Surface Water Supply of the United States 1955

Part 10. The Great Basin

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1394

Prepared in cooperation with the States of California, Idaho, Nevada, Oregon, Utah, and Wyoming, and with other agencies

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Part 10. The Great Basin

Prepared under the direction of J. V. B. WELLS, *Chief, Surface Water Branch*

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GEOLOGICAL SURVEY

Thomas B. Nolan, *Director*

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PREFACE

This report was prepared by the Geological Survey in cooperation with the States of California, Idaho, Nevada, Oregon, Utah, and Wyoming, and with other agencies, by personnel of the Water Resources Division, C. G. Paulsen, chief, under the general direction of J. V. B. Wells, chief, Surface Water Branch, and B. J. Peterson, chief, Annual Reports Section.

The data were collected and computed under supervision of district engineers, Surface Water Branch, as follows:

F. M. Bell----------Denver, Colo.
R. C. Briggs----------San Francisco, Calif.
T. R. Newell----------Boise, Idaho
K. N. Phillips----------Portland, Oreg.
M. T. Wilson----------Salt Lake City, Utah

CALENDAR FOR WATER YEAR 1955

OCTOBER 1954

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

NOVEMBER 1954

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

DECEMBER 1954

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JANUARY 1955

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

FEBRUARY 1955

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

MARCH 1955

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

APRIL 1955

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

MAY 1955

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

JUNE 1955

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

JULY 1955

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

AUGUST 1955

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

SEPTEMBER 1955

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

CONTENTS

ILLUSTRATIONS

SURFACE WATER SUPPLY OF THE GREAT BASIN, 1955

SCOPE OF WORK

This volume is one of a series of 18 reports presenting measurements of stage, discharge, and content of streams, lakes, and reservoirs in the United States during the water year ending September 30, 1955. Since 1888, when the United States Geological Survey first studied streamflow in relation to problems of irrigation, similar measurements have been made at more than 13,250 gaging stations in the 48 States and at many others in the Territories of Alaska and Hawaii. On September 30, 1955, the Geological Survey and cooperating organizations were maintaining 6,860 gaging stations, including those in Alaska and Hawaii. Discharge measurements only were made at many other points in the 1955 water year, most of which are published at the end of each report. The name of each stream measured at points other than gaging stations is not listed in the index of this report. Only the major river basins in which measurements were made are listed under the item "Discharge measurements" in the index.

COOPERATION

Many State, municipal, and private organizations have cooperated with the Geological Survey in this work by either furnishing or helping to collect data. Organizations that supplied data are acknowledged in station descriptions, and organizations that assisted in the collection of data through cooperative agreements with the Survey are:

California: State Department of Public Works, F. B. Durkee, director, through Division of Water Resources, A. D. Edmonston, State engineer, succeeded by H. O. Banks; San Bernardino County Flood Control District.

Idaho: State Department of Reclamation, M. R. Kulp, State reclamation engineer.

Nevada: Office of State Engineer, H. A. Shamberger.

Oregon: Office of State Engineer, C. E. Stricklin, succeeded by L. A. Stanley.

Utah: Office of State Engineer, J. M. Tracy; Utah Water & Power Board, Charles Redd, chairman, and G. D. Clyde, director.

Wyoming: Office of State Engineer, L. C. Bishop.

Work in the Bear River basin (exclusive of Malad Valley) was done under cooperative agreements with the State Department of Reclamation of Idaho, the Office of State Engineer of Utah, Utah Water & Power Board, and the Office of State Engineer of Wyoming.

Assistance in the form of funds or services was given by the Corps of Engineers, Department of the Army, in collecting records published herein for 2 gaging stations in Utah, 2 in California, and 5 in Nevada.

Assistance was also furnished by Fish and Wildlife Service and the Bureau of Reclamation of the United States Department of the Interior.

The following organizations aided in collecting records:

California: Walker River Irrigation District.

Idaho: Utah Power & Light Co.

Oregon: Harney and Lake Counties.

Utah: Utah Power & Light Co.

DIVISION OF WORK

The stream-gaging work was done by the Water Resources Division of the Geological Survey under the direction of personnel shown in the preface. The data for stations in the several States were collected and prepared for publication in the district offices listed below.

State	District office	Address
California a/	San Francisco	541 Federal Office Building.
Idaho b/	Boise	429 Federal Building.
Nevada	Salt Lake City, Utah	300 Federal Building.
Oregon c/	Portland	606 Post Office Building.
Utah d/	Salt Lake City	300 Federal Building.
Wyoming	Denver, Colo.	Federal Center.

a/ Except for stations in Walker Lake, Carson River, and Truckee River basins.
b/ Except for stations in Bear River basin operated in connection with Federal Power Commission projects.
c/ The work in Oregon was done in collaboration with C. E. Stricklin and L. A. Stanley, State engineer.
d/ Including stations in Walker Lake, Carson River, and Truckee River basins and stations in the Bear River basin in Idaho operated in connection with Federal Power Commission projects.

Information of a more detailed nature than that published for most of the gaging stations given in this report is on file in the district offices listed above. Provisional records of discharge prior to publication, and other unpublished data concerning the gaging-station records may usually be obtained from the district office.

DEFINITION OF TERMS AND ABBREVIATIONS

The terms of streamflow and other hydrologic data, as used in this report, are defined as follows:

Cubic foot per second (cfs) is the rate of discharge of a stream whose channel is 1 square foot in cross-sectional area and whose average velocity is 1 foot per second.

Cubic feet per second per square mile (cfsm) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Runoff in inches is the depth to which an area would be covered if all the water draining from it in a given period were uniformly distributed on its surface. The term is used for comparing runoff with rainfall, which is also usually expressed in inches.

Acre-foot is the quantity of water required to cover an acre to the depth of 1 foot and is equivalent to 43,560 cubic feet. The term is commonly used in relation to storage for irrigation.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347l acre-feet, or 646,317 gallons, and represents a runoff of 0.0372 inch for 1 square mile.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, a long reach of the channel, or an artificial structure.

Contents is the volume of water in a reservoir. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

The drainage area of a stream at a specified location is that area, measured in a horizontal plane, which is so enclosed by a topographic divide that direct surface runoff from precipitation normally would drain by gravity into the river above the specified point.

Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER OF LISTING GAGING STATIONS

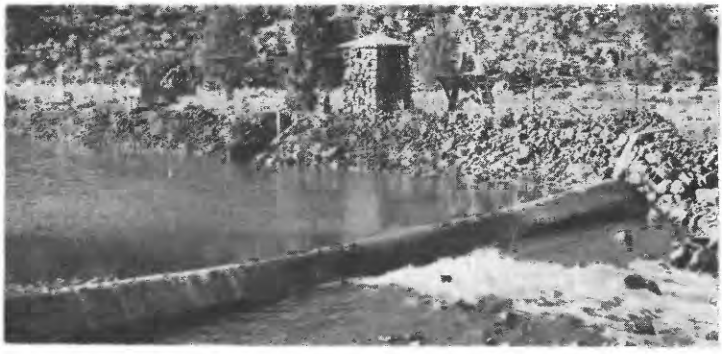
Beginning with the series of reports for the water year ending September 30, 1951, the order of listing gaging-station records was changed. In this report, in a downstream direction along the main stem all stations on a tributary entering above a main-stem station are listed before that station. If a tributary enters between two main-stem stations, it is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. To indicate the rank of any tributary on which a gaging station is situated and the stream to which it is immediately tributary, each indention in the listing of gaging stations in the table of contents of this report represents one rank. This downstream order and system of indention show which gaging stations are on tributaries between any two stations on a main stem and the rank of the tributary on which each gaging station is situated.

The order of listing used before the publication of the 1951 report listed first all stations on the main stem from headwaters toward mouth, then all stations on the uppermost tributary to the main stem from the tributary's source to mouth, and then all stations from source to mouth of the uppermost tributary to the tributary.

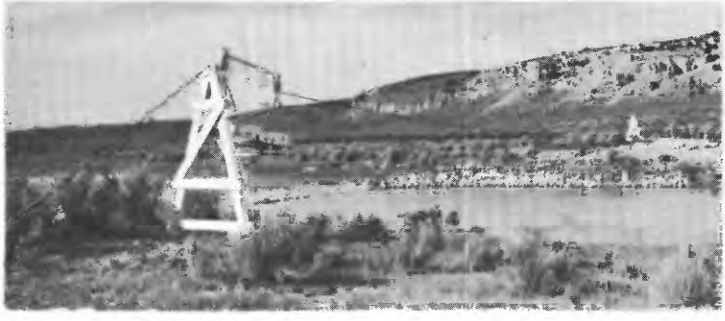
EXPLANATION OF DATA

The base data collected at gaging stations consist of records of stage and measurements of discharge. In addition, observations of factors affecting the stage-discharge relation, weather records, and other information are used to supplement base data 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 fluctuations. Measurements of discharge are made with a current meter by the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in Water-Supply Paper 888 and are also outlined in standard textbooks on the measurement of stream discharge. Typical structures in use at gaging stations are shown in figure 1.

Rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect determinations of peak discharge (such as slope-area or contracted-opening determinations, computation of flow over dams or weirs, and by other methods), velocity-area studies, and logarithmic plotting. The application of the daily mean gage height to those rating tables gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station



A, DONNER UND BLITZEN RIVER NEAR FRENCHGLEN, OREG.



B, SEVIER RIVER NEAR JUAB, UTAH.

C, LOGAN RIVER NEAR LOGAN, UTAH.

FIGURE 1.—GAGING-STATION STRUCTURES.

is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is essentially the shifting-control method.

At some gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. Information requisite for determining the slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage. If so, the rate of change in stage is used as a factor in the determination of discharge.

At most gaging stations in the northern part of the United States and at some in the mountainous regions of other parts the stage-discharge relation is affected by ice during the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and engineers, and comparable records of discharge for other stations in the same or nearby basins. If the stage-discharge relation is affected by ice, this information is given in a note to the table. No mention is made of occasional days of ice effect if the degree of accuracy of daily records is not changed.

The data usually presented generally comprise a description of the station, a skeleton rating table, and a table showing the daily discharge and monthly and yearly discharge and runoff of the stream. Records are published for the water year which begins on October 1 and ends on September 30. A calendar for the water year 1955 is shown on page IV for the purpose of finding the day of the week for any date.

The description of the station gives the location, drainage area, records available, type and history of gages, average discharge, extremes of discharge, general remarks, and notations of revisions of the previously published record. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "Location" for some stations, is that determined and used by Corps of Engineers unless otherwise noted. Under "Records available" are given the periods for which there are published records generally equivalent to those at the present site. Under "Gage" are given the type of gage currently in use and the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of records available. Under "Average discharge" is given the average discharge for the number of years indicated. It is not given for stations having fewer than five complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. Under "Extremes" are given 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 (also the minimum discharge if useful); and the minimum gage height (unless it is of no importance). In the first paragraph, the data given are for the complete current water year unless otherwise specified. In the second paragraph, the data given are for the periods of record within the calendar year dates in the heading (not necessarily those for the complete years indicated by the heading dates). Reliable information concerning major floods that have occurred outside the period of record are given in the third or last paragraph under "Extremes." Unless otherwise qualified, the maximum discharge

corresponds to the crest stage obtained by use of a water-stage recorder, a crest-stage indicator, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge, it is given separately. Information pertaining to the accuracy of the records and conditions which affect the natural flow at gaging station is given under "Remarks."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual reports. In order to make it easier to find such revised records, a paragraph headed "Revisions (water years)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge are concerned in the revision, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

Skeleton rating tables are generally published for all stations except those at which the daily discharge for the greater part of the open-water period was determined by the shifting-control method, the slope method, or other special methods involving an equivalent adjustment to the gage height of more than one-tenth foot. Skeleton rating tables are generally not published for stations on canals.

For stations equipped with water-stage recorders, except those on streams subject to sudden or rapid fluctuation, the daily table gives the discharge corresponding to the daily mean gage height. For stations subject to such fluctuation the daily mean gage height may not indicate the true daily mean discharge, which must be obtained by averaging the discharge for parts of the day or by using the discharge integrator, an instrument for obtaining the daily mean discharge from a continuous gage-height graph and containing, as an essential element, a curve representing the stage-discharge relation at the station. For stations equipped with nonrecording gages, the table of daily discharge gives the discharge corresponding to once-daily readings of the gage, or to the mean of twice-daily readings, or to the mean gage height determined from gage-height graphs based on gage readings. For periods of rapidly changing stage, the daily mean discharge is determined from gage-height graphs based on gage readings, the frequency of which is stated in the station description.

In the table of daily discharge, the figures for the maximum day and the minimum day for each month are underlined. If the figure is repeated, it is underlined only on the first day of its occurrence.

In the monthly summary below the daily table, the line headed "Total" gives the sum of the daily figures; it is the total cfs-days for the month. The line headed "Mean" gives the average flow in cubic feet per second during the month. Runoff for the month may be expressed in cubic feet per second per square mile (line headed "Cfsm"), or in inches (line headed "In."), or in acre-feet (line headed "Ac-ft"). Figures for cubic feet per second per square mile and runoff in inches are omitted if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches.

In the yearly summary below the monthly summary, the figures of maximum are the maximum daily discharges, not the momentary discharges when the water was at crest stage. Likewise, the minimums in this summary are the minimum daily discharges.

Peak discharges and the times of their occurrence and corresponding gage heights of most stations are listed below the table of daily and monthly discharge. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man.

Footnotes to the table of daily discharge indicate periods when discharge was computed or estimated by unusual or special methods during periods of no gage-height record and ice effect, or by other effects that reduce the degree of accuracy of the records. Days on which discharge measurements were made are indicated by asterisk and footnote unless they were made at frequent regular intervals, in which instance the general frequency of discharge measurements is given under "Remarks" in the station description.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is usually given in the first report in which data for the reservoir are published, but it is omitted from succeeding reports.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description states the degree of accuracy of the records. "Excellent" indicates that, in general, the error in the daily records is believed to be less than 5 percent; "good," less than 10 percent; "fair," less than 15 percent; and "poor," probably more than 15 percent. The records of monthly and yearly mean discharge and runoff are, in general, more nearly accurate than the daily records.

Runoff at some stations, as indicated by the monthly mean, may vary widely from natural runoff, owing to diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and runoff in inches are not published unless storage or diversion records are included to indicate the extent of the regulation or diversion, or unless satisfactory adjustments can be made for changes in contents of reservoirs or for other changes incident to use and control. Evaporation from a reservoir is not

included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur when relatively large negative adjustments are made or when evaporation is large in comparison with the observed discharge.

Many gaging stations on streams in the irrigated areas of the United States are situated above most of the diversions from those streams, and therefore the discharge recorded does not actually show the water supply available at the stations for further development, because water must first be supplied to existing irrigation systems.

PUBLICATIONS

To facilitate publication of the annual series of reports, the area of the United States is divided into 14 parts whose boundaries coincide with certain natural drainage lines. Formerly, the results of streamflow measurements were published in 14 volumes, one for each of the 14 parts. Beginning with the reports for 1951, the records are published in 18 volumes, there being 2 volumes each for Parts 1, 2, 3, and 6. The boundaries of the various parts are indicated by the following list and the map in figure 2.

Part 1. North Atlantic slope basins, in two volumes:
- A, North Atlantic slope basins, Maine to Connecticut.
- B, North Atlantic slope basins, New York to York River.

2. South Atlantic slope and eastern Gulf of Mexico basins, in two volumes:
- A, South Atlantic slope basins, James River to Savannah River.
- B, South Atlantic slope and eastern Gulf of Mexico basins, Ogeechee River to Pearl River.

3. Ohio River basin, in two volumes:
- A, Ohio River basin except Cumberland and Tennessee River basins.
- B, Cumberland and Tennessee River basins.

4. St. Lawrence River basin.
5. Hudson Bay and upper Mississippi River basins.
6. Missouri River basin, in two volumes:
- A, Missouri River basin above Sioux City, Iowa.
- B, Missouri River basin below Sioux City, Iowa.

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 on the water resources of the United States may be purchased or consulted as follows:

1. Copies may be purchased from Superintendent of Documents, Government Printing Office, Washington 25, D. C., who will, on application, furnish lists giving prices. A list of Geological Survey publications may be obtained by applying to the Director, Geological Survey, Washington, D. C.

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 offices of the Water Resources Division of the Geological Survey. Addresses of the offices in the area covered by this report are given on page 2.

Early records of the flow of streams in the United States are published in the reports listed below. In many of these reports records for years earlier than those indicated have been included for some streams.

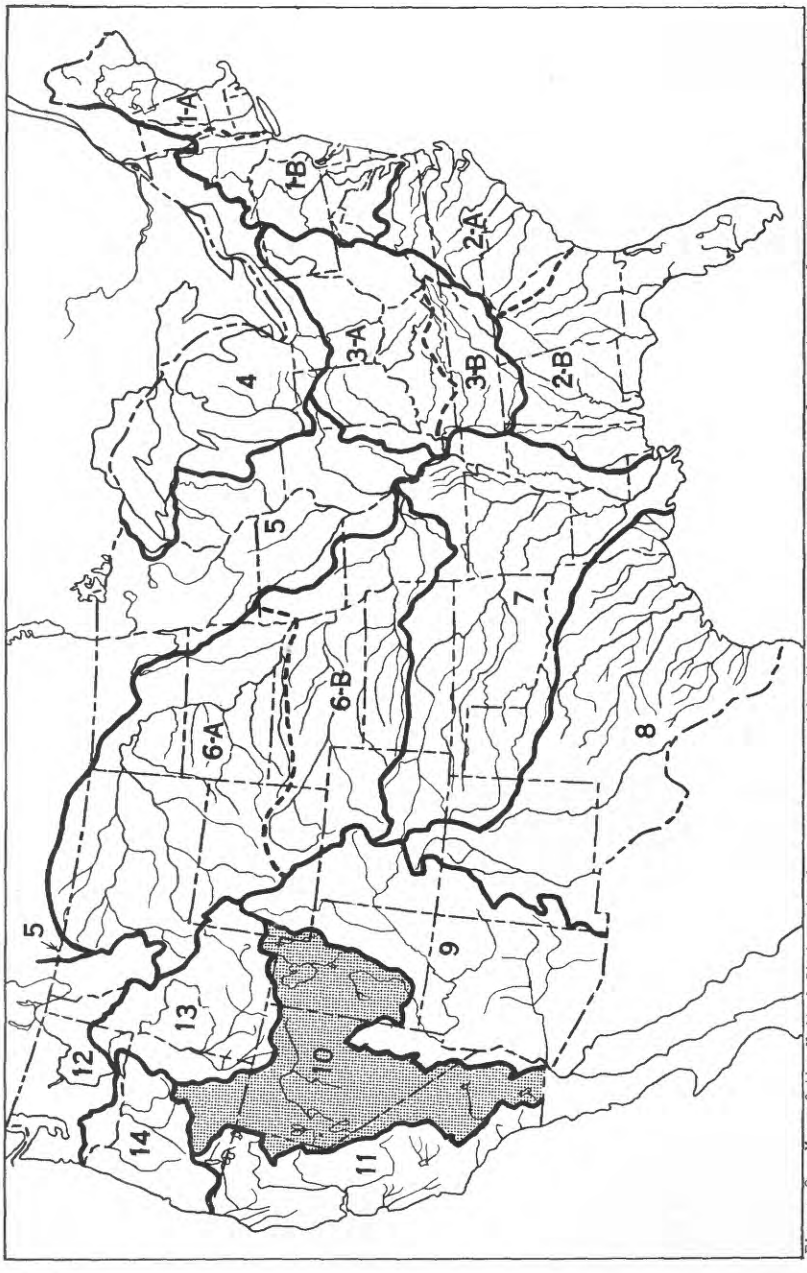


Figure 2.--Map of the United States showing areas covered by the 18 annual volumes on surface-water supply. The area covered by this report is shaded.

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Streamflow data for the years 1884-1901, in reports of the Geological Survey

(A = Annual Reports; B = Bulletin)

Report	Character of data	Year
10th A, pt. 2	Descriptive information only.	
11th A, pt. 2	Monthly discharge and descriptive information.....	1884 to September 1890.
12th A, pt. 2	....do.....	1884 to June 30, 1891.
13th A, pt. 3	....do.....	1884-92.
14th A, pt. 2	Monthly discharge.....	1888-93.
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.	1895.
WSP 11.....	Gage heights.....	1896.
18th A, pt. 4	Descriptions, measurements, rating, and monthly discharge...	1895-96.
WSP 15.....	Descriptions, measurements, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries above Kansas River.	1897.
WSP 16.....	Descriptions, measurements, and gage heights of streams west of the Mississippi River, except Missouri River and tributaries above Kansas River.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge..	1897.
WSP 27.....	Measurements, ratings, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries.	1898.
WSP 28.....	Measurements, ratings, and gage heights of streams west of the Mississippi River, except Missouri River and tributaries.	1898.
20th A, pt. 4	Monthly discharge.....	1898.
WSP 35 to 39.	Descriptions, measurements, gage heights, and ratings.....	1899.
21st A, pt. 4	Monthly discharge.....	1899.
WSP 47 to 52.	Descriptions, measurements, gage heights, and ratings.....	1900.
22d A, pt. 4.	Monthly discharge.....	1900.
WSP 65, 66...	Descriptions, measurements, gage heights, and ratings.....	1901.
WSP 75.....	Monthly discharge.....	1901.

Note.--Records for all stations in Oregon from the beginning of record through September 1910 have been republished in WSP 370 with some revisions, superseding all earlier reports for these stations.

Reports on surface-water supply containing records from 1899 to date for drainage basins in this report are listed below. The data for any particular gaging station will, in general, be found in the reports covering the years during which the station was maintained.

Numbers of water-supply papers containing results of stream measurements in the Great Basin, 1899-1955

Year	WSP	Year	WSP	Year	WSP	Year	WSP	Year	WSP
1899	38, a39	1911	310	1923	570	1934	765	1945	1040
1900	51	1912	330	1924	590	1935	790	1946	1060
1901	66, 75	1913	360	1925	610	1936	810	1947	1090
1902	85	1914	390	1926	630	1937	830	1948	1120
1903	100	1915	410	1927	650	1938	860	1949	1150
1904	133, b134	1916	440	1928	670	1939	880	1950	1180
1905	176, b177	1917	460	1929	690	1940	900	1951	1214
1906	212, b213	1918	480	1930	705	1941	930	1952	1244
1907-8	250, b251	1919-20	510	1931	720	1942	960	1953	1284
1909	270, b271	1921	530	1932	735	1943	980	1954	1344
1910	290	1922	550	1933	750	1944	1010	1955	1394

a Mojave River only.
b The Great Basin in California, except Truckee and Carson River basins.
Note.--Records for all stations in Oregon from the beginning of record through September 1910 have been republished in WSP 370 with some revisions, superseding all earlier reports for these stations.

The records at most of the stations discussed in these reports extend over many years. Discharge measurements at many points other than regular gaging stations have been made each year and are published at the end of each report. The streams and points of measurement are listed in the same order as the streams and gaging stations in the body of the report. An index of the records obtained before 1904 has been published in Water-Supply Paper 119.

Each of the reports on the surface-water supply for the year 1939 (Water-Supply Paper 880 for the Great Basin) contains, for the area included in that report, a summary of yearly discharge at gaging stations at which 10 or more complete years of record had been collected. These summaries were reprinted separately.

Reports also 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 may have been revised), as well as some records not contained in the annual series of water-supply papers. The following table lists reports of the type for the Great Basin.

Reports containing compilations of discharge by States and drainage basins

WSP	Period	Report
300.....	1891-1912	Water resources of California, part 3, Stream measurements in the Great Basin and Pacific Coast river basins.
370.....	1878-1910	Surface water supply of Oregon.
517.....	1889-1920	Water powers of Great Salt Lake basin.
637-A.....	1895-1927	Surface water supply of minor San Francisco Bay, northern Pacific, and Great basins in California.
920.....	1889-1937	Utilization of surface water resources of Sevier Lake basin (Utah).

Records of discharge have been published also 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 for the area covered by this report.

State reports containing compilations of records of discharge

State	Period	Report	Issued by
Oregon....	1878-1914	Bull. 4, Water resources of the State of Oregon.	Office of the State Engineer.
Do.....	1914-24	Bull. 7, Water resources of the State of Oregon.	Do.
Do.....	1924-30	Bull. 8, Water resources of the State of Oregon.	Do.
Do.....	1930-36	Bull. 9, Water resources of the State of Oregon.	Do.
Do.....	1936-41	Bull.10, Water resources of the State of Oregon.	Do.
Utah.....	1889-1905	5th biennial report.....	Do.
Do.....	1906-10	7th biennial report.....	Do.
Do.....	1911-16	10th biennial report.....	Do.

Note.--In addition to the records contained in the reports listed above, the States of California, Nevada, and Oregon have issued annual or biennial reports in which are contained records of discharge.

The reports listed in the foregoing tables contain the customary records of discharge collected during the systematic operation of gaging stations. Detailed information on the stage and discharge of many streams during major floods has been included in special reports on these floods published by the Geological Survey or other agencies. The more recent of these special reports also contain other pertinent hydrologic information and analyses and compilations of data relating to earlier notable floods. The following is a list of numbers and titles of these reports:

WSP	REPORT
771:	Floods in the United States, magnitude and frequency.
843:	Floods of December 1937 in northern California.
844:	Floods of March 1938 in southern California.
847:	Maximum discharges at stream-measurement stations through September 1938.
994:	Cloudburst floods in Utah, 1850 to 1938.
1137-H:	Floods of November-December 1950 in western Nevada.
1260-E:	Floods of 1952 in Nevada and Utah.

The table below contains a list of gaging stations for the area covered by this report, at which records of discharge were collected during the water year October 1954 to September 1955 by agencies other than the Geological Survey. The records of these stations are not contained in publications of the Geological Survey, nor have they been published elsewhere except as noted in footnotes to the table. Records for many canals and ditches and occasional records for several natural streams, none of which are here listed, have also been collected, and some of them have been published in the reports of irrigation projects or of the water commissioner of the drainage basin in which the streams are situated.

Records of discharge collected by agencies other than the Geological Survey

Stream	Location	Period	Collected by
City Creek.....	Salt Lake City, Utah, near mouth of canyon.	1898-1954a	Salt Lake City.
Cottonwood Creek.	....do.....	1898-1955a	Do.
Emigration Creek.	....do.....	1898-1955a	Do.
Ephraim Creek....	Near Ephraim, Utah.....	1914-55	Intermountain Forest & Range Experiment Station.
Little Cottonwood Creek.	Salt Lake City, Utah, near mouth of canyon.	1898-1955a	Salt Lake City.
Little Truckee River.	Above Boca Reservoir, near Boca, Calif.....	1942-55	Washoe County Water Conservation District.
Do.....	Below Boca Reservoir, near Boca, Calif.....	1942-55	Do.

Records of discharge collected by agencies other than the Geological Survey--Continued

Stream	Location	Period	Collected by
Mill Creek.....	Salt Lake City, Utah, near mouth of canyon.	1898-1955a	Salt Lake City.
Otter Creek Outlet.	Antimony, Utah, at former Geological Survey gaging station near Coyote.	1920-55b	Sevier River water commissioner.
Parleys Creek....	Salt Lake City, Utah, near mouth of canyon.	1898-1955a	Salt Lake City.
Sevier River.....	Delta, Utah, at former Geological Survey gaging station.	1920-55b	Sevier River water commissioner.
Truckee River....	At Derby Dam, Nev.....	1907-10c 1926-55	Federal Court Watermaster for Truckee River and Truckee-Carson Irrigation District.
Do.....	At Farad, Calif.....	1938-55d	Truckee-Carson Irrigation District.
Do.....	At Pyramid Dam, Nev.....	1928-55	Federal Court Watermaster for Truckee River.
Do.....	At Tahoe, Calif.....	1895-96, 1900-55d	Federal Court Watermaster for Truckee River and Truckee-Carson Irrigation District.
Do.....	At Vista, Nev.....	1899-1907c, 1927-55	Federal Court Watermaster for Truckee River.
Walker River.....	Near Wabusha, Nev.....	1902-8c 1920-34c 1940-55	Walker River Irrigation District.

a Records prior to 1913 are contained in water-supply papers published by the Geological Survey; those for 1913-30, in reports published by Salt Lake City.
b Published in the annual reports of Sevier River water commissioner.
c Published in water-supply papers by the Geological Survey.
d Records prior to 1944 published in water-supply papers by the Geological Survey.

HYDROLOGIC CONDITIONS

During the water 1955 streamflow in the Great Basin was below median, with deficient runoff in Nevada and southern California for most of the year. The area of deficient runoff spread to cover the entire basin in March and April. The flow of Weber River near Oakley, Utah, in March was record-low for that month; records have been collected at this station for over 50 years. Cloudburst storms during June, July, and August caused flash floods on small streams in Nevada and Utah. In September runoff again became deficient and was approaching record-low flows. In southern Utah, runoff for the water year at several gaging stations was the second or third lowest of record in nearly 50 years. For three key gaging stations in the area covered by this report, a comparison of the monthly and yearly mean discharges during the 1955 water year with the median for the 25-year period 1921-45 is shown in figure 3 on the opposite page.

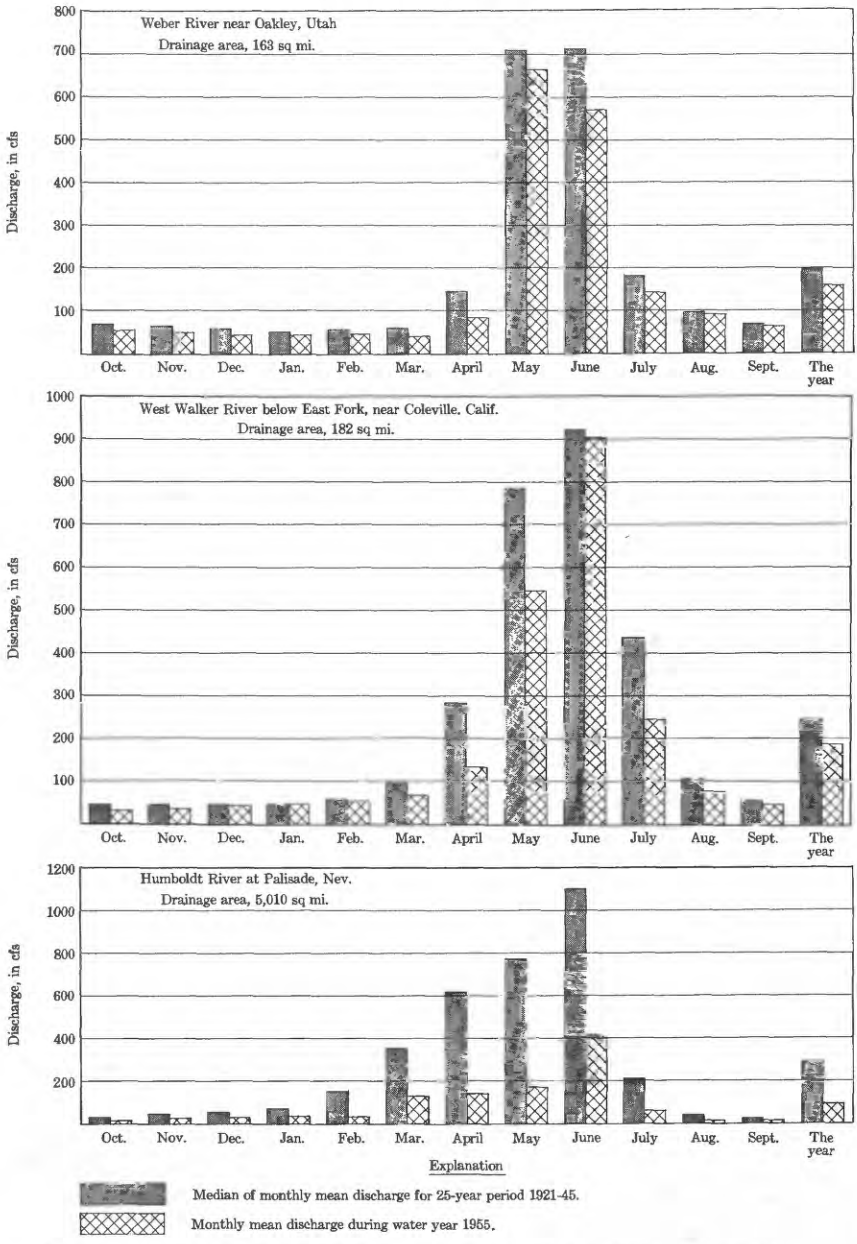

Figure 3. Comparison of discharge at three key gaging stations during 1955 water year with median discharge for 25-year period.

GREAT SALT LAKE BASIN

Great Salt Lake, Utah

Location.--Lat 40°44'15", long 112°12'30", in NW¼ sec. 17, T. 1 S., R. 3 W., at Salt Lake County Boat Harbor on southeast shore of lake, 17 miles west of Salt Lake City; and lat 41°13', long 112°36', at Midlake, on Lucin cutoff of Southern Pacific Railroad, 30 miles west of Ogden.

Records available.--September 1875 to December 1899, March to July 1904, and October 1912 to September 1955 in reports of Geological Survey. July 1903 to December 1934 in reports of U. S. Weather Bureau. Diagram showing fluctuations of lake from 1851-1940 is published in WSP 880.

Gage.--Water-stage recorder at Boat Harbor since October 1938 at datum 4,186.9 ft above mean sea level, datum of 1929. Staff gage at Midlake since October 1902 at datum 4,198.1 ft above mean sea level, datum of 1929. Prior to October 1938, staff gages at sites and datums as follows: September 1875 to October 1877 at Black Rock at datum 4,208.4 ft above mean sea level, November 1877 to November 1879 at Farmington Bay at datum 4,206.9 ft above mean sea level, November 1879 to April 1881 near Black Rock at datum 4,203.1 ft above mean sea level, April 1881 to December 1899 at Garfield Landing at datum 4,198.5 ft above mean sea level, and July 1903 to October 1938 at Saltair at datum 4,196.9 ft above mean sea level.

Extremes.--Maximum elevation during year, 4,198.05 ft May 1 at Boat Harbor gage; minimum, 4,196.75 ft Sept. 15 at Boat Harbor gage.
1851-1955: Maximum elevation, 4,211.6 ft in 1873, computed from traditional data by E. C. LaRue (see WSP 880, p. 125); minimum, 4,193.7 ft Oct. 15, Nov. 1, 1940, at Boat Harbor gage and Oct. 15, 1940, at Midlake gage.

Remarks.--Apparent inconsistencies in readings are due largely to the effect of wind, as the 2 gages are about 40 miles apart. To compensate for wind effect, elevations given for the Boat Harbor gage are taken from a mean slope line defined by several days' gage-height graph preceding and following 12:01 a.m. for the first and fifteenth of each month. Wind effects cause substantial changes in elevation which are not shown in the published elevations.

Cooperation.--Records for Midlake gage furnished by Southern Pacific Railroad.

Gage height, in feet, water year 1954-55

Day	Boat Harbor	Midlake
Oct. 1	10.45	-0.65
15	10.35	-.85
Nov. 1	10.25	-1.0
15	10.3	-1.1
Dec. 1	10.35	-1.1
15	10.4	-1.1
Jan. 1	10.4	-.9
15	10.5	-.75
Feb. 1	10.55	-.65
15	10.6	-.6
Mar. 1	10.7	-.5
15	10.8	-.4
Apr. 1	10.95	-.4
15	11.0	-.25
May 1	11.15	-.35
15	11.1	-.35
June 1	11.05	-.35
15	11.0	-.4
July 1	10.9	-.4
15	10.65	-.5
Aug. 1	10.4	-.6
15	10.25	-.85
Sept. 1	10.05	-1.0
15	9.85	-1.1

Hilliard-East Fork Canal near State line, near Evanston, Wyo.

Location.--Lat 40°55', long 110°49', in NW¼ sec. 16, T. 2 N., R. 10 E., in Utah, on left bank 8 ft upstream from abandoned forest road bridge, 300 ft downstream from new road bridge, three-quarters of a mile downstream from head, and 25 miles southeast of Evanston.

Records available.--October 1949 to September 1955 in reports of Geological Survey. April 1944 to September 1949 (irrigation season only) in Bear River Hydrometric Data reports.

Gage.--Water-stage recorder. Altitude of gage is about 8,500 ft (from topographic map).

Average discharge.--6 years (1949-55), 5.94 cfs (4,300 acre-ft per year).

Extremes.--1949-55: Maximum daily discharge, 39 cfs June 15, 20, 1952, May 20, 21, 1954; no flow during winter and at other times each year.

Remarks.--Records good except those for periods of ice effect, which are fair. Canal diverts from East Fork Bear River for irrigation of lands in Hilliard Flat area, Wyoming.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used July 12-24, Aug. 27 to Sept. 18, 24-30)

0.3	0	1.7	15
.4	.4	2.1	22
.6	2.0	2.5	29
.9	4.8	2.9	40
1.4	10		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.5	7.1						0	2.8	22	1.7	14
2	7.2	6.9						0	2.7	23	*1.7	14
3	7.1	6.8						0	7.4	28	1.7	14
4	7.4	6.8						0	11	27	1.7	14
5	8.1	6.9						2.0	11	*26	5.4	14
6	7.5	7.1						6.9	11	25	8.4	14
7	7.1	3.6						6.7	12	24	8.4	14
8	7.2	0						6.6	13	22	8.3	13
9	7.6	0						7.2	12	25	8.2	13
10	7.1	0						7.6	*13	28	8.2	13
11	7.0	0						7.9	9.7	31	7.9	12
12	6.8	0						6.6	.2	29	7.9	*12
13	6.8	0						6.2	21	27	7.9	12
14	6.8	0						5.0	32	26	7.9	12
15	6.8	0						4.8	30	24	8.0	12
16	6.8	0						4.0	32	23	7.9	12
17	6.8	0						5.3	37	22	7.9	12
18	6.8	0						*7.4	37	21	*8.0	13
19	6.7	0						7.2	37	*20	8.1	14
20	6.6	0						9.4	38	23	7.9	13
21	6.4	0						11	37	24	7.8	13
22	4.2	0						11	*38	24	7.8	*12
23	2.1	0						10	37	30	*7.7	12
24	7.0	0						9.6	36	23	7.7	13
25	7.5	0						6.8	34	2.1	7.9	14
26	*8.0	0						3.4	31	1.1	8.1	14
27	7.8	0						3.3	29	1.6	10	13
28	8.2	0						3.2	27	1.7	15	14
29	7.5	0						2.8	26	1.7	15	13
30	7.6	0			------			2.9	23	1.7	15	13
31	7.1	------			------		------	3.0	------	1.7	14	------
Total	215.1	45.2	0	0	0	0	0	167.8	687.8	608.6	249.1	392
Mean	6.94	1.51	0	0	0	0	0	5.41	22.9	19.6	8.04	13.1
Ac-ft	427	90	0	0	0	0	0	333	1,360	1,210	494	778

Calendar year 1954: Max 39 Min 0 Mean 6.96 Ac-ft 5,040
Water year 1954-55: Max 38 Min 0 Mean 6.48 Ac-ft 4,690

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Oct. 13-17, 25.

Bear River near Utah-Wyoming State line

Location.--Lat 40°58', long 110°51', in SE¼ sec. 30, T. 3 N., R. 10 E., on left bank just downstream from West Fork and 2.8 miles upstream from Utah-Wyoming State line.

Drainage area.--176 sq mi.

Records available.--July 1942 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 7,965 ft (from river-profile map).

Average discharge.--13 years, 188 cfs (136,100 acre-ft per year).

Extremes.--Maximum discharge during year, 1,430 cfs June 9 (gage height, 3.46 ft); minimum, 16 cfs Nov. 5, but may have been less during periods of ice effect.
1942-55: Maximum discharge, 2,750 cfs June 14, 1953 (gage height, 4.89 ft); minimum, 16 cfs Apr. 11, 1951, Nov. 5, 1954, but may have been less during periods of ice effect or no gage-height record.

Remarks.--Records good except those for periods of ice effect which are fair. Diversions above station for irrigation of land in drainage basin below station.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.8	19	2.0	338
1.0	39	2.4	584
1.2	73	2.8	888
1.4	123	3.2	1,210
1.7	219		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	27	b28	38	*32	b32	b35	202	548	188	87	37
2	33	27	b35	37		b32	34	188	428	178	84	35
3	33	26	40	35		b32	b34	158	*372	162	75	34
4	33	25	40	b33		b28	b34	168	338	152	69	33
5	37	24	b38			b28	b34	*252	313	*146	82	32
6	34	25	b36		b31	b28	b34	381	398	132	94	31
7	33	26	*b34			b29	b35	548	733	123	104	29
8	32	27	b32			*b30	b36	658	1,050	115	84	28
9	35	28	b30			b31	b36	628	*1,130	104	69	28
10	34	32	b31		33	32	38	673	1,050	91	71	27
11	33	33	32			b32	40	787	998	89	62	27
12	32	37	b32		b31	32	b40	865	975	87	58	26
13	35	40	32			32	40	904	896	78	58	25
14	33	35	b32			32	48	904	833	73	60	25
15	34	38	b31		31		48	703	703	69	58	25
16	34	42	b30		b31		48	505	666	69	58	25
17	33	37	b30	b31	31		58	416	534	69	58	25
18	32	38	b30			b30	51	*376	499	67	58	28
19	31	31	b31		b31		46	459	492	*65	58	52
20	29	34	b32				48	787	479	67	50	52
21	28	38	b33				60	1,010	428	75	44	38
22	29	34	b34			b31	73	1,120	*434	71	42	*34
23	34	34	b35		b30	b32	69	1,040	404	82	*40	32
24	31	34	35			b32	65	1,010	376	118	44	33
25	33	35	33			b31	99	*904	338	188	58	40
26	*34	39	b32			b30	104	673	296	198	96	51
27	27	37	b30		b32	b30	82	534	280	140	60	44
28	25	b35	b28			b31	75	428	249	118	48	44
29	29	b28	b32		-	33	94	404	238	104	44	38
30	27	b28	b36		------	34	155	519	208	91	40	37
31	27	------	40	32	------	b35	------	688	------	87	38	------
Total	991	974	1,024	981	869	959	1,693	18,892	16,686	3,396	1,951	1,015
Mean	32.0	32.5	33.0	31.6	31.0	30.9	56.4	609	556	110	62.9	33.8
Ac-ft	1,970	1,930	2,030	1,950	1,720	1,900	3,360	37,470	33,100	6,740	3,870	2,010

Calendar year 1954: Max 1,000 Min - Mean 112 Ac-ft 81,100
Water year 1954-55: Max 1,130 Min - Mean 135 Ac-ft 98,050

Peak discharge (base, 1,100 cfs).--May 22 (2 a.m.) 1,280 cfs (3.28 ft); June 9 (1 a.m.) 1,430 cfs (3.46 ft).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Mill Creek at Utah-Wyoming State line

Location.--Lat 40°59'30", long 110°50'30", in W½ sec. 17, T. 3 N., R. 10 E., in Utah, on right bank 2,000 ft upstream from State line and 19½ miles southeast of Evanston, Wyo.

Drainage area.--59 sq mi, approximately.

Records available.--October 1949 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 7,860 ft (from river-profile map).

Average discharge.--6 years (1949-55), 33.2 cfs (24,040 acre-ft per year).

Extremes.--Maximum discharge during year, 286 cfs May 13 (gage height, 2.87 ft); minimum, 3.0 cfs Nov. 23, result of freezeup.
1949-55: Maximum discharge, 626 cfs May 3, 1952 (gage height, 4.27 ft); minimum, 0.9 cfs Nov. 11, 1951, result of freezeup.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Three small diversions for irrigation of hay meadows above station.

Rating table, water year 1954-55 except period of ice effect (gage height, in feet, and discharge in cubic feet per second)

0.4	2.0	1.3	50
.5	3.4	1.6	86
.6	5.0	2.0	138
.8	12	2.4	199
1.0	22		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.2	6.5	5.0		(*)			50	89	15	7.1	4.5
2	4.4	6.5	5.6					45	67	14	8.0	4.5
3	4.4	6.2	5.3	6.0				40	62	13	6.2	4.5
4	4.7	5.9	6.2					76	61	12	5.6	4.4
5	4.8	5.6	6.2			5.5		*103	62	*11	6.5	4.2
6	4.8	5.9	5.9				7.2	148	69	8.4	11	4.0
7	4.7	6.2	*6.2					175	103	5.9	14	3.9
8	4.7	5.6				(*)		164	129	5.9	14	3.9
9	5.6	5.6						139	*113	5.6	9.2	3.9
10	5.0	6.5						148	87	5.0	8.4	3.9
11	4.8	6.8		5.0				172	77	5.3	7.7	3.9
12	4.8	7.7						173	73	5.9	6.2	3.7
13	5.9	9.2					8.5	188	63	7.4	5.6	3.4
14	6.2	7.4	5.5					183	65	8.4	5.9	3.4
15	6.5	8.0						130	108	7.7	6.8	3.3
16	6.8	9.2			5.5			92	90	8.0	9.6	3.3
17	6.5	7.4						65	65	10	7.7	3.6
18	5.9	7.4					12	*56	55	9.2	8.0	4.4
19	5.9	6.2		5.0		6.0		67	47	*8.0	12	7.7
20	5.9	6.5						107	41	8.0	8.4	7.4
21	5.9	7.1						129	36	7.4	6.8	5.9
22	5.6	6.2						149	31	8.4	6.2	*5.3
23	5.3	6.5	6.0				16	135	28	10	5.9	4.8
24	6.5	6.5						135	25	12	4.7	5.9
25	7.4	6.5						133	22	14	*5.6	9.2
26	*7.4	6.5		5.5				104	21	17	9.2	11
27	6.5	5.0						85	20	10	6.2	8.8
28	7.1	4.7					30	65	18	8.0	5.3	8.0
29	6.8	4.7	5.0		-			69	17	7.1	4.8	7.1
30	6.8	4.8			------	7.0		76	17	6.5	4.7	6.5
31	6.5	------			------			107	------	6.5	4.5	------
Total	178.3	194.8	171.9	165.5	154.0	185.0	404.5	3,508	1,761	280.6	231.8	158.3
Mean	5.75	6.49	5.55	5.34	5.5	5.97	13.5	113	58.7	9.05	7.48	5.28
Ac-ft	354	386	341	328	305	367	802	6,960	3,490	557	460	314

Calendar year 1954: Max 156 Min 2.7 Mean 18.6 Ac-ft 13,470
Water year 1954-55: Max 188 Min - Mean 20.3 Ac-ft 14,660

Peak discharge (base, 250 cfs).--May 13 (10:30 p.m.) 286 cfs (2.87 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 8 to Jan. 16. No gage-height record Jan. 17 to May 3, May 15; discharge estimated on basis of 2 discharge measurements, weather records, and records for stations on nearby streams.

Bear River above Sulphur Creek, near Evanston, Wyo.

Location.--Lat 41°08', long 110°53', in NW¼NE¼ sec. 6, T. 13 N., R. 119 W., on right bank 2 miles upstream from Myers Bridge, 5¾ miles upstream from Sulphur Creek, and 9½ miles southeast of Evanston.

Drainage area.--282 sq mi.

Records available.--October 1946 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 7,130 ft (from river-profile map). Prior to Oct. 1, 1953, at site 1,200 ft downstream at different datum.

Average discharge.--9 years, 202 cfs (146,200 acre-ft per year).

Extremes.--Maximum discharge during year, 1,280 cfs June 9 (gage height, 4.37 ft); minimum, 4.0 cfs July 19.
1946-55: Maximum discharge, 2,970 cfs June 14, 1953 (gage height, 5.73 ft site and datum then in use); minimum, that of July 19, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas.

Rating table, water year 1954-55, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.4	4	2.5	210
1.5	8	3.0	420
1.6	16	3.5	710
1.8	40	4.0	1,040
2.0	76	4.5	1,380

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	25	25		40	(*)		226	549	76	21	11
2	23	25	35		(*)			217	420	65	20	10
3	24	25	42	42			48	186	*356	54	16	8.0
4	24	24	42					159	338	45	14	7.2
5	25	23			40			223	294	39	14	6.8
6	27	23					50	380	302	50	19	6.4
7	25	23	(*)				50	549	476	45	33	6.0
8	22	23					55	697	886	42	34	5.2
9	29	24					60	658	1,050	39	26	5.2
10	26	27					65	664	938	34	22	6.4
11	25	26					75	782	886	27	21	9.6
12	24	26					75	*924	846	22	17	7.2
13	27	33					75	918	794	18	17	6.0
14	29	33					100	964	704	13	17	5.6
15	29	30	42			43	100	782	639	11	15	5.6
16	29	34					100	514	597	8.8	16	5.2
17	29	36			40		140	420	476	8.0	18	5.6
18	30	36					130	352	405	6.4	18	8.0
19	29	36		40			120	338	375	*4.8	21	18
20	29	32					*177	537	361	4.4	20	29
21	29	34					183	756	302	7.2	15	25
22	29	34					171	1,000	290	14	14	*21
23	29	32					144	976	*273	17	12	20
24	30	32					125	970	258	23	11	21
25	29	30					156	1,010	220	36	*14	26
26	*30	32					162	834	198	87	22	36
27	30	32			43		115	579	168	57	23	36
28	27	25	42				108	430	128	36	17	30
29	29	21			-		139	375	91	25	14	29
30	27	21			------		159	390	80	22	13	27
31	26	------			------		------	561	------	21	12	------
Total	843	857	1,278	1,250	1,129	1,333	3,074	18,371	13,700	957.6	566	443.0
Mean	27.2	28.6	41.2	40.3	40.3	43	102	593	457	30.9	18.3	14.8
Ac-ft	1,670	1,700	2,530	2,480	2,240	2,640	6,100	36,440	27,170	1,900	1,120	879

Calendar year 1954: Max 1,170 Min 5.6 Mean 103 Ac-ft 74,790
Water year 1954-55: Max 1,050 Min 4.4 Mean 120 Ac-ft 86,870

Peak discharge (base, 1,100 cfs).--May 23 (6:30 a.m.) 1,120 cfs (4.14 ft); June 9 (9 a.m.) 1,280 cfs (4.37 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 28 to Apr. 10 (no gage-height record Dec. 25 to Feb. 1, Feb. 10-28; discharge estimated on basis of weather records and records for nearby stations on Bear River). No gage-height record Apr. 11-19; discharge estimated on basis of weather records and records for nearby stations on Bear River.

Sulphur Creek near Evanston, Wyo.

Location.--Lat 41°10', long 110°52', in SE¼ sec. 29, T. 14 N., R. 119 W., on left bank 4.8 miles upstream from mouth and 9 miles southeast of Evanston.

Drainage area.--80.5 sq mi.

Records available.--April 1942 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 7,070 ft (from river-profile map). Prior to June 16, 1948, at datum 2.00 ft higher. June 16, 1948, to Aug. 21, 1952, at datum 1.00 ft higher.

Average discharge.--13 years, 22.8 cfs (16,510 acre-ft per year).

Extremes.--Maximum discharge during year, 467 cfs Apr. 16 (gage height, 4.23 ft); minimum, 0.4 cfs Sept. 15, 17, but may have been less during periods of ice effect or no gage-height record.
1942-55: Maximum discharge, 1,220 cfs Apr. 23, 1952 (gage height, 5.93 ft, present datum); maximum gage height, 6.01 ft Apr. 21, 1948, present datum; no flow Sept. 10, 1949.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas.

Revisions (water years).--WSP 1040: 1943-44.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used July 30 to Sept. 30)

1.3	0.4	2.2	26
1.4	1.1	2.5	50
1.5	2.2	2.9	95
1.6	3.8	3.3	166
1.8	8.1	3.6	236
2.0	15		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	1.4	2.1		a2.8	*2.8	(*)	52	85	8.1	0.8	1.3
2	.8	1.4			*2.8	2.8		49	73	6.2	.8	1.2
3	.8	1.5		b3.0	2.8	3.0	b5.0	39	64	6.2	.6	1.1
4	.8	1.5			2.8	b2.8		*34	69	5.7	.8	1.0
5	.9	1.6			2.7	b2.5		31	49	4.0	.8	1.0
6	.8	1.5			2.8	b2.7	b7.0	31	37	3.2	2.7	1.1
7	.8	1.6	(*)		2.8	3.0	b10	39	23	2.7	2.4	1.2
8	.7	1.9		b2.5	2.8	3.0	b15	30	18	2.8	1.4	1.0
9	1.3	2.0			b2.5	3.2	b20	28	20	2.2	1.1	1.0
10	1.3	2.0			b2.3	3.3	b25	21	20	2.4	1.0	.9
11	1.1	1.9	b2.5		b2.5	3.5	b30	20	23	2.5	1.0	.8
12	1.0	2.8			2.7	b3.5	*b32	*22	22	2.5	1.0	.6
13	1.4	3.8			2.7	b3.5	b50	19	20	1.9	1.2	.5
14	1.3	3.2			2.7	b3.5	b80	23	41	1.6	1.3	.5
15	1.1	3.2		a2.5	2.7	b3.5	131	32	62	1.3	1.2	.4
16	1.1	4.9			2.8		205	31	52	1.5	1.1	.5
17	1.1	4.4			3.0		231	25	50	1.4	1.5	.4
18	1.2	4.2			b3.0		208	19	36	1.4	1.5	.5
19	1.1	4.6			b2.5		*87	17	28	*1.3	1.8	1.1
20	1.0	4.2			b2.3		*94	13	28	1.1	1.8	.6
21	1.0	3.8			b2.3		127	23	25	1.3	1.9	.8
22	1.2	3.8			b2.5	b3.0	*107	38	18	1.6	2.0	*.8
23	1.2	3.8	b3.0		b2.5		73	25	*14	1.9	2.1	.8
24	1.3	3.8			b2.5		70	25	14	1.6	2.0	1.0
25	1.6	3.8			2.5		76	68	12	5.1	*2.8	1.5
26	*1.6	3.8		a2.8	2.4		61	108	11	4.2	3.6	1.5
27	1.5	3.5			2.7		34	66	8.3	2.7	3.5	1.0
28	1.4	b3.0			2.7		45	42	7.9	1.5	2.7	.8
29	1.4	b2.0	b2.5		-	b3.5	59	27	7.4	1.0	2.1	.7
30	1.4	2.1			------	b4.0	50	18	9.6	.7	1.6	.6
31	1.4	------			------	b4.5	------	28	------	.7	1.5	------
Total	35.4	87.0	79.6	83.3	74.1	97.6	1,952.0	1,043	947.2	82.3	51.8	26.2
Mean	1.14	2.90	2.57	2.69	2.65	3.15	65.1	33.6	31.6	2.65	1.67	0.87
Ac-ft	70	173	158	165	147	194	3,870	2,070	1,880	163	103	52

Calendar year 1954: Max 166 Min .6 Mean 12.6 Ac-ft 9,100
Water year 1954-55: Max 231 Min .4 Mean 12.5 Ac-ft 9,040

Peak discharge (base, 300 cfs).--Apr. 16 (10 p.m.) 467 cfs (4.23 ft).
* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for stations on nearby streams.
b Stage-discharge relation affected by ice.

Yellow Creek near Evanston, Wyo.

Location.--Lat 41°09', long 111°03', in SW¼ sec. 21, T. 5 N., R. 8 E., in Utah, on left bank 600 ft downstream from Sage Creek, 1½ miles upstream from Coyote Creek, and 9¾ miles southwest of Evanston.

Drainage area.--80 sq mi, approximately.

Records available.--February 1943 to September 1945, October 1949 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,920 ft (from river-profile map). February 1943 to September 1945 at site 500 ft upstream at different datum.

Average discharge.--8 years, 11.8 cfs (8,540 acre-ft per year).

Extremes.--Maximum discharge during year, 58 cfs May 11 (gage height 2.46 ft); no flow most of year.
1943-45, 1949-55: Maximum discharge, 477 cfs Apr. 28, 1952 (gage height, 7.04 ft); no flow at times.

Remarks.--Records good except those for period of ice effect, which are fair. One small diversion for irrigation of hay meadows above station.

Rating table, water year 1954-55, except period of ice effect (gage height, in feet and discharge, in cubic feet per second)

0.2	0	0.8	5.8
.3	.1	1.0	14
.4	.3	1.2	22
.5	.5	1.5	37
.6	1.6	2.0	50

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							*0	26	7.6	0.4	0	
2					(*)		0	*26	9.5	.4	0	
3							0	22	8.8	.4	0	
4							0	20	8.4	.3	0	
5							0	18	8.8	.2	0	
6							0	35	7.3	.1	0	
7							0	46	5.6	*.3	2.7	
8							0	46	4.6	.5	.4	
9							.5	46	3.8	.1	0	
10							1.0	42	*3.6	.1	0	
11							1.5	*46	6.9	0	0	
12							*2.0	45	5.6	0	0	
13							2.5	40	4.3	0	0	
14							3.0	33	3.6	0	0	
15							10	25	3.6	0	0	
16							30	20	3.0	0	0	
17							50	15	3.0	0	0	
18							35	13	2.1	*0	0	
19							8.0	*12	1.9	0	0	
20							*10	11	1.5	0	0	
21							30	11	3.0	0	0	
22							*25	9.9	3.1	0	0	(*)
23							22	9.5	2.3	0	0	
24							18	8.8	1.9	0	0	
25							28	14	1.4	0	0	
26							33	17	.7	0	*0	
27							17	14	.5	0	0	
28							15	10	.4	0	0	
29							16	9.5	.3	0	0	
30					------		17	7.6	.2	0	0	
31		------			------		------	6.5	------	0	0	------
Total	0	0	0	0	0	0	374.5	704.8	117.3	2.8	3.1	0
Mean	0	0	0	0	0	0	12.5	22.7	3.91	0.09	0.10	0
Ac-ft	0	0	0	0	0	0	743	1,400	233	5.6	6.1	0

Calendar year 1954: Max 21 Min 0 Mean 2.18 Ac-ft 1,580
Water year 1954-55: Max 50 Min 0 Mean 3.29 Ac-ft 2,390

Peak discharge (base, 100 cfs).--No peak above base.
* Discharge measurement or observation of no flow made on this day.
Note.--Stage-discharge relation affected by ice Apr. 9-21.

Bear River near Evanston, Wyo.

Location.--Lat 41°19', long 110°01', in sec. 1, T. 15 N., R. 121 W., on left bank 300 ft upstream from road bridge and 3½ miles northwest of Evanston.

Drainage area.--715 sq mi.

Records available.--October 1913 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,610 ft (from river-profile map).

Average discharge.--42 years, 232 cfs (168,000 acre-ft per year).

Extremes.--Maximum discharge during year, 1,100 cfs June 9 (gage height, 4.40 ft); no flow Oct. 1-4, Sept. 8-24.
1913-55: Maximum discharge, 3,690 cfs June 14, 1921 (gage height, 6.35 ft), from rating curve extended above 2,700 cfs; no flow at times in 1924, 1931, 1933-34, 1939-40, 1942, 1946, 1948, 1954-55.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas.

