24	2.8	8	15	27	306	460	320	97	23	6	1.3	1.1
25	2.7	7.5	16	27	302	450	328	90	22	6.5	1.3	1.1
26	2.7	6.5	17	28	246	418	333	99	23	6.5	1.2	1.1
27	2.8	6	34	29	218	385	375	99	21	5.5	1.1	1.1
28	2.8	6	50	30	211	410	324	88	23	5	1.1	1.1
29	3.0	6	30	31	-	395	292	82	20	4.9	1.0	1.1
30	3.7	5.5	32	39	-	375	288	78	18	5	.9	1.1
31	6.5	-	86	35	-	315	-	76	-	5.5	.9	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					62.0	6.5	0.4	2.0	123			
November.....					175.2	18	4.1	5.84	348			
December.....					1,255.0	373	5.5	40.5	2,490			
Calendar year 1936.....					10,599.0	669	.1	29.0	21,030			
January.....					927	49	24	29.9	1,840			
February.....					18,167	4,180	35	649	36,030			
March.....					15,909	2,350	207	513	31,560			
April.....					12,432	922	288	414	24,660			
May.....					5,795	338	76	187	11,490			
June.....					1,089	71	18	36.3	2,160			
July.....					286.4	18	4.9	9.56	598			
August.....					65.6	5	.9	2.12	130			
September.....					35.9	3.4	.7	1.20	71			
Water year 1936-37.....					56,209.1	4,180	.4	154	111,500			

Mojave River near Victorville, Calif.

Location.- Water-stage recorder, lat. 34°34'25", long. 117°19'10", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 6 N., R. 4 W., 500 feet above bridge on U.S. Highway 66 and 3 miles northwest of Victorville.

Records available.- October 1936 to September 1937. November 1930 to September 1936, at site 3 miles upstream; records equivalent.

Extremes.- Maximum discharge during year, 8,880 second-feet Feb. 14 (gage height, 7.65 feet); minimum, 11 second-feet Aug. 12.

1930-37: Maximum discharge, 12,500 second-feet Feb. 9, 1932; minimum, that of Aug. 12, 1937.

Remarks.- Records fair. Storage at Lake Arrowhead, diversions for irrigation from Deep Creek by Hesperia Water Co. and from Mojave River at Victorville. Discharge Oct. 1 to Feb. 5 and May 7-10 computed on basis of 13 discharge measurements and records for stations on nearby streams.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	30	45	60	42	302	485	303	31	20	12	16
2	25	30	44	42	43	290	517	320	31	20	12	17
3	25	30	44	41	44	278	512	333	31	22	13	13
4	26	30	43	41	45	266	470	346	30	19	12	14
5	26	31	42	41	45	266	465	333	29	19	14	16
6	27	31	42	40	96	286	490	320	30	18	15	13
7	27	31	41	40	4,530	302	495	300	31	17	14	16
8	28	31	40	40	1,090	345	485	240	26	18	12	15
9	28	31	40	40	518	365	470	220	25	18	15	19
10	29	31	39	40	452	428	485	200	26	17	15	18
11	30	31	39	40	380	464	506	182	29	18	12	18
12	30	32	39	40	310	1,110	522	176	28	18	11	18
13	30	32	39	40	290	3,140	517	176	29	16	12	17
14	30	33	39	40	4,880	1,710	539	173	28	15	18	17
15	30	33	38	40	2,800	1,160	646	163	26	13	14	19
16	30	34	38	40	1,240	3,210	700	160	22	13	13	18
17	30	35	38	40	842	1,790	604	132	23	13	12	17
18	29	35	38	40	702	1,330	544	111	26	16	14	17
19	29	36	38	40	674	1,070	539	106	20	16	14	18
20	29	37	38	40	625	866	465	87	20	18	16	22
21	29	38	38	40	566	751	450	71	20	16	15	20
22	29	39	38	40	566	884	445	63	20	16	20	20
23	29	39	38	40	452	828	372	60	19	17	14	22
24	29	40	39	41	416	800	324	54	20	17	13	20
25	29	40	40	41	518	744	324	47	22	17	18	22
26	30	41	40	41	470	676	320	52	24	17	13	22
27	30	42	41	42	365	634	350	56	23	16	14	18
28	30	43	43	42	310	658	346	44	23	16	15	15
29	30	44	46	42	-	616	307	34	24	17	18	19
30	30	45	80	42	-	656	299	35	10	18	14	22
31	30	-	140	42	-	500	-	34	-	18	15	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						888	30	25	28.6	1,760		
November.....						1,055	45	30	35.2	2,090		
December.....						1,397	140	38	44.7	2,750		
Calendar year 1936.....						10,729.0	140	18	29.3	21,270		
January.....						1,278	60	40	41.2	2,530		
February.....						23,311	4,880	42	833	46,240		
March.....						26,645	3,210	266	860	52,850		
April.....						13,993	700	299	466	27,780		
May.....						4,931	346	34	159	9,780		
June.....						754	31	19	25.1	1,500		
July.....						529	22	13	17.1	1,050		
August.....						440	20	11	14.2	873		
September.....						538	22	13	17.9	1,070		
Water year 1936-37.....						75,749	4,880	11	208	150,200		

Mojave River at Barstow, Calif.

Location.- Water-stage recorder, lat. 34°54'25", long. 117°01'20", in SW¼SE¼ sec. 31, T. 10 N., R. 1 W., on U. S. Highway 91, at Barstow.

Records available.- November 1930 to September 1937.

Extremes.- Maximum discharge during year, 6,000 second-feet Feb. 15 (gage height, 5.85 feet); no flow for most of each year.
1930-37: Maximum discharge, 8,300 second-feet Feb. 9, 1932 (gage height, 3.95 feet); no flow for several months each year.

Remarks.- Record fair. Considerable water diverted for irrigation above station.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					0	153	485	260				
2					0	154	480	220				
3					0	156	450	200				
4					0	158	420	170				
5					0	160	390	145				
6					0	152	360	130				
7					256	164	340	110				
8					960	166	360	95				
9					355	167	370	85				
10					153	195	380	80				
11					115	188	400	76				
12					103	218	415	72				
13					81	1,480	425	68				
14					1,480	3,030	440	55				
15					3,950	1,160	460	60				
16					1,920	1,840	475	55				
17					1,030	2,700	450	45				
18					800	1,700	420	40				
19					600	1,200	390	30				
20					515	982	370	20				
21					488	910	346	10				
22					427	850	340	5				
23					403	830	335	1.0				
24					317	810	335	.8				
25					260	798	320	.6				
26					270	740	320	.5				
27					270	680	315	.4				
28					203	600	315	.1				
29					-	529	305	0				
30					-	500	290	0				
31					-	490	-	0				
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					0	0	0	0	0			
November.....					0	0	0	0	0			
December.....					0	0	0	0	0			
Calendar year 1936.....					0	0	0	0	0			
January.....					0	0	0	0	0			
February.....					14,956	3,950	0	534	29,660			
March.....					23,870	3,030	153	770	47,350			
April.....					11,501	485	290	393	22,810			
May.....					2,045.4	260	0	66.0	4,060			
June.....					0	0	0	0	0			
July.....					0	0	0	0	0			
August.....					0	0	0	0	0			
September.....					0	0	0	0	0			
Water year 1936-37.....					52,372.4	3,950	0	143	103,900			

West Fork of Mojave River near Hesperia, Calif.

Location.- Water-stage recorder, lat. 34°20'20", long. 117°14'35", in SE¼ sec. 13, T. 3 N., R. 4 W., at highway bridge, half a mile above junction with Mojave River, and 7 miles southeast of Hesperia. Altitude, about 3,050 feet.

Drainage area.- 74.8 square miles.

Records available.- January 1930 to September 1937.

Extremes.- Maximum discharge during year, 4,100 second-feet Mar. 13 (gage height, 7.70 feet); no flow for several months.
1930-37: Maximum discharge, 6,000 second-feet Feb. 8, 1932 (gage height, 10.00 feet); no flow for long periods each year.

Remarks.- Records good. Discharge for Jan. 9-14, May 7-13, June 25-29, July 1-10 interpolated.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0	177	86	144	193	61	16	0.2		
2			0	102	62	138	197	56	14	.2		
3			0	69	60	138	183	53	14	.2		
4			0	44	49	138	170	51	14	.2		
5			0	44	64	136	164	49	13	.1		
6			0	207	999	136	158	46	12	.1		
7			0	102	1,130	136	144	44	11	.1		
8			0	76	416	136	136	42	10	.1		
9			0	65	260	136	131	40	9.5	.1		
10			0	48	185	140	125	38	8.5	.1		
11			0	45	140	144	122	36	8.5	0		
12			0	42	108	707	116	34	7.5	0		
13			0	42	388	1,690	115	31	6	0		
14			0	42	1,960	634	110	30	5	0		
15			0	41	885	531	105	29	5	0		
16			0	41	518	1,280	102	29	4.7	0		
17			0	36	370	614	96	29	4.5	0		
18			0	28	283	542	90	28	3.9	0		
19			0	34	235	428	86	26	3.4	0		
20			0	32	197	352	83	25	2.9	0		
21			0	26	174	301	80	24	2.6	0		
22			0	24	164	444	75	23	2.0	0		
23			0	26	156	355	70	23	1.7	0		
24			0	25	158	343	67	22	1.5	0		
25			0	20	298	334	62	23	1.2	0		
26			0	15	195	278	62	25	.9	0		
27			149	13	172	262	78	23	.7	0		
28			261	15	154	272	75	20	.5	0		
29			62	38	-	235	71	20	.3	0		
30			84	157	-	215	66	20	.2	0		
31			716	164	-	201	-	20	-	0		
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				0	0	0	0	0				
November.....				0	0	0	0	0				
December.....				1,272	716	0	41.0	2,520				
Calendar year 1936.....				3,926.8	716	0	10.7	7,780				
January.....				1,840	207	13	59.4	3,650				
February.....				9,866	1,960	49	352	19,570				
March.....				11,540	1,690	136	372	26,890				
April.....				3,332	197	62	111	6,610				
May.....				1,020	61	20	32.9	2,020				
June.....				185.0	16	.2	6.17	367				
July.....				1.4	.2	0	.05	2.8				
August.....				0	0	0	0	0				
September.....				0	0	0	0	0				
Water year 1936-37.....				22,056.4	1,960	0	79.6	57,630				

Rock Creek near Valyermo, Calif.

Location.-- Water-stage recorder, lat. 34°25'10", long. 117°50'25", in NE¼ sec. 20, T. 4 N., R. 9 W., 1½ miles southeast of Valyermo. Altitude, about 4,050 feet.

Drainage area.-- 23.0 square miles.

Records available.-- January 1923 to September 1937.

Average discharge.-- 14 years, 12.5 second-feet.

Extremes.-- Maximum discharge during year, 620 second-feet Feb. 6 (gage height, 3.25 feet); minimum, 2.0 second-feet Oct. 15 (gage height, 0.82 foot).

1923-37: Maximum discharge, that of Feb. 6, 1937; minimum, 1.2 second-feet Aug. 22, 1925.

Remarks.-- Records good. No diversions. Results of nine discharge measurements furnished by Los Angeles County Flood Control District.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.6	2.9	3.4	8	8	35	54	49	55	29	16	11
2	2.6	2.9	3.4	7	7.5	35	58	51	54	28	16	11
3	2.8	3.0	3.4	7	7.5	37	55	58	52	27	16	11
4	2.8	3.2	3.4	7	8	37	54	61	47	27	15	11
5	2.6	3.4	3.5	7	11	37	52	65	47	26	15	11
6	2.4	3.5	3.5	8	236	39	55	64	45	26	15	11
7	2.4	3.5	3.5	7	202	39	55	64	44	25	15	11
8	2.4	3.5	3.5	7	58	40	55	62	42	24	15	11
9	2.3	3.7	3.5	7	39	41	56	65	40	24	15	10
10	2.3	3.7	3.7	6.5	34	42	58	67	39	24	15	10
11	2.3	3.9	3.7	7	34	43	59	62	39	24	15	10
12	2.3	3.9	3.9	7.5	32	84	59	72	38	24	15	10
13	2.3	3.9	3.9	7.5	90	115	62	98	38	22	15	13
14	2.2	3.9	4.1	7.5	363	75	70	98	37	22	14	15
15	2.2	3.7	16	7.5	184	97	90	102	36	22	14	14
16	2.6	3.7	40	8	102	272	96	98	35	22	14	14
17	2.9	3.7	18	8	72	140	81	96	34	22	14	14
18	2.8	3.9	10	8	59	100	67	96	34	22	13	13
19	2.6	3.9	8.5	8	55	81	64	92	33	22	13	12
20	2.6	3.9	8	7.5	51	69	62	98	32	21	13	12
21	2.6	3.9	7.5	7	49	62	69	83	32	20	13	12
22	2.6	3.9	7	7.5	46	62	75	83	32	20	13	12
23	2.4	3.7	6.5	7.5	44	54	69	79	31	20	12	11
24	2.4	3.7	6.5	7	44	51	61	77	31	19	12	11
25	2.4	3.5	7	7	44	49	58	75	31	18	12	11
26	2.4	3.5	6.5	7	41	47	61	77	30	18	12	11
27	2.4	3.5	9.5	7	39	47	59	70	30	18	12	11
28	2.6	3.4	8.5	7	37	47	54	67	30	17	12	10
29	2.6	3.4	8	7.5	-	49	51	65	30	17	11	10
30	2.6	3.4	8	8	-	49	50	61	29	16	11	10
31	2.9	-	11	8	-	50	-	59	-	16	11	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						77.9	2.9	2.2	2.51	155		
November.....						107.6	3.9	2.9	3.59	213		
December.....						236.9	40	3.4	7.64	470		
Calendar year 1936.....						2,407.1	55	2.2	6.58	4,770		
January.....						228.5	8	6.5	7.37	453		
February.....						1,997.0	363	7.5	71.3	3,960		
March.....						2,024	272	36	65.3	4,010		
April.....						1,869	96	50	62.3	3,710		
May.....						2,294	102	49	74.0	4,550		
June.....						1,127	55	29	37.6	2,240		
July.....						682	29	16	22.0	1,550		
August.....						424	16	11	13.7	841		
September.....						344	15	10	11.5	682		
Water year 1936-37.....						11,411.9	363	2.2	31.3	22,630		

Little Rock Creek near Little Rock, Calif.

Location.- Water-stage recorder, lat. 34°27'40", long. 118°01'15", 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 1936.

Extremes.- Maximum discharge during year, 261 second-feet Feb. 23; no flow Oct. 1 to Nov. 7, July 13 to Sept. 30.

1930-36: Maximum discharge, 2,200 second-feet Feb. 8, 1932; no flow part of each year.

Remarks.- Daily discharge record furnished by Palmdale Irrigation District and Los Angeles County Flood Control District.

Discharge, in second-feet, water year October 1935 to September 1936

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	1.2	1.9	1.9	18	10	4.8	1.9	0.6		
2		0	1.2	1.9	27	18	9	4.3	1.9	.5		
3		0	1.2	1.9	17	18	10	4.1	1.9	.5		
4		0	1.2	1.9	9	17	14	3.9	1.9	.5		
5		0	1.3	1.9	6	16	14	3.9	1.9	.5		
6		0	1.4	1.9	5	15	11	3.5	1.4	.5		
7		0	1.4	1.9	4.3	15	11	3.5	1.4	.4		
8		.1	1.3	1.9	3.9	14	12	3.3	1.5	.4		
9		.5	1.3	1.7	3.7	14	15	3.1	1.4	.3		
10		.5	1.3	1.7	3.5	13	15	2.8	1.4	.3		
11		.5	1.3	1.7	7	13	15	2.6	1.3	.2		
12		.5	1.3	1.7	54	13	14	2.4	1.2	.1		
13		.6	1.3	1.7	46	12	14	2.2	1.0	0		
14		.6	1.3	1.7	48	12	12	2.2	1.0	0		
15		.6	1.4	1.7	46	12	12	2.1	.9	0		
16		.6	1.3	1.7	42	11	11	2.1	.9	0		
17		.7	1.3	1.6	34	11	10	1.9	.9	0		
18		.7	1.4	1.6	27	11	9	1.7	.9	0		
19		.8	1.4	1.6	22	10	9	1.7	.9	0		
20		.9	1.4	1.6	16	10	8.5	1.6	.9	0		
21		.9	1.4	1.6	17	10	8	1.5	.9	0		
22		1.0	1.5	1.6	21	9.5	7	1.5	.8	0		
23		1.2	1.5	1.6	127	9.5	7	1.4	.7	0		
24		1.2	1.4	1.6	57	9.5	6.5	1.4	.7	0		
25		1.2	1.4	1.6	38	9	6	1.3	.6	0		
26		1.2	1.4	1.6	28	8.5	5.5	1.3	.6	0		
27		1.2	1.5	1.6	24	8	5.5	1.4	.7	0		
28		1.2	1.5	1.6	21	8	5	1.4	.7	0		
29		1.2	1.7	1.6	19	8	5	1.4	.6	0		
30		1.2	1.9	1.6	-	8.5	5	1.5	.6	0		
31		-	2.1	1.6	-	12	-	1.7	-	0		
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					0	0	0	0	0			
November.....					19.1	1.2	0	.64	37.9			
December.....					43.5	2.1	1.2	1.40	66.3			
Calendar year 1935.....					9,205.8	1,210	0	25.22	18,260			
January.....					52.8	1.9	1.6	1.70	105			
February.....					777.3	127	1.9	26.8	1,540			
March.....					373.5	18	8	12.0	741			
April.....					296	15	5	9.37	587			
May.....					73.5	4.8	1.3	2.37	146			
June.....					33.4	1.9	.6	1.11	66			
July.....					4.8	.6	0	.15	9.5			
August.....					0	0	0	0	0			
September.....					0	0	0	0	0			
Water year 1935-36.....					1,673.9	127	0	4.57	3,320			

Owens River near Round Valley, Calif.

Location.— Water-stage recorder, lat. 37°26'25", long. 118°33'20", in SE¼ sec. 10, T. 8 S., R. 31 E., below Sheep Bridge, 700 feet above mouth of Rocky Creek and 2 miles north of Round Valley. Altitude, about 4,450 feet.

Drainage area.— About 450 square miles.

Records available.— August 1903 to September 1923, April 1927 to September 1937.

Average discharge.— 30 years, 225 second-feet.

Extremes.— Maximum discharge during year, 685 second-feet June 23 (gage height, 3.46 feet); minimum, 49 second-feet Jan. 21.
1903-23; 1927-37: Maximum discharge recorded, 1,190 second-feet June 30, 1907 (gage height, 4.0 feet); minimum, 5.4 second-feet Feb. 13, 1923.