Revisions (water years).--WSP 1010: 1942-43. WSP 1090: Drainage area.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Dec. 4, 5)

0.4	0	1.5	97
.5	.3	1.9	185
.6	1.1	2.4	318
.7	3.6	2.9	485
.8	7.5	3.5	715
1.0	22	4.1	965
1.2	46		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	11	24		43	15		289	584	29	3.4	0.9
2	0	11	30		(*)	(*)		304	507	19	2.8	.8
3	0	11	38	45			50	267	387	18	2.6	.8
4	0	12	46					232	380	15	3.1	.7
5	.6	12	42		43			237	324	9.2	2.4	.5
6	1.1	12					90	358	289	3.6	2.6	.3
7	2.1	12					125	560	354	4.0	71	.2
8	1.8	12	(*)				136	715	659	5.2	13	0
9	2.4	12					138	715	*907	4.8	10	0
10	2.6	14		43			138	671	898	3.6	7.5	0
11	2.6	18					149	760	828	2.8	5.6	0
12	2.8	15					*158	*860	780	2.6	3.1	0
13	3.1	17					155	872	746	3.1	2.4	0
14	3.1	21					212	898	624	3.1	2.4	0
15	3.4	19					315	804	667	2.8	2.1	*0
16	4.4	23										
17	3.4	30			43	45	390	560	518	2.1	2.4	0
18	3.6	31					607	446	489	1.8	2.6	0
19	5.9	34	45				545	339	394	*1.6	3.1	0
20	6.3	32					428	289	336	1.6	4.4	0
21	7.1	32					*256	367	301	1.4	4.0	0
22	8.6	38										
23	8.6	38		43			374	518	272	1.4	3.6	0
24	9.2	38					367	772	237	1.1	*3.1	0
25	9.7	38					358	868	*209	2.4	2.4	*0
							250	820	178	2.4	2.4	0
							321	916	149	3.4	2.6	.4
26	11	36					306	937	129	3.4	2.6	3.6
27	*13	36			45		229	642	103	11	2.4	6.7
28	12	28					185	467	84	11	2.8	7.1
29	11	24			-		245	358	54	5.6	1.8	6.3
30	10	25			------		229	321	36	3.6	1.1	5.9
31	12	------			------		------	428	------	3.4	.9	------
Total	161.4	692	1,350	1,343	1,210	1,395	6,956	17,591	12,423	183.0	176.2	34.2
Mean	5.21	23.1	43.5	43.3	43.2	45.0	232	567	414	5.90	5.68	1.14
Ac-ft	320	1,370	2,680	2,660	2,400	2,770	13,800	34,890	24,640	363	349	68

Calendar year 1954: Max 1,010 Min 0 Mean 102 Ac-ft 73,670
Water year 1954-55: Max 937 Min 0 Mean 119 Ac-ft 86,310

Peak discharge (base, 1,200 cfs).--No peak above base.
* Discharge measurement or observation of no flow made on this day.
Note.--Stage-discharge relation affected by ice Nov. 30, Dec. 6 to Apr. 6 (no gage-height record Jan. 14 to Feb. 1, Feb. 9 to Mar. 1); discharge estimated on basis of weather records and records for other nearby stations on Bear River.

Chapman Canal at State line, near Evanston, Wyo.

Location.--Lat 41°24', long 110°02', in SE¼ sec. 36, T. 17 N., R. 121 W., on right bank at highway bridge, 6½ miles downstream from headgates and 10 miles northwest of Evanston.

Records available.--October 1945 to September 1955 in reports of Geological Survey. April to September 1942 and May to September 1943 in Upper Bear River Water Commissioner's reports, Utah; April 1944 to September 1948 in Upper Bear River Water Commissioner's reports, Utah; and Bear River Hydrometric Data reports.

Gage.--Water-stage recorder. Prior to Oct. 11, 1946, staff gage at same site and datum.

Average discharge.--10 years (1945-55), 16.5 cfs (11,950 acre-ft per year).

Extremes.--1942-55: Maximum daily discharge observed, 129 cfs Apr. 14, 1946; no flow at times each year.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Canal diverts water from Bear River in NW¼ sec. 36, T. 16 N., R. 121 W. Many diversions above station for irrigation in Wyoming. Flow at station is for storage in Neponset Reservoir, Utah, and irrigation in Saleratus Basin, Utah.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	6.3	8.8			*0	b45	117	76	8.2	0	0
2	0	4.5	11			0	b45	124	76	2.8	0	0
3	0	4.5	17			0	b40	107	67	.8	0	0
4	0	4.7	28			0	b32	*70	67	0	0	0
5	0	5.5	26			0	b32	40	62	0	0	0
6	0	5.2	18			0	b30	42	54	0	0	0
7	0	5.2	23			0	b28	46	54	0	24	0
8	0	5.5	*22			0	b30	46	77	0	11	0
9	0	6.0	19			*0	b40	40	*98	0	2.2	0
10	0	8.2	b15			0	b95	42	100	0	1.6	0
11	0	8.5	b10			0	a95	*49	94	0	.9	0
12	0	8.8	0			0	*90	48	90	0	.4	0
13	0	5.8	0			a5.0	85	46	87	0	0	0
14	0	7.1	0				95	67	84	0	0	0
15	0	8.5	0				113	57	93	0	0	0
16	0	8.5	0				117	46	85	0	0	0
17	0	12	0				122	39	84	0	0	0
18	0	14	0				105	36	74	*0	0	0
19	0	15	0				*93	45	69	0	0	0
20	1.2	20	0			a35	71	56	62	0	0	0
21	1.9	11	0				82	78	54	0	0	0
22	3.0	15	0				82	63	52	0	0	0
23	2.8	16	0				81	55	*60	0	0	*0
24	4.5	18	0				69	49	53	0	*0	0
25	6.0	18	0				82	58	45	0	0	0
26	6.3	17	0				122	74	38	0	0	0
27	*6.8	b15	0				111	72	31	0	0	0
28	6.0	b12	0			45	98	63	23	0	0	0
29	6.3	b10	0		-		109	57	15	0	0	0.1
30	5.2	b8.0	0		- - -		108	54	10	0	0	.9
31	5.5	- -	0		---	*b45	------	63	------	0	0	--- ---
Total	55.5	303.8	197.8	0	0	695.0	2,347	1,849	1,934	11.8	40.1	1.0
Mean	1.79	10.1	6.38	0	0	22.4	78.2	59.6	64.5	0.38	1.29	0.03
Ac-ft	110	603	392	0	0	1,380	4,660	3,670	3,840	23	80	2.0

Calendar year 1954: Max 86 Min 0 Mean 15.3 Ac-ft 11,110
Water year 1954-55: Max 124 Min 0 Mean 20.4 Ac-ft 14,760

* Discharge measurement or observation of no flow made on this day.
a No gage-height record; discharge estimated on basis of records for stations on Bear River near Evanston, and Bear River near Woodruff, Utah.
b Stage-discharge relation affected by ice.

Bear River near Woodruff, Utah

Location.--Lat 41°31'25", long 111°01'00", in SW¼ sec. 20, T. 18 N., R. 120 W., in Wyoming, on left bank 2.8 miles upstream from Wyoming-Utah State line and 7.6 miles east of Woodruff.

Drainage area.--870 sq mi, approximately.

Records available.--April 1942 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,360 ft (from river-profile map).

Average discharge.--13 years, 217 cfs (157,100 acre-ft per year).

Extremes.--Maximum discharge during year, 898 cfs May 26 (gage height, 3.26 ft); no flow Oct. 1-23, Aug. 27 to Sept. 30.
1942-55: Maximum discharge, 3,010 cfs Apr. 28, 1952 (gage height, 5.32 ft); maximum gage height, 5.98 ft Mar. 21, 1951 (ice jam); no flow at times each year 1942-49, 1954-55.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Natural flow of stream affected by diversions for irrigation, including Chapman Canal which carries some water over a low divide for storage in Neponset Reservoir for irrigation in Saleratus Basin, and return flow from irrigated areas.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.45	0	1.5	84
.5	.5	1.8	151
.6	1.5	2.1	248
.7	3.8	2.5	424
.8	6.7	3.0	731
1.0	17	3.3	931
1.2	36		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	5.5	4.0					144	430	29	15	
2	0	5.8	6.0					186	492	20	4.4	
3	0	6.1	8.0				10	180	372	16	.4	
4	0	6.1	10					*168	316	13	.5	
5	0	6.1	10					174	287	12	.6	
6	0	6.1	*8.0				35	230	237	11	.9	
7	0	6.4	8.0			45		368	212	9.3	3.1	
8	0	6.4	7.0					552	295	9.3	4.4	
9	0	7.1	6.0			(*)		640	571	8.4	8.4	
10	0	6.1	8.0				70	608	751	7.1	5.5	
11	0	5.8	8.0					628	712	6.1	3.6	
12	0	7.1	10					712	672	5.8	2.6	
13	0	7.1			43		70	777	634	5.0	2.2	
14	0	7.6					130	744	615	4.7	2.0	
15	0	8.0		43			200	777	653	3.8	1.4	
16	0	9.3					300	634	559	3.6	1.3	
17	0	11					469	*424	492	3.6	2.0	
18	0	9.7					500	332	377	3.3	2.2	
19	0	9.3					350	252	303	3.1	2.0	
20	0	8.4				15	256	223	248	*2.6	1.4	
21	0	7.1					*248	303	234	2.4	1.3	
22	0	7.1	43				295	463	206	2.2	1.2	
23	0	7.1					283	660	*163	2.0	*.8	(*)
24	1.7	7.1					226	672	124	9.5	.5	
25	4.7	8.0					206	*790	98	8.0	.5	
26	3.3	8.0					196	871	86	4.1	.3	
27	3.6	8.0			45		177	679	73	3.1	0	
28	*4.1	6.0					124	469	64	2.2	0	
29	4.4	6.0		(*)	-	5.0	117	324	40	1.3	0	
30	4.7	4.0					144	244	35	1.2	0	
31	5.5							264		.9	0	
Total	32.0	213.4	910.0	1,333	1,210	795.0	4,796	14,492	10,351	213.6	68.5	0
Mean	1.03	7.11	29.4	43	43.2	25.6	160	467	345	6.89	2.21	0
Ac-ft	63	423	1,800	2,640	2,400	1,580	9,510	28,740	20,530	424	136	0

Calendar year 1954: Max 1,010 Min 0 Mean 80.4 Ac-ft 58,230
Water year 1954-55: Max 871 Min 0 Mean 94.3 Ac-ft 68,250

Peak discharge (base, 1,300 cfs).--No peak above base.
* Discharge measurement or observation of no flow made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28 to Apr. 16, Apr. 18, 19 (no gage-height record Dec. 10 to Apr. 12; discharge estimated on basis of 2 discharge measurements, weather records, and records for nearby stations on Bear River).

Woodruff Creek near Woodruff, Utah

Location.--Lat 41°29', long 111°16', in SE¼SE¼ sec. 28, T. 9 N., R. 6 E., on left bank 1¼ miles upstream from Birch Creek and 6 miles southwest of Woodruff.

Drainage area.--65 sq mi, approximately.

Records available.--October 1949 to September 1955 in reports of Geological Survey. October 1937 to September 1943 records for site 1½ miles upstream available in files at Logan project office, Geological Survey, under name of South Fork Woodruff Creek near Woodruff.

Gage.--Water-stage recorder. Altitude of gage is about 6,600 ft (from topographic map).

Average discharge.--6 years (1949-55), 35.8 cfs (25,920 acre-ft per year).

Extremes.--Maximum discharge during year, 240 cfs May 22 (gage height, 4.29 ft); minimum, 5.3 cfs Mar. 31, result of freezeup.
1949-55: Maximum discharge, 528 cfs May 25, 1950 (gage height, 5.72 ft); minimum, 2.9 cfs Mar. 29, 1951, Nov. 9, 1953, result of freezeup.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. No diversion above station.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	9.5			8.2		10	60	71	22	11	9.0
2	12	9.5			8.2		13	57	66	21	10	9.0
3	12	9.0	9.0	b9.0	8.5	a9.0	12	56	63	20	10	9.0
4	14	9.0			b8.0		11	54	64	20	10	9.0
5	15	9.0		a9.0	9.0		15	70	64	19	10	9.0
6	13	9.5	(*)		b8.5	a8.0	14	92	70	18	12	9.0
7	12	9.5			8.5	*8.2	12	111	74	18	12	9.0
8	14	8.5	b9.0		8.5	b8.0	15	132	*74	18	12	8.5
9	16	8.5			b8.5	9.0	20	109	70	16	10	9.0
10	15	10	10			8.2	26	122	64	16	10	9.0
11	12	11	10			7.5	*27	143	60	16	10	9.0
12	13	21	10				24	167	56	16	9.5	9.0
13	16	17	10	a7.0			25	192	53	16	10	9.0
14	15	12	10				34	204	54	15	10	9.0
15	12	10	10				36	166	49	14	10	9.0
16	12	16					33	128	46	15	9.5	9.0
17	12	13			b7.5	b8.5	35	*109	44	14	13	9.5
18	12	12					32	111	40	13	13	9.5
19	12	9.5					28	150	38	13	12	13
20	12	9.0					26	189	37	*13	12	11
21	12	10					*28	186	35	12	10	*10
22	12	8.5				9.5	30	213	33	12	10	9.5
23	10	9.0				9.0	31	184	30	12	10	9.5
24	12	9.0	b8.0			8.2	31	157	29	12	*10	10
25	13	8.2		a7.5	b8.0	8.5	40	130	27	14	9.5	12
26	12	8.2				b8.0	47	107	26	12	9.5	12
27	10	8.5			a9.0	b8.5	40	93	26	12	9.5	10
28	*9.5	7.5		*6.9		b8.5	37	74	25	11	9.5	9.5
29	9.5	b6.5		b6.5	-	8.5	41	68	23	11	9.5	9.5
30	9.5	b6.5		7.2	----	10	49	73	*23	10	9.0	9.5
31	9.5	- - -		7.5	- - -	*10	-----	85	------	10	9.0	- - -
Total	382.0	304.4	269.0	230.6	223.4	267.6	822	3,792	1,434	461	321.5	288.0
Mean	12.3	10.1	8.68	7.44	7.98	8.63	27.4	122	47.8	14.9	10.4	9.60
Ac-ft	760	604	534	457	443	531	1,630	7,520	2,840	914	638	571

Calendar year 1954: Max 138 Min 6.3 Mean 19.2 Ac-ft 13,930
Water year 1954-55: Max 213 Min 6.5 Mean 24.1 Ac-ft 17,440

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for stations on nearby streams.
b Stage-discharge relation affected by ice.

Birch Creek near Woodruff, Utah

Location.--Lat 41°30'00", long 111°17'30", in NE¼ sec. 20, T. 9 N., R. 6 E., on left bank a quarter of a mile downstream from small tributary, 2 miles upstream from mouth, and 7 miles southwest of Woodruff.

Drainage area.--17 sq mi, approximately.

Records available.--October 1949 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,670 ft (from topographic map).

Average discharge.--6 years, 7.61 cfs (5,510 acre-ft per year).

Extremes.--Maximum daily discharge during year, 31 cfs July 10; no flow Oct. 1 to Nov. 4. 1949-55: Maximum discharge, 172 cfs May 22, 1950 (gage height, 3.73 ft); no flow Aug. 26 to Nov. 4, 1954.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. No diversion above station. Flow regulated by 2 small reservoirs 1¼ miles upstream (capacity, 2,430 acre-ft). Birch Creek Reservoir (capacity, 2,260 acre-ft) completed in November 1951.

Rating table, water year 1954-55, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.5	0	1.0	3.8
.6	.1	1.2	8.0
.7	.4	1.4	14
.8	.8	1.8	35
.9	2.1		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0					0.5	5.6	6.5	13	20	0.2
2		0					.6	5.2	6.0	14	20	.1
3		0	0.2				.5	5.8	5.6	15	20	.1
4		0					.5	6.5	5.4	15	20	.1
5		.1					.5	8.7	5.0	17	20	.1
6		.1	(*)				.5	10	4.8	29	20	.1
7		.1					.5	12	4.6	30	20	.1
8		.2					.6	11	*4.4	29	20	.1
9		.2					1.1	10	4.2	28	19	.1
10		.2					1.4	11	4.0	31	19	.1
11		1.4					*1.3	12	3.8	30	19	.1
12		2.6					1.3	12	3.6	29	18	.2
13		.5					1.4	13	3.5	28	18	.6
14		.3					2.3	13	4.0	27	18	.7
15		.3					2.6	11	3.8	26	17	.8
16		.4		0.2	0.3	0.4	2.8	9.9	3.5	26	18	.8
17		.4					3.0	*9.2	3.5	26	17	.8
18		.4	.2				2.8	8.7	3.0	26	16	.8
19		.4					2.4	8.5	2.8	25	15	1.1
20		.4					2.8	9.0	2.6	*25	14	.9
21		.4					*2.4	9.2	2.6	24	14	*.9
22		.4					2.8	9.7	2.4	24	14	.9
23		.4					2.8	9.2	2.8	24	13	.9
24		.4					2.8	9.0	3.3	22	*12	.8
25		.4					3.5	8.7	2.8	21	11	.9
26		.4					4.4	8.0	2.6	20	4.2	.8
27		.3					3.8	7.8	2.4	19	1.8	.8
28	(*)	.2		(*)			3.3	6.9	2.3	19	6.2	.8
29		.1			-		3.8	6.5	7.1	19	.6	.7
30		.2			------		4.6	6.2	*12	19	.4	.7
31		------			------	*.4	------	7.3	------	20	.3	------
Total	0	11.2	6.2	6.2	8.4	12.4	63.6	280.6	124.9	720	445.5	16.1
Mean	0	0.37	0.2	0.2	0.3	0.40	2.12	9.05	4.16	23.2	14.4	0.53
Ac-ft	0	22	12	12	17	25	126	557	248	1,430	884	32

Calendar year 1954: Max 22 Min 0 Mean 3.42 Ac-ft 2,470
Water year 1954-55: Max 31 Min 0 Mean 4.64 Ac-ft 3,360

* Discharge measurement or observation of no flow made on this day.
Note.--No gage-height record Nov. 9-11, Dec. 5 to Mar. 30; discharge estimated on basis of 2 discharge measurements, weather records, and general pattern of low flow. Stage-discharge relation affected by ice Nov. 27 to Dec. 4.

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Big Creek near Randolph, Utah

Location.--Lat 41°37', long 111°15', in SE¼ sec. 10, T. 10 N., R. 6 E., on left bank 3½ miles downstream from main forks and 4¾ miles southwest of Randolph.

Drainage area.--52.2 sq mi.

Records available.--October 1949 to September 1955. March 1939 to September 1944 (fragmentary), at site a quarter of a mile downstream; records not equivalent at times because of two small diversions between sites of irrigation.

Gage.--Water-stage recorder. Altitude of gage is 6,390 ft (from topographic map). March 1939 to September 1944 at site a quarter of a mile downstream at different datum.

Average discharge.--6 years (1949-55), 22.6 cfs (16,360 acre-ft per year).

Extremes.--Maximum discharge during year, 36 cfs May 14 (gage height, 0.87 ft); minimum, 2.4 cfs Mar. 31, but may have been less during periods of ice effect or no gage-height record.
1949-55: Maximum discharge, 146 cfs May 18, 1950 (gage height, 2.46 ft); minimum, 1.6 cfs Mar. 12, 1951 (ice jam upstream).

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. No diversion above station.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.8	7.6					5.8	10	22	*12	9.5	7.6
2	7.6	7.8					6.8	12	20	12	9.2	7.3
3	7.3	7.8		7.0			6.0	12	18	12	8.6	7.3
4	7.3	7.8					6.0	11	18	11	8.3	7.3
5	7.3	8.1	7.0		6.5		6.5	*12	18	11	8.3	7.0
6	7.0	7.8	(*)				6.3	15	17	11	8.9	7.0
7	7.3	8.1					7.0	17	18	11	9.8	7.3
8	7.3	8.3					8.3	23	*18	11	9.2	7.3
9	8.1	8.3					10	23	19	10	8.6	7.3
10	8.1	7.3				(*)	12	23	18	10	8.9	7.3
11	8.1	6.8					10	25	18	10	8.6	7.6
12	7.8	9.2	8.0				8.9	28	17	10	8.6	7.3
13	8.9	8.3		6.0			*9.5	*31	16	9.8	9.8	7.3
14	7.8	7.0					10	35	17	9.5	10	7.3
15	8.1	7.0				6.5	9.5	32	16	8.9	9.8	7.3
16	8.1	7.8			5.5		8.3	28	16	9.2	9.8	7.3
17	7.6	7.6					8.9	26	16	9.8	10	7.6
18	7.3	7.0					8.3	25	15	9.5	9.8	7.6
19	7.0	7.0	6.0				7.3	26	15	10	9.8	9.5
20	7.0	7.0					6.8	28	15	*11	8.6	8.1
21	6.8	6.5					6.3	28	15	12	8.1	*7.6
22	6.5	6.5					6.3	31	14	12	7.8	7.3
23	6.5	6.5					6.0	29	14	12	7.8	7.3
24	7.3	6.3					5.3	28	14	12	*7.8	7.6
25	7.8	7.0			6.0		6.3	26	14	12	8.3	8.6
26	7.6	6.5	6.0	6.5			6.8	24	14	12	8.9	8.3
27	7.8	6.5		(*)	6.5		6.5	23	13	11	8.6	7.6
28	*7.6	6.0					5.8	20	13	10	8.3	7.3
29	7.8	5.5			-		6.0	19	13	10	8.1	7.0
30	7.8	5.5			------	*5.3	7.6	19	13	9.8	7.8	7.0
31	7.8	------			------	5.3	-----	24	------	9.5	7.6	------
Total	234.1	216.4	207.0	196.5	166.5	199.1	225.1	713	484	331	273.2	225.2
Mean	7.55	7.21	6.68	6.34	5.95	6.42	7.50	23.0	16.1	10.7	8.81	7.51
Ac-ft	464	429	411	390	330	395	446	1,410	960	657	542	447

Calendar year 1954: Max 25 Min - Mean 11.1 Ac-ft 8,020
Water year 1954-55: Max 35 Min - Mean 9.51 Ac-ft 6,880

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28 to Dec. 21. No gage-height record Dec. 22 to Mar. 29 (stage-discharge relation affected by ice most of period); discharge estimated on basis of 2 discharge measurements, weather records, and records for stations on nearby streams.

Randolph Creek near Randolph, Utah

Location.--Lat 41°40,30", long 111°14'00", in SW¼ sec. 23, T. 11 N., R. 6 E., on left bank a quarter of a mile downstream from confluence of Old Canyon and New Canyon, half a mile upstream from Randolph Dam, and 2¾ miles west of Randolph.
Drainage area.--30.3 sq mi.
Records available.--October 1949 to September 1955.
Gage.--Water-stage recorder. Altitude of gage is 6,370 ft (from topographic map).
Average discharge.--6 years, 4.64 cfs (3,360 acre-ft per year).
Extremes.--Maximum discharge during year, 8.9 cfs Apr. 8 (gage height, 0.97 ft); minimum, 1.0 cfs Feb. 3.
1949-55: Maximum discharge, 32 cfs Mar. 21, 1951 (gage height, 1.44 ft); minimum, 0.5 cfs Aug. 14, 1953.
Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Several diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1			4.6	4.8	b4.5	4.8	2.1	6.1	*1.9	2.0	4.0
2	3.3			4.8	4.8	b4.5	5.2	2.0	6.1	1.9	1.9	4.0
3	2.6			4.8	4.8	b4.5	4.8	1.9	5.8	1.9	1.8	4.0
4	2.4			4.8	4.4	4.6	4.6	2.0	5.8	2.0	1.7	4.0
5	2.3		5.0	b4.5	4.6	4.6	4.8	*2.3	5.4	3.3	1.7	4.0
6	2.3			4.8	4.6	4.6	5.0	2.2	5.4	3.0	2.0	4.0
7	2.3	2.0		b4.5	4.6	*4.6	5.6	2.7	5.2	1.7	2.1	3.0
8	2.3		*5.2	b4.5	4.6	4.6	6.1	2.6	*5.2	2.3	2.2	1.4
9	2.6		b5.0	b4.5	b4.5	4.6	6.1	3.4	5.4	2.6	2.0	1.5
10	2.7		5.2	4.6	b4.2	4.8	6.3	5.8	3.6	3.1	2.0	1.6
11	2.6		5.4	4.6	b4.0	4.4	5.4	5.8	2.1	4.8	3.4	2.6
12	2.6		5.6	4.6	b4.2	4.6	5.6	5.8	2.2	4.8	4.2	3.6
13	3.1	3.0	5.6	4.6	b4.5	4.4	*5.4	5.6	2.1	4.6	4.2	3.6
14	2.8	4.0	5.4	4.6	b4.8	4.4	5.0	5.6	2.2	4.6	4.2	3.6
15	2.8		5.4	b4.5	5.2	4.4	3.1	5.6	2.1	4.6	4.0	3.6
16	2.8		5.2	4.4	4.8	4.6	2.6	5.4	2.3	4.4	4.2	3.6
17	2.8		b5.0	4.4	4.4	4.6	5.0	5.4	2.6	4.4	4.2	3.1
18	2.7		b4.8		4.2	4.6	5.8	*5.4	2.2	4.4	2.1	3.0
19	2.7		b4.6	4.5	4.4	4.6	5.6	5.6	2.2	4.4	1.8	3.1
20	2.7		b4.5		4.8	4.4	5.8	5.6	2.7	*4.4	1.6	2.8
21	2.7		5.0		4.6	4.6	5.8	5.6	2.6	4.6	1.7	*2.7
22	2.7	5.0	5.0		4.6	4.6	3.8	5.4	2.2	4.6	4.2	2.4
23	2.6		5.4		4.6	b4.5	2.2	5.2	2.1	4.6	4.2	2.4
24	2.4		5.6		4.6	b4.5	2.4	3.6	2.0	4.6	*4.4	2.7
25	1.9		4.8	5.0	4.6	b4.5	2.2	2.8	2.1	4.8	4.4	2.2
26			4.8		4.6	b4.5	2.0	3.3	3.3	4.8	4.4	2.2
27			b4.5		4.6	4.4	2.2	3.4	4.8	4.4	4.2	2.1
28	(*)		b4.5	*5.0	4.4	4.6	2.2	3.4	3.0	3.4	4.0	2.0
29	2.0		4.6	5.2	-	4.8	2.6	3.0	2.1	4.6	4.0	2.1
30			4.6	4.8	------	4.6	2.0	4.2	2.0	4.6	4.0	2.3
31		------	b4.5	4.6	------	4.6	-----	6.8	------	4.0	4.0	------
Total	77.8	111.0	155.2	146.2	127.8	141.1	130.0	129.5	102.9	118.1	96.8	87.2
Mean	2.51	3.70	5.01	4.72	4.56	4.55	4.33	4.18	3.43	3.81	3.12	2.91
Ac-ft	154	220	308	290	253	280	258	257	204	234	192	173

Calendar year 1954: Max 7.8 Min 1.4 Mean 4.02 Ac-ft 2,910
Water year 1954-55: Max 6.8 Min 1.4 Mean 3.90 Ac-ft 2,820

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Oct. 26 to Dec. 7, Jan. 18-27; discharge estimated on basis of 1 discharge measurement, weather records, and records for stations on nearby streams.

Diversions from Bear River between Woodruff and Randolph gaging stations, Utah

Between Woodruff and Randolph gaging stations, 12 canals divert water from Bear River for irrigation. Records available April to September 1950-52, and May to September 1953, 1955, June to September 1954, in reports of Geological Survey. Seasonal records available 1944-47, 1949, in Bear River Hydrometric Data Report. All canals equipped with water-stage recorders. Prior to 1949, 6 canals equipped with staff gages only, which were read at least 3 or 4 times weekly. Records of discharge are combined to show total diverted flow. Records good.

Discharge, in cubic feet per second, 1955

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1	232	824	159	65	15	16	987	1,160	69	22	32
2	263	979	142	72	14	17	849	1,120	67	13	33
3	278	950	129	73	9.7	18	682	1,010	55	9.2	33
4	267	858	116	75	6.9	19	563	819	41	9.1	40
5	258	765	115	74	7.3	20	466	662	42	8.8	38
6	287	666	111	78	8.6	21	493	605	40	11	34
7	406	589	96	78	8.8	22	620	546	40	12	33
8	560	566	90	76	13	23	813	464	37	12	33
9	685	749	84	59	18	24	917	393	46	11	34
10	754	958	75	39	31	25	1,060	327	53	12	36
11	823	1,050	73	18	32	26	1,200	300	47	10	34
12	890	1,110	72	16	33	27	1,230	277	43	11	33
13	976	1,110	76	19	34	28	1,080	264	44	16	33
14	994	1,140	75	23	34	29	898	207	46	15	31
15	1,030	1,180	72	21	32	30	750	178	34	14	31
						31	701	-	51	14	-
Total							22,012	21,824	2,240	986.1	805.3
Mean							710	727	72.3	31.8	26.8
Runoff in acre-feet							43,660	43,290	4,440	1,960	1,600

The period Max - Min - Mean - Ac-ft 94,950

Bear River near Randolph, Utah

Location.--Lat 41°48', long 111°06', in SE¼NE¼ sec. 7, T. 12 N., R. 8 E., on left bank 4.2 miles upstream from Twin Creek, 5.5 miles upstream from Utah-Wyoming State line, and 11 miles northeast of Randolph.

Drainage area.--1,640 sq mi, approximately.

Records available.--December 1943 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,205 ft (from river-profile map).

Average discharge.--11 years (1944-55), 207 cfs (149,900 acre-ft per year).

Extremes.--Maximum discharge during year, 348 cfs Apr. 19 (gage height, 3.53 ft); minimum, 5.2 cfs Sept. 28.
1943-55: Maximum discharge, 2,660 cfs May 8, 1952 (gage height, 8.80 ft); minimum, that of Sept. 28, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Natural flow of stream affected by diversions for irrigation and return from irrigated areas.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.1	4.0	2.0	75
1.2	7.0	2.3	118
1.3	11	2.6	169
1.5	24	3.0	241
1.7	41	3.4	318

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.7	17	9.0					71	146	62	15	28
2	6.7	18	13					68	218	57	15	26
3	6.7	17	16	42		(*)		56	232	51	14	26
4	7.0	16	22				18	44	252	44	13	26
5	7.0	17	22					39	264	37	13	26
6	7.0	18	21	40				36	245	34	13	25
7	7.0	17	20	40			40	36	212	33	16	25
8	7.0	16	*19			50	80	35	169	30	17	24
9	7.4	13	17				110	32	124	28	16	23
10	7.4	13	15				130	34	105	26	38	20
11	7.0	15	18				160	62	85	24	55	11
12	7.4	19	18				200	78	85	22	42	8.6
13	7.8	22	25				*240	52	94	21	41	7.4
14	9.0	17			40		273	56	110	23	40	7.0
15	8.6	16					262	70	124	23	36	6.7
16	8.2	16					236	*96	149	2.	35	6.4
17	7.8	15					214	118	189	18	34	6.4
18	7.8	12					232	110	230	16	34	7.0
19	8.2	11					294	85	260	19	36	7.8
20	8.2	11		40			300	75	243	29	37	6.4
21	7.8	12					252	63	201	*28	37	*6.1
22	9.0	13	38				185	59	164	27	36	6.1
23	15	13				18	128	55	153	28	*35	6.1
24	17	13					116	51	*131	27	35	6.1
25	17	14					136	62	108	30	35	6.4
26	18	17					136	*69	89	30	34	6.7
27	17	17		(*)	50		98	98	82	27	35	6.4
28	17	15					89	149	79	25	36	6.1
29	*17	9.0			-		84	134	76	23	32	5.8
30	16	9.0			------		83	116	73	23	30	5.8
31	16	------			------		------	124	------	18	29	------
Total	316.7	448.0	919.0	1,250	1,150	1,006	4,186	2,233	4,692	904	934	385.3
Mean	10.2	14.9	29.6	40.3	41.1	32.5	140	72.0	156	29.2	30.1	12.8
Ac-ft	628	889	1,820	2,480	2,280	2,000	8,300	4,430	9,310	1,790	1,850	764

Calendar year 1954: Max 250 Min 6.4 Mean 54.6 Ac-ft 39,500
Water year 1954-55: Max 300 Min 5.8 Mean 50.5 Ac-ft 36,540

* Discharge measurement made on this day.

Note.--Stage discharge relation affected by ice Nov. 27 to Apr. 13 (no gage-height record Jan. 8 to Apr. 12; discharge estimated on basis of 2 discharge measurements, weather records, and records for nearby stations on Bear River).

Twin Creek at Sage, Wyo.

Location.--Lat 41°49', long 110°58', in SE¼ sec. 7, T. 21 N., R. 119 W., on left bank at Sage, 5 miles upstream from mouth.

Drainage area.--246 sq mi.

Records available.--April 1943 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,330 ft (from highway map). Prior to Oct. 1, 1945, staff gage at site 0.6 mile upstream at different datum.

Average discharge.--12 years, 20.6 cfs (14,910 acre-ft per year).

Extremes.--Maximum discharge during year, 117 cfs Apr. 15 (gage height, 3.28 ft); minimum, 0.8 cfs Sept. 4.
1943-55: Maximum discharge, 649 cfs Mar. 18, 1947 (gage height, 6.08 ft); minimum, 0.6 cfs Mar. 18, 1953, result of freezeup.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Many diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.5	6.6	3.5					43	43	9.0	4.7	2.7
2	2.7	6.2	3.8			(*)		*45	62	9.4	4.9	2.4
3	3.0	6.2		5.0			6.5	28	60	9.4	4.7	1.5
4	3.3	5.8						21	62	8.3	4.4	1.0
5	3.5	5.8				5.0		27	48	7.6	4.4	1.2
6	4.1	5.8					10	29	35	6.6	4.4	1.2
7	3.8	5.8					13	35	29	6.6	13	1.3
8	3.8	5.8	(*)				17	35	23	6.9	6.2	1.7
9	4.4	8.0					20	31	*13	6.9	5.8	1.7
10	4.7	6.9					25	28	13	6.2	4.4	1.8
11	3.8	5.8	4.0				*28	25	13	4.9	4.4	1.5
12	3.8	8.6					35	20	13	6.2	3.5	1.5
13	4.4	11		4.0	4.5		*47	*16	13	6.2	3.8	2.0
14	3.8	8.0					66	17	14	7.2	4.4	2.0
15	3.5	6.9					94	18	18	6.2	4.9	1.8
16	3.8	7.2					78	18	17	5.2	5.2	2.0
17	3.8	7.2					92	17	28	5.8	5.8	2.4
18	3.5	6.6				5.5	*82	14	23	5.5	5.5	2.7
19	3.5	6.2					72	12	16	5.5	*4.1	4.9
20	3.5	5.8					34	12	14	4.9	3.5	5.8
21	3.8	5.8					*51	12	13	*4.9	3.3	*4.1
22	3.8	5.8					*66	15	11	4.9	3.3	4.7
23	3.9	5.8	5.0				36	15	9.0	5.2	3.3	5.2
24	3.8	5.8					26	16	*9.0	22	2.7	4.9
25	3.3	5.5					60	21	8.6	8.6	2.5	5.5
26	3.5	5.5		4.5		(*)	72	29	8.6	8.0	3.3	7.2
27	3.8	5.2		(*)	5.0		32	25	8.6	5.8	4.1	7.2
28	3.5	4.1					18	18	8.6	5.5	4.1	5.2
29	*4.5	3.0	4.0		-		32	16	8.3	4.7	3.0	4.9
30	7.6	3.0			------	6.2	47	15	9.0	4.1	3.5	4.9
31	6.6	------			------	6.5	------	20	------	3.8	4.1	------
Total	121.3	185.7	128.3	134.5	127.5	169.0	1,185.5	693	650.7	212.0	139.2	96.9
Mean	3.91	6.19	4.14	4.34	4.55	5.45	39.5	22.4	21.7	6.84	4.49	3.23
Ac-ft	241	368	254	267	253	335	2,350	1,370	1,290	420	276	192

Calendar year 1954: Max 55 Min 1.5 Mean 6.80 Ac-ft 4,920
Water year 1954-55: Max 94 Min 1.0 Mean 10.5 Ac-ft 7,620

Peak discharge (base, 200 cfs).--No peak above base.
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 30, Dec. 3 to Apr. 10 (no gage-height record Dec. 23, 24, 27, Jan. 3-26, Mar. 22-25; discharge estimated on basis of weather records and records for stations on nearby streams).

Bear River below Pixley Dam, near Cokeville, Wyo.

Location.--Lat 41°56'20", long 110°59'05", in SE¼SE¼ sec. 25, T. 23 N., R. 120 W., 800 ft downstream from Pixley Dam, 17.5 miles downstream from Twin Creek, and 11 miles south of Cokeville.

Drainage area.--2,040 sq mi, approximately.

Records available.--October 1941 to November 1943, October 1952 to September 1955. Published as "near Cokeville" 1941-43.

Gage.--Water-stage recorder. Altitude of gage is 6,185 ft (from river-profile map). Oct. 1, 1941, to Nov. 30, 1943, at site 200 ft downstream at different datum.

Extremes.--Maximum discharge during year, 382 cfs June 5 (gage height, 5.05 ft); minimum, 7.8 cfs May 14.
1941-43, 1952-55: Maximum discharge, 1,640 cfs Apr. 6 or 7, 1942 (gage height, 8.35 ft, from high-water mark in gage well, site and datum then in use); minimum, 4.6 cfs May 25, 1954.

Remarks.--Records good except those for period of ice effect, which are fair. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas. No diversion between station and Collett Creek Branch of Smiths Fork.

Rating table, water year 1954-55, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used June 1 to July 1)

2.0	7.0	2.7	59
2.1	11	3.0	95
2.2	16	4.0	256
2.4	29	5.0	454

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	28	15					21	12	115	28	37
2	18	28	20					21	*15	69	28	35
3	17	28	25	50		(*)		*20	27	58	27	34
4	17	*28	30				40	20	43	66	32	36
5	17	28	30					20	250	64	41	35
6	17	28	29					20	258	60	29	34
7	17	28	27				60	20	222	57	27	33
8	17	28	*25			55	120	18	164	59	29	33
9	18	26	23				160	16	140	56	32	33
10	18	26	21				180	14	98	51	41	34
11	17	26	25				210	14	39	47	43	32
12	18	26	25				250	12	59	44	66	29
13	18	30	30		48		300	*8.6	56	42	65	28
14	19	34					350	8.6	51	*39	56	26
15	20	33					375	9.0	54	40	55	23
16	20	30					325	9.0	57	39	52	22
17	20	29					287	8.6	59	37	49	21
18	19	28					*280	8.6	67	35	*49	20
19	19	26		48			291	8.6	81	34	46	20
20	20	23					320	8.6	*102	34	47	*21
21	19	23					282	9.0	126	*33	48	21
22	19	23	45				88	9.0	134	34	49	20
23	18	23				30	12	10	125	33	48	20
24	23	24					16	11	107	33	47	20
25	26	24					22	11	90	35	47	19
26	28	25		(*)			21	10	72	37	50	20
27	28	25			55		20	9.8	58	42	51	20
28	28	22					21	10	47	40	47	19
29	28	15			-		21	11	38	35	47	18
30	28	15			------		21	11	86	32	45	18
31	28	------			------		------	12	------	31	41	------
Total	640	780	1,135	1,498	1,365	1,280	4,272	399.4	2,737	1,431	1,362	781
Mean	20.6	26.0	36.6	48.3	48.8	41.3	142	12.9	91.2	46.2	43.9	26.0
Ac-ft	1,270	1,550	2,250	2,970	2,710	2,540	8,470	792	5,430	2,840	2,700	1,550

Calendar year 1954: Max 276 Min 5.2 Mean 54.5 Ac-ft 39,440
Water year 1954-55: Max 375 Min 8.6 Mean 48.4 Ac-ft 35,070

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 27 to Apr. 16.

Bear River above Sublette Creek, near Cokeville, Wyo.

Location.--Lat 42°02'20", long 110°57'05", in SW¼SE¼ sec. 20, T. 24 N., R. 119 W., on left bank 1,500 ft upstream from Sublette Creek and 3¼ miles south of Cokeville.

Drainage area.--2,110 sq mi, approximately.

Records available.--April 1948 to September 1955 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 6,165 ft (from river-profile map).

Average discharge.--7 years, 248 cfs (179,500 acre-ft per year).

Extremes.--Maximum discharge during year, 508 cfs June 5 (gage height, 5.55 ft); minimum, 17 cfs Nov. 28, just prior to ice effect and may have been less during period of ice effect.
1948-55: Maximum discharge, 2,620 cfs May 10, 1952 (gage height, 9.90 ft); minimum, 10 cfs July 8, 1954.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas. No diversion between station and Collette Creek Branch of Smiths Fork.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	34	20					88	64	219	42	43
2	29	35	25					93	*119	162	40	40
3	27	35	30	55				93	181	102	40	40
4	28	*35	33					88	233	102	40	40
5	28	35	33				60	85	376	98	51	40
6	28	35	32			60		78	418	92	44	40
7	27	35	*30					74	355	89	40	38
8	27	35	28				100	68	276	97	40	38
9	30	34	26				140	63	235	96	42	37
10	29	34	25				180	45	206	92	49	37
11	27	33	30			(*)	250	41	127	83	49	37
12	26	36	30				300	39	134	78	66	36
13	28	38	45		50	65	380	*32	133	74	72	34
14	27	39					450	30	127	70	62	32
15	27	39					500	30	129	69	58	30
16	28	37					450	31	130	66	58	29
17	28	35					400	30	134	65	56	29
18	28	34					*317	30	134	64	54	28
19	27	34		50			315	30	148	57	*53	30
20	27	31					339	28	162	55	51	*29
21	27	30					325	27	184	*50	51	29
22	27	30	48				206	29	198	49	51	28
23	27	30					50	32	192	48	51	27
24	27	31				40	46	36	182	46	51	27
25	31	30					65	39	166	49	51	28
26	34	30					66	40	152	49	56	30
27	35	29			60		63	39	134	51	59	29
28	35	26					62	38	123	54	52	27
29	35	20			-		68	39	*110	51	51	26
30	35	20			------		77	41	164	47	50	26
31	34	------			------		------	49	------	44	47	------
Total	908	979	1,251	1,575	1,430	1,565	5,569	1,505	5,426	2,368	1,577	984
Mean	29.3	32.6	40.4	50.8	51.1	50.5	186	48.5	181	76.4	50.9	32.8
Ac-ft	1,800	1,940	2,480	3,120	2,840	3,100	11,050	2,990	10,760	4,700	3,130	1,950

Calendar year 1954: Max 288 Min 13 Mean 64.1 Ac-ft 46,430
Water year 1954-55: Max 500 Min 20 Mean 68.9 Ac-ft 49,860

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28 to Apr. 16 (no gage-height record Jan. 22-25, Feb. 20 to Mar. 10, Apr. 17); discharge estimated on basis of weather records and records for nearby stations on Bear River. No gage-height record Sept. 30; discharge extrapolated.

Smiths Fork near Border, Wyo.

Location.--Lat 42°17', long 110°52', in NW¼ sec. 33, T. 27 N., R. 118 W., on left bank 4½ miles upstream from Howland Creek, 6 miles downstream from Hobble Creek, and 12 miles northeast of Border.

Drainage area.--165 sq mi.

Records available.--May 1942 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,650 ft (from topographic map).

Average discharge.--13 years, 193 cfs (139,700 acre-ft per year).

Extremes.--Maximum discharge during year, 587 cfs June 10 (gage height, 3.56 ft); minimum, 35 cfs Mar. 21 (result of freezeup), but may have been less during periods of no gage-height record.
1942-55: Maximum discharge, 1,360 cfs May 29, 1951 (gage height, 4.56 ft); minimum, that of Mar. 21, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. One small diversion for irrigation of about 150 acres above station.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 26 to Dec. 5)

1.7	54	3.0	358
2.1	118	3.6	605
2.5	205		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	87	74	60					146	402	287	153	97
2	85	74	60					168	405	278	159	94
3	85	73	70	70		60		172	394	265	151	94
4	85	*73	73				55	159	413	259	146	94
5	85	73	66					191	444	253	144	94
6	84	73						259	476	248	144	92
7	84	72	(*)				60	330	506	242	148	90
8	82	72				50	65	372	*546	237	144	90
9	87	72					75	351	574	231	138	90
10	87	72					85	362	569	226	134	90
11	85	72					85	383	564	223	132	90
12	84	74					80	387	551	221	130	89
13	90	74				55	80	398	520	213	132	87
14	85	72					*92	409	*511	205	132	85
15	85	72					96	402	481	*195	126	85
16	84	79	65	60	55		92	344	472	191	130	85
17	85	74					105	*313	456	188	*132	85
18	85	72					105	300	440	188	124	87
19	84	68					97	326	421	186	122	94
20	82	70				50	89	380	409	181	118	*90
21	82	70					94	417	398	186	116	87
22	80	68					97	468	390	195	114	85
23	80	70					96	*464	387	203	110	85
24	80	72				50	90	460	383	203	108	85
25	80	72		(*)			103	440	369	205	112	87
26	80	73					103	413	348	188	108	99
27	78	73	60				92	394	330	177	108	90
28	78	68		55		52	90	358	*313	170	105	89
29	76	60			-		99	337	310	166	101	85
30	76	60	65		------		122	344	300	161	101	84
31	76	------	70		------		------	394	------	157	99	------
Total	2,566	2,141	2,004	1,880	1,540	1,637	2,522	10,641	13,082	6,528	3,921	2,678
Mean	82.8	71.4	64.6	60.6	55	52.8	84.1	343	436	211	126	89.3
Ac-ft	5,090	4,250	3,970	3,730	3,050	3,250	5,000	21,110	25,950	12,950	7,780	5,310

Calendar year 1954: Max 782 Min - Mean 156 Ac-ft 112,600
Water year 1954-55: Max 574 Min - Mean 140 Ac-ft 101,400

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 28 to Dec. 4, Dec. 6 to Mar. 22 (no gage-height record Feb. 24, 25, Feb. 27-to Mar. 1, Mar. 6, 7). No gage-height record Mar. 23 to Apr. 13; discharge estimated on basis of weather records and records for stations on nearby streams.

Bear River below Smiths Fork, near Cokeville, Wyo.

Location.--Lat 42°07'30", long 110°58'20", in SE¼NE¼ sec. 28, T. 25 N., R. 119 W., 1.1 miles upstream from Wyman Dam, 2.8 miles northwest of Cokeville, and 3.8 miles downstream from Smiths Fork.

Drainage area.--2,460 sq mi, approximately.

Records available.--April 1954 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,140 ft (from river-profile map).

Extremes.--Maximum discharge during year, 880 cfs June 5 (gage height, 4.20 ft); minimum, 71 cfs Oct. 4.
1954-55: Maximum discharge, that of June 5, 1955; minimum, 68 cfs Sept. 12, 1954.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

2.2	69	3.4	454
2.4	102	3.8	662
2.7	174	4.1	825
3.0	272		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	97	133	b105	115	130	133	152	265	353	424	137	112
2	85	133	b110	115	b130	b150	163	292	444	344	133	108
3	79	130	135	117	133	*135	171	309	515	272	133	106
4	79	130	137	b110	b130	b130	186	292	578	254	128	106
5	82	*125	135	b105		b125	186	276	721	246	128	106
6	82	125	128	b100		b125	194	317	825	225	125	106
7	85	123	140	b100	b125	b130	213	399	781	203	123	106
8	83	121	*135	b100		b135	246	464	*732	200	125	104
9	90	121	b120	b100		b135	292	459	727	200	128	102
10	95	123	121	b110		140	362	439	705	191	135	100
11	94	123	133	110		137	444	444	641	180	135	100
12	94	130	128			140	495	454	625	180	142	100
13	100	142	121		b130	140	552	*454	620	188	155	100
14	106	140				140	*641	474	583	200	145	100
15	110	142	b125	b110		b135	716	480	588	183	142	100
16	110	145			130	b135	689	449	557	177	145	97
17	110	145			130	b135	667	399	536	169	142	97
18	110	140	b120		b130	b140	578	366	510	163	135	97
19	110	137		b120		b150	541	357	505	155	*133	106
20	110	135		b130		b145	536	376	500	145	128	*99
21	115	135		b125	b125	b140	521	429	510	*150	128	95
22	115	133	b115	b120		147	429	480	526	145	125	95
23	115	135		130		147	250	474	495	145	125	94
24	115	135		128	b130	145	209	454	464	140	125	95
25	119	135	117	b125	133	b140	246	444	444	150	125	99
26	133	135		*b125	130	*b125	265	414	414	150	125	110
27	140	133		b125	133	b125	239	390	380	145	140	115
28	137	123	b110	b125	b130	b130	225	357	*339	147	128	115
29	137	b115		b120	-	140	219	309	313	145	123	115
30	140	106	112	b120	------	150	242	284	348	137	121	117
31	137	------	110	b130	------	150	------	309	------	137	117	------
Total	3,314	3,928	3,737	3,575	3,594	4,274	10,869	12,109	16,279	5,890	4,079	3,102
Mean	107	131	121	115	128	138	362	391	543	190	132	103
Ac-ft	6,570	7,790	7,410	7,090	7,130	8,480	21,560	24,020	32,290	11,680	8,090	6,150

Calendar year 1954: Max - Min - Mean - Ac-ft -
Water year 1954-55: Max 825 Min 79 Mean 205 Ac-ft 148,300

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Bear River at Border, Wyo.

Location.--Lat 42°11', long 111°03', in NE¼NE¼ sec. 15, T. 14 S., R. 46 E., in Idaho, on left bank a quarter of a mile west of Wyoming-Idaho State line, half a mile west of Border, and 2.1 miles upstream from Thomas Fork.

Drainage area.--2,490 sq mi, approximately.

Records available.--October 1937 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 6,051.63 ft above mean sea level, unadjusted.

Average discharge.--18 years, 403 cfs (291,700 acre-ft per year).

Extremes.--Maximum discharge during year, 753 cfs June 6 (gage height, 3.50 ft); minimum, 87 cfs Sept. 10.
1937-55: Maximum discharge, 3,680 cfs May 11, 1952 (gage height, 8.89 ft); minimum daily, 30 cfs Aug. 18-22, 1940.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas.

Rating table, water year 1954-55, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.0	85	2.5	379
1.3	126	3.0	556
1.6	175	3.5	745
2.0	254		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	101	150	115			145	160	268	236	382	144	124
2	91	148	120			165	165	286	293	349	142	117
3	89	*147		125	145	*150	170	302	370	295	142	116
4	90	147				145	180	300	451	254	139	112
5	93	142		115		140	185	282	549	239	132	116
6	100	139	150			140	195	298	726	226	147	107
7	111	139	(*)				210	361	*672	197	144	91
8	93	136		110		145	230	430	653	184	142	90
9	92	134	145		140		270	458	634	182	148	90
10	97	136	145				350	430	623	177	153	90
11	101	137				150	400	430	582	165	153	95
12	97	147					470	*444	541	161	150	98
13	103	153					520	447	556	161	160	97
14	103	152	140	120			600	461	530	175	147	98
15	110	153			140	145	*702	469	534	*163	137	98
16	111	158					706	454	512	160	137	100
17	122	156					702	399	497	153	139	100
18	116	150	135			150	608	361	469	148	*134	100
19	134	148		130		160	549	307	469	142	131	*108
20	129	145			135	155	523	312	458	131	137	105
21	134	144				150	519	339	458	132	136	104
22	139	144	130	140			458	389	451	129	137	104
23	137	142				155	298	396	419	129	134	112
24	137	144					224	349	*399	150	134	114
25	139	144		(*)		150	247	293	386	155	136	112
26	144	144		140	140	140	279	279	367	158	131	124
27	153	147				140	256	270	349	153	142	131
28	155	132				140	234	259	324	150	137	137
29	153	125	125	130	-	150	232	218	300	150	134	142
30	155	115		130	------	160	241	201	298	147	131	139
31	153	------		145	------	160	------	202	------	140	129	------
Total	3,682	4,298	4,200	3,930	3,910	4,625	10,883	10,694	14,106	5,637	4,339	3,271
Mean	119	143	135	127	140	149	363	345	470	182	140	109
Ac-ft	7,300	8,520	8,330	7,800	7,760	9,170	21,590	21,210	27,980	11,180	8,610	6,490

Calendar year 1954: Max 608 Min 65 Mean 209 Ac-ft 151,300
Water year 1954-55: Max 726 Min 89 Mean 202 Ac-ft 145,900

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 29 to Mar. 27 (no gage-height record Jan. 10-24, Feb. 13 to Mar. 4, Mar. 22-25; discharge estimated same as in following note). No gage-height record Mar. 28 to Apr. 14; discharge estimated on basis of weather records and records for station below Smiths Fork near Cokeville.

Thomas Fork near Wyoming-Idaho State line

Location.--Lat 42°24', long 111°01', in NW¼SE¼ sec. 19, T. 28 N., R. 119 W., in Wyoming, on left bank 1.3 miles downstream from Giraffe Creek, 1.5 miles upstream from State line, and 3½ miles northeast of Geneva, Idaho.

Drainage area.--113 sq mi.

Records available.--October 1949 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,290 ft (from topographic map). Prior to Sept. 22, 1950, at datum 0.68 ft higher.

Average discharge.--6 years, 53.5 cfs (38,730 acre-ft per year).

Extremes.--Maximum discharge during year, 152 cfs May 8 (gage height, 3.75 ft); minimum, 5.9 cfs Mar. 20, result of freezeup.
1949-55: Maximum discharge, 869 cfs May 18, 1950 (gage height, 5.55 ft, datum then in use); minimum, 3.8 cfs Mar. 18, 1954, result of freezeup.

Remarks.--Records good except those for periods of no gage-height record, which are fair. No diversion above station.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.6	10	9.9			10	10	46	67	46	17	11
2	9.2	9.9	10			10	11	50	*105	42	17	11
3	9.6	*9.9	11	10		*9.8	10	51	88	41	16	10
4	9.6	10	11			9.2	9.8	46	104	38	15	10
5	9.6	9.9	12			8.4	9.5	56	118	35	15	10
6	9.6	9.9	*12			8.4	9.5	90	131	34	15	9.9
7	9.6	9.9	11			9.6	11	110	119	34	17	10
8	9.6	9.6	10			9.2	13	126	107	33	17	9.9
9	9.6	9.6	9.6			8.9	18	110	100	32	16	9.9
10	9.6	9.6	11			9.2	23	*105	94	31	15	9.9
11	9.6	9.9	11			9.2	21	108	90	29	15	9.9
12	9.6	10	11			9.2	20	105	88	28	14	9.9
13	9.6	11	11			9.2	25	105	84	28	15	9.6
14	9.6	8.9	11			8.9	35	98	86	26	15	9.6
15	9.6	8.4	11	9.5	9.0	8.6	*42	90	81	*26	15	9.2
16	9.9	11	11			8.6	40	78	74	24	*15	9.2
17	9.9	10				8.9	50	68	71	23	16	9.2
18	9.9	11				8.9	41	61	67	23	17	9.6
19	9.9	10				9.2	36	60	65	22	15	*11
20	9.9	9.9				8.9	29	60	62	23	14	12
21	9.9	11				8.6	33	60	60	23	13	11
22	9.9	10				8.9	37	65	57	22	12	11
23	10	11				9.2	34	57	57	25	12	11
24	10	10	10			9.2	31	56	*54	25	12	11
25	10	11		*9.2		8.8	41	56	53	26	12	12
26	10	10		8.9		8.2	46	54	51	24	14	16
27	10	11		8.9		8.0	31	54	48	22	13	14
28	10	11		8.6		8.5	26	50	47	19	12	12
29	10	9.9		8.5	-	9.5	28	48	46	19	11	11
30	10	10		8.8	------	11	40	46	49	18	12	11
31	10	------		9.0	------	10	------	57	------	17	11	------
Total	302.9	303.3	323.5	292.4	252.0	282.0	810.8	2,226	2,323	858	445	320.8
Mean	9.77	10.1	10.4	9.43	9.0	9.10	27.0	71.8	77.4	27.7	14.4	10.7
Ac-ft	601	602	642	580	500	559	1,610	4,420	4,610	1,700	883	636

Calendar year 1954: Max 177 Min 8.1 Mean 29.0 Ac-ft 20,980
Water year 1954-55: Max 131 Min 8.0 Mean 23.9 Ac-ft 17,340

Peak discharge (base, 150 cfs).--May 8 (3 a.m.) 152 cfs (3.75 ft).
* Discharge measurement made on this day.
Note.--No gage-height record Dec. 5, Dec. 17 to Jan. 24, Jan. 29 to Mar. 2, Mar. 25 to Apr. 14; discharge estimated on basis of weather records and records for stations on nearby streams.

Bear River at Harer, Idaho

Location.--Lat 42°11'50", long 111°10'05", in NW¼ sec. 23, T. 14 S., R. 45 E., on right bank 400 ft downstream from Sheep Creek, three-quarters of a mile north of Harer siding on Union Pacific (Oregon Short Line) Railroad, and 5 miles southeast of Dingle.

Drainage area.--2,780 sq mi, approximately.

Records available.--June 1913 to September 1916, January 1919 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,000 ft (from topographic map). Prior to Aug. 24, 1914, staff gage at site 1,500 ft downstream at different datum.

Average discharge.--39 years, 513 cfs (371,400 acre-ft per year).

Extremes.--Maximum discharge during year, 919 cfs Apr. 15; maximum gage height, 4.98 ft June 6; minimum discharge, 104 cfs Sept. 18.
1913-16, 1919-55: Maximum discharge, 4,440 cfs May 7, 1952 (gage height, 11.04 ft); minimum daily, 26 cfs Aug. 21-27, 1934.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Many diversions above station for irrigation.

Cooperation.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project. One discharge measurement was made by Geological Survey engineer in addition to those made by the power company.

Rating table, water year 1954-55, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used June 3-17)

2.6	104
3.0	189
3.5	331
4.0	524
5.0	926

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	110	172	140	140	150	150	195	318	278	372	179	139
2	129	170	140	140	150	150	200	345	325	420	179	133
3	121	167	150	145	155	150	200	365	365	383	182	131
4	*119	172	160	145	155	150	200	376	472	325	184	129
5	119	170	170	145	155	155	200	358	562	299	177	133
6	123	163	170	145	155	155	230	351	743	275	177	152
7	127	161	170	145	150	*150	260	383	*769	258	187	131
8	131	161	170	145	145	150	280	455	747	238	184	112
9	119	*158	170	140	145	150	320	538	*720	230	182	110
10	117	158	170	135	145	150	380	*529	684	225	184	108
11	125	158	165	135	145	155	440	511	671	217	196	108
12	123	163	*165	135	145	160	490	502	607	206	189	112
13	125	170	165	135	140	160	550	502	620	233	194	112
14	127	175	165	135	140	160	708	498	*589	225	*196	114
15	127	175	160	135	140	165	*830	515	571	217	184	*114
16	133	182	160	135	140	170	822	515	562	204	172	114
17	139	179	155	135	145	170	811	472	548	196	172	114
18	147	184	155	135	145	165	762	420	538	192	170	112
19	143	177	150	135	150	165	688	378	520	*196	165	114
20	154	175	145	135	150	165	642	341	543	187	158	*121
21	154	172	145	*138	150	165	629	*345	*515	172	154	115
22	156	170	145	140	145	165	602	379	515	172	150	112
23	165	170	145	140	145	170	493	412	498	167	150	112
24	163	167	145	135	145	175	387	416	480	167	150	119
25	161	167	145	135	145	185	387	362	455	199	152	129
26	161	167	140	140	150	175	376	334	443	199	156	135
27	165	167	140	145	150	165	*358	312	416	199	150	141
28	172	165	140	150	150	155	328	315	387	196	156	145
29	172	163	140	150	-	160	312	290	358	192	152	141
30	177	140	140	150	------	170	305	258	338	189	145	145
31	175	------	140	150	------	175	------	*261	------	187	143	------
Total	4,379	5,038	4,760	4,348	4,125	5,005	13,385	12,354	15,839	7,137	5,269	3,707
Mean	141	168	154	140	147	161	446	399	528	230	170	124
Ac-ft	8,690	9,990	9,440	8,620	8,180	9,930	26,550	24,500	31,420	14,160	10,450	7,350

Calendar year 1954: Max 663 Min 82 Mean 248 Ac-ft 179,600
Water year 1954-55: Max 830 Min 108 Mean 234 Ac-ft 169,300

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 30 to Apr. 13 (no gage-height record Jan. 13-21).

Rainbow inlet canal near Dingle, Idaho

Location.--Lat 42°13'00", long 111°17'30", in SE¼ sec. 3, T. 14 S., R. 44 E., on left bank 1½ miles west of Dingle and 1¾ miles downstream from head at Stewart Dam.

Records available.--October 1945 to September 1955 in reports of Geological Survey. January 1922 to September 1945 in files of Salt Lake City district office, Geological Survey.

Gage.--Water-stage recorder. Altitude of gage is 5,950 ft (from topographic map). Prior to Oct. 1, 1923, at site 300 ft downstream at different datum.

Average discharge.--33 years, 298 cfs (215,700 acre-ft per year).

Extremes.--Maximum discharge during year, 798 cfs Apr. 15 (gage height, 3.54 ft); minimum daily, 13 cfs Sept. 21-23.
1945-55: Maximum discharge, 4,180 cfs May 7, 1952 (gage height, 8.62 ft); minimum daily, 11 cfs for several days in 1954.

Remarks.--Records good except those for periods of ice effect, or indefinite stage-discharge relation, which are fair. Discharge measurements generally made three times a week. Canal diverts from Bear River at Stewart Dam in NE¼ sec. 34, T. 13 S., R. 44 E., for storage in Bear Lake. At times flow in canal is augmented by surplus water from Black Otter Slough about half a mile above station and by seepage and wastage from irrigation lands on both sides of canal.

Cooperation.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project. One discharge measurement made by Geological Survey in addition to those made by the power company.

Rating tables, water year 1954-55, except periods of ice effect and indefinite stage-discharge relation (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 31		Jan. 1 to Sept. 30			
0.5	8	0.6	8	2.1	303
1.0	94	.8	23	2.5	429
1.5	195	1.1	58	3.0	598
		1.4	113	3.5	776
		1.7	187		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	119	98	79	109	115	151	252	18	26	44	57
2	36	122	96	87	118	118	158	270	19	28	45	50
3	56	124	109	90	120	115	156	294	17	34	58	47
4	55	122	132	94	118	111	156	315	24	32	78	48
5	56	126	138	93	113	120	144	318	87	28	85	50
6	56	121	134	92	118	122	158	297	198	50	92	51
7	56	117	132	90	111	113	182	291	300	66	107	41
8	60	115	122	90	107	115	206	331	294	64	122	29
9	62	121	89	87	109	115	243	426	279	58	111	27
10	56	130	71	85	111	115	297	465	255	48	105	27
11	58	140	72	87	109	115	350	384	237	47	129	23
12	65	146	83	87	107	118	410	346	217	43	134	21
13	72	150	87	96	105	120	495	264	184	36	122	22
14	67	156	83	105	102	124	584	255	171	35	120	19
15	67	162	83	105	102	127	718	237	158	43	120	14
16	67	150	80	105	105	131	740	226	154	76	113	15
17	71	140	76	100	107	134	733	200	136	61	105	15
18	83	158	80	98	111	127	708	151	127	54	100	15
19	90	150	72	96	114	122	630	118	122	48	96	16
20	90	146	67	102	118	124	580	88	127	44	94	14
21	96	142	69	102	113	125	566	63	122	44	87	13
22	96	140	72	102	109	127	526	54	105	38	79	13
23	98	136	74	105	98	124	482	63	66	35	78	13
24	100	132	74	96	107	122	371	66	58	32	74	14
25	102	130	72	96	113	141	315	42	54	30	78	15
26	102	132	72	105	111	148	322	26	52	31	83	15
27	102	136	72	107	113	134	334	20	47	31	81	17
28	107	132	78	115	115	115	312	18	42	33	71	21
29	111	107	76	113	-	111	297	18	30	55	68	44
30	111	98	72	113	------	118	264	17	27	58	64	68
31	113	------	74	113	------	134	------	17	------	43	63	------
Total	2,375	4,000	2,709	3,035	3,093	3,800	11,588	5,932	3,727	1,351	2,806	834
Mean	76.6	133	87.4	97.9	110	123	386	191	124	43.6	90.5	27.8
Ac-ft	4,710	7,930	5,370	6,020	6,130	7,540	22,980	11,770	7,390	2,680	5,570	1,650

Calendar year 1954: Max 532 Min 11 Mean 141 Ac-ft 101,900
Water year 1954-55: Max 740 Min 13 Mean 124 Ac-ft 89,740

Note.--Stage-discharge relation affected by ice Jan 5, Feb. 9, 18-19, 27, May. 15-16, 20, 21, 23. Stage-discharge relation indefinite Oct. 1, May 28 to June 1, and Sept. 22-25; discharge estimated on basis of 1 discharge measurement, records of gate changes, and engineer's notes.

Bear River below Stewart Dam, near Montpelier, Idaho

Location.--Lat 42°15'30", long 111°17'30", in NE¼ sec. 34, T. 13 S., R. 44 E., on right bank 300 ft downstream from Stewart Dam and 4½ miles south of Montpelier.

Records available.--October 1945 to September 1955 in reports of Geological Survey. January 1922 to September 1945 in files of Salt Lake City district office, Geological Survey.

Gage.--Water-stage recorder. Altitude of gage is 5,950 ft (from topographic map).

Average discharge.--33 years, 70.8 cfs (51,260 acre-ft per year).

Extremes.--Maximum discharge during year, 29 cfs May 12 (gage height, 1.32 ft); minimum, 2 cfs Apr. 12.
1923-55: Maximum daily discharge, 3,050 cfs June 3, 1923; minimum daily, 1 cfs for several days in 1931, 1934, 1940, 1948.

Remarks.--Records good. Discharge measurements generally made once each week. Water diverted at Stewart Dam for storage and regulation in Bear Lake. Many diversions above station for irrigation.

Cooperation.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project. One discharge measurement made by Geological Survey in addition to those made by the power company.

Rating table, water year 1954-55, (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Dec. 30, Aug. 3 to Sept. 30)

0.7	2.7
.8	4.5
1.0	12
1.3	29

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	11	4	6	7	7	11	11	5	13	19	25
2	9	10	4	6	7	7	10	11	6	13	19	25
3	10	10	6	6	a7	7	10	12	6	14	21	23
4	10	11	6	6	a7	7	10	13	10	14	23	23
5	9	11	5	6	a7	8	10	13	12	13	23	23
6	10	10	5	6	a7	8	10	13	11	16	24	23
7	9	10	5	6	a7	8	8	12	14	18	23	23
8	10	10	5	6	7	8	10	13	14	19	25	21
9	10	10	5	6	8	8	11	13	14	19	25	18
10	10	10	5	6	a8	8	14	11	14	19	25	14
11	10	10	5	6	a8	7	13	14	14	18	26	10
12	10	10	5	6	a7	8	12	20	14	16	27	6
13	10	10	5	6	a7	8	16	24	13	16	27	7
14	10	11	6	6	7	8	23	24	12	16	27	4
15	10	11	6	6	7	9	22	24	12	16	27	3
16	10	13	6	6	7	9	21	23	12	15	27	3
17	11	18	a6	7	6	9	20	23	12	15	26	3
18	11	15	a6	a7	6	9	18	22	13	14	26	3
19	11	14	a6	a7	7	9	16	23	13	12	26	3
20	11	13	a6	a6	7	9	15	21	13	10	25	3
21	11	13	a6	a6	7	10	14	22	13	8	25	3
22	12	13	6	6	7	10	14	25	12	6	25	3
23	12	13	6	a6	7	9	13	26	13	6	24	3
24	13	13	6	a7	7	10	12	27	14	a6	24	3
25	12	12	6	7	7	9	11	25	14	a7	24	3
26	12	8	6	a7	7	10	11	14	14	7	24	3
27	12	4	6	a7	7	10	11	7	14	9	25	3
28	12	4	6	a7	7	10	11	6	14	12	25	5
29	11	4	6	a7	-	10	10	6	14	20	26	6
30	11	4	6	a7	- - - -	10	10	5	13	21	25	8
31	11	- - -	6	7	- - - -	10	- - - - -	5	- - - - - -	20	25	- - - - -
Total	329	316	173	197	197	269	397	508	369	428	763	303
Mean	10.6	10.5	5.6	6.4	7.0	8.7	13.2	16.4	12.3	13.8	24.6	10.1
Ac-ft	653	627	343	391	391	534	787	1,010	732	849	1,510	601

Calendar year 1954: Max 28 Min 4 Mean 12.3 Ac-ft 8,920
Water year 1954-55: Max 27 Min 3 Mean 11.6 Ac-ft 8,430

a No gage-height record; discharge estimated on basis of 1 discharge measurement, weather records, and records for nearby stations.

Montpelier Creek at irrigators weir, near Montpelier, Idaho

Location.--Lat 42°20', long 111°14', in SE¼ sec. 31, T. 12 S., R. 45 E., on right bank 3 miles east of Montpelier and 3½ miles downstream from South Fork.

Drainage area.--50.9 sq mi.

Records available.--December 1942 to September 1955.

Gage.--Water-stage recorder and sharp-crested weir. Altitude of gage is 6,210 ft (from topographic map).

Average discharge.--12 years (1943-55), 22.2 cfs (16,070 acre-ft per year).

Extremes.--Maximum discharge during year, 54 cfs June 4 (gage height, 0.93 ft); minimum, 1.9 cfs Dec. 14, result of freezeup.
1942-55: Maximum discharge, 224 cfs May 18, 1950 (gage height, 2.91 ft); minimum, 1.4 cfs Feb. 22, 1951, result of freezeup.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. One small diversion above station for irrigation.

Rating tables, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 27 to Dec. 6 and Mar. 4 to Apr. 15)

Oct. 1 to Apr. 15		Apr. 15 to Sept. 14				Sept. 14-30	
0.4	3.7	0.2	5.5	0.6	25	0.8	5.1
.7	6.8	.3	9.0	1.0	55	.9	6.6
1.3	17	.4	14			1.1	9.8

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.7	7.1	5.4	6.0		6.0	6.2	22	*26	24	11	6.9
2	7.6	7.1	6.0	6.5		6.5	7.0	21	37	22	10	6.9
3	7.6	*7.1	7.0	6.5		6.0	6.4	22	39	21	9.9	6.9
4	7.4	7.0	7.4	6.0		*5.7	6.1	21	52	19	10	6.6
5	7.6	7.1	7.1	5.5		b5.0	5.9	22	48	19	9.9	6.6
6	7.6	7.1	*6.3	4.5		b4.5	6.0	25	46	19	9.9	6.6
7	7.6	7.1	6.7	4.0		5.6	6.4	26	44	18	11	6.6
8	7.6	7.0	6.2	4.0		5.6	7.4	26	43	18	11	6.2
9	7.6	7.1	5.3	4.5		5.5	9.7	28	42	18	10	6.2
10	7.7	7.1	6.7	6.0		5.8	12	*26	41	17	9.4	6.6
11	7.7	7.1	6.2	6.2		5.6	12	26	39	16	9.0	6.6
12	7.7	8.3	6.6	6.1		5.5	10	26	38	16	9.0	6.6
13	8.6	8.5	6.5	5.9		5.5	13	26	37	16	9.4	6.6
14	8.2	7.7	6.2	6.0		5.4	16	26	37	15	9.9	*6.6
15	7.8	7.6	6.4	5.8	5.5	5.2	*19	26	36	*14	*9.4	6.4
16	7.8	8.8	5.8	6.1		b5.0	19	24	34	13	9.9	6.6
17	7.7	8.5	5.5	6.0		b4.5	22	23	33	13	11	6.8
18	7.6	7.7	5.4	5.5		b5.0	21	22	32	13	9.4	7.0
19	7.6	7.4	5.3	6.0		5.4	19	22	31	14	9.0	7.7
20	7.6	7.1	5.5	6.1		5.1	16	23	28	15	9.0	7.7
21	7.4	7.1	5.6	6.1		b4.8	17	23	26	14	8.3	7.5
22	7.4	7.0	5.8	5.9		5.4	18	24	26	13	8.3	7.4
23	7.6	7.0	6.0	6.0		5.2	18	22	26	13	8.0	7.4
24	7.8	7.0	6.2	*6.1		5.3	17	22	*25	14	8.0	7.7
25	8.2	7.0	6.4	6.0		5.1	19	22	25	15	9.0	8.5
26	8.0	7.0	5.8	5.9		b5.0	19	22	24	14	9.4	9.5
27	7.7	6.9	3.8	5.9		b4.5	16	23	24	13	9.4	8.5
28	7.4	6.4	3.5	b5.0		5.2	15	22	24	12	8.6	8.0
29	7.2	5.6	4.0	b5.0	-	5.7	17	21	24	12	8.0	7.5
30	7.2	6.0	4.5	b5.5	-------	6.7	20	*21	24	11	7.6	7.5
31	7.2	- - -	5.5	6.0	-------	6.0	- -----	25	------	11	7.2	------
Total	237.4	516.5	180.6	176.6	154	167.3	416.1	730	1,011	482	288.9	214.2
Mean	7.66	7.22	5.83	5.70	5.5	5.40	13.9	23.5	33.7	15.5	9.32	7.14
Ac-ft	471	429	358	350	305	332	825	1,450	2,010	956	573	425

Calendar year 1954: Max 39 Min 3.5 Mean 12.1 Ac-ft 8,750
Water year 1954-55: Max 52 Min 3.5 Mean 11.7 Ac-ft 8,480

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Dec. 28 to Jan. 9, Feb. 1 to Mar. 3; discharge estimated on basis of weather records and records for stations on nearby streams.

Bear Lake at Lifton, near St. Charles, Idaho

Location.--Lat 42°07'20", long 111°19'20", in NE¼ sec. 16, T. 15 S., R. 44 E., in Lifton pumping plant of Utah Power & Light Co., 3½ miles east of St. Charles.

Records available.--October 1903 to June 1906 (gage heights only), October 1945 to September 1955. January 1921 to September 1945 (elevations only) in files of Salt Lake City district office, Geological Survey. Published as Bear Lake at Fish Haven 1903-6.

Gage.--Water-stage recorder. Datum of gage is 5,900 ft above mean sea level, unadjusted (levels by Utah Power & Light Co.). October 1903 to June 1906 staff gage at different site and datum.

Extremes.--Maximum contents during year, 808,900 acre-ft June 20-22 (gage height, 14.82 ft); minimum, 619,200 acre-ft Sept. 30 (gage height, 11.96 ft).
1921-55: Maximum contents, 1,423,000 acre-ft June 10, 1923 (gage height, 23.68 ft); no usable contents Nov. 9-19, 1935 (gage height, 2.00 ft, lower limit of pumps).

Remarks.--Outflow regulated by gates and pumps at Bear Lake and by gates in dike at north end of Mud Lake. Inflow to lake augmented by water diverted from Bear River through Rainbow inlet canal and Dingle inlet canal, which empty into Mud Lake (see p. 37). Water from Mud Lake reaches Bear Lake by a sluice at pumping plant or by gates in causeway at south end of Mud Lake. Capacity, 1,421,000 acre-ft between gage height 2.00 ft (lower limit of pumps) and 23.65 ft (present feasible upper limit of storage with existing facilities). Storage water used for irrigation and power development.

Cooperation.--Gage heights furnished by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project. Contents computed by Geological Survey from capacity table based on data furnished by Utah Power & Light Co.

Capacity table, water year 1954-55 (gage height, in feet, and contents, in acre-feet)

11.0	556,700
12.0	621,800
13.0	687,500
14.0	754,000
15.0	821,000

Contents, in thousands of acre-feet, at 10 a.m., water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	701.4	690.1	691.5	694.8	705.3	729.8	753.3	791.5	800.9	803.6	714.7	675.0
2	700.0	689.5	691.5	694.8	705.3	731.3	754.0	792.2	802.9	802.2	712.7	674.3
3	699.4	689.5	691.5	695.4	706.6	731.9	754.7	792.9	804.2	800.2	711.3	673.0
4	698.1	688.8	691.5	696.1	708.0	732.6	754.7	794.2	804.2	800.2	709.3	671.7
5	696.7	688.8	692.8	696.7	709.3	733.2	755.3	794.9	804.2	797.6	707.3	670.3
6	695.4	688.2	692.8	696.7	710.6	733.9	755.3	796.2	804.2	795.5	706.0	670.3
7	694.1	688.2	693.4	697.4	712.0	734.6	756.0	797.6	804.9	794.2	704.7	669.0
8	692.8	688.2	693.4	698.1	712.7	735.2	756.7	798.9	805.6	792.2	704.0	667.7
9	692.8	688.2	693.4	698.1	713.3	735.9	756.7	799.6	806.3	790.8	702.0	666.4
10	692.8	687.5	693.4	698.1	714.7	737.9	757.4	800.9	806.9	788.8	700.7	663.7
11	692.8	687.5	694.1	698.7	715.3	738.6	757.4	801.6	807.6	786.2	699.4	660.4
12	692.8	687.5	694.1	698.7	716.0	739.9	758.0	802.2	807.6	782.8	697.4	656.5
13	692.8	687.5	694.1	699.4	716.6	740.6	759.4	803.6	808.3	778.1	696.1	653.2
14	692.8	687.5	694.1	699.4	717.3	741.3	760.7	803.6	808.3	776.8	695.4	649.3
15	692.1	687.5	694.1	700.0	718.6	741.9	761.4	803.6	807.6	774.1	694.1	646.0
16	691.5	687.5	694.1	700.7	719.3	742.6	764.0	804.2	806.9	770.8	692.8	642.7
17	691.5	688.8	694.1	700.7	719.9	743.3	766.7	805.6	806.9	767.4	692.8	639.4
18	690.8	689.5	694.1	700.7	720.6	744.0	770.1	806.3	807.6	763.4	692.8	635.6
19	690.1	689.5	694.1	700.7	721.9	744.6	772.1	806.9	808.3	759.4	692.1	632.3
20	690.1	689.5	694.1	701.4	722.6	745.3	773.4	806.9	808.9	756.0	691.5	630.3
21	689.5	690.1	694.1	701.4	723.3	746.0	776.8	806.9	808.9	752.0	690.1	629.0
22	689.5	690.1	694.1	702.0	724.0	747.3	778.8	806.9	808.9	747.3	688.8	625.7
23	689.5	690.8	694.1	702.0	724.0	748.6	778.1	806.3	808.3	743.3	686.8	625.0
24	690.1	690.8	694.1	702.7	724.6	750.0	781.5	806.3	807.6	738.6	684.9	623.1
25	690.8	691.5	694.1	702.7	724.6	750.6	784.2	805.6	807.6	733.9	683.5	623.1
26	690.8	691.5	694.1	703.3	725.3	751.3	786.8	804.9	806.9	729.3	690.9	623.1
27	690.8	691.5	694.1	703.3	726.6	752.0	788.2	804.9	806.3	726.6	679.6	623.1
28	690.8	691.5	694.1	704.0	728.6	752.0	789.5	804.2	805.6	724.0	678.9	623.1
29	690.8	691.5	694.1	704.0	-	752.7	790.2	803.6	805.6	721.3	678.3	621.8
30	690.1	691.5	694.1	704.0	-------	753.3	790.8	802.2	804.9	719.3	676.9	619.2
31	690.1	-------	694.8	704.7	-------	753.3	-------	801.6	-------	716.6	675.6	-------
(†)	13.04	13.06	13.11	13.26	13.62	13.99	14.55	14.71	14.76	13.44	12.82	11.96
(‡)	-11.9	+1.4	+3.3	+9.9	+23.9	+24.7	+37.5	+10.8	+3.3	-88.3	-41.0	-56.4

Calendar year 1954: (‡) -166.6
Water year 1954-55: (‡) -82.8

† Gage height in feet, at end of month.
‡ Change in contents, in thousands of acre-feet.

Bear Lake outlet canal near Paris, Idaho

Location.--Lat 42°13'00", long 111°20'30", in SW¼ sec. 8, T. 14 S., R. 44 E., on right bank 2,000 ft downstream from head (at dike) and 3 miles southeast of Paris.

Records available.--October 1945 to September 1955 in reports of Geological Survey. January 1922 to September 1945 in files of Salt Lake City district office, Geological Survey.

Gage.--Water-stage recorder. Altitude of gage is 5,920 ft (from topographic map).

Average discharge.--33 years, 348 cfs (251,900 acre-ft per year).

Extremes.--Maximum discharge during year, 1,380 cfs July 19; maximum gage height, 18.41 ft July 26; minimum daily discharge, 2 cfs for many days.
1922-55: Maximum daily discharge, 1,870 cfs Aug. 8, 1924; minimum daily, 1 cfs for many days in 1937 and 1954.

Remarks.--Records good except those for periods of indefinite stage-discharge relation or no gage-height record, which are fair. Discharge measurements generally made six times a week during period of release from Bear Lake.

Cooperation.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project. Two discharge measurements made by Geological Survey in addition to those made by the power company.

Rating table, water year 1954-55, except period of indefinite stage-discharge relation (gage height, in feet, and discharge, in cubic feet per second) (Shifting-control method used Oct. 1-5, May 19-22, 25-27, June 14-24, June 29 to July 3, July 19-24, Sept. 14-15)

12.3	2	14.0	176
12.4	6	15.0	365
12.6	17	17.0	896
13.0	48	18.5	1,380
13.5	104		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	257	17	3	2	2	2	2	2	68	666	1,180	501
2	259	17	3	2	2	2	2	2	12	660	912	484
3	257	17	3	2	2	2	2	2	12	671	893	576
4	259	17	3	2	2	2	2	2	12	674	890	554
5	188	17	3	2	2	2	2	2	12	685	893	649
6	82	16	3	2	2	2	2	2	12	788	921	646
7	85	16	3	2	2	2	2	2	12	933	949	713
8	59	16	3	2	2	2	2	2	12	933	830	757
9	20	16	3	2	2	2	2	2	12	995	696	810
10	20	16	3	2	2	2	2	2	12	1,090	688	921
11	20	16	3	2	2	2	2	2	12	1,150	677	992
12	20	16	3	2	2	2	2	2	12	1,270	668	622
13	20	15	3	2	2	2	2	2	202	1,310	556	246
14	20	15	3	2	2	2	2	2	465	1,290	418	752
15	20	15	3	2	2	2	2	2	481	1,260	414	896
16	20	15	3	2	2	2	2	2	400	1,240	253	972
17	19	15	2	2	2	2	2	2	161	1,250	30	1,080
18	19	15	2	2	2	2	2	107	33	1,260	148	1,030
19	19	15	2	2	2	2	2	329	30	1,310	414	759
20	19	15	2	2	2	2	2	350	139	1,330	542	211
21	19	15	2	2	2	2	2	359	331	1,370	544	217
22	19	8	2	2	2	2	2	350	338	1,370	540	505
23	18	2	2	2	2	2	2	354	445	1,370	532	510
24	18	2	2	2	2	2	2	383	534	1,360	530	527
25	18	2	2	2	2	2	2	398	537	1,350	378	270
26	18	2	2	2	2	2	2	418	550	1,330	168	18
27	18	3	2	2	2	2	2	416	599	1,360	202	14
28	18	3	2	2	2	2	2	427	677	1,330	199	143
29	18	3	2	2	-	2	2	427	668	1,330	309	370
30	17	3	2	2	------	2	2	414	663	1,310	479	430
31	17	------	2	2	------	2	------	273	------	1,310	513	------
Total	1,880	360	78	62	56	62	60	5,039	7,453	35,555	17,366	17,175
Mean	60.6	12.0	2.5	2.0	2.0	2.0	2.0	163	248	1,147	560	572
Ac-ft	3,730	714	155	123	111	123	119	9,990	14,780	70,520	34,440	34,070

Calendar year 1954: Max 1,300 Min 1 Mean 302 Ac-ft 218,400
Water year 1954-55: Max 1,370 Min 2 Mean 233 Ac-ft 168,900

Note.--No gage-height record Nov. 9 to May 17; discharge estimated on basis of 8 discharge measurements, records of headgate changes, and field notes. Stage-discharge relation indefinite Oct. 9 to Nov. 8, May 18, June 2-13; discharge computed on basis of 5 discharge measurements, record of headgate settings, and field notes.

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Georgetown Creek near Georgetown, Idaho

Location.--Lat 42°30', long 111°19', in NE¼ sec. 4, T. 11 S., R. 44 E., on left bank 150 ft downstream from Little Right Hand Fork and 3 miles northeast of Georgetown.

Drainage area.--22.2 sq mi.

Records available.--October 1911 to September 1914 (fragmentary), November 1939 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,350 ft (from topographic map). October 1911 to September 1914 staff gage at site 0.7 mile downstream at different datum.

Average discharge.--15 years (1940-55), 31.0 cfs (22,440 acre-ft per year).

Extremes.--Maximum discharge during year, 37 cfs June 13 (gage height, 2.00 ft); minimum daily, 20 cfs Feb. 3-6, Mar. 10.
1911-14, 1939-55: Maximum discharge observed, 162 cfs June 8, 1912; minimum daily, 18 cfs for many days February to May 1941.

Remarks.--Records good. No diversion above station. At one time a small storage reservoir was operated about 1½ miles above station but dam is now breached and no longer operative.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

1.7	20
1.8	25
1.9	32
2.0	41

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	26	26	23	21	21	22	22	*31	35	32	30
2	28	26	26	23	21	21	22	22	33	35	32	30
3	27	*26	26	23	20	21	22	22	32	35	32	30
4	27	26	26	23	20	*21	22	22	31	35	32	30
5	27	26	25	23	20	21	21	22	31	35	32	30
6	27	26	*25	23	20	21	21	22	31	35	32	30
7	27	26	25	23	21	21	22	22	32	35	32	30
8	27	26	25	22	21	21	22	22	34	35	32	29
9	27	26	25	22	21	21	22	*22	35	35	31	29
10	28	26	25	22	21	20	22	22	35	34	31	29
11	27	26	25	22	21	21	22	22	35	34	31	29
12	27	26	25	22	21	21	22	22	35	34	31	29
13	27	26	25	22	21	21	22	23	35	33	31	29
14	27	26	24	22	21	21	22	23	36	33	31	29
15	27	26	24	22	21	21	*22	25	36	33	*31	29
16	27	26	24	22	21	21	22	25	35	33	31	29
17	27	26	24	22	21	21	22	25	35	33	30	29
18	27	26	24	22	21	21	21	25	35	33	30	29
19	27	26	24	22	21	21	21	26	35	33	30	*29
20	27	26	24	22	21	21	21	26	35	33	30	29
21	26	26	24	22	21	21	21	26	35	32	30	29
22	26	26	24	22	21	21	21	27	35	32	30	29
23	26	26	24	22	21	21	21	28	35	33	30	28
24	26	26	24	*22	21	21	21	28	35	34	30	28
25	26	26	24	21	21	22	21	28	35	33	31	28
26	26	26	24	21	21	22	21	28	35	33	30	28
27	26	26	24	21	21	22	21	30	35	32	30	28
28	26	26	24	21	21	22	21	30	*35	32	30	28
29	26	26	24	21	-	22	21	30	35	32	30	28
30	26	26	24	21	------	22	21	30	35	32	30	28
31	26	------	23	21	------	22	------	31	------	32	30	------
Total	829	780	760	682	584	657	645	778	1,027	1,038	955	869
Mean	26.7	26.0	24.5	22.0	20.9	21.2	21.5	25.1	34.2	33.5	30.8	29.0
Ac-ft	1,640	1,550	1,510	1,350	1,160	1,300	1,280	1,540	2,040	2,060	1,890	1,720

Calendar year 1954: Max 35 Min 23 Mean 27.3 Ac-ft 19,730
Water year 1954-55: Max 36 Min 20 Mean 26.3 Ac-ft 19,040

* Discharge measurement made on this day.

Bear River at Soda Springs, Idaho

Location.--Lat 42°36'50", long 111°35'00", in NW¼ sec. 29, T. 9 S., R. 42 E., on left bank 800 ft upstream from Bailey Creek road bridge and 2 miles south of Soda Springs.

Records available.--May to September 1896; May and June 1898; October 1953 to September 1955. 1944-49, 1950-53 (irrigation season only) in reports on Bear River hydrometric data (Geological Survey open-file report).

Gage.--Water-stage recorder. Altitude of gage is 5,760 ft (from topographic map). May 25 to Oct. 2, 1896, May 22 to July 1, 1898, staff gage at different datum. 1944-49, 1950-53, water-stage recorder at site 800 ft downstream at different datum.

Extremes.--Maximum discharge during year, 1,450 cfs July 13 (gage height, 4.84 ft); minimum daily, 88 cfs Nov. 29.
1896, 1898, 1944-49, 1950-55: Maximum discharge, 6,380 cfs June 9, 15, 1896 (gage height, 8.40 ft, datum then in use); minimum daily, that of Nov. 29, 1954.

Remarks.--Records good except those for periods of ice effect, which are fair. Many diversions above station for irrigation. Flow regulated by storage in Bear Lake.

Cooperation.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project. Two discharge measurements were made by Geological Survey in addition to those made by the power company.

Rating tables, water year 1954-55, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 31				Jan. 1 to Sept. 30			
2.1	76	3.0	303	2.2	87	3.5	535
2.4	121	3.5	528	2.6	170	4.0	835
2.7	200			3.0	304	5.0	1,560

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	111	146	121	115	125	105	160	320	546	936	1,360	562
2	296	146	146	115	125	*100	160	354	540	929	1,220	562
3	331	148	125	115	125	100	137	375	514	943	1,000	557
4	339	143	123	120	130	100	147	371	540	936	936	623
5	343	*141	134	120	130	100	149	329	499	936	929	688
6	311	139	146	115	130	95	187	312	473	*895	922	688
7	197	141	146	115	130	95	182	304	449	943	956	694
8	176	139	136	120	120	95	199	304	449	1,040	977	744
9	170	136	101	120	110	100	248	*252	406	1,060	882	795
10	132	134	*120	120	110	115	320	228	406	1,180	763	855
11	119	132	120	120	110	125	434	231	402	*1,240	*738	1,020
12	118	139	130	110	110	125	519	218	388	*1,310	731	1,030
13	125	146	135	110	105	125	664	225	366	1,420	750	725
14	125	141	135	110	105	120	782	234	478	1,410	664	345
15	121	143	130	110	105	110	862	252	*756	1,400	525	719
16	121	167	130	110	105	105	744	266	789	1,360	519	889
17	121	156	125	115	110	105	*652	266	731	1,340	425	1,000
18	121	146	120	115	125	105	557	248	589	1,320	212	1,100
19	121	165	120	115	130	105	493	296	449	1,310	167	1,090
20	121	167	120	*120	130	105	449	551	393	1,320	454	848
21	119	162	120	120	125	105	420	*595	416	1,350	578	429
22	119	159	120	120	120	100	397	629	612	1,350	578	234
23	121	159	115	120	115	100	366	606	629	1,340	578	530
24	132	143	115	120	125	100	358	589	*682	1,360	573	584
25	151	132	115	120	125	100	393	612	731	1,390	578	623
26	148	132	115	120	120	105	406	676	725	1,380	488	499
27	143	132	110	120	120	135	366	712	744	1,360	281	*218
28	165	125	110	125	115	145	349	676	795	1,360	285	149
29	156	88	110	125	-	135	337	676	868	1,360	281	154
30	151	121	115	125	------	142	324	670	909	1,360	337	439
31	148	------	115	125	------	147	------	646	------	1,360	519	------
Total	5,172	4,268	3,823	3,650	3,335	3,449	11,761	13,023	17,274	38,198	20,206	19,393
Mean	167	142	123	118	119	111	392	420	576	1,232	652	646
Ac-ft	10,260	8,470	7,580	7,240	6,610	6,840	23,330	25,830	34,260	75,760	40,080	38,470

Calendar year 1954: Max 1,400 Min 88 Mean 448 Ac-ft 324,400
Water year 1954-55: Max 1,420 Min 88 Mean 393 Ac-ft 284,700

* Discharge measurement made this day.
Note.--Stage-discharge relation affected by ice Dec. 10 to Mar. 28.

Bear River at Alexander, Idaho

Location.--Lat 42°39', long 111°42', in NW¼ sec. 17, T. 9 S., R. 41 E., on right bank 600 ft downstream from Soda hydroelectric plant of Utah Power & Light Co., half a mile southeast of Alexander, and 5 miles downstream from Soda Creek.

Drainage area.--3,840 sq mi, approximately.

Records available.--March 1911 to September 1916, April 1919 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,650 ft (from topographic map).

Average discharge.--40 years (1911-16, 1919-20, 1921-55), 758 cfs (548,800 acre-ft per year).

Extremes.--Maximum daily discharge during year, 1,530 cfs July 11; minimum daily, 141 cfs Dec. 19.
1911-16, 1919-55: Maximum discharge, 4,590 cfs May 9, 1922; maximum gage height, 15.95 ft Dec. 11, 1919; minimum discharge, 28 cfs at times when reservoir gates are closed.

Remarks.--Records good. Many diversions above station for irrigation. Flow regulated by Bear Lake Reservoir and Soda hydroelectric plant.

Cooperation.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project. One discharge measurement made by Geological Survey in addition to those made by power company.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Nov. 25, July 29 to Sept. 30)

0.5	124
1.0	310
1.5	579
2.0	945
3.0	1,900

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	252	166	222	145	252	204	193	152	511	906	1,350	561
2	201	199	190	163	597	*187	169	197	773	758	1,290	707
3	212	154	196	248	390	236	155	279	476	859	1,150	697
4	273	*202	182	225	206	193	253	208	609	940	1,100	583
5	259	167	192	214	171	170	210	228	492	1,310	951	670
6	250	190	232	215	208	148	245	206	458	1,290	763	830
7	250	162	194	211	260	184	346	166	464	1,300	948	983
8	227	208	192	184	200	179	436	156	459	1,260	866	1,010
9	155	168	*263	236	299	201	477	240	451	905	1,060	961
10	170	204	208	222	323	204	254	208	586	1,070	742	711
11	243	186	223	224	283	201	734	222	623	1,530	806	664
12	230	179	190	197	166	154	833	216	605	1,510	702	896
13	243	186	359	211	155	157	830	244	612	1,260	*766	851
14	193	173	237	199	302	259	828	264	612	1,310	676	899
15	172	211	296	151	499	202	947	241	605	1,220	600	982
16	196	162	235	156	506	198	905	293	*812	1,230	572	946
17	192	216	277	214	424	196	815	326	612	1,270	512	529
18	209	145	186	224	210	197	*810	385	605	1,390	846	515
19	167	181	141	*249	156	147	836	390	586	1,410	561	979
20	198	224	275	308	169	165	831	405	612	1,510	488	814
21	220	212	272	212	247	226	893	357	612	1,450	482	728
22	151	233	265	189	154	235	853	398	618	1,290	571	700
23	207	190	204	198	191	202	799	*519	663	1,420	617	484
24	161	195	172	261	213	442	669	595	740	1,440	661	355
25	204	207	179	198	201	281	948	627	*605	1,430	611	353
26	172	236	144	216	144	148	630	554	637	1,450	542	*402
27	209	227	247	223	147	275	545	519	957	1,440	442	444
28	160	184	210	222	225	223	468	488	925	1,420	436	410
29	203	232	247	172	-	212	291	517	744	1,310	616	416
30	152	229	211	189	------	231	179	505	949	1,150	555	393
31	183	------	204	261	------	224	------	505	------	1,120	576	------
Total	6,314	5,828	6,845	6,537	7,298	6,481	17,382	10,610	18,813	39,158	22,498	20,473
Mean	204	194	221	211	261	209	579	342	627	1,263	726	682
Ac-ft	12,520	11,560	13,580	12,970	14,480	12,850	34,480	21,040	37,320	77,670	44,620	40,610

Calendar year 1954: Max 1,440 Min 123 Mean 514 Ac-ft 372,200
Water year 1954-55: Max 1,530 Min 141 Mean 461 Ac-ft 333,700

* Discharge measurement made on this day.

Cottonwood Creek near Cleveland, Idaho

Location.--Lat 42°20', long 111°46', in SW¼ sec. 34, T. 12 S., R. 40 E., on right bank 500 ft upstream from Cleveland irrigation canal, 2½ miles west of Cleveland, and 4 miles downstream from proposed Cottonwood Dam.

Drainage area.--61.7 sq mi.

Records available.--November 1938 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,150 ft (from topographic map). Prior to Dec. 29, 1944, staff gage at same site and datum.

Average discharge.--16 years (1939-55), 30.2 cfs (21,860 acre-ft per year).

Extremes.--Maximum discharge during year, 205 cfs June 3 (gage height, 2.27 ft); minimum, 2.3 cfs Sept. 24.
1938-55: Maximum discharge, 773 cfs Apr. 27, 1952 (gage height, 3.83 ft); minimum observed, 0.5 cfs Aug. 17, 1940.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. A few small diversions for irrigation of meadowland in Cottonwood Valley above station. Treasureton Canal diverts from Cottonwood Creek above station in SE¼ sec. 8, T. 12 S., R. 39 E., for irrigation in Battle Creek basin in vicinity of Treasureton.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.4	1.7	1.3	42
.5	3.2	1.6	73
.6	5.4	1.9	118
.8	12	2.3	200
1.0	22		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.0	4.5	b3.5				13	98	23	6.0	3.4	3.6
2	3.0	4.5	4.1				17	101	70	5.4	3.4	3.6
3	3.0	4.3	5.7	6.5			13	86	113	5.0	3.0	3.6
4	3.4	4.3	6.9				12	74	143	4.5	2.9	3.6
5	3.9	4.3	6.9		6.5	7.0	12	94	113	7.2	2.9	3.2
6	3.9	4.5	5.4				12	*124	90	7.5	3.9	3.0
7	*3.6	4.7	6.3				14	143	*76	7.5	4.5	2.9
8	3.4	4.7	b5.0				20	182	62	6.9	5.4	2.8
9	3.6	*4.8	b4.5				30	157	48	6.6	6.0	2.8
10	3.9	5.4	5.0	5.5			36	126	37	6.3	4.5	2.8
11	3.9	5.4	5.2				*30	120	30	6.0	4.5	2.8
12	4.1	6.3	5.2				27	106	26	*6.6	*4.1	2.6
13	4.7	7.2	5.4			9.0	33	92	22	6.3	8.8	2.6
14	4.7	6.6	5.7				45	78	18	5.7	8.4	2.4
15	4.7	6.6	*5.7				58	68	16	5.0	6.0	2.4
16	4.7	13	b5.5			8.0	60	54	*15	5.0	5.2	2.6
17	4.5	9.9	b5.3		6.0	7.5	73	42	13	5.0	5.2	3.3
18	4.5	8.4	b5.0	6.0		*7.2	62	34	12	5.0	5.2	4.0
19	4.7	7.8	b5.1			6.6	48	34	11	4.7	7.2	3.8
20	4.5	7.5	b5.3	(*)		b6.5	39	*34	9.5	4.3	5.4	*3.6
21	4.5	7.5	b5.5			b6.7	45	35	7.2	4.1	4.5	2.9
22	4.5	7.2				6.9	54	47	6.6	3.6	4.3	2.8
23	4.3	6.9				6.6	43	32	8.8	3.2	4.3	2.9
24	4.3	6.9				7.2	41	28	7.5	4.1	4.3	2.8
25	5.2	6.9		6.5	(*)	6.6	*60	27	6.9	5.7	8.4	3.9
26	5.2	6.6	5.5		7.0	b6.5	65	24	6.6	5.4	9.1	3.6
27	5.0	6.6				b6.5	49	24	6.0	5.0	6.3	2.9
28	4.7	b5.5				b8.0	45	18	5.7	5.0	5.2	2.6
29	4.7	b4.0			-	*9.9	54	14	6.6	4.1	4.5	2.6
30	4.7	4.3			------	12	78	12	7.5	3.9	3.9	2.6
31	4.5	------			------	11	------	19	------	3.9	3.6	------
Total	131.3	187.1	167.2	189.5	178.0	238.7	1,188	2,121	1,016.9	164.5	158.3	91.6
Mean	4.24	6.24	5.39	6.11	6.36	7.70	39.6	68.4	33.9	5.31	5.11	3.05
Ac-ft	260	371	332	376	353	473	2,360	4,210	2,020	326	314	182

Calendar year 1954: Max 111 Min 1.0 Mean 12.9 Ac-ft 9,350
Water year 1954-55: Max 182 Min 2.4 Mean 16.0 Ac-ft 11,580

Peak discharge (base, 150 cfs).--May 9 (12:30 a.m.) 202 cfs (2.31 ft); June 3 (9:30 a.m.) 205 cfs (2.27 ft).

* Discharge measurement made on this day.

b Stage-discharge relation affected by ice

Note.--No gage-height record Dec. 22 to Mar. 17, Sept. 17-19; discharge estimated on basis of 2 discharge measurements, weather records, and records for stations on nearby streams.

Bear River below Utah Power & Light Co.'s tailrace, at Oneida, Idaho

Location.--Lat 42°16', long 111°45', in sec. 26, T. 13 S., R. 40 E., on right bank 200 ft below tailrace of Oneida plant and 6 miles south of Cleveland.

Records available.--October 1945 to September 1955 in reports of Geological Survey. January 1922 to September 1945 in files of Salt Lake City district office, Geological Survey.

Gage.--Water-stage recorder. Altitude of gage is 4,800 ft (from topographic map).

Average discharge.--33 years, 780 cfs (564,700 acre-ft per year).

Extremes.--1922-55: Maximum daily discharge, 5,480 cfs May 8, 1922; minimum daily, 15 cfs May 3, 4, 1925.

Remarks.--Records excellent. Many diversions above station. Flow regulated by Bear Lake and Soda, Grace, and Oneida hydroelectric plants.

Cooperation.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project. Two discharge measurements were made by Geological Survey in addition to those made by power company.

Rating tables, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 31		Jan. 1 to Sept. 30			
1.1	70	0.9	39	3.0	673
1.5	157	1.2	76	4.0	1,210
2.0	293	1.5	134	5.0	1,900
3.0	674	2.0	274		
4.0	1,210				

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	429	478	258	472	326	119	456	200	505	951	903	632
2	502	318	248	196	700	406	355	848	142	1,070	826	777
3	507	355	263	*357	509	114	185	1,220	1,000	990	1,060	925
4	341	357	320	275	518	429	545	595	591	1,300	980	658
5	349	333	416	446	45	408	445	517	460	746	854	888
6	540	450	354	182	392	263	298	453	930	552	870	627
7	419	206	313	403	444	313	230	462	585	468	573	703
8	267	377	263	494	370	259	749	87	583	507	779	690
9	560	484	417	485	439	556	1,030	865	229	1,650	867	979
10	539	294	237	675	540	311	460	703	389	1,870	903	869
11	*315	301	596	381	797	604	687	345	141	1,520	538	454
12	200	713	528	206	189	188	732	544	139	918	501	791
13	597	106	703	200	54	207	1,090	654	237	980	456	*930
14	202	233	576	65	*209	436	1,480	134	*207	843	494	718
15	308	502	555	579	740	397	1,530	203	358	*1,370	650	968
16	536	490	435	246	676	367	1,160	227	282	1,360	628	792
17	264	264	316	958	765	500	544	495	358	774	448	1,230
18	239	454	336	356	625	399	804	262	586	1,280	345	593
19	547	283	74	287	79	503	1,010	69	296	1,100	512	892
20	236	478	468	379	44	205	1,120	482	344	932	464	827
21	531	104	461	152	353	518	1,010	460	471	1,000	288	1,190
22	263	432	477	170	187	298	1,260	263	613	1,350	711	616
23	507	555	111	380	358	419	1,060	505	579	1,440	590	405
24	214	438	77	302	293	477	598	*189	625	1,060	511	619
25	286	543	389	282	152	582	881	406	350	1,300	661	234
26	618	585	416	452	374	64	1,550	449	370	867	473	453
27	344	476	333	209	396	620	550	481	526	*1,240	611	682
28	270	705	676	557	542	380	1,010	442	441	1,230	434	467
29	334	286	262	236	-	*607	708	277	393	1,200	711	553
30	534	221	125	263	------	576	582	503	474	1,310	684	501
31	176	------	325	633	------	360	------	219	------	958	652	------
Total	11,974	11,821	11,328	11,278	11,116	11,885	24,119	13,559	13,204	34,136	19,977	21,663
Mean	386	394	365	364	397	383	804	437	440	1,101	644	722
Ac-ft	23,750	23,450	22,470	22,370	22,050	23,570	47,840	26,890	26,190	67,710	39,620	42,970

Calendar year 1954: Max 1,750 Min 30 Mean 602 Ac-ft 436,000
Water year 1954-55: Max 1,870 Min 44 Mean 537 Ac-ft 388,900

* Discharge measurement made on this day.

Bear River near Preston, Idaho

Location.--Lat 42°10', long 111°51', in NW¼ sec. 36, T. 14 S., R. 39 E., on left bank 600 ft downstream from headgates of West Cache Canal, 5 miles downstream from Mink Creek, 5 miles north of Preston, and 5½ miles upstream from Battle Creek.

Drainage area.--4,500 sq mi, approximately.

Records available.--October 1889 to September 1917 (gage heights only, January to September 1917), January 1944 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,540 ft (from topographic map). October 1889 to September 1917 staff gage at site 5 miles downstream at different datum.

Average discharge.--11 years (1944-55), 914 cfs (661,700 acre-ft per year).

Extremes.--Maximum discharge during year, 2,990 cfs Apr. 14 (gage height, 4.62 ft); minimum, 2.6 cfs Mar. 27 (gage height, 0.23 ft); minimum daily, 25 cfs May 19.
1889-1917, 1944-55: Maximum discharge, about 8,500 cfs June 9, 10, 1907, estimated on basis of records for station near Collinston, Utah; maximum gage height observed, 9.04 ft Jan. 17, 18, 1917 (backwater from ice), site and datum then in use; minimum, 0.6 cfs June 14, 1949; minimum daily, 14 cfs July 4, 1944, July 4, 1945, July 5, 1947, May 11, 1953.

Remarks.--Records good except those for period of no gage-height record, which are fair. Station is below all irrigation diversions from Bear River in Idaho except Cub River pumps in SE¼ sec. 20, T. 16 S., R. 39 E. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	323	432	308	448	388	222	357	362	331	690	795	402
2	356	278	294	318	700	368	351	875	404	903	530	568
3	334	299	267	332	575	242	186	826	953	731	904	712
4	343	334	194	365	619	489	584	571	723	1,090	770	607
5	145	185	538	471	169	446	435	555	608	760	656	661
6	401	505	354	230	358	326	348	495	960	266	777	457
7	410	144	342	390	454	275	164	537	656	331	465	546
8	306	368	237	621	383	382	932	235	672	752	586	455
9	426	329	414	538	544	609	983	867	413	1,310	716	769
10	501	369	224	a650	510	387	585	680	452	1,430	816	641
11	329	246	588	a370	757	534	729	475	186	1,570	411	484
12	158	712	604	a275	463	315	702	596	158	687	459	618
13	561	114	704	264	82	265	1,210	883	202	819	372	776
14	213	219	537	148	296	451	1,340	296	160	518	357	602
15	262	472	570	629	660	330	1,550	352	135	*1,110	560	735
16	432	485	532	230	736	400	1,470	235	350	1,200	599	647
17	302	146	347	877	849	477	591	386	492	712	341	972
18	233	497	321	417	693	*359	853	287	582	996	280	475
19	569	217	132	275	191	558	1,020	25	237	984	410	756
20	159	517	446	*498	158	240	1,170	313	264	720	500	738
21	544	113	447	223	427	508	996	511	215	729	281	1,090
22	220	256	531	250	182	410	1,370	281	554	1,040	538	565
23	521	646	206	357	399	343	1,130	447	375	1,190	383	378
24	262	361	122	388	359	434	648	238	516	956	436	578
25	233	542	325	199	*215	441	1,030	220	133	1,090	522	234
26	526	*624	434	561	376	61	1,620	419	162	792	357	468
27	342	382	348	330	426	535	536	377	308	889	343	632
28	233	771	658	618	610	302	1,140	330	313	1,110	398	467
29	304	309	346	224	-	*487	666	156	281	947	512	603
30	484	225	187	330	------	*536	548	332	263	1,050	607	487
31	159	------	283	658	------	296	------	181	------	845	410	------
Total	10,591	11,097	11,840	12,484	12,579	12,028	25,244	13,343	12,058	28,217	16,091	18,123
Mean	342	370	382	403	449	388	841	430	402	910	519	604
Ac-ft	21,010	22,010	23,480	24,760	24,950	23,860	50,070	26,470	23,920	55,970	31,920	35,950

Calendar year 1954: Max 1,590 Min 50 Mean 530 Ac-ft 383,800
Water year 1954-55: Max 1,620 Min 25 Mean 503 Ac-ft 364,400

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station at Oneida.

Little Bear River near Paradise, Utah

Location.--Lat 41°35'25", long 111°51'10", in SE¼ sec. 20, T. 10 N., R. 1 E., on right bank 1 mile upstream from backwater of Hyrum Reservoir, 2 miles northwest of Paradise, and 5 miles downstream from East Fork.

Drainage area.--203 sq mi.

Records available.--October 1938 to September 1955 in reports of Geological Survey. January 1936 to October 1939 (fragmentary) in reports of Little Bear River water commissioner.

Gage.--Water-stage recorder. Altitude of gage is 4,680 ft (from topographic map). Prior to Nov. 27, 1945, at site 150 ft upstream at different datum. Nov. 28, 1945, to May 19, 1952, at present site at datum 1.50 ft higher.

Average discharge.--17 years (1938-55), 86.7 cfs (62,770 acre-ft per year).

Extremes.--Maximum discharge during year, 780 cfs Apr. 17; maximum gage height, 3 83 ft May 6; minimum discharge, 10 cfs Sept. 3.
1938-55: Maximum discharge, 1,390 cfs Apr. 27, 1952 (gage height, 5.81 ft); minimum, 4 cfs Aug. 14, 1940.

Remarks.--Records good except those for periods of ice effect or no gage height record, which are fair. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas. No diversion between station and Hyrum Reservoir.

Rating tables, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 15 to May 9, Aug. 23 to Sept. 30)

Oct. 1 to Apr. 30				May 1 to Sept. 30			
1.1	12	1.8	101	1.9	8.2	2.8	140
1.2	19	2.0	159	2.0	13	3.1	235
1.4	37	2.5	358	2.2	30	3.4	373
1.6	63	3.0	605	2.4	56	3.8	658
				2.6	92		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*17	*36	36	43	(*)	48	78	506	148	23	*14	15
2	19	37	41	45		48	95	414	146	23	14	15
3	16	37	42	*43		48	82	326	143	23	14	12
4	25	36	47	43		47	75	357	143	22	14	13
5	30	36	42	42	45	b42	70	459	154	22	15	13
6	29	36	39			b45	73	*566	*151	22	16	14
7	31	35	41			49	84	*608	135	22	16	13
8	31	36	37	b37		47	117	608	124	23	16	13
9	30	37	33		(*)	52	159	472	94	22	15	*14
10	28	37	39			73	217	414	75	22	*14	12
11	32	36	39		b40	70	*205	391	59	22	14	13
12	32	53	37			73	143	*342	56	21	13	14
13	33	50	37			82	176	337	*48	20	16	16
14	*34	43	36			*82	280	342	42	20	17	16
15	32	41	37	43		65	332	303	34	19	*18	15
16	31	73	34			62	323	239	31	*20	18	17
17	32	62	b32			62	471	214	31	19	18	18
18	33	55	b31		43	60	*346	207	30	*19	18	20
19	34	50	b33			62	236	*221	26	18	18	20
20	35	49	b34			60	217	228	26	18	17	19
21	34	48	b37			56	236	224	28	17	16	20
22	35	47	b39			59	*280	228	26	17	16	18
23	36	47	39			57	260	200	29	17	14	20
24	36	45	39			62	244	*178	25	16	16	21
25	37	47	39			60	471	168	*22	16	16	25
26	36	47	41		47	53	442	146	23	16	17	30
27	37	43	b35	42		53	301	143	25	17	15	29
28	37	44	b30		(*)	56	248	122	24	17	16	26
29	38	38	b45		-	62	*318	112	*26	*16	*16	*24
30	37	*39	44		------	*80	461	110	24	15	15	29
31	37	------	43		------	72	------	*162	------	13	*14	------
Total	984	1,320	1,178	1,293	1,237	1,847	7,040	9,347	1,948	597	486	544
Mean	31.7	44.0	38.0	41.7	44.2	59.6	235	302	64.9	19.3	15.7	18.1
Ac-ft	1,950	2,620	2,340	2,560	2,450	3,660	13,960	18,540	3,860	1,180	964	1,080

Calendar year 1954: Max 318 Min 11 Mean 54.1 Ac-ft 39,190
Water year 1954-55: Max 608 Min 12 Mean 76.2 Ac-ft 55,160

Peak discharge (base, 400 cfs).--Apr. 17 (7:30 p.m.) 780 cfs (3.45 ft); May 6 (11:30 p.m.) 724 cfs (3.83 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Note.--No gage-height record Jan. 11 to Feb. 9, Feb. 13-28; discharge estimated on basis of 3 discharge measurements, weather records, and records for stations on nearby streams.

Hyrum Reservoir near Hyrum, Utah

Location.--Lat 41°37'30", long 111°52'30", in SE¼NE¼ sec. 7, T. 10 N., R. 1 E., at Hyrum Dam on Little Bear River, 1 mile southwest of Hyrum.

Drainage area.--220 sq mi.

Records available.--October 1938 to September 1955.

Gage.--Mercury indicating gage. Datum of gage is at mean sea level.

Extremes.--Maximum contents observed during year, 15,860 acre-ft May 16 (elevation, 4,673.2 ft); minimum observed, 1,620 acre-ft Oct. 10 (elevation, 4,636.6 ft).
1938-55: Maximum contents observed, 16,100 acre-ft June 12, 13, 1953 (elevation, 4,673.7 ft); minimum, 1,130 acre-ft Oct. 5, 1940 (elevation, 4,634.7 ft).

Remarks.--Reservoir is formed by earth-fill dam; storage began in 1935. Usable capacity, 15,280 acre-ft between elevations 4,629.6 ft (sill of outlet canal) and 4,672 ft (top of spillway gates). Dead storage, 3,405 acre-ft (below elevation 4,629.6 ft, sill of outlet canal). Figures given herein represent usable contents. Elevation of spillway crest, 4,660 ft. Water used for irrigation on Hyrum project.

Cooperation.--Capacity table furnished by Bureau of Reclamation.

Revisions (water years).--WSP 1060: 1946(m).

Contents, in acre-feet, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	-	-	-	-	-	-	-	15,570	13,130	8,140	4,870
2	-	-	-	-	-	-	-	-	15,520	12,940	8,020	4,800
3	-	-	-	-	-	-	-	-	15,570	12,800	7,940	4,730
4	-	-	-	-	-	-	-	-	15,570	12,670	7,900	4,660
5	-	-	-	-	-	-	-	-	15,570	12,440	7,700	4,600
6	-	-	-	-	-	-	-	-	15,620	12,300	7,620	4,490
7	-	-	-	-	-	-	-	-	15,660	12,120	7,580	4,460
8	-	-	-	-	-	-	-	-	15,620	11,940	7,420	4,430
9	-	-	-	-	-	-	-	-	15,570	11,760	7,340	4,390
10	1,620	-	5,570	-	10,260	10,310	14,620	14,340	15,570	11,580	7,260	4,360
11	-	-	-	-	-	-	-	15,420	15,520	11,400	7,150	4,290
12	-	-	-	-	-	-	-	15,380	15,520	11,270	6,950	4,230
13	-	-	-	-	-	-	-	15,330	15,520	11,140	6,760	3,800
14	-	-	-	-	-	-	-	15,280	15,420	10,870	6,650	3,770
15	-	-	-	-	-	10,310	-	15,330	15,420	10,700	6,610	3,670
16	-	-	-	-	-	-	-	15,860	15,280	10,570	6,530	3,540
17	-	-	-	-	-	-	-	15,760	15,190	10,390	6,380	3,480
18	-	-	-	-	-	-	-	15,660	15,140	10,260	6,270	3,450
19	-	-	-	-	-	-	-	15,520	15,140	10,140	6,160	3,360
20	1,890	4,530	6,720	9,460	10,310	11,000	14,340	15,420	14,810	9,620	6,050	3,290
21	-	-	-	-	-	-	-	15,330	14,670	9,540	5,970	3,200
22	-	-	-	-	-	-	-	15,570	14,530	9,460	5,860	3,140
23	-	-	-	-	-	-	-	15,330	14,430	9,370	5,790	3,110
24	-	-	-	-	-	-	-	15,090	14,340	9,160	5,650	3,080
25	-	-	-	-	-	-	-	15,280	14,200	9,000	5,430	3,080
26	-	-	-	-	-	-	-	15,420	14,060	8,870	5,360	3,080
27	-	-	-	-	-	-	-	15,190	13,870	8,750	5,250	3,080
28	-	-	-	-	10,310	-	-	15,230	13,680	8,670	5,180	3,110
29	-	-	-	-	-	-	-	15,280	13,540	8,500	5,110	3,110
30	-	5,180	-	-	-------	-	15,280	15,330	13,310	8,380	5,040	3,140
31	2,570	-------	7,700	10,220	-------	12,170	-------	15,470	-------	8,260	4,940	-------
(†)	4,640.0	4,648.1	4,654.8	4,660.9	4,661.1	4,665.3	4,672.0	4,672.4	4,667.8	4,656.2	4,647.4	4,641.9
(‡)	+1,140	+2,610	+2,520	+2,520	+90	+1,860	+3,110	+190	-2,160	-5,050	-3,320	-1,800

Calendar year 1954: (‡) -2,090
Water year 1954-55: (‡) +1,710

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

Little Bear River near Hyrum, Utah

Location.--Lat 41°38'00", long 111°53'00", in NE¼ sec. 6, T. 10 N., R. 1 E., on left bank 2,000 ft upstream from road bridge, 1½ miles downstream from Hyrum Dam, and 1½ miles west of Hyrum.

Drainage area.--222 sq mi.

Records available.--October 1938 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,520 ft (from topographic map). Prior to Nov. 9, 1949, at site 1,200 ft downstream at different datum.

Average discharge.--17 years, 63.0 cfs (45,610 acre-ft per year).

Extremes.--Maximum daily discharge during year, 533 cfs May 2; minimum daily, 0.6 cfs for several days in October and December.
1938-55: Maximum discharge, 986 cfs Apr. 30, 1952 (gage height, 4.54 ft); minimum daily, 0.5 cfs Oct. 30 to Nov. 1, Nov. 3, 1953.

Remarks.--Records good. Flow regulated by Hyrum Reservoir (see preceding page).