Remarks.— Record affected by power development in Owens River gorge and diversions from tributaries for irrigation in Long Valley above station. (See Rock Creek at Sherwin Hill, near Bishop, Calif.). Daily-discharge record furnished by city of Los Angeles.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	129	156	132	206	147	159	255	188	428	452	187	142
2	137	145	132	159	156	159	289	190	388	432	185	142
3	145	142	140	156	174	159	281	192	373	420	179	138
4	145	145	142	180	174	162	268	197	384	420	173	136
5	140	160	137	159	239	162	266	204	428	440	167	136
6	134	153	137	89	335	182	279	214	464	440	163	140
7	127	156	142	150	275	162	279	192	482	424	159	142
8	127	153	142	193	250	162	279	227	452	396	156	145
9	124	150	142	242	250	162	279	225	432	373	152	145
10	122	153	142	224	235	165	324	225	400	362	149	149
11	129	159	137	206	230	168	336	212	373	345	147	150
12	129	159	132	189	225	174	345	220	356	333	142	150
13	129	156	132	171	221	180	388	241	339	356	142	150
14	137	153	134	168	217	180	448	270	339	330	142	156
15	137	159	145	155	212	180	537	321	356	315	140	156
16	134	159	165	171	206	183	550	348	339	309	140	156
17	180	156	156	171	196	193	448	356	352	303	145	156
18	193	156	165	186	190	193	428	362	356	285	149	156
19	180	156	165	159	190	186	452	356	373	276	149	152
20	165	150	159	137	183	183	474	339	424	261	142	149
21	159	150	152	85	177	186	505	330	492	247	140	150
22	156	145	159	114	177	190	452	333	555	249	140	149
23	150	150	153	137	174	177	291	339	570	267	140	149
24	150	147	153	145	174	186	276	345	570	273	140	149
25	150	147	153	134	171	190	258	359	565	273	142	149
26	150	150	145	132	168	183	244	348	525	261	143	147
27	150	145	137	137	165	188	214	348	500	243	145	147
28	147	145	174	142	162	194	195	352	474	234	140	150
29	147	145	150	153	-	199	190	364	496	215	136	154
30	156	140	140	129	-	215	188	432	469	206	138	156
31	159	-	150	129	-	239	-	448	-	194	138	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						4,517	193	122	146	8,960		
November.....						4,530	159	140	151	8,990		
December.....						4,554	174	132	147	9,030		
Calendar year 1936.....						72,380	488	114	198	143,600		
January.....						4,918	242	85	159	9,760		
February.....						5,674	335	147	203	11,250		
March.....						5,561	259	159	180	11,070		
April.....						10,018	550	188	334	19,870		
May.....						9,097	448	188	293	18,040		
June.....						13,024	570	336	434	25,830		
July.....						9,933	452	194	320	19,700		
August.....						4,650	187	136	150	9,220		
September.....						4,448	158	136	148	8,820		
Water year 1936-37.....						80,944	570	85	222	160,500		

Owens River at Pleasant Valley, near Bishop, Calif.

Location.— Water-stage recorder, lat. 37°25'00", long. 118°31'40", in NW¼ sec. 24, T. 8 S., R. 31 E., 1,000 feet above Owens River Canal intake, 2.2 miles below Rock Creek, and 8 miles northwest of Bishop. Altitude, about 4,550 feet.

Drainage area.— 596 square miles.

Records available.— March 1918 to September 1937.

Average discharge.— 19 years, 233 second-feet.

Extremes.— Maximum discharge during year, 1,010 second-feet June 22 (gage height, 5.80 feet); minimum regulated, 100 second-feet Jan. 21.
1918-37: Maximum discharge, 1,580 second-feet June 13, 1921 (gage height, 6.15 feet); minimum, 53 second-feet Aug. 25, 1931.

Remarks.— Diversions from tributaries and regulation by operation of power plant above station. Daily-discharge record furnished by city of Los Angeles.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	175	197	178	199	194	216	281	234	609	725	290	172
2	183	192	184	199	216	211	309	238	569	703	282	170
3	191	195	188	198	215	211	313	242	562	689	274	167
4	190	200	190	198	225	209	305	248	604	700	264	166
5	183	203	186	198	294	209	313	288	671	729	248	166
6	179	209	188	134	361	211	334	273	702	729	240	164
7	167	210	189	170	327	211	342	279	705	661	232	164
8	163	204	192	135	298	209	321	291	587	590	222	170
9	161	203	190	137	298	207	314	298	550	553	212	170
10	160	203	190	165	282	207	381	306	506	553	202	176
11	166	209	183	177	285	209	396	292	474	531	196	176
12	163	208	178	194	282	218	404	323	438	520	190	178
13	163	200	180	192	268	227	442	384	431	553	188	178
14	168	196	184	195	232	225	494	458	422	504	160	178
15	171	200	200	196	294	225	584	544	422	480	176	178
16	177	200	234	202	273	219	595	587	474	466	176	178
17	220	197	206	196	268	236	508	576	476	452	186	178
18	230	197	214	213	263	234	490	558	469	420	194	178
19	230	197	209	200	258	228	514	518	518	400	196	174
20	220	195	206	177	249	225	529	500	635	380	190	170
21	206	189	206	128	245	228	560	498	770	368	184	176
22	202	188	202	170	238	228	529	502	860	385	182	176
23	197	186	195	189	236	214	364	504	843	400	182	180
24	195	180	193	199	233	228	349	512	832	410	182	180
25	191	179	196	192	229	230	331	528	790	397	180	178
26	190	177	182	187	219	223	313	508	770	385	178	176
27	190	176	190	187	219	219	282	496	748	370	180	174
28	188	178	214	193	219	218	260	538	761	342	172	178
29	190	174	190	202	-	223	250	628	796	318	172	180
30	194	178	181	194	-	238	238	666	790	306	172	180
31	202	-	187	175	-	264	-	647	-	300	172	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				5,805		230	160	187	11,610			
November.....				5,818		210	174	194	11,540			
December.....				6,005		234	178	194	11,910			
Calendar year 1936.....				98,893		690	160	270	196,200			
January.....				5,681		213	128	184	11,290			
February.....				7,338		381	194	262	14,550			
March.....				6,860		264	207	221	13,610			
April.....				11,645		595	238	366	23,100			
May.....				13,414		666	234	433	26,610			
June.....				18,754		860	422	625	37,200			
July.....				15,319		729	300	494	30,380			
August.....				6,294		290	172	203	12,480			
September.....				5,229		180	164	174	10,370			
Water year 1936-37.....				108,172		860	128	296	214,600			

Owens River near Big Pine, Calif.

Location.— Water-stage recorder, lat. 37°01'45", long. 118°13'30", in NE¼ sec. 2, T. 11 S., R. 34 E., at Charlies Butte, 11 miles southeast of Big Pine. Altitude, about 3,850 feet.

Drainage area.— 1,930 square miles.

Records available.— September 1906 to September 1937.

Average discharge.— 31 years, 331 second-feet.

Extremes.— Maximum discharge during year, 970 second-feet during Feb. 7 at noon to Feb. 19 at noon (gage height, 6.26 feet); no flow Jan. 9-13, 21-26.
1906-27: Maximum discharge, about 3,220 second-feet Jan. 26, 1914 (gage height, 11.2 feet); no flow Jan. 9-13 and 21-26, 1937.

Remarks.— Diversions above station from main stream and tributaries. Storage in Tinemaha Reservoir, capacity 16,600 acre-feet. Intake of Los Angeles Aqueduct is 4 miles downstream from station. Daily-discharge record furnished by city of Los Angeles.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	324	145	425	438	826	306	276	496	335	438	216
2	9	327	145	401	407	801	298	337	516	298	438	220
3	9	293	149	406	407	774	305	340	488	298	437	218
4	9	267	151	414	407	751	291	344	450	301	434	226
5	9	262	154	420	442	720	261	358	432	305	431	247
6	9	260	156	320	505	688	261	378	453	318	428	249
7	9	255	152	78	507	649	261	380	492	332	425	117
8	9	254	152	48	518	601	264	385	534	346	424	14
9	9	258	152	0	547	536	332	397	558	356	422	30
10	9	260	152	0	560	486	441	404	548	358	418	61
11	9	261	152	0	564	463	442	408	478	361	428	15
12	9	262	149	0	564	456	445	418	455	366	449	20
13	9	267	145	0	572	445	526	422	446	407	448	15
14	9	266	145	28	703	443	587	439	428	411	443	12
15	9	267	152	128	816	442	584	461	417	413	437	12
16	9	260	196	116	864	456	581	532	418	414	432	12
17	9	237	342	112	965	445	579	556	425	417	428	12
18	9	188	403	213	970	432	587	625	428	421	440	12
19	9	159	403	335	968	431	584	652	434	423	446	12
20	9	150	403	28	961	428	581	672	436	425	450	12
21	9	149	404	0	949	424	565	688	460	423	456	12
22	9	146	403	0	938	424	545	683	469	424	455	12
23	29	148	401	0	922	421	532	630	442	422	460	12
24	301	155	404	0	910	421	537	505	421	422	365	12
25	303	146	411	0	900	418	518	426	413	422	169	12
26	305	139	411	0	884	424	428	418	383	424	127	12
27	309	141	432	58	864	422	354	417	363	424	117	12
28	316	139	444	230	846	417	351	378	358	424	170	12
29	316	139	451	286	-	414	303	378	352	422	216	12
30	319	142	448	383	-	410	259	404	361	432	220	12
31	324	-	419	453	-	366	-	460	-	440	228	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					2,720	324	9	87.7	5,400			
November.....					6,521	327	139	217.7	12,930			
December.....					8,626	461	145	278	17,110			
Calendar year 1936.....					108,069	576	9	295	214,400			
January.....					4,862	453	0	157	9,640			
February.....					19,898	979	407	711	39,470			
March.....					15,834	826	366	511	31,410			
April.....					12,908	587	259	430	25,600			
May.....					14,213	688	276	458	28,190			
June.....					13,354	558	352	445	26,490			
July.....					12,004	440	298	387	23,810			
August.....					11,679	460	117	377	23,160			
September.....					1,952	249	12	61.7	3,670			
Water year 1936-37.....					124,471	970	0	341	246,900			

Rock Creek at Sherwin Hill, near Bishop, Calif.

Location.-- Water-stage recorder, lat. 37°28'45", long. 118°36'05", in SW $\frac{1}{4}$ sec. 29, T. 5 S., R. 51 E., at Sherwin Hill, 3 miles above Pine Creek, and 14 miles north-west of Bishop. Altitude, about 4,900 feet.

Drainage area.-- 51.7 square miles.

Records available.-- August 1922 to September 1937.

Average discharge.-- 15 years, 20.9 second-feet.

Extremes.-- Maximum discharge during year, 113 second-feet June 22 (gage height, 2.64 feet); minimum, 1.6 second-feet Dec. 1, 1922-37; Maximum discharge recorded, 162 second-feet June 17, 1927 (gage height, 3.04 feet, at former gage); minimum, that of Dec. 1, 1936.

Remarks.-- Diversions at about 7,300 feet elevation for irrigation in Little Round Valley or discharge into Owens River at lower end of Long Valley. Daily-discharge record furnished by city of Los Angeles.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	11	3.5	8.5	16	12	15	26	70	86	40	10
2	11	11	10	11	15	12	15	28	66	82	36	9.5
3	12	10	9	15	15	12	15	33	65	81	33	9
4	12	11	11	19	15	12	15	36	68	91	30	9
5	12	12	8	15	20	12	15	42	80	98	27	8.5
6	11	12	12	16	19	12	15	44	86	103	25	9.5
7	11	11	13	16	14	12	14	46	86	88	23	9
8	11	9	12	16	15	13	15	47	82	74	22	12
9	11	11	9.5	16	19	13	16	49	71	66	21	11
10	11	11	10	15	19	13	16	52	65	63	21	11
11	11	12	7.5	15	23	13	16	56	60	64	21	10
12	11	12	9	14	20	13	17	64	55	61	20	10
13	10	11	11	14	18	13	18	77	53	60	19	10
14	10	11	11	14	19	13	21	92	52	58	16	10
15	10	11	11	14	17	13	23	94	53	56	16	10
16	11	11	17	14	17	14	23	96	58	55	14	11
17	15	11	12	14	17	14	21	93	61	54	15	11
18	15	11	16	14	16	14	21	87	59	52	16	11
19	17	12	15	13	15	13	22	78	57	49	20	11
20	16	12	15	12	14	14	23	71	71	46	21	11
21	15	11	15	12	14	14	26	70	97	44	20	11
22	15	11	13	11	14	15	25	71	110	46	19	11
23	14	11	12	11	13	13	23	70	105	49	17	12
24	14	11	11	11	13	15	23	68	94	51	17	12
25	14	11	13	11	13	14	25	68	86	52	17	12
26	13	11	6.5	10	11	14	27	67	81	49	16	11
27	13	11	12	12	11	14	26	65	78	47	15	11
28	13	11	14	13	12	14	23	68	81	46	13	11
29	12	10	10	13	-	14	23	81	88	45	13	11
30	12	8.5	10	15	-	14	24	87	86	45	13	11
31	12	-	6.5	12	-	15	-	81	-	43	10	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				386	17	10	12.5	766				
November.....				329.5	12	8.5	11.0	654				
December.....				345.5	17	3.5	11.1	685				
Calendar year 1936.....				9,012.0	113	3.5	24.6	17,870				
January.....				416.5	19	8.5	13.4	826				
February.....				444	23	11	15.9	881				
March.....				415	15	12	13.3	819				
April.....				601	27	14	20.0	1,190				
May.....				2,007	96	26	64.7	3,980				
June.....				2,224	110	52	74.1	4,410				
July.....				1,904	103	43	61.4	3,780				
August.....				626	40	10	20.2	1,240				
September.....				315.5	12	8.5	10.5	626				
Water year 1936-37.....				10,012.0	110	3.5	27.4	19,860				

Rock Creek near Round Valley, Calif.

Location.- Water-stage recorder, lat. 37°26'25", long. 118°34'15", in SE $\frac{1}{4}$ sec. 9, T. 8 S., R. 31 E., 0.1 mile above Pine Creek and 2 miles northwest of Round Valley. Altitude, about 4,450 feet.

Drainage area.- About 96 square miles.

Records available.- August 1903 to September 1923, April 1930 to September 1937.

Average discharge.- 27 years, 37.9 second-feet.

Extremes.- Maximum discharge during year, 108 second-feet June 22 (gage height, 2.76 feet); minimum, 8 second-feet Sept. 5.

1903-23; 1930-37: Maximum discharge recorded, 360 second-feet Jan. 25, 1914 (gage height, 5.0 feet, at former gage); minimum, 7.5 second-feet Sept. 16, 1933.

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

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	22	19	24	29	25	18	18	68	86	36	16
2	17	18	18	25	23	25	16	22	69	86	36	14
3	18	19	19	26	28	24	18	26	63	86	35	13
4	18	20	20	26	28	24	16	30	67	92	34	12
5	18	22	19	26	26	24	18	36	86	97	26	12
6	18	20	22	26	28	23	18	38	87	100	24	8.5
7	15	19	22	26	29	23	19	40	84	81	24	10
8	13	19	23	24	29	23	20	43	84	66	22	12
9	15	20	20	24	29	22	19	47	83	68	20	14
10	15	20	22	24	29	22	18	47	77	56	22	14
11	15	21	19	24	29	22	20	47	72	60	20	15
12	14	20	19	24	29	22	21	62	66	61	20	16
13	15	20	20	24	29	21	22	70	57	58	19	17
14	16	19	23	24	29	21	25	89	55	55	16	17
15	17	19	26	25	30	21	24	99	57	56	16	12
16	18	20	36	24	30	20	20	100	60	53	16	12
17	25	20	23	26	30	20	19	94	64	51	16	12
18	24	20	28	28	30	20	20	76	68	49	18	12
19	26	20	27	25	29	20	21	64	64	46	20	12
20	20	20	27	21	29	20	23	64	79	36	21	13
21	11	20	26	19	28	20	26	61	100	42	20	13
22	12	21	23	22	28	20	27	60	107	47	20	13
23	11	20	23	23	28	20	25	62	102	48	20	13
24	10	20	23	23	27	20	26	60	95	49	18	14
25	10	20	24	22	27	20	26	64	82	48	16	14
26	10	20	19	22	26	20	29	62	83	47	15	14
27	8.5	20	27	21	26	20	28	57	83	44	16	14
28	18	20	25	22	26	20	24	64	86	36	16	14
29	22	20	23	23	-	20	19	82	95	36	18	15
30	22	20	19	28	-	20	16	86	91	38	18	15
31	23	-	23	23	-	20	-	82	-	38	16	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						511.5	26	8.5	16.5	1,010		
November.....						599	22	18	20.0	1,190		
December.....						707	36	18	22.8	1,400		
Calendar year 1936.....						10,652.5	104	8.5	29.1	21,130		
January.....						744	28	19	24.0	1,480		
February.....						795	30	26	28.4	1,580		
March.....						662	25	20	21.4	1,310		
April.....						643	29	16	21.4	1,280		
May.....						1,854	100	18	59.8	3,680		
June.....						2,333	107	55	77.8	4,630		
July.....						1,808	100	36	58.3	3,590		
August.....						654	36	15	21.1	1,300		
September.....						402.5	17	8.5	13.4	798		
Water year 1936-37.....						11,713.0	107	8.5	32.1	23,250		

OWENS LAKE BASIN

Pine Creek at division box, near Bishop, Calif.

Location.- Water-stage recorder, lat. 37°24'55", long. 118°37'10", in NW¼ sec. 19, T. 8 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. Altitude, about 5,250 feet.

Drainage area.- 37.9 square miles.

Records available.- October 1921 to September 1937.

Average discharge.- 16 years, 38.1 second-feet.

Extremes.- Maximum discharge during year, 274 second-feet June 21 (gage height, 3.56 feet); minimum, 14 second-feet Jan. 5.

1922-37: Maximum discharge, 350 second-feet July 21, 1936 (gage height, 3.58 feet); minimum, 10 second-feet Jan. 8, 1930, Jan. 21, 1935.

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

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	21	17	17	17	18	19	28	152	216	76	30
2	20	21	17	17	17	18	19	33	146	214	71	29
3	20	21	17	17	17	18	19	39	167	221	68	28
4	20	21	17	17	19	18	19	44	219	202	65	28
5	19	20	17	17	22	18	19	52	222	224	64	26
6	19	19	17	18	21	18	19	64	213	207	62	26
7	20	19	17	17	21	18	19	62	191	178	61	26
8	20	19	17	17	20	18	19	61	169	162	56	25
9	20	19	17	17	20	19	20	69	145	153	53	25
10	19	19	17	17	20	19	20	66	138	164	51	25
11	19	19	17	17	20	19	20	75	131	138	48	24
12	19	19	17	17	20	19	20	105	129	142	47	24
13	19	19	17	17	20	19	22	125	136	169	45	24
14	19	19	17	17	20	19	24	153	139	145	45	23
15	19	19	18	17	20	19	26	166	148	138	44	23
16	19	19	19	17	20	19	25	155	149	129	44	23
17	22	18	18	17	19	19	24	148	139	114	40	23
18	21	18	18	17	18	19	25	133	138	107	42	23
19	21	18	18	17	18	19	25	115	185	101	43	23
20	21	18	18	17	18	19	26	115	216	101	42	23
21	21	18	18	17	18	19	28	128	232	101	41	23
22	22	18	18	17	18	19	28	133	230	100	40	22
23	21	18	18	17	18	18	27	126	216	100	39	22
24	21	18	18	17	18	18	27	128	233	103	38	21
25	21	18	18	17	18	18	28	130	238	93	37	21
26	21	18	17	17	18	18	29	99	231	92	36	21
27	21	18	18	17	18	18	29	106	219	91	35	20
28	21	18	19	17	18	19	28	162	236	90	34	20
29	21	17	17	-	-	19	27	208	207	87	34	20
30	21	-	17	-	-	19	27	185	221	85	33	20
31	21	-	17	-	-	19	-	130	-	80	33	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						628	22	19	20.3	1,250		
November.....						563	21	17	18.8	1,120		
December.....						542	19	17	17.5	1,080		
Calendar year 1936.....						17,861	247	16	48.9	35,490		
January.....						528	18	17	17.0	1,050		
February.....						531	22	17	19.0	1,050		
March.....						576	19	18	18.6	1,140		
April.....						707	29	19	23.6	1,400		
May.....						3,359	208	28	108	6,620		
June.....						5,515	238	129	184	10,940		
July.....						4,247	224	80	137	8,480		
August.....						1,467	76	33	47.3	2,910		
September.....						711	30	20	23.7	1,410		
Water year 1936-37.....						19,354	238	17	53.0	38,390		

Pine Creek near Round Valley, Calif.

Location.- Water-stage recorder, lat. 37°26'10", long. 118°34'10", in SE¼ sec. 9, T. 6 S., R. 31 E., 600 feet above junction with Rock Creek and 2 miles northwest of Round Valley. Altitude, about 4,450 feet.

Drainage area.- About 58 square miles.

Records available.- August 1903 to September 1923, April 1930 to September 1937.

Average discharge.- 27 years, 21.5 second-feet.

Extremes.- Maximum discharge during year, 293 second-feet June 21 (gage height, 3.00 feet); minimum, 0.4 second-foot May 1, 1903-23; 1930-37. Maximum daily discharge, 370 second-feet (estimated) June 22, 1911; minimum, 0.1 second-foot July 30, Aug. 13, 1920, May 23, 1930, many days in 1931, Aug. 25, 1934.

Remarks.- Water diverted for irrigation above station. Daily-discharge record furnished by City of Los Angeles.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	3.0	4.4	4.0	3.5	4.7	2.1	0.6	78	170	27	5.5
2	2.7	3.2	3.5	4.6	3.5	4.7	1.9	.7	88	162	25	4.6
3	3.2	3.3	3.5	4.6	3.5	4.0	1.8	.6	97	165	25	3.7
4	3.2	3.5	3.5	4.2	3.8	4.0	1.8	.6	152	176	21	3.3
5	3.3	3.6	3.3	4.2	11	4.0	1.9	.6	179	184	20	3.8
6	2.7	3.3	3.7	4.6	22	3.8	1.8	1.4	172	163	19	2.1
7	2.2	3.3	3.7	4.4	14	3.8	1.8	2.1	165	127	18	1.7
8	2.5	3.3	3.7	3.8	6.5	3.7	1.9	2.4	138	112	17	1.7
9	1.7	3.3	3.5	3.8	5.5	3.5	2.1	6.5	107	106	16	1.2
10	1.3	3.3	3.7	3.8	5.5	3.0	1.8	11	97	115	12	2.2
11	1.4	3.5	3.3	3.8	6	3.0	1.7	11	85	104	12	1.7
12	1.2	3.5	3.2	3.8	8	3.0	1.8	31	77	100	10	2.5
13	1.4	3.5	3.2	3.8	7	3.0	1.8	51	99	116	9	2.4
14	3.3	3.5	3.7	3.7	20	3.0	1.8	84	89	98	6.5	2.2
15	4.6	3.5	6	3.7	12	3.0	1.8	102	102	95	4.6	2.1
16	4.9	3.5	9	4.0	10	3.0	1.4	94	131	91	5	1.8
17	7.5	3.5	4.7	4.0	11	2.8	1.4	88	105	77	7	1.5
18	6	3.5	4.2	4.2	11	2.8	1.4	74	79	64	8.5	1.7
19	6.5	4.0	4.0	4.2	10	2.7	1.5	54	128	58	7.5	1.5
20	5	3.8	4.2	3.0	8.5	2.7	1.4	52	208	56	8.5	1.8
21	4.9	4.0	4.0	2.4	8	2.5	1.4	60	238	54	9	2.2
22	4.7	4.4	3.8	2.4	7.5	2.5	1.0	68	234	52	8.5	2.2
23	4.2	4.6	4.0	2.7	6.5	2.5	1.0	64	197	51	8.5	2.2
24	3.3	4.7	4.4	2.8	5.5	2.5	1.0	69	182	53	8.5	1.4
25	3.3	4.7	4.6	2.8	4.9	2.5	1.3	74	180	46	8	1.0
26	3.5	4.9	4.0	2.7	4.7	2.4	1.4	59	173	44	6.5	.6
27	3.3	5	7	2.7	4.6	2.2	1.3	60	175	41	5.5	.6
28	3.3	5	5.5	2.7	4.6	2.1	1.9	107	191	38	5.5	.6
29	3.3	4.9	4.2	3.0	-	2.1	1.8	160	184	30	5.5	.6
30	3.2	4.9	3.7	3.3	-	2.2	1.8	142	184	28	5.5	.6
31	3.2	-	4.0	3.5	-	2.2	-	86	-	27	5.5	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				106.5	7.5	1.2	3.44	211				
November.....				115.9	5	3.0	3.86	230				
December.....				131.0	9	3.2	4.23	260				
Calendar year 1936.....				7,478.8	199	1.2	20.4	14,830				
January.....				111.2	4.6	2.4	3.59	221				
February.....				228.6	22	3.5	8.16	453				
March.....				93.9	4.7	2.1	3.03	186				
April.....				48.8	2.1	1.0	1.63	97				
May.....				1,616.5	160	0.6	52.1	3,210				
June.....				4,314	238	77	144	8,560				
July.....				2,803	184	27	90.4	5,560				
August.....				354.1	27	4.6	11.4	702				
September.....				61.0	5.5	0.6	2.03	121				
Water year 1936-37.....				9,984.5	238	0.6	27.4	19,810				

MONO LAKE BASIN

Mono Lake near Mono Lake, Calif.

Location.- Staff gage, lat. $38^{\circ}00'$, long. $119^{\circ}08'$, in NE $\frac{1}{4}$ sec. 31, T. 2 N., R. 26 E., about a mile south of Mono Lake post office. Zero of gage is 6,390.66 feet above mean sea level (general adjustment of 1929).

Records available.- June 1912 to September 1937. Records prior to September 1934 in Water-Supply Paper 765.

Extremes.- 1912-37: Maximum stage, 37.4 feet July 18, 1919; minimum, 23.8 feet Nov. 18, 1935.

Gage height, in feet, water year 1936-37

Date	U. S. Forest Service	City of Los Angeles	Date	U. S. Forest Service	City of Los Angeles
1936			1937		
Oct. 2	-	24.4	Apr. 2	-	24.9
6	-	24.3	8	-	24.9
13	-	24.3	12	24.9	-
21	24.4	-	23	-	24.9
30	-	24.3	29	-	24.9
Nov. 5	-	24.2	May 4	-	25.0
7	-	24.2	11	-	25.0
12	-	24.2	19	-	25.0
13	24.3	-	25	25.0	-
17	-	24.2	26	-	25.0
20	-	24.2	June 4	-	25.0
25	-	24.2	8	-	25.1
Dec. 3	-	24.2	15	-	25.0
9	-	24.2	24	-	25.0
17	-	24.2	28	-	25.0
19	24.2	-	30	25.1	-
22	-	24.2	July 1	-	25.1
1937			6	-	25.1
Jan. 4	-	24.3	12	-	25.1
15	-	24.3	19	25.0	-
21	-	24.3	27	-	25.1
28	-	24.3	Aug. 2	-	25.0
Feb. 3	-	24.4	10	-	24.9
10	-	24.5	14	24.8	-
16	-	24.7	18	-	24.8
23	-	24.7	25	-	24.7
Mar. 3	-	24.8	Sept. 4	-	24.7
15	-	24.8	8	-	24.5
16	-	24.8	9	-	24.5
26	-	24.9	14	-	24.5
			17	24.4	-
			20	-	24.4
			27	-	24.4

WALKER LAKE BASIN

Walker Lake near Hawthorne, Nev.

Location.- Benchmark at United States naval ammunition depot, lat. $38^{\circ}35'$, long. $118^{\circ}42'$, in NW $\frac{1}{4}$ sec. 1, T. 8 N., R. 29 E., 6 miles northwest of Hawthorne.

Records available.- August 1928 to September 1937. Occasional readings prior to August 1928.

Extremes.- 1928-37: Maximum elevation observed, 4,051.8 feet Mar. 13, 1928 (Indian Service); minimum, 4,020.9 feet Sept. 14, 1937.

Lake elevation, Sept. 27, 1908, 4,078.0 feet, observed by U. S. Coast and Geodetic Survey (general adjustment of 1912).

Remarks.- Elevations determined by spirit leveling. Records furnished by Navy Department.

Elevations, in feet, above mean sea level, water year 1936-37

Nov. 6	4,022.3	May 4	4,022.1
Dec. 7	4,022.0	June 2	4,021.9
Jan. 21	4,022.0	July 6	4,021.9
Feb. 16	4,021.8	Aug. 11	4,021.3
Apr. 7	4,022.2	Sept. 14	4,020.9

Bridgeport Reservoir near Bridgeport, Calif.

Location.- Elevation determined at Bridgeport Dam, lat. 36°19'30", long. 119°12'50",
 in SE $\frac{1}{4}$ sec. 34, T. 6 N., R. 25 E., $\frac{1}{4}$ miles north of Bridgeport.

Records available.- October 1931 to September 1937.

Remarks.- Gage read once daily. Capacity of reservoir, 42,500 acre-feet. Gage-
 height record and capacity table furnished by Walker River Irrigation District.

Contents, acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23,200	24,240	27,090	30,360	32,840	32,330	34,770	37,320	34,510	39,260	32,330	19,060
2	23,200	24,340	27,200	30,480	32,960	32,460	35,300	37,040	34,900	39,540	31,700	18,780
3	23,200	24,340	27,320	30,480	33,090	32,330	35,830	36,760	35,170	39,980	31,330	18,610
4	23,200	24,460	27,440	30,610	33,360	32,330	36,360	36,630	35,440	39,980	30,850	18,440
5	23,200	24,660	27,440	30,610	33,730	32,080	36,900	36,230	35,700	40,120	30,360	18,090
6	23,200	24,770	27,550	30,730	33,980	31,820	37,460	36,960	35,960	40,270	29,880	17,760
7	23,200	24,880	27,550	30,730	33,980	31,670	37,970	36,440	36,360	40,710	29,400	17,400
8	23,200	24,880	27,680	30,970	33,960	31,670	38,150	36,440	36,760	41,000	28,820	17,140
9	23,200	24,990	27,780	30,970	33,860	31,670	38,150	36,170	37,180	41,440	28,360	16,980
10	23,100	24,990	27,780	31,090	33,600	31,330	38,670	34,640	37,730	41,730	27,780	16,740
11	23,100	25,100	27,900	31,330	33,360	31,330	38,710	34,240	38,290	41,440	27,200	16,580
12	23,100	25,210	27,900	31,330	33,360	31,670	38,840	33,860	37,730	41,290	26,640	16,420
13	23,100	25,320	27,900	31,460	33,360	31,820	38,980	33,600	37,320	41,000	26,090	16,260
14	23,000	25,430	28,010	31,670	33,360	31,980	38,840	33,360	37,040	40,660	25,540	16,110
15	23,000	25,540	28,010	31,670	33,360	32,200	38,710	33,090	36,760	40,120	25,100	15,950
16	23,000	25,760	28,120	31,700	33,360	32,330	38,710	33,090	36,360	39,680	24,560	15,630
17	23,000	25,870	28,240	31,700	33,360	32,330	38,710	33,360	35,960	39,260	24,040	15,470
18	23,100	25,980	28,360	31,820	33,730	32,460	38,670	33,600	36,100	38,710	23,620	15,240
19	23,200	26,090	28,470	31,820	34,110	32,590	38,670	34,110	36,230	38,150	23,100	14,880
20	23,300	26,090	28,700	31,820	33,980	32,720	38,430	34,240	36,500	37,460	22,790	14,580
21	23,300	26,200	28,930	31,820	33,980	32,960	38,150	34,510	36,760	36,760	22,380	14,580
22	23,410	26,310	29,160	31,950	33,600	33,220	38,150	34,640	36,900	36,100	21,990	14,430
23	23,520	26,420	29,280	31,950	33,090	33,090	38,010	34,510	37,180	35,700	21,600	14,290
24	23,620	26,530	29,400	31,950	32,720	32,840	37,870	34,380	36,150	35,170	21,110	14,140
25	23,620	26,640	29,400	32,080	32,460	32,460	37,870	34,240	35,840	34,900	20,820	13,990
26	23,720	26,750	29,640	32,080	32,330	32,590	37,730	34,240	35,400	34,640	20,530	13,860
27	23,720	26,860	29,640	32,200	32,330	32,590	37,730	34,240	35,980	34,610	20,260	13,720
28	23,830	26,960	29,760	32,200	32,200	32,840	37,730	33,980	36,710	33,980	20,070	13,580
29	23,940	27,090	29,880	32,330	-	33,080	37,690	33,600	36,710	33,600	19,880	13,460
30	23,940	27,090	29,880	32,330	-	33,600	37,690	33,980	36,980	33,220	19,610	13,460
31	24,040	-	30,120	32,590	-	34,110	-	34,240	-	32,960	19,330	-

East Walker River near Bridgeport, Calif.

Location.- Staff gage, lat. 39°19'40", long. 119°12'50", in SW 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 1937. July 1911 to September 1914, at site 1 1/2 miles upstream.

Average discharge.- 14 years (1922-24, 1925-37), 103 second-feet.

Extremes.- Maximum discharge observed during year, 452 second-feet June 12-15, from rating curve extended above 300 second-feet; minimum, 7 second-feet Nov. 24 to Feb. 4, Feb. 18, 19.

1921-37: Maximum discharge 1,050 second-feet (estimated) June 28-30, 1922; minimum, 2 second-feet several times when reservoir gates were closed.

Remarks.- Records good. Staff gage read once daily. Considerable areas of meadow and pasture lands irrigated near Bridgeport. Flow regulated by Bridgeport Reservoir; capacity, 42,500 acre-feet. Gage-height record furnished by Walker River Irrigation District.

Rating table, water year 1936-37 (gage height, in feet, and discharge, in second-feet)

2.2	5	3.2	100	4.0	276
2.4	15	3.4	136	4.3	355
2.6	30	3.6	179	4.6	438
2.8	49	3.8	226	5.0	555
3.0	72				

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	66	34	7	7	7	202	39	200	342	355	392	238
2	66	34	7	7	7	202	39	251	342	355	392	238
3	66	34	7	7	7	168	39	251	342	350	382	238
4	66	21	7	7	7	168	39	266	342	342	368	238
5	66	21	7	7	100	168	39	307	342	342	333	238
6	66	21	7	7	221	157	39	307	342	342	333	238
7	66	21	7	7	221	106	39	307	342	350	333	224
8	66	12	7	7	221	108	39	307	342	360	333	190
9	66	12	7	7	221	108	39	302	342	342	333	190
10	54	12	7	7	221	80	39	302	342	342	333	137
11	54	12	7	7	221	80	39	302	360	339	333	190
12	54	12	7	7	221	80	39	302	452	328	328	190
13	54	12	7	7	221	80	70	302	452	344	328	190
14	35	12	7	7	221	80	195	302	452	382	328	190
15	34	12	7	7	221	80	212	302	452	382	328	190
16	34	12	7	7	221	80	251	302	427	382	328	122
17	34	12	7	7	75	80	251	312	366	382	312	190
18	34	12	7	7	7	80	251	342	355	382	276	190
19	34	12	7	7	7	80	251	342	355	382	276	190
20	34	12	7	7	88	80	251	342	355	382	276	106
21	34	12	7	7	271	90	244	342	355	382	276	144
22	34	12	7	7	271	151	221	342	355	382	276	136
23	34	12	7	7	271	202	214	342	297	382	276	88
24	34	7	7	7	271	202	214	342	355	382	266	136
25	34	7	7	7	251	202	214	342	322	382	238	136
26	34	7	7	7	251	202	207	342	404	382	238	136
27	34	7	7	7	251	202	190	342	390	382	238	88
28	34	7	7	7	202	39	188	342	355	382	238	136
29	34	7	7	7	-	39	179	342	355	382	238	70
30	34	7	7	7	-	39	179	342	355	382	238	88
31	34	-	7	7	-	39	-	342	-	382	238	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,423	66	34	45.9	2,820		
November.....						427	34	7	14.2	847		
December.....						217	7	7	7.0	430		
Calendar year 1936.....						51,362	491	6	140	101,900		
January.....						217	7	7	7.0	430		
February.....						4,775	271	7	171	9,470		
March.....						3,666	202	39	118	7,270		
April.....						4,250	251	39	142	8,450		
May.....						9,712	342	200	313	19,264		
June.....						10,989	452	297	366	21,800		
July.....						11,367	382	328	367	22,580		
August.....						9,385	382	238	303	18,610		
September.....						5,075	238	70	169	10,070		
Water year 1936-37.....						61,503	452	7	169	122,000		

West Walker River near Coleville, Calif.

Location.- Water-stage recorder, lat. 38°30'50", long. 119°27'15", in NE $\frac{1}{4}$ 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.- March 1909 to August 1910, June 1915 to September 1937. October 1902 to July 1908 at site half a mile upstream.

Average discharge.- 27 years (1902-7, 1915-37), 277 second-feet.

Extremes.- Maximum discharge during year, 2,200 second-feet May 29 (gage height, 5.40 feet); minimum discharge recorded, 21 second-feet Nov. 3 (gage height, 1.43 feet). 1915-37: Maximum discharge, 2,710 second-feet June 12, 1921 (gage height, 5.74 feet), from rating curve extended above 1,700 second-feet; minimum, 5 second-feet Dec. 3, 1924, Aug. 27, 1931.

Remarks.- Records fair. Discharge for periods of missing gage heights, Oct. 23-26 and July 28 to Sept. 9, computed on basis of records for station on East Fork of Carson River near Gardnerville, Nev. Discharge for period of ice effect, Dec. 25 to Mar. 1, computed on basis of weather records. Station is above diversions except for a few small ranch ditches. Very slight regulation from storage in Poor Lake Reservoir (capacity unknown), 17 miles upstream.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	45	30			55	116	378	1,060	776		55
2	48	39	38			62	129	505	1,230	752		55
3	49	35	31			62	120	600	1,330	728		55
4	49	45	36			68	116	722	1,540	758		55
5	47	44	36			72	114	782	1,600	824		55
6												
7	45	44	36			77	109	830	1,410	704		55
8	45	39	36			79	107	788	1,360	580		55
9	47	36	36			85	107	740	1,310	540		55
10	50	39	31			94	111	758	1,120	520		55
	54	41	34			103	124	692	1,020	480		55
11												
12	54	47	31			111	122	698	878	378		55
13	55	42	31			114	136	1,020	812	368		53
14	56	42	35			109	184	1,120	860	364		51
15	55	41	35			105	256	1,440	884	360		49
	55	44	40			99	342	1,570	1,010	330		48
16												
17	53	43	68			107	317	1,460	1,250	294		48
18	53	41	45			114	256	1,410	995	270		45
19	61	41	44			107	249	1,310	872	263		42
20	62	41	44			98	252	1,010	1,090	249		39
	63	40	44			98	286	1,000	1,310	245		39
21												
22	62	38	44			94	378	1,190	1,330	242		39
23	58	38	36			96	356	1,290	1,480	235		37
24	55	35	36			82	330	1,350	1,360	297		39
25	52	35	37			90	351	1,350	1,190	360		38
	49	36	40			90	410	1,450	1,030	305		38
26												
27	47	37	40			87	470	1,160	860	256		38
28	45	35	35			89	430	1,310	890	222		35
29	47	36	35			87	338	1,530	866	195		37
30	44	33	35			85	501	1,800	890	165		37
31	48	35	35			90	309	1,540	866	155		37
	49	-	35			98	-	1,110	-	153		-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,604	63	44	51.7	3,180		
November.....						1,184	47	30	39.5	2,350		
December.....						1,169	68	30	37.7	2,320		
Calendar year 1936.....						102,009	1,270	30	279	202,300		
January.....						930	-	-	30	1,840		
February.....						1,120	-	-	40	2,220		
March.....						2,807	114	55	90.5	5,570		
April.....						7,256	470	107	242	14,390		
May.....						33,913	1,800	378	1,094	67,270		
June.....						33,653	1,600	812	1,122	66,750		
July.....						12,368	624	153	399	24,530		
August.....						3,410	-	-	110	6,760		
September.....						1,397	55	37	46.6	2,770		
Water year 1936-37.....						100,811	1,800	-	276	200,000		

WALKER LAKE BASIN

Topaz Reservoir near Topaz, Calif.

Location.— Elevations obtained near outlet works of Topaz Reservoir, lat. 38°41', long. 119°31', in sec. 28, T. 10 N., R. 22 E., 6 miles north of Topaz.

Records available.— October 1931 to September 1937.

Remarks.— Gage read once daily. Topaz Reservoir, formerly Alkali Lake, was formed by the diversion of water from West Walker River through a feeder canal and the construction of an outlet tunnel through a low saddle in rim of lake. Contents given represent available storage only. The usable capacity is about 53,000 acre-feet (prior to 1937 it was about 45,000 acre-feet). Gage-height record and capacity table furnished by Walker River Irrigation District.