Rating table, water year, 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 27 to Nov. 24)

0.0	0.2	1.0	50
.1	1.4	1.5	124
.2	3.6	2.0	223
.4	9.0	3.0	466
.6	18	3.3	547
.8	32		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*0.8	*1.6	0.8	2.1	41	51	7.8	420	39	2.7	*1.0	0.8
2	1.0	1.8	.7	2.3	49	49	8.1	533	69	2.3	1.0	.9
3	.9	1.8	.6	*2.1	51	48	8.1	484	97	2.1	1.0	.9
4	.7	1.8	.9	2.1	50	47	8.1	445	116	1.8	2.9	.9
5	.7	1.6	.6	2.1	49	45	8.4	445	124	2.3	1.4	.9
6	.7	1.4	1.2	2.1	48	42	8.4	*453	133	1.3	1.2	.9
7	.7	1.4	1.8	2.3	47	43	8.4	461	122	1.2	1.0	.9
8	.7	1.3	1.6	2.3	47	44	8.4	469	107	1.2	1.0	.9
9	.7	1.3	1.4	2.5	*46	46	8.4	469	84	1.2	1.0	1.4
10	.6	1.3	1.4	2.3	43	58	8.4	461	55	1.2	1.0	2.9
11	.7	1.3	1.4	2.1	40	66	34	450	31	1.2	.9	2.5
12	.8	1.8	1.4	2.1	41	70	144	368	20	1.0	.9	1.2
13	.8	1.4	1.4	2.1	42	75	121	212	10	1.0	.9	1.0
14	.8	1.3	1.4	2.1	44	82	215	96	7.3	.9	1.0	1.0
15	.8	1.3	1.6	2.1	45	52	266	202	8.1	.9	1.0	1.0
16	.7	1.8	1.6	2.1	45	5.4	325	245	9.0	.8	1.0	1.0
17	.7	1.4	1.6	1.8	50	*5.4	469	219	8.1	.8	.9	1.0
18	.6	1.3	1.6	1.8	54	5.6	*495	196	4.6	.8	1.2	1.0
19	.6	1.3	1.6	1.8	48	5.6	471	*185	2.5	1.0	4.6	.9
20	.6	1.3	1.6	1.8	44	5.8	430	183	2.5	1.6	1.3	.9
21	.6	1.0	1.6	1.8	44	5.8	293	183	2.5	1.6	.9	.9
22	.7	1.0	1.6	1.8	48	6.1	192	183	1.8	1.8	.9	.9
23	.8	.9	1.6	2.1	50	6.4	173	183	1.8	1.4	.8	.9
24	.8	.9	1.6	2.1	49	6.7	175	*89	1.3	1.2	.8	.9
25	.8	.9	1.8	2.1	*48	6.7	181	50	1.3	1.2	.9	.9
26	.9	.9	1.8	2.1	48	6.7	303	50	1.3	1.2	.9	.8
27	.9	.9	1.8	2.1	52	7.0	318	21	1.3	1.2	.9	.8
28	1.4	.9	2.1	2.1	55	7.0	298	9.4	1.4	1.2	.9	.8
29	1.8	.9	1.8	3.6	-	7.3	*335	8.7	*2.3	1.2	.8	*.8
30	2.1	*.9	1.8	12	------	7.8	358	7.6	2.7	1.0	.8	.8
31	2.1	-----	2.1	26	------	7.6	-----	*13	------	1.0	*.8	------
Total	27.5	38.7	45.8	99.8	1,318	920.9	5,678.5	7,793.7	1,066.8	41.3	35.6	31.4
Mean	0.89	1.29	1.48	3.22	47.1	29.7	189	251	35.6	1.33	1.15	1.05
Ac-ft	55	77	91	198	2,610	1,830	11,260	15,460	2,120	82	71	62

Calendar year 1954: Max 288 Min 0.5 Mean 30.6 Ac-ft 22,140
Water year 1954-55: Max 533 Min 0.6 Mean 46.8 Ac-ft 33,920

* Discharge measurement made on this day.

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

Location.--Lat 41°44'40", long 111°47'00", in NE¼ sec. 36, T. 12 N., R. 1 E., on right bank 100 ft downstream from powerhouse of Utah Power & Light Co. and 2½ miles east of Logan.

Records available.--May 1913 to September 1955.

Gage.--Water-stage recorder and timber control. Altitude of gage is 4,680 ft (from topographic map).

Average discharge.--42 years, 110 cfs (79,640 acre-ft per year).

Extremes.--1913-55: Maximum daily discharge, 204 cfs Apr. 14, 1952, Apr. 23, 1953; no flow for periods during several years.

Remarks.--Records excellent except those for period of no gage-height record, which are good. Flow regulated by powerplant above gage. Power canal diverts water from right bank of Logan River in SE¼SW¼ sec. 29, T. 12 N., R. 2 E. Water returned to river 125 ft below gaging station on Logan River above State dam.

Cooperation.--Records collected in collaboration with Utah Power & Light Co. in connection with a Federal Power Commission project.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	87	69	75	68	67	70	191	198	190	128	99
2	95	87	78	76	64	66	74	191	198	191	128	97
3	92	86	78	74	69	66	74	193	196	193	127	96
4	92	87	86	74	68	63	71	196	196	193	125	95
5	93	87	78	*70	68	55	68	199	198	193	125	95
6	93	86	76	66	63	59	*70	198	198	193	124	92
7	95	86	79	52	68	67	74	198	198	193	124	93
8	92	86	72	a55	67	65	78	196	196	*193	124	92
9	92	*85	68	a60	68	65	87	198	196	193	123	91
10	93	85	78	74	58	75	95	199	194	193	111	90
11	89	85	80	78	58	68	95	*199	193	194	104	89
12	92	92	77	70	68	67	93	198	193	191	105	85
13	*93	91	75	65	68	72	93	198	193	188	105	*84
14	93	85	76	71	67	72	95	199	193	185	105	84
15	93	86	74	65	66	66	96	199	*191	178	103	85
16	92	96	68	74	*67	60	95	199	191	174	107	83
17	91	89	65	67	68	66	98	199	191	170	108	83
18	90	84	60	64	66	69	65	199	190	166	109	84
19	90	85	64	*74	54	64	125	199	190	164	110	86
20	90	84	66	69	54	66	123	199	190	162	109	83
21	90	84	69	67	64	63	35	199	191	158	109	80
22	90	*84	74	59	69	69	42	198	191	156	107	79
23	90	81	74	67	63	67	136	198	191	153	105	80
24	91	83	72	67	64	68	124	198	190	150	107	80
25	91	81	72	68	64	66	164	198	188	150	107	89
26	90	83	74	66	66	61	132	*198	188	148	107	96
27	89	81	64	62	68	61	*142	198	186	*142	105	107
28	89	81	59	61	66	66	137	198	186	*140	103	107
29	87	74	72	66	-	68	158	198	188	140	102	107
30	87	78	76	69	------	*71	183	198	190	136	101	105
31	86	------	74	69	------	71	------	198	------	132	98	------
Total	2,826	2,549	2,247	2,094	1,821	2,049	2,992	6,126	5,772	5,302	3,455	2,716
Mean	91.2	85.0	72.5	67.5	65.0	66.1	99.7	198	192	171	111	90.5
Ac-ft	5,610	5,060	4,460	4,150	3,610	4,060	5,930	12,150	11,450	10,520	6,850	5,390

Calendar year 1954: Max 198 Min 0 Mean 113 Ac-ft 82,020
Water year 1954-55: Max 199 Min 35 Mean 109 Ac-ft 79,240

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Logan River above State dam and Logan, Hyde Park & Smithfield Canal near Logan.

Logan, Hyde Park & Smithfield Canal near Logan, Utah

Location.--Lat 41°44'45", long 111°47'05", in SE¼ sec. 25, T. 12 N., R. 1 E., on right bank 1¼ miles downstream from head of canal and 2½ miles east of Logan.

Records available.--June 1904 to December 1907, January 1909 to September 1955 (fragmentary prior to May 1924).

Gage.--Water-stage recorder in flume. Prior to May 29, 1924, at site half a mile upstream at different datum.

Average discharge.--32 years (1923-55), 28.8 cfs (20,850 acre-feet per year).

Extremes.--1906, 1924-55: Maximum daily discharge, 136 cfs May 30, 31, 1930; no flow at times in most years.

Remarks.--Records excellent above 10 cfs and good below, except for periods of ice effect, which are fair. No diversion above station. Canal diverts from Logan River in NE¼NE¼ sec. 31, T. 12 N., R. 2 E., for irrigation and domestic supply north of Logan.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	2.9	2.9	3.7	4.6	4.9	0.6	0.2	75	30	41	24
2	3.4	3.2	4.0	3.7	4.9	4.9	.6	0	67	87	40	23
3	3.4	2.9	3.4	*3.7	4.6	4.6	.6	0	49	85	39	23
4	3.4	2.9	4.0	3.7	4.9	4.6	.6	0	27	82	38	23
5	*3.7	2.9	3.4	3.4	5.4	b4.4	.6	1.2	25	76	37	23
6	3.4	2.6	2.9	3.2	5.4	4.3	.4	5.8	*33	69	36	22
7	3.4	2.6	2.6	b3.2	5.4	4.3	.2	6.3	36	62	36	22
8	3.7	2.6	2.3	3.2	5.4	4.6	.2	5.8	45	58	35	22
9	4.3	2.6	2.6	3.4	5.4	4.6	.2	5.8	74	55	35	22
10	3.7	2.6	2.9	3.7	*b5.0	5.8	.2	33	85	49	32	22
11	4.3	2.6	2.9	4.0	b5.0	4.9	.2	40	99	*43	32	22
12	4.6	4.3	2.6	4.0	5.4	4.6	.2	56	111	46	30	23
13	4.6	3.7	2.6	3.7	5.8	4.6	.2	63	119	42	31	24
14	4.0	3.2	2.3	4.0	5.8	4.6	.1	66	122	40	32	24
15	3.7	3.2	2.3	4.0	5.8	4.3	.1	56	119	40	*32	24
16	3.7	4.6	2.3	4.0	5.8	4.3	.1	47	124	41	34	24
17	3.2	3.7	2.3	4.0	5.8	4.6	.1	54	*126	40	31	24
18	3.2	3.2	2.6	4.0	5.4	4.6	0	62	122	40	31	24
19	3.2	2.9	2.6	4.3	4.9	4.3	.9	72	116	41	31	25
20	4.0	2.9	2.9	4.3	b5.4	4.3	.9	*76	119	41	31	25
21	3.4	2.9	2.9	4.3	5.8	4.3	0	79	120	41	30	24
22	3.4	2.6	2.9	4.0	5.8	4.3	0	84	119	41	30	24
23	3.4	2.6	2.9	4.3	5.8	4.3	.6	90	117	40	29	24
24	4.0	2.6	3.2	4.3	5.8	4.3	.6	93	116	40	29	24
25	4.0	2.6	3.2	4.0	5.4	4.0	.7	89	105	41	29	14
26	3.7	2.6	2.9	3.7	4.9	4.0	.4	*80	115	42	28	4.9
27	3.4	2.6	2.6	3.7	5.4	4.3	**.6	77	114	43	28	3.4
28	3.4	2.6	b2.9	3.7	5.4	4.6	.4	80	113	*42	26	2.9
29	3.2	2.6	3.2	4.3	-	3.2	.4	95	104	42	25	*3.2
30	3.2	*2.6	3.4	4.3	------	2.0	.2	107	93	42	24	2.9
31	2.9	------	3.4	4.6	------	1.6	------	85	------	42	24	------
Total	112.3	88.4	89.9	120.4	150.4	133.0	10.9	1,609.1	2,809	1,583	986	592.3
Mean	3.62	2.95	2.90	3.88	5.37	4.29	0.36	51.9	93.6	51.1	31.8	19.7
Ac-ft	223	175	178	239	298	264	22	3,190	5,570	3,140	1,960	1,170

Calendar year 1954: Max 131 Min 0 Mean 25.2 Ac-ft 18,230
Water year 1954-55: Max 126 Min 0 Mean 22.7 Ac-ft 16,430

* Discharge measurement made on this day.
** Field estimate made on this day.
b Stage-discharge relation affected by ice.

Logan River above State dam, near Logan, Utah

Location.--Lat 41°44'40", long 111°47'00", in NE¼ sec. 36, T. 12 N., R. 1 E., on right bank at Logan plant of Utah Power & Light Co., 125 ft upstream from tailrace, half a mile upstream from State dam, and 2½ miles east of Logan.
Drainage area.--218 sq mi.
Records available.--June 1896 to September 1955. Records since May 1913 equivalent to earlier records if records for Utah Power & Light Co.'s tailrace near Logan are added.
Gage.--Water-stage recorder and concrete control. Altitude of gage is 4,680 ft (from topographic map). Prior to May 7, 1913 staff gage at site a quarter of a mile downstream at different datum.
Average discharge.--42 years (1913-55), 107 cfs (77,460 acre-ft per year). Average combined discharge of Logan River above State dam, Utah Power & Light Co.'s tailrace, and Logan, Hyde Park & Smithfield Canal, 32 years (1923-55), 231 cfs (167,200 acre-ft per year).
Extremes.--Maximum discharge during year, 551 cfs May 23 (gage height, 2.73 ft); minimum daily, 12 cfs for many days October to March.
Maximum combined daily discharge during year (Logan River above State dam, Utah Power & Light Co.'s tailrace, and Logan, Hyde Park & Smithfield Canal), 770 cfs May 22; minimum daily, 69 cfs Jan. 7.
1913-55: Maximum discharge, 2,000 cfs Mar. 21, 1916 (gage height, 5.6 ft, datum then in use), from rating curve extended above 1,000 cfs; minimum daily, 6 cfs Nov. 7, 1940.
1934-55: Maximum combined daily discharge (Logan River above State dam, Utah Power & Light Co.'s tailrace, and Logan, Hyde Park & Smithfield Canal), 1,400 cfs May 24, 30, 1950; minimum daily, 50 cfs Jan. 21, 1935.
Remarks.--Records excellent above 20 cfs and fair below. Water diverted from river and springs above station for power, irrigation, and municipal supply. Flow regulated by powerplants above station. For records of combined flow of Logan River, Utah Power & Light Co.'s tailrace, and Logan, Hyde Park & Smithfield Canal, see following page. Combined flow record excludes that in Logan City culinary pipe lines and one small irrigation diversion from power flume that syphons canyon 400 ft upstream from station.
Cooperation.--Records collected in collaboration with Utah Power & Light Co., in connection with a Federal Power Commission project.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.9	12	1.7	158
1.0	22	2.0	245
1.2	50	2.4	400
1.4	87	2.8	591

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	14	13	13	15	12	18	67	255	47	20	19
2	13	15	13	14	14	12	18	75	233	40	21	19
3	12	15	13	14	14	12	18	65	236	35	21	19
4	12	13	13	14	14	12	17	40	252	30	21	19
5	13	13	13	*14	14	12	17	58	239	28	19	19
6	12	13	12	14	13	12	*17	98	*233	27	20	19
7	12	13	13	14	12	12	17	161	255	32	22	19
8	12	13	12	14	12	12	17	230	323	*29	23	19
9	13	*13	12	15	12	12	19	217	323	22	21	20
10	12	12	12	16	12	12	21	202	323	21	23	20
11	15	12	12	15	12	12	25	*230	304	19	31	20
12	14	14	12	15	12	12	22	245	285	20	32	20
13	*14	13	12	15	12	12	21	275	258	19	36	*20
14	13	13	12	15	12	12	28	315	252	19	38	20
15	13	13	13	15	12	12	47	271	*223	19	*28	20
16	13	13	13	15	*12	12	50	194	205	19	31	20
17	13	12	12	15	12	12	77	153	*185	20	25	21
18	13	12	12	16	12	12	102	150	172	20	23	20
19	13	12	12	*15	12	12	35	208	161	20	25	21
20	14	12	12	15	12	12	21	293	156	20	22	21
21	13	12	13	15	13	12	81	378	138	20	20	20
22	14	*12	13	18	13	12	105	488	123	20	19	20
23	14	12	13	20	13	12	26	470	119	20	19	20
24	14	12	13	15	13	12	21	*437	109	20	19	20
25	15	12	13	15	13	12	35	387	105	20	19	34
26	15	12	13	15	13	12	67	*336	79	20	19	32
27	14	12	13	15	13	12	*28	304	67	*20	19	22
28	14	12	13	16	13	12	18	233	57	*19	19	17
29	14	12	13	15	-	13	22	182	58	19	19	17
30	14	12	13	15	------	*16	41	185	58	19	19	17
31	14	-------	13	15	------	16	- -----	282	------	19	19	------
Total	414	380	391	467	356	381	1,051	7,229	5,786	722	712	614
Mean	13.4	12.7	12.6	15.1	12.7	12.3	35.0	233	193	23.3	23.0	20.5
Ac-ft	821	754	776	926	706	756	2,080	14,340	11,480	1,430	1,410	1,220

Calendar year 1954: Max 319 Min 11 Mean 32.4 Ac-ft 23,450
Water year 1954-55: Max 488 Min 12 Mean 50.7 Ac-ft 36,700

* Discharge measurement made on this day.

Logan River above State dam, near Logan, Utah--Continued

Combined discharge, in cubic feet per second, of Logan River above State dam, Utah Power & Light Co.'s tailrace, and Logan, Hyde Park & Smithfield Canal near Logan, Utah, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	112	104	85	92	88	84	89	258	528	327	189	142
2	111	105	95	94	83	83	93	266	498	318	189	139
3	107	104	94	92	88	83	93	258	481	313	187	138
4	107	103	103	92	87	80	89	236	475	305	184	137
5	110	103	94	87	87	71	86	258	462	297	181	137
6	108	102	91	83	81	75	87	302	464	289	180	133
7	110	102	95	69	85	83	91	365	489	287	182	134
8	108	102	86	72	84	82	95	432	564	280	182	133
9	109	101	83	78	85	82	106	421	593	270	179	133
10	109	100	94	94	75	93	116	434	602	263	166	132
11	108	100	96	97	75	85	120	469	596	256	167	131
12	111	110	93	89	85	84	115	499	589	257	167	128
13	112	108	91	84	86	89	114	536	570	249	172	128
14	110	101	91	90	85	89	123	580	567	244	175	128
15	110	102	90	84	84	82	143	526	533	237	163	129
16	109	114	84	93	85	76	145	440	520	234	172	127
17	107	105	80	86	86	83	175	406	502	230	164	128
18	106	99	76	84	83	86	167	411	484	226	163	128
19	106	100	80	93	71	80	161	479	467	225	166	132
20	108	99	82	88	71	82	145	568	465	223	162	129
21	106	99	86	86	83	79	116	656	449	219	159	124
22	107	99	91	81	88	85	147	770	433	217	156	123
23	107	96	91	91	82	83	163	758	427	213	153	124
24	109	98	89	86	83	84	146	728	415	210	155	124
25	110	96	89	87	82	82	200	674	398	211	155	137
26	109	98	91	85	84	77	199	614	382	210	154	133
27	106	96	81	81	86	77	171	579	367	205	152	132
28	106	96	77	81	84	83	155	511	356	201	148	127
29	104	89	90	85	-	84	180	475	350	201	146	127
30	104	93	94	88	------	89	224	490	341	197	144	125
31	103	------	92	89	------	89	------	565	------	193	141	------
Total	3,349	3,024	2,754	2,681	2,326	2,564	4,054	14,964	14,367	7,607	5,153	3,922
Mean	108	101	88.8	86.5	83.1	82.7	135	483	479	245	166	131
Ac-ft	6,640	6,000	5,460	5,320	4,610	5,090	8,040	29,680	28,500	15,090	10,220	7,780

Calendar year 1954: Max 607 Min 76 Mean 171 Ac-ft 123,700
Water year 1954-55: Max 770 Min 69 Mean 183 Ac-ft 132,400

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

Location.--Lat 41°37'20", long 111°44'25", in NE¼ sec. 8, T. 10 N., R. 2 E., on right bank three-quarters of a mile upstream from diversion dam, 3¼ miles upstream from powerplant of Utah Power & Light Co., and 6 miles east of Hyrum.

Drainage area.--260 sq mi.

Records available.--July 1900 to December 1902, November 1913 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,000 ft (from topographic map). July 19, 1900, to Dec. 31, 1902, staff gage at site 3½ miles downstream at different datum. Nov. 28, 1913, to Oct. 2, 1934, water-stage recorder at site 1,000 ft upstream at different datum.

Average discharge.--41 years (1914-55), 125 cfs (90,500 acre-ft per year).

Extremes.--Maximum discharge during year, 457 cfs May 7 (gage height, 3.69 ft); maximum gage height, 5.96 ft Feb. 27 (caused by snowslide 400 ft downstream from gage); minimum daily discharge, 50 cfs Dec. 28.
1913-55: Maximum discharge, 1,620 cfs May 15, 1917 (gage height, 6.5 ft, site and datum then in use), from rating curve extended above 600 cfs; minimum daily, 29 cfs Jan. 3, 1935.

Remarks.--Records excellent. Some diversions for irrigation of meadowlands above station. Low-water flow may be regulated by powerplant above station.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

1.8	45
2.0	69
2.5	156
3.0	271
3.7	460

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*69	*68	65	65	66	64	69	297	152	105	*87	80
2	68	66	65	66	68	62	76	307	156	102	86	78
3	68	66	65	*66	66	62	75	281	156	102	86	72
4	68	66	68	65	66	62	72	268	158	100	84	78
5	69	64	70	64	66	62	70	320	158	98	84	76
6	69	66	68	59	65	61	69	369	*148	97	86	75
7	69	66	68	52	65	62	75	401	144	97	87	72
8	69	66	66	55	65	62	86	385	142	97	87	78
9	65	66	61	59	*65	65	102	*331	136	95	86	*76
10	70	66	62	72	62	72	117	307	136	95	86	75
11	70	68	64	74	60	70	123	300	134	95	84	75
12	70	72	62	69	64	72	105	*297	132	92	84	75
13	70	72	65	68	66	72	119	284	125	90	86	76
14	70	69	65	69	65	74	142	279	128	92	87	76
15	70	68	64	66	65	72	148	256	126	92	86	78
16	70	76	65	69	65	68	142	227	123	92	86	78
17	70	72	60	69	69	69	173	204	121	90	84	78
18	70	69	59	68	68	68	169	190	117	90	82	78
19	69	68	60	68	60	66	136	192	115	90	87	82
20	69	66	61	69	60	65	123	199	112	90	84	80
21	69	68	62	69	65	65	140	204	108	90	81	80
22	69	68	64	66	69	65	152	210	105	90	81	76
23	69	66	64	66	66	65	142	201	105	90	80	75
24	70	66	64	68	65	66	138	*192	105	90	81	76
25	70	66	64	69	65	65	213	186	103	92	82	82
26	69	66	64	68	65	62	217	175	103	90	86	81
27	69	66	60	68	66	61	166	171	102	90	82	78
28	69	66	50	66	*65	61	150	156	102	89	82	76
29	68	66	68	65	-	64	*164	146	*102	89	81	*78
30	64	*66	65	68	------	*65	217	144	103	82	80	80
31	68	------	65	68	------	65	-----	154	------	86	75	------
Total	2,136	2,024	1,973	2,053	1,822	2,034	3,890	7,633	3,751	2,879	2,600	2,314
Mean	68.9	67.5	63.6	66.2	65.1	65.6	130	246	125	92.9	83.9	77.1
Ac-ft	4,240	4,010	3,910	4,070	3,610	4,030	7,720	15,140	7,440	5,710	5,160	4,590

Calendar year 1954: Max 268 Min 50 Mean 91.3 Ac-ft 66,120
Water year 1954-55: Max 401 Min 50 Mean 96.2 Ac-ft 69,630

Peak discharge (base, 140 cfs).--May 7 (12:30 a.m.) 457 cfs (3.69 ft).
* Discharge measurement made on this day.

Hammond (East Side) Canal near Collinston, Utah

Location.--Lat 41°50', long 112°03', in SE¼ sec. 27, T. 13 N., R. 2 W., on right bank 3,600 ft downstream from Cutler Dam and 4 miles north of Collinston.

Records available.--June 1912 to September 1955.

Gage.--Water-stage recorder.

Average discharge.--38 years (1917-55), 51.7 cfs (37,430 acre-ft per year).

Extremes.--1912-55: Maximum daily discharge, 182 cfs June 28, July 1, 1932, June 27, 28, 1933; no flow for periods during each year.

Remarks.--Records good except those for period of no gage-height record, which are fair. Canal diverts from east side of Bear River in NW¼SW¼ sec. 26, T. 13 N., R. 2 W., at dam at which West Side Canal and intake of Cutler powerplant also divert. Water used for irrigation in eastern Box Elder County.

Cooperation.--Gage-height record and seven discharge measurements furnished by Utah Power & Light Co.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control used June 12-19)

1.3	0	2.2	19
1.4	1.0	2.5	30
1.5	2.3	3.0	54
1.7	5.8	4.0	114
1.9	10	5.0	182

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	a14	0.6					0	122	166	144	143
2	61	13	.2					0	46	167	144	143
3	64	13	0					0	24	167	145	144
4	64	12	0	(*)				0	20	166	146	144
5	54	7.1	0					0	27	165	146	144
6	48	5.6	0					5.6	*37	169	144	144
7	48	5.0	0					54	49	168	150	144
8	49	*10	0					56	58	168	155	144
9	49	22	0					*79	94	168	155	142
10	50	22	0					*71	105	169	155	135
11	50	20	0					65	129	*169	156	136
12	*49	21	0					64	140	169	157	129
13	42	21	0				(*)	113	*140	169	134	116
14	*36	21	*0			(*)		125	120	169	104	*114
15	36	21	0					115	118	169	110	110
16	36	17	0					110	126	171	*125	104
17	36	7.3	0					109	*137	171	127	105
18	36	4.7	0					109	149	172	127	104
19	27	2.6	0	(*)				113	149	*172	127	97
20	22	1.9	0					117	149	171	127	93
21	19	1.6	0					126	149	164	132	95
22	19	1.4	0					134	150	161	144	90
23	20	*.9	0					147	150	162	153	83
24	20	*.4	0					*152	154	160	154	83
25	18	.4	0		(*)			*162	163	155	151	62
26	16	.5	0					160	167	*150	133	41
27	16	.5	0					163	*170	148	142	52
28	a16	.7	0					165	170	145	143	*72
29	a16	.7	0		-			165	155	146	143	72
30	a16	.6	0		------			165	166	145	141	72
31	a16	------	0		------		------	132	-------	144	143	-------
Total	1,092	268.9	0.8	0	0	0	0	2,976.6	3,533	5,055	4,357	3,257
Mean	35.2	8.96	0.03	0	0	0	0	96.0	118	163	141	109
Ac-ft	2,170	533	1.6	0	0	0	0	5,900	7,010	10,030	8,640	6,460

Calendar year 1954: Max 180 Min 0 Mean 64.4 Ac-ft 46,670
Water year 1954-55: Max 172 Min 0 Mean 56.3 Ac-ft 40,740

* Discharge measurement or observation of no flow made on this day.
a No gage-height record; discharge estimated on basis of notes of gate changes by employee of Utah Power & Light Co.

West Side Canal near Collinston, Utah

Location.--Lat 41°50', long 112°04', in SW¼ sec. 27, T. 13 N., R. 2 W., on left bank 4,200 ft downstream from Cutler Dam and 4 miles north of Collinston.

Records available.--June 1912 to September 1955.

Gage.--Water-stage recorder.

Average discharge.--43 years, 230 cfs (166,500 acre-ft per year).

Extremes.--1912-55: Maximum daily discharge, 748 cfs May 19, 20, 1954; no flow during periods in every year except 1914.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Canal diverts from west side of Bear River in NW¼SW¼ sec. 26, T. 13 N., R. 2 W., at dam at which Hammond (East Side) Canal and intake of Cutler powerplant also divert. Water used for irrigation in eastern Box Elder County.

Cooperation.--Gage-height record and eight discharge measurements furnished by Utah Power & Light Co.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	184	94	76					0	469	668	557	639
2	273	90	75					0	224	674	557	639
3	301	91	71					0	190	683	559	639
4	281	90	73	(*)				0	195	688	557	639
5	228	91	73					0	194	695	572	641
				39	18							
6	208	91	73					0	*175	706	595	657
7	208	91	73			17		0	193	711	619	661
8	208	*91	73					0	313	711	644	652
9	208	91	68		(*)			0	420	711	644	644
10	208	85	59					*242	439	711	630	641
11	207	84	57	30				241	514	*709	619	644
12	*204	83	56					243	602	713	634	630
13	195	82	53				(*)	298	*619	718	574	591
14	*189	81	*48			*7.1		348	500	718	490	*572
15	189	80	47			0		289	506	713	479	557
					*15							
16	189	79	44			0		276	555	713	*462	530
17	188	75	39			0		320	*559	718	446	530
18	181	79	39	(*)		0		392	559	718	431	526
19	166	87	38			0		429	585	*718	429	502
20	166	89	38			0		508	604	720	444	475
21	165	90	39	18		0		564	597	716	510	479
22	164	91				0		604	619	711	580	458
23	164	*91				0		644	626	706	641	431
24	163	90				0		*668	639	699	668	415
25	124	90			*17	0		*655	672	670	663	321
26	101	79	39			0		652	679	*648	604	273
27	100	73				0		652	*683	635	639	272
28	100	73				*0		661	686	613	657	*309
29	99	74			-	0		699	683	600	639	308
30	99	75			------	0		692	679	572	637	308
31	99	------			------	0	------	559	------	559	637	------
Total	5,559	2,550	1,602	780	466	228.1	0	10,636	14,978	21,245	17,817	15,583
Mean	179	85.0	51.7	25.2	16.6	7.36	0	343	499	685	575	519
Ac-ft	11,030	5,060	3,180	1,550	924	452	0	21,100	29,710	42,140	35,340	30,910

Calendar year 1954: Max 748 Min 0 Mean 278 Ac-ft 201,300
Water year 1954-55: Max 720 Min 0 Mean 251 Ac-ft 181,400

* Discharge measurement or observation of no flow made on this day.
Note.--No gage-height record Nov. 11-15, Dec. 22 to Mar. 14; discharge estimated on basis of 5 discharge measurements and notes of gate changes by employee of Utah Power & Light Co.

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Bear River near Collinston, Utah

Location.--Lat 41°50', long 112°03', in NW¼SE¼ sec. 27, T. 13 N., R. 2 W., on right bank 800 ft downstream from Cutler plant of Utah Power & Light Co., 2,000 ft downstream from Cutler Dam, and 5½ miles north of Collinston.

Drainage area.--6,000 sq mi, approximately.

Records available.--July 1889 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 4,276.13 ft above mean sea level (levels by Bureau of Reclamation). Prior to Sept. 10, 1938, at site three-quarters of a mile downstream at different datum.

Extremes.--Maximum daily discharge during year, 2,880 cfs May 10; minimum daily, 26 cfs May 21.
1889-1955: Maximum discharge observed, 11,600 cfs June 7-10, 1909 (gage height, 7.70 ft, site and datum then in use); practically no flow at 12 p.m. Aug. 5, 1920.

Remarks.--Records excellent except those for periods of no gage-height record, which are good. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation and return flow from irrigated areas.

Cooperation.--Eight discharge measurements furnished by Utah Power & Light Co.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	706	1,110	1,020	964	944	1,970	1,600	1,120	30	31	42
2	42	679	902	986	994	915	1,430	2,450	1,180	30	31	41
3	32	491	615	419	844	533	1,190	2,240	1,900	33	32	39
4	916	824	814	*937	908	596	1,650	2,140	1,900	30	32	36
5	869	676	863	1,120	605	1,140	1,540	2,100	2,310	30	33	119
6	497	514	831	711	1,370	881	1,680	1,990	2,260	28	44	33
7	708	625	848	476	1,280	786	1,380	2,340	1,940	34	34	43
8	388	712	764	a494	683	613	1,130	1,820	1,920	31	34	42
9	619	281	779	a951	983	1,030	1,450	*2,130	1,460	42	34	39
10	143	816	625	a548	966	1,240	1,230	2,880	1,550	27	34	33
11	381	687	597	a748	1,230	1,850	1,650	1,930	1,300	32	31	34
12	*1,220	1,090	696	1,170	434	1,740	1,790	2,080	398	28	32	34
13	325	586	788	688	218	1,610	1,770	2,410	*643	31	41	39
14	312	1,530	*1,110	1,140	912	1,980	1,580	1,910	483	32	33	*32
15	736	841	1,080	a1,150	*1,210	1,800	1,720	1,340	569	30	32	32
16	603	772	903	a1,150	1,180	1,590	2,050	2,230	626	32	164	32
17	129	1,020	944	677	994	1,340	2,340	2,180	201	32	335	33
18	934	931	608	798	1,440	1,780	2,710	1,290	28	46	708	33
19	861	540	855	1,110	571	2,380	2,630	904	35	*39	244	37
20	668	599	958	1,120	221	1,430	2,330	860	504	36	88	33
21	332	864	591	1,120	1,010	1,990	2,330	26	540	34	30	33
22	708	432	481	978	432	1,080	2,210	28	44	33	30	33
23	644	373	275	1,130	814	1,310	2,060	1,090	160	40	31	926
24	1,060	*831	919	946	716	1,390	2,090	1,170	28	28	76	508
25	779	956	777	637	693	1,150	2,320	981	30	48	31	981
26	820	1,100	539	724	151	1,220	2,290	1,200	39	*30	33	791
27	284	941	628	1,000	1,080	1,700	2,490	367	33	30	32	832
28	701	673	760	918	1,470	*1,300	2,580	31	31	31	32	133
29	668	789	411	668	-	1,550	2,270	32	31	31	32	767
30	661	907	484	531	------	1,940	2,100	63	31	31	*33	934
31	580	------	1,120	1,030	------	1,990	------	728	------	31	33	------
Total	17,655	22,786	23,673	27,095	24,353	42,758	57,980	44,540	23,294	1,020	2,440	8,744
Mean	570	760	764	874	870	1,379	1,932	1,437	776	32.9	78.7	225
Ac-ft	35,020	45,200	46,950	53,740	48,300	84,810	115,000	88,340	46,200	2,020	4,840	13,380

Calendar year 1954: Max 2,210 Min 30 Mean 672 Ac-ft 486,700
Water year 1954-55: Max 2,880 Min 26 Mean 806 Ac-ft 583,800

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of output of powerplant.

Little Malad River above Elkhorn Reservoir, near Malad City, Idaho

Location.--Lat 42°20', long 112°26'; on line between secs. 35 and 36, T. 12 S., R. 34 E., on left bank three-quarters of a mile upstream from highway bridge, 2 miles downstream from Wright Creek, 2½ miles downstream from springs, 2½ miles upstream from Elkhorn Dam, and 14 miles northwest of Malad City.

Drainage area.--120 sq mi, approximately.

Records available.--August 1911 to August 1913 (published as "near Malad"), October 1931 to September 1932, Novmeber 1940 to September 1955.

Gage.--Water-stage recorder and Cipolletti weir. Prior to Dec. 5, 1940, staff gages at different datums.

Average discharge.--16 years (1911-12, 1931-32, 1941-55), 17.8 cfs (12,890 acre-ft per year).

Extremes.--Maximum discharge during year, 351 cfs July 24 (gage height, 3.63 ft), from rating curve extended above 50 cfs on basis of computation of peak flow by weir formula; minimum, 11 cfs Oct. 22 (gage height, 0.39 ft), result of obstruction upstream.
1911-13, 1931-32, 1940-55: Maximum discharge, that of July 24, 1955; minimum, 6.8 cfs Aug. 19, 1948, Jan. 3, 1951; minimum gage height, 0.31 ft Aug. 19, 1948.

Remarks.--Records fair except those for periods of no gage-height record, which are poor. Diversions above station for irrigation of about 400 acres.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.4	9.8	1.2	50
.6	18	1.5	68
.8	28	2.0	104
1.0	38		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	15	13	14	15	15	19	16	18	15	15	13
2	14	14	14	14	15	16	17	16	18	15	15	13
3	14	14	14	14	15	14	16	16	17	15	15	12
4	14	14	14	14	15	14	16	16	17	15	15	12
5	14	14	14	14	15	14	17	16	16	15	15	12
6	14	14	*14	14	15	14	17	16	16	15	15	12
7	14	14	14	14	15	14	18	16	16	14	15	12
8	14	14	13	14	15	14	17	16	16	14	15	12
9	14	13	13	14	15	15	15	16	15	14	15	12
10	14	13	13	14	15	18	17	16	15	14	15	12
11	14	14	13	14	15	20	18	16	15	15	14	13
12	14	14	14	*14	15	25	18	16	16	15	14	13
13	15	14	14	14	15	20	18	16	15	14	15	13
14	15	14	14	14	15	19	18	15	15	14	16	13
15	15	14	14	14	15	18	18	16	15	14	16	13
16	15	16	13	14	15	17	18	16	15	14	17	13
17	15	14	13	14	14	16	18	16	15	14	17	13
18	14	14	13	14	14	15	18	15	15	14	30	13
19	14	14	13	14	14	14	17	15	*15	14	18	14
20	14	14	13	14	14	14	17	15	14	14	15	14
21	14	14	14	14	14	14	17	14	14	14	14	13
22	14	14	13	14	14	20	17	15	14	*14	14	13
23	15	14	13	14	14	20	17	*15	14	*22	13	13
24	15	14	13	14	14	20	16	15	14	*62	*13	13
25	15	14	14	14	14	15	17	16	14	34	35	14
26	15	14	14	14	15	15	*17	16	14	39	18	13
27	15	14	14	14	15	*17	16	16	14	16	14	13
28	15	14	13	14	15	20	16	15	14	15	14	13
29	15	13	14	14	-	32	16	15	15	15	13	13
30	*15	13	13	14	------	21	16	15	15	15	13	13
31	15	------	14	14	------	16	------	17	------	15	13	------
Total	448	419	419	434	411	536	512	485	456	549	496	385
Mean	14.5	14.0	13.5	14.0	14.7	17.3	17.1	15.6	15.2	17.7	16.0	12.8
Ac-ft	889	831	831	861	815	1,060	1,020	962	904	1,090	984	764

Calendar year 1954: Max 28 Min 12 Mean 15.5 Ac-ft 11,230
Water year 1954-55: Max 62 Min 12 Mean 15.2 Ac-ft 11,010

* Discharge measurement made on this day.

Note.--No gage-height record Jan. 14 to Mar. 26, July 27 to Aug. 6, Aug. 18, 19; discharge estimated on basis of weather records and records for Devil Creek above Campbell Creek, near Malad City, Malad River at Woodruff, and Raft River near Bridge.

Devil Creek above Campbell Creek, near Malad City, Idaho

Location.--Lat 42°18', long 112°12', in sec. 12, T. 13 S., R. 36 E., on right bank 0.6 mile upstream from proposed dam, 1.3 miles upstream from highway crossing of Campbell Creek, 4.5 miles upstream from Evans dividers, and 7½ miles northeast of Malad City.

Drainage area.--13 sq mi, approximately.

Records available.--November 1938 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,150 ft (by barometer). Prior to Dec. 16, 1943, staff gage and Dec. 16, 1943, to Aug. 22, 1954, water-stage recorder at site 50 ft upstream at datum 1.84 ft higher.

Average discharge.--16 years (1939-55), 10.2 cfs (7,380 acre-ft per year).

Extremes.--Maximum discharge during year, 27 cfs Aug. 25 (gage height, 2.27 ft); minimum, 2.8 cfs Feb. 22 (gage height, 1.62 ft); minimum daily, 4.3 cfs Feb. 22.
1938-55: Maximum discharge observed, 160 cfs Apr. 2, 1943, from rating curve extended above 47 cfs on basis of logarithmic plotting and discharge measurement of 126 cfs made in 1952; maximum gage height, 2.38 ft Apr. 19, 1952, site and datum then in use; minimum discharge recorded, 1.6 cfs Jan. 13, 1950 (gage height, 0.43 ft, site and datum then in use); minimum daily, 1.8 cfs Nov. 3-5, 1949.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Diversions above station for irrigation of 20 to 30 acres. Stream receives part of flow of Birch Creek above station. Malad powerplant and its small reservoir on Birch Creek cause slight diurnal fluctuations.

Revisions (water years).--WSP 1344: 1943(m).

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.7	3.9
1.8	6.0
1.9	6.8
2.0	12

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.2	7.1	7.4	7.1	5.4	5.8	8.0	7.1	7.7	6.0	4.7	5.0
2	5.2	7.1	7.1	7.1	4.7	6.0	8.0	7.4	8.0	5.8	4.7	5.2
3	5.2	7.1	6.0	6.8	b5.0	6.3	7.4	7.4	8.0	5.8	4.7	5.2
4	5.4	7.1	6.6	6.6	b5.0	7.1	7.1	7.1	7.7	5.8	4.7	5.2
5	5.4	7.1	7.4	6.8	4.5	6.8	6.8	7.4	7.4	5.6	5.0	4.7
6	5.4	7.1	*7.4	6.8	b5.0	6.6	6.3	7.7	7.4	5.6	5.0	5.0
7	5.4	7.1	7.4	6.3	4.5	7.1	6.8	8.2	7.1	5.4	5.0	5.0
8	5.4	7.1	7.4	6.8	4.5	7.1	8.0	9.2	6.8	5.2	5.0	5.2
9	5.4	7.1	b7.0	6.6	5.0	7.4	8.5	8.5	6.6	5.2	4.7	5.0
10	5.4	7.1	7.1	7.1	b6.0	7.1	8.6	8.2	6.6	5.2	4.7	5.0
11	5.4	7.1	6.8	6.8	b6.3	7.4	7.4	8.5	6.6	5.4	4.7	5.0
12	5.4	6.8	6.0	*6.0	b6.3	7.4	7.7	8.2	6.6	5.3	4.7	5.0
13	5.6	7.7	6.0	5.4	b6.3	7.4	7.7	8.5	6.6	5.2	5.6	5.2
14	5.6	7.1	6.0	5.2	6.3	7.4	8.0	8.5	6.6	5.2	5.2	5.0
15	5.6	7.1	6.0	5.2	6.0	7.4	7.4	8.0	6.6	5.2	4.7	5.0
16	5.6	8.0	5.6	5.2	5.4	7.4	8.0	8.0	6.6	5.2	4.7	5.0
17	5.6	6.8	5.6	5.2	5.4	7.4	8.2	7.4	6.6	5.0	5.0	4.7
18	5.6	6.6	5.8	5.4	4.7	7.4	7.4	7.4	6.6	5.0	4.7	5.2
19	5.6	6.3	5.8	5.4	b5.0	7.1	6.3	7.4	6.3	5.0	5.0	5.0
20	5.6	6.3	6.0	5.4	b5.0	7.1	6.3	7.7	*6.3	5.0	4.7	5.0
21	5.6	6.3	6.8	5.2	5.4	7.1	6.3	8.0	6.3	5.2	4.5	5.0
22	6.3	6.3	6.0	5.4	4.3	7.1	6.3	8.0	6.6	5.2	4.7	5.0
23	6.3	6.3	5.8	5.4	5.4	6.8	6.0	*7.7	6.3	5.4	4.7	5.0
24	6.6	6.3	5.8	5.4	*5.4	7.1	6.0	7.7	6.3	*5.8	4.7	5.0
25	6.6	6.8	6.3	5.4	6.0	7.1	6.8	7.7	6.3	5.8	*6.7	5.2
26	6.8	7.4	6.8	5.2	6.0	*7.1	6.8	7.7	6.3	6.3	5.4	5.2
27	6.8	7.4	6.8	5.4	6.0	7.4	*6.6	7.4	6.3	5.6	5.0	5.2
28	6.8	7.4	6.6	5.4	5.8	7.1	6.6	7.4	6.3	5.2	5.0	5.2
29	6.8	7.4	b6.5	5.2	-	7.4	6.6	7.4	6.3	5.0	5.0	5.2
30	*6.8	7.4	6.8	5.2	------	7.7	6.6	6.8	6.3	5.0	5.0	5.2
31	7.1	------	7.1	5.2	------	7.7	------	7.7	------	4.7	5.0	------
Total	181.5	209.8	201.7	181.6	150.6	220.3	214.7	241.3	202.0	166.3	152.9	151.8
Mean	5.85	6.99	6.51	5.86	5.38	7.11	7.16	7.78	6.73	5.36	4.93	5.06
Ac-ft	360	416	400	360	299	437	426	479	401	330	303	301

Calendar year 1954: Max 16 Min 4.6 Mean 6.86 Ac-ft 4,970
Water year 1954-55: Max 9.2 Min 4.3 Mean 6.23 Ac-ft 4,510

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record July 7-23; discharge estimated on basis of weather records and records for other nearby streams.

Malad River at Woodruff, Idaho

Location.--Lat 42°02', long 112°14', in sec. 15, T. 16 S., R. 36 E., on left abutment of bridge on county road at Woodruff, 2½ miles north of Idaho-Utah State line.

Drainage area.--485 sq mi, approximately.

Records available.--November 1938 to September 1955.

Gage.--Staff gage read once daily. Prior to Mar. 6, 1951, staff gage at site 300 ft downstream at datum 0.27 ft lower.

Extremes.--Maximum discharge observed during year, 180 cfs Mar. 12 (gage height, 4.40 ft); minimum observed, 17 cfs May 28, July 10, 11, 15-18; minimum gage height observed, 1.90 ft July 10, 11, 15-17.
1938-55: Maximum discharge, 650 cfs Jan. 22 or 23, 1943 (gage height, 8 ft, from information by observer), from rating curve extended above 370 cfs by logarithmic plotting; minimum observed, 15 cfs July 15, 16, 1940; minimum gage height observed, 1.92 ft Aug. 7, 1947.

Remarks.--Records fair. Flow regulated by several small reservoirs above station. Diversions above station for irrigation of 25,000 to 30,000 acres.

Revisions (water years).--WSP 1060: 1943(M).

Rating table, water year 1954-55 (gage height in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-13, July 17 to Sept. 30)

1.8	17	3.0	79
2.1	30	4.0	148
2.5	50	5.0	229

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	36	59	a48	58	55	105	a92	52	a26	a19	a26
2	24	36	60	48	60	55	105	a90	57	a30	19	a25
3	25	37	61	48	60	55	107	a86	81	a28	19	a24
4	25	37	61	48	61	55	102	a80	123	a26	20	23
5	a26	37	a60	48	61	60	98	a70	112	a25	21	22
6	a26	37	*a59	48	58	61	a96	a70	88	a24	19	21
7	a26	37	a58	48	56	61	a98	a72	81	a22	21	21
8	a26	38	a58	48	55	58	a100	a74	69	a21	21	21
9	a26	38	a54	47	54	61	a104	a74	47	20	21	21
10	a26	38	50	46	53	64	a108	a74	31	17	21	21
11	a26	38	50	45	51	73	a108	a72	31	17	21	21
12	a27	38	52	*46	50	180	a108	a68	30	a20	21	a22
13	a28	38	52	a46	50	134	a105	a64	30	a18	21	a22
14	29	40	52	a46	50	135	a105	a60	30	a18	21	a20
15	30	41	52	46	50	128	a105	a56	27	17	21	a19
16	30	41	52	48	50	92	a102	a50	27	17	a22	a19
17	a28	42	52	48	50	78	a100	a46	27	17	a23	a19
18	a29	44	52	48	50	73	a98	42	27	17	a23	a19
19	a29	44	51	49	50	73	a98	37	*25	18	a24	a19
20	26	44	51	49	51	141	a98	32	27	18	a24	a20
21	25	44	51	49	51	138	a95	27	27	18	a26	21
22	25	44	51	49	51	125	a95	27	27	18	a23	a22
23	25	46	51	48	51	120	a95	*26	22	*18	a21	a23
24	a26	47	51	49	*53	107	a95	25	22	a18	*a23	a24
25	a27	47	51	50	52	a100	a100	23	22	a19	a25	a25
26	a28	48	51	50	55	a95	*a105	22	20	a19	a28	a25
27	a29	49	51	50	55	*93	a100	a19	20	a19	a32	a26
28	a30	52	51	50	55	a100	a96	a17	20	a19	a31	a26
29	a32	54	49	50	-	105	a94	a19	20	a19	a30	a25
30	*a34	54	49	58	------	106	a92	a21	a28	a19	a29	a25
31	36	------	49	58	------	104	------	a25	------	a19	a28	------
Total	852	1,266	1,651	1,509	1,501	2,912	3,017	1,560	1,250	621	718	667
Mean	27.5	42.2	53.3	48.7	53.6	93.9	101	50.3	41.7	20.0	23.2	22.2
Ac-ft	1,690	2,510	3,270	2,990	2,980	5,780	5,980	3,090	2,480	1,230	1,420	1,320

Calendar year 1954: Max 223 Min 19 Mean 45.6 Ac-ft 32,990
Water year 1954-55: Max 180 Min 17 Mean 48.0 Ac-ft 34,740

* Discharge measurement made on this day.
a Doubtful or no gage-height record; discharge estimated on basis of weather records and records for Portneuf River at Pocatello.

Bear River near Corinne, Utah

Location.--Lat 41°34'30", long 112°06'00", in SW¼NW¼ sec. 29, T. 10 N., R. 2 W., on right bank 1.1 miles downstream from Salt Creek, 2.0 miles northeast of Corinne, and 2.6 miles downstream from Malad River.

Records available.--October 1949 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,220 ft (from benchmark at Corinne). Since July 27, 1950, auxiliary staff gage 7,800 ft downstream.

Average discharge.--6 years, 1,782 cfs (1,290,000 acre-ft per year).

Extremes.--Maximum discharge during year, 2,850 cfs Apr. 20 (gage height, 8.91 ft); minimum, 99 cfs July 19; minimum daily, 101 cfs July 18, 19, 21-23.
1949-55: Maximum discharge, 7,200 cfs May 3, 1952 (gage height, 14.69 ft); maximum gage height, 14.83 ft Feb. 11, 1951; minimum discharge, 86 cfs Aug. 18, 1953; minimum daily, 90 cfs Aug. 18, 1953.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas. Records are equivalent to flow at Bear River Bird Refuge diversion works.

Revisions (water years).--WSP 1284: 1953.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	667	780	1,110	1,220	1,170	1,580	2,080	2,270	684	145	121	109
2	*233	888	1,290	1,170	1,100	1,180	2,130	2,050	1,340	140	114	118
3	198	731	1,070	1,150	1,120	1,160	1,820	2,480	1,610	137	*108	124
4	210	676	793	660	1,000	780	1,540	2,370	2,040	138	109	119
5	809	1,030	971	1,050	1,040	820	1,860	2,390	2,120	132	107	118
6	1,110	870	1,030	1,280	870	1,260	*1,870	2,450	*2,520	128	112	118
7	845	569	1,010	920	1,520	1,100	1,830	2,250	2,220	124	115	140
8	872	*787	991	680	1,420	1,020	1,690	2,420	2,150	*122	130	124
9	649	806	907	700	900	900	1,470	*1,900	2,000	127	126	137
10	766	500	906	1,120	1,100	1,280	1,660	2,300	1,890	126	120	134
11	380	905	776	760	1,100	1,520	1,530	2,410	1,540	133	115	*134
12	450	1,010	615	960	1,340	1,960	1,890	2,050	1,430	128	115	*142
13	1,290	1,280	748	1,320	640	1,900	*1,790	2,160	*785	116	136	167
14	*660	897	*975	920	410	1,840	2,060	2,480	702	112	184	198
15	388	1,540	1,230	1,300	1,100	2,100	1,870	2,090	547	109	170	184
16	839	1,210	1,160	1,300	1,320	1,960	1,890	1,620	622	105	*160	160
17	795	1,060	1,040	1,310	1,300	*1,820	2,270	2,120	680	103	174	146
18	461	1,120	1,080	840	1,180	1,640	2,600	2,140	513	*101	309	142
19	892	1,170	800	960	1,570	2,080	2,740	1,520	232	101	705	151
20	1,160	785	1,100	1,260	860	2,460	2,700	*1,000	172	102	436	148
21	741	677	1,140	1,260	460	1,720	2,610	1,000	376	101	217	146
22	482	1,030	805	1,250	1,140	2,080	2,490	218	714	101	172	*140
23	807	619	715	1,180	660	1,360	2,390	115	270	101	145	137
24	841	*499	326	1,280	980	1,460	2,210	993	170	103	131	670
25	1,220	975	953	1,100	880	1,500	2,350	1,230	191	110	132	546
26	a850	1,210	1,000	770	850	1,400	2,610	1,110	140	122	142	938
27	a890	1,330	589	810	420	1,440	2,590	1,290	*127	126	127	876
28	a380	1,160	760	1,120	1,240	*1,780	2,670	578	121	118	131	*867
29	*a770	841	880	1,060	-	1,610	*2,640	149	124	119	130	423
30	818	910	600	830	------	1,820	2,540	114	138	118	*124	758
31	716	------	620	710	------	2,070	------	127	------	121	115	------
Total	22,189	27,865	27,990	32,250	28,690	48,600	64,390	49,394	28,168	3,669	5,232	8,314
Mean	716	929	903	1,040	1,025	1,568	2,146	1,593	939	118	169	277
Ac-ft	44,010	55,270	55,520	63,970	56,910	96,400	127,700	97,970	55,870	7,280	10,380	16,490

Calendar year 1954: Max 2,350 Min 103 Mean 807 Ac-ft 584,700
Water year 1954-55: Max 2,740 Min 101 Mean 950 Ac-ft 687,800

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station near Collinston.
Note.--Stage-discharge relation affected by ice Dec. 18-20, Dec. 28 to Mar. 27.

Weber River near Oakley, Utah

Location.--Lat 40°44'10", long 111°14'45", in SE¼NE¼ sec. 15, T. 1 S., R. 6 E., on right bank 1.4 miles downstream from South Fork, 2.6 miles upstream from Weber-Provo diversion canal, and 3¼ miles northeast of Oakley.

Drainage area.--163 sq mi.

Records available.--October 1904 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,600 ft (from topographic map). Prior to Oct. 25, 1933, staff gage at site a quarter of a mile downstream at different datum. Oct. 25, 1933, to Aug. 29, 1955, water-stage recorder at present site at datum 0.5 ft higher.

Average discharge.--49 years (1906-55), 226 cfs (163,300 acre-ft per year).

Extremes.--Maximum discharge during year, 1,550 cfs June 9 (gage height, 2.84 ft); minimum not determined, occurred during period of ice effect.

1904-55: Maximum discharge observed, 4,170 cfs (revised), June 13, 1921 (gage height, 9.0 ft, site and datum then in use), from rating curve extended above 2,000 cfs by logarithmic plotting; minimum recorded, 16 cfs Mar. 12, 1941.

Revisions.--The figures of maximum discharge observed for some water years have been revised as shown in the following table. They supersede figures published in the water-supply papers indicated.

WSP	Water year	Date	Discharge (cfs)	Gage height (feet)
250	1907	July 6, 1907	3,500	8.5
250	1908	June 15, 1908	2,110	7.5
270	1909	June 5-7, 1909	3,500	8.5
310	1911	June 13, 1911	2,080	7.3
330	1912	June 9, 1912	3,370	8.4
530	1921	June 13, 1921	4,170	9.0
550	1922	June 8, 9, 1922	2,930	8.3

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Several small diversions for irrigation above station. Flow slightly regulated by several small lakes on headwaters and a small reservoir on Smith and Morehouse Creek. Total capacity of all reservoirs, about 3,200 acre-ft.

Revisions (water years).--WSP 790: 1934. Revised figures of discharge, in cubic feet per second, for the water years 1907-9, 1911-12, 1921-22, superseding those published in WSP 250, 270, 310, 330, 530, and 550, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1907		1907-Con.		1908-Con.		1909-Con.		1911-Con.	
May 11	555	July 1	2,860	July 2	855	June 15	1,780	May 23	712
12	668	2	2,860	3	855	16	1,880	24	775
13	610	3	3,240	4	855	17	2,740	25	840
14	555	4	3,370	5	790	18	2,860	26	905
15	668	5	3,370	6	822	19	2,290	27	775
16	728	6	3,500	7	728	20	2,080	28	653
17	822	7	2,980	8	668	21	1,880	29	653
18	855	8	2,290	9	555	22	1,780	30	712
19	1,070	9	2,180			23	2,080	31	905
20	1,310	10	1,780	1909		24	2,290	June 1	1,040
21	1,490	11	1,580	May 5	555	25	2,290	2	1,040
22	1,580	12	1,400	6	582	26	2,080	3	1,190
23	1,400	13	1,230	7	610	27	2,180	4	1,510
24	1,310	14	1,230	8	668	28	2,080	5	1,600
25	1,230	15	1,150	9	728	29	1,980	6	1,780
26	995	16	995	10	925	30	1,880	7	1,690
27	925	17	925	11	790	July 1	1,780	8	1,780
28	855	18	890	12	668	2	1,690	9	1,780
29	855	19	890	13	668	3	1,600	10	1,190
30	995	20	855	14	668	4	1,430	11	1,350
31	1,150	21	822	15	728	5	1,270	12	1,780
June 1	1,400	22	728	16	728	6	1,120	13	2,080
2	1,490	23	698	17	610	7	840	14	1,980
3	1,580	24	639	18	668	8	840	15	1,780
4	1,680	25	610	19	668	9	775	16	1,600
5	1,880	26	610	20	728	10	712	17	1,430
6	1,880	27	582	21	790	11	653	18	1,270
7	2,080			22	925	12	597	19	1,270
8	1,780	1908		23	995	13	570	20	1,350
9	1,510	June 10	610	24	925	14	544	21	1,270
10	1,270	11	995	25	790			22	1,190
11	1,270	12	1,400	26	925	1911		23	1,120
12	1,600	13	1,400	27	1,070	May 4	446	24	1,040
13	1,430	14	1,680	28	1,400	5	544	25	775
14	1,270	15	2,110	29	1,150	6	712	26	775
15	1,040	16	1,400	30	925	7	712	27	712
16	975	17	1,230	31	995	8	840	28	712
17	975	18	1,070	June 1	995	9	775	29	653
18	1,040	19	855	2	1,490	10	775	30	597
19	1,430	20	925	3	2,110	11	712	July 1	544
20	1,600	21	1,070	4	2,840	12	712	2	544
21	1,780	22	1,310	5	3,500	13	775	3	494
22	2,180	23	995	6	3,500	14	775	4	446
23	1,600	24	925	7	3,500	15	840	5	423
24	1,430	25	1,150	8	2,620	16	775	6	400
25	1,430	26	1,490	9	2,080	17	775	28	175
26	1,510	27	1,780	10	1,690	18	712		
27	1,690	28	2,000	11	1,600	19	653	1912	
28	2,080	29	1,150	12	1,690	20	597	Mar. 18	80
29	2,180	30	885	13	1,690	21	544	19	85
30	2,180	July 1	890	14	1,880	22	597	20	90

Weber River near Oakley, Utah--Continued

Revised figures of discharge, in cubic feet per second, 1907-9, 1911-12, 1921-22--Continued

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1912-Con.		1912-Con.		1912-Con.		1921-Con.		1922-Con.	
May 18	712	June 8	2,740	June 29	975	June 24	1,780	June 5	2,170
19	840	9	3,370	30	875	25	1,680	6	2,170
20	975	10	2,400					7	2,410
21	975	11	1,780	1921		1922		8	2,930
22	840	12	1,690	June 6	2,340	May 18	1,110	9	2,930
23	712	13	2,080	7	2,710	19	1,270	10	2,530
24	712	14	1,510	8	3,100	20	1,190	11	2,290
25	905	15	1,430	9	3,240	21	1,190	12	1,950
26	975	16	1,040	10	3,380	22	1,230	13	1,950
27	975	17	975	11	3,530	23	1,270	14	2,290
28	840	18	905	12	3,840	24	1,540	15	1,540
29	1,040	19	905	13	4,170	25	1,640	16	1,360
30	1,430	20	1,120	14	3,600	26	1,840	17	1,540
31	1,270	21	1,350	15	3,170	27	1,640	18	1,740
June 1	1,190	22	1,390	16	2,460	28	1,540	19	2,170
2	1,430	23	1,430	17	1,680	29	1,640	20	2,060
3	1,880	24	1,600	18	1,630	30	1,740	21	2,060
4	1,980	25	1,270	19	1,360	31	1,740	22	1,800
5	2,080	26	1,190	20	1,070	June 1	1,740	23	1,740
6	2,290	27	1,120	22	1,580	2	1,740	24	1,360
7	2,860	28	1,040	23	1,890	3	1,740	25	1,190
						4	1,950	26	1,110

Month	Maximum	Minimum	Mean	Runoff in acre-feet
May 1907	1,580	360	795	48,900
June	2,180	975	1,575	93,700
July	3,500	385	1,486	91,400
Water year 1906-7	3,500	-	415	300,000
Calendar year 1907	3,500	-	417	302,000
June 1908	2,110	360	997	59,300
July	890	154	398	24,500
Water year 1907-8	2,110	46	218	158,000
Calendar year 1908	2,110	46	222	161,000
May 1909	1,400	241	745	45,800
June	3,500	995	2,180	130,000
July	1,780	243	658	40,500
Water year 1908-9	3,500	-	382	277,000
Calendar year 1909	3,500	-	385	279,000
May 1911	905	320	684	42,100
June	2,080	597	1,310	78,000
July	544	146	287	17,600
Water year 1910-11	2,080	-	255	185,000
Calendar year 1911	2,080	55	258	186,000
March 1912	96	55	68.6	4,220
May	1,430	108	566	34,800
June	3,370	875	1,600	95,000
Water year 1911-12	3,370	55	279	202,000
Calendar year 1912	3,370	55	287	208,000
June 1921	4,170	1,160	2,130	127,000
Water year 1920-21	4,170	-	373	270,000
Calendar year 1921	4,170	-	371	269,000
May 1922	1,840	322	953	58,600
June	2,930	610	1,790	106,000
Water year 1921-22	2,930	-	321	232,000
Calendar year 1922	2,930	-	317	229,000

Weber River near Oakley, Utah--Continued

Rating tables, water year 1954-55, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Nov. 27, Apr. 7 to May 21)

May 16 to Aug. 29				Aug. 30 to Sept. 30	
-0.2	61	1.0	345	0.2	51
0.0	85	1.5	575	.5	85
.3	136	2.0	890		
.6	202	2.6	1,350		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	*50						232	636	*188	*115	75
2	50	50						229	525	180	108	75
3	51	48		(*)				219	480	178	102	73
4	51	48					45	216	448	173	98	68
5	51	46						277	412	166	102	62
6	51	46						390	394	159	110	62
7	50	48					40	*499	732	153	123	61
8	50	46					48	566	1,190	149	114	60
9	57	48					54	540	*1,240	142	102	65
10	52	54					62	566	1,140	132	94	66
11	51	52					63	714	1,020	130	88	72
12	51	62	45				58	*853	925	125	81	71
13	54	65					65	908	*827	123	80	65
14	52	57					79	900	*799	123	90	63
15	52	56					85	727	702	121	94	61
16	52	65		45	45		90	*565	666	121	92	58
17	51	57					96	494	535	117	91	58
18	51	56					88	466	498	117	85	58
19	50	50					86	586	466	123	82	75
20	50	50					85	946	448	114	80	70
21	48	52					102	1,130	399	110	77	64
22	48	50					40	109	1,290	390	123	72	61
23	50	50					104	*1,210	363	149	71	59
24	52	50					102	1,130	329	162	80	59
25	56	48					133	974	298	175	96	69
26	54	48	45				152	757	275	171	102	71
27	51	46					128	630	245	146	91	68
28	52	40			(*)	(*)	119	530	226	136	86	68
29	51	*35			-		*133	516	206	130	84	65
30	50	40			------		173	654	201	125	*81	62
31	50	------		(*)	------		------	*799	------	119	77	------
Total	1,590	1,513	1,395	1,395	1,260	1,240	2,530	20,513	17,015	4,380	2,848	1,964
Mean	51.3	50.4	45	45	45	40	84.3	662	567	141	91.9	65.5
Ac-ft	3,150	3,000	2,770	2,770	2,500	2,460	5,020	40,690	33,750	8,690	5,650	3,900

Calendar year 1954: Max 1,100 Min 35 Mean 139 Ac-ft 100,400
Water year 1954-55: Max 1,290 Min - Mean 158 Ac-ft 114,400

Peak discharge (base, 1,200 cfs).--May 22 (1:30 a.m.) 1,450 cfs (2.77 ft); June 9 (12:30 a.m.) 1,550 cfs (2.84 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 28 to Apr. 6 (no gage-height record Dec. 23 to Jan. 3, Jan. 7 to Mar. 13; discharge estimated on basis of 3 discharge measurements, weather records, and records for stations near Wanship and Coalville).