Contents, in acre-feet, water year, October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	-	19,450	22,080	25,660	-	-	41,040	50,930	51,480	36,270	20,220
2	18,520	17,500	-	-	25,740	33,840	37,980	40,770	51,200	51,200	35,730	19,700
3	-	-	-	-	-	-	-	40,410	51,480	50,930	35,280	19,280
4	-	-	19,790	-	-	-	-	40,140	51,020	50,650	35,100	18,860
5	-	-	-	23,360	27,180	34,200	-	40,140	50,460	50,370	34,380	18,430
6	18,000	17,590	-	-	-	-	38,340	40,140	50,280	50,100	33,930	18,000
7	-	-	-	-	-	-	-	40,140	50,190	49,820	33,390	17,590
8	-	-	20,220	23,780	-	-	-	40,140	50,190	49,540	32,850	17,180
9	17,590	-	-	-	28,040	34,920	38,610	40,050	50,370	49,360	32,220	16,840
10	-	17,590	-	-	-	-	-	39,960	50,370	49,080	31,520	16,430
11	-	-	20,470	-	-	-	-	39,780	50,180	48,800	31,000	16,020
12	17,340	-	-	24,120	-	35,460	-	39,600	50,100	48,020	30,390	15,610
13	-	17,590	-	-	-	-	38,880	39,780	49,820	48,150	29,780	15,200
14	-	-	-	-	-	-	-	40,050	49,450	47,600	29,160	14,790
15	-	-	20,720	24,460	-	-	-	40,680	49,260	47,040	28,550	14,380
16	17,420	-	-	-	31,180	36,180	39,600	41,490	49,360	46,400	27,950	13,970
17	-	17,670	-	-	-	-	-	42,320	49,450	45,840	27,360	13,560
18	-	-	-	-	-	-	-	43,060	49,630	45,190	26,680	13,160
19	-	-	-	24,800	31,700	36,900	-	43,900	49,720	44,540	26,160	12,750
20	17,420	17,920	-	-	-	-	40,860	44,640	49,910	43,990	25,570	12,340
21	-	-	-	-	-	-	-	45,660	50,100	43,340	24,980	11,930
22	-	-	21,400	25,060	-	-	-	46,210	50,460	42,600	24,460	11,520
23	17,420	-	-	-	32,580	37,170	41,040	46,760	50,650	41,860	23,870	11,110
24	-	18,340	-	-	-	-	-	47,410	51,580	41,130	23,440	10,700
25	-	-	21,660	-	-	-	-	47,970	51,580	40,410	23,020	10,290
26	-	-	-	25,320	33,300	-	-	48,620	51,850	39,690	22,600	9,880
27	17,420	18,940	-	-	-	37,350	41,220	48,980	51,850	39,060	22,170	9,470
28	-	-	-	-	-	-	-	49,540	51,850	38,520	21,740	9,060
29	-	-	21,920	25,480	-	-	41,220	50,100	51,850	37,980	21,490	8,650
30	17,500	-	-	-	-	37,620	41,130	50,650	51,670	37,350	21,320	8,240
31	-	-	-	-	-	-	-	50,930	-	36,810	20,810	-

CARSON RIVER BASIN

East Fork of Carson River near Gardnerville, Nev.

Location.— Staff gage and Cippoletti weir, lat. 38°52'25", long. 119°41'35", in sec. 25, T. 12 N., R. 20 E., 300 feet below Douglas Power Co.'s dam, 1,000 feet above highway bridge, half a mile southwest of Rodenbah ranch, and 5 miles southeast of Gardnerville.

Drainage area.— 381 square miles.

Records available.— April 1890 to December 1893, October 1900 to December 1906, March 1908 to December 1910, June to October 1917, December 1924 to September 1929, and October 1935 to September 1937.

Extremes.— Maximum discharge observed during year, 1,680 second-feet May 14, 15 (gage height, 2.50 feet); minimum, 30 second-feet Sept. 25.

1890-93, 1900-1906, 1908-10, 1917, 1924-29, 1935-37: Maximum discharge 5,540

second-feet (estimated), Dec. 25, 1892; minimum, 8 second-feet Dec. 4-10, 19-23, 1904.

Remarks.— Records fair. Staff gage read once daily. Discharge for period of ice effect, Jan. 10-31, computed on basis of weather records. Station is above all diversions in Carson Valley except Rodenbah pump ditch.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)

0.1	10	0.8	192	2.0	1,140
.2	28	1.0	291	2.3	1,460
.3	47	1.2	420	2.6	1,790
.4	68	1.4	576	3.0	2,230
.5	92	1.6	752	3.5	2,830
.6	120	1.8	940		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	60	66	41	60	47	153	264	734	1,080	544	112	73
2	64	62	55	60	47	172	309	826	1,140	458	112	68
3	68	53	60	64	58	184	286	960	1,200	450	103	70
4	92	58	62	60	64	201	264	1,040	1,240	372	106	68
5	90	60	60	55	556	215	243	1,120	1,300	366	117	66
6	90	62	60	51	576	238	249	1,140	1,220	400	109	73
7	87	64	62	49	346	286	229	1,130	1,140	328	127	70
8	85	53	64	38	284	297	233	1,070	1,090	270	140	70
9	82	59	62	39	172	309	238	1,160	960	249	133	69
10	80	64	58	40	163	322	264	1,000	921	201	127	66
11	58	68	47	40	136	352	286	1,090	864	184	117	66
12	58	64	43	40	143	322	297	1,220	845	188	112	68
13	55	60	49	45	238	275	315	1,500	845	206	114	70
14	55	64	51	50	826	264	420	1,680	854	172	117	68
15	58	66	75	50	553	249	743	1,680	845	161	87	64
16	60	66	192	50	270	264	716	1,500	1,180	153	85	64
17	66	64	95	50	264	291	734	1,500	940	172	95	60
18	80	62	80	50	238	280	544	1,420	864	161	92	58
19	90	64	78	45	215	201	560	1,160	789	153	95	58
20	82	62	73	40	165	197	576	1,140	940	166	92	49
21	75	64	66	40	157	188	752	1,220	950	157	87	45
22	70	66	58	40	160	184	771	1,440	921	153	32	39
23	70	64	49	45	153	172	780	1,390	892	161	60	38
24	68	62	55	50	169	165	662	1,500	845	233	82	32
25	68	62	64	45	172	165	752	1,440	662	197	85	30
26	68	60	66	45	165	169	864	1,140	698	201	87	36
27	68	49	49	50	153	172	803	1,260	662	150	87	41
28	70	64	51	50	157	169	629	1,460	595	130	70	47
29	68	64	49	50	-	161	576	1,640	576	117	60	49
30	66	62	51	45	-	180	560	1,530	552	112	62	47
31	66	-	62	45	-	210	-	1,140	-	109	70	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	2,217	92	55	71.5	4,400
November.....	1,857	68	49	61.9	3,680
December.....	1,937	192	41	64.1	3,940
Calendar year 1936.....	127,245	2,290	41	348	252,400
January.....	1,481	64	39	47.8	2,940
February.....	6,627	826	47	237	13,140
March.....	7,007	352	153	226	13,900
April.....	14,923	864	229	497	29,600
May.....	39,230	1,680	734	1,265	77,810
June.....	27,608	1,300	552	920	54,760
July.....	7,073	544	109	228	14,030
August.....	3,044	140	60	98.2	6,040
September.....	1,720	73	30	57.3	3,410
Water year 1936-37.....	114,774	1,680	30	314	227,600

CARSON RIVER BASIN

Carson River near Fort Churchill, Nev.

Location.- Water-stage recorder, lat. $39^{\circ}17'$, long. $119^{\circ}18'$, in SE $\frac{1}{4}$ sec. 32, T. 17 N., R. 24 E., 2 miles west of Fort Churchill and 6 miles east of Clifton.

Drainage area.- 1,450 square miles.

Records available.- January 1934 to September 1937. April 1911 to December 1933, at site 8 miles upstream; records practically equivalent.

Average discharge.- 26 years (1911-37), 347 second-feet.

Extremes.- Maximum daily discharge during year, 2,110 second-feet May 17; no flow Oct. 1-20, Sept. 1-30.

1911-37: Maximum discharge, 8,150 second-feet Jan. 26, 1914 (gage height, 11.5 feet, former site and datum); no flow during some periods in nearly every year since 1923.

Remarks.- Numerous diversions for irrigation above station, including those for irrigation of 720 acres between present site and the site used prior to Jan. 1, 1934. Practically entire flow is diverted during late irrigation season. Records of daily discharge furnished by Truckee-Carson Irrigation District.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	96	108	132	354	374	323	467	1,480	388	18	
2	0	98	115	132	403	379	341	485	1,140	345	18	
3	0	100	112	125	323	388	414	639	1,110	318	18	
4	0	102	100	116	327	393	393	898	1,060	284	18	
5	0	102	106	151	594	393	369	1,070	1,120	231	18	
6	0	89	98	122	1,020	403	354	1,260	1,130	198	17	
7	0	100	106	169	1,480	419	350	1,310	1,180	181	14	
8	0	110	108	169	1,680	424	359	1,290	1,090	146	12	
9	0	112	115	211	1,290	430	341	1,240	996	116	12	
10	0	112	119	211	723	440	327	1,200	858	104	9	
11	0	112	121	208	745	462	336	1,140	781	90	9	
12	0	115	115	208	626	451	345	1,010	694	80	8	
13	0	119	117	198	745	440	350	1,150	626	68	7	
14	0	121	106	184	955	440	350	1,380	633	62	7	
15	0	121	108	172	1,580	414	435	1,650	660	52	3	
16	0	121	121	166	1,630	398	600	1,970	653	46	1	
17	0	121	144	143	1,110	398	745	2,110	759	44	1	
18	0	121	176	141	922	424	639	2,080	922	36	1	
19	0	117	165	127	882	414	562	1,940	737	34	1	
20	0	117	154	120	766	388	531	1,680	633	18	1	
21	42	117	148	120	653	374	537	1,480	653	18	1	
22	55	115	146	116	594	364	600	1,470	680	18	1	
23	66	115	144	141	594	354	715	1,410	674	18	1	
24	66	117	140	169	587	341	667	1,480	633	18	1	
25	70	115	136	215	562	345	594	1,530	537	42	1	
26	75	115	136	211	513	332	620	1,620	473	29	1	
27	77	110	140	211	430	323	752	1,570	408	36	1	
28	79	106	146	208	379	318	752	1,340	393	30	1	
29	79	104	152	184	-	323	639	1,380	379	26	1	
30	83	104	154	169	-	352	544	1,600	374	24	1	
31	91	-	161	231	-	323	-	1,790	-	24	1	
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						783	91	0	25.2	1,550		
November.....						3,324	121	89	111	6,590		
December.....						4,017	176	98	130	7,970		
Calendar year 1936						139,446	2,040	0	381	276,600		
January.....						5,180	231	116	167	10,270		
February.....						22,487	1,680	323	802	44,560		
March.....						12,001	462	318	387	23,800		
April.....						14,884	752	323	496	29,520		
May.....						42,639	2,110	467	1,375	84,870		
June.....						23,466	1,480	374	782	46,540		
July.....						3,126	388	18	101	6,200		
August.....						204	18	1	6.6	405		
September.....						0	0	0	0	0		
Water year 1936-37						132,091	2,110	0	362	262,000		

Humboldt River at Palisade, Nev.

Location.- Chain gage, lat. 40°35', long. 116°12', 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 1908, July 1911 to September 1937.

Average discharge.- 29 years (1903-6, 1911-37), 329 second-feet.

Extremes.- Maximum discharge observed during year, 1,380 second-feet June 2 (gage height, 5.16 feet); minimum observed, 11 second-feet Aug. 18 (gage height, 1.06 feet).

1902-6, 1911-37: Maximum discharge observed, 4,300 second-feet Mar. 5, 1921 (gage height, 8.6 feet); minimum, 2 second-feet Aug. 25-28, 1931.

Remarks.- Records good except those for period of ice effect, Jan. 10 to Feb. 4, which were computed on basis of weather records and are fair. Gage read once daily. Water is diverted for irrigation of about 150,000 acres of hay and pasture lands above station.

Rating table, water year 1936-37 except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Mar. 10).

1.0	9	2.6	180	4.3	835
1.3	23	3.0	280	4.6	1,010
1.6	42	3.3	376	5.0	1,270
2.0	61	3.6	492	5.3	1,480
2.3	124	4.0	680		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	36	33	64	60	121	650	611	1,270	216	30	16
2	30	40	36	64	65	134	760	620	1,380	207	29	17
3	27	38	40	62	70	156	780	592	1,350	202	25	18
4	26	41	41	62	75	156	720	611	1,240	168	23	17
5	24	40	43	60	95	164	710	630	1,230	164	24	18
6	25	43	44	62	101	178	760	620	1,340	228	22	18
7	28	41	49	64	110	191	740	640	1,240	156	20	17
8	31	41	53	62	119	224	700	660	1,010	152	19	19
9	32	41	53	60	113	245	670	690	1,050	145	19	20
10	30	41	40		116	255	680	700	1,230	160	20	19
11	28	41	33		119	280	670	700	1,050	149	18	19
12	27	41	34		113	286	645	690	974	156	19	18
13	30	41	40		104	304	660	675	902	149	17	16
14	30	41	41		98	316	780	660	890	152	15	15
15	32	41	43		104	362	879	710	855	141	14	14
16	33	41	49		77	412	1,020	750	813	131	14	15
17	34	37	53		77	459	868	780	780	124	13	14
18	34	42	53		85	536	857	802	750	100	11	13
19	36	33	56		90	611	846	835	680	94	15	15
20	37	33	56		77	573	879	879	650	91	14	15
21	38	33	66	55	95	582	890	824	601	94	15	15
22	40	33	66		90	592	846	780	564	81	13	16
23	41	33	68		90	573	740	802	554	71	15	17
24	38	33	70		62	554	690	780	476	62	18	18
25	40	33	68		82	536	660	791	435	52	19	17
26	36	33	66		90	527	670	657	405	50	18	19
27	36	33	66		98	510	680	914	376	52	17	19
28	37	33	68		110	518	660	879	316	45	18	20
29	36	33	70		-	527	650	846	286	39	17	18
30	34	33	68		-	554	660	890	263	34	15	19
31	33	-	66		-	592	-	1,140	-	33	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,015	41	24	32.7	2,010
November.....	1,123	43	33	37.4	2,230
December.....	1,632	70	33	52.6	3,240
Calendar year 1936.....	138,086	2,290	18	377	273,900
January.....	1,770	-	-	57.1	3,610
February.....	2,585	119	60	92.5	5,130
March.....	12,032	611	121	388	25,870
April.....	22,420	1,020	645	747	44,470
May.....	23,358	1,140	592	753	46,330
June.....	24,940	1,380	263	851	49,470
July.....	3,696	226	33	119	7,330
August.....	560	30	11	18.1	1,110
September.....	511	20	13	17.0	1,010
Water year 1936-37.....	95,642	1,380	11	262	189,700

HUMBOLDT RIVER BASIN

Humboldt River near Imlay, Nev.

Location.- Water-stage recorder, lat. 40°41'20", long. 118°12'55", in SW $\frac{1}{4}$ sec. 25. T. 33 N., R. 33 E., about 600 feet above old Calahan Dam and 4 miles northwest of Imlay.

Drainage area.- 13,500 square miles.

Records available.- June 1935 to September 1937.

Extremes.- Maximum daily discharge during year, 405 second-feet April 6; minimum, no flow Sept. 18-30.
1935-37: Maximum daily discharge, 564 second-feet June 4, 1936; no flow June 1-18, Sept. 17 to about Dec. 31, 1935, Sept. 18-30, 1937.

Remarks.- Records good. Discharge for Jan. 1 to Feb. 28 estimated. Station is immediately above flow line of Rye Patch Reservoir and about 9 miles below the Humboldt Lovelock Irrigation Light & Power Co.'s feeder canal. The Humboldt Lovelock Irrigation Light & Power Co.'s outlet canal releases water into the Rye Patch Reservoir. Flow also affected by numerous diversions for irrigation above station. Daily discharge record furnished by Bureau of Reclamation. Occasional discharge measurements and computations of monthly discharge by Geological Survey.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	4	6			7	368	190	24	20	91	23
2	1	4	6			8	374	161	26	89	84	23
3	1	4	6			14	385	123	23	182	78	22
4	1	4	6			18	399	166	26	181	72	22
5	1	4	6			32	401	195	25	170	68	22
6	1	4	6			30	405	206	16	161	65	21
7	1	4	6			32	393	195	16	161	74	21
8	1	4	6			48	392	130	16	175	74	20
9	1	4	6			78	396	93	18	159	71	20
10	1	4	6			105	397	72	20	128	65	19
11	2	5	7			108	397	67	22	81	60	19
12	2	5	7			77	384	62	19	104	58	18
13	2	5	7			50	378	132	23	115	53	17
14	2	5	7			38	381	130	37	170	50	16
15	2	5	7			129	372	100	61	246	47	8
16	2	5	7			210	379	75	136	200	46	0
17	2	5	7			212	377	70	82	185	43	0
18	2	5	7			219	353	61	63	176	42	0
19	2	5	7			223	360	55	56	153	41	0
20	2	5	7			222	365	46	62	156	38	0
21	3	6	8			225	368	49	66	148	36	0
22	3	6	8			246	373	41	61	141	34	0
23	3	6	8			246	368	39	63	133	32	0
24	3	6	8			264	264	31	61	133	29	0
25	3	6	8			279	235	33	58	127	30	0
26	3	6	8			295	198	32	47	122	29	0
27	3	6	8			314	200	30	31	112	28	0
28	3	6	8		7	324	170	26	28	106	26	0
29	3	6	8		-	328	161	43	25	101	24	0
30	3	6	8		-	354	174	52	20	97	24	0
31	3	-	8		-	362	-	33	-	93	24	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						63	3	1	2.0	125		
November.....						150	6	4	5.0	298		
December.....						218	8	6	7.0	432		
Calendar year 1936.....						49,672	564	-	136	98,530		
January.....						91	-	-	2.9	180		
February.....						96	-	-	3.4	190		
March.....						5,097	362	7	164	10,110		
April.....						10,187	405	161	339	20,170		
May.....						2,738	206	26	88.3	5,430		
June.....						1,229	136	16	41.0	2,440		
July.....						4,328	246	20	140	8,580		
August.....						1,538	91	24	49.5	3,050		
September.....						291	53	0	9.7	577		
Water year 1936-37.....						26,004	405	0	71.2	51,580		

Rye Patch Reservoir near Rye Patch, Nev.

Location.- Mercury indicating gage, lat. 40°28'15", long. 118°18'20", in NE¼ sec. 18, T. 30 N., R. 33 E., at control works at left end of Rye Patch Dam, 2 miles north-west of Rye Patch.

Records available.- February 1936 to September 1937.

Remarks.- Rye Patch Dam, completed by Bureau of Reclamation in 1936, has an impounding capacity of 179,000 acre-feet. Records furnished by Bureau of Reclamation.

Contents, in acre-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,790	9,390	9,110	9,150	9,020	9,900	18,650	28,980	13,380	8,090	5,760	3,660
2	9,760	9,370	9,110	9,130	9,020	9,940	19,500	28,990	13,080	8,000	5,580	3,720
3	9,760	9,320	9,110	9,110	9,020	10,020	20,110	28,550	12,710	7,900	5,370	3,710
4	9,760	9,320	9,100	9,110	9,020	10,100	20,800	28,060	12,500	7,890	5,160	3,680
5	9,730	9,310	9,070	9,140	9,020	10,170	21,560	27,950	12,230	7,920	5,050	3,660
6	9,720	9,310	9,070	9,110	9,040	10,250	22,220	27,200	11,870	7,980	4,930	3,640
7	9,720	9,280	9,070	9,130	9,090	10,270	22,830	26,730	11,650	7,980	4,800	3,560
8	9,710	9,280	9,070	9,110	9,070	10,360	23,390	26,410	11,280	7,970	4,680	3,500
9	9,730	9,250	9,060	9,100	9,120	10,390	24,120	26,070	11,020	8,010	4,500	3,440
10	9,710	9,240	9,070	9,100	9,170	10,470	24,670	25,460	10,770	8,010	4,320	3,370
11	9,680	9,230	9,070	9,070	9,230	10,580	25,460	24,750	10,490	8,030	4,150	3,320
12	9,640	9,230	9,060	9,070	9,200	10,650	25,990	24,190	10,240	7,990	3,990	3,250
13	9,600	9,230	9,040	9,070	9,270	10,740	26,520	23,560	9,950	7,840	3,900	3,200
14	9,560	9,220	9,030	9,070	9,120	10,830	27,180	22,830	9,710	7,750	3,850	3,140
15	9,600	9,210	9,040	9,070	9,110	10,920	27,750	22,590	9,400	7,710	3,810	3,030
16	9,530	9,210	9,040	9,090	9,160	10,990	28,550	21,720	8,940	7,800	3,700	3,010
17	9,510	9,200	9,040	9,090	9,220	11,200	28,890	21,230	8,950	7,880	3,680	2,950
18	9,510	9,200	9,060	9,090	9,300	11,510	29,400	20,600	8,900	7,920	3,650	2,880
19	9,510	9,190	9,060	9,080	9,300	11,920	29,800	19,700	8,880	7,860	3,620	2,870
20	9,600	9,180	9,060	9,060	9,300	12,350	30,150	19,520	8,780	7,750	3,580	2,860
21	9,490	9,170	9,050	9,050	9,420	12,740	30,180	18,790	8,620	7,620	3,520	2,890
22	9,480	9,170	9,050	9,030	9,510	13,110	30,580	18,200	8,670	7,450	3,460	2,910
23	9,460	9,170	9,050	9,020	9,510	13,480	30,700	17,800	8,580	7,260	3,430	2,940
24	9,390	9,160	9,070	9,040	9,530	13,940	31,040	17,180	8,600	7,070	3,420	2,950
25	9,480	9,160	9,090	9,040	9,630	14,480	31,160	16,640	8,610	6,900	3,390	2,930
26	9,390	9,160	9,090	9,020	9,680	14,990	31,160	16,340	8,550	6,740	3,390	2,950
27	9,390	9,160	9,140	9,020	9,860	15,620	31,130	15,480	8,460	6,510	3,420	2,960
28	9,390	9,150	9,140	9,020	9,860	16,290	30,150	14,930	8,430	6,470	3,540	2,970
29	9,350	9,130	9,140	9,020	-	16,760	29,690	14,350	8,250	6,300	3,550	2,980
30	9,340	9,130	9,140	9,040	-	17,360	29,230	13,840	8,140	6,100	3,520	2,990
31	9,340	-	9,140	9,030	-	17,980	-	13,640	-	5,920	3,580	-

Humboldt River near Rye Patch, Nev.

Location.— Water-stage recorder, lat. 40°27'25", long. 118°18'20", in NE¼ sec. 19, T. 30 N., R. 33 E., 5,000 feet below Rye Patch Dam and a mile northwest of Rye Patch.

Drainage area.— 13,700 square miles.

Records available.— October 1935 to September 1937. January 1896 to December 1909, September 1910 to September 1922, and September 1924 to September 1932 (fragmentary), at site near Oreana, 7 miles downstream; records practically equivalent.

Average discharge.— 25 years (1899-1909, 1910-16, 1917-22, 1930-32, 1935-37), 212 second-feet.

Extremes.— Maximum daily discharge during year, 568 second-feet May 19; no flow Oct. 1 to Apr. 4, Sept. 21-30.

1896-1922, 1924-32, 1935-37: Maximum discharge, 3,050 second-feet May 12, 1897 (gage height, 12.0 feet, former site); no flow during some periods in 1905, 1915, 1918-20, 1931-32, 1935-37.

Remarks.— Records good. Because of unstable conditions caused by backwater from aquatic growth at gaging station, flow was computed from gate openings at dam, 5,000 feet upstream, by applying a coefficient determined from current-meter measurements to the theoretical discharge. Flow completely regulated by Rye Patch Reservoir (capacity, 179,000 acre-feet), 5,000 feet upstream, and affected also by many diversions for irrigation and storage in Taylor-Pitt Reservoirs above station. Records furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	273	206	117	385	33
2							0	302	205	117	383	58
3							0	392	204	142	380	79
4							0	402	208	198	359	79
5							51	423	203	245	301	79
6							73	456	199	262	287	88
7							46	495	231	290	285	97
8							46	510	241	306	309	97
9							46	509	240	306	330	97
10							36	531	248	306	328	96
11							28	545	256	291	288	96
12							46	544	255	252	275	96
13							59	542	254	251	239	96
14							59	540	253	251	206	95
15							75	539	251	226	182	81
16							85	536	193	165	165	48
17							85	534	138	165	167	47
18							117	558	135	197	156	76
19							135	568	135	269	156	94
20							189	550	122	304	156	35
21							214	514	113	302	155	0
22							215	512	96	301	156	0
23							215	510	85	299	145	0
24							250	449	85	298	130	0
25							265	384	85	297	130	0
26							327	362	85	296	114	0
27							355	325	84	277	72	0
28							353	298	106	367	58	0
29							324	290	117	390	58	0
30							273	239	117	390	47	0
31							-	207	-	388	33	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							0	0	0	0	0	
November.....							0	0	0	0	0	
December.....							0	0	0	0	0	
Calendar year 1936.....							41,454	477	0	113	62,220	
January.....							0	0	0	0	0	
February.....							0	0	0	0	0	
March.....							0	0	0	0	0	
April.....							3,967	355	0	132	7,870	
May.....							13,841	568	207	446	27,450	
June.....							5,150	256	64	172	10,210	
July.....							8,265	390	117	267	16,590	
August.....							6,405	383	33	207	12,700	
September.....							1,567	97	0	62.2	3,110	
Water year 1936-37.....							39,195	568	0	107	77,730	

South Fork of Humboldt River near Elko, Nev.

Location.— Water-stage recorder, lat. 40°43'15", long. 115°49'50", in NW¼ sec. 30, T. 33 N., R. 55 E., a quarter of a mile above head of canyon, three-quarters of a mile below highway bridge, 5 miles above mouth, and 10 miles southwest of Elko.

Drainage area.— 1,150 square miles.

Records available.— August 1896 to September 1922, October 1923 to September 1932, October 1936 to September 1937.

Extremes.— Maximum discharge during year, 800 second-feet June 1 (gage height, 4.00 feet); minimum, not determined.
1896-1922, 1923-32, 1936-37: Maximum discharge, 2,400 second-feet Jan. 26, 1914; no flow during some periods in nearly every year since 1915.

Remarks.— Records good except those for Dec. 12 to Apr. 13 (computed on basis of miscellaneous gage readings and records for Humboldt River at Palisade) and those for Aug. 20 to Sept. 30 (estimated), which are fair. Station is below all diversions except those of Hunter & Banks ranch, 3 miles downstream.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

0.9	1	1.8	66	2.8	310
1.0	3	2.0	100	3.0	380
1.1	6	2.2	142	3.3	500
1.2	10	2.4	190	3.6	620
1.4	22	2.6	246	4.0	800
1.6	40				

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	18	18				185	170	746	127	5	
2	9	16	20				217	160	608	108	5	
3	9	16	19				190	170	464	96	4	
4	9	18	23				165	198	332	74	4	
5	9	17	22				165	229	348	66	3	
6	9	16	24				165	268	317	72	3	
7	9	16	25				155	317	307	86	3	
8	9	15	26				140	331	359	95	3	
9	9	16	24				131	356	544	79	3	
10	9	15	26				135	366	532	63	3	
11	9	16	21				140	356	424	55	3	
12	9	16					144	338	376	46	3	
13	9	15					160	320	331	41	3	
14	10	15					195	352	307	45	3	
15	10	15					220	408	310	40	3	
16	10	15					229	452	314	36	3	
17	10	15					190	492	324	34	3	
18	10	15					185	504	294	30	3	
19	11	15					172	496	252	26	2	
20	14	14					175	432	252	23	2	
21	14	16	25				175	380	277	18	2	
22	12	16					168	345	280	16	2	
23	12	16					175	300	246	12	2	
24	12	30					168	324	165	12	2	
25	13	33					158	356	175	10	2	
26	14	35					156	468	182	9	2	
27	14	29					165	440	168	8	2	
28	14	21					178	420	149	8	2	
29	15	20					180	456	142	7	2	
30	15	21					178	516	140	5	2	
31	15	-					-	652	-	5	2	
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				342	15	9	11.0	678				
November.....				551	35	14	18.4	1,090				
December.....				748	-	-	24.1	1,480				
Calendar year												
January.....				775	-	-	25	1,540				
February.....				980	-	-	35	1,940				
March.....				2,325	-	-	75	4,610				
April.....				5,159	229	131	172	10,230				
May.....				11,369	652	160	367	22,550				
June.....				9,745	746	140	325	19,330				
July.....				1,342	127	5	43.3	2,660				
August.....				86	5	2	2.8	171				
September.....				50	-	-	2	118				
Water year 1936-37.....				33,482	746	-	91.7	66,400				

Martin Creek near Paradise Valley, Nev.

Location.- Water-stage recorder, lat. $41^{\circ}32'$, long. $117^{\circ}26'$, in SE $\frac{1}{4}$ sec. 11, T. 42 N., R. 40 E., $1\frac{1}{2}$ miles above Silver State flour mill and 8 miles northeast of Paradise Valley.

Records available.- October 1921 to September 1937.

Average discharge.- 15 years (1921-26, 1927-37), 23.0 second-feet.

Extremes.- Maximum discharge during year, 247 second-feet Apr. 15 (gage height, 7.52 feet); minimum daily discharge, 4 second-feet Aug. 5 to Sept. 1, Sept. 6-30.
1921-37: Maximum discharge, about 1,000 second-feet Feb. 21 or 22, 1927 (gage height, about 12 feet), from rating curve extended above 200 second-feet; minimum, 2 second-feet Sept. 1-9, 1928.

Remarks.- Records fair. Discharge for periods of missing gage heights, Mar. 30, 31, May 7, 8, June 4-6, 8, 9, 11-14, 16, 20, 22, 25, 26, 28, 30, July 1, 3, 4 computed on basis of weather records and records for Owyhee River at Mountain City, Nev. No diversions above gage.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	7	6	6	6	7	95	42	71	13	5	5
2	6	7	7	6	6	7	161	56	60	11	5	5
3	6	6	6	5	7	8	47	61	61	10	5	5
4	6	5	6	5	7	8	39	94	59	9	5	5
5	6	5	6	6	7	8	36	97	56	8	4	5
6	6	7	6	6	8	9	35	92	54	8	4	4
7	6	6	7	6	8	10	33	89	52	8	4	4
8	6	6	7	6	8	11	38	85	51	8	4	4
9	6	6	7	5	8	13	45	82	49	8	4	4
10	6	6	6	5	7	14	50	75	48	8	4	4
11	6	8	6	5	7	16	43	69	46	8	4	4
12	6	7	5	6	8	17	61	74	44	8	4	4
13	6	7	6	6	8	30	125	84	42	7	4	4
14	6	7	6	6	8	42	195	102	40	7	4	4
15	6	7	6	6	7	56	192	104	38	7	4	4
16	7	6	6	6	7	71	149	102	36	7	4	4
17	7	6	6	6	7	64	107	101	34	7	4	4
18	7	7	6	6	8	87	73	101	28	7	4	4
19	7	6	6	6	7	29	63	98	28	7	4	4
20	7	7	6	7	6	23	71	98	27	6	4	4
21	7	7	7	6	7	22	94	87	27	6	4	4
22	7	6	7	6	7	22	70	79	26	6	4	4
23	7	7	6	6	7	16	50	83	24	6	4	4
24	7	8	6	6	7	17	50	85	23	6	4	4
25	7	6	6	6	7	20	55	97	22	6	4	4
26	7	7	6	6	7	33	76	87	20	5	4	5
27	7	7	6	6	7	37	88	87	19	5	4	4
28	7	7	6	6	7	34	59	86	17	5	4	4
29	7	6	6	6	-	35	50	85	15	5	4	4
30	7	6	6	6	-	45	38	83	14	5	4	4
31	7	-	6	6	-	65	-	76	-	5	4	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						202	7	6	6.5	401		
November.....						196	8	5	6.5	389		
December.....						191	7	5	6.2	379		
Calendar year 1936.....						10,107	183	-	27.6	20,050		
January.....						182	7	5	5.9	361		
February.....						201	8	6	7.2	399		
March.....						875	87	7	28.3	1,740		
April.....						2,268	195	33	75.6	4,500		
May.....						2,641	104	42	85.2	5,240		
June.....						1,131	71	14	37.7	2,240		
July.....						222	13	5	7.2	440		
August.....						128	5	4	4.1	254		
September.....						126	5	4	4.2	250		
Water year 1936-37.....						8,364	195	4	22.9	16,590		

Humboldt-Lovelock Irrigation, Light & Power Co.'s feeder canal near Mill City, Nev.

Location.- Water-stage recorder, lat. 40°42'05", long. 118°04'40", in SW $\frac{1}{4}$ sec. 29, T. 33 N. R. 35 E., a quarter of a mile below head of canal and 2 miles north of Mill City.

Records available.- February 1914 to September 1931, January to September 1937.

Remarks.- Flow regulated by head gates. This canal diverts water from Humboldt River in NW $\frac{1}{4}$ sec. 29, T. 33 N., R. 35 E., for storage in Taylor-Pitt Reservoirs near Humboldt. Water is released, during irrigation season, about 3 miles west of Humboldt, and conveyed through Humboldt-Lovelock Irrigation, Light & Power Co.'s outlet canal to Rye Patch Reservoir, from which it is later released and carried in natural river channel to Lovelock district for use in irrigation. Records of daily discharge furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						114	1	243	203	192		0
2						123	1	219	200	150		0
3						131	1	235	202	0		0
4						123	1	254	211	0		0
5						123	2	248	200	0		0
6						148	7	238	176	0		0
7						158	25	250	176	0		0
8						177	26	244	181	0		0
9						173	28	225	200	0		0
10						195	31	208	231	0		0
11						194	38	213	197	0		0
12						194	55	218	208	0		0
13						202	73	243	232	0		0
14						210	66	245	246	0		0
15						84	57	250	242	0		11
16						0	43	250	239	0		19
17						0	16	246	243	0		20
18						0	1	246	243	0		20
19						0	1	242	242	0		21
20						0	1	239	246	0		21
21						0	1	241	250	0		21
22						0	1	242	249	0		21
23						0	24	230	247	0		21
24						0	121	210	244	0		22
25						0	175	214	245	0		22
26						0	190	236	243	0		23
27						0	213	230	233	0		23
28						0	226	239	228	0		23
29						0	244	239	211	0		23
30						6	246	232	204	0		23
31						3	-	215	-	0		-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....						716	-	-	23.1	1,420		
February.....						844	-	-	30.1	1,675		
March.....						2,359	210	0	76.1	4,680		
April.....						1,915	246	1	63.8	3,800		
May.....						7,281	254	208	235	14,440		
June.....						6,672	250	176	222	13,230		
July.....						342	192	0	11.0	678		
August.....						0	0	0	0	0		
September.....						334	23	0	11.1	662		
The period.....										40,580		

HUMBOLDT RIVER BASIN

Humboldt-Lovelock Irrigation, Light & Power Co.'s outlet canal near Humboldt, Nev.

Location.- Water-stage recorder and Cippoletti weir, lat. 40°36'25", long. 119°18'20", in SE¼ sec. 30, T. 32 N., R. 33 E., at outlet of lower Taylor-Pitt Reservoir, 2¼ miles west of Humboldt.

Records available.- February 1914 to September 1920, October 1921 to September 1937.

Average discharge.- 22 years 13.7 second-feet.

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. Records of daily discharge furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								0	32	27	173	52
2								30	32	27	173	52
3								45	37	46	173	52
4								92	70	73	172	52
5								115	64	94	164	52
6								115	66	113	149	52
7								131	71	145	149	52
8								138	71	151	150	52
9								138	72	151	151	52
10								137	92	151	150	52
11								137	100	131	149	52
12								138	99	90	149	53
13								138	83	90	134	54
14								146	66	91	107	55
15								155	59	57	79	30
16								155	53	0	79	0
17								155	36	0	79	0
18								176	44	0	78	0
19								188	40	63	77	0
20								189	25	90	78	0
21								190	25	91	77	0
22								191	25	91	78	0
23								191	26	92	77	0
24								163	25	91	78	0
25								99	23	91	77	0
26								69	25	80	78	0
27								47	25	85	82	0
28								33	26	202	52	0
29								32	26	205	52	0
30								33	27	173	52	0
31								32	-	173	52	-
Month								Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....								0	0	0	0	0
November.....								0	0	0	0	0
December.....								0	0	0	0	0
Calendar year 1936.....								3,517	125	0	9.6	6,980
January.....								0	0	0	0	0
February.....								0	0	0	0	0
March.....								0	0	0	0	0
April.....								0	0	0	0	0
May.....								3,598	191	0	116	7,140
June.....								1,465	100	23	48.8	2,910
July.....								2,964	205	0	95.6	5,880
August.....								3,348	173	52	108	6,640
September.....								764	55	0	25.5	1,520
Water year 1936-37.....								12,139	205	0	33.3	24,090

Pyramid Lake near Nixon, Nev.

Location.- Benchmark 1 of General Land Office, top of iron post in forks of road, lat. 39°50'30", long. 119°27'30", about 900 feet north of quarter corner of secs. 29 and 30, T. 23 N., R. 23 E., $4\frac{1}{2}$ miles west of Pyramid Lake Sanatorium at Nixon. Elevation of benchmark is 3,862.258 feet above mean sea level (general adjustment of 1912).

Records available.- June 1926 to September 1937. Occasional readings during some years 1867 to 1925.

Extremes.- 1926-1937: Maximum elevation observed, 3,847.9 feet June 1926; minimum, 3,816.4 feet Jan. 29, 1937.

Elevation, in feet, above mean sea level, water year 1936-37

Oct. 21	3,818.40	Apr. 20	3,817.9
Nov. 19	3,818.15	May 22	3,818.4
Dec. 19	3,817.8	June 19	3,818.35
Jan. 29	3,816.4	July 22	3,818.2
Feb. 17	3,816.8	Aug. 21	3,817.85
Mar. 23	3,817.45	Sept. 18	3,817.15

Lake Tahoe at Tahoe, Calif.

Location.- Staff gage, lat. 39°09'55", long. 120°08'25", in NW $\frac{1}{4}$ sec. 7, T. 15 N., R. 17 E., near outlet of lake at Tahoe. Zero of gage is 6,219.01 feet above mean sea level (general adjustment of 1929). Rim of Lake (natural control of outlet) and sill of outlet gates are 6,222.01 and 6,218.01 feet, respectively, above mean sea level.

Drainage area.- 519 square miles (including water surface of lake, which is 193 square miles).

Records available.- 1900 to September 1937.

Extremes.- Maximum stage during year, 5.82 feet June 29 to July 3; minimum, 3.81 feet Dec. 14.

1900-1937: Maximum stage, 11.26 feet July 14, 15, 17, 18, 1907; minimum, 1.74 feet Dec. 26, 1934.

Remarks.- Gage read once daily. Records furnished by Truckee-Carson Irrigation District.