Weber-Provo diversion canal at Oakley, Utah

Location.--Lat 40°42'30", long 111°16'30", in NW¼ sec. 28, T. 1 S., R. 6 E., on right bank 1,400 ft downstream from head and three-quarters of a mile east of Oakley.

Records available.--October 1945 to September 1955 in reports of Geological Survey. October 1938 to September 1945, collected by Bureau of Reclamation, available in files of Salt Lake City district office, Geological Survey. October 1932 to September 1939 in reports of Weber River water commissioner.

Gage.--Water-stage recorder and Parshall flume. Altitude of gage is 6,500 ft (from topographic map).

Extremes.--1945-55: Maximum daily discharge, 880 cfs June 9, 1955; no water diverted from Weber River for several months each year.

Remarks.--Records good except those for periods of once-daily gage-height readings, which are fair. Canal diverts water from Weber River in SW¼SW¼ sec. 21, T. 1 S., R. 6 E., for irrigation and water supply in Jordan River basin. Figures given herein represent water diverted from main stem of Weber River, some of which may return to Weber River through seepage. For records at outlet of canal see page 105.

Revisions (water years).--WSP 1284: 1949.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	20	29	31	31	39	181	44			
2		0	25	29	29	33	30	183	*43			
3		0	29	30	29	35	31	179	162			
4		0	30	29	29	33	33	167	226			
5		0	29	29	27	23	33	207	195			
6		0	*27	29	28	27	34	262	181			
7		0	29	29	29	30	34	340	*380			
8		0	14	31	28	27	35	408	*676			
9		0	14	31	24	25	38	418	*880			
10		0	30	32	22	27	42	438	861			
11	(*)	0	22	*32	21	30	42	500	815			
12		0	20	32	26	34	42	438	748			
13		0	29	35	29	34	42	338	557			
14		0	26	33	32	32	56	272	**104			
15		18	23	33	33	34	69	266	0			
16		34	22	33	33	41	70	*262	0			
17		33	18	32	33	21	78	258	0			
18		*30	22	31	*25	27	71	256	0			
19		28	23	33	13	29	69	268	0			
20		27	24	34	20	16	65	284	0			
21		29	24	34	23	5.7	*80	282	0			
22		28	30	33	26	27	84	287	0			
23		28	31	31	36	34	81	185	0			
24		28	32	33	31	33	78	154	0			
25		27	29	34	38	*28	98	101	0			
26		28	28	32	31	29	128	48	0			
27		28	23	29	30	27	110	44	0			
28		25	19	30	29	25	94	45	0			
29		22	26	31	-	34	110	44	0			
30		19	29	32	------	36	143	44	0			
31		------	29	*32	------	37	------	45	------			------
Total	0	432	776	977	785	904.7	1,959	7,204	5,872	0	0	0
Mean	0	14.4	25.0	31.5	28.0	29.2	65.3	232	196	0	0	0
Ac-ft	0	857	1,540	1,940	1,560	1,790	3,890	14,290	11,650	0	0	0

Calendar year 1954: Max 316 Min 0 Mean 21.5 Ac-ft 15,550
Water year 1954-55: Max 880 Min 0 Mean 51.8 Ac-ft 37,520

* Discharge measurement or observation of no flow made on this day.
** Field estimate made on this day.
Note.--Discharge computed from once-daily staff-gage readings Dec. 7 to Apr. 1.

Weber River near Wanship, Utah

Location.--Lat 40°47'30", long 111°24'15", in center sec. 29, T. 1 N., R. 5 E., on left bank 1.2 miles south of Wanship and 1¼ miles upstream from Silver Creek.

Drainage area.--320 sq mi, approximately.

Records available.--October 1950 to September 1955 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 5,900 ft (from topographic map).

Average discharge.--5 years, 215 cfs (155,700 acre-ft per year).

Extremes.--Maximum discharge during year, 1,320 cfs May 23 (gage height, 4.13 ft); minimum, 27 cfs Sept. 15 (gage height, 0.67 ft).
1950-55: Maximum discharge, 2,340 cfs May 30, 1951 (gage height, 4.73 ft); minimum, that of Sept. 15, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Many diversions above station for irrigation. Records do not include water diverted from Weber River basin through Weber-Provo diversion canal (see p. 66). Flow slightly regulated by several small lakes and reservoirs.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	*65					198	82	680	*117	*123	71
2	54	62					205	87	489	102	108	66
3	53	62		(*)			127	80	331	94	94	65
4	56	62					123	80	174	87	94	64
5	52	64		58			117	96	141	83	100	56
6	54	65					108	158	108	83	94	48
7	52	65					119	240	94	73	151	46
8	48	64			56		188	297	271	73	136	44
9	60	68					272	274	308	68	104	39
10	60	71				58	286	182	228	54	93	39
11	62	75					214	240	153	58	89	41
12	59	102		58			134	490	132	58	82	41
13	53	130					171	724	146	50	85	38
14	50	100					199	830	594	50	78	33
15	54	89	58				148	632	796	48	75	33
16	56	121					139	*400	698	46	71	33
17	56	96					127	274	621	65	68	30
18	56	76					108	202	509	59	68	36
19	54	65					85	218	455	56	71	85
20	53	64					82	489	408	54	65	59
21	52	60					83	711	336	54	64	54
22	52	60			58		76	948	308	109	64	52
23	50	60					80	1,140	282	94	58	52
24	53	59		56			75	1,070	253	132	54	58
25	62	59				60	89	1,020	224	257	80	104
26	66	60					87	*823	202	224	96	106
27	70	59					73	621	177	169	83	78
28	73	52			(*)	*73	80	445	156	143	80	71
29	70	*50			-	99	*75	348	134	141	83	70
30	70	50			------	132	71	441	130	139	*85	66
31	66	------		(*)	------	136	------	724	------	123	80	------
Total	1,782	2,135	1,798	1,766	1,594	2,020	3,939	14,366	9,538	2,963	2,676	1,678
Mean	57.5	71.2	58	57	56.9	65.2	131	463	318	95.6	86.3	55.9
Ac-ft	3,530	4,230	3,570	3,500	3,160	4,010	7,810	28,490	18,920	5,880	5,310	3,330

Calendar year 1954: Max 1,130 Min - Mean 129 Ac-ft 93,150
Water year 1954-55: Max 1,140 Min 30 Mean 127 Ac-ft 91,740

Peak discharge (base, 1,200 cfs).--May 23 (2:30 p.m.) 1,320 cfs (4.13 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 29 to Jan. 9. No gage-height record Jan. 10 to Mar. 27 (stage-discharge relation affected by ice during most of period); discharge estimated on basis of 2 discharge measurements, weather records, and records for nearby stations.

Weber River near Coalville, Utah

Location.--Lat 40°53'40", long 111°24'00", in SE¼NE¼ sec. 20, T. 2 N., R. 5 E., on left bank 1½ miles upstream from high-water line of Echo Reservoir, 1½ miles south of Coalville, and 6 miles downstream from Silver Creek.

Drainage area.--438 sq mi.

Records available.--April 1927 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,600 ft (from topographic map). Prior to Mar. 22, 1931, staff gage, and Mar. 22, 1931, to Sept. 30, 1952, water-stage recorder, at same site at datum 1 ft higher.

Average discharge.--28 years, 209 cfs (151,300 acre-ft per year).

Extremes.--Maximum discharge during year, 956 cfs May 24 (gage height, 3.36 ft); minimum, 27 cfs Sept. 15 (gage height, 0.57 ft).
1927-55: Maximum discharge, 2,190 cfs May 6, 1952; maximum gage height, 5.08 ft (present datum) May 29, 1951; minimum discharge, 6 cfs Sept. 20, 1934.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Many diversions above station for irrigation. No diversion between station and Echo Reservoir. Records do not include water diverted from Weber River basin through Weber-Provo diversion canal (see p. 66). Flow slightly regulated by several small reservoirs above station.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.5	24	1.5	191
.6	32	2.0	335
.7	43	3.0	750
1.0	87	3.2	850

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	*74	70				194	134	640	*114	92	76
2	55	76	72				259	138	500	102	*87	66
3	55	77	75	(*)			149	125	394	92	77	60
4	58	77	84	64			123	127	264	87	74	60
5	58	76	84				101	149	224	81	89	56
6	56	76	73				102	194	194	76	92	46
7	56	76	71	64			123	245	156	71	138	36
8	53	76					201	276	261	68	125	36
9	60	76					314	279	281	66	94	36
10	65	77				62	366	221	234	59	82	34
11	66	79		64			300	232	177	55	81	36
12	65	94					172	*338	158	56	74	36
13	60	129					211	488	*153	53	74	32
14	58	106					291	568	402	53	71	30
15	60	94			62		237	500	610	51	68	28
16	60	117	65				216	*356	540	43	66	31
17	60	115					219	256	504	44	70	30
18	59	94					181	219	416	44	71	33
19	59	84		64			138	224	374	47	74	79
20	58	81					121	388	349	44	71	64
21	58	79				65	134	540	307	46	68	60
22	58	77					123	700	270	61	71	56
23	56	76					119	*840	256	78	66	56
24	59	74					115	845	237	89	60	58
25	70	73					140	825	219	191	74	84
26	71	73		64		65	142	*740	198	189	96	101
27	73	73					117	592	181	140	89	81
28	77	62			(*)		121	468	167	112	84	74
29	79	*60	65		-	*77	*121	394	142	108	*89	73
30	81	62		64	- - - -	96	142	112	430	127	108	87	70
31	76	-		*64	- -	125	- - - - -		610	- - - - -	92	84	- - -
Total	1,935	2,463	2,089	1,984	1,736	2,141	5,262	12,441	8,935	2,520	2,538	1,618
Mean	62.4	82.1	67.4	64	32	69.1	175	401	298	81.3	81.9	53.9
Ac-ft	3,840	4,890	4,140	3,940	3,440	4,250	10,440	24,680	17,720	5,000	5,030	3,210

Calendar year 1954: Max 1,060 Min 36 Mean 129 Ac-ft 93,310
Water year 1954-55: Max 845 Min 28 Mean 125 Ac-ft 90,580

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 29 to Dec. 3, Dec. 8 to Mar. 27 (no gage-height record Dec. 26-31, Jan. 7, 15-22, Jan. 30 to Mar. 18, Mar. 25-27; discharge estimated on basis of 2 discharge measurements, weather records, and records for other Weber River stations).

Chalk Creek at Coalville, Utah

Location.--Lat 40°55'10", long 111°24'00", in NE¼SE¼ sec. 8, T. 2 N., R. 5 E., on left bank 100 ft downstream from bridge on U. S. Highway 189 in Coalville and a third of a mile upstream from mouth.

Drainage area.--253 sq mi.

Records available.--October 1904 to December 1905 (gage heights only), April 1927 to September 1955.

Gage.--Water-stage recorder and concrete control. Datum of gage is 5,560.6 ft above mean sea level, datum of 1929. Prior to Feb. 13, 1931, staff gage at site 100 ft upstream at different datum. Feb. 13, 1931, to Oct. 15, 1941, water-stage recorder at site 300 ft upstream at different datum.

Average discharge.--28 years (1927-55), 59.8 cfs (43,290 acre-ft per year).

Extremes.--Maximum discharge during year, 349 cfs May 8 (gage height, 1.83 ft); minimum, 3.6 cfs Mar. 27 (gage height, 0.16 ft).
1927-55: Maximum discharge, 1,540 cfs Apr. 28, 1952 (gage height, 4.67 ft); minimum, less than 1 cfs for several days during June to November 1934.

Remarks.--Records good. Several diversions above station for irrigation, none below. Flow slightly affected by Chalk Creek Reservoir (capacity, 1,200 acre-ft).

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.2	4.5	0.9	95
.3	9.0	1.2	164
.4	17	1.8	336
.6	41		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.8	15	9.8	13	15	15	28	99	108	22	12	11
2	9.8	*15	12	14	15	15	32	108	106	22	*11	11
3	9.8	14	15	*15	15	15	20	102	102	22	9.0	9.8
4	11	14	15	15	15	15	20	85	110	20	12	9.0
5	9.8	13	13	15	15	11	14	113	102	17	11	9.8
6	7.2	13	11	16	15	11	20	198	91	*13	12	9.8
7	6.3	13	12	15	15	11	24	*280	85	13	12	9.0
8	5.8	13	11	15	15	11	28	307	77	12	15	9.0
9	6.8	13	9.8	15	15	15	31	277	81	13	15	8.6
10	5.8	14	13	16	15	26	33	257	73	13	11	8.1
11	5.4	12	15	16	15	25	34	280	68	12	11	8.6
12	6.3	14	14	16	15	31	25	295	64	12	11	8.6
13	7.2	16	12	16	15	41	28	289	*59	12	11	8.1
14	8.1	15	11	16	15	32	34	277	66	12	11	7.6
15	8.6	15	11	16	15	17	34	223	68	11	12	7.6
16	9.0	18	11	15	15	15	36	*164	62	11	12	7.6
17	9.8	17	11	15	15	17	49	142	61	9.8	9.0	8.1
18	9.0	*15	12	15	15	21	47	124	55	14	8.6	7.6
19	9.8	15	12	15	15	21	41	126	51	14	9.8	9.8
20	9.8	13	12	15	15	16	38	145	44	13	8.6	9.8
21	11	14	12	15	15	9.8	54	142	43	15	7.6	8.6
22	11	14	12	15	15	19	61	145	37	15	7.2	9.0
23	11	14	12	15	15	18	68	133	34	15	7.6	8.6
24	13	15	12	15	15	17	55	124	31	11	8.1	8.6
25	14	15	12	15	15	15	64	138	31	14	8.1	12
26	14	15	12	15	15	11	81	142	28	16	11	17
27	14	15	12	15	15	12	66	128	27	15	14	15
28	13	11	12	15	*15	*18	*52	110	25	15	13	15
29	14	*7.6	12	15	-	40	54	95	24	14	*11	15
30	15	11	12	15	------	34	61	85	25	13	11	14
31	15	------	12	*15	------	21	------	*93	------	12	11	------
Total	310.1	418.6	374.6	469	420	595.8	1,232	5,226	1,838	442.8	333.6	301.3
Mean	10.0	14.0	12.1	15.1	15.0	19.2	41.1	169	61.3	14.3	10.8	10.0
Ac-ft	615	830	743	930	833	1,180	2,440	10,370	3,650	878	662	598

Calendar year 1954: Max 145 Min 5.4 Mean 26.0 Ac-ft 18,830
Water year 1954-55: Max 307 Min 5.4 Mean 32.8 Ac-ft 23,730

Peak discharge (base, 400 cfs).--No peak above base.
* Discharge measurement made on this day.

Echo Reservoir at Echo, Utah

Location.--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.

Drainage area.--732 sq mi.

Records available.--October 1930 to September 1955.

Gage.--Staff gage read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to 1932, elevations obtained from mercury gage in valve house and staff gage.

Extremes.--Maximum contents during year, 72,180 acre-ft June 8, 9 (elevation, 5,558.8 ft); no storage Oct. 1 to Nov. 15.

1930-55: Maximum contents, 74,460 acre-ft May 31, 1937 (elevation, 5,560.35 ft); no storage Sept. 12 to Dec. 3, 1931, Sept. 24 to Nov. 2, 1934, Oct. 12 to Nov. 21, 1944, Oct. 1 to Nov. 15, 1954.

Remarks.--Reservoir is formed by earth-fill, rock-faced dam; storage began in October 1930; dam completed in 1931. Capacity, 73,940 acre-ft between elevations 5,450 ft (bottom of outlet tunnel) and 5,560 ft (top of radial gates in spillway) above mean sea level. Dead storage negligible. Water is used for irrigation on the Echo project.

Contents, in acre-feet, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	3,690	9,060	14,330	19,010	27,500	41,660	67,020	65,200	36,000	13,380
2		0	3,890	9,310	14,470	19,160	28,130	42,110	68,290	64,370	34,980	12,710
3		0	4,120	9,470	14,600	19,390	28,670	42,670	69,440	63,540	34,280	11,830
4		0	4,360	9,680	14,790	19,620	29,040	43,120	70,440	62,720	33,400	11,140
5		0	4,580	9,890	14,920	19,780	29,310	43,580	71,020	61,760	32,520	10,480
6		0	4,830	10,050	15,130	19,930	29,590	43,920	71,600	60,550	31,750	9,840
7		0	5,020	10,210	15,330	20,090	29,870	44,730	72,040	59,480	31,080	9,210
8		0	5,210	10,320	15,460	20,240	30,330	46,010	72,180	58,150	30,420	8,650
9		0	5,320	10,480	15,670	20,480	30,800	47,320	72,180	57,100	29,870	8,210
10		0	5,520	10,590	15,810	20,710	31,750	48,400	71,890	55,920	29,220	7,690
11		0	5,720	10,750	16,020	21,190	32,620	49,250	71,460	54,640	28,400	7,270
12		0	5,920	10,920	16,160	21,510	33,200	50,240	70,730	53,490	27,680	6,820
13		0	6,130	11,090	16,300	21,990	33,690	51,600	69,870	52,350	26,970	6,430
14		0	6,340	11,260	16,440	22,560	34,280	52,980	69,010	51,230	26,270	6,010
15		0	6,470	11,430	16,580	22,880	34,980	54,890	69,150	50,110	25,400	5,600
16		396	6,650	11,600	16,720	23,130	35,700	56,190	69,440	49,010	24,550	5,210
17		756	6,780	11,830	16,940	23,460	36,100	57,230	69,870	48,040	23,960	4,870
18		1,050	6,910	12,000	17,160	23,710	36,620	57,620	70,300	46,960	23,380	4,580
19		1,320	7,090	12,180	17,300	23,960	37,240	57,620	70,440	45,900	22,720	4,400
20		1,540	7,220	12,300	17,380	24,210	37,550	57,620	70,590	44,960	22,310	4,330
21		1,760	7,360	12,470	17,520	24,470	37,870	58,020	70,440	43,920	21,270	4,260
22		1,990	7,500	12,650	17,740	24,630	38,180	58,810	70,150	43,010	20,480	4,230
23		2,200	7,640	12,830	17,960	24,800	38,610	60,010	69,870	42,000	19,700	4,190
24		2,440	7,830	13,010	18,110	24,970	39,040	61,490	69,580	41,110	18,940	4,160
25		2,680	8,020	13,200	18,340	25,150	39,360	62,860	69,150	40,440	18,040	4,160
26		2,850	8,210	13,380	18,480	25,400	39,790	64,230	68,720	39,900	17,380	4,230
27		3,060	8,360	13,570	18,640	25,660	40,230	65,340	68,150	39,250	16,720	4,230
28		3,270	8,460	13,760	18,790	25,920	40,560	65,900	67,590	38,610	16,090	4,230
29		3,430	8,560	13,890	-	26,180	41,000	66,180	66,740	38,180	15,330	4,160
30		3,590	8,700	14,080	-------	26,620	41,330	66,040	66,040	37,450	14,660	4,160
31		-------	8,910	14,270	-------	27,150	-------	65,900	-------	36,520	14,010	-------
(†)	-	5,481.7	5,494.6	5,504.0	5,510.4	5,520.6	5,534.9	5,554.4	5,554.5	5,530.4	5,503.6	5,483.4
(‡)	-676	+3,590	+5,320	+5,360	+4,520	+8,360	+14,180	+24,570	+140	-29,520	-22,510	-9,850

Calendar year 1954: (‡) -16,240
Water year 1954-55: (‡) -3,480

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

Weber River at Echo, Utah

Location.--Lat 40°57'55", long 111°26'10", in SE¼NE¼ sec. 25, T. 3 N., R. 4 E., on right bank a quarter of a mile downstream from Echo Dam, half a mile upstream from Echo Creek, and three-quarters of a mile southeast of Echo.

Drainage area.--732 sq mi.

Records available.--April 1927 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,440 ft (from Echo Reservoir elevations). Prior to Apr. 18, 1931, staff gage at site a quarter of a mile downstream at different datum. Apr. 18, 1931, to Mar. 23, 1950, water-stage recorder at site 0.3 mile downstream at different datum.

Average discharge.--28 years, 278 cfs (201,300 acre-ft per year).

Extremes.--Maximum discharge during year, 691 cfs July 9 (gage height, 4.07 ft); minimum daily, 0.3 cfs Nov. 18-29, Jan. 18-24.
1927-55: Maximum discharge, 3,060 cfs May 13, 1952 (gage height, 7.34 ft); minimum daily, that of Nov. 18-29, 1954, Jan. 18-24, 1955.

Remarks.--Records good. Many diversions above and below station for irrigation. Flow regulated by Echo Reservoir (see preceding page).

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	177	110	0.4	0.5	*0.4	*1.0	0.9	1.8	212	581	*507	429
2	75	*112	.4	.5	.4	1.0	.9	1.8	65	550	495	425
3	70	112	.4	.5	.4	1.0	1.1	2.0	44	520	491	425
4	75	110	.5	*.5	.4	1.0	1.1	2.2	44	572	491	410
5	75	106	.5	.5	.4	.9	1.1	2.4	44	*656	495	385
6	68	110	.4	.5	.5	1.0	1.1	2.4	76	*676	475	368
7	68	112	.5	.5	.5	1.0	1.1	2.6	160	671	471	325
8	62	108	.4	.5	.6	1.0	1.1	2.8	302	671	448	281
9	70	108	.4	.5	.6	.9	1.0	4.9	424	681	440	275
10	75	112	.4	.8	.6	.9	1.1	7.8	559	681	444	281
11	76	116	.4	.5	.6	.9	1.0	16	585	661	455	278
12	76	124	.4	.5	.6	.9	1.0	*22	618	656	455	258
13	78	180	.4	.5	.6	.9	1.0	21	*656	652	455	253
14	75	167	.4	.5	.6	.8	1.0	20	623	642	444	248
15	76	80	.4	.5	.6	.8	1.0	19	545	623	429	237
16	78	.9	.4	.5	.7	.8	1.0	24	495	594	432	219
17	79	.4	.4	.4	.7	.8	1.0	*87	429	590	414	195
18	79	.3	.4	.3	.7	.8	1.0	284	414	594	407	178
19	79	.3	.4	.3	.7	.7	1.0	407	403	604	414	153
20	76	.3	.4	.3	.7	.7	1.0	471	491	594	429	138
21	78	.3	.4	.3	.7	.7	1.0	396	524	585	451	120
22	79	.3	.4	.3	.8	.8	1.0	351	512	576	459	106
23	78	.3	.4	.3	.8	.9	1.1	316	499	567	451	100
24	79	.3	.5	.3	.8	.9	1.3	*348	503	550	451	99
25	79	.3	.5	.4	.8	.8	1.3	345	516	507	440	99
26	106	.3	.5	.4	.9	.8	1.4	329	516	491	440	122
27	112	.3	.5	.4	.9	.8	1.4	361	528	479	432	136
28	112	.3	.5	.4	1.0	.9	*1.4	429	554	471	432	120
29	112	*.3	.5	.4	-	*.9	1.5	503	563	479	*432	104
30	110	.4	.5	.4	------	.8	1.7	563	576	516	429	100
31	112	------	.5	.4	------	.9	------	404	------	528	429	------
Total	2,644	1,768.3	13.5	13.3	18.0	27.0	33.6	5,746.7	12,480	18,218	13,937	6,867
Mean	85.3	58.9	0.44	0.44	0.64	0.87	1.12	185	416	588	450	229
Ac-ft	5,240	3,510	27	26	36	54	67	11,400	24,750	36,130	27,640	13,620

Calendar year 1954: Max 604 Min 0.3 Mean 184 Ac-ft 133,200
Water year 1954-55: Max 681 Min 0.3 Mean 169 Ac-ft 122,500

* Discharge measurement made on this day.

Lost Creek near Croydon, Utah

Location.--Lat 41°10'35", long 111°24'20", in SW¼SE¼ sec. 8, T. 5 N., R. 5 E., on right bank 0.8 mile downstream from Francis Fork, 1.6 miles upstream from Hell Canyon, and 9½ miles northeast of Croydon.

Drainage area.--133 sq mi.

Records available.--February 1921 to December 1923, April 1941 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,820 ft (by barometer). Prior to Aug. 26, 1954, at several sites within 40 ft of present site at various datums.

Average discharge.--16 years, 37.5 cfs (27,150 acre-ft per year).

Extremes.--Maximum discharge during year, 163 cfs May 8 (gage height, 5.20 ft, from graph based on partial gage-height record); minimum, 5.0 cfs Sept. 8, 9, but may have been less during period of ice effect.
1921-23, 1941-55: Maximum discharge, 770 cfs May 10, 11, 18, 1923 (gage height, 4.20 ft, site and datum then in use), from rating curve extended above 200 cfs; minimum, 3 cfs for several days in August and September 1941, 1942.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1, 2, May 10 to June 16, July 2-5, Aug. 2 to Sept. 30)

2.7	5.0	4.0	57
3.0	12	5.0	135
3.3	22	5.2	153
3.6	35		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.6	9.5			(*)	(*)	19	75	50	14	a8	6.0
2	7.4	10	b10	a 11		b11	21	71	48	13	*7.6	5.8
3	7.6	9.7					18	69	46	12	7.4	5.8
4	7.6	9.7	11	(*)			17	66	44	11	6.9	5.8
5	8.7	9.5	10			a 11	b17	88	41	*11	7.1	5.6
6	8.3	9.7		b10			17	*114	40		8.5	5.6
7	7.8	9.7					18	139	39		12	5.6
8	8.3	9.7	b10		a10	a12	21	a141	37		9.0	5.4
9	9.0	9.7					27	a137	35		7.8	5.4
10	10	9.7					34	138	34		7.4	5.4
11	9.5	9.7	10				31	145	33	a10	7.1	5.4
12	8.7	12	10				26	147	32		6.9	5.4
13	10	14	10				30	*149	31		7.1	5.4
14	10	12					38	140	*33		7.4	5.4
15	9.7	11					40	118	30		6.9	5.2
16	9.5	16	b10				40	99	29		6.9	5.6
17	9.5	14				a13	47	*87	28		7.6	5.8
18	9.7	13					41	80	26		8.5	6.0
19	9.0	12					38	79	24		10	7.8
20	9.0	11		a10			34	82	23		7.8	7.4
21	9.0	11					36	80	21	a9	7.1	6.9
22	9.5	11			a 11		38	83	20		6.9	6.5
23	9.7	11					38	78	20		6.7	6.5
24	9.7	11				14	39	*71	18		6.7	6.5
25	11	11	a10			13	51	66	17		7.1	7.6
26	10	11				13	62	63	16		7.1	7.8
27	10	11				14	51	58	16		7.1	7.6
28	10	9.7				13	*46	52	15		6.3	7.1
29	10	b9.0			-	*16	51	48	15	a8	6.1	6.7
30	9.7	*b9.0			------	19	61	47	15		*6.0	6.7
31	9.5	------			------	17	-----	54	------		6.0	------
Total	285.0	326.3	311	314	293	403	1,047	2,864	876	299	231.0	185.7
Mean	9.19	10.9	10.0	10.1	10.5	13.0	34.9	92.4	29.2	9.65	7.45	6.19
Ac-ft	565	647	617	623	581	799	2,080	5,680	1,740	593	458	368

Calendar year 1954 : Max 83 Min 5.4 Mean 17.0 Ac-ft 12,310
Water year 1954-55 : Max 149 Min 5.2 Mean 20.4 Ac-ft 14,750

Peak discharge (base, 130 cfs).--May 8 (time unknown) 163 cfs (5.20 ft).
* Discharge measurement made on this day.
a No gage-height record (stage-discharge relation affected by ice during winter periods); discharge estimated on basis of 2 discharge measurements, weather records, and records for nearby streams.
b Stage-discharge relation affected by ice.

Weber River at Devils Slide, Utah

Location.--Lat 41°03'40", long 111°34'25", in SE¼SE¼ sec. 23, T. 4 N., R. 3 E., on right bank 350 ft downstream from highway underpass on U. S. Highway 30S, 1½ miles west of Devils Slide, and 1¾ miles downstream from Lost Creek.

Drainage area.--1,100 sq mi, approximately.

Records available.--February 1905 to September 1955 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 5,300 ft. Prior to Oct. 1, 1934, staff gage at site 1½ miles upstream at different datum.

Average discharge.--50 years, 438 cfs (317,100 acre-ft per year).

Extremes.--Maximum discharge during year, 805 cfs July 25 (gage height, 3.54 ft); minimum daily, 23 cfs Dec. 28.
1905-55: Maximum discharge observed, 6,000 cfs May 22, 1920 (gage height, 8.0 ft, site and datum then in use); minimum, 18 cfs Sept. 23, 1934, Mar. 6, 1948.

Remarks.--Records good except those for periods of ice effect, which are fair. Many diversions above station for irrigation. Flow regulated by Echo Reservoir (see p.).

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	229	131	29	29	*32	*39	64	193	274	574	492	449
2	105	*131	32	29	31	40	83	197	144	554	*478	449
3	104	135	32	30	32	43	69	195	101	500	481	449
4	101	133	34	*30	31	43	56	173	88	522	485	439
5	101	131	33	29	32	38	51	225	74	647	492	399
6	86	131	32	28	32	36	50	338	81	*674	492	383
7	86	133	31		32	40	51	392	108	679	478	348
8	84	133	30	b25	32	43	56	389	228	670	456	285
9	81	131	b29		34	46	66	360	336	679	432	274
10	96	137	33	24		86	74	367	526	679	436	268
11	99	142	31	27		92	79	363	566	661	442	271
12	105	148	31		b29	126	65	345	591	647	456	255
13	107	204	31			137	64	314	638	638	453	242
14	110	195	30			102	73	285	*621	634	449	250
15	109	142	30		35	62	85	245	534	616	425	232
16	113	40	28	b26	35	60	86	193	496	612	429	220
17	112	39			38	57	107	*162	399	599	419	195
18	109	36			38	56	110	314	383	599	406	184
19	109	34		28	36	57	104	425	367	604	409	171
20	105	33	b26	30	33	54	89	500	442	599	429	144
21	105	33		30	b32	43	91	436	503	583	453	126
22	107	33	25	b29	34	49	93	412	488	574	470	119
23	104	33	26	30	36	50	92	392	478	574	460	109
24	105	33	27	33	b36	49	92	429	474	554	463	110
25	122	33	28	30	37	48	112	432	481	578	456	117
26	129	32	28		38	42	148	*399	481	503	446	139
27	131	31	b26		38	43	135	425	496	478	439	165
28	135	31	b23	b29	38	49	*119	515	526	463	442	154
29	133	29	24		-	*54	119	566	554	463	442	141
30	135	*29	26		------	93	139	643	554	485	*446	135
31	135	------	29	31	------	69	-----	511	------	507	446	------
Total	3,492	2,656	888	869	937	1,846	2,622	11,135	12,032	18,149	14,002	7,222
Mean	113	88.5	28.6	28.0	33.5	59.5	87.4	359	401	585	452	241
Ac-ft	6,930	5,270	1,760	1,720	1,860	3,660	5,200	22,090	23,870	36,000	27,770	14,320

Calendar year 1954: Max 630 Min 23 Mean 229 Ac-ft 165,800
Water year 1954-55: Max 679 Min 23 Mean 208 Ac-ft 150,400

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

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East Canyon Reservoir near Morgan, Utah

Location.--Lat 40°55'20", long 111°35'50", in NE¼ sec. 10, T. 2 N., R. 3 E., upstream face of concrete dam, 9 miles southeast of Morgan.

Drainage area.--144 sq mi.

Records available.--October 1937 to September 1955 in reports of Geological Survey. November 1931 to September 1955 in reports of Weber River water commissioner.

Gage.--Tape gage generally read weekly. Altitude of gage is 5,550 ft (from river-profile map). Prior to Oct. 1, 1953, staff gage 500 ft east of dam.

Extremes.--Maximum contents observed during year, 17,530 acre-ft June 15, 16 (gage height, 115.1 ft); no contents Oct. 1-11.
1931-55: Maximum contents, 29,170 acre-ft June 2, 1943 (gage height, 141.67 ft); no contents Nov. 1, 1931, Sept. 2 to Nov. 1, 1934, Sept. 11 to Oct. 18, 1937, Sept. 11-28, 1946, Sept. 21 to Oct. 11, 1954.

Remarks.--Reservoir was formed in 1896 by a 58-foot rock-fill dam (capacity, 3,850 acre-ft), which was raised 25 ft in 1900 (capacity, 9,000 acre-ft), was raised 12 ft more in 1902 (capacity, 14,000 acre-ft), and later was replaced by present concrete dam, which formed a reservoir having a capacity of 28,730 acre-ft between gage heights 0.0 ft (bottom of outlet tunnel) and 140.8 ft (top of flashboards in spillway). Gage height of spillway crest is 135 ft. No dead storage. Water is used for irrigation in Davis and Weber Counties.

Contents, in acre-feet, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	-	-	-	-	-	-	11,790	-	-	-	-
2	-	-	-	2,730	-	-	-	-	-	-	-	9,720
3	-	-	-	-	-	-	6,560	-	-	16,590	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	1,930	-	-	-	-	13,500	16,820	-	-	-
6	-	-	-	-	4,000	5,100	-	-	-	-	-	-
7	"	1,050	-	-	-	-	-	-	-	-	13,630	-
8	"	-	-	-	-	-	-	13,080	-	-	-	-
9	"	-	-	2,910	-	-	-	-	-	-	-	-
10	"	-	-	-	-	-	7,140	13,500	-	16,100	-	-
11	0	-	-	-	-	-	-	-	-	16,040	-	-
12	-	-	-	-	-	-	-	-	17,340	-	-	-
13	-	-	-	-	4,250	5,440	-	-	-	-	-	-
14	-	1,230	-	-	-	-	-	-	-	-	12,700	-
15	-	-	-	-	-	-	-	14,260	17,530	-	-	-
16	-	-	-	3,140	-	-	-	-	17,530	-	-	-
17	322	-	-	-	-	-	9,090	-	-	15,580	-	-
18	-	-	-	-	-	-	-	-	-	-	-	5,780
19	-	-	-	-	-	-	-	-	17,440	-	-	-
20	-	-	2,380	-	4,550	5,750	-	-	-	-	-	-
21	-	1,570	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	15,120	-	-	-	-
23	-	-	-	3,360	-	-	-	-	-	-	-	-
24	628	-	-	-	-	-	10,610	-	-	14,860	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	2,530	-	-	-	-	-	17,080	-	-	-
27	-	-	-	-	4,850	6,060	-	-	-	-	-	-
28	-	1,760	-	-	a4,890	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	15,910	-	14,440	-	-
30	-	a1,810	-	3,590	-------	-	a11,620	-	a16,800	-	-	3,820
31	876	-------	a2,670	a3,650	-------	a6,340	-------	a16,170	-------	14,240	a10,030	-------
(†)	23.2	-	-	-	-	-	-	-	-	104.5	-	56.1
(‡)	+876	+934	+860	+980	+1,240	+1,450	+5,280	+4,550	+630	-2,560	-4,210	-6,210

Calendar year 1954: (‡) -9,180
Water year 1954-55: (‡) +3,820

† Gage height, in feet, at end of month.
‡ Change in contents, in acre-feet.
a No gage-height record; contents interpolated.

East Canyon Creek near Morgan, Utah

Location.--Lat 40°55'20", long 111°36'20", in NW¼ sec. 10, T. 2 N., R. 3 E., on right bank 2,500 ft downstream from East Canyon Dam, 2½ miles upstream from Sheep Canyon, and 9 miles southeast of Morgan.

Drainage area.--145 sq mi.

Records available.--October 1937 to September 1955 in reports of Geological Survey. October 1931 to September 1955 in report of Weber River water commissioner.

Gage.--Water-stage recorder and Lyman rectangular weir. Altitude of gage is 5,460 ft (from river-profile map).

Average discharge.--24 years (1931-55), 52.7 cfs (38,150 acre-ft per year).

Extremes.--Maximum discharge during year, 158 cfs Sept. 7 (gage height, 1.22 ft); minimum daily, 1.4 cfs Dec. 18-20, Dec. 28 to Jan. 30.
1931-55: Maximum discharge, 872 cfs May 4, 1952 (gage height, 3.49 ft); minimum daily, that of Dec. 18-20, 1954, Dec. 28, 1954, to Jan. 30, 1955.

Remarks.--Records good except those for period of no gage-height record, which are fair. No diversion between station and East Canyon Reservoir (see preceding page) which completely regulates flow.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.0	0	0.6	53
.1	3.6	1.0	117
.2	9.7	1.5	220
.3	18		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			1.8	1.4	1.8	1.8	2.7	4.7	7.1	52	59	87
2			1.8	1.4	*1.8	*1.8	2.7	5.3	7.1	50	59	87
3		(*)	1.8	1.4	1.8	1.8	2.7	5.3	7.1	50	*59	85
4		8.0	1.8	*1.4	1.8	1.8	2.7	5.3	7.8	49	59	85
5			1.8	1.4	1.8	1.8	2.7	5.3	7.8	*50	57	84
6			1.8	1.4	1.8	1.8	2.7	5.3	7.8	50	57	84
7			1.8	1.4	1.8	2.2	2.7	5.9	7.8	49	74	119
8	12		1.8	1.4	1.8	2.2	2.7	5.9	7.8	49	82	140
9			1.8	1.4	1.8	2.2	2.7	5.9	7.1	49	82	136
10			1.8	1.4	1.8	2.2	2.7	5.9	7.1	46	82	134
11			1.8	1.4	1.8	2.2	2.7	5.9	6.5	46	80	138
12			1.8	1.4	1.8	2.2	2.7	6.5	7.1	46	80	140
13			1.8	1.4	1.8	2.2	2.7	7.1	17	46	80	136
14		5.0	1.8	1.4	1.8	2.2	3.2	7.1	24	40	79	134
15			1.8	1.4	1.8	2.2	3.6	7.1	*24	42	78	134
16			1.8	1.4	1.8	2.2	3.6	7.1	41	56	78	130
17			1.8	1.4	1.8	2.7	4.2	*7.1	54	60	76	128
18			1.4	1.4	1.8	2.7	5.3	7.1	54	64	76	127
19			1.4	1.4	1.8	2.7	5.3	7.1	53	64	76	138
20			1.4	1.4	1.8	2.7	5.3	7.1	54	64	74	138
21			1.8	1.4	1.8	2.7	5.3	7.1	54	61	80	136
22			3.2	1.4	1.8	2.7	5.3	7.1	53	61	84	134
23	8.0		6.5	1.4	1.8	2.7	5.3	7.1	53	61	84	117
24			6.5	1.4	1.8	2.7	5.3	7.1	53	61	82	99
25		3.0	7.1	1.4	1.8	2.7	5.3	7.1	53	61	82	92
26			4.2	1.4	1.8	2.7	5.3	7.1	52	60	82	42
27			1.8	1.4	1.8	2.7	*5.3	7.1	52	61	82	19
28			1.4	1.4	1.8	2.7	4.7	7.1	52	61	87	19
29		1.8	1.4	1.4	-	2.7	4.7	7.1	52	61	90	19
30		*1.8	1.4	1.4	------	*2.7	4.7	7.8	52	61	89	19
31		------	1.4	1.8	------	2.7	-----	7.8	------	60	*89	------
Total	304.0	145.6	71.5	43.8	50.4	73.3	116.8	203.5	935.1	1,691	2,378	3,078
Mean	9.81	4.85	2.31	1.41	1.80	2.36	3.89	6.56	31.2	54.5	76.7	103
Ac-ft	603	289	142	87	100	145	232	404	1,850	3,350	4,720	6,110

Calendar year 1954: Max 164 Min 1.4 Mean 34.7 Ac-ft 25,150
Water year 1954-55: Max 140 Min 1.4 Mean 24.9 Ac-ft 18,030

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 1 to Nov. 29; discharge estimated on basis of 1 discharge measurement and record of gate changes at East Canyon Reservoir.

Hardscrabble Creek near Porterville, Utah

Location.--Lat 40°57'10", long 111°43'00", in SW¼NW¼ sec. 34, T. 3 N., R. 2 E., on right bank two-thirds of a mile upstream from Tucker Hollow and 2¾ miles southwest of Porterville.

Drainage area.--24.9 sq mi.

Records available.--October 1941 to September 1955 in reports of Geological Survey. December 1937 to August 1940 (fragmentary) in files of State engineer's office.

Gage.--Water-stage recorder. Altitude of gage is 5,500 ft (from topographic map).

Average discharge.--14 years (1941-55), 32.6 cfs (23,600 acre-ft per year).

Extremes.--Maximum discharge during year, 149 cfs May 21 (gage height, 2.49 ft); minimum not determined, occurred during period of ice effect.
1941-55: Maximum discharge, 464 cfs Aug. 20, 1945 (gage height, 3.60 ft); minimum recorded, 3.0 cfs Feb. 11, 1944.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. A small transbasin canal diverts water from Arthurs Fork, a tributary of Hardscrabble Creek, to Farmington Creek for irrigation in vicinity of Farmington.

Revisions (water years).--WSP 1244: 1945(M).

Rating table, water year 1954-55, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-31, Mar. 19-25, Mar. 29 to Apr. 13, July 26 to Aug. 10)

0.8	3.4	1.7	39
1.0	6.6	2.0	71
1.2	11	2.5	155
1.4	19		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	5.5	b5.0				14	57	80	18	9.0	4.4
2	5.8	5.3	b5.0		(*)	(*)	16	59	69	16	8.7	4.4
3	5.8	5.1	5.6				12	55	70	16	*8.3	4.4
4	6.2	*5.1	6.6				11	53	68	15	7.8	4.4
5	6.8	5.1	5.3	(*)			9.6	79	65	*15	7.6	4.4
6	6.0	5.1					10	*105	64	14	7.8	4.5
7	5.8	5.1					10	122	66	14	8.0	4.5
8	6.0	5.1					13	124	69	14	7.2	4.4
9	6.6	5.1	b5.0				22	124	64	13	7.0	4.4
10	5.8	5.3				6.0	34	119	60	13	6.8	4.5
11	5.8	5.3			5.0		28	119	56	13	6.6	4.5
12	5.6	7.0	5.0				22	117	53	12	6.4	4.5
13	7.0	6.2	5.0				27	128	48	12	6.6	4.4
14	6.0	5.8					40	130	49	11	6.4	4.2
15	6.0	5.3					41	108	*43	11	6.2	4.4
16	5.8	18	b5.0	5.0			41	88	43	11	6.4	4.7
17	5.8	8.0					47	*77	37	11	6.0	4.7
18	5.6	6.6					39	75	33	10	6.0	4.8
19	5.5	6.0				8.0	31	90	30	10	6.0	6.8
20	5.5	5.5				7.2	27	115	28	9.9	5.8	5.1
21	5.5					4.8	28	137	26	9.4	5.7	5.0
22	5.5					5.8	30	135	26	9.4	5.6	4.8
23	5.6					7.2	27	*128	24	9.4	5.5	4.8
24	6.2					7.4	28	122	23	10	5.4	4.8
25	6.0		5.0		6.0	7.4	46	114	22	12	5.3	6.0
26	6.0	5.0				b6.0	55	98	21	10	5.2	6.2
27	6.0					b6.2	*39	86	19	9.4	5.1	5.3
28	5.8					b7.2	33	75	19	8.7	5.0	5.0
29	5.6				-	8.7	34	73	19	9.0	4.9	4.8
30	5.6	(*)			------	*11	42	77	18	8.5	4.8	4.8
31	5.6	------			------	9.9	-----	97	----	9.4	*4.4	------
Total	182.6	175.5	157.5	155.0	148.0	204.8	856.6	3,086	1,311	364.1	197.5	143.9
Mean	5.89	5.85	5.08	5.00	5.29	6.61	28.6	99.5	43.7	11.7	6.37	4.80
Ac-ft	362	348	312	307	294	406	1,700	6,120	2,600	722	392	285

Calendar year 1954: Max 60 Min 3.5 Mean 12.5 Ac-ft 9,020
Water year 1954-55: Max 137 Min - Mean 19.1 Ac-ft 13,850

Peak discharge (base, 220 cfs).--No peak above base.
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Nov. 3, 21-30, Dec. 20 to Mar. 18 (stage-discharge relation affected by ice during most of period), Aug. 21-30; discharge estimated on basis of discharge measurements, weather records, and records for nearby streams.

East Canyon Creek below diversions, near Morgan, Utah

Location.--Lat 41°02'10", long 111°41'30", in SW¼ sec. 35, T. 4 N., R. 2 E., on left bank 1 mile southwest of Morgan and 3 miles upstream from mouth.

Records available.--November 1950 to September 1955 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 5,050 ft (from river-profile map).

Extremes.--Maximum discharge during year, 206 cfs May 8 (gage height, 3.26 ft); minimum daily, 0.7 cfs June 13.
1950-55: Maximum discharge, 926 cfs May 8, 1952 (gage height, 9.19 ft); minimum daily, 0.4 cfs Nov. 8, 1953.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Diversions above station for irrigation. Flow regulated by East Canyon Reservoir (see p. 74).

Rating table, water year 1954-55, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 18-27, May 5-9, June 11-16)

0.6	0.6	1.0	9.5
.7	1.5	1.5	36
.8	2.9	2.0	74
.9	5.3	3.0	170

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	10	(*)		(**)	(**)	12	66	27	21	26	47
2	14	9.5					12	72	24	19	26	48
3	16	*8.6					12	74	34	24	*34	53
4	16	7.3					14	66	36	22	30	57
5	18	5.7		(*)			12	95	32	23	32	57
6	18	6.9					12	135	22	*28	31	60
7	17	8.2					14	*147	20	28	43	88
8	18	8.6		4.0			18	164	18	24	64	124
9	19	8.2			3.0	4.0	23	167	8.6	16	62	134
10	20	8.2					29	144	14	1.9	62	126
11	20	9.1					30	131	8.7	1.6	65	127
12	20	11					24	119	2.2	2.5	77	130
13	20	10					27	101	.7	1.5	77	129
14	21	8.6					35	80	*1.6	1.0	64	134
15	21	4.8					38	75	1.5	.9	62	134
			4.0									
16	20	15		4.0			38	52	3.1	1.4	57	133
17	6.5	12		4.0			45	*42	11	1.8	52	134
18	8.2	9.5					40	23	12	7.3	54	133
19	7.8	6.9					35	21	7.8	8.6	53	152
20	7.8	6.5				5.0	32	44	4.3	15	36	149
21	9.5	5.7					33	66	10	17	39	150
22	9.1	9.5			4.0		35	72	14	16	42	145
23	8.6	8.6					34	63	17	17	42	135
24	9.5	6.5		3.0			33	52	15	22	42	106
25	12	6.5					44	46	14	29	43	101
26	10	6.1					62	38	21	32	48	61
27	11	6.1					49	35	16	29	53	24
28	10	5.6				9.0	*41	33	17	28	57	22
29	11	3.5			-	(*)	42	13	16	28	61	22
30	10	3.0			------		48	5.2	16	27	59	22
31	10	------			------		------	*25	------	27	*52	------
Total	435.0	235.7	124.0	110.0	97.0	164.0	923	2,266.2	444.5	520.5	1,545	2,937
Mean	14.0	7.86	4.0	3.55	3.46	5.29	30.8	73.1	14.8	16.8	49.8	97.9
Ac-ft	863	468	246	218	192	325	1,830	4,490	882	1,030	3,060	5,830

Calendar year 1954: Max 137 Min 0.8 Mean 26.9 Ac-ft 19,450
Water year 1954-55: Max 167 Min 0.7 Mean 26.9 Ac-ft 19,430

* Discharge measurement made on this day.
** Field estimate made on this day.
Note.--Stage-discharge relation affected by ice Nov. 28 to Jan. 17. No gage-height record Jan. 18 to Apr. 3 (stage-discharge relation affected by ice during most of period); discharge estimated on basis of 3 discharge measurements, weather records and records for nearby streams.

Weber River near Morgan, Utah

Location.--Lat 41°03'50", long 111°43'40", in NE¼ sec. 21, T. 4 N., R. 2 E., on right bank 300 ft downstream from Line Creek and 2½ miles northwest of Morgan.

Records available.--October 1950 to September 1955 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 4,970 ft (by barometer). Prior to Dec. 3, 1952, at site a quarter of a mile upstream at different datum.

Average discharge.--5 years, 509 cfs (368,500 acre-ft per year).

Extremes.--Maximum discharge during year, 735 cfs July 25 (gage height, 3.30 ft); minimum daily, less than 50 cfs during December, January, and February.
1950-55: Maximum daily discharge, 6,000 cfs May 5, 6, 1952; minimum daily, that of December 1954, January and February 1955.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Many diversions above and below station for irrigation. Flow regulated by Echo and East Canyon Reservoirs (see p. 70 and 74).

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

1.3	57	2.0	179
1.5	79	2.5	337
1.7	110	3.3	702

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*274	163	(*)			*49	116	281	349	617	582	462
2	158	161			(*)	50	126	312	258	597	*557	466
3	142	161				52	110	302	213	543	543	462
4	137	*158				54	96	278	201	543	538	458
5	135	151		(*)		51	87	292	176	642	543	422
6	132	151				50	85	440	163	*687	548	422
7	132	153				50	90	502	171	692	543	405
8	135	153				60	110	525	252	692	543	381
9	132	151				85	130	516	334	702	530	373
10	137	153				101	146	498	498	697	530	369
11	135	156				144	146	476	520	672	534	365
12	139	166				161	122	440	525	652	530	361
13	144	196				201	124	*405	567	642	538	341
14	148	204				166	153	361	592	637	525	345
15	151	182				112	161	326	*520	627	502	330
			48	46	47							
16	156	112				98	163	255	494	622	502	330
17	151	73				96	201	207	453	612	489	309
18	146					96	193	*249	422	612	476	292
19	144					98	169	354	401	622	471	306
20	144					93	153	489	453	617	466	281
21	144					90	156	484	538	602	476	274
22	144					80	163	471	534	592	502	261
23	142					90	163	458	530	602	489	252
24	142	51				100	158	466	516	587	494	228
25	153					100	190	484	530	627	494	231
26	161					84	255	430	534	572	484	210
27	161					85	*240	440	543	543	476	196
28	163					86	204	507	572	534	471	187
29	163				-	*93	199	516	602	525	480	174
30	163				- - - -	122	213	567	597	548	476	166
31	166	- - -			- - -	110	-----	553	------	582	*462	- - -
Total	4,674	3,307	1,488	1,426	1,316	2,907	4,622	12,884	13,058	19,041	15,794	9,659
Mean	151	110	48	46	47	93.8	154	416	435	614	509	322
Ac-ft	9,270	6,560	2,950	2,830	2,610	5,770	9,170	25,560	25,900	37,770	31,330	19,160

Calendar year 1954: Max 592 Min - Mean 260 Ac-ft 188,000
Water year 1954-55: Max 702 Min - Mean 247 Ac-ft 178,900

* Discharge measurement made on this day.
Note.--No gage-height record Nov. 17 to Mar. 9, Mar. 21-29; discharge estimated on basis of 5 discharge measurements, weather records, and records for other Weber River stations.

Weber River at Gateway, Utah

Location.--Lat 41°08', long 111°50', in NW¼SW¼ sec. 27, T. 5 N., R. 1 E., on right bank 800 ft downstream from Union Pacific Railroad bridge, 2,500 ft downstream from Strawberry Creek, and 2,500 ft east of section house at Gateway.

Drainage area.--1,610 sq mi, approximately.

Records available.--October 1889 to October 1901, April to July 1903 (gage heights only), June 1919 to September 1955. Published as "near Uinta" 1889-1903.

Gage.--Water-stage recorder. Altitude of gage is 4,790 ft (by barometer). Oct. 13, 1889, to July 11, 1903, staff gage at site 1 mile downstream at different datum. June 22, 1919, to Oct. 22, 1929, water-stage recorder at site 2,200 ft upstream at different datum. Oct. 22, 1929, to Oct. 30, 1947, water-stage recorder at site 50 ft downstream at present datum.

Average discharge.--35 years (1920-55), 592 cfs (428,600 acre-ft per year).

Extremes.--Maximum discharge during year, 927 cfs May 10 (gage height, 2.33 ft); minimum daily recorded, 75 cfs Feb. 23.
1889-1903, 1919-55: Maximum discharge observed, 7,980 cfs May 31, 1896; minimum, 45 cfs Sept. 24, 1934.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Many diversions above and below station for irrigation. Flow regulated by Echo and East Canyon Reservoirs (see p. 70 and 74).

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.0	71
.4	138
1.0	304
1.5	505
2.3	905

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*308	190	87	84	a80	78	220	440	541	670	605	514
2	208	188	90	90	*a80	*78	240	492	456	655	585	523
3	172	188	94	89		80	198	*492	396	600	*570	516
4	170	*185	102	87		81	168	448	388	575	570	518
5	162	185	102	*84		80	151	505	344	660	570	478
6	160	180	95	83		78	158	725	315	*710	590	478
7	160	182	95			78	193	845	311	715	590	460
8	160	180	94			80	239	872	372	720	590	440
9	160	178	86			87	287	866	436	710	560	424
10	162	178	89		b80	151	320	866	570	710	565	424
11	162	175	94			215	*288	850	625	690	575	420
12	165	193	92			256	237	820	625	670	570	412
13	172	212	90			340	265	780	660	655	580	396
14	*172	226	90			301	*334	700	705	650	565	400
15	175	215	86			196	326	610	*640	645	550	392
16	180	165	87		(*)	168	315	510	*605	635	546	*388
17	178	132	81			80	158	380	440	570	530	532	364
18	172	*118	81			79	153	352	*436	528	630	518	348
19	170	107	83	a80			160	304	514	505	630	523	380
20	170	104	83		b78		147	271	660	528	640	514	340
21	168	100	83				128	278	670	620	630	518	329
22	168	102	83			76	126	288	685	615	620	546	315
23	170	102	81			75	128	284	655	620	625	541	304
24	165	100				78	145	265	*640	590	615	546	281
25	178	98				79	151	308	680	615	665	541	294
26	185	*98	b80			79	122	408	610	610	615	541	281
27	188	97				80	130	*388	585	610	580	532	252
28	190	95				80	126	333	635	625	*565	523	246
29	190	92	78			-	181	318	625	660	550	532	237
30	190	90	79			*220	336	690	655	555	528	229
31	193	- - -	81		- - - -	190	-----	755	- - - - - -	595	*523	--- ---
Total	5,523	4,455	2,686	2,517	2,212	4,612	8,452	20,101	16,340	19,815	17,139	11,385
Mean	178	148	86.6	81.2	79.0	149	282	648	545	639	553	380
Ac-ft	10,950	8,840	5,330	4,990	4,390	9,150	16,760	39,870	32,410	39,300	33,990	22,580

Calendar year 1954: Max 755 Min 78 Mean 321 Ac-ft 232,000
Water year 1954-55: Max 872 Min - Mean 316 Ac-ft 228,600

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 2 discharge measurements, weather records, and records for other Weber River stations.
b Stage-discharge relation affected by ice.

Weber River at Ogden, Utah

Location.--Lat 41°13'40", long 111°59'15", in sec. 30, T. 6 N., R. 1 W., on right bank 200 ft southeast of intersection of 21st Street and Middleton Road in Ogden and 1 mile upstream from Ogden River.

Records available.--December 1950 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,270 ft (by barometer).

Extremes.--Maximum discharge during year, 864 cfs May 7 (gage height, 4.20 ft); minimum daily, 3.4 cfs May 27.
1950-55: Maximum discharge, 7,070 cfs May 6, 1952 (gage height, 10.89 ft); minimum daily, that of May 27, 1955.