Gage height, in feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.71	4.25	3.94	4.07	4.05	4.58	4.68	4.91	5.55	5.82	5.53	4.93
2	4.69	4.22	3.92	4.06	4.09	4.58	4.70	4.92	5.57	5.82	5.50	4.90
3	4.63	4.21	3.90	4.05	4.08	4.57	4.72	4.94	5.59	5.82	5.48	4.86
4	4.67	4.20	3.89	4.04	4.09	4.57	4.72	4.96	5.60	5.81	5.46	4.83
5	4.66	4.19	3.89	4.04	4.34	4.57	4.71	4.98	5.62	5.81	5.45	4.80
6	4.64	4.18	3.88	4.09	4.42	4.57	4.76	5.00	5.64	5.80	5.43	4.78
7	4.63	4.16	3.87	4.08	4.47	4.57	4.76	5.01	5.65	5.80	5.41	4.77
8	4.61	4.12	3.87	4.05	4.46	4.57	4.76	5.02	5.66	5.79	5.40	4.76
9	4.60	4.11	3.86	4.02	4.45	4.57	4.76	5.04	5.67	5.79	5.39	4.74
10	4.60	4.11	3.84	3.99	4.44	4.57	4.77	5.06	5.67	5.78	5.37	4.73
11	4.59	4.11	3.83	3.97	4.43	4.57	4.77	5.08	5.68	5.78	5.35	4.71
12	4.58	4.10	3.83	3.96	4.47	4.57	4.78	5.10	5.68	5.77	5.34	4.71
13	4.57	4.09	3.82	3.95	4.46	4.58	4.78	5.13	5.68	5.79	5.33	4.70
14	4.56	4.09	3.81	3.97	4.62	4.58	4.78	5.16	5.69	5.78	5.31	4.70
15	4.55	4.09	3.82	3.96	4.63	4.58	4.79	5.19	5.70	5.77	5.29	4.69
16	4.52	4.08	3.88	3.97	4.63	4.59	4.80	5.23	5.74	5.75	5.27	4.69
17	4.49	4.08	3.90	3.96	4.62	4.59	4.80	5.26	5.76	5.74	5.25	4.68
18	4.46	4.08	3.90	3.94	4.62	4.60	4.80	5.28	5.76	5.72	5.24	4.68
19	4.46	4.06	3.89	3.96	4.61	4.59	4.82	5.30	5.75	5.70	5.22	4.66
20	4.45	4.05	3.89	3.95	4.62	4.64	4.83	5.32	5.76	5.69	5.21	4.63
21	4.45	4.05	3.89	3.93	4.61	4.65	4.84	5.34	5.77	5.68	5.19	4.60
22	4.44	4.04	3.88	3.92	4.61	4.68	4.84	5.36	5.78	5.67	5.17	4.58
23	4.41	4.03	3.88	3.90	4.60	4.69	4.85	5.38	5.79	5.65	5.13	4.56
24	4.38	4.02	3.86	3.89	4.60	4.70	4.86	5.40	5.80	5.65	5.09	4.54
25	4.37	4.02	3.87	3.88	4.61	4.70	4.87	5.42	5.80	5.64	5.08	4.53
26	4.36	4.01	3.89	3.87	4.60	4.69	4.88	5.44	5.79	5.64	5.06	4.52
27	4.36	3.99	3.99	3.88	4.59	4.68	4.88	5.46	5.80	5.63	5.04	4.51
28	4.34	3.99	4.00	3.91	4.59	4.68	4.89	5.48	5.80	5.62	5.02	4.50
29	4.31	3.98	4.00	3.98	-	4.67	4.90	5.50	5.82	5.60	5.00	4.48
30	4.29	3.97	4.02	4.01	-	4.67	4.91	5.53	5.82	5.58	4.99	4.45
31	4.28	-	4.08	4.05	-	4.68	-	5.54	-	5.56	4.96	-

Truckee River at Tahoe, Calif.

Location.- Staff gage, lat. 39°09'55", long. 120°08'45", in NW¼ sec. 7, T. 15 N., R. 27 E., at Tahoe, just below dam at outlet of Lake Tahoe. Altitude, about 6,200 feet.

Drainage area.- 519 square miles.

Records available.- July 1895 to February June 1900 to September 1937.

Average discharge.- 37 years (1900-1937), 244 second-feet.

Extremes.- Maximum daily discharge during year, 466 second-feet Aug. 5-9; no flow for several months.

1895-96; 1900-1937: Maximum daily discharge, 1,340 second-feet July 13-20, 1907; no flow during parts of 1900, 1901, 1914, 1918-37.

Remarks.- Flow regulated by operation of gates in dam at Lake Tahoe and occasionally by pumping from the lake. Daily-discharge record furnished by Truckee-Carson Irrigation District.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	235	131	79	106	103	224			0	243	457	321
2	229	125	76	104	109	224			0	275	457	311
3	227	123	73	103	108	220			0	301	457	298
4	224	121	72	101	109	218			0	311	462	289
5	222	119	72	101	96	218			0	329	466	279
6	216	118	70	109	0	216			0	350	466	273
7	214	114	69	108	129	216			0	367	466	270
8	209	107	69	103	76	121			0	372	466	267
9	206	106	67	97	0	43			0	372	466	261
10	206	106	64	93	0	0			0	372	463	258
11	204	106	63	90	0	0			0	372	463	252
12	201	104	63	88	68	0			0	372	463	262
13	199	102	61	87	109	0			0	372	460	249
14	196	102	60	90	224	0			0	380	459	249
15	194	102	61	88	193	0			0	391	451	246
16	187	101	70	90	170	0			0	406	444	246
17	180	101	73	88	120	0			0	404	437	243
18	173	101	73	85	134	0			0	420	433	243
19	173	98	72	88	170	0			0	437	425	238
20	171	96	72	87	170	0			0	437	422	229
21	171	96	72	84	170	0			0	437	414	221
22	169	94	70	82	170	0			0	437	407	218
23	162	93	70	79	170	0			0	437	392	211
24	156	91	67	79	170	122			23	437	377	205
25	154	91	69	76	170	210			98	437	374	203
26	152	90	72	75	202	210			179	445	367	200
27	152	87	87	76	224	210			179	449	359	198
28	148	87	88	81	224	162			179	462	352	195
29	142	85	88	91	-	133			194	457	345	190
30	136	84	91	96	-	133			215	457	342	183
31	136	-	101	103	-	50			-	457	331	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						5,746	235	136	185	11,400		
November.....						3,081	131	84	103	6,110		
December.....						2,254	101	60	72.7	4,470		
Calendar year 1936.....						43,302	471	0	118	85,900		
January.....						2,828	109	75	91.2	5,610		
February.....						3,586	224	0	128	7,120		
March.....						2,930	224	0	94.5	5,810		
April.....						0	0	0	0	0		
May.....						0	0	0	0	0		
June.....						1,067	215	0	35.6	2,120		
July.....						12,193	462	243	393	24,180		
August.....						13,143	466	331	424	26,070		
September.....						7,298	321	183	243	14,480		
Water year 1936-37.....						54,128	466	0	148	107,400		

Truckee River at Iceland, Calif.

Location.- Water-stage recorder, lat. 39°22'35", long. 120°01'35", in Sw¼ sec. 31, T. 18 N., R. 18 E., above dam of National Ice Co. at Iceland. Altitude, about 5,420 feet.

Drainage area.- 937 square miles.

Records available.- August 1912 to September 1937. September 1899 to August 1912, at site at Nevada-California State line, 3 miles downstream.

Average discharge.- 25 years (1912-37), 628 second-feet.

Extremes.- Maximum daily discharge during year, 2,340 second-feet Apr. 15 and May 14; minimum, 99 second-feet Dec. 11, 12, 14.

1899-1937: Maximum daily discharge, 15,300 second-feet Mar. 18, 1907 (gage height, 11.5 feet); minimum, 28 second-feet Dec. 18, 1930.

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, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	297	186	124	233	374	396	820	1,250	1,150	552	520	352
2	287	178	130	239	374	418	900	1,480	1,160	552	520	347
3	262	162	134	239	357	447	827	1,730	1,230	552	514	341
4	271	166	141	239	350	514	778	1,950	1,230	565	514	330
5	278	190	134	239	792	539	792	1,960	1,200	571	514	325
6	278	186	130	239	514	558	743	1,940	1,100	552	514	315
7	271	182	127	280	368	617	656	1,910	992	552	514	310
8	266	186	124	320	374	656	703	1,610	930	558	514	310
9	266	170	111	370	665	558	806	1,590	834	552	514	305
10	271	159	105	407	483	558	878	1,600	750	539	508	305
11	266	174	99	368	315	552	900	1,480	656	533	501	305
12	266	170	99	363	300	630	1,010	1,750	610	539	501	300
13	271	162	105	379	347	591	1,440	2,080	643	545	495	300
14	278	162	99	379	623	501	2,090	2,340	636	520	489	295
15	278	170	102	368	649	495	2,340	2,300	636	520	483	295
16	271	162	148	357	558	571	1,820	2,180	1,500	514	477	290
17	266	162	137	363	385	591	1,370	2,000	757	514	483	290
18	266	155	137	365	356	527	1,320	1,680	785	533	471	280
19	247	162	141	341	407	447	1,340	1,390	663	533	453	271
20	238	159	144	341	401	396	1,450	1,360	703	527	441	266
21	229	159	152	352	396	374	1,860	1,380	696	527	441	266
22	220	144	148	352	385	347	1,800	1,470	617	527	435	262
23	224	152	141	352	374	306	1,470	1,630	552	527	418	257
24	220	144	141	336	363	285	1,450	1,730	477	527	401	253
25	211	141	141	352	352	501	1,560	1,740	459	520	401	248
26	206	144	159	330	357	539	1,680	1,400	558	520	396	248
27	202	141	127	315	401	623	1,400	1,430	571	520	390	244
28	202	130	198	305	396	597	1,140	1,580	565	520	379	239
29	198	130	206	300	-	584	1,060	1,700	552	520	379	230
30	194	127	206	315	-	663	1,070	1,480	545	520	368	226
31	190	-	198	336	-	757	-	1,180	-	520	357	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	7,710	297	190	249	15,290
November.....	4,855	190	127	162	9,630
December.....	4,268	206	99	138	8,510
Calendar year 1936.....	255,746	3,310	99	699	507,200
January.....	10,072	407	233	325	19,980
February.....	12,034	792	300	439	23,870
March.....	15,137	757	285	521	32,010
April.....	37,493	2,340	656	1,250	74,370
May.....	52,200	2,340	1,180	1,684	103,500
June.....	23,737	1,500	459	791	47,080
July.....	16,571	571	514	535	32,870
August.....	14,305	520	357	461	28,370
September.....	8,605	352	226	287	17,070
Water year 1936-37.....	208,007	2,340	99	570	412,600

Deep Creek above Adel, Oreg.

Location.-- Water-stage recorder, lat. 42°11', long. 119°59', in E₁ sec. 15, T. 39 S., R. 23 E., a third of a mile below Drake Creek and 5 miles west of Adel.

Drainage area.-- 249 square miles.

Records available.-- September 1922 to September 1923 and October 1932 to September 1937 in reports of U. S. Geological Survey; September 1922 to September 1923 and October 1929 to September 1936 in reports of State engineer.

Extremes.-- Maximum discharge during year, 1,990 second-feet Apr. 15 (gage height, 5.86 feet); minimum, 4.8 second-feet Aug. 9-12, 18-29 (gage height, 0.41 foot). 1922-23; 1932-37: Maximum discharge, that of Apr. 15, 1937; minimum, 1.7 second-feet July 20, 27-29, 1934. Maximum discharge known, 4,950 second-feet Mar. 2, 1910, observed at site at Adel, 5 miles downstream.

Remarks.-- Records good except those for periods of ice effect or missing gage heights, Dec. 10, 11, Dec. 29 to Jan. 16, Jan. 18, Feb. 3-28, which were computed on basis of one discharge measurement, weather records, and records for Chewaucan River near Paisley and are poor. Diversions for irrigation above station.

Rating table, water year 1936-37, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

.4	4.5	1.6	104	4.0	530
.6	11.4	2.0	177	4.5	1,080
.8		2.5	292	5.5	1,690
1.0	35	3.0	432	6.0	2,050
1.3	64	3.5	610		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.8	13	11		12	13	546	305	133	20	6.6	5.7
2	9.8	10	12		13	14	482	358	119	18	6.6	5.7
3	10	11	11			13	300	401	113	17	6.0	5.7
4	10	11	10			13	196	432	108	16	5.7	6.0
5	10	12	11			15	173	416	107	14	5.4	6.0
6	10	13	12			15	141	372	98	13	5.4	6.9
7	11	10	12			16	132	358	94	13	5.1	6.0
8	11	11	12			18	173	310	93	13	5.1	5.4
9	11	12	13			20	245	318	100	13	4.8	5.4
10	11	12	14	13		20	222	287	94	12	4.8	5.4
11	11	13	11			21	209	262	86	11	4.8	5.7
12	10	13	9.8			23	292	262	87	11	4.8	6.0
13	9.1	14	11			27	910	315	90	11	5.4	6.0
14	11	14	12			41	1,560	350	84	9.4	5.1	5.7
15	11	16	12			63	1,450	334	72	9.1	5.1	5.7
16	11	15	11			61	610	323	110	8.7	5.1	5.4
17	11	13	11	16		65	302	323	132	7.9	5.1	5.4
18	11	14	11	17		54	358	310	91	7.2	4.8	5.4
19	12	15	11	17		46	358	316	82	6.9	4.8	5.7
20	11	11	11	16		55	401	262	72	6.9	4.8	6.3
21	11	12	12	15		29	552	243	58	7.2	4.8	6.3
22	11	12	14	15		26	372	238	49	6.9	4.8	6.3
23	12	11	14	15		26	329	238	41	6.6	4.8	6.3
24	12	14	15	15		26	345	238	38	6.6	4.8	6.3
25	12	11	14	14		28	432	245	34	6.9	4.8	6.3
26	12	11	13	14		33	482	241	31	6.6	4.8	6.3
27	12	11	12	13		42	401	202	29	6.6	4.8	6.3
28	12	10	12	13		52	305	187	27	6.6	4.8	6.3
29	12	11	11	13	-	60	262	177	23	6.3	4.8	6.3
30	13	11	11	12	-	80	272	173	23	6.0	5.4	6.6
31	13	-	11	12	-	151	-	153	-	6.0	5.7	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						343.7	13	9.1	11.1	682		
November.....						365	16	10	12.2	724		
December.....						367.8	15	9.6	11.9	730		
Calendar year 1936.....						42,894.5	1,020	7	11.7	85,070		
January.....						427	18	-	13.8	847		
February.....						511	15	-	11.1	617		
March.....						1,146	151	13	37.0	2,270		
April.....						12,812	1,660	132	427	25,410		
May.....						8,976	432	153	290	17,800		
June.....						2,308	133	23	76.9	4,580		
July.....						310.4	20	6.0	10.0	616		
August.....						159.6	6.6	4.8	5.15	317		
September.....						178.8	6.9	5.4	5.96	355		
Water year 1936-37.....						27,705.3	1,560	4.8	75.9	54,950		

Chewaucan River above Conn Ditch, near Paisley, Oreg.

Location.- Water-stage recorder, lat. $42^{\circ}41'$, long. $120^{\circ}35'$, 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.

Drainage area.- 266 square miles.

Records available.- April to September 1912 and May 1924 to September 1937. January 1905 to December 1907 and January 1909 to April 1912, at site 2 miles downstream, below Conn Ditch. November 1912 to September 1921, at site 0.5 mile upstream, above Mill Creek. Records at both former sites gives practically same yearly run-off as do records at present site.

Average discharge.- 27 years (1905-7, 1909-21, 1924-37), 128 second-feet.

Extremes.- Maximum discharge during year, 950 second-feet Apr. 13 (gage height, 4.08 feet); minimum, 0.6 second-foot Aug. 22 (gage height, 0.92 foot); minimum daily discharge, 16 second-feet Nov. 9.

1905-07, 1909-21, 1924-37: Maximum discharge 4,000 second-feet (estimated), Nov. 23, 1909 (gage height, 9.40 feet, former site and datum); no flow part of Dec. 7, 1927, Dec. 12, 1932 (frozen); minimum daily discharge not determined.

Remarks.- Records good except those for periods of ice effect, Nov. 3-8, 10-23, Nov. 25 to Dec. 9, Dec. 12-15, 17-19, 21-24, Dec. 26 to Feb. 17, and those for period of missing gage heights, Mar. 24-29, which were computed on basis of five discharge measurements, weather records, and records for Deep Creek above Adel and are poor. Low-water flow partly regulated by power plant above station. About 160 acres irrigated above station.

Rating tables, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Dec. 27

Jan. 10 to Sept. 30

1.6 25
2.0 68

1.4 12 2.6 190
1.7 35 3.0 350
2.0 68 3.5 565
2.3 115 4.0 890

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	24	24	28	21	35	185	298	196	84	31	27
2	27	18	24	28	21	35	185	350	182	77	30	26
3	27	19	25	29	22	34	133	406	176	72	29	24
4	27	20	25	29	23	37	109	446	166	67	26	24
5	26	20	25	29	24	39	109	402	156	62	26	24
6	25	21	24	28	24	42	94	370	146	61	25	24
7	25	19	25	27	23	47	92	379	143	54	24	23
8	27	18	26	26	22	49	117	358	166	54	23	22
9	28	16	27	25	22	54	179	358	168	52	23	21
10	28	17	28	25	23	60	146	326	156	50	23	21
11	24	19	24	26	24	63	126	338	153	48	23	20
12	24	20	24	26	24	66	146	354	158	46	23	23
13	25	21	25	27	24	78	874	384	122	45	22	23
14	26	22	27	27	24	81	718	428	122	44	21	21
15	26	23	27	27	24	84	685	424	122	43	21	20
16	26	23	28	28	25	80	424	424	202	41	21	21
17	26	22	27	29	26	80	310	406	199	40	21	21
18	26	22	27	28	26	87	290	410	168	39	20	21
19	26	21	28	26	29	60	266	406	176	37	20	23
20	25	20	29	25	29	48	302	358	171	35	20	30
21	24	21	29	24	30	46	362	330	158	34	20	29
22	25	21	30	23	30	44	280	322	153	33	19	24
23	25	21	30	23	31	45	252	318	124	34	19	24
24	25	23	28	23	32	46	266	314	115	41	20	24
25	25	22	25	23	33	49	318	358	109	47	21	24
26	25	21	24	22	33	52	350	342	100	52	21	24
27	24	21	23	22	33	57	302	283	93	42	21	24
28	23	22	24	22	34	65	258	266	88	35	21	24
29	24	23	25	22	-	70	238	255	113	31	20	24
30	26	24	26	21	-	76	248	238	109	30	21	24
31	26	-	27	21	-	86	-	211	-	30	24	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	792	28	23	25.5	1,570
November.....	624	24	16	20.6	1,240
December.....	810	30	25	26.1	1,610
Calendar year 1936.....	49,128	874	16	154	97,440
January.....	769	29	21	25.5	1,560
February.....	738	34	21	26.4	1,460
March.....	1,775	66	34	67.3	3,580
April.....	8,064	718	92	269	16,000
May.....	10,842	446	211	350	21,500
June.....	4,370	202	88	146	8,670
July.....	1,460	84	30	47.1	2,900
August.....	699	31	19	22.5	1,390
September.....	704	30	20	23.5	1,400
Water year 1936-37.....	31,667	718	16	86.6	62,820

Silver Creek near Silver Lake, Oreg.

Location.- Water-stage recorder, lat. $43^{\circ}07'$, long. $121^{\circ}04'$, 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. Zero of gage is 4,361.28 feet above mean sea level.

Drainage area.- 221 square miles.

Records available.- December 1904 to March 1907, January 1909 to September 1937.

Average discharge.- 27 years (1905-6, 1909-27, 1929-37), including Silver Lake Irrigation District Canal, 28.0 second-feet.

Extremes.- Maximum discharge during year, 41 second-feet Apr. 15 (gage height, 2.41 feet); minimum discharge observed, 0.2 second-foot Sept. 29, 30, 1904-7, 1909-37; Maximum discharge, 1,800 second-foot Mar. 20, 1907 (gage height, 9.08 feet, former datum); no flow at times during 1931, 1932, 1934.