Remarks.--Records good. Many diversions above and below station for irrigation. Flow regulated by Echo and East Canyon Reservoirs (see p.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-16, Apr. 16 to May 1, July 16 to Sept. 30)

1.0	3.0	2.0	78
1.1	6.5	2.5	195
1.2	11	3.0	364
1.4	21	4.0	804
1.7	44		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	120	*75	90	74	77	195	422	91	52	38	*29
2	20	120	74	92	70	81	272	516	111	74	35	38
3	9.6	124	75	80	*70	*86	204	516	70	52	30	32
4	*9.2	122	105	68	65	85	157	453	57	29	*34	35
5	12	*113	90	69	69	85	120	410	29	39	33	27
6	25	98	93	*60	68	77	115	592	14	50	42	36
7	28	76	93	66	70	77	149	717	63	*53	38	32
8	25	107	90	62	73	86	204	770	13	65	48	26
9	23	109	85	83	74	93	268	628	6.5	57	34	14
10	20	113	92	83	71	143	310	578	14	61	28	14
11	24	122	101	88	66	239	324	508	29	72	35	16
12	29	214	97	81	75	261	223	398	19	50	29	20
13	38	192	95	73	76	342	242	285	36	55	54	20
14	37	217	93	81	72	360	299	214	82	29	34	19
15	44	210	93	73	74	214	338	141	*75	71	26	18
16	47	246	93	78	76	168	302	88	96	28	29	13
17	47	152	85	70	111	141	360	29	120	24	28	23
18	38	124	81	64	92	133	383	*7.7	83	23	20	28
19	40	105	84	66	83	141	316	4.0	56	25	25	35
20	42	95	86	68	95	136	272	16	40	25	25	23
21	50	93	84	68	101	113	275	18	72	29	14	24
22	53	86	85	66	85	107	261	18	57	27	29	21
23	55	88	86	68	78	111	296	16	57	29	39	18
24	62	88	83	69	72	111	265	9.2	35	28	33	13
25	101	80	88	65	81	138	*299	32	43	53	39	23
26	122	81	95	69	85	111	394	7.4	45	31	36	33
27	117	78	86	70	85	109	425	3.4	29	26	29	23
28	115	78	77	70	86	113	364	8.2	61	29	22	23
29	129	80	63	69	-	138	338	5.4	42	22	33	23
30	126	75	74	74	------	*248	334	34	38	19	26	24
31	124	------	75	77	------	177	-----	164	------	29	29	------
Total	1,645.8	3,606	2,676	2,280	2,197	4,501	8,304	7,608.3	1,583.5	1,256	994	723
Mean	53.1	120	86.3	72.9	78.5	145	277	245	52.8	40.5	32.1	24.1
Ac-ft	3,260	7,150	5,310	4,480	4,360	8,930	16,470	15,090	3,140	2,490	1,970	1,430

Calendar year 1954: Max 512 Min 4.6 Mean 111 Ac-ft 80,580
Water year 1954-55: Max 770 Min 3.4 Mean 102 Ac-ft 74,080

* Discharge measurement made on this day.

South Fork Ogden River near Huntsville, Utah

Location.--Lat 41°16', long 111°40', in SE¼ sec. 12, T. 6 N., R. 2 E., on right bank half a mile downstream from Magpie Creek, 1 mile upstream from Huntsville Mountain Canal, and 5½ miles east of Huntsville.

Drainage area.--148 sq mi.

Records available.--March 1921 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,190 ft (by barometer). Prior to Aug. 14, 1934, at site 300 ft upstream at different datum.

Average discharge.--34 years, 110 cfs (79,640 acre-ft per year).

Extremes.--Maximum discharge during year, 788 cfs May 6 (gage height, 3.65 ft); minimum, 30 cfs Sept. 14 (gage height, 0.79 ft).
1921-55: Maximum discharge, 1,890 cfs May 3, 1952 (gage height, 5.98 ft); minimum observed, 20 cfs Nov. 25, 1931, July 28, 1934.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 23 to May 6)

1.8	30	2.0	210
1.0	45	3.0	502
1.2	65	4.0	880
1.5	108		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	36	36	39	35	38	*72	419	178	64	45	*35
2	36	36	38	40	35	39	85	403	174	63	43	36
3	36	36	*39	39	*36	*40	74	375	167	61	43	36
4	*36	36	41	38	b35	39	66	388	163	58	*42	35
5	37	*36	39	38	36	35	66	519	157	57	42	35
6	36	36	38	(*)	b35	35	73	*644	154	55	44	34
7	36	36	39	b35	b35	40	86	682	154	*54	44	34
8	36	36	36		b35	45	106	652	152	53	43	34
9	36	36	b36		36	50	127	560	152	53	43	34
10	34	36	b36		b35	60	144	554	146	53	40	34
11	33	36	38		b35	56	133	560	140	52	40	34
12	35	47	38			60	115	*568	131	51	41	33
13	37	43	38			68	125	575	123	50	43	33
14	36	40	37			70	154	543	125	50	43	32
15	36	39	37			58	174	458	116	49	40	32
16	36	50				53	169	388	*116	47	41	33
17	36	43				53	198	339	113	47	43	34
18	36	40				52	183	*307	102	47	48	34
19	40	39				52	161	310	97	47	43	39
20	39	39	b35	35	35	50	150	333	91	47	41	36
21	36	39				46	163	339	86	46	39	35
22	36	39				49	174	339	84	46	40	35
23	36	39				48	165	307	81	45	39	35
24	36	39	36			49	167	282	79	45	39	36
25	36	39	36			47	244	254	77	49	39	39
26	36	38	36			44	*302	234	74	47	39	39
27	36	38				44	227	220	72	45	39	38
28	37	37	b34			46	196	192	69	44	37	36
29	36	35			-	50	212	174	69	45	36	36
30	36	37	38		------	63	307	169	68	45	35	36
31	36	------	39		------	61	------	192	------	45	35	------
Total	1,120	1,156	1,133	1,104	983	1,540	4,618	12,279	3,510	1,560	1,269	1,052
Mean	36.1	38.5	36.5	35.6	35.1	49.7	154	396	117	50.3	40.9	35.1
Ac-ft	2,220	2,290	2,250	2,190	1,950	3,050	9,160	24,360	6,960	3,090	2,520	2,090

Calendar year 1954: Max 384 Min - Mean 71.3 Ac-ft 51,640
Water year 1954-55: Max 682 Min - Mean 85.8 Ac-ft 62,130

Peak discharge (base, 400 cfs).--May 6 (9 p.m.) 788 cfs (3.65 ft).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 10 to Feb. 2, Feb. 12 to Mar. 11 (stage-discharge relation affected by ice during most of period); discharge estimated on basis of 1 discharge measurement, weather records, and records for nearby stations.

Pine View Reservoir near Ogden, Utah

Location.--Lat 41°15'20", long 111°50'25", in NW¼SE¼ sec. 16, T. 6 N., R. 1 E., at trash rack at Pine View Dam on Ogden River, 7 miles northeast of Ogden.

Drainage area.--310 sq mi, approximately.

Records available.--November 1936 to September 1955.

Gage.--Staff gage read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

Extremes.--Maximum contents during year, 44,180 acre-ft May 18 to June 10 (elevation, 4,872.0 ft); minimum, 3,200 acre-ft Mar. 8, 9 (elevation, 4,834.6 ft).
1936-55: Maximum contents, 45,370 acre-ft May 17, 1938 (elevation, 4,873.00 ft); minimum, 80 acre-ft Feb. 19, 1937 (elevation, 4,818.99 ft).

Remarks.--Reservoir is formed by earth-fill, rock-faced dam; storage began Nov. 16, 1936; capacity, 44,180 acre-ft at elevation 4,872 ft (top of spillway gates) above mean sea level; during September 1939 sills of radial spillway gates were raised 1 ft, thus changing the top of spillway gates from elevation 4,871 to 4,872 ft. Dead storage negligible. Water is used for irrigation on Ogden River project.

Cooperation.--Capacity table furnished by Bureau of Reclamation.

Contents, in acre-feet, at 8 a.m., water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,080	3,730	4,350	4,950	4,670	3,430	4,840	20,600	44,180	39,500	27,240	15,680
2	4,030	3,730	4,350	5,070	4,670	3,380	5,240	21,920	44,180	38,990	26,970	15,250
3	3,980	3,730	4,350	5,070	4,620	3,380	5,470	23,150	44,180	38,660	26,560	14,750
4	3,930	3,780	4,350	5,180	4,730	3,380	5,660	24,300	44,180	38,330	26,020	14,250
5	3,880	3,780	4,350	5,180	4,620	3,340	5,780	25,610	44,180	38,000	25,610	13,860
6	3,780	3,780	4,400	5,180	4,510	3,290	5,900	27,240	44,180	37,500	25,220	13,480
7	3,730	3,780	4,400	5,240	4,400	3,250	6,080	29,360	44,180	37,020	24,960	13,010
8	3,680	3,780	4,400	5,300	4,290	3,200	6,340	32,230	44,180	36,690	24,690	12,560
9	3,680	3,780	4,350	5,360	4,240	3,200	6,660	33,690	44,180	36,370	24,430	12,190
10	3,680	3,830	4,350	5,360	4,190	3,250	7,060	35,570	44,180	35,890	24,040	11,840
11	3,680	3,830	4,400	5,420	4,140	3,340	7,610	37,500	44,000	35,410	23,660	11,490
12	3,630	3,930	4,400	5,530	4,080	3,430	8,040	39,160	43,820	35,100	23,150	11,150
13	3,630	4,030	4,450	5,470	4,030	3,630	8,400	40,510	43,640	34,780	22,780	10,820
14	3,630	4,030	4,510	5,530	3,980	3,880	8,840	41,890	43,470	34,310	22,410	10,480
15	3,630	4,080	4,510	5,530	3,980	4,080	9,380	42,760	43,470	33,840	22,040	10,160
16	3,630	4,190	4,560	5,590	3,930	3,980	9,920	43,470	43,290	33,530	21,670	9,840
17	3,630	4,290	4,560	5,660	3,880	3,880	10,570	44,000	43,120	32,920	21,310	9,530
18	3,630	4,290	4,560	5,590	3,880	3,880	11,320	44,180	43,120	32,610	20,950	9,220
19	3,630	4,290	4,620	5,530	3,780	3,930	12,020	44,180	43,120	32,310	20,600	8,990
20	3,630	4,290	4,620	5,470	3,780	3,980	12,650	44,180	42,940	31,710	20,250	8,840
21	3,630	4,290	4,620	5,420	3,780	3,930	13,200	44,180	42,760	31,410	19,900	8,620
22	3,630	4,350	4,620	5,360	3,680	3,930	13,680	44,180	42,410	30,960	19,560	8,470
23	3,630	4,350	4,670	5,360	3,680	3,880	14,250	44,180	42,060	30,520	19,210	8,330
24	3,630	4,350	4,730	5,420	3,630	3,880	14,840	44,180	41,720	30,080	18,770	8,180
25	3,680	4,350	4,730	5,120	3,580	3,980	15,550	44,180	41,370	29,940	18,320	8,040
26	3,680	4,350	4,730	5,070	3,530	4,030	16,070	44,180	41,020	29,500	17,880	7,900
27	3,680	4,350	4,780	5,010	3,480	4,080	17,120	44,180	40,850	29,070	17,560	7,900
28	3,680	4,350	4,780	4,950	3,480	4,080	17,880	44,180	40,340	28,790	17,020	7,820
29	3,680	4,350	4,840	4,900	-	4,140	18,660	44,180	40,000	28,360	16,800	7,750
30	3,730	4,350	4,840	4,780	-------	4,450	19,440	44,180	39,660	27,940	16,490	7,680
31	3,730	-------	4,900	4,730	-------	4,620	-------	44,180	-------	27,520	16,070	-------
(†)	4,835.7	4,836.9	4,837.9	4,837.6	4,835.2	4,837.4	4,855.1	4,872.0	4,869.4	4,861.5	4,852.0	4,842.3
(‡)	-410	+620	+550	-170	-1,250	+1,140	+14,820	+24,740	-2,520	-12,140	-11,450	-8,390

Calendar year 1954: (‡) +4,240
Water year 1954-55: (‡) +3,540

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

Ogden River below Pine View Dam, near Ogden, Utah

Location.--Lat 41°15'15", long 111°50'40", in NE¼SW¼ sec. 16, T. 6 N., R. 1 E., on left bank 500 ft downstream from Wheeler Creek, 1,000 ft downstream from Pine View Dam, and 6½ miles northeast of Ogden. Prior to Oct. 1, 1954, at site 1,000 ft downstream.

Drainage area.--321 sq mi.

Records available.--October 1937 to September 1955, not including flow of Pine View pipeline. January 1904 to October 1912, October 1931 to September 1937, including flow of pipeline, published as Ogden River near Ogden, Utah; records not equivalent.

Gage.--Water-stage recorder. Datum of gage is 4,803.33 ft above mean sea level (levels by Bureau of Reclamation). Prior to Aug. 24, 1932, hook or chain gage, and Aug. 25, 1932, to Sept. 30, 1954, water-stage recorder, at site 1,000 ft downstream, at datum 5.03 ft lower.

Average discharge.--18 years (1937-55), 89.3 cfs (64,650 acre-ft per year).

Extremes.--Maximum discharge observed during year, 383 cfs May 22, 23 (gage height, 3.24 ft); minimum daily discharge, 0.3 cfs Dec. 9-11.
1937-55: Maximum discharge, 3,190 cfs May 3, 1952 (gage height, 7.76 ft, site and datum then in use); minimum daily, 0.1 cfs Jan. 19-22, 1954, when reservoir gates were closed.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by Pine View Reservoir (see p. 82). Pine View pipeline diverts water above station for use in irrigation and power development. Diversions for irrigation and municipal supply above Pine View Reservoir.

Rating table, water year 1954-55, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.7	0.2	1.5	32
.8	.8	1.7	52
.9	2.3	2.0	94
1.0	4.8	3.0	322
1.1	8.2	3.3	399
1.3	18		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	0.7	0.5	0.5		a0.4	*5.4	25	30	28	25	*25
2	1.0	.7	.5			a.4	7.8	25	30	33	17	29
3	.8	.6	*.4		(*)	*.4	5.0	24	57	36	34	29
4	*.9	.6	.6	b.5		.4	3.7	22	214	35	*33	29
5	1.0	*.6	.4			.4	3.2	23	139	31	33	28
6	1.1	.6	.4	(*)		.5	3.9	23	24	33	33	28
7	1.0	.6	.4			.4	7.0	23	26	*37	34	17
8	1.1	.6	.4			.4	12	27	28	37	35	15
9	2.5	.6	.3			.6	16	31	29	36	35	26
10	9.4	.6	.3			1.4	55	29	26	36	33	28
11	5.0	.5	.3			2.5	16	30	25	36	32	28
12	1.9	1.7	.4			3.0	11	146	25	36	32	28
13	1.9	1.1	.4			4.2	17	222	24	37	31	20
14	1.7	.8	.4	a.5		4.2	30	253	25	37	31	17
15	1.7	.8	.5			3.0	26	277	24	35	31	18
16	1.6	3.0	.5		a0.4	1.9	27	287	*23	35	29	24
17	1.6	1.6	.5			1.6	38	284	22	34	28	18
18	1.6	.9	.5			1.4	28	*282	22	34	28	17
19	1.6	.8	.5			1.4	18	314	22	34	22	17
20	1.4	.8	.5			1.4	17	357	28	34	23	11
21	1.2	.7	.5			1.1	22	370	35	35	26	7.8
22	1.1	.7	.5			1.1	23	383	33	35	29	3.7
23	1.1	.6	.5			1.0	22	383	30	35	29	1.9
24	1.1	.6	.5			1.1	25	262	34	35	29	1.9
25	1.1	.6	.5			1.2	37	214	33	35	29	1.9
26	1.1	.6	.5	2.4		1.1	*31	168	32	35	29	1.9
27	1.0	.6	.5			1.1	21	156	35	35	29	1.9
28	.9	.6	.5			1.4	17	63	31	35	28	1.7
29	.9	.6	.4		-	2.3	21	26	23	35	27	1.7
30	.8	.5	.4		------	6.0	25	28	28	32	25	1.2
31	.7	------	.5		------	3.9	------	32	------	30	25	------
Total	50.8	24.3	14.0	14.4	11.2	51.2	591.0	4,789	1,157	1,071	904	477.6
Mean	1.64	0.81	0.45	0.46	0.4	1.65	19.7	154	38.6	34.5	29.2	15.9
Ac-ft	101	48	28	29	22	102	1,170	9,500	2,290	2,120	1,790	947

Calendar year 1954: Max 89 Min 0.1 Mean 17.2 Ac-ft 12,420
Water year 1954-55: Max 383 Min - Mean 25.1 Ac-ft 18,150

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 1 discharge measurement, weather records, and records for nearby streams.
b Stage-discharge relation affected by ice.

Weber River near Plain City, Utah

Location.--Lat 41°16'42", long 112°05'30", in NW¼NE¼ sec. 8, T. 6 N., R. 2 W., on right bank at highway bridge, 1 mile downstream from Fourmile Creek, 1½ miles south of Plain City, and 6 miles upstream from mouth.

Drainage area.--2,060 sq mi, approximately.

Records available.--May 1905 to September 1955 in reports of Geological Survey. January 1904 to May 1905 in reports of State engineer.

Gage.--Water-stage recorder. Altitude of gage is 4,210 ft (from topographic map). Prior to Nov. 12, 1914, staff gage, and Nov. 12, 1914, to Aug. 29, 1949, chain gage, at same site and datum.

Extremes.--Maximum discharge during year, 976 cfs May 9 (gage height, 5.43 ft); minimum daily, 21 cfs Aug. 30, Sept. 5.
1904-55: Maximum discharge, 10,100 cfs May 6, 1952 (gage height, 19.01 ft); practically no flow during latter part of several summers since 1915.

Remarks.--Records good except those for periods of no gage-height record, which are fair. During summer months practically entire flow is diverted above station for irrigation. Flow is partly regulated by Echo, East Canyon and Pine View Reservoirs (see p. 70, 74, and 82).

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73	181	150	151	192	240	*432	647	264		37	*23
2	96	174	*151	167	186	244	548	789	452		37	29
3	85	183	145	163	*183	*261	488	829	423		40	26
4	*71	190	196	148	156	279	435	762	504		*41	23
5	63	181	188	151	168	277	384	669	606	85	41	21
6	60	*174	198	*145	174	261	358	728	272		56	22
7	60	130	209	137	179	259	384	886	272	(*)	51	35
8	105	160	226	134	181	261	440	942	205	60	39	33
9	104	175	188	134	188	288	510	907	100	46	56	40
10	98	168	186	136	170	382	581	754	85	44	51	29
11	95	186	192	148	179	519	636	644	85	57	36	32
12	95	260	179	139	184	658	485	562	80	65	40	32
13	95	350	179	134	186	705	479	605	80	49	34	33
14	94	330	174	139	190	754	548	539	90	51	55	34
15	93	312	175	132	196	836	640	504	100	34	41	43
16	93	432	174	137	201	581	571	470	*146	50	48	35
17	91	355	156	142	272	523	581	376	199	34	43	29
18	90	259	158	156	250	440	651	305	186	29	43	40
19	90	225	160	172	223	426	605	*315	153	29	38	72
20	90	199	164	184	217	415	523	340	110	31	34	87
21	89	194	168	188	217	382	510	379	90	26	32	83
22	89	183	166	175	227	368	513	406	90	33	30	70
23	89	181	172	179	227	368	535	426		38	60	70
24	89	163	158	192	215	365	555	276		39	39	67
25	126	160	155	192	225	373	535	248		76	29	73
26	196	156	156	174	233	371	*661	255	85	55	44	141
27	192	160	155	167	231	355	716	225		36	44	116
28	198	151	136	163	238	350	633	163		37	32	103
29	221	156	119	165	-	355	592	126		36	28	103
30	203	147	139	170	------	449	585	121		36	21	99
31	183	------	142	181	------	455	-----	204	------	34	24	------
Total	3,416	6,275	5,214	4,895	5,688	12,600	16,114	15,402	5,272	1,620	1,244	1,643
Mean	110	209	168	158	203	406	537	497	176	52.3	40.1	54.8
Ac-ft	6,780	12,450	10,340	9,710	11,280	24,990	31,960	30,550	10,460	3,210	2,470	3,260

Calendar year 1954: Max 636 Min 7.7 Mean 166 Ac-ft 120,400
Water year 1954-55: Max 942 Min 21 Mean 217 Ac-ft 157,500

* Discharge measurement made on this day.

Note.--No gage-height record June 9-15, June 20 to July 8; discharge estimated on basis of water commissioner's records of canal operations, weather records, and records for stations on Weber River at Ogden and Ogden River below Pineview Dam.

Holmes Creek near Kaysville, Utah

Location.--Lat 41°03'18", long 111°53'40", in NE¼ sec. 25, T. 4 N., R. 1 W., on left bank 2 miles northeast of Kaysville.

Records available.--May 1950 to September 1955.

Gage.--Water-stage recorder and concrete control. Datum of gage is 5,095.1 ft above mean sea level, unadjusted.

Average discharge.--5 years, 3.80 cfs (2,750 acre-ft per year).

Extremes.--Maximum discharge during year, 11 cfs May 8 (gage-height, 0.78 ft); no flow for part of Feb. 3.
1950-55: Maximum discharge, 36 cfs May 3, 1952 (gage height, 1.13 ft); no flow for part of several days during 1951 and 1955.

Remarks.--Records good. No diversion above station.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.4	0.8
.5	1.8
.6	3.4
.7	6.6
.8	12

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	1.4	*1.5	1.5	*1.3	a1.8	2.3	7.1	6.6	3.2	2.0	1.5
2	1.1	1.4	1.3	1.5	1.3	1.9	2.6	6.6	6.2	3.0	2.0	1.5
3	1.2	*1.4	1.4	1.5	b1.3	1.9	2.4	5.8	6.6	2.8	2.0	1.5
4	*1.4	1.4	1.8	1.5	b1.3	1.9	2.3	5.8	6.6	2.8	2.0	1.5
5	1.3	1.4	1.6	1.5	1.3	2.0	2.3	7.5	6.6	2.8	2.0	1.5
6	1.3	1.4	1.6	b1.2	1.4	2.0	2.6	8.5	6.2	2.8	2.0	1.5
7	1.3	1.4	1.6	b1.2	1.4	2.0	2.6	9.5	6.2	2.8	2.0	1.5
8	1.3	1.4	1.4		1.4	2.0	3.0	9.5	6.2	2.8	2.0	1.4
9	1.6	1.4	1.6		1.4	2.1	3.4	*9.5	*6.2	2.6	1.9	1.4
10	1.3	1.4	1.6	a1.2	b1.4	2.1	4.2	9.5	6.2	2.4	1.9	1.4
11	1.3	1.5	1.5		1.5	2.1	3.9	9.5	6.6	2.4	1.8	1.4
12	1.3	2.3	1.5	*1.2	1.5	2.3	*3.6	9.5	6.6	*2.4	1.8	1.4
13	1.4	1.8	1.5	1.2	1.5	2.4	3.4	9.5	6.2	2.4	2.0	1.4
14	*1.3	1.6	1.5	1.2	1.5	2.3	3.9	9.5	6.2	2.3	2.0	1.4
15	1.3	1.6	1.5	1.2	1.5	2.0	4.5	9.5	5.8	2.3	1.9	1.4
16	1.3	2.3	*1.4	1.3	1.6	*1.9	4.8	*9.0	5.8	2.3	*1.9	*1.4
17	1.3	*1.8		1.3		2.0	5.5	8.0	5.5	2.3	1.9	1.5
18	1.3	1.6		1.3		2.0	5.1	7.1	5.1	2.1	1.9	1.6
19	1.3	1.8		1.3	b1.6	1.9	4.2	7.1	4.8	2.1	1.9	1.8
20	1.3	1.6	b1.5	b1.3		1.8	3.9	7.5	4.5	2.0	1.8	1.8
21	1.3	1.6		1.4	(*)	1.9	3.9	9.0	4.5	2.0	1.8	1.8
22	1.3	1.5		1.4		1.8	3.9	10	4.5	2.0	1.6	1.8
23	1.3	1.5	1.5	1.4		1.9	3.6	10	*4.2	2.0	1.6	1.8
24	1.4	1.5	1.5	1.3		1.9	3.6	10	4.2	2.0	1.8	1.8
25	1.4	1.5	1.5	1.3	a1.6	1.9	4.2	9.5	3.9	2.1	1.8	2.4
26	1.4	1.4	1.4	1.3		1.9	5.1	9.0	3.6	2.0	1.8	2.1
27	1.4	1.4	1.4	1.3		1.9	4.5	8.5	3.4	*2.0	1.8	1.8
28	1.4	1.4	1.4	1.3		1.9	4.2	6.6	3.2	2.0	1.6	1.6
29	1.4	1.2	1.4	1.3	-	2.1	4.5	6.2	3.4	2.0	1.6	1.6
30	1.4	1.5	1.4	1.4	------	2.3	5.5	6.2	3.2	2.0	*1.5	1.6
31	1.4	------	1.5	1.4	------	2.1	------	6.6	------	2.0	1.5	------
Total	41.1	46.4	46.3	40.8	41.8	62.0	113.5	257.1	158.8	72.7	57.1	48.1
Mean	1.33	1.55	1.49	1.32	1.49	2.00	3.78	8.29	5.29	2.35	1.84	1.60
Ac-ft	82	92	92	81	83	123	225	510	315	144	113	95

Calendar year 1954: Max 4.5 Min 1.0 Mean 1.93 Ac-ft 1,400
Water year 1954-55: Max 10 Min 1.1 Mean 2.70 Ac-ft 1,960

Peak discharge (base, 10 cfs).--May 8 (2 p.m.) 11 cfs (0.78 ft).
* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby stations.
b Stage-discharge relation affected by ice.

Farmington Creek above diversions, near Farmington, Utah

Location.--Lat 41°00'05", long 111°52'25", in NE¼ sec. 18, T. 3 N., R. 1 E., on right bank 1.0 mile northeast of Farmington.

Drainage area.--9.9 sq mi, approximately.

Records available.--November 1949 to September 1955.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5,100 ft (from Forest Service topographic map). Prior to Oct. 1, 1951, at site 600 ft downstream at different datum.

Average discharge.--5 years, 13.2 cfs (9,560 acre-ft per year).

Extremes.--Maximum discharge during year, 120 cfs May 10 (gage height, 1.52 ft); minimum, 1.1 cfs Nov. 29, Sept. 6.
1949-55: Maximum discharge, 254 cfs May 22, 1950 (gage height, 1.74 ft), site and datum then in use; minimum, 0.9 cfs Aug. 25, 30, 31, 1954.

Remarks.--Records good. Records include a small transmountain diversion from Hardscrabble Creek.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.6	1.3	1.1	21
.7	2.6	1.2	32
.8	4.8	1.3	47
.9	8.4	1.5	106
1.0	14		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	2.0	*2.3	2.1	*2.3	2.8	5.1	26	27	8.0	2.9	1.5
2	1.7	2.0	2.3	2.1	2.3	2.9	6.4	26	25	7.1	2.4	1.6
3	1.9	*2.0	2.3	2.3	2.3	3.1	5.7	24	29	6.4	2.3	1.6
4	*2.0	2.1	3.1	2.3	2.4	2.9	4.8	26	29	5.7	2.3	1.5
5	2.6	2.0	2.6	2.1	2.3	2.8	4.8	43	26	5.7	2.3	1.5
6	2.0	2.1	2.4	2.1	2.3	2.8	4.8	*73	24	5.4	2.4	1.4
7	1.9	2.1	2.4	2.1	2.3	2.8	5.7	60	24	5.1	2.6	1.5
8	2.0	2.0	2.0	2.1	2.3	3.1	6.4	65	*24	4.8	2.4	1.6
9	2.8	2.1	2.3	2.1	2.3	3.8	8.9	*80	23	4.8	2.3	1.5
10	2.1	2.1	2.4	2.3	2.3	4.3	12	103	23	4.3	2.1	1.5
11	2.0	2.0	2.4	2.1	2.3	4.5	10	103	23	4.0	2.0	1.5
12	1.9	5.7	2.3	(*)	2.3	4.8	*8.4	90	21	*4.0	1.9	1.5
13	2.6	3.8	2.3		2.1	5.7	8.9	*83	20	3.6	2.1	1.5
14	*2.1	2.8	2.3		2.3	6.0	13	70	21	3.6	2.3	*1.4
15	2.0	2.6	2.3		2.6	4.8	14	60	19	3.4	2.0	1.5
16	2.0	8.1	*2.0		2.6	*4.3	15	43	20	3.4	*2.1	1.5
17	2.0	*4.0	2.0		3.4	4.5	18	*39	20	2.9	2.3	1.6
18	1.9	3.1	2.1		2.8	4.0	15	41	18	2.9	2.3	2.0
19	1.9	2.8	2.1	b2.1	2.6	4.0	12	47	16	2.8	2.3	3.1
20	1.9	2.6	2.1		2.6	3.8	11	55	15	2.8	2.0	2.1
21	1.9	2.6	2.1		2.6	3.6	12	55	14	2.9	1.9	1.9
22	1.9	2.4	2.1		2.6	3.4	12	57	13	2.9	1.9	1.9
23	2.0	2.4	2.1		*2.6	3.4	11	*50	*13	2.9	1.7	1.9
24	2.1	2.4	2.1		2.6	3.1	13	45	12	3.4	1.7	1.9
25	2.3	2.4	2.0		2.6	3.1	19	39	10	4.3	2.1	3.8
26	2.3	2.3	2.0		2.6	3.1	27	35	9.8	3.4	2.1	3.8
27	2.1	2.1	2.0	2.1	2.6	2.9	20	30	9.3	*3.1	2.0	2.6
28	2.1	1.9	2.0	2.1	2.6	3.4	17	26	8.4	2.9	1.7	2.1
29	2.1	1.5	2.0	2.1	-	4.3	17	25	8.4	2.9	1.7	2.1
30	2.1	2.0	2.0	2.1	------	5.7	21	25	8.9	2.6	*1.6	2.1
31	2.0	------	2.1	2.3	------	4.8	------	28	------	2.6	1.6	------
Total	64.1	80.0	68.5	65.9	69.5	118.5	358.9	1,572	553.8	124.6	65.3	57.0
Mean	2.07	2.67	2.21	2.13	2.48	3.82	12.0	50.7	18.5	4.02	2.11	1.90
Ac-ft	127	159	136	131	138	235	712	3,120	1,100	247	130	113

Calendar year 1954: Max 34 Min 1.1 Mean 6.37 Ac-ft 4,620
Water year 1954-55: Max 103 Min 1.4 Mean 8.76 Ac-ft 6,350

Peak discharge (base, 80 cfs).--May 10 (5 p.m.) 120 cfs (1.52 ft).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Ricks Creek above diversions, near Centerville, Utah

Location.--Lat 40°56'25", long 111°52'00" (revised), in NW¼ sec. 5, T. 2 N., R. 1 E., on left bank half a mile east of alternate U. S. Highway 91 and 1.2 miles north of Centerville.

Drainage area.--2.35 sq mi.

Records available.--April 1950 to September 1955.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 4,840 ft, revised (from topographic map).

Average discharge.--5 years, 2.41 cfs (1,740 acre-ft per year).

Extremes.--Maximum discharge during year, 10 cfs May 13 (gage height, 0.95 ft); minimum, 0.1 cfs Feb. 3.
1950-55: Maximum discharge, 31 cfs May 15, 1952; maximum gage height, 1.27 ft May 23, 1950; minimum discharge, 0.1 cfs Apr. 9, 1953, Feb. 3, 1955.

Remarks.--Records good.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.5	0.3	0.8	4.2
.6	.9	.9	7.4
.7	2.2	1.0	12

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	0.6	*0.7	0.5	0.5	0.6	0.8	4.0	5.1	2.0	1.0	0.6
2	.3	.6	.7	.5	*.6	.6	.9	4.0	4.8	2.0	1.0	.6
3	.3	*.6	.6	.5	.4	.7	.9	4.0	4.8	1.9	1.0	.7
4	*.4	.6	.8	.5	.6	.6	.9	4.0	4.5	1.7	1.0	.6
5	.6	.6	.7	.4	.6	.6	.9	5.1	4.2	1.7	1.0	.6
6	.5	.6	.6	.4	.5	.6	1.0	6.4	4.0	1.7	1.1	.6
7	.4	.6	.6	.4	.5	.7	1.0	*7.1	3.8	1.7	1.0	.6
8	.5	.6	.4		.5	.8	1.2	7.1	*3.8	1.7	.9	.6
9	.6	.6	.5		.5	.8	1.6	8.2	3.6	1.6	.8	.6
10	.6	.6	.6	.4	.5	.8	1.7	8.2	3.8	1.6	.8	.6
11	.6	.6	.6		.5	.8	1.7	8.6	3.8	1.6	.8	.6
12	.6	.8	.6	*.5	.5	.9	*1.4	8.2	3.6	*1.4	.8	.6
13	*.6	.8	.5	.5	.4	.9	1.6	9.0	3.4	1.2	.9	.5
14	.6	.7	.4	.5	.4	.9	1.9	9.0	3.6	1.3	.8	.5
15	.6	.7	.5	.5	.4	*.7	2.0	8.2	3.6	1.2	.8	.5
16	.5	1.0	*.4	.6	.5	.7	2.4	7.8	3.6	1.2	.8	*.5
17	.5	*.8	.4	.5	.6	.7	2.8	*7.4	3.4	1.2	*.8	.5
18	.5	.7	.4	.5	.5	.7	2.4	7.1	3.2	1.2	.8	.6
19	.5	.7	.5	.4	.4	.7	1.9	7.1	3.0	1.2	.8	.6
20	.5	.7	.5	.5	.4	.6	1.9	7.8	3.0	1.2	.8	.6
21	.5	.7	.4	.6	.4	.6	1.9	8.2	3.0	1.3	.6	.6
22	.5	.7	.4	.5	.4	.7	1.9	8.6	*2.8	1.3	.6	.6
23	.6	.7	.4	.5	*.6	.7	1.7	8.2	2.8	1.2	.6	.6
24	.7	.7	.4	.5	.6	.7	1.9	*8.2	2.6	1.2	.8	.6
25	.7	.8	.4	.5	.6	.7	2.4	8.2	2.6	1.3	.8	1.0
26	.6	.8	.4	.5	.6	.6	3.4	7.8	2.6	1.2	.8	.8
27	.7	.7	.4	.5	.6	.6	3.0	7.1	2.4	*1.1	.8	.6
28	.6	.5	.4	.5	.6	.7	3.0	6.4	2.2	1.1	.6	.6
29	.6	.4	.4	.5	-	.9	3.2	5.7	2.2	1.1	.6	.6
30	.6	.7	.4	.5	------	.9	3.8	5.7	2.2	1.0	*.6	.6
31	.6	------	.4	.5	------	.8	------	5.7	------	1.0	.6	------
Total	16.8	20.2	15.4	14.9	14.2	22.3	57.1	218.1	102.0	43.1	25.1	18.2
Mean	0.54	0.67	0.50	0.48	0.51	0.72	1.90	7.04	3.40	1.39	0.81	0.61
Ac-ft	33	40	31	30	28	44	113	433	202	85	50	36

Calendar year 1954: Max 3.6 Min 0.3 Mean 1.05 Ac-ft 760
Water year 1954-55: Max 9.0 Min 0.3 Mean 1.55 Ac-ft 1,120

Peak discharge (base, 10 cfs).--May 13 (3 p.m.) 10 cfs (0.95 ft).
* Discharge measurement made on this day.

Parrish Creek above diversions, near Centerville, Utah

Location.--Lat 40°55'25", long 111°51'50" (revised), in NW¼ sec. 8, T. 2 N., R. 1 E., on left bank 1 mile northeast of Centerville.

Drainage area.--2.08 sq mi (revised).

Records available.--November 1949 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,600 ft, revised (from topographic map).

Average discharge.--5 years, 1.70 cfs (1,230 acre-ft per year).

Extremes.--Maximum discharge during year, 11 cfs May 13; minimum daily, 0.2 cfs on several days during November, August, and September.
1949-55: Maximum discharge, 30 cfs May 5, 1952; minimum, 0.2 cfs at times in 1954, 1955.

Remarks.--Records good except those for periods of doubtful or no gage-height record, which are fair. Record includes flow through pipeline for Centerville city water supply.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0.3	0.3	0.4	0.4	0.4	0.6	2.3	3.4	1.2	0.5	0.2
2		.2	.3	.4	.4	.4	.7	2.2	3.1	1.2	.4	.2
3		.2	.3	.4	.4	.4	.6	2.1	3.1	1.1	.4	.2
4	d0.4		.4	.4	.4	.4	.6	2.3	3.0	1.0	.4	.2
5			.4	.4	.4	.4	.6	2.3	2.7	1.0	.4	.2
6			.4	.4	.4	.4	.8	5.0	2.7	1.0	.5	.2
7			.4	.4	.4	.4	.8	5.9	2.5	.9	.5	.2
8	.4		.4	.4	.4	.4	.9	6.2	2.5	.8	.4	.2
9	.4		.3		.4	.5	1.2	6.6	2.5	.8	.4	.2
10	.4	a.3	.3		.4	.5	1.3	7.2	2.7	.8	.4	.2
11	.4		.4		.4	.5	1.2	7.5	2.5	.7	.4	.2
12	.4		.4	a.4	.4	.5	1.1	8.2	2.3	.7	.4	.2
13	.4		.4		.4	.6	1.1	9.0	2.2	.7	.5	.2
14	.4		.4		.4	.5	1.3	8.8	2.5	.6	.4	.2
15	.4		.4		.4	.5	1.5	7.7	2.2	.6	.4	.2
16	.4		.3		.4	.6	1.5	6.5	2.3	.6	.4	.2
17	.4	.3	.3	.4	.4	.6	1.7	5.9	2.1	.6	.4	.2
18	.4	.3	.3	.4		.6	1.6	5.8	1.8	.6	.4	.4
19	.3	.3	.3	.4		.6	1.4	6.0	1.8	.6	.4	.4
20	.3	.3	.3	.4		.6	1.4	6.6	1.8	.5	.3	.3
21	.3	.3	.4	.4	a.4	.6	1.4	7.4	1.6	.5	.3	.3
22	.3	.3	.4	.4		.6	1.3	7.6	1.6	.5	.3	.3
23	.3	.3	.4	.4		.6	1.2	7.0	1.7	.5	.3	.3
24	.3	.4	.4	.4		.6	1.3	6.4	1.5	.5	.3	.3
25	.3	.4	.4	.4	.4	.6	1.7	6.0	1.4	.6	.4	.6
26	.3	.3	.4	.4	.4	.5	2.0	5.7	1.4	.6	.3	.6
27	.3	.3	.4	.4	.5	.6	1.6	5.2	1.3	.5	.3	.4
28	.3	.3	.4	.4	.4	.6	1.6	4.4	1.3	.5	.2	.4
29	.3	.3	.4	.4	-	.6	1.7	3.5	1.4	.5	.2	.3
30	.3	.3	.4	.4	------	.6	1.9	3.4	1.3	.4	.2	.3
31	.3	------	.4	.4	------	.6	------	3.7	------	.5	.2	------
Total	11.1	9.0	11.4	12.4	11.3	16.3	37.6	174.4	64.2	21.6	11.3	8.3
Mean	0.36	0.30	0.37	0.40	0.40	0.53	1.25	5.63	2.14	0.70	0.36	0.28
Ac-ft	22	18	23	25	22	32	75	346	127	43	22	16

Calendar year 1954: Max 25 Min 0.2 Mean 0.63 Ac-ft 457
Water year 1954-55: Max 9.0 Min 0.2 Mean 1.06 Ac-ft 771

Peak discharge (base, 10 cfs).--May 13 (3:30 p.m.) 11 cfs.
a No gage-height record; discharge estimated on basis of weather records, and records for nearby streams.
d Doubtful gage-height record; discharge computed on basis of recorder graph and records for nearby streams.

Centerville Creek above diversions, near Centerville, Utah

Location.--Lat 40°55'00", long 111°51'45" (revised), in SE¼ sec. 8, T. 2 N., R. 1 E., on right bank 1.2 miles east of Centerville.

Drainage area.--3.15 sq mi.

Records available.--November 1949 to September 1955.

Gage.--Water-stage recorder and concrete rating flume. Altitude of gage is 4,650 ft, revised (from topographic map).

Average discharge.--5 years, 2.86 cfs (2,070 acre-ft per year).

Extremes.--Maximum daily discharge during year, 8.4 cfs May 9; minimum daily, 0.5 cfs Mar. 16.
1949-55: Maximum daily discharge, 30 cfs May 6, 7, 1952; minimum daily, that of Mar. 16, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Record includes flow of one ditch which diverts water about a quarter of a mile above station.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	1.2	0.8	1.1	1.3	1.0	a1.4	4.8	5.3	2.1	1.0	0.8
2	.8	1.2	.8	1.1	1.3	1.0	a1.5	4.8	5.1	2.2	1.0	.8
3	.8	1.2	.8	1.1	1.3	1.0	a1.5	4.7	5.1	2.0	.9	.8
4	.8	1.1	1.0	1.1	1.3	.9	a1.5	4.8	5.0	2.0	.9	.8
5	.9	1.1	.9	1.0	1.3	b.9	a1.4	5.9	4.7	2.0	1.0	.8
6	.8	1.1	.9		1.3	b.9	a1.5	7.2	4.5	1.8	1.1	.8
7	.8	1.1	.9		1.3	.9	a1.6	7.9	4.4	1.8	1.1	.8
8	.8	1.1	.8	b1.0	1.2	.9	a1.6	8.3	4.3	1.8	1.0	.8
9	.9	1.1	.9		1.3	.9	a1.8	8.4	4.2	1.7	.9	.8
10	.9	1.1	.9		1.3	.9	a1.8	8.1	4.2	1.7	.9	.8
11	.9	1.0	.9	1.1	b1.2	.9	a1.8	8.0	4.1	1.7	.9	.8
12	.9	1.4	.9	1.1	b1.2	1.0	2.0	7.5	4.0	1.7		.7
13	1.0	1.2	.9	1.1	1.2	1.0	2.3	7.3	3.8	1.6		.7
14	1.0	1.1	.9	1.1	1.2	.9	2.8	7.3	4.0	1.6	2.9	.7
15	1.0	1.1	.9	1.1	1.2	.7	2.9	6.8	3.7	1.4		.7
16	1.0	1.5	.9	1.2	1.2	.5	3.1	6.1	4.1	1.4	.8	.7
17	1.0	1.0		1.2	b1.2	.6	3.2	5.8	3.6	1.4	.9	.7
18	1.0	.9	b.9	1.2	1.2	.6	2.9	5.4	3.3	1.3	.9	.8
19	1.0	.9		1.2	b1.1	.9	2.7	5.4	3.3	1.4	.9	1.0
20	1.0	.8		1.2	b1.1	.8	2.6	5.8	3.1	1.4	.9	.8
21	1.0	.8	.9	1.2	b1.1	.8	2.7	6.7	2.9	1.3	.8	.8
22	1.0	.9	.9	1.2	b1.1	.8	2.7	7.0	2.9	1.3	.8	.8
23	1.1	.9	.9	1.2	1.1	.8	2.6	7.3	2.7	1.3	.8	.8
24	1.2	.9	.9	1.2	1.0	a.9	2.7	7.1	2.7	1.3	.9	.8
25	1.2	.9	.9	1.3	1.0	a.9	4.2	6.9	2.6	1.5	1.0	1.3
26	1.2	.9	.9	1.3	1.0	a.9	4.1	6.4	2.6	1.3	1.0	1.3
27	1.2	.8	.8	1.3	1.0	a.9	3.5	5.9	2.5	1.2	.9	1.0
28	1.2	.8	.8	1.3	1.0	a.9	3.4	5.5	2.4	1.1	.9	.9
29	1.2	.8	1.0	1.3	-	a1.0	3.6	5.3	2.4	1.1	.9	.9
30	1.2	.8	1.0	1.3	------	a1.1	4.2	5.0	2.2	1.0	.9	.9
31	1.2	------	1.0	1.3	------	a1.0	------	5.5	------	.9	.9	------
Total	30.8	30.7	27.7	35.8	33.0	27.2	75.6	198.9	109.7	47.3	28.5	25.1
Mean	0.99	1.02	0.89	1.15	1.18	0.88	2.52	6.42	3.66	1.53	0.92	0.84
Ac-ft	61	61	55	71	65	54	150	395	218	94	57	50

Calendar year 1954: Max 3.6 Min 0.6 Mean 1.26 Ac-ft 912
Water year 1954-55: Max 8.4 Min 0.5 Mean 1.84 Ac-ft 1,330

a No gage-height record; discharge estimated on basis of discharge measurements, weather records, and records for nearby stations.
b Stage-discharge relation affected by ice.

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Stone Creek above diversions, near Bountiful, Utah

Location.--Lat 40°53'40" (revised), long 111°50'40", in NW¼ sec. 21, T. 2 N., R. 1 E., on right bank 2.2 miles east of Bountiful.

Drainage area.--4.48 sq mi.

Records available.--April 1950 to September 1955.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5,080 ft, revised (from topographic map).

Average discharge.--5 years, 3.47 cfs (2,510 acre-ft per year).

Extremes.--Maximum discharge during year, 16 cfs May 13 (gage height, 1.23 ft); minimum not determined, occurred during period of no gage-height record.
1950-55: Maximum discharge, 82 cfs May 5, 1952 (gage height, 2.79 ft); no flow Oct. 5, 1951.

Remarks.--Records good except those for periods of no gage-height record, which are fair.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.6	0.2	1.0	5.3
.7	.5	1.1	9.3
.8	1.3	1.2	16
.9	2.8		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0.7	*0.8	0.8			1.7	7.5	8.4	1.9		
2		.7	.8	.9	(*)		1.7	7.1	7.5	1.9		
3	a0.3	*.7	.8	.9			1.7	6.0	7.5	1.5	0.8	a0.5
4	(**)	.7	.9	.8			1.5	6.4	7.5	1.4		
5	.4	.7	.8	.8			1.4	7.9	7.1	1.3		
6	.3	.7	.8	.8		a0.9	1.5	*11	6.7	1.2		
7	.3	.7	.8	.8			1.7	11	6.7	1.1		
8	.4	.7	.8	.8			2.4	11	*6.4	1.1		a.4
9	.5	.7	.8				3.2	11	6.4	1.1		
10	.5	.7	.9				3.9	13	6.4	1.1	.7	
11	.5	.7	.9				3.4	12	6.0	*1.2		
12	.6	1.1	.9			1.0	*3.0	13	6.0	1.2		
13	*.6	1.1	.9			1.0	3.2	*13	5.6	1.1		
14	.6	.9	.8			1.0	3.6	15	5.6	1.0		(*)
15	.6	.8	.8			*.8	4.2	14	5.3	.9		a.3
16	.7	1.7	*.7		a0.9	.7	4.2	11	6.0		.6	
17	.6	*1.0	.7	(*)		.7	4.2	9.8	5.6		(*)	
18	.7	.9	.7			.7	3.9	8.8	5.0			
19	.7	.9	.8			.7	3.6	8.4	4.7			
20	.7	.8	.8	a.9		.7	3.4	9.3	4.7			
21	.7	.8	.9			.7	3.4	11	4.4		a.6	a.5
22	.7	.8	.9			.7	3.4	12	*4.2			
23	.7	.8	.8		(*)	.7	3.2	13	3.6	.9		
24	.8	.9	.8			.7	3.4	*13	3.4			
25	.7	1.0	.7			.8	4.4	11	3.2			
26	.7	1.0	.7			.8	5.6	9.8	2.8	(*)		
27	.7	.9	.8			.7	4.7	8.8	2.8			a.6
28	.7	.8	.8			.8	4.2	7.9	2.4		a.5	
29	.7	.7	.8		-	1.3	4.7	7.5	2.4			
30	.7	.8	.8		------	1.5	5.6	7.5	2.2	.8		
31	.7	------	.8		------	1.4	------	8.8	------	.8	(*)	------
Total	17.7	25.4	25.0	27.3	25.2	27.3	100.0	316.5	156.5	33.2	19.8	13.5
Mean	0.57	0.85	0.81	0.88	0.9	0.88	3.33	10.2	5.22	1.07	0.64	0.45
Ac-ft	35	50	50	54	50	54	198	628	310	66	39	27

Calendar year 1954: Max 4.9 Min - Mean 1.30 Ac-ft 941
Water year 1954-55: Max 15 Min - Mean 2.16 Ac-ft 1,560

Peak discharge (base, 15 cfs).--May 13 (8 p.m.) 16 cfs (1.23 ft).
* Discharge measurement or observation of no flow made on this day.
** Field estimate made on this day.
a No gage-height record; discharge estimated on basis of 6 discharge measurements, weather records, and records for nearby streams.
Note.--Water bypassing gage in pipeline July 16 to Aug. 17; discharge computed on basis of record at station, computation of flow at outlet of pipe, engineer's notes, and records for nearby streams.

Mill Creek at Mueller Park, near Bountiful, Utah

Location.--Lat 40°51'50", long 111°50'10", in SE¼ sec. 33, T. 2 N., R. 1 E., on right bank 2 miles southeast of Bountiful.

Drainage area.--8.79 sq mi (revised).

Records available.--April 1950 to September 1955.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5,240 ft (from topographic map).

Average discharge.--5 years, 7.39 cfs (5,350 acre-ft per year).

Extremes.--Maximum daily discharge during year, 44 cfs May 7; minimum daily, 0.7 cfs for several days during September and October.
1950-55: Maximum daily discharge, 140 cfs Apr. 28, 1952; minimum, 0.5 cfs for several days in August and September 1954.

Remarks.--Records good. Records include flow of pipeline which diverts about a quarter of a mile above station.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.7	1.1	1.2	1.1	1.3	1.4	2.9	21	18	5.7	2.2	0.9
2	.7	1.1	1.2	1.1	1.3	1.4	4.0	23	16	5.6	2.1	.9
3	.7	1.1	1.2	1.1	1.3	1.5	3.4	24	14	5.3	1.8	.9
4	.7	1.1	1.8	1.1	1.3	1.5	2.9	23	12	5.2	1.8	.9
5	.8	1.1	1.4	1.1	1.3	1.4	2.7	25	12	5.0	1.9	.9
6	.8	1.1	1.3	1.1	1.3	1.4	3.1	41	13	4.8	2.2	.9
7	.8	1.1	1.3	1.1	1.3	1.4	3.5	44	15	4.8	2.1	.9
8	.7	1.1	1.1	1.1	1.3	1.4	4.1	42	17	4.6	1.8	.9
9	.8	1.1	1.3	1.1	1.3	1.7	5.1	34	16	4.5	1.7	.8
10	.8	1.1	1.3	1.1	1.3	1.8	5.6	36	15	4.2	1.6	.8
11	.8	1.0	1.1	1.1	1.3	1.7	6.3	36	14	4.1	1.6	.8
12	.8	1.5	1.1	1.1	1.3	1.8	5.9	35	13	4.1	1.5	.8
13	.9	1.4	1.1	1.1	1.3	1.9	6.3	36	11	3.8	1.7	.7
14	.9	1.3	1.1	1.1	1.3	1.9	7.9	33	12	3.7	1.6	.7
15	.9	1.3	1.1	1.1	1.3	1.8	9.7	28	10	3.4	1.5	.8
16	1.0	3.2	1.0	1.1	1.3	1.8	9.6	21	10	3.4	1.6	.9
17	1.0	1.9	.9	1.1	1.8	1.8	11	18	8.9	3.2	1.6	1.0
18	1.0	1.6	.9	1.1	1.5	1.8	11	17	8.0	3.2	1.6	1.1
19	.9	1.4	.9	1.3	1.4	1.8	10	17	7.4	3.1	1.7	1.5
20	1.0	1.3	.9	1.3	1.4	1.8	10	22	7.0	2.9	1.4	1.2
21	1.0	1.2	1.0	1.1	1.3	1.8	10	23	6.8	2.9	1.3	1.1
22	1.0	1.2	.9	1.1	1.3	1.8	10	22	6.7	2.8	1.3	1.1
23	1.0	1.2	1.0	1.3	1.3	1.7	10	22	6.4	2.7	1.1	1.1
24	1.0	1.4	1.0	1.3	1.3	1.7	10	21	6.4	2.8	1.3	1.1
25	1.0	1.4	1.0	1.3	1.3	1.7	12	20	6.1	3.2	1.5	1.7
26	1.0	1.4	1.0	1.3	1.3	1.6	16	18	5.8	2.9	1.5	1.4
27	1.0	1.4	1.0	1.3	1.3	1.7	14	16	5.5	2.7	1.2	1.2
28	1.0	1.2	1.1	1.3	1.4	1.7	13	14	5.5	2.4	1.1	1.1
29	1.0	1.2	1.1	1.3	-	2.0	12	15	5.7	2.4	1.1	1.1
30	1.0	1.2	1.1	1.3	------	3.1	14	16	5.6	2.1	1.0	1.2
31	1.0	------	1.1	1.3	------	2.8	------	19	------	2.1	1.1	------
Total	27.7	39.7	34.5	36.3	37.4	54.6	246.0	782	309.8	113.6	48.5	30.4
Mean	0.89	1.32	1.11	1.17	1.34	1.76	8.20	25.2	10.3	3.66	1.56	1.01
Ac-ft	55	79	68	72	74	108	488	1,550	614	225	96	60

Calendar year 1954: Max 10 Min 0.5 Mean 2.51 Ac-ft 1,820
Water year 1954-55: Max 44 Min 0.7 Mean 4.82 Ac-ft 3,490

Salt Creek at Nephi, Utah

Location.--Lat 39°42'45", long 111°48'25", in NE¼ sec. 3, T. 13 S., R. 1 E., on right bank 1 mile east of Nephi.

Drainage area.--95.6 sq mi.

Records available.--December 1950 to September 1955

Gage.--Water-stage recorder. Altitude of gage is 5,240 ft (by barometer). Prior to Nov. 6, 1952, at site 75 ft upstream at datum 1 43 ft higher.

Extremes.--Maximum discharge during year, 217 cfs July 24; minimum daily, 5.3 cfs Dec. 27, Jan. 8.
1950-55: Maximum discharge, 724 cfs May 2, 1952; minimum, 1.1 cfs Dec. 13, 1951.

Remarks.--Records good. Records include discharge of Salt Creek diversion canal near Nephi.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.2	9.5	9.5	8.1	8.8	7.8	13	34	46	20	15	8.8
2	8.8	9.2	9.8	8.1	8.8	8.1	15	34	38	20	14	7.8
3	9.8	9.5	9.8	*8.1	8.8	8.4	13	34	36	19	13	8.1
4	9.5	9.5	12	8.4	8.8	8.4	13	35	36	18	13	8.8
5	9.5	9.5	9.8	8.1	8.4	7.8	9.8	34	34	17	13	8.8
6	9.5	9.8	9.5	7.1	9.2	6.8	12	42	*34	17	13	8.4
7	9.2	9.8	9.2	5.5	*8.8	7.4	12	52	38	17	13	8.1
8	9.2	9.5	8.4	5.3	8.4	7.4	13	52	50	16	13	8.2
9	9.5	9.2	8.1	5.8	8.8	7.8	15	*54	54	14	13	8.1
10	9.5	9.2	9.2	8.1	6.8	9.2	17	52	52	14	13	7.8
11	9.5	9.5	8.8	8.1	6.1	10	*16	58	48	*13	13	8.1
12	9.5	11	9.2	8.1	9.2	11	14	58	46	12	13	7.8
13	9.5	11	9.2	7.1	8.8	12	16	66	46	12	13	7.4
14	9.5	10	9.2	7.8	8.4	*12	19	65	42	13	15	7.1
15	9.2	9.5	9.5	7.4	8.4	11	20	55	35	14	13	7.4
16	8.8	11	8.8	8.8	8.4	9.8	21	47	36	19	*13	7.8
17	8.8	9.8	8.1	8.1	9.8	9.8	22	42	32	17	13	8.4
18	8.8	9.5	8.1	6.8	9.8	9.8	22	39	31	16	12	9.8
19	8.1	9.5	8.4	8.4	8.1	10	23	40	32	15	12	*8.4
20	8.1	9.8	8.4	8.1	6.4	10	22	46	32	16	11	6.8
21	8.4	9.8	8.4	8.4	7.1	8.4	22	52	30	16	11	6.8
22	8.4	9.5	8.8	8.4	7.8	9.8	22	55	29	16	11	6.8
23	8.4	9.5	9.2	8.8	8.4	9.8	23	*55	28	16	11	6.4
24	8.8	9.5	9.5	8.4	7.4	9.8	23	54	27	36	11	6.8
25	*11	9.5	9.5	8.1	7.4	10	26	54	26	22	16	13
26	9.8	9.5	9.8	8.1	8.4	11	28	47	24	19	13	7.8
27	9.5	9.5	5.3	7.8	8.8	11	31	41	23	17	12	7.1
28	9.5	9.8	5.5	8.1	8.4	11	32	37	22	16	11	6.8
29	9.5	*9.5	7.1	8.8	-	12	31	37	22	16	9.8	6.4
30	9.8	9.5	7.8	9.2	------	13	31	42	22	15	9.2	6.4
31	9.8	------	8.1	9.2	------	12	------	48	------	15	9.2	------
Total	286.4	290.9	272.0	244.6	232.7	302.3	596.8	1,461	1,051	523	385.2	236.2
Mean	9.24	9.70	8.77	7.89	8.31	9.75	19.9	47.1	35.0	16.9	12.4	7.87
Ac-ft	568	577	540	485	462	600	1,180	2,900	2,080	1,040	764	468

Calendar year 1954: Max 59 Min 5.3 Mean 16.5 Ac-ft 11,910
Water year 1954-55: Max 66 Min 5.3 Mean 16.1 Ac-ft 11,660

* Discharge measurement made on this day.

Currant Creek near Goshen, Utah

Location.--Lat 39°53'05", long 111°53'05", in NW¼ of SE¼ sec. 1, T. 11 S., R. 1 W., on right bank 0.9 miles upstream from canal diversions and 5.4 miles south of Goshen.

Drainage area.--303 sq mi.

Records available.--August 1953 to October 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,850 ft (from topographic map).