Remarks.- Records fair except those for period of ice effect, Nov. 26 to Mar. 13, which were computed on basis of three discharge measurements, gage heights and weather records and are poor. Silver Lake Irrigation District Canal diverts water above gage during irrigation season. Flow regulated by storage above diversion dam $1\frac{1}{2}$ miles upstream, capacity 800 acre-feet, and in Thompson Valley Reservoir, 11 miles upstream.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	1.0	1.5				4.5	26	31	21	4.2	1.4
2	1.0	1.0	1.5				9.0	28	27	21	4.5	1.2
3	1.0	1.1	2.4				10	28	26	19	4.5	1.1
4	1.0	1.0					11	28	25	20	3.6	1.1
5	1.0	1.0					12	32	24	19	3.3	1.0
6	1.0	1.0				1.5	12	32	24	19	3.3	1.0
7	1.0	1.0					12	32	24	18	3.3	.9
8	1.0	1.0					12	30	24	17	4.5	.8
9	1.0	1.0					12	30	25	17	4.5	.8
10	1.0	1.0					14	34	28	17	4.5	.7
11	1.0	1.0		1.8			15	36	26	17	4.2	.6
12	1.1	1.0				1.6	17	36	23	17	3.9	.5
13	1.1	1.0				1.6	18	36	23	16	3.9	.5
14	1.1	1.2				1.7	22	36	24	12	3.6	.5
15	1.1	1.1				1.2	32	35	23	9	3.6	.5
16	1.1	1.0				1.1	32	36	24	8.2	3.3	.6
17	1.1	1.0	2.0			1.1	25	36	24	7.8	3.3	.5
18	1.1	1.0				1.4	21	37	22	8.6	3.3	.5
19	1.1	1.0				1.2	19	34	20	8.2	3.0	.5
20	1.1	1.0				1.6	18	31	19	7.4	2.8	.5
21	1.1	1.0				1.4	18	32	19	7.8	2.8	.5
22	1.1	1.0		1.8		1.6	18	32	22	9.0	2.4	.4
23	1.1	1.0				1.7	17	33	21	7.8	2.4	.4
24	1.0	1.1				2.0	17	32	22	8.6	2.3	.3
25	1.0	1.4				2.0	20	32	22	12	2.3	.3
26	1.0	1.5				1.6	22	32	21	9.5	2.2	.3
27	1.0	1.5		1.8		1.8	22	32	20	7.8	2.0	.3
28	1.0	1.5				1.8	22	32	20	7.0	1.8	.3
29	1.0	1.5				1.8	24	32	21	4.5	1.7	.2
30	1.0	1.5				1.8	24	32	22	4.2	1.7	.2
31	1.0	1.6				1.7	-	31	-	4.2	1.6	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						32.2	1.1	1.0	1.04	64		
November.....						33.4	1.5	1.0	1.11	66		
December.....						61.4	-	-	1.98	122		
Calendar year 1936.....						3,176.8	39	-	8.68	6,300		
January.....						55.8	-	-	1.80	111		
February.....						42.0	-	-	1.50	83		
March.....						48.4	2.0	1.1	1.56	96		
April.....						531.5	32	4.5	17.7	1,050		
May.....						1,006	37	26	32.4	1,990		
June.....						696	31	19	23.2	1,380		
July.....						381.6	21	4.2	12.3	757		
August.....						98.3	4.5	1.6	3.17	195		
September.....						18.4	1.4	0.2	.61	36		
Water year 1936-37.....						3,004.0	37	-	8.23	5,950		

Silver Lake Irrigation District Canal near Silver Lake, Oreg.

Location.- Staff gage, lat. 43°05', long. 121°05', 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.- October 1922 to September 1928, October 1929 to September 1937.

Average discharge.- 14 years, 4.19 second-feet.

Extremes.- Maximum discharge observed during year, 30 second-feet May 26; no flow Oct. 1 to Apr. 19, July 23 to Sept. 30.

1922-28, 1929-37: Maximum discharge, 60 second-feet June 26-29, 1923; no flow at times.

Remarks.- Records fair except those for April 20 to May 14, May 16, 18, 23, 27, 30, June 6, 13, July 11, which are poor. Discharge for Apr. 21-26, May 14, 16, 18, 23, 30, June 6, 13, July 11 estimated. Canal diverts from Silver Creek water released from storage in Thompson Valley Reservoir. Gage readings furnished by Silver Lake Irrigation District.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	12	24	17		
2							0	15	24	17		
3							0	17	24	19		
4							0	19	24	20		
5							0	20	24	20		
6							0	20	24	20		
7							0	20	24	20		
8							0	20	24	20		
9							0	22	24	20		
10							0	22	25	20		
11							0	22	18	20		
12							0	23	16	20		
13							0	26	15	20		
14							0	29	15	20		
15							0	29	14	19		
16							0	29	14	15		
17							0	29	14	15		
18							0	29	14	15		
19							0	29	14	17		
20							1	29	14	16		
21							1	29	14	16		
22							1	29	12	11		
23							1	29	11	0		
24							1	29	11	0		
25							1	29	13	0		
26							2	30	16	0		
27							3	30	16	0		
28							6	28	16	0		
29							9	26	16	0		
30							10	24	16	0		
31							-	24	-	0		
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							-	0	0	0	0	
November.....							-	0	0	0	0	
December.....							-	0	0	0	0	
Calendar year 1936.....							1,976.0	33	0	5.40	3,924	
January.....							-	0	0	0	0	
February.....							-	0	0	0	0	
March.....							-	0	0	0	0	
April.....							36	10	0	1.2	71	
May.....							768	30	12	24.8	1,520	
June.....							528	24	11	17.6	1,050	
July.....							406	20	0	13.1	805	
August.....							-	0	0	0	0	
September.....							-	0	0	0	0	
Water year 1936-37.....							1,738	30	0	4.76	3,446	

Silvies River near Burns, Oreg.

Location.- Water-stage recorder, lat. 43°43', long. 119°10', in or near SE¼ sec. 25, T. 21 S., R. 29 E., 1 mile below site of dam for proposed lower Silvies Reservoir and 11 miles northwest of Burns.

Drainage area.- 940 square miles.

Records available.- May 1903 to July 1906, December 1908 to September 1937.

Average discharge.- 24 years (1903-5, 1909-12, 1917-21, 1922-37), 130 second-feet.

Extremes.- Maximum discharge during year, 859 second-feet Apr. 17 (gage height, 9.35 feet); minimum, 1 second-foot Aug. 13.
1903-6, 1908-37: Maximum discharge, 4,730 second-feet Apr. 15, 1904 (gage height, 17.12 feet, former site and datum); no flow July 19 to Sept. 22, 1934.

Remarks.- Records fair except those for period of ice effect, Dec. 1 to Mar. 10, which were computed on basis of two discharge measurements and weather records, and are poor. Discharge for May 16-21 interpolated; that for July 4-21 estimated. A large area on headwaters of Silvies River is irrigated with flood water.

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	13				20	177	435	64	33	7	6
2	6	12				20	222	425	62	29	7	6
3	5	9				20	204	446	57	26	7	5
4	6	12				20	203	457	50	25	6	5
5	6	13				21	213	479	43	21	5	4
6	5	14				21	204	468	35	19	4	4
7	6	12				22	166	446	35	17	4	4
8	6	11				23	182	405	35	16	3	4
9	7	10				25	208	375	35	14	3	3
10	7	10				27	240	355	36	13	3	3
11	7	10				45	240	325	36	12	2	3
12	7	11				54	249	315	36	11	2	3
13	7	10				69	276	325	36	10	2	3
14	8	10				103	405	295	38	9	2	2
16	7	13				93	612	276	40	6	2	2
16	7	13				123	795	255	48	7	2	3
17	7	14				128	627	234	70	6	2	3
18	7	12				108	795	213	75	6	2	3
19	8	12				97	636	192	71	6	2	4
20	8	11				93	589	172	74	5	2	4
21	8	10				97	636	152	90	5	2	4
22	8	10				84	636	132	110	5	2	5
23	7	10				91	545	112	96	5	2	5
24	8	10				75	512	99	93	5	2	5
25	9	9				95	612	89	89	6	2	5
26	10	9				105	534	85	72	18	2	5
27	10	7				96	545	80	58	12	2	5
28	15	7				114	556	71	54	9	2	5
29	14	7				114	501	62	45	9	2	5
30	13					128	468	63	39	7	2	5
31	14	-				132	-	65	-	6	3	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						256	15	5	8.3	506		
November.....						318	14	7	10.6	631		
December.....						465	-	-	15.0	922		
Calendar year 1936						34,358.2	1,500	2.3	93.9	68,140		
January.....						372	-	-	12.0	736		
February.....						504	-	-	18.0	1,000		
March.....						2,263	132	20	73.0	4,490		
April.....						12,913	827	177	430	25,610		
May.....						7,903	479	62	255	15,660		
June.....						1,722	110	35	57.4	3,420		
July.....						378	33	5	12.2	750		
August.....						92	7	2	3.0	182		
September.....						123	6	2	4.1	244		
Water year 1936-37						27,309	827	2	74.8	54,180		

Trout Creek near Denio, Oreg.

Location.- Water-stage recorder, lat. 42°10', long. 118°28', 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.

Records available.- March 1911 to March 1912, April 1922 to November 1923, and April 1925 to September 1937 (incomplete prior to 1932).

Extremes.- Maximum discharge during year, 127 second-feet May 14 (gage height, 3.39 feet); minimum, 0.8 second-foot Aug. 26, 27 (gage height, 1.22 feet).

1911-12, 1922-23, 1925-37: Maximum discharge, 343 second-feet Aug. 1, 1933 from rating curve extended above 125 second-feet; probably no flow at times.

Maximum stage known, 6.0 feet (caused by cloudburst), between 1922 and 1932.

Remarks.- Records good except those for period of doubtful intake action, Apr. 16 to June 18, which are fair, and those for periods of ice effect or missing gage heights, Oct. 1-17, 21-29, Nov. 6-14, Dec. 5-7, Dec. 29 to Jan. 1, Jan. 3 to Feb. 5, Feb. 8 to Mar. 13, which were estimated on basis of weather records and are poor. Some diversions above station for irrigation of small fields; large irrigation diversions below.

Rating table, water year 1936-37 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.4	1.4	2.4	34
1.6	3.1	2.6	49
1.8	7.3	2.9	75
2.0	13	3.2	106
2.2	22		

Discharge, in second-feet, water year October 1936 to September 1937

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		4.6	2.1	1.9			8.1	14	46	10	1.8	1.2
2		2.6	2.9	1.8			11	20	45	8.1	1.7	1.3
3		1.8	3.1		4.5		11	33	44	7.6	1.4	1.6
4		4.0	2.2				11	44	40	6.6	1.5	1.6
5		4.4	3.0				10	46	35	5.8	1.6	1.8
6			4.0		4.6		11	47	31	5.8	1.6	1.9
7			4.5		4.6	5.0	9.7	50	29	5.5	1.7	1.8
8			4.4				10	50	29	5.3	1.7	1.9
9			3.7				9.5	53	30	5.3	1.5	1.4
10	3.5	5.0	2.4				9.7	55	26	7.8	1.4	1.2
11			2.6				11	55	25	5.5	1.4	1.2
12			3.3				10	63	26	4.4	1.5	1.1
13			4.0				9.2	73	23	6.4	1.7	1.1
14			4.2			7.3	13	100	24	6.2	1.7	1.1
15		5.8	4.2			7.3	21	94	24	5.8	1.6	1.4
16		4.6	3.7	4.0		7.6	16	88	24	5.5	1.5	1.5
17		4.2	3.7			7.6	8.9	84	20	4.4	1.5	1.4
18	4.2	4.0	4.2		5.0	7.6	9.7	80	17	3.5	1.3	1.4
19	4.2	4.4	5.1			6.4	12	81	17	3.0	1.1	1.4
20	4.2	3.8	4.8			7.1	14	64	15	3.0	1.0	1.9
21		3.5	4.6			6.9	19	59	15	2.8	1.0	2.2
22		3.8	4.0			6.9	17	58	12	3.0	.9	1.8
23		3.0	3.8			5.8	15	60	12	2.8	.9	1.8
24		2.7	3.8			6.4	13	60	11	2.4	.9	1.8
25	4.3	3.3	3.7			6.2	14	64	11	2.4	.9	1.9
26		4.2	2.2			5.8	16	56	11	2.8	.8	1.9
27		3.0	2.5			6.2	22	55	11	2.8	.8	1.8
28		2.4	2.4			6.2	16	54	8.9	2.6	.9	1.8
29		3.1	2.3	-		6.2	13	55	9.2	2.4	.9	2.0
30	4.4	3.0	2.2	-	-	6.6	13	51	12	2.2	1.0	2.2
31	4.6	-	2.0	-	-	6.9	-	47	-	1.9	1.0	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						119.8	-	-	3.86	238		
November.....						121.2	-	1.8	4.04	240		
December.....						105.6	5.1	2.0	3.41	209		
Calendar year 1936						3,813.4	70	.6	10.4	7,560		
January.....						119.7	-	-	3.86	237		
February.....						136.7	-	-	4.83	271		
March.....						186.0	7.6	-	6.00	369		
April.....						383.8	22	8.1	12.8	761		
May.....						1,813	100	14	56.5	3,600		
June.....						683.1	46	8.9	22.8	1,350		
July.....						143.6	10	1.9	4.63	285		
August.....						40.2	1.8	.8	1.30	80		
September.....						48.2	2.2	1.1	1.61	96		
Water year 1936-37						3,900.9	100	.8	10.7	7,740		

In addition to the records of stream flow obtained at gaging stations and reported in the preceding pages, measurements of flow were made at a number of other points, as shown by the following table:

Miscellaneous discharge measurements in the Great Basin during water year October 1936 to September 1937

Bear River Basin

Date	Stream	Tributary to or diverting from-	Locality	Discharge
July 15	Logan, Hyde Park & Smithfield Canal.	Logan River....	SW $\frac{1}{4}$ sec. 25, T. 12 N., R. 1 E., 1,000 feet below gaging station, $1\frac{1}{2}$ miles below head of canal, and $2\frac{1}{2}$ miles east of Logan, Utah.	Sec.-ft. *84.1
Aug. 28	.....do.....	.....do.....	.....do.....	†32.0
Oct. 12	Devil Creek.....	Malad River....	Sec. 15, T. 13 S., R. 36 E., 7 miles northeast of Malad, Idaho.	7.06
Oct. 12	Devil Creek (below Evans dividers).	.....do.....	Sec. 35, T. 13 S., R. 36 E., 3 miles northeast of Malad, Idaho.	1.89
Dec. 17	.....do.....	.....do.....	.....do.....	0
Feb. 15	.....do.....	.....do.....	.....do.....	0
Mar. 26	.....do.....	.....do.....	.....do.....	0
Apr. 20	.....do.....	.....do.....	.....do.....	17.9
May 20	.....do.....	.....do.....	.....do.....	12.7
June 21	.....do.....	.....do.....	.....do.....	3.54
23	.....do.....	.....do.....	.....do.....	4.58
Aug. 2	.....do.....	.....do.....	.....do.....	.83
Sept. 6	.....do.....	.....do.....	.....do.....	1.48
12	.....do.....	.....do.....	.....do.....	1.79
29	.....do.....	.....do.....	.....do.....	1.61
Oct. 12	Spring Creek (below Evans dividers).	Devil Creek....	.....do.....	3.15
Dec. 17	.....do.....	.....do.....	.....do.....	8.68
Feb. 15	.....do.....	.....do.....	.....do.....	8.11
Mar. 26	.....do.....	.....do.....	.....do.....	9.31
Apr. 20	.....do.....	.....do.....	.....do.....	19.0
May 20	.....do.....	.....do.....	.....do.....	13.2
June 21	.....do.....	.....do.....	.....do.....	7.78
23	.....do.....	.....do.....	.....do.....	5.07
Aug. 2	.....do.....	.....do.....	.....do.....	4.87
Sept. 6	.....do.....	.....do.....	.....do.....	5.08
12	.....do.....	.....do.....	.....do.....	3.47
29	.....do.....	.....do.....	.....do.....	1.60

*90.2 sec.-ft. at gaging station 1,000 feet upstream.

†33.7 sec.-ft. at gaging station 1,000 feet upstream.

Sevier Lake Basin

May 18	Conroe Ditch.....	Birch Creek....	SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 14 S., R. 5 E., 500 feet below head and 3 miles southeast of Fairview, Utah.	31.2
18	Fairview Canal....	.....do.....	In NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 14 S., R. 5 E., 100 feet below head and 3 miles southeast of Fairview, Utah.	32.0

Salton Sea Basin

Mar. 18	Whitewater River..	Salton Sink....	Whitewater, Calif.	*10
May 17	.....do.....	.....do.....	.....do.....	*15
Dec. 14	Murray Canyon Creek.	Palm Canyon Creek	function with Palm Canyon Creek, near Palm Springs, Calif.	.33
22	.....do.....	.....do.....	.....do.....	.90
Jan. 15	.....do.....	.....do.....	.....do.....	2.4
28	.....do.....	.....do.....	.....do.....	2.5
Feb. 16	.....do.....	.....do.....	.....do.....	*50
Mar. 4	.....do.....	.....do.....	.....do.....	*5
18	.....do.....	.....do.....	.....do.....	*40
30	.....do.....	.....do.....	.....do.....	*25
Apr. 21	.....do.....	.....do.....	.....do.....	*10
May 6	.....do.....	.....do.....	.....do.....	*3.0
17	.....do.....	.....do.....	.....do.....	*3.0
25	.....do.....	.....do.....	.....do.....	*4.0
June 16	.....do.....	.....do.....	.....do.....	*2.0
July 2	.....do.....	.....do.....	.....do.....	*.1
16	.....do.....	.....do.....	.....do.....	0
Dec. 22	Andreas Canyon Creek.	.....do.....	.....do.....	1.8
Jan. 15	.....do.....	.....do.....	.....do.....	3.6
28	.....do.....	.....do.....	.....do.....	2.4
Feb. 16	.....do.....	.....do.....	.....do.....	*25
Mar. 4	.....do.....	.....do.....	.....do.....	*8
18	.....do.....	.....do.....	.....do.....	*30
30	.....do.....	.....do.....	.....do.....	*15
Apr. 21	.....do.....	.....do.....	.....do.....	*15
May 6	.....do.....	.....do.....	.....do.....	*6
17	.....do.....	.....do.....	.....do.....	*5
25	.....do.....	.....do.....	.....do.....	*6
June 16	.....do.....	.....do.....	.....do.....	*3.0
July 2	.....do.....	.....do.....	.....do.....	*.5
16	.....do.....	.....do.....	.....do.....	*.2
Aug. 2	.....do.....	.....do.....	.....do.....	*.1

*Estimated.

Miscellaneous discharge measurements in the Great Basin during water year October 1936 to September 1937--Continued.

Salton Sea Basin--Continued.

Date	Stream	Tributary to or diverting from--	Locality	Discharge Sec.-ft.
Dec. 22	Tahquitz Creek..	Palm Canyon Creek.	Junction with Palm Canyon Creek, near Palm Springs, Calif.	2.8
Jan. 15	.....do.....	.....do.....	.....do.....	*3.0
28	.....do.....	.....do.....	.....do.....	*1.0
Feb. 16	.....do.....	.....do.....	.....do.....	*50
Mar. 4	.....do.....	.....do.....	.....do.....	*20
18	.....do.....	.....do.....	.....do.....	*40
30	.....do.....	.....do.....	.....do.....	*20
Apr. 21	.....do.....	.....do.....	.....do.....	*40
May 6	.....do.....	.....do.....	.....do.....	*50
17	.....do.....	.....do.....	.....do.....	*50
25	.....do.....	.....do.....	.....do.....	*15
June 16	.....do.....	.....do.....	.....do.....	*10
July 2	.....do.....	.....do.....	.....do.....	*5
16	.....do.....	.....do.....	.....do.....	

*Estimated.

Mojave River Basin

Feb. 23	Mojave River....	Great Basin....	Near Hodge, Calif.....	415
June 2	.....do.....	.....do.....	.....do.....	0

Antelope Valley Basin

Apr. 9	Punch Bowl Creek	Rock Creek.....	Near Valyermo, Calif.....	4.1
May 13	.....do.....	.....do.....	.....do.....	*5.0
June 11	.....do.....	.....do.....	.....do.....	.5

*Estimated.

Warner Lakes Basin

July 29	Camas Creek....	Deep Creek.....	NW $\frac{1}{4}$ sec. 1, T. 39 W., R. 21 E., along-side highway, near Adel, Oreg.	1.5
29	Mud Creek.....	Camas Creek....	NW $\frac{1}{4}$ sec. 5, T. 39 S., R. 22 E., at highway crossing, near Adel, Oreg.	.4
29	Blue Creek.....	.....do.....	NW $\frac{1}{4}$ sec. 3, T. 39 S., R. 22 E., at highway crossing, near Adel, Oreg.	Trace
29	Drake Creek....	Deep Creek.....	NE $\frac{1}{4}$ sec. 9, T. 39 S., R. 23 E., at highway crossing, near Adel, Oreg.	1.5
29	Paranip Creek..	Drake Creek	NW $\frac{1}{4}$ sec. 8, T. 39 S., R. 23 E., at highway crossing, near Adel, Oreg.	.1

Abert Lake Basin

July 30	Crooked Creek..	Chewaucan River.	NE $\frac{1}{4}$ sec. 19, T. 36 S., R. 19 E., at Chandler State Park, near Valley Falls, Oreg.	0.2
---------	-----------------	------------------	--	-----

Malheur and Harney Lakes Basin

May 24	Silvies River...	Malheur Lake....	Sec. 2, T. 17 S., R. 31 E., 1 mile below Seneca, Oreg.	64.2
June 1	.....do.....	.....do.....	.....do.....	30.6
May 24	.....do.....	.....do.....	Sec. 1, T. 19 S., R. 31 E., 1 mile below Silvies, Oreg.	20.8
June 1	.....do.....	.....do.....	.....do.....	22.4
Apr. 7	.....do.....	.....do.....	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 36, T. 22 S., R. 30 E., below Foley Dam, Oreg.	63.2
June 29	Bear Creek.....	Silvies River...	Sec. 26, T. 16 S., R. 31 E., at highway bridge, near Seneca, Oreg.	2.9
Apr. 8	Trout Creek....	.....do.....	NW $\frac{1}{4}$ sec. 18, T. 19 S., R. 32 E., at highway bridge near mouth, near Silvies, Oreg.	4.8
June 5	.....do.....	.....do.....	.....do.....	.4
May 25	Emigrant Creek..	.....do.....	Sec. 2, T. 21 S., R. 29 E., at mouth	33.7
Apr. 7	Poison Creek....	.....do.....	NE $\frac{1}{4}$ sec. 9, T. 22 S., R. 31 E., at upper end of irrigated lands on Burns-John Day highway, Oreg.	2.9
June 29	.....do.....	.....do.....	.....do.....	.3
May 7	Coffee Pot Creek	Malheur Lake....	SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 22 S., R. 32 E., 1 mile above old Burns highway, Oreg.	9.51
7	Cow Creek.....	.....do.....	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 22 S., R. 32 $\frac{1}{2}$ E., above Danforth ranch, Oreg.	13.3
6	Rattlesnake Creek	.....do.....	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, T. 22 S., R. 32 $\frac{1}{2}$ E., 100 feet above Jas. Bain West Ditch diversion, Oreg.	17.0
June 17	Donner und Blitzen River	.....do.....	NW $\frac{1}{4}$ sec. 20, T. 32 S., R. 32 $\frac{1}{2}$ E., at site of proposed gaging station, $\frac{3}{4}$ miles southeast of Frenchglen, Oreg.	148
Sept. 20	.....do.....	.....do.....	.....do.....	28.9
Apr. 30	Silver Creek....	Harney Lake....	NE $\frac{1}{4}$ sec. 18, T. 25 S., R. 28 E., above Dunn Field, Oreg.	165
June 11	.....do.....	.....do.....	NE $\frac{1}{4}$ sec. 30, T. 22 S., R. 26 E., above forks, near Suntex, Oreg.	12.4

MISCELLANEOUS DISCHARGE MEASUREMENTS

Miscellaneous discharge measurements in the Great Basin during water year October 1936 to September 1937--Continued.

Malheur and Harney Lakes Basin--Continued.

Date	Stream	Tributary to or diverting from-	Locality	Discharge
Apr. 7	West Fork of Silver Creek*	Harney Lake.....	NE $\frac{1}{4}$ sec. 32, T. 23 S., R. 27 E., at Yellowstone Cut-off Highway bridge, near old Riley, Oreg.	7.4
May 18	....do.....	....do.....	....do.....	12.5
27	....do.....	....do.....	....do.....	7.2
June 11	....do.....	....do.....	....do.....	4.4
17	....do.....	....do.....	....do.....	21.0
Apr. 7	East Fork of Silver Creek*	....do.....	SW $\frac{1}{4}$ sec. 28, T. 23 S., R. 27 E., at Central Oregon Highway bridge, near old Riley, Oreg.	3.2
May 18	....do.....	....do.....	....do.....	25.4
27	....do.....	....do.....	....do.....	15.5
June 11	....do.....	....do.....	....do.....	7.1
17	....do.....	....do.....	....do.....	156
7	Chickahominy Creek.	Silver Creek.....	NE $\frac{1}{4}$ sec. 32, T. 23 S., R. 27 E., at Yellowstone Cut-off Highway crossing near old Riley, Oreg.	6.5
16	Virginia Creek.	....do.....	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 33, T. 23 S., R. 28 E., at Central Oregon Highway crossing 3.8 miles west of summit of Sage Hen Hill, Oreg.	.2

*Braided channel of Silver Creek.

Catlow Valley Basin

May 17	Rock Creek.....	Catlow Valley.....	Sec. 9, T. 35 S., R. 26 E., above Lyons ranch, Oreg.	15.4
June 15	....do.....	....do.....	....do.....	5.2
16	....do.....	....do.....	....do.....	10.3
May 17	....do.....	....do.....	Sec. 3, T. 35 W., R. 26 E., below Lyons ranch, Oreg.	14.8
June 15	....do.....	....do.....	....do.....	4.5
16	....do.....	....do.....	....do.....	10.2
May 19	....do.....	....do.....	Sec. 16, T. 35 S., R. 26 E., just below Willow Creek and above diversion to Fluke ranch, Oreg.	15.0
19	....do.....	....do.....	Sec. 3, T. 35 S., R. 26 E., below diversion to Fluke ranch and Piute Creek, Oreg.	12.8
June 15	....do.....	....do.....	Sec. 22, T. 34 S., R. 27 E., just above Fluke Creek, Oreg.	5.4
15	....do.....	....do.....	Sec. 26, T. 33 S., R. 28 E., 8 miles above Rock Creek ranch, Oreg.	2.4
15	....do.....	....do.....	Sec. 13, T. 33 S., R. 29 E., at Rock Creek ranch, Oreg.	2.1

INDEX

	Page		Page
Abert Lake Basin, Oreg., discharge measurement in.....	93	Deep Creek (Bear River Basin) below First Creek, near Malad, Idaho...	22
gaging-station records in.....	87	Deep Creek (Mojave River Basin) near Hesperia, Calif.....	55
Accuracy of data and computed results..	2-3	Deep Creek (Warner Lakes Basin) above Adel, Oreg.....	86
Acre-foot, definition of.....	1	Denio, Oreg., Trout Creek near.....	91
Adel, Oreg., Deep Creek above.....	86	Devil Creek, Idaho, discharge measurements of.....	92
Agencies other than Geological Survey, records collected by.....	8	near Malad, Idaho.....	21
Alexander, Idaho, Bear River at.....	12	Devils Slide, Utah, Weber River at.....	27
Alvord Lake Basin, Oreg., gaging-station records in.....	91	Donner und Blitzen River, Oreg., discharge measurements of.....	93
Andreas Canyon Creek, Calif., discharge measurements of.....	92	Drake Creek, Oreg., discharge measurement of.....	93
Antelope Valley Basin, Calif., discharge measurements in.....	93	East Side Canal (Bear River Basin). See Hammond Canal.	
gaging-station records in.....	59-60	East Walker River near Bridgeport, Calif.....	70
Barstow, Calif., Mojave River at.....	57	Echo, Utah, Echo Reservoir at.....	25
Bear Creek, Oreg. (tributary to Silvies River), discharge measurement of.....	93	Weber River at.....	26
Bear River at Alexander, Idaho.....	12	Elko, Nev., South Fork of Humboldt River near.....	79
at Harer, Idaho.....	11	Emigrant Creek, Oreg., discharge measurement of.....	93
near Collinston, Utah.....	14	Escalante Desert Basin, Utah, gaging-station records in.....	52
near Evanston, Wyo.....	10	Evanston, Wyo., Bear River near.....	10
near Weston, Idaho.....	13	Fairview Canal, Utah, discharge measurement of.....	92
Bear River Basin, Wyo.-Utah-Idaho, discharge measurements in.....	92	Forks, Utah, Provo River at.....	38
gaging-station records in.....	10-22	South Fork of Provo River at.....	41
Beaver River at Rockyford Dam, near Minersville, Utah.....	51	Fort Churchill, Nev., Carson River near.....	74
near Beaver, Utah.....	50	Gardnerville, Nev., East Fork of Carson River near.....	73
Big Pine, Calif., Owens River near.....	63	Gateway, Utah, Weber River at.....	28
Bishop, Calif., Owens River near.....	62	Great Salt Lake, Utah, gages on.....	9
Pine Creek near.....	66	Great Salt Lake Basin, Utah-Wyo.-Idaho, gaging-station records in.....	9-41
Rock Creek near.....	64	Gunnison, Utah, Sevier River near.....	46
Blacksmith Fork above Utah Power & Light Co.'s dam near Hyrum, Utah.	18	Hammond (East Side) Canal near Collinston, Utah.....	20
Blue Creek, Oreg., (tributary to Camas Creek), discharge measurement of.	93	Harer, Idaho, Bear River at.....	11
Bridgeport, Calif., Bridgeport Reservoir near.....	69	Harney Lake Basin. See Malheur and Harney Lake Basins	
East Walker River near.....	70	Hawthorne, Nev., Walker Lake near.....	68
Burns, Oreg., Silvies River near.....	90	Hesperia, Calif., Deep Creek near.....	55
Camas Creek, Oreg., discharge measurement of.....	93	West Fork of Mojave River near.....	58
Carson River, East Fork of, near Gardnerville, Nev.....	73	Humboldt-Carson Sink Basin, Nev., gaging-station records in.....	73-82
near Fort Churchill, Nev.....	74	Humboldt-Lovelock Irrigation, Light & Power Co.'s feeder canal near Mill City, Nev.....	81
Castilla, Utah, Spanish Fork at.....	37	Humboldt-Lovelock Irrigation, Light & Power Co.'s outlet canal near Humboldt, Nev.....	82
Catlow Valley Basin, Oreg., discharge measurements in.....	94	Humboldt River at Palisade, Nev.....	75
Cedar City, Utah, Coal Creek near.....	52	near Imlay, Nev.....	76
Chalk Creek at Coalville, Utah.....	30	near Rye Patch, Nev.....	79
Chewaucan River above Conn Ditch, near Paisley, Oreg.....	87	South Fork of, near Elko, Nev.....	79
Chickahominy Creek, Oreg., discharge measurement of.....	94	Humboldt River Basin, Nev., gaging-station records in.....	75-82
Coal Creek near Cedar City, Utah.....	52	Huntsville, Utah, South Fork of Ogden River near.....	31
Coalville, Utah, Chalk Creek at.....	30	Hyrum, Utah, Blacksmith Fork near.....	18
Weber River near.....	24	Iceland, Calif., Truckee River at.....	85
Coffee Pot Creek, Oreg., discharge measurement of.....	93	Imlay, Nev., Humboldt River near.....	76
Coleville, Calif., West Walker River near.....	71	Jordan River at Narrows, near Lehi, Utah.....	34
Collinston, Utah, Bear River near.....	14	Jordan River Basin, Utah, gaging-station records in.....	34-41
Hammond (East Side) Canal near.....	20	Juab, Utah, Sevier Bridge Reservoir near.....	47
West Side Canal near.....	19	Sevier River near.....	48
Computations, results of, accuracy of..	2-3	Kingston, Utah, East Fork of Sevier River near.....	49
Conroe Ditch (diverting from Birch Creek), Utah, discharge measurement of.....	92	Sevier River near.....	42
Control, definition of.....	1	Lake Tahoe at Tahoe, Calif.....	83
Cooperation, record of.....	8	Lehi, Utah, Jordan River near.....	34
Cow Creek, Oreg. (tributary to Malheur Lake), discharge measurement of.....	93		
Crooked Creek, Oreg. (tributary to Chewaucan River), discharge measurement of.....	93		
Data, accuracy of.....	2-3		
explanation of.....	1-2		

	Page		Page
Little Rock Creek near Little Rock Calif.....	60	Rock Creek (Owens Lake Basin) at Sherwin Hill, near Bishop, Calif.....	64
Logan, Hyde Park & Smithfield Canal, Utah, discharge measurements of.....	92	near Round Valley, Calif.....	65
Logan, Utah, Logan, Hyde Park & Smithfield Canal near.....	17	Round Valley, Calif., Owens River near.....	61
Logan River near.....	15	Pine Creek near.....	67
Utah Power & Light Co.'s tailrace near.....	16	Rock Creek near.....	65
Logan River above State dam, near Logan, Utah.....	15	Run-off in inches, definition of.....	1
Malad, Idaho, Deep Creek near.....	22	Rye Patch, Nev., Humboldt River near.....	78
Devil Creek near.....	21	Rye Patch Reservoir near.....	77
Malheur and Harney Lakes Basin, Oreg., discharge measurements of.....	93-94	Salt Creek near Nephi, Utah.....	35
gaging-station records in.....	90	Salton Sea, Calif.....	53
Martin Creek near Paradise Valley, Nev.....	80	Salton Sea Basin, Calif., discharge measurements in.....	92-93
Marysville, Utah, Piute Reservoir near.....	43	gaging-station records in.....	53-54
Sevier River near.....	44	Second-foot per square mile, definition of.....	1
Mill City, Nev., Humboldt-Lovelock Irrigation, Light & Power Co.'s feeder canal near.....	81	Second-foot, definition of.....	1
Minersville, Utah, Beaver River near.....	51	Second-foot-day, definition of.....	1
Mojave River at Barstow, Calif.....	57	Sevier Bridge Reservoir near Juab, Utah.....	47
discharge measurements of.....	93	Sevier Lake Basin, Utah, discharge measurements in.....	92
near Victorville, Calif.....	56	gaging-station records in.....	42-49
West Fork of, near Hesperia, Calif.....	58	Sevier River below Piute Dam, near Marysville, Utah.....	44
Mojave River Basin, Calif., discharge measurements in.....	93	below San Pitch River, near Gunnison, Utah.....	46
gaging-station records in.....	55-58	East Fork of, near Kingston, Utah.....	49
Mono Lake near Mono Lake, Calif.....	68	near Juab, Utah.....	48
Mud Creek, Oreg. (tributary to Camas Creek), discharge measurement of.....	93	near Kingston, Utah.....	42
Murray Canyon Creek, Calif., discharge measurements of.....	92	near Vermilion, Utah.....	45
Nephi, Utah, Salt Creek near.....	35	Silver Creek (Silver Lake Basin) near Silver Lake, Oreg.....	88
Nixon, Nev., Pyramid Lake near.....	83	Silver Creek, Oreg. tributary to Harney Lake, discharge measurements of.....	93
Oakley, Utah, Weber River near.....	23	West Fork of, discharge measure- ments of.....	94
Ogden, Utah, Ogden River near.....	33	East Fork of, discharge measurements of.....	94
Pine View Reservoir near.....	32	Silver Lake, Oreg., Silver Creek near.....	88
Ogden River near Ogden, Utah.....	33	Silver Lake Irrigation District Canal near.....	89
South Fork of, near Huntsville, Utah.....	31	Silver Lake Basin, Oreg., gaging- station records in.....	88-89
Owens Lake Basin, Calif., gaging- station records in.....	61-67	Silver Lake Irrigation District Canal near Silver Lake, Oreg.....	89
Owens River at Pleasant Valley, near Bishop, Calif.....	62	Silvies River, Oreg., discharge measurements of.....	90
near Big Pine, Calif.....	63	near Burns, Oreg.....	93
near Round Valley, Calif.....	61	Spanish Fork at Castilla, Utah.....	37
Paisley, Oreg., Chewaucan River near.....	87	at Thistle, Utah.....	36
Palisade, Nev., Humboldt River at.....	75	Spring Creek, Idaho (tributary to Devil Creek), discharge measurements of.....	92
Palm Canyon Creek near Palm Springs, Calif.....	54	Stage-discharge relation, definition of.....	1
Palm Springs, Calif., Palm Canyon Creek near.....	54	Tahoe, Calif., Lake Tahoe at.....	83
Paradise Valley, Nev., Martin Creek near.....	80	Truckee River at.....	84
Parsnip Creek, Oreg., discharge measurement of.....	93	Tahquitz Creek, Calif., discharge measurements of.....	93
Pine Creek at division box near Bishop, Calif.....	66	Terms, definition of.....	1
near Round Valley, Calif.....	67	Thistle, Utah, Spanish Fork at.....	36
Pine View Reservoir near Ogden, Utah.....	32	Topaz Reservoir near Topaz, Calif.....	72
Piute Reservoir near Marysville, Utah.....	43	Trout Creek (Alvord Lake Basin) near Denio, Oreg.....	91
Plain City, Utah, Weber River near.....	29	Trout Creek, Oreg., tributary to Silvies River), discharge measurements of.....	93
Poison Creek, Oreg., discharge measurements of.....	93	Truckee River at Iceland, Calif.....	85
Provo River at Forks, Utah.....	38	at Tahoe, Calif.....	84
at Provo, Utah.....	39	Utah Power & Light Co.'s tailrace near Logan, Utah.....	19
South Fork of, at Forks, Utah.....	41	Valyermo, Calif., Rock Creek near.....	56
Provo, Utah, Provo River at.....	39	Vermilion, Utah, Sevier River near.....	45
Publications on stream flow by Geological Survey.....	3-6	Victorville, Calif., Mojave River near.....	56
by State agencies.....	6-7	Virginia Creek, Oreg., discharge measurement of.....	94
information concerning.....	3-7	Walker Lake Basin, Nev.-Calif., gaging- station records in.....	68-72
Punch Bowl Creek, Calif., discharge measurements of.....	93	Walker Lake near Hawthorne, Nev.....	68
Pyramid and Winnemucca Lakes Basin, Nev.-Calif., gaging-station records in.....	83-85	Warner Lakes Basin, Oreg., discharge measurements in.....	93
Pyramid Lake near Nixon, Nev.....	83	gaging-station records in.....	86
Rattlesnake Creek, Oreg., discharge measurement of.....	93	Weber-Provo diversion canal near Woodland, Utah.....	40
Rock Creek (Antelope Valley Basin) near Valyermo, Calif.....	59	Weber River at Devils Slide, Utah.....	27
Rock Creek, Oreg. (Catlow Valley Basin), discharge measurements of.....	94	at Echo, Utah.....	26
		at Gateway, Utah.....	28

INDEX

97

	Page		Page
Weber River near Coalville, Utah.....	24	Whitewater River, Calif., discharge	
near Oakley, Utah.....	23	measurements of.....	92
near Plain City, Utah.....	29	Winnemucca Lake Basin. See Pyramid and	
Weber River Basin, Utah, gaging-station		Winnemucca Lakes Basin	
records in.....	23-33	Woodland, Utah, Weber-Provo diversion	
West Side Canal near Collinston, Utah...	19	canal near.....	40
West Walker River near Coleville, Calif.	71	Work, division of.....	9
Weston, Idaho, Bear River near.....	13	scope of.....	1

**The use of the subjoined mailing label to return
this report will be official business, and no
postage stamps will be required**

U. S. GOVERNMENT PRINTING OFFICE 6—9772

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

**PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, \$300**

OFFICIAL BUSINESS

**This label can be used only for returning
official publications. The address must not
be changed.**

**GEOLOGICAL SURVEY,
WASHINGTON, D. C.**