Extremes.--Maximum discharge during year, 77 cfs May 10-12 (gage height, 1.69 ft); minimum not determined, probably occurrred during period of no gage-height record.
1953-55: Maximum discharge, 77 cfs Apr. 26, 1954, May 10-12, 1955; minimum not determined, occurred during period of no gage-height record.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Irrigation diversions above station. Flow regulated by Mt. Nebo Reservoir about 1 mile above station. Spring area about half a mile below station contributes water to Currant Creek at head of canyon; a discharge of 1.5 cfs was measured on Aug. 12, 1955, at point where spring flow enters creek.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.2	0.4	0.8	11
.3	1.0	1.0	20
.4	1.9	1.3	38
.5	3.3	1.7	77
.6	5.3		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	17	1.2	4.6	0.4		0.4	38	40	47	34	42
2	17	17	.9	2.8	.4		.4	46	40	47	36	44
3	17	19	.9	2.7	.5		.4	49	39	47	36	46
4	17	20	.8	1.9	.4		.4	49	37	47	26	45
5	19	20	1.4	.9	.4		.4	54	37	47	23	44
6	23	20	2.1	.7	.4		.4	57	36	48	23	40
7	20	21	1.6	.7	.4		.4	56	36	50	21	39
8	16	21	1.6	b2.6	.5		.4	59	37	*50	22	43
9	16	21	1.9	b4.6	.4		.4	65	*43	50	26	45
10	18	21	*3.0	b4.6			.4	69	42	52	26	45
11	17	*21	2.5	b4.6			16	77	44	56	26	44
12	17	21	1.9	b4.6			28	75	48	56	*26	44
13	17	21	1.5	4.6		0.4	17	74	48	56	26	33
14	*17	21	1.4	*4.6			14	72	47	56	23	26
15	17	21	.7	4.6	(*)		23	68	47	56	27	*28
16	17	21	.5	4.4			25	*67	50	56	32	32
17	17	21	3.6	3.6			23	67	48	48	32	33
18	17	21	8.3	b3.6			23	67	46	22	32	34
19	18	21	7.1	4.4	.4		*23	*63	46	44	29	34
20	18	21	6.6	4.2			23	62	45	49	27	34
21	18	21	6.6	2.7			22	62	38	42	26	30
22	18	21	6.0	.5			22	62	25	39	26	28
23	18	21	5.5	.5		(*)	22	57	31	36	29	26
24	18	21	6.0	.9			22	53	32	39	30	23
25	18	21	6.6	b1.5			22	53	36	32	28	23
26	18	21	6.3	b.9		.4	23	53	36	28	27	18
27	17	21	6.3	b.7		.4	24	53	38	27	27	13
28	17	21	6.0	b.5		.4	24	53	43	26	27	13
29	17	21	6.0	b.4	-	.4	24	53	47	29	27	13
30	17	11	6.0	.5	------	.4	24	50	47	30	27	13
31	17	------	6.0	.4	------	.4	------	44	------	31	37	------
Total	547	607	116.8	78.8	11.4	12.4	448.0	1,827	1,229	1,343	864	975
Mean	17.6	20.2	3.77	2.54	0.41	0.40	14.9	58.9	41.0	43.3	27.9	32.5
Ac-ft	1,080	1,200	232	156	23	25	889	3,620	2,440	2,660	1,710	1,930

Calendar year 1954: Max 72 Min 0.5 Mean 27.7 Ac-ft 20,060
Water year 1954-55: Max 77 Min - Mean 22.1 Ac-ft 15,960

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Feb. 10 to Mar. 25; discharge interpolated or estimated on basis of 2 discharge measurements.

Summit Creek near Santaquin, Utah

Location.--Lat 39°55'20", long 111°45'10", in NW¼NE¼ sec. 30, T. 10 S., R. 2 E., on right bank 3½ miles southeast of Santaquin.

Drainage area.--14.6 sq mi. Area at site used 1910-16, 19.2 sq mi (revised).

Records available.--March 1910 to September 1916, October 1954 to September 1955.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5,900 ft (from topographic map). March 1910 to September 1916 hook gage and sharp-crested weir in powerplant tailrace and staff gages and weir in main river channel at site 2½ miles downstream at different datums.

Average discharge.--7 years (1910-16, 1954-55), 14.5 cfs (10,500 acre-ft per year).

Extremes.--Maximum discharge during year, 65 cfs May 6 (gage height, 1.57 ft); minimum, 1.3 cfs Jan. 21.
1910-16, 1954-55: Maximum discharge observed, 154 cfs May 10, 1910 (gage height, 2.0 ft, site and datum then in use); minimum, that of Jan. 21, 1955.

Remarks.--Records good except those for periods of no gage-height record, which are fair.

Cooperation.--Records Jan. 1, 1911, to Sept. 30, 1916, furnished by Utah Power and Light Co.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.4	1.4	0.8	10
.5	2.4	1.0	20
.6	4.4	1.2	33
.7	6.8	1.5	60

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			4.1	4.4	4.1	4.4	3.9	27		11		6.0
2			4.1	4.4	3.9	4.1	3.1	23		11		6.0
3			4.1	4.4	3.9	4.4	2.0	20		11		
4			4.6	4.4	5.1	4.4	4.1	23		10		
5		a4.8	4.1	4.1	4.4	3.1	5.5	35	a35	10		
6			3.9	3.5	4.4	2.9	4.8	46		10	a8.0	
7			3.9	3.1	4.1	4.1	4.8	46		10		
8			3.7	3.5	4.6	3.9	4.8	44		*9.8		
9			3.7	4.4	4.4	4.1	5.1	*43	*29	9.8		a6.0
10			*4.6	4.6	4.4	4.1	5.5	44	27	9.4		
11		*4.6	4.4	4.1	3.9	4.1	5.3	46	24	9.4		
12		6.5	3.7	3.3	5.1	4.1	5.8	48	24	9.4	*7.8	
13		6.0	4.4	3.9	4.6	4.1	5.8	51	23	9.1	7.8	
14		5.5	4.1	*3.9	4.4	4.4	6.8	48	23	9.1	8.1	
15	a5.0	5.1	4.4	3.7	*4.6	3.7	7.8	41	*20	8.8	7.8	*6.0
16		5.5	3.3	4.6	4.8	3.9	8.8	34	19	8.8	7.8	6.0
17		5.1	3.3	4.6	5.1	3.9	11	31	17	9.4	7.8	6.0
18		5.1	3.9	4.4	2.6	3.3	9.4	31	17	9.4	7.5	6.3
19		4.6	4.6	4.6	2.2	3.9	*9.1	*36	17	9.1	7.5	6.3
20		4.6	4.4	4.1	2.5	2.9	8.8	43	16	8.8	7.1	6.0
21		4.6	4.1	3.1	4.0	2.8	10	47	15	8.4	6.8	6.0
22		4.6	4.1	3.7	5.0	4.1	11	48	15	8.4	6.8	6.0
23		4.6	4.1	4.6	5.0	*3.7	9.8	45	14	8.4	6.5	6.0
24		4.6	4.1	4.6	4.1	3.5	11	*46	14	12	6.8	6.0
25		4.6	4.1	4.4	4.4	3.5	17	42	13	8.4	7.5	7.5
26		4.4	4.1	4.1	4.1	3.3	20		13		7.1	6.3
27		4.1	3.5	3.9	4.1	2.9	16		12		6.5	6.0
28		3.5	3.5	3.9	3.7	3.9	15		12		6.5	5.8
29		3.5	4.4	3.9	-	3.9	16	a35	11	a8.0	6.5	5.8
30		3.7	4.1	3.9	------	3.9	23		12		6.0	5.8
31		------	4.1	4.1	------	3.9	------		------		6.0	------
Total	155.0	142.8	125.5	126.2	117.5	117.2	271.0	1,198	667	286.9	230.2	181.8
Mean	5.0	4.76	4.05	4.07	4.20	3.78	9.03	38.6	22.2	9.25	7.43	6.06
Ac-ft	307	283	249	250	233	232	538	2,380	1,320	569	457	361

Calendar year 1954: Max - Min - Mean - Ac-ft -
Water year 1954-55: Max 51 Min 2.0 Mean 9.92 Ac-ft 7,180

Peak discharge (base, 30 cfs).--May 6 (5:30 p.m.) 65 cfs (1.57 ft); July 24 (4 p.m.) 48 cfs (1.37 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for nearby streams.

Payson Creek above diversions, near Payson, Utah

Location.--Lat 39°58'10", long 111°41'35", in SE¼SE¼ sec. 3, T. 10 S., R. 2 E., on left bank a quarter of a mile above diversion dam for Strawberry Water Users Association powerplant, 5 miles southeast of Payson, and 12 miles upstream from Utah Lake.

Drainage area.--19.6 sq mi.

Records available.--July 1947 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,670 ft (by barometer).

Average discharge.--8 years, 13.9 cfs (10,060 acre-ft per year).

Extremes.--Maximum discharge during year, 294 cfs May 6 (gage height, 2.68 ft); minimum, 3.2 cfs Feb. 10, but may have been less during period of no gage-height record.
1947-55: Maximum discharge, 465 cfs May 4, 1952 (gage height, 2.99 ft), from rating curve extended above 150 cfs on basis of logarithmic plotting; minimum recorded, 2.1 cfs Feb. 12, 1952.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow affected by several small reservoirs.

Rating tables, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 14 to Feb. 10, Apr. 12 to May 7, July 7, 8)

Oct. 1 to May 7				May 8 to Sept. 30			
0.7	3.3	1.5	42	0.1	4.6	0.7	32
.8	5.4	2.0	96	.3	8.8	1.0	60
1.0	12	2.5	171	.5	18	1.5	120
1.2	21						

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.1	5.4	4.4		5.2	3.9	4.8	54	32	12	9.8	6.2
2	3.7	5.2	4.4			4.1	b4.8	45	32	12	9.5	6.2
3	3.9	5.2	4.6	5.0	b5.0	4.1	b4.8	37	32	11	8.8	6.0
4	3.9	5.2	4.8			4.4	5.0	48	33	11	9.1	6.0
5	3.9	5.0	4.6		5.0	b4.4	b5.0	70	30	10	9.5	6.0
6	3.7	5.0	4.1		4.8	b4.4	5.0	106	27	10	10	6.0
7	3.9	5.0	4.1	b5.0	4.8	4.4	5.0	128	25	9.5	10	5.8
8	4.1	4.8	4.1		4.8	4.4	5.2	115	23	*8.8	9.5	5.8
9	4.1	5.0	b4.1		4.8	4.6	5.4	111	23	8.5	9.1	5.8
10	4.4	5.0	*4.1		4.8	4.8	6.2	108	22	7.9	8.8	5.8
11	4.4	*4.6	4.1	5.0	b4.6	4.8	6.2	*112	21	7.9	8.8	5.6
12	4.4	6.2	3.9		4.6	4.8	6.5	109	21	9.1	*8.5	5.6
13	4.6	6.0	4.1		4.6	5.0	6.5	110	*17	9.8	8.8	5.4
14	*4.7	5.4	4.1	*5.7	4.6	5.0	7.9	92	23	9.5	8.5	5.4
15	4.6	5.4	4.1	5.7	*4.4	b4.6	8.9	76	21	9.1	8.2	*5.4
16	4.8	5.7		6.2	4.4	4.4	10	61	19	9.5	8.5	5.3
17	4.8	5.2		5.7		b4.2	11	53	18	9.1	8.2	5.4
18	4.8	5.2	b4.1	5.4		b4.2	11	53	17	8.2	7.9	5.8
19	4.8	4.8		5.7		4.1	*10	*61	17	7.9	7.6	6.4
20	5.0	5.0		5.7	b4.2	b4.1	9.6	60	16	8.2	7.4	6.0
21	4.8	4.8		5.4		b4.1	12	58	16	8.8	7.4	5.8
22	5.0	4.8		5.4	4.1	4.1	13	51	15	8.5	7.1	5.8
23	5.0	4.8		5.4	3.9	*3.9	12	46	14	8.2	6.9	5.8
24	5.4	4.8	4.1	5.4	4.1	3.9	16	*40	14	8.2	6.6	6.2
25	5.7	4.8		5.4	3.9	b4.0	26	38	13	8.5	7.4	7.4
26	6.0	4.4		5.4	4.1	b4.0	27	34	13	8.2	7.1	6.4
27	5.7	4.4		b5.3	3.9	b4.0	22	30	12	9.1	6.6	6.0
28	5.4	4.1	b4.1	b5.3	b3.9	4.1	21	27	12	9.1	6.6	6.0
29	5.4	4.1		5.2	-	4.4	29	26	13	8.1	6.6	6.0
30	5.4	4.4	4.1	5.2	------	4.6	53	29	13	9.5	6.4	6.0
31	5.4	------		5.2	------	4.4	-----	33	------	9.5	6.2	------
Total	145.8	149.7	129.2	163.7	125.3	134.2	369.8	2,021	604	285.7	251.4	177.3
Mean	4.70	4.99	4.17	5.28	4.48	4.33	12.3	65.2	20.1	9.22	8.11	5.91
Ac-ft	289	297	256	325	249	266	733	4,010	1,200	567	499	352

Calendar year 1954: Max 50 Min - Mean 8.88 Ac-ft 6,430
Water year 1954-55: Max 128 Min - Mean 12.5 Ac-ft 9,040

Peak discharge (base, 80 cfs).--May 6 (7 p.m.) 294 cfs (2.68 ft).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Dec. 20-27, Dec. 29 to Jan. 5, Jan. 9-13 (stage-discharge relation affected by ice during most of period); discharge estimated on basis of weather records and records for nearby stations.

Spanish Fork at Thistle, Utah

Location.--Lat 40°00', long 111°30', in SW¼ sec. 28, T. 9 S., R. 4 E., on right bank at Thistle, 600 ft downstream from confluence of Soldier Fork and Thistle Creek and 2½ miles upstream from Diamond Fork.

Drainage area.--490 sq mi, approximately.

Records available.--January 1908 to September 1925 and October 1936 to September 1955 in reports of Geological Survey. January 1933 to September 1955 in reports of Spanish Fork water commissioner.

Gage.--Water-stage recorder. Altitude of gage is 4,950 ft. Prior to Nov. 21, 1912, staff gage 1 mile downstream at different datum. Nov. 21, 1912, to Dec. 31, 1925, staff gage at site 200 ft downstream at different datum. Jan. 1, 1933, to May 10, 1937, staff gage at present site at different datum. May 12, 1937, to Oct. 8, 1938, staff gage at present site and datum.

Average discharge.--39 years (1908-25, 1933-55), 94.1 cfs (68,130 acre-ft per year).

Extremes.--Maximum discharge during year, 554 cfs Aug. 6 (gage height, 4.85 ft); minimum, 26 cfs Sept. 30.
1908-25, 1933-55: Maximum discharge, 1,800 cfs May 4, 1952 (gage height, 7.96 ft); minimum observed, 10 cfs Sept. 17, 22, 25, Oct. 25, 1934, Dec. 9, 10, 1951.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Small diversions above station for irrigation.

Rating tables, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 7-10, May 11-16, May 18 to June 6, Sept. 25-30)

Oct. 1 to Mar. 12		Mar. 13 to Sept. 30			
2.2	25	2.0	24	3.0	112
2.5	43	2.3	37	3.5	201
2.9	85	2.6	59	4.0	310

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	35	34	35	42	42	a68	151	156	49	51	
2	32	35	36	37	40	43	a72	151	145	48	46	
3	31	35	39	b35	40	45	a64	143	138	49	a45	
4	30	35	38	b35	40	44	a62	134	134	52	a45	
5	29	35	39		40	41	a62	149	120	50	44	
6	31	35	37		40	42	*a68	207	108	48	80	
7	31	36	36			44	78	216	108	*50	68	a32
8	37	36	*33		b40	*45	87	218	110	47	a60	
9	36	36	b35	a35		45	98	*209	106	46	a45	
10	34	37	34			59	109	203	103	46	a35	
11	34	*37	38			63	102	220	98	44	*34	
12	32	40	38		a40	73	79	238	94	43	36	
13	*30	41	39	(*)		206	84	254	89	39		
14	30	39	36	b35	(*)	224	109	262	91	41		(*)
15	28	38	36	b35	43	a94	a122	260	*86	40		32
16	28	40	34	b35	43	a88	a115	232	83	44		33
17	28	40		35	45	a85	a121	a200	80	46		32
18	28	41		b35	41	a85	*a108	*183	74	48		31
19	28	37		b35		a85	91	187	70	52	a34	36
20	28	37		37		a75	82	205	69	54		30
21	28	40	b35	38		a48	93	218	62	54		29
22	28	*39		37	b40	*a52	96	218	59	a60		28
23	28	40		37		a65	97	210	57	a60		28
24	32	40	34	38		a82	96	*201	56	a55		28
25	37	40	35	b38		a76	115	194	55	a55	59	34
26	35	40	35	38	42	a55	134	183	54	a55		32
27	34	39			43	a52	122	179	51	a50		27
28	34	37			42	a56	108	169	51	a50		28
29	34	35	b35	b36	-	a72	119	158	52	*a50	a34	28
30	34	36			------	a80	134	152	54	44		28
31	35	------	34	42	------	a58	-----	156	------	45		------
Total	977	1,131	1,105	1,116	1,141	2,224	2,895	6,060	2,613	1,514	1,260	932
Mean	31.5	37.7	35.6	36.0	40.8	71.7	96.5	195	87.1	48.8	40.6	31.1
Ac-ft	1,940	2,240	2,190	2,210	2,260	4,410	5,740	12,020	5,180	3,000	2,500	1,850

Calendar year 1954: Max 146 Min 25 Mean 50.4 Ac-ft 36,460
Water year 1954-55: Max 262 Min 27 Mean 62.9 Ac-ft 45,540

Peak discharge (base, 330 cfs).--Mar. 14 (1 a.m.) 530 cfs (4.81 ft); Aug. 6 (11:00 p.m.) 554 cfs (4.85 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of weather records for Spanish Fork at Castilla and Diamond Fork near Thistle.

b Stage-discharge relation affected by ice.

Strawberry tunnel at West Portal, near Thistle, Utah

Location.--Lat 40°09'40", long 111°14'40", in SW¼ sec. 34, T. 7 S., R. 6 E., on left bank 40 ft downstream from west portal of tunnel and 18 miles northeast of Thistle.

Records available.--October 1945 to September 1955 in reports of Geological Survey. October 1922 to September 1925 and May 1932 to September 1945 in Spanish Fork water commissioner's reports and files of Salt Lake City district office, Geological Survey.

Gage.--Water-stage recorder and rectangular weir. Altitude of gage is 7,470 ft (by barometer).

Extremes.--1922-25, 1932-55: Maximum daily discharge, 595 cfs July 9, 1923; minimum daily observed, 4 cfs many times when no water is being diverted from Strawberry Reservoir.

Remarks.--Records good. Records show water diverted from Strawberry Reservoir (in Colorado River basin, capacity, 270,000 acre-ft) plus tunnel seepage, for use on lands of Strawberry project.

Cooperation.--Records furnished by Strawberry Water Users Association.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44								265	491	153	212
2	49								146	491	132	230
3	53								119	490	169	229
4	57								86	479	166	212
5	65							6	7	491	199	213
6	108								9.6	491	204	231
7	165								70	491	178	220
8	218					5			181	493	167	225
9	221								271	493	185	252
10	160							9	383	493	185	255
11								34	382	482	199	199
12								60	417	480	235	173
13								36	493	485	270	168
14								29	493	484	252	142
15								6	491	460	243	130
		5	5	5	5		6					
16								6	446	453	257	125
17								6	375	434	279	124
18								9	347	398	292	100
19								27	296	415	308	65
20								12	312	424	322	67
21	5							6	354	410	310	44
22								6	409	339	320	11
23								6	422	310	332	11
24						6		14	390	247	323	47
25								78	367	187	310	71
26								114	358	180	246	10
27								117	382	155	237	13
28								112	428	152	182	20
29					-			96	484	154	168	26
30					------			145	491	165	184	55
31		------			------		------	217	------	154	189	------
Total	1,245	150	155	155	140	171	180	1,199	9,674.6	11,871	7,196	3,880
Mean	40.2	5	5	5	5	5.52	6	38.7	322	383	232	129
Ac-ft	2,470	298	307	307	278	339	357	2,380	19,190	23,550	14,270	7,700

Calendar year 1954: Max 496 Min - Mean 109 Ac-ft 78,790
Water year 1954-55: Max 493 Min - Mean 98.7 Ac-ft 71,450

Note.--Discharge for period Oct. 11 to May 10 estimated on basis of observed tunnel seepage on Oct. 10, 31, and May 10.

Diamond Fork below Red Hollow, near Thistle, Utah

Location.--Lat 40°04'40", long 111°24'00", in NW¼ sec. 32, T. 8 S., R. 5 E., on right bank about 0.5 mile downstream from Red Hollow, 7.2 miles upstream from mouth, and 8 miles northeast of Thistle.

Drainage area.--110 sq mi, approximately.

Records available.--October 1953 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,300 ft (from river-profile map).

Extremes.--1953-54: Maximum discharge during water year, 1,020 cfs July 13 (gage height, 4.71 ft); minimum, 6.0 cfs Mar. 3.
1954-55: Maximum discharge during water year, 576 cfs Aug. 25 (gage height, 3.53 ft); minimum, 6.0 cfs Mar. 27.

Remarks.--Records good except those for periods of ice effect, indefinite stage-discharge relation, or no gage-height record, which are fair. Flow includes water diverted from Strawberry Reservoir (capacity, 270,000 acre-ft) in Colorado River basin via Strawberry tunnel (see preceding page) for irrigation in vicinity of Spanish Fork.

Rating table, water year 1953-54 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 24 to May 13, May 27, 28, June 16 to July 7, Sept. 21-30)

1.2	10	2.5	138
1.4	19	3.0	249
1.7	40	4.0	625
2.0	68		

Discharge, in cubic feet per second, water year October 1953 to September 1954

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			a18	15	16	16	19	90	252	479	155	206
2			a18	16	15	14	20	49	263	447	177	235
3			18	16	15	14	22	47	280	424	231	175
4			16	18	15	15	24	45	313	346	280	136
5	a125		14	18	16	15	27	44	a360	283	274	106
6			15	*18	16	15	28	43	a300	277	286	96
7			18	18	16	16	*24	52	a210	346	307	83
8			14	18	16	17	25	49	a225	432	295	76
9			15	16	16	20	27	76	a248	471	289	55
10			18	14	*16	23	28	155	a240	471	310	35
11			*12	17	15	20	29	*199	a210	455	313	26
12			13	18	16	15	31	260	a200	420	342	37
13			16	17	16	14	34	304	a215	414	*366	29
14			15	18	18	*16	41	a390	a230	*420	349	62
15			18	17	16	17	37	a450	a220	370	304	*79
16		a20	18	17	16	18	35		*233	269	280	103
17			18	17	16	17	38		231	239	286	115
18			18	17	16	17	39	a490	310	218	295	96
19			18	18	14	16	41		342	206	336	88
20			18	18	13	18	42		380	186	353	96
21	a23		18	18	16	18	43	a470	402	167	329	99
22			13	16	16	18	43	a320	455	169	317	123
23			11	18	16	18	43	a105	475	142	257	130
24			13	18	17	19	140	a115	471	96	255	115
25			13	20	18	19	146	a130	496	155	255	83
26			13	18	17	18	165	a155	500	181	280	62
27			16	16	14	18	*169	*181	517	123	298	44
28			14	18	14	18	171	181	530	100	298	44
29			16	18	-	20	161	231	513	100	255	53
30			16	17		20	163	226	487	124	213	58
31			14	16		18		223		140	209	
Total	1,733	600	485	534	441	537	1,855	7,040	10,108	8,670	8,794	2,745
Mean	55.9	20	15.6	17.2	15.8	17.3	61.8	227	337	280	284	91.5
Ac-ft	3,440	1,190	962	1,060	875	1,070	3,680	13,960	20,050	17,200	17,440	5,440

Calendar year 1953: Max - Min - Mean - Ac-ft -
Water year 1953-54: Max 530 Min 11 Mean 119 Ac-ft 86,370

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Diamond Fork near Thistle.

Diamond Fork below Red Hollow, near Thistle, Utah--Continued

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	14	14	16	16		18	49	266	490	190	206
2	57	14	14	16	16		18	50	186	490	180	221
3	60	14	14	15	16		16	49	159	490	180	224
4	64	14	16	14	16		16	46	133	490	185	215
5	66	14	14	14	16		15	48	65	490	210	213
6	110	14	13		16		16	60	51	490	215	226
7	169	14	12				18	68	86	*483	190	221
8	218	14	*b8	b14			19	66	190	491	180	224
9	226	14	b10				22	62	356	496	190	245
10	177	14	16	15			26	58	380	496	190	254
11	34	*14	14	15		15	26	84	380	479	*192	204
12	17	17	14				21	106	420	475	226	172
13	*16	16	14				24	95	495	479	260	158
14	15	15	13	14			33	86	495	483	262	*137
15	14	14	13	(*)	b15		31	70	*490	475	252	124
16	14	19		16			33	58	450	455	262	122
17	14	16		14			34	58	359	439	280	122
18	14	15		13			34	*60	311	424	298	105
19	14	14	b13	16			29	73	295	428	306	79
20	14	14		16			*29	71	307	428	322	78
21	14	14		16			31	62	336	417	319	56
22	14	14	13	14		*16	31	62	395	370	319	27
23	14	14	13	16		16	31	62	409	335	325	14
24	16	14	14	16		16	33	60	387	270	322	31
25	16	14	14		15	16	37	109	356	200	322	101
26	15	14	12			13	39	142	339	185	250	20
27	14	14	b11	b15		14	36	148	366	175	245	15
28	14	13	b10			15	34	146	402	172	190	25
29	14	11	10		-	16	39	133	483	175	172	27
30	14	14	11		--	18	45	163	490	175	182	56
31	14	------	14	16	------	16	------	223	------	175	190	------
Total	1,526	430	399	460	426	471	834	2,627	9,837	12,120	7,406	3,922
Mean	49.2	14.3	12.9	14.8	15.2	15.2	27.8	84.7	328	391	239	131
Ac-ft	3,030	853	791	912	845	934	1,650	5,210	19,510	24,040	14,690	7,780

Calendar year 1954: Max 530 Min 8 Mean 11.8 Ac-ft 85,450
Water year 1954-55: Max 496 Min 8 Mean 11.1 Ac-ft 80,240

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 12-15, Feb. 22 to Mar. 21, July 22 to Aug. 10; stage-discharge relation indefinite June 12-16, June 30 to July 6; discharge estimated on basis of weather records and records for Strawberry tunnel.

Diamond Fork near Thistle, Utah

Location (revised).--Lat 40°03'50", long 111°26'30", in NW¼ sec. 1, T. 9 S., R. 4 E., on left bank about 0.4 mile downstream from Little Diamond Creek, 5.0 miles upstream from mouth, and 5.2 miles northwest of Thistle.

Drainage area.--146 sq mi.

Records available.--January 1908 to September 1917, April 1940 to September 1955 (discontinued). Records prior to 1915 not equivalent due to transmountain diversion.

Gage.--Water-stage recorder. Altitude of gage is 5,140 ft (from river-profile map). Prior to Apr. 9, 1940, staff gage at site 4 miles downstream at different datum. Apr. 9, 1940, to Oct. 6, 1949, water-stage recorder at site 2.7 miles downstream at different datum.

Average discharge.--18 years (1914-17, 1940-55), 119 cfs (86,150 acre-ft per year).

Extremes.--Maximum discharge during year, 510 cfs Aug. 1 (gage height, 6.17 ft); minimum not determined, probably occurred during period of ice effect or no gage-height record. 1908-17, 1940-55: Maximum discharge, 1,610 cfs May 4, 1952 (gage height, 5.18 ft); minimum, 1.0 cfs Nov. 9, 1948.

Remarks.--Records good except those for periods of ice effect, indefinite stage-discharge relation, or no gage-height record, which are fair. Beginning in 1915, flow includes water diverted from Strawberry Reservoir in Colorado River basin via Strawberry tunnel (see p. 115), for irrigation in vicinity of Spanish Fork.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	20	16	17				57	292	492	185	203
2	59	20	17	16				58	199	492	167	219
3	67	20	17	16			a17	58	179	492	171	226
4	70	20	20	16				54	150	492	177	219
5	75	18	17	15				59	62	492	a210	214
6	116	16	15				*18	72	46	492	a210	228
7	173	17	15				21	78	89	*482	a185	226
8	219	15	*b10	b15			25	76	207	498	a180	228
9	241	16	b11				29	72	286	498	a185	246
10	216	16	19				34	72	385	494	a185	254
11	56	*16	18	a15		a16	34	109	385	482	*192	214
12	20	20	17				29	160	425	486	226	177
13	*17	20	16	(*)			39	146	495	480	259	160
14	17	18	15	b15	(*)		54	129	495	480	259	*140
15	16	17		b15			51	104	*a490	475	251	127
16	17	24			a16		56	86	424	455	261	125
17	16	20					57	79	361	440	281	127
18	16	19					51	*68	326	425	295	104
19	16	18					41	83	316	430	304	79
20	16	18	b14				*35	84	325	430	319	72
21	17	18					36	74	354	420	313	53
22	17	*17				*16	36	72	395	370	316	26
23	17	17		b16		16	36	75	410	335	325	7.4
24	20	17				17	40	72	387	270	322	17
25	22	17	15			16	44	131	356	200	332	111
26	20	17					46	171	340	185	259	28
27	19	17					43	179	368	170	248	9.6
28	20	15					42	179	405	170	196	17
29	20	13	b13		-	a16	47	169	485	*163	173	24
30	20	17		a16	- - -		52	196	492	167	179	54
31	20	-		a16	- -		-----	254	- - - -	167	188	- - -
Total	1,712	533	456	486	448	497	1,081	3,276	9,929	12,124	7,353	3,935.0
Mean	55.2	17.8	14.7	15.7	16.0	16.0	36.0	106	331	391	237	131
Ac-ft	3,400	1,060	904	964	889	986	2,140	6,500	19,690	24,050	14,580	7,800

Calendar year 1954: Max 531 Min 13 Mean 125 Ac-ft 90,440
Water year 1954-55: Max 498 Min 7.4 Mean 115 Ac-ft 82,960

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Strawberry tunnel at West Portal near Thistle and Diamond Fork below Red Hollow near Thistle.
b Stage-discharge relation affected by ice.
Note.--Stage-discharge relation indefinite Apr. 21 to May 10, June 10-14, June 22 to July 6, July 13-28, discharge estimated as for footnote "a" above.

Spanish Fork at Castilla, Utah

Location.--Lat 40°03'00", long 111°32'50", in SW¼NE¼ sec. 12, T. 9 S., R. 3 E., on left bank 600 ft upstream from outlet of Cold Springs, 1 mile upstream from diversion dam of Bureau of Reclamation, 1¼ miles northwest of Castilla, and 3 miles downstream from Diamond Fork.

Drainage area.--670 sq mi, approximately.

Records available.--May 1919 to September 1925, October 1936 to September 1955 in reports of Geological Survey. January 1933 to September 1955 in reports of Spanish Fork water commissioner.

Gage.--Water-stage recorder. Altitude of gage is 4,870 ft (from topographic map). Prior to Apr. 20, 1920, staff gage, and Apr. 20, 1920, to Sept. 30, 1925, water-stage recorder, at same site at different datums.

Average discharge.--28 years (1919-25, 1933-55), 220 cfs (159,300 acre-ft per year).

Extremes.--Maximum discharge during year, 732 cfs Aug. 7 (gage height, 5.98 ft); minimum, 24 cfs Jan. 28, but may have been less during period of no gage-height record.
1919-25, 1933-55: Maximum discharge, 3,610 cfs May 3, 1952 (gage height, 9.83 ft); minimum, 14 cfs Dec. 9, 1951.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Several small diversions above station for irrigation. Flow includes water diverted from Strawberry Reservoir (capacity, 270,000 acre-ft) in Colorado River basin via Strawberry tunnel (see p.115) for irrigation in vicinity of Spanish Fork.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

3.3	30
3.6	69
4.0	135
5.0	370
6.0	724

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	102	59	50		59		102	226	458	563	259	250
2	100	58	57		58		112	233	353	552	254	264
3	103	58	62		59	a60	94	228	307	548	254	259
4	105	57	74		58		92	219	264	541	259	252
5	110	57	61		54		87	235	191	548	274	247
6	141	58	57		58	a62	*90	279	146	548	311	252
7	189	58	59	a54	50	a68	95	312	164	*545	304	252
8	252	57	*51		52	*a80	102	328	286	541	a245	250
9	269	57	45		59	a86	121	315	364	541	a240	269
10	233	57	57		46	a90	146	305	462	548	a240	279
11	a92	*57	61		a45	a100	162	334	485	530	*a245	247
12	a55	66			43	a120	124	382	499	524	276	a220
13	*54	70		(*)	51	a220	139	403	574	527	318	a190
14	54	63		47	*55	a240	184	397	600	530	307	*176
15	52	62		36		a160	202	373	*556	524	302	168
16	52	61		52		a140	193	323	541	506	318	162
17	52			51		a136	204	a272	485	487	326	158
18	51			42		a136	174	*a254	414	468	342	144
19	50	a60		52		a136	160	262	394	472	350	130
20	50			57		a120	*131	289	391	496	364	115
21	51		a56	55	a60	a75	143	292	422	482	362	105
22	51	*59		54		*80	148	294	472	435	364	a60
23	52	59		54		98	148	279	492	397	370	a45
24	58	59		55		128	146	272	475	339	373	a60
25	68	59		51		119	172	312	448	312	422	146
26	62	59		52		84	195	350	439	266	294	a60
27	59	59		49		78	174	362	455	240	292	a45
28	59	55		38		87	154	345	485	219	252	a60
29	58	50		45	-	112	166	315	541	*219	219	a60
30	59	57		50	------	124	178	339	563	228	224	a90
31	59	------		59	------	89	------	413	------	228	233	------
Total	2,802	1,771	1,754	1,601	1,587	3,268	4,338	9,542	12,726	13,904	9,193	5,015
Mean	90.4	59.0	56.6	51.6	56.7	105	145	308	424	449	297	167
Ac-ft	5,560	3,510	3,480	3,180	3,150	6,480	8,600	18,930	25,240	27,580	18,230	9,950

Calendar year 1954: Max 581 Min 45 Mean 177 Ac-ft 128,500
Water year 1954-55: Max 600 Min 36 Mean 185 Ac-ft 133,900

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for stations at Thistle and Diamond Fork near Thistle.

Spanish Fork near Lake Shore, Utah

Location.--Lat 40°09'30", long 111°43'50", in SE¼SE¼ sec. 32, T. 7 S., R. 2 E., on left bank 1 mile upstream from mouth and 2½ miles north of Lake Shore.

Drainage area.--700 sq mi, approximately.

Records available.--December 1903 to July 1907, March 1909 to September 1925, January 1938 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,500 ft (from topographic map). Prior to Jan. 23, 1938, staff gages at several sites about 3 miles upstream at various datums. Jan. 23, 1938, to Mar. 23, 1953, water-stage recorder at same site at different datum.

Average discharge.--34 years (1904-6, 1909-19, 1920-25, 1938-55), 90.7 cfs (65,660 acre-ft per year).

Extremes.--Maximum discharge during year, 477 cfs Mar. 14 (gage height, 5.12 ft); no flow at times during summer months.
1903-7, 1909-25, 1938-55: Maximum discharge observed, 3,020 cfs Apr. 28, 1952; no flow at times during irrigation season of most years.

Remarks.--Records good except those for periods of ice effect, which are fair, and those for periods of no gage-height record, which are poor. Flow regulated by many diversions for irrigation and hydroelectric powerplant. During latter part of irrigation season only wasted and return waters pass gage. Station below all diversions. Discharge includes that of overflow canal constructed in winter of 1947-48, which diverts part of high flow from river about 1 mile above gage.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	51	53		78	80	108	132	0			
2		50	55		66	83	134	139	0			
3		50	59		b60	87	107	132	0			0.3
4		48	74		62	88	105	100	0		0.2	
5		48	82		58	74	95	78		0.2		
6		45	64		54	66	*98	71				
7	1.0	38	*64		61	79	104	64			45	
8		46	57		59	83	107	67		(*)		.2
9		40	55		62	*91	127					
10		37	49		57	94	158		.1			
11		39	64		b60	120	179				(*)	.1
12		*55	62		b60	126	130					0
13		75	66		60	181	138		(**)			0
14	(*)	67	61		*60	301	183	20		.3		*0
15		70	58		b60	192	209					0
16		72	56	b55	81	149	195		0		.2	
17		77	54		89	142	213		0			
18	7.0	69	53		87	140	193		0			
19		62	53			147	*181	(*)	0			
20		61	61			142	153		0			1.0
21		58	53			105	171	10	0			
22		*65	62			*114	171		0			
23		60	55		b65	*126	175		0			
24	24	62	55			152	169		0			
25	56	58	53			159	177				11	
26	45	67	58			114	181	4		.2	23	11
27	40	63			89	99	152		.1			
28	45	56			93	108	127					
29	49	57	b55		-	111	105	0			.4	1.0
30	57	58			------	159	104	0				
31	58	------			------	105	-----	0	------			------
Total	462.1	1,704	1,791	1,705	1,876	3,817	4,449	1,059	1.7	7.5	85.6	27.6
Mean	14.9	56.8	57.8	55	67.0	123	148	34.2	0.06	0.24	2.76	0.92
Ac-ft	917	3,380	3,550	3,380	3,720	7,570	8,820	2,100	3.4	15	170	55

Calendar year 1954: Max 172 Min 0 Mean 45.0 Ac-ft 32,600
Water year 1954-55: Max 213 Min 0 Mean 46.5 Ac-ft 33,680

* Discharge measurement or observation of no flow made on this day.
** Field estimate made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Oct. 1-23, Feb. 13, 14, May 7 to Aug. 6, Aug. 8-24, Aug. 27 to Sept. 25, Sept. 27-30; discharge estimated on basis of 7 discharge measurements, weather records, and records for other Spanish Fork stations.

Hobble Creek near Springville, Utah

Location.--Lat 40°09'30", long 111°31'30", in NE¼ sec. 6, T. 8 S., R. 4 E., on right bank 1,000 ft downstream from Springville hydroelectric plant, 1¼ miles downstream from Right Fork, and 4 miles southeast of Springville.

Drainage area.--105 sq mi.

Records available.--March 1904 to December 1916 (1906-7 gage heights only), April 1945 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,920 ft (from topographic map). Prior to June 1, 1909, staff gage at site 200 ft downstream at different datum (destroyed by flood). June 1, 1909, to Dec. 31, 1916, staff gage at site 800 ft upstream at different datum. Apr. 17, 1945, to July 23, 1952, water-stage recorder at same site at datum 1.70 ft higher.

Average discharge.--20 years (1904-5, 1907-16, 1945-55), 53.9 cfs (39,020 acre-ft per year).

Extremes.--Maximum discharge during year, 119 cfs May 7 (gage height, 2.96 ft); minimum daily, 8.6 cfs Sept. 8, 11, 18.
1904-16, 1945-55: Maximum discharge, 1,250 cfs May 4, 1952 (gage height, 7.83 ft, present datum); minimum, 1.4 cfs Feb. 12, 1946.

Remarks.--Records good. Several diversions above station for irrigation. Flow regulated by hydroelectric plants at times during low stages. Springville city pipeline (capacity, approximately 5 cfs) diverts water from tributary spring above station (diversion began August 1951).

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(*Shifting-control method* used Oct. 9-14, Dec. 2-9, Dec. 30 to Jan. 10, Apr. 16-27, July 20 to Sept. 30)

1.5	6.0	2.0	31
1.6	8.9	2.5	75
1.8	18	2.8	107

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	16	16	18	17	16	22	73	39	17	14	13
2	15	17	16	18	17	17	25	71	38	17	13	13
3	14	17	16	18	17	16	24	67	34	16	13	14
4	9.2	17	17	18	16	16	23	56	35	16	13	14
5	13	16	17	18	16	14	22	61	36	13	13	15
6	16	16	18	16	16	13	21	83	34	11	16	14
7	15	15	18	15	15	14	22	103	34	11	14	9.2
8	14	16	19	16	16	15	23	99	27	13	13	8.6
9	14	16	*17	16	16	16	28	93	24	*14	12	10
10	14	15	18	17	13	17	33	92	24	11	*12	10
11	14	15	18	16	12	17	39	*92	22	10	12	8.6
12	14	*16	17	16	16	18	32	95	24	10	14	9.2
13	14	16	18	16	14	22	34	94	*24	11	12	9.6
14	*15	16	18	*16	15	23	45	87	31	11	10	8.9
15	15	16	17	14	14	21	49	78	30	11	12	*9.9
16	16	18	16	17	*15	20	52	69	28	12	13	9.2
17	15	17	14	16	17	20	59	61	24	12	13	10
18	15	17	13	15	16	19	52	56	24	12	12	8.6
19	15	17	15	16	9.4	20	*48	*52	24	13	9.2	8.9
20	13	17	16	17	10	20	44	50	22	13	10	10
21	14	16	17	15	11	*15	48	50	20	13	11	9.6
22	14	16	17	15	14	18	48	51	17	13	12	9.6
23	14	16	17	14	16	18	46	56	17	13	13	9.2
24	13	16	16	15	13	18	48	54	16	15	13	9.6
25	15	15	17	14	15	20	63	53	16	16	15	11
26	18	16	17	16	16	19	75	50	16	15	15	11
27	18	16	17	15	16	18	63	47	16	15	13	10
28	17	16	16	12	16	19	54	44	16	14	13	10
29	17	16	17	14	-	19	56	42	15	14	13	11
30	17	16	17	17	------	21	63	40	18	14	13	10
31	17	------	17	17	------	20	------	38	------	14	14	------
Total	459.2	485	519	491	414.4	559	1,261	2,057	745	410	395.2	314.7
Mean	14.8	16.2	16.7	15.8	14.8	18.0	42.0	66.4	24.8	13.2	12.7	10.5
Ac-ft	911	962	1,030	974	822	1,110	2,500	4,080	1,480	813	784	624

Calendar year 1954: Max 66 Min 9.2 Mean 21.5 Ac-ft 15,540
Water year 1954-55: Max 103 Min 8.6 Mean 22.2 Ac-ft 16,090

Peak discharge (base, 120 cfs).--No peak above base.
* Discharge measurement made on this day.

Provo River near Kamas, Utah

Location.--Lat 40°35'00", long 111°00'30", in NE¼ sec. 2, T. 3 S., R. 8 E., on right bank 3 miles upstream from Soapstone Creek and 14 miles east of Kamas.

Drainage area.--29.6 sq mi.

Records available.--August 1949 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 8,110 ft (by barometer).

Average discharge.--6 years, 52.0 cfs (37,650 acre-ft per year).

Extremes.--Maximum discharge during year, 454 cfs May 22 (gage height, 2.83 ft); minimum, 2.7 cfs Oct. 28, 29, Nov. 5, but may have been less during periods of ice effect or no gage-height record.
1949-55: Maximum discharge, 765 cfs May 27, 1951 (gage height, 3.49 ft); minimum, 2.7 cfs Oct. 26, 1953, Oct. 28, 29, Nov. 5, 1954.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. No diversion above station. Flow regulated by several small lakes at headwaters which have dams and outlet works. Combined regulated capacity, 10,841 acre-ft. Station is immediately above outlet of Duchesne tunnel.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.6	2.6	1.2	25
.7	4.0	1.4	44
.8	6.3	1.7	92
.9	9.5	2.0	162
1.0	14	2.6	360

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	4.8	3.8					20	144	86	34	23
2	3.4	4.8	3.8					30	117	84	33	22
3	3.4	4.8	3.8					35	106	79	40	20
4	3.5	4.6	b3.8					35	98	77	52	18
5	3.4	b4.5	4.0					45	102	*86	55	18
6	3.2	4.4	3.8			4.0		70	136	100	55	18
7	3.2		3.8					100	*193	98	57	18
8	3.2	b4.6	3.8				6.0	150	233	96	51	20
9	3.1	(*)	3.8					180	236	92	*43	22
10	3.1	4.2	3.8					*193	208	92	42	22
11	*3.1	4.4	3.7					249	182	92	41	22
12	3.2	4.6	3.7					262	162	90	40	*22
13	3.7	5.2	3.7					272	154	90	40	21
14	3.5	4.8	3.8					262	*162	88	40	20
15	3.5	4.6	3.8					184	144	88	40	20
16	3.5	5.2	3.8	3.5	3.5	5.0	7.5	*129	124	88	40	19
17	3.4		3.8				8.3	115	108	86	40	19
18	3.7		3.8				8.2	141	96	86	39	19
19	3.5	b4.3	3.8				8.0	217	86	86	38	25
20	3.5		3.8				8.0	286	75	84	36	20
21	3.5	4.4	3.8				9.0	326	64	86	36	14
22	3.7		3.8				10	345	68	88	36	9.9
23	3.7		3.8				10	*308	108	92	41	8.8
24	3.8		3.7				10	266	106	86	41	8.5
25	5.0		3.5				15	223	102	98	51	11
26	5.0	4.1	3.5			6.0	18	162	96	80	48	9.9
27			3.5				17	136	86	55	43	8.2
28			3.5				16	120	82	45	40	8.2
29	b4.8				-		*16	144	88	30	35	7.2
30			b3.4		------		17	182	88	33	33	6.6
31	4.6	------			------		------	190	------	33	29	------
Total	116.1	133.2	115.2	108.5	98.0	156.0	268.0	5,377	3,754	2,494	1,289	500.3
Mean	3.75	4.44	3.72	3.50	3.50	5.03	8.93	173	125	80.5	41.6	16.7
Ac-ft	230	264	228	215	194	309	532	10,660	7,450	4,950	2,560	992

Calendar year 1954: Max 252 Min - Mean 33.2 Ac-ft 24,060
Water year 1954-55: Max 345 Min - Mean 39.5 Ac-ft 28,580

Peak discharge (base, 400 cfs).--May 22 (7 p.m.) 454 cfs (2.83 ft).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 1 to May 9; discharge estimated on basis of weather records and records for station near Hailstone.

Weber-Provo diversion canal near Woodland, Utah

Location.--Lat 40°36'40", long 111°18'15", in SW¼SE¼ sec. 30, T. 2 S., R. 6 E., on right bank 100 ft upstream from outlet to Provo River and 4½ miles northwest of Woodland.

Records available.--October 1931 to June 1955 (periods of diversion only).

Gage.--Water-stage recorder and Parshall flume. Datum of gage is 6,318 ft above mean sea level (levels by Bureau of Reclamation).

Extremes.--1931-55: Maximum daily discharge, 822 cfs June 9, 1955; no water diverted from Weber River or Beaver Creek for several months during each year.

Remarks.--Records good except those for periods of no gage-height record and those for periods of once-daily staff-gage readings, which are fair. Canal diverts water from Weber River in SW¼SW¼ sec. 21, T. 1 S., R. 6 E., and from Beaver Creek in NE¼SE¼ sec. 17, T. 2 S., R. 6 E., to Provo River for irrigation along Provo and Jordan Rivers. Figures given herein represent quantity of water reaching Provo River during periods when water was diverted from Weber River and Beaver Creek. Not all of flow diverted reaches Provo River due to evaporation, transpiration, and seepage losses. No water was diverted from Weber River or Beaver Creek on days for which no figures are given. For records at head of canal see page 66.

Discharge, in cubic feet per second, November 1954 to June 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		-	23	27	25	*23	34	202	54			
2		-	28	27	23	24	32	200	*60			
3		-	33	g27	23	24	26	193	145			
4		-	37	g27	21	23	30	172	242			
5		-	34	g28	22	18	28	206	213			
6		-	*28	a26	23	20	36	263	190			
7		-	25	a24	23	23	40	315	344			
8		-	22	g22	23	27	42	372	*654			
9		-	*17	g23	23	27	51	414	*822			
10		-	22	g28	23	31	54	*454	807			
11	†0.5	-	30	*g24	22	38	50	502	764			
12		-	26	g30	21	37	46	478	701			
13		-	28	g28	22	32	51	401	576			
14		-	25	g29	23	32	57	311	170			
15		5.5	23	g28	24	23	74	291	5.4			
16		37	25	g28	24	20	75	*277	-			
17		39	18	g26	25	25	85	260	-			
18		*32	17	g27	*25	24	81	242	-			
19		28	a18	g27	20	25	84	246	-			
20		28	a20	g25	16	23	73	263	-			
21		28	a22	g23	17	20	*97	263	-			
22		29	a24	g23	23	25	105	269	-			
23		27	a26	g25	26	29	102	204	-			
24		g27	28	g23	26	*29	97	160	-			
25		g28	27	g26	27	30	115	114	-			
26		g28	26	g26	25	24	151	55	-			
27		g28	24	23	23	22	131	49	-			
28		g31	a25	23	23	24	109	51	-			
29		a28	a26	23	-	31	120	52	-			
30		25	a26	23	------	34	146	51	-			
31		------	a27	*24	------	32	------	54	------			------
Total		-	780	793	641	819	2,222	7,384	-			
Mean		-	25.2	25.6	22.9	26.4	74.1	238	-			
Ac-ft		-	1,550	1,570	1,270	1,620	4,410	14,650	-			

Calendar year 1954: Max - Min - Mean - Ac-ft -
The period : Max 822 Min - Mean - Ac-ft 37,360

* Discharge measurement made on this day.
† Field estimate made on this day.
a No gage-height record; discharge estimated on basis of Weber-Provo canal near Oakley.
g Computed from once-daily staff-gage readings.

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Provo River near Hailstone, Utah

Location.--Lat 40°36', long 111°22', in SE¼ sec. 34, T. 2 S., R. 5 E., on right bank 3 miles upstream from Ross Creek and Hailstone.

Drainage area.--233 sq mi.

Records available.--October 1949 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,100 ft (from river-profile map).

Extremes.--Maximum discharge during year, 2,020 cfs June 10 (gage height, 5.74 ft); minimum, 37 cfs Oct. 19.
1949-55: Maximum discharge, 2,220 cfs June 14, 1953; minimum, 17 cfs Aug. 31, 1954.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Records include flow of Weber-Provo diversion canal and Duchesne tunnel. Flow affected by irrigation diversions above and storage in several small reservoirs at headwaters.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	57	77				133	463	756	219	97	44
2	42	62	83				127	471	615	213	85	60
3	42	62	88				98	435	602	198	54	62
4	46	62	98				100	385	655	184	59	60
5	47	63	85				93	512	593	*175	79	57
						85						
6	44	69	83	80			104	721	611	179	97	54
7	40	62	80				123	920	1,050	186	112	54
8	*39	60			80		147	1,110	*1,590	184	104	51
9	42	*59					175	1,130	1,810	172	*82	54
10	40	57	(*)				189	*1,200	1,810	166	74	56
11	*39	57		(*)		90	161	1,400	1,680	155	69	56
12	39	77				100	145	1,520	1,560	151	66	*53
13	42	79				109	175	1,510	1,400	147	68	53
14	43	71				98	198	1,520	*950	147	68	53
15	42	69				80	226	1,350	669	143	62	49
16	43	121	80			83	237	*1,090	611	139	62	46
17	42	109			(*)	85	260	884	537	141	63	47
18	39	105				80	243	792	459	143	66	56
19	38	93				80	232	1,090	389	136	62	79
20	38	92				77	206	1,360	353	133	53	77
21	38	95		80		66	*260	1,440	313	131	53	68
22	38	95			85	83	257	1,480	281	139	50	59
23	38	92				82	249	*1,480	313	149	50	59
24	44	87				*80	235	1,330	284	155	56	59
25	51	80				77	284	1,220	269	186	66	75
26	53	87				71	357	879	246	232	100	83
27	51	87	80			75	303	756	235	153	77	74
28	53	68				83	257	624	224	135	68	66
29	54	68			-	109	284	615	235	118	54	63
30	51	74			------	116	333	766	232	104	46	62
31	54	------			------	104	-----	970	------	104	43	------
Total	1,355	2,319	2,514	2,480	2,305	2,678	6,191	31,423	21,332	4,917	2,145	1,789
Mean	43.7	77.3	81.1	80.0	82.3	86.4	206	1,010	711	159	69.2	59.6
Ac-ft	2,690	4,600	4,990	4,920	4,570	5,310	12,280	62,330	42,310	9,750	4,250	3,550

Calendar year 1954: Max 1,390 Min 20 Mean 178 Ac-ft 128,600
Water year 1954-55: Max 1,810 Min 38 Mean 223 Ac-ft 161,600

Peak discharge (base, 1,220 cfs).--May 12 (5:45 a.m.) 1,630 cfs (5.10 ft); May 23 (5 a.m.) 1,670 cfs (5.20 ft); June 10 (7 a.m.) 2,020 cfs (5.74 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 29 to Dec. 1, Dec. 6, Dec. 8 to Mar. 10 (no gage-height record Dec. 25 to Jan. 11; discharge estimated on basis of 1 discharge measurement, weather records, and records for station near Kamas, Duchesne tunnel, and Weber-Provo Canal).

Deer Creek Reservoir near Charleston, Utah

Location.--Lat 40°24', long 111°32', in SW¼SW¼ sec. 5, T. 5 S., R. 4 E., at dam on Provo River, a quarter of a mile upstream from Deer Creek and 4½ miles southwest of Charleston.

Drainage area.--560 sq mi.

Records available.--December 1940 to September 1955.

Gage.--Mercury indicating gage read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

Extremes.--Maximum contents during year, 146,200 acre-ft June 16, 17 (elevation, 5,414.60 ft); minimum, 64,980 acre-ft Oct. 22-24 (elevation, 5,374.00 ft).
1940-55: Maximum contents, 154,000 acre-ft June 19, 1946 (elevation, 5,417.65 ft); minimum, 1,200 acre-ft Dec. 16, 1940 (elevation, 5,296.8 ft).

Remarks.--Reservoir is formed by earth-fill dam with concrete cutoff wall. Storage began in October 1940. Capacity, 152,560 acre-ft between elevations 5,280 ft (bottom of outlet tunnel) and 5,417 ft (top of 20-foot radial gates). Dead storage, 2,870 acre-ft below elevation 5,305 ft (sill of trash-rack structure). Water used for irrigation, domestic, and industrial purposes. Contents given herein include dead storage and are computed from 12 p.m. elevations which are based on trend indicated by 8 a.m. readings.

Cooperation.--Records of daily elevations and contents furnished by Provo River water commissioner.

Contents in acre-feet, at 12 p.m., water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	65,790	65,730	70,230	70,950	71,630	74,720	84,320	95,360	127,200	137,300	108,400	85,250
2	65,760	65,870	70,230	71,080	71,790	74,880	84,700	95,720	127,600	136,600	107,500	84,640
3	65,730	65,980	70,340	71,110	71,840	74,980	85,000	95,960	127,900	135,600	106,600	83,930
4	65,630	66,040	70,500	71,110	71,890	75,130	85,270	96,100	128,300	134,900	105,800	83,240
5	65,560	66,110	70,600	71,110	71,970	75,230	85,540	96,310	128,700	134,000	104,900	82,590
6	65,480	66,250	70,630	71,110	72,050	75,320	85,810	96,990	129,200	132,900	104,000	81,900
7	65,450	66,410	70,680	71,160	72,130	75,470	86,130	98,320	130,300	131,900	103,200	81,290
8	65,450	66,560	70,710	71,190	72,210	75,630	86,570	99,740	132,100	130,900	102,600	80,670
9	65,400	66,720	70,680	71,190	72,240	75,900	87,020	101,200	135,700	129,900	101,900	79,980
10	65,370	66,880	70,680	71,190	72,240	76,340	87,470	102,800	138,700	129,000	101,100	79,320
11	65,320	67,080	70,760	71,190	72,240	76,780	87,860	104,600	141,100	128,100	100,100	78,730
12	65,290	67,330	70,840	71,190	72,240	77,380	88,160	106,700	143,000	127,100	99,120	78,130
13	65,250	67,580	71,030	71,190	72,240	78,060	88,620	108,700	144,700	126,200	98,360	77,540
14	65,170	67,840	71,110	71,190	72,290	78,570	89,120	110,400	145,700	125,200	97,640	76,920
15	65,140	68,250	71,220	71,190	72,370	78,880	89,580	111,900	146,100	124,100	96,870	76,280
16	65,140	68,680	71,160	71,240	72,560	79,200	90,090	112,800	146,200	123,100	96,290	75,660
17	65,140	69,070	71,060	71,270	72,810	79,540	90,520	113,300	146,200	122,000	95,470	75,000
18	65,140	69,310	71,030	71,270	73,000	79,890	90,840	113,900	146,000	120,900	94,670	74,600
19	65,140	69,520	70,920	71,390	73,100	80,270	91,170	114,900	145,700	120,100	93,910	74,280
20	65,060	69,750	70,870	71,430	73,180	80,550	91,620	116,200	145,200	119,200	93,290	73,770
21	65,020	69,950	70,870	71,430	73,330	80,720	92,090	117,900	144,700	118,300	92,630	73,260
22	64,980	69,990	70,870	71,430	73,490	81,000	92,500	119,600	144,100	117,100	91,940	72,870
23	64,980	70,040	70,820	71,480	73,660	81,340	92,880	121,300	143,500	116,100	91,190	72,340
24	64,980	70,120	70,890	71,510	73,820	81,690	93,180	122,700	142,800	115,300	90,370	71,900
25	65,180	70,200	70,900	71,510	73,980	81,990	93,530	123,900	142,200	114,500	89,730	71,600
26	65,290	70,280	70,870	71,560	74,190	82,260	93,910	124,700	141,400	113,600	89,170	71,350
27	65,340	70,360	70,870	71,600	74,390	82,520	94,290	125,100	140,600	112,900	88,550	71,160
28	65,420	70,340	70,820	71,550	74,550	82,780	94,660	125,400	139,700	112,000	87,990	70,830
29	65,490	70,310	70,740	71,470	-	83,220	94,920	125,500	138,900	111,100	87,260	70,620
30	65,650	70,260	70,760	71,430	-------	83,580	95,110	125,900	138,100	110,100	86,550	70,460
31	65,680	-------	70,790	71,480	-------	83,900	-------	126,600	-------	109,300	85,920	-------
(†)	5,374.45	5,377.37	5,377.70	5,378.13	5,380.02	5,385.48	5,391.57	5,406.60	5,411.41	5,398.69	5,386.61	5,377.49
(‡)	-230	+4,580	+530	+690	+3,070	+9,350	+11,210	+31,490	+11,500	-28,800	-23,380	-15,460

Calendar year 1954: (‡) -25,170
Water year 1954-55: (‡) +4,550

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

Provo River below Deer Creek Dam, Utah

Location.--Lat 40°24'10", long 111°31'45", in NE¼NE¼ sec. 7, T. 5 S., R. 4 E., 200 ft upstream from Deer Creek, 1,000 ft downstream from Deer Creek Dam, and 4 miles northeast of Vivian Park.

Drainage area.--560 sq mi.

Records available.--May 1953 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,270 ft (from topographic map).

Extremes.--Maximum discharge during year, 649 cfs July 13 (gage height, 4.11 ft); minimum daily, 96 cfs Apr. 26.
1953-55: Maximum discharge, 669 cfs June 26, 1953 (gage height, 4.23 ft); minimum daily, 77 cfs Apr. 1, 1954.

Remarks.--Records good. Flow regulated by Deer Creek Reservoir (see preceding page), and small lakes at headwaters that serve as reservoirs. Small transmoutain diversions from Strawberry River drainage into Daniels Creek. Flow also affected by irrigation diversions above. Records include flow of Weber-Provo diversion canal (see p. 105) and Duchesne tunnel (see p. 115).

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

2.3	91
2.5	125
3.0	241
4.0	580
4.2	661

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	137	111		200	159	114	102	205	503	580	533	430
2	125	109		200	168	116	102	247	496	576	533	430
3	121	111		200	165	118	102	323	492	584	518	423
4	120	109		200	167	116	102	342	452	576	518	409
5	121	109	200	200	166	116	102	385	448	580	526	409
6	121	109		200	165	116	102	357	452	*580	526	398
7	121	109		200	161	116	102	220	462	576	511	398
8	123	109		202	165	116	102	242	473	576	503	409
9	125	107	*200	202	166	116	104	284	*488	588	511	416
10	125	*109	200	202	165	116	105	348	511	580	*518	402
11	125	109	200	200	176	114	107	409	511	580	518	388
12	*123	109	200	*200	192	112	105	423	514	584	522	388
13	121	109	200	202	190	111	105	444	514	596	511	*378
14	121	109	200	202	188	102	104	448	511	600	452	368
15	123	111	200	202	185	102	104	473	503	600	437	361
16	125	114	200	200	*175	102	107	481	496	596	441	361
17	125	112	200	200	118	102	116	*484	488	596	434	361
18	125	111	198	202	116	102	112	481	488	588	437	361
19	127	111	198	202	107	104	112	444	492	525	441	361
20	121	111	198	202	111	104	*112	470	496	391	437	358
21	120	153	198	200	114	104	116	466	496	588	441	361
22	121	187	198	200	114	104	120	462	496	580	441	361
23	120	192	198	200	112	104	120	466	526	572	455	355
24	112	195	198	200	112	*104	116	466	537	549	452	348
25	112	200	198	202	112	104	120	462	560	553	448	329
26	112	200	200	200	112	104	96	473	568	541	441	292
27	112	202	200	202	112	104	120	488	580	526	441	281
28	112	200	198	202	112	104	118	484	580	526	441	281
29	114	200	198	205	-	104	120	496	584	533	434	278
30	114	202	198	205	------	104	152	496	592	533	426	263
31	112	------	200	186	------	102	------	499	------	541	430	------
Total	3,736	4,129	6,178	6,220	4,105	3,357	3,307	12,768	15,309	17,494	14,677	10,958
Mean	121	138	199	201	147	108	110	412	510	564	473	365
Ac-ft	7,410	8,190	12,250	12,340	8,140	6,660	6,560	25,320	30,360	34,700	29,110	21,730

Calendar year 1954: Max 541 Min 77 Mean 264 Ac-ft 191,400
Water year 1954-55: Max 600 Min 96 Mean 280 Ac-ft 202,800

* Discharge measurement made on this day.

Provo River at Vivian Park, Utah

Location.--Lat 40°21'40", long 111°33'45", in NW¼NW¼ sec. 25, T. 5 S., R. 3 E., on right bank half a mile downstream from North Fork, 3,500 ft northeast of Vivian Park, and three-quarters of a mile upstream from South Fork.

Drainage area.--600 sq mi, approximately.

Records available.--November 1911 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,200 ft (from topographic map). Prior to Nov. 13, 1933, staff gage at site three-quarters of a mile downstream at different datum.

Extremes.--Maximum discharge during year, 663 cfs July 14 (gage height, 3.87 ft); minimum daily, 122 cfs Feb. 19.
1911-55: Maximum discharge observed, 3,180 cfs June 11, 1921; minimum daily, 29 cfs Mar. 11, 13, 15-17, 20-22, 1948.

Remarks.--Records good except those for period of no gage-height record, which are fair. Flow regulated by Deer Creek Reservoir (see p. 107), and small lakes at headwaters that serve as reservoirs. Small transmountain diversions from Strawberry River drainage into Daniels Creek. Flow also affected by irrigation diversions above. Records include flow of Weber-Provo diversion canal (see p. 105), and Duchesne tunnel (see p. 115).

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	162	124		226	168	137	136	259	543	615	561	441
2	136	124		226	180	141	137	272	529	611	550	441
3	134	125		226	174	141	136	378	529	619	536	438
4	132	125		221	176	139	134	390	477	619	540	428
5	134	125	230	221	176	139	134	425	477	615	550	425
6	134	125		221	178	139	134	394	481	*611	561	412
7	134	125		219	172	139	136	267	494	611	540	412
8	134	125	*231	216	180	139	137	291	501	608	532	428
9	136	125	228	219	180	139	139	339	*515	615	529	441
10	136	*125	231	219	176	143	143	403	543	611	*547	428
11	136	127	228	218	183	146	143	461	554	608	547	415
12	*136	134	231	*216	212	146	141	474	554	619	550	419
13	136	132	231	216	212	148	143	481	557	630	540	*409
14	136	130	228	216	212	134	145	484	557	634	477	393
15	136	130	228	216	212	130	145	518	554	622	454	384
16	136	145	228	219	*198	130	146	515	550	611	458	381
17	137	136	228	219	136	130	160	*515	526	615	444	376
18	137	132	226	219	132	132	158	512	526	611	448	378
19	137	134	226	219	122	132	160	481	536	550	458	390
20	134	135	226	216	127	132	*158	508	540	387	454	387
21	132	183	224	214	130	134	158	518	540	597	458	390
22	130	220	224	214	134	134	162	518	536	590	458	384
23	129		224	214	134	134	162	522	572	583	477	369
24	127		224	214	132	*137	154	522	590	561	477	357
25	125		221	214	134	139	160	522	611	568	467	354
26	125	230	224	216	134	136	136	518	608	561	461	302
27	125		224	216	134	134	160	522	622	543	458	288
28	125		219	219	136	134	158	515	626	543	458	288
29	125		219	219	-	136	164	522	622	554	448	288
30	127		221	219	------	137	193	532	634	554	438	272
31	127	-----	224	209	-------	136	------	543	------	565	441	------
Total	4,130	4,826	7,028	6,756	4,574	4,247	4,472	14,121	16,504	18,241	15,317	11,518
Mean	133	161	227	218	163	137	149	456	550	588	494	384
Ac-ft	8,190	9,570	13,940	13,400	9,070	8,420	8,870	28,010	32,740	36,180	30,380	22,850

Calendar year 1954: Max 593 Min 107 Mean 289 Ac-ft 209,600
Water year 1954-55: Max 634 Min 122 Mean 306 Ac-ft 221,600

* Discharge measurement made on this day.
Note.--No gage-height record Nov. 20 to Dec. 7, Jan. 11; discharge estimated on basis of weather records and records for station below Deer Creek Reservoir.

South Fork Provo River at Vivian Park, Utah

Location.--Lat 40°21'10", long 111°34'10", in NW¼SE¼ sec. 26, T. 5 S., R. 3 E., on right bank a quarter of a mile southeast of Vivian Park and half a mile upstream from mouth.

Drainage area.--30 sq mi, approximately.

Records available.--November 1911 to September 1955.

Gage.--Water-stage recorder and Parshall flume. Altitude of gage is 5,240 ft (from topographic map). Prior to June 15, 1913, staff gage at site half a mile downstream at different datum. June 15, 1913, to Nov. 21, 1933, staff gage at site a quarter of a mile downstream at different datum.

Extremes.--Maximum discharge during year, 24 cfs Nov. 16 (gage height, 0.79 ft); minimum, 5.4 cfs Sept. 11.
1911-55: Maximum discharge observed, 123 cfs May 27, 1922; minimum, 5.4 cfs May 28, 29, 1954, Sept. 11, 1955.

Remarks.--Records good. Flow affected by irrigation diversions above, and diversion for city of Provo municipal supply which bypasses gaging station.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.3	4.5
.6	14
.8	23

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	15	16	18	16	15	15	14	15	10	8.4	11
2	16	15	16	17	16	15	16	14	14	10	10	11
3	16	15	16	16	16	15	15	15	14	9.0	11	11
4	16	15	17	17	16	16	15	15	14	9.0	9.4	9.7
5	15	16	16	17	16	16	16	15	14	9.4	9.0	12
6	15	16	16	17	16	16	16	16	13	*11	9.4	13
7	15	16	16	17	15	16	16	17	13	10	11	13
8	15	16	16	17	15	16	15	17	13	11	11	13
9	16	16	*16	17	15	16	15	18	*14	14	10	13
10	16	*16	16	17	15	16	16	18	13	13	*10	13
11	13	16	16	17	15	16	16	*17	12	11	11	8.1
12	*11	17	16	*17	15	16	16	18	11	13	10	6.0
13	12	16	16	17	15	17	16	18	11	12	12	*7.1
14	12	17	16	17	15	16	16	18	11	11	13	7.1
15	14	17	16	16	15	16	16	17	12	11	13	8.1
16	16	20	16	17	15	16	16	17	14	9.4	12	8.7
17	15	18	16	17	*15	16	15	*16	13	9.0	13	8.7
18	13	17	16	17	15	16	15	14	13	9.0	13	8.4
19	13	17	17	17	15	15	15	12	13	11	12	10
20	14	17	17	17	15	15	*15	12	13	12	10	11
21	18	17	17	17	15	15	15	13	13	10	10	14
22	16	17	17	17	15	15	15	14	10	9.7	11	14
23	16	17	17	17	15	15	14	16	8.4	9.4	12	14
24	16	16	17	16	15	*16	14	16	7.7	11	13	15
25	16	17	17	16	15	16	14	17	8.7	12	13	16
26	16	17	17	16	15	15	14	17	7.4	12	13	16
27	16	16	17	16	15	15	14	17	9.0	11	13	16
28	16	16	17	16	15	15	14	17	11	9.7	12	15
29	15	16	17	16	-	15	14	16	11	9.7	11	15
30	15	16	17	16	------	15	14	16	12	11	12	14
31	15	------	18	16	------	15	------	16	------	8.1	11	------
Total	463	493	511	518	426	483	453	493	358.2	328.4	349.2	351.9
Mean	14.9	16.4	16.5	16.7	15.2	15.6	15.1	15.9	11.9	10.6	11.3	11.7
Ac-ft	918	978	1,010	1,030	845	958	899	978	710	651	693	698

Calendar year 1954: Max 25 Min 6.0 Mean 17.2 Ac-ft 12,430
Water year 1954-55: Max 20 Min 6.0 Mean 14.3 Ac-ft 10,370

* Discharge measurement made on this day.

Provo River at Provo, Utah

Location.--Lat 40°14'15", long 111°41'55", in NW¼SE¼ sec. 3, T. 7 S., R. 2 E., on left bank 1,300 ft downstream from bridge on State Highway 114, 2 miles west of Provo, and 2 miles upstream from mouth.

Records available.--May 1903 to June 1905 (gage heights only), May 1933 to September 1934, January 1937 to September 1955. Published as Provo River at San Pedro, Los Angeles and Salt Lake Railroad bridge near Provo 1903-4 and as Provo River at Rio Grande Western Railroad bridge near Provo 1905.

Gage.--Water-stage recorder. Altitude of gage is 4,510 ft (from topographic map). May 1903 to June 1905 staff gages at site three-quarters of a mile upstream at different datums. May 1933 to September 1934 staff gage at present site at different datum. January 1937 to November 1938 water-stage recorder at site 1,000 ft upstream at different datum.

Average discharge.--19 years (1933-34, 1937-55), 176 cfs (127,400 acre-ft per year).

Extremes.--Maximum discharge during year, 216 cfs Feb. 11 (gage height, 1.68 ft); minimum daily, 0.5 cfs Aug. 2-4.
1903-5, 1933-34, 1937-55: Maximum discharge, 2,520 cfs May 6, 1952 (gage height, 6.37 ft); practically no flow during several periods.

Remarks.--Records good. Station is below all diversions. At times entire flow is diverted above station for irrigation. Flow regulated by Deer Creek Reservoir (see p. 107) and small lakes at headwaters that serve as reservoirs. Small transmountain diversions from Strawberry River basin into Daniels Creek. Flow affected by Weber-Provo diversion canal and Duchesne tunnel (see p. 105, 115). Factory race diverts water above station into Provo Bay, an arm of Utah Lake, and Provo River water commissioner furnished following records of this diverted flow for water year 1955.

Month	Diversion in acre-feet	Month	Diversion in acre-feet
October	562	May	762
November	654	June	681
December	676	July	611
January	676	August	510
February	610	September	520
March	676		
April	639	Water year 1954-55	7,577

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.8	65	198	195	157	120	106	23	25	6.0	0.6	1.9
2	5.2	70	198	198	162	124	108	14	33	6.0	.5	1.9
3	5.6	74	193	195	164	126	108	17	37	5.6	.5	1.9
4	6.4	87	208	198	162	126	110	18	33	4.4	.5	1.9
5	6.0	87	206	198	164	122	108	20	25	4.4	.6	2.5
6	5.6	87	203	198	164	124	106	22	13	3.7	.7	2.2
7	5.2	86	*200	195	164	124	110	10	8.0	*2.8	.9	1.9
8	3.1	86	200	195	166	124	110	8.0	6.8	2.2	.8	1.6
9	2.5	87	200	195	166	126	115	12	6.4	2.2	.7	2.2
10	2.2	87	198	198	159	128	113	13	12	2.2	.7	2.2
11	2.2	95	198	195	159	130	115	14	17	1.6	.7	2.8
12	*2.2	103	193	193	183	130	110	5.2	17	1.9	1.0	3.1
13	4.2	*106	193	193	183	132	106	4.8	*16	1.3	1.6	3.1
14	9.5	103	193	193	183	124	108	5.6	19	1.3	1.6	2.5
15	11	101	193	*190	159	117	111	13	19	1.9	1.6	2.8
16	14	115	190	193	*159	117	110	15	22	2.2	1.6	*2.8
17	14	115	190	193	148	115	110	*9.5	23	2.5	1.9	2.8
18	13	124	190	190	142	115	113	9.0	15	2.8	1.6	2.8
19	13	119	190	193	130	115	113	8.5	13	4.0	*1.6	3.4
20	14	119	193	190	126	115	111	6.8	17	1.6	2.2	4.8
21	12	128	193	188	128	*113	108	6.4	13	1.9	3.1	3.4
22	12	180	190	185	128	113	*104	13	10	1.6	2.5	2.8
23	10	190	190	185	128	110	95	13	9.0	2.5	1.9	2.5
24	10	193	190	185	126	110	89	10	8.0	2.5	1.6	2.8
25	24	193	193	188	126	111	83	9.0	6.4	1.6	2.5	3.4
26	33	190	193	188	120	110	49	9.0	6.8	1.0	2.2	9.0
27	32	193	193	188	120	108	75	10	10	.9	2.2	28
28	38	198	190	188	124	108	61	6.8	7.2	.9	2.5	32
29	39	198	190	188	-	106	42	4.4	4.8	.9	2.2	31
30	49	195	188	188	------	110	32	4.4	5.6	.8	1.6	25
31	63	------	193	190	------	106	------	7.2	------	.7	2.2	------
Total	465.7	3,774	6,030	5,949	4,200	3,659	2,939	341.6	458.0	75.9	46.4	191.0
Mean	15.0	126	195	192	150	118	98.0	11.0	15.3	2.45	1.50	6.37
Ac-ft	924	7,490	11,960	11,800	8,330	7,260	5,830	678	908	151	92	379

Calendar year 1954: Max 372 Min 1.9 Mean 95.0 Ac-ft 68,790
Water year 1954-55: Max 208 Min 0.5 Mean 77.1 Ac-ft 55,800

* Discharge measurement made on this day.

American Fork above upper powerplant, near American Fork, Utah

Location.--Lat 40°26'50", long 111°40'55", in NE¼ sec. 26, T. 4 S., R. 2 E., on right bank 500 ft downstream from Rock Creek, 1,000 ft upstream from intake for upper powerplant of Utah Power & Light Co., 4 miles upstream from mouth of canyon, and 8 miles northeast of American Fork.

Drainage area.--55 sq mi, approximately.

Records available.--October 1945 to September 1955 in reports of Geological Survey. January 1927 to September 1945 in files of Salt Lake City district office, Geological Survey.

Gage.--Water-stage recorder. Altitude of gage is 5,950 ft (from topographic map).

Average discharge.--28 years, 53.1 cfs (38,440 acre-ft per year).

Extremes.--Maximum discharge during year, 292 cfs May 21 (gage height, 6.10 ft); minimum, 7 cfs Mar. 16.
1927-55: Maximum discharge not determined, occurred July 30, 1953 (gage height, 9.2 ft, from floodmark); minimum, 4 cfs Jan. 25, 1952.

Remarks.--Records good. No diversion above station.

Cooperation.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project. Fourteen discharge measurements were made by Geological Survey in addition to those made by the power company.

Rating tables, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 1 to Apr. 27)

Oct. 1 to Dec. 31		Jan. 1 to Sept. 30			
4.5	8	4.3	9	5.0	63
4.6	12	4.5	18	5.5	143
4.8	24	4.7	31	6.0	258

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	15	12	13	13	14	*14	58	175	83	32	24
2	18	15	14	11	13	14	15	61	143	82	31	25
3	18	14	14	13	13	14	15	57	137	80	30	24
4	19	14	15	13	13	14	15	63	128	76	31	25
5	19	14	14	12	13	14	14	87	122	73	30	25
6	19	14	13	*12	12	b14	14	130	132	70	29	24
7	19	14	14	12	13	14	15	149	168	70	36	23
8	19	14	11	b12	12	14	16	162	216	70	34	23
9	20	13	10	b12	12	14	17	166	240	*66	30	23
10	19	13	14	13	b12	14	19	160	*240	63	28	23
11	18	13	14	13	b13	14	19	177	219	61	27	22
12	18	*17	13	13	13	14	19	*195	204	58	28	21
13	18	15	*14	b13	13	13	20	209	198	56	27	22
14	17	14	13	*13	13	12	22	204	193	55	26	21
15	*18	14	14	b13	13	11	22	173	173	51	25	*17
16	16	19	11	13	13	10	23	149	168	50	26	*19
17	15	16	11	13	*13	11	25	137	*149	50	26	19
18	*15	16	12	b13	12	10	23	134	143	50	25	19
19	14	15	13	13	11	11	22	164	145	46	*25	22
20	14	15	13	13	b11	11	22	*195	147	44	24	19
21	14	15	13	13	b12	*10	23	238	143	43	23	19
22	15	14	13	b12	b13	11	*23	256	137	39	23	19
23	14	14	13	12	b14	11	23	*256	128	37	23	18
24	16	*14	13	12	b14	12	24	238	120	36	23	18
25	16	14	13	12	14	10	33	*202	111	52	27	20
26	16	14	14	12	14	11	46	*186	103	40	25	19
27	14	14	13	12	14	11	37	166	101	38	24	19
28	14	12	b13	12	14	12	36	151	95	37	24	19
29	14	11	13	12	-	12	36	160	92	*36	23	19
30	14	11	13	12	------	12	44	186	84	35	23	18
31	15	------	13	12	------	13	------	202	------	34	23	------
Total	514	427	403	386	360	382	696	5,071	4,554	1,681	831	628
Mean	16.6	14.2	13.0	12.5	12.9	12.3	23.2	164	152	54.2	26.8	20.9
Ac-ft	1,020	847	799	766	714	758	1,380	10,060	9,030	3,330	1,650	1,250

Calendar year 1954: Max 220 Min 10 Mean 38.2 Ac-ft 27,650
Water year 1954-55: Max 256 Min 10 Mean 43.7 Ac-ft 31,600

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Dry Creek near Alpine, Utah

Location.--Lat 40°28'35", long 111°45'25", in NE¼ sec. 18, T. 4 S., R. 2 E., on right bank 2 miles northeast of Alpine and 3½ miles upstream from Fort Creek.

Records available.--July 1947 to September 1955 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 5,320 ft (from topographic map). Prior to Aug. 3, 1951, at site 500 ft downstream at different datum (destroyed by flood).

Average discharge.--8 years, 21.3 cfs (15,420 acre-ft per year).

Extremes.--Maximum discharge during year, 187 cfs May 23 (gage height, 1.88 ft); minimum, 1.5 cfs Oct. 13.
1947-55: Maximum discharge not determined, occurred Aug. 3, 1951; minimum, that of Oct. 13, 1954.

Remarks.--Records good except those for periods of ice effect, which are fair.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 12-26, May 11, 12, 20, May 22 to June 10)

0.4	2.0	1.3	50
.6	7.0	1.6	90
.8	14	2.0	158
1.0	24	2.1	177

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.6	4.1	b5.4	4.3	5.6	4.6	5.4	22	81	27	6.7	3.8
2	3.4	4.1	5.1	4.1	5.6	4.6	6.2	19	65	26	6.5	3.6
3	3.6	3.8	5.4	4.1	5.6	4.6	b5.2	17	57	25	6.2	3.4
4	4.1	3.8	5.9	4.1	5.4	4.3	4.6	20	55	23	5.9	3.2
5	3.8	3.6	5.4	4.1	5.4		b4.6	37	57	20	14	3.2
6	3.6	3.6	5.1	4.3	5.1	b4.3	4.6	58	74	18	12	2.9
7	3.6	3.6	*4.8	b4.3	4.8		4.8	*67	99	17	15	2.9
8	3.2	3.6	b4.8	b4.3	4.8	4.3	5.1	82	129	16	9.6	2.9
9	3.4	3.8	b4.8	5.1	4.6	4.3	6.7	*78	132	*15	8.0	3.2
10	3.2	3.8	4.8	5.1	b4.5	4.6	9.2	93	*125	13	7.3	3.4
11	3.2	3.8	4.6	5.1	b4.3	4.6	8.9	*126	121	12	7.0	3.4
12	3.2	7.0	4.6	5.1	b4.3	4.8	7.6	132	116	12	7.0	3.2
13	3.4	*5.6	4.8	5.4	4.3	4.8	9.6	133	109	11	7.0	3.2
14	3.4	5.1	b4.8	5.1	4.6	4.3	11	106	111	11	6.5	3.2
15	*3.2	4.8	5.1	*5.6	4.6		11	70	96	10	5.9	3.2
16	3.2	7.0		5.9	4.6	b4.2	12	54	88	9.2	5.6	*3.4
17	2.9	6.2		5.6	(*)		13	44	72	8.6	5.6	3.2
18	2.9	5.9		5.9			11	46	75	8.3	5.6	3.6
19	2.9	6.2	b5.1	5.6		4.1	9.6	77	80	8.0	*5.6	4.8
20	3.4	7.0		5.6	b4.6	4.6	11	*92	81	8.0	5.1	4.1
21	3.4	7.0		5.6		*b4.2	12	128	75	8.0	4.6	3.6
22	3.4	7.3	5.1	5.4		3.8	*11	149	70	8.0	4.6	3.4
23	3.4	7.6	5.1	5.6		3.8	9.2	*162	63	8.3	4.3	3.4
24	4.6	7.3	5.1	5.6	4.8	3.6	9.9	147	57	8.0	4.6	3.6
25	4.8	7.3	4.8	5.6	4.8	3.6	15	123	48	15	5.6	7.0
26	4.6	7.0		5.4	4.3	b3.6	16	109	43	9.9	5.6	5.6
27	4.6	6.5		5.4	4.3	b3.6	14	90	39	8.3	4.8	6.2
28	4.8	6.2	b4.6	5.4	4.3	3.6	14	78	37	7.6	4.6	5.6
29	4.6	b5.8		5.4	-	4.1	15	107	32	7.3	4.3	5.3
30	4.6	b5.6		5.4	------	4.6	21	114	28	6.7	4.3	3.6
31	4.3	------	4.6	5.4	------	4.3	------	103	------	6.7	4.1	------
Total	114.3	164.0	153.7	158.9	132.8	131.0	298.2	2,683	2,315	391.9	203.5	115.1
Mean	3.69	5.47	4.96	5.13	4.74	4.23	9.94	86.5	77.2	12.6	6.56	3.84
Ac-ft	227	325	305	315	263	260	591	5,320	4,590	777	404	228

Calendar year 1954: Max 142 Min 2.7 Mean 15.4 Ac-ft 11,130
Water year 1954-55: Max 162 Min 2.9 Mean 18.8 Ac-ft 13,600

Peak discharge (base, 100 cfs).--May 11 (4:30 p.m.) 166 cfs (1.90 ft); May 23 (4:30 p.m.) 187 cfs (1.88 ft); June 8 (7 p.m.) 168 cfs (1.93 ft); Aug. 5 (9:15 p.m.) 118 cfs (1.83 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Fort Creek at Alpine, Utah

Location.--Lat 40°27'55", long 111°46'45", in SE¼ sec. 13, T. 4 S., R. 1 E., on right bank three-quarters of a mile north of Alpine and 1½ miles upstream from mouth.

Drainage area.--6.1 sq mi, approximately.

Records available.--July 1947 to September 1955 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 5,050 ft (from topographic map).

Average discharge.--8 years, 8.38 cfs (6,070 acre-ft per year).

Extremes.--Maximum discharge during year, 105 cfs May 11 (gage height, 3.12 ft); no flow for part of each day July 29, Sept. 6, 7, 13, 14.
1947-55: Maximum discharge, 246 cfs Aug. 4, 1951 (gage-height, 4.60 ft), from rating curve extended above 83 cfs; no flow Sept. 6, 1951.

Remarks.--Records good except those for periods of ice effect, which are fair. One diversion above station for irrigation.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 22-24)

0.7	0	1.2	4.4
.8	.3	1.4	8.6
.9	.9	1.7	19
1.0	1.7	2.0	35
1.1	2.8	2.4	60

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	3.0	3.4	3.3	3.4	3.3	6.1	16	10	4.6	2.7	2.4
2	2.8	3.0	3.4	3.3	3.3	3.6	6.3	13	12	4.4	2.6	2.4
3	1.7	3.0	3.4	3.3	3.3	4.1	5.7	12	12	4.2	2.5	2.4
4	3.3	3.0	3.9	3.3	3.3	3.9	5.4	14	15	4.1	1.1	2.4
5	2.0	3.0	3.4	3.1	3.3		5.9	25	19	3.4	2.3	2.4
6	3.0	3.0	3.4	3.1	3.3	b3.5	6.5	43	23	1.9	3.8	1.0
7	3.0	2.8	*3.3		3.1		7.2	*60	28	2.0	4.9	1.5
8	2.4	2.8	3.1		3.3	3.9	7.7	58	33	4.1	3.3	2.4
9	.7	2.8	3.4	b3.0	3.3	4.4	10	44	23	*3.8	1.5	2.5
10	3.3	2.7	3.3			4.6	12	48	*23	3.6	2.6	2.5
11	2.1	2.7	3.3	3.0	b3.2	4.6	11	*58	34	3.6	.4	2.6
12	3.4	3.3	3.1	3.0		4.8	9.8	60	34	2.5	2.4	2.2
13	3.8	*3.1	3.1	b3.0	3.4	5.9	12	56	33	3.4	3.0	.1
14	3.9	3.3	3.1	3.0	3.4	5.9	13	37	35	2.3	2.8	2.2
15	*3.4	3.3	3.1	*b3.0	3.8		13	23	15	.2	2.7	2.4
16	3.0	3.9		3.0	3.8		15	17	13	.8	2.1	*2.4
17	3.0	3.6		3.0	*b3.6	b4.8	15	15	14	3.3	1.5	2.4
18	1.9	3.4	b3.0	3.1	b3.4		13	22	9.5	3.4	1.2	2.6
19	1.5	3.6		3.0			12	37	11	3.3	*2.7	1.6
20	2.4	3.6		3.0		4.8	12	*44	12	3.3	2.6	1.1
21	2.7	3.6	3.1	3.0	b3.2	*b4.0	13	46	11	3.1	2.6	2.5
22	3.1	3.6	3.1	3.0		4.4	*11	42	9.2	.9	2.6	2.5
23	3.3	3.8	3.1	3.0		4.4	10	*31	8.6	1.9	2.6	2.5
24	3.8	3.6	3.1	3.0	3.4	4.2	11	26	6.8	3.3	.6	2.5
25	3.9	3.6	3.1	3.0	3.3	4.2	17	19	6.3	4.1	2.5	3.9
26	3.6	3.6	2.7	3.0	3.1	b4.2	15	15	6.3	3.3	2.7	1.4
27	3.6	3.6			3.1	b4.2	12	13	3.4	3.0	2.7	3.0
28	3.6	3.4	b3.0	b3.0	3.1	4.2	12	15	5.4	2.3	2.6	3.3
29	3.4	3.4			-	5.2	11	22	5.0	.3	2.6	3.1
30	3.0	3.4			------	5.7	16	20	4.8	2.6	2.0	3.1
31	3.0	------	3.3	3.4	------	5.2	------	13	------	2.6	.6	------
Total	90.4	98.5	98.2	95.3	92.6	138.2	326.6	964	475.3	89.6	72.8	69.3
Mean	2.92	3.28	3.17	3.07	3.31	4.46	10.9	31.1	15.8	2.89	2.35	2.31
Ac-ft	179	195	195	189	184	274	648	1,910	943	178	144	137

Calendar year 1954: Max 34 Min 0.2 Mean 5.85 Ac-ft 4,240
Water year 1954-55: Max 60 Min 0.1 Mean 7.15 Ac-ft 5,180

Peak discharge (base, 75 cfs).--May 11 (6 p.m.) 105 cfs (3.12 ft); May 20 (4:30 p.m.) 81 cfs (2.77 ft); June 14 (7 a.m.) 83 cfs (2.74 ft).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Transmountain diversions from Colorado River basin to Jordan River basin

The following tunnel and ditches in Utah, each equipped with a water-stage recorder, divert water from the Colorado River basin to the Jordan River basin. Records of daily flow collected by Geological Survey available in Salt Lake City district office.

Duchesne tunnel diverts water from the Duchesne River to the Provo River. Gage is located in NE¼ sec. 2, T. 3 S., R. 8 E.

Strawberry tunnel whose west portal is in SW¼ sec. 34, T. 7 S., R. 6 E., diverts water from Strawberry Reservoir on Strawberry River to Diamond Fork in the Jordan River basin. Records furnished by Spanish Fork Water Users Association and include tunnel seepage (see p. 97 for complete record of daily discharge).

Hobble Creek ditch diverts water from tributary of Strawberry River to Daniels Creek (a tributary of Provo River). Gage is located in NW¼ sec. 15, T. 6 S., R. 6 E.

Strawberry River and Willow Creek ditches divert water from the Strawberry River basin to Daniels Creek. The flow of each is gaged in sec. 4, T. 2 S., R. 12 W., Uinta Special Meridian.

Transmountain diversions, in acre-feet, water year October 1954 to September 1955

Name	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
Duchesne tunnel....	422	456	383	400	361	400	503	11,170	13,870	2,070	1,230	795	32,060
Strawberry tunnel..	2,470	298	307	307	278	339	357	2,380	19,190	23,550	14,270	7,700	71,450
Hobble Creek ditch.	0	0	0	0	0	0	0	798	329	23	3	6	1,160
Strawberry River and Willow Creek ditches.	0	0	0	0	0	0	0	407	1,170	539	325	170	2,610
Total in Utah....	2,890	754	690	707	639	739	860	14,760	34,560	26,180	15,830	8,670	107,300

Jordan River at narrows, near Lehi, Utah

Location.--Lat 40°26'40", long 111°55'15", in SE¼NW¼ sec. 26, T. 4 S., R. 1 W., at narrows, 5½ miles northwest of Lehi and 7½ miles downstream from Utah Lake.
Drainage area.--2,960 sq mi, approximately, including 280 sq mi in closed basin in Cedar Valley.
Records available.--May to December 1904, July 1913 to September 1955.
Gage.--Water-stage recorder. Altitude of gage is 4,470 ft (by barometer). Prior to May 16, 1920, staff gage, and May 16, 1920, to Sept. 30, 1934, water-stage recorder, at outlet of Utah Lake, 7½ miles upstream at different datum.
Average discharge.--42 years (1913-55), 373 cfs (270,000 acre-ft per year).
Extremes.--1913-55: Maximum daily discharge, 1,410 cfs June 10, 1952; no flow at times when gates are closed.
Remarks.--Records good above 30 cfs and fair below. They represent combined flow of Jordan River, Utah and Salt Lake Canal, and East Jordan Canal. Flow may be regulated by gates and pumps at outlet of Utah Lake, pumps at Pelican Point, and diversion dam at narrows.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	350	31	23	19	6.5	6.5	8.3	103	474	776	679	738
2	372	31	23	9.7	6.5	6.5	8.3	123	320	819	674	729
3	465	31	23	8.7	6.5	6.5	7.6	146	295	855	688	729
4	498	31	23	7.1	6.5	6.5	8.0	119	303	850	718	728
5	495	31	23	6.5	6.5	6.7	8.0	108	320	816	713	729
6	492	31	23	6.5	6.5	6.9	8.3	162	329	820	711	729
7	495	31	23	6.5	6.5	7.1	8.3	242	426	807	664	728
8	496	31	23	6.5	6.5	7.1	8.7	259	533	818	593	727
9	459	31	23	6.5	6.5	7.1	8.7	258	599	822	615	718
10	377	28	23	6.5	6.5	7.3	8.7	182	643	821	627	719
11	337	27	23	6.5	6.5	7.3	8.0	316	650	809	629	721
12	324	27	23	6.5	6.5	7.6	8.0	486	650	808	657	719
13	309	27	23	6.5	6.5	8.0	8.3	560	647	811	672	717
14	306	27	23	6.5	6.5	8.0	8.3	567	547	810	668	711
15	104	27	23	6.5	6.5	7.6	8.0	403	463	812	685	673
16	38	27	23	6.5	6.5	7.6	8.3	293	524	809	720	674
17	35	27	23	6.5	6.5	7.6	8.7	407	532	808	756	656
18	35	27	23	6.5	6.5	7.6	9.3	558	443	808	774	618
19	35	27	29	6.5	6.5	7.6	9.3	572	394	810	767	543
20	45	27	28	6.5	6.5	7.1	9.0	603	419	808	765	504
21	55	27	28	6.5	6.5	7.6	8.7	618	482	799	764	508
22	55	25	28	6.5	6.5	7.6	47	631	645	799	762	485
23	54	23	28	6.5	6.5	7.6	70	637	682	799	765	473
24	53	21	28	6.5	6.5	7.3	89	614	671	799	766	471
25	54	21	28	6.5	6.5	7.6	97	610	687	644	767	431
26	44	22	28	6.5	6.5	7.6	100	635	719	606	764	353
27	33	23	29	6.5	6.5	8.0	100	649	738	592	762	360
28	31	24	29	6.5	6.5	8.0	102	661	746	566	761	397
29	31	23	29	6.5	-	8.3	103	661	731	558	757	388
30	31	23	29	6.5	------	8.3	102	663	744	614	757	342
31	31	------	29	6.5	------	8.3	------	622	------	668	756	------
Total	6,539	809	784	220.0	182.0	230.4	986.8	13,468	16,356	23,741	22,156	18,018
Mean	211	27.0	25.3	7.10	6.50	7.43	32.9	434	545	766	715	601
Ac-ft	12,970	1,600	1,560	436	361	457	1,960	26,710	32,440	47,090	43,950	35,740

Calendar year 1954: Max 877 Min 21 Mean 418 Ac-ft 302,700
Water year 1954-55: Max 855 Min 6.5 Mean 284 Ac-ft 205,300

Surplus Canal at Salt Lake City, Utah

Location.--Lat 40°44', long 111°55', in SW¼SW¼ sec. 14, T. 1 S., R. 1 W., on right bank 350 ft downstream from diversion dam which is an eighth of a mile downstream from highway bridge over Jordan River on Twenty-first South Street, Salt Lake City.

Records available.--December 1942 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 4,219.02 ft above mean sea level, datum of 1929. Prior to Oct. 22, 1952, at site 50 ft upstream at present datum. Since Dec. 31, 1946, auxiliary water-stage recorder about 1 mile downstream.

Average discharge.--12 years (1943-55), 206 cfs (149,100 acre-ft per year).

Extremes.--Maximum discharge during year, 366 cfs June 9 (gage height, 5.69 ft); minimum daily, 24 cfs July 9.
1942-55: Maximum discharge, 1,700 cfs June 7, 1952; maximum gage height, 8.84 ft May 7, 1952; minimum daily discharge, that of July 9, 1955.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow regulated by headgates at diversion dam 350 ft above station. Canal was built to bypass flood water of Jordan River around Salt Lake City residential area (see p. 118) for records of combined flow of Jordan River and Canal). Several diversions below station for irrigation.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*163	*109	117	70	45	101	75	94	256	115	*123	112
2	154	99	115	90	50	130	84	87	291	144	110	114
3	142	101	91	99	49	174	96	78	267	136	114	123
4	150	99	128	82		158	88	71	256	120	115	125
5	181	98	144	77		128	85	67	221	109	114	125
6	182	102	130	80		110	94	78	192	87	181	118
7	182	98	115	77		107	88	128	*158	*75	224	112
8	168	93	112	73		106	81	138	208	50	238	85
9	168	90	107	71		102	80	134	302	24	192	93
10	174	90	107	71	a50	122	82	134	293	29	182	102
11	154	94	117	73		112	*90	133	274	50	178	110
12	147	130	112	70		106	77	149	240	43	157	122
13	157	126	102	*71		102	68	171	227	33	162	118
14	*166	115	91	68		*104	70	189	264	53	171	117
15	173	*87	*117	68		96	67	173	301	84	*133	*134
16	136	117	106	75		94	64	*174	278	112	117	134
17	99	152	88	68	78	93	63	130	286	104	110	149
18	98	107	87	42	134	91	75	125	270	113	104	173
19	93	90	84	43	81	93	77	109	235	126	125	218
20	90	87	85	47	82	96	71	109	205	101	126	218
21	82	82	81	47		82	60	154	*181	84	126	219
22	84	82	80	43	a50	80	60	206	144	109	136	227
23	107	87	75	43		87	73	234	142	155	130	214
24	118	90	68	46	*47	87	67	246	152	218	134	210
25	125	91	73	47	52	93	81	264	120	334	134	238
26	122	101	77	45	54	91	94	221	74	326	163	275
27	112	112	74	43	66	84	131	186	98	301	160	258
28	107	114	74	42	131	84	122	155	104	262	146	254
29	109	117	71	42	-	77	110	114	68	205	142	251
30	110	*147	68	42	------	74	87	110	77	160	125	*258
31	109	------	64	*47	------	77	------	178	------	91	*104	------
Total	4,162	3,107	2,960	1,902	1,669	3,141	2,460	4,539	6,184	3,953	4,476	5,006
Mean	134	104	95.5	61.4	59.6	101	82.0	146	206	128	144	167
Ac-ft	8,260	6,160	5,870	3,770	3,310	6,230	4,880	9,000	12,270	7,840	8,880	9,930

Calendar year 1954: Max 427 Min 29 Mean 175 Ac-ft 127,000
Water year 1954-55: Max 334 Min 24 Mean 119 Ac-ft 86,400

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Jordan River and auxiliary gage recorder trace.

Jordan River at Salt Lake City, Utah

Location.--Lat 40°44', long 111°55', in SW¼SW¼ sec. 14, T. 1 S., R. 1 W., a quarter of a mile downstream from highway bridge on Twenty-first South Street, Salt Lake City, and 2 miles downstream from Mill Creek.

Records available.--December 1942 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 4,220.73 ft above mean sea level, datum of 1929.

Average discharge.--12 years (1943-55), 148 cfs (107,100 acre-ft per year).

Extremes.--Maximum discharge during year, 233 cfs June 14 (gage height, 4.39 ft); minimum, 41 cfs Nov. 11.
Maximum combined discharge during year (Jordan River and Surplus Canal), 595 cfs June 9; minimum daily, 141 cfs July 13.
1942-55: Maximum discharge, 384 cfs June 3, 1944; maximum gage height, 5.75 ft June 26, 1952; no flow May 10, 24, 1952 (entire flow diverted to Surplus Canal).
Maximum combined discharge (Jordan River and Surplus Canal), 1,820 cfs June 7, 1952; minimum daily, that of July 13, 1955.

Remarks.--Records good. Flow completely regulated since reconstruction, in May 1952, of Surplus Canal diversion dam 1,000 ft upstream. Flow affected by gates and pumps at outlet of Utah Lake. Many diversions above station for irrigation and industrial and municipal water supplies. See preceding page for records of Surplus Canal. For records of combined flow see following page.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 18 to Dec. 4, Aug. 9 to Sept. 2)

3.0	92
4.0	192
5.0	292

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*161	*136	125	136	147	167	101	136	187	138	*147	137
2	159	138	136	141	149	181	102	135	194	148	144	136
3	153	138	145	140	150	195	102	133	177	149	137	137
4	157	135	161	135	145	190	104	131	174	146	131	137
5	167	135	168	140	144	179	111	129	186	142	137	137
6	170	135	164	140	145	173	114	134	167	138	153	127
7	170	133	161	136	144	171	112	149	*156	*132	172	129
8	166	132	163	134	143	171	110	146	173	126	179	128
9	170	129	165	132	144	171	111	140	209	120	167	131
10	175	130	167	133	143	150	111	138	210	123	160	136
11	171	107	170	131	140	129	*121	144	204	126	147	134
12	168	111	160	128	141	121	117	147	190	114	118	135
13	169	145	153	*127	141	116	117	155	191	108	126	132
14	*171	138	152	125	136	*118	116	156	204	110	131	132
15	172	*139	*151	124	142	116	116	151	212	107	*119	*133
16	158	137	147	127	143	116	115	*158	202	104	120	138
17	141	150	155	136	152	116	113	143	200	105	118	147
18	144	150	153	148	177	117	122	140	187	113	116	161
19	143	148	154	148	165	114	118	134	174	114	133	179
20	139	145	155	151	161	115	120	136	168	115	132	181
21	138	143	155	150	158	112	119	152	*154	110	143	182
22	138	145	153	149	150	110	119	171	143	111	144	188
23	148	140	151	149	148	113	126	179	138	123	143	184
24	152	138	150	150	*143	114	123	180	136	135	146	177
25	150	139	150	150	146	119	123	189	131	206	149	185
26	145	141	150	148	149	119	132	170	121	215	159	200
27	140	128	148	148	155	115	147	157	124	201	156	190
28	141	127	143	146	180	115	148	141	123	181	148	190
29	139	135	142	146	~	107	143	126	126	163	149	187
30	138	*139	141	147	------	96	135	118	131	153	141	*192
31	134	------	139	*149	------	100	------	149	------	141	*135	------
Total	4,787	4,086	4,727	4,344	4,181	4,146	3,568	4,567	5,092	4,217	4,400	4,682
Mean	154	136	152	140	149	134	119	147	170	136	142	156
Ac-ft	9,490	8,100	9,380	8,620	8,290	8,220	7,080	9,060	10,100	8,360	8,730	9,290

Calendar year 1954: Max 262 Min 107 Mean 164 Ac-ft 118,400
Water year 1954-55: Max 215 Min 96 Mean 145 Ac-ft 104,700

* Discharge measurement made on this day.

Jordan River at Salt Lake City, Utah--Continued

Combined discharge, in cubic feet per second, of Jordan River and Surplus Canal at Salt Lake City, Utah, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	324	245	242	206	192	268	176	230	443	253	270	249
2	313	237	251	231	199	311	186	222	485	292	254	250
3	295	239	236	239	199	369	198	211	444	285	251	260
4	307	234	289	217	195	348	192	202	430	266	246	262
5	348	233	312	217	194	307	196	196	407	251	251	262
6	352	237	294	220	195	283	208	212	359	225	334	245
7	352	231	276	213	194	278	200	277	314	207	396	241
8	334	225	275	207	193	277	191	284	381	176	417	213
9	338	219	272	203	194	273	191	274	511	144	359	224
10	349	220	274	204	193	272	193	272	503	152	342	238
11	325	201	287	204	190	241	211	277	478	176	325	244
12	315	241	272	198	191	227	194	296	430	157	275	257
13	326	271	255	198	191	218	185	326	418	141	288	250
14	337	253	243	193	186	222	186	345	468	163	302	249
15	345	226	268	192	192	212	183	324	513	191	252	267
16	294	254	253	202	193	210	179	332	480	216	237	272
17	240	302	243	204	230	209	176	273	486	209	228	296
18	242	257	240	190	311	208	197	265	457	226	220	334
19	236	238	238	191	246	207	195	243	409	240	258	397
20	229	232	240	198	243	211	191	245	373	216	258	399
21	220	225	236	197	208	194	179	306	335	194	269	401
22	222	227	233	192	200	190	179	377	287	220	280	415
23	255	227	226	192	198	200	199	413	280	278	273	398
24	270	228	218	196	190	201	190	426	288	353	280	387
25	275	230	223	197	198	212	204	453	251	540	283	423
26	267	242	227	193	203	210	226	391	195	541	322	475
27	252	240	222	191	221	199	278	343	222	502	316	448
28	248	241	217	188	311	199	270	296	227	443	294	444
29	248	252	213	186	-	184	253	240	194	368	291	438
30	248	286	209	189	------	170	222	228	208	313	266	450
31	243	------	203	196	------	177	------	327	------	232	239	------
Total	8,949	7,193	7,687	6,246	5,850	7,287	6,028	9,106	11,276	8,170	8,876	9,688
Mean	289	240	248	201	209	235	201	294	376	264	286	323
Ac-ft	17,750	14,270	15,250	12,390	11,600	14,450	11,960	18,060	22,370	16,200	17,610	19,220

Calendar year 1954: Max 655 Min 165 Mean 339 Ac-ft 245,400
Water year 1954-55: Max 541 Min 141 Mean 264 Ac-ft 191,100

Sevier River at Hatch, Utah

Location.--Lat 37°39'00", long 112°25'30", in SW¼NW¼ sec. 28, T. 36 S., R. 5 W., on left bank 300 ft downstream from bridge, 0.2 mile east of Hatch, and 2.8 miles downstream from Mammoth Creek.

Drainage area.--260 sq mi, approximately.

Records available.--June 1911 to September 1928, June 1939 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,870 ft (from river-profile map). Prior to May 7, 1914, and Aug. 22, 1914, to Mar. 15, 1915, staff gages and May 7-25, 1914, Mar. 16, 1915, to Oct. 3, 1949, water-stage recorder, at several sites within 2 miles of present site at various datums.

Average discharge.--24 years (1912-13, 1914-16, 1917-18, 1922-23, 1924-27, 1939-55), 125 cfs (90,500 acre-ft per year).

Extremes.--Maximum discharge during year, 343 cfs Oct. 7 (gage height, 2.54 ft); minimum not determined, occurred during period of ice effect.
1911-28, 1939-55: Maximum discharge not determined, occurred May 25, 1914, when Hatchtown Dam failed; maximum recorded, 1,490 cfs May 26, 1922 (gage height, 5.25 ft, datum then in use); minimum daily, 10 cfs for several days in 1912 when water was stored in Hatchtown Reservoir. Minimum natural flow, 36 cfs Feb. 19, 1952.

Remarks.--Records good except those for periods of ice effect, which are fair. Small diversions above station for irrigation. No regulation since Hatchtown Dam failed in 1914.

Revisions (water years).--WSP 960: 1939-40. WSP 1284: 1916.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	44
1.5	72
2.0	185

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	51	58				63	63	98	53	50	53
2	49	51	58			b54	61	69	95	53	51	51
3	49	51	58				56	66	90	50	54	50
4	51	51	69			56	55	60	*86	49	61	50
5	49	51	58			58	55	60	83	47	*58	50
6	47	51	58			b60	55	67	81	49	53	47
7	107	51	55			61	56	86	79	47	50	49
8	77	51	b55		b50	64	56	107	74	47	49	49
9	60	51	b55			70	56	116	69	46	47	49
10	56	50	56			85	55	118	67	*46	47	49
11	56	51	55			86	55	118	66	46	49	47
12	56	53	54			92	53	134	63	46	49	47
13	56	55	55			96	54	156	64	46	46	47
14	55	55				94	*53	156	66	46	68	47
15	55	*53		b50	54	*77	53	167	64	49	72	46
16	54	55			*54	67	53	156	63	54	74	46
17	54	54			58	63	54	144	63	53	81	46
18	55	56				63	54	127	61	55	55	47
19	54	56				64	51	111	58	55	51	47
20	54	55	(*)			64	53	116	56	54	50	47
21	54	55			b50	b64	53	116	56	54	49	47
22	53	55	b50			63	56	125	55	58	50	47
23	53	55				72	60	134	55	53	49	47
24	54	55				83	56	144	54	72	50	47
25	*54	55				90	58	139	55	76	72	47
26	54	55			50	79	63	125	55	69	*67	47
27	53	55			51	69	67	120	55	60	63	47
28	53	54			b51	64	61	111	54	55	54	46
29	51	56			-	67	58	105	54	51	53	46
30	51	b56			------	69	63	103	54	51	53	46
31	51	------			------	60	------	100	------	51	54	------
Total	1,726	1,603	1,644	1,550	1,418	2,162	1,696	3,519	1,993	1,641	1,709	1,431
Mean	55.7	53.4	53.0	50	50.6	69.7	56.5	114	66.4	52.9	55.1	47.7
Ac-ft	3,420	3,180	3,260	3,070	2,810	4,290	3,360	6,980	3,950	3,250	3,390	2,840

Calendar year 1954: Max 381 Min - Mean 85.1 Ac-ft 61,590
Water year 1954-55: Max 167 Min 46 Mean 60.5 Ac-ft 43,800

Peak discharge (base, 500 cfs).--No peak above base.
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Sevier River near Circleville, Utah

Location.--Lat 38°06', long 112°19', in SW¼ sec. 20, T. 31 S., R. 4 W., Salt Lake meridian, on left bank 2 miles upstream from Pine Creek and 6 miles southwest of Circleville.

Drainage area.--950 sq mi, approximately.

Records available.--May to September 1912, April 1914 to September 1927, November 1949 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,240 ft (from river-profile map). May 10 to Sept. 19, 1912, staff gage at site 300 ft upstream at different datum. Apr. 23, 1914, to Sept. 30, 1927, Nov. 21, 1949, to Aug. 6, 1954, water-stage recorder at site 300 ft upstream at datum 1.23 ft higher.

Average discharge.--14 years (1914-22, 1923-24, 1950-55), 185 cfs (133,900 acre-ft per year).

Extremes.--Maximum discharge during year, 297 cfs Aug. 6 (gage height, 2.69 ft); minimum daily, 19 cfs July 12.
1912, 1914-27, 1949-55: Maximum discharge, 1,960 cfs about May 21, 1922 (gage height, 9.8 ft, from high-water mark, present datum), from rating curve extended above 1,000 cfs by logarithmic plotting; minimum daily, that of July 12, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Many diversions above and below station.

Revisions (water years).--WSP 1180: 1922(M).

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.8	14	1.8	118
1.0	26	2.4	234
1.3	52		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	69	110			a110	a130	49		24	*30	45
2	48	69	116			a130	a120	51		23	31	31
3	52	69	113			a140	a112	51		22	34	27
4	47	68	128	(*)		a150	a100	48	a40	22	32	29
5	34	73	125			a155	a90	42		22	34	26
6	41	74	116			a160	a86	42		23	107	26
7	47	71	110			a170	a88	a45	*40	24	50	26
8	59	73	107	b95	(*)	a190	a94	a50	36	24	40	27
9	42	74	102			a210	a90	a55	31	25	33	27
10	41	75	112		b90	a230	a80	a60	31	25	26	29
11	41	75	115			a230	a78	a60	33	*24	30	29
12	38	80	112			a220	a78	63	32	19	49	29
13	38	83	102			a205	a78	71	31	21	44	28
14	46	83				a200	a78	79	29	20	a38	27
15	49	*87				*a190	*a74	87	29	22	a38	26
16	50	88				a170	64	104	29	20	44	24
17	50	89				a160	64	105	32	25	53	24
18	50	87				a150	67	105	32	23	47	26
19	50	94				a140	63	88	34	21	53	29
20	52	104				a140	63	71	30	24		30
21	51	105				a140	61	74	26	20	a50	33
22	60	105	b95			a140	63	73	24	23		32
23	55	107				a140	65	78	26	22		29
24	a60	102		b90	a90	a150	65	79	27	22	54	29
25	*a70	102				a160	58	83	27	22	*86	32
26	73	102				a173	49	80	26	25	152	30
27	76	101				a162	54	73	26	23	75	30
28	76	101				a154	54	65	32	21	58	31
29	71	105			-	a145	50	59	26	21	51	29
30	65	110			------	a135	51	a50	26	24	49	28
31	68	------			------	a137	------	a45	------	27	45	------
Total	1,656	2,625	3,178	2,865	2,520	5,086	2,267	2,085	955	703	1,583	868
Mean	53.4	87.5	103	92.4	90	164	75.6	67.3	31.8	22.7	51.1	28.9
Ac-ft	3,280	5,210	6,300	5,680	5,000	10,090	4,500	4,140	1,890	1,390	3,140	1,720

Calendar year 1954: Max 284 Min 26 Mean 91.1 Ac-ft 65,950
Water year 1954-55: Max 230 Min 19 Mean 72.3 Ac-ft 52,340

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 2 discharge measurements and records for stations near Kingston and at Hatch.
b Stage-discharge relation affected by ice.

Sevier River near Kingston, Utah

Location.--Lat 38°12', long 112°12', in NE¼NW¼ sec. 16, T. 30 S., R. 3 W., on left bank 1,000 ft upstream from bridge on State Highway 22, 1 mile west of Kingston, and 2 miles upstream from East Fork.

Drainage area.--1,110 sq mi, approximately.

Records available.--June 1914 to September 1955.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5,980 ft (from river-profile map). Prior to Sept. 20, 1918, at site 1 mile downstream at different datum.

Average discharge.--41 years, 139 cfs (100,600 acre-ft per year).

Extremes.--Maximum discharge during year, 227 cfs Dec. 4 (gage height, 1.57 ft); minimum daily, 5.8 cfs July 13-15.
1914-55: Maximum discharge, about 3,000 cfs (including estimated flow of 360 cfs in overflow channel bypassing station) Mar. 4, 1938 (gage height, 5.20 ft), from rating curve extended above 600 cfs; minimum daily, 4.2 cfs June 29, 30, 1953.

Remarks.--Records good except those for period of no gage-height record, which are fair. Many diversions above station for irrigation.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.5	3.0	1.0	55
.6	7.0	1.3	129
.7	14	1.6	231
.8	24		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	43	132			121	112	17	16	8.4	7.0	*17
2	22	45	141			123	104	19	17	7.7	6.6	16
3	21	52	141			135	98	19	18	7.7	8.4	18
4	19	57	187	(*)		140	86	19	17	7.0	9.1	16
5	20	52	177			145	76	18	16	7.7	9.1	15
6	14	59	157			150	78	17	15	7.0	*22	13
7	13	55	148			157	78	16	*14	7.0	12	13
8	13	66	141	a110	a105	170	88	16	16	7.7	11	13
9	19	57	135			191	84	16	15	7.0	9.1	13
10	17	59	141			209	68	16	15	7.0	9.1	13
11	25	46	148			209	66	14	15	*7.0	8.4	13
12	31	46	148			191	72	13	15	6.6	9.8	12
13	23	61	138			191	68	12	16	5.8	9.8	11
14	21	72	135			191	a70	14	14	5.8	9.8	11
15	21	70	129		*107	177	*72	16	13	5.8	10	11
16	24	*78	126		112	154	53	15	14	6.2	10	10
17	32	57	132		126	138	38	17	13	6.6	12	11
18	25	46	a129		141	*129	40	24	13	6.6	12	10
19	28	50	a126		101	126	46	22	12	6.6	13	11
20	28	78	a115		70	126	43	21	11	6.6	11	13
21	31	109	a109		88	126	31	21	9.8	6.6	11	13
22	30	109			84	129	30	20	9.8	6.6	11	13
23	38	115			84	129	30	19	12	6.2	11	13
24	34	112		a105	86	123	27	21	9.8	6.2	15	13
25	34	112			94	141	25	20	9.8	7.0	27	14
26	*38	109	a110		104	154	23	20	8.4	6.6	121	14
27	46	107			109	141	21	19	8.4	6.2	52	13
28	41	101			121	132	20	18	8.4	6.2	24	13
29	46	109			-	123	19	17	7.7	6.2	a24	13
30	43	118			------	112	18	16	8.4	6.6	a18	13
31	37	------			------	118	------	14	------	7.0	17	------
Total	857	2,252	4,035	3,330	2,897	4,601	1,684	546	387.5	209.2	540.2	392
Mean	27.6	75.1	130	107	103	148	56.1	17.6	12.9	6.75	17.4	13.1
Ac-ft	1,700	4,470	8,000	6,600	5,750	9,130	3,340	1,080	769	415	1,070	778

Calendar year 1954: Max 209 Min 9.8 Mean 75.4 Ac-ft 54,570
Water year 1954-55: Max 209 Min 5.8 Mean 59.5 Ac-ft 43,100

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 1 discharge measurement, weather records, and records for other Sevier River stations.

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Otter Creek Reservoir near Antimony, Utah

Location.--Lat 38°10'15", long 112°00'00", in NW¼ sec. 28, T. 30 S., R. 2 W., near spillway on right side of dam on Otter Creek, 5 miles northwest of Antimony and 12 miles east of Kingston.

Records available.--January to September 1914, October 1945 to September 1955 in reports of Geological Survey. 1915, 1934-45 in files of Salt Lake City district office, Geological Survey.

Gage.--Staff gage. Altitude of gage is 6,350 ft (by barometer).

Extremes.--Maximum contents observed during year, 25,320 acre-ft Apr. 30, May 1 (gage height, 23.4 ft); minimum observed, 400 acre-ft Sept. 30 (gage height, 1.5 ft).
1914-15, 1934-55: Maximum contents observed, 55,000 acre-ft May 1, 1946, May 20, 1948, June 10, 20, 1949, June 10, 1952 (gage height, 37.0 ft); minimum observed, 400 acre-ft Aug. 1, Sept. 1, 20, Oct. 1, 1934, Aug. 31, Sept. 2, 10, 1954, Sept. 30, 1955.

Remarks.--Reservoir was formed in 1898 by a 15-foot earth-fill, rock-faced dam which was raised some each year to the ultimate height of 45 ft in 1915. The dam has a concrete core through the center. Capacity, 52,500 acre-ft between gage height zero (bottom of outlet gate) and gage height 36.0 ft (top of flashboards on spillway). Spillway crest is at gage height of 33.5 ft. Reservoir stores water from Otter Creek and also water diverted from East Fork Sevier River, for irrigation in Sevier River basin.

Contents, in acre-feet, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	600	2,830	5,400	9,100	12,390	15,580	22,620	25,320	19,920	12,390	7,100	2,550
2	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-
10	1,300	3,620	7,000	9,980	13,430	17,670	23,520	24,780	-	-	5,100	1,600
11	-	-	-	-	-	-	-	-	17,200	10,220	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-
20	2,020	4,420	8,000	11,090	14,600	20,100	24,600	23,340	14,880	8,600	-	800
21	-	-	-	-	-	-	-	-	-	-	3,620	-
22	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	15,440	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-
30	-	a5,310	-	-	-	-	25,320	-	a12,620	-	-	400
31	a2,760	-------	9,000	a12,280	-------	22,440	-------	a20,200	-------	a7,220	a2,650	-------
(†)	-	-	12.5	-	17.6	21.8	23.4	-	-	-	-	1.5
(‡)	+2,160	+2,550	+3,690	+3,280	+3,160	+7,000	+2,880	-5,120	-7,580	-5,400	-4,570	-2,250

Calendar year 1954: (‡) -6,580
Water year 1954-55: (‡) -200

† Gage-height, in feet, at end of month.
‡ Change in contents, in acre-feet.
a No gage-height record; contents interpolated.

East Fork Sevier River near Kingston, Utah

Location.--Lat 38°12', long 112°09', in SW¼NW¼ sec. 13, T. 30 S., R. 3 W., on right bank 1,000 ft downstream from bridge on State Highway 22, 1.7 miles east of Kingston, and 4.1 miles upstream from mouth.

Drainage area.--1,260 sq mi, approximately.

Records available.--March 1913 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,110 ft (from river-profile map). Prior to Apr. 29, 1914, staff gage at site 1 mile upstream at different datum. Apr. 29, 1914, to June 2, 1939, water-stage recorder at site 1,500 ft downstream at different datum.

Average discharge.--42 years, 86.0 cfs (62,260 acre-ft per year).

Extremes.--Maximum discharge during year, 154 cfs Aug. 5 (gage height, 1.71 ft); minimum daily recorded, 11 cfs Nov. 16.
1913-55: Maximum discharge, 2,030 cfs May 12, 1941 (gage height, 5.05 ft); minimum daily recorded, 7 cfs Oct. 29, 30, 1930.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. Diversions above and below station for irrigation. Flow regulated by Otter Creek Reservoir (see preceding page).

Revisions (water years).--WSP 750: 1931-32.

Rating table, water year 1954-55, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.2	9.0	1.0	56
.4	15	1.5	124
.7	31	2.0	222

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18		a14				14		138	115	95	*78
2	17		a14				14	a32	140	115	102	80
3	17		a14				14		144	114	121	77
4	18		21				14	34	144	112	121	69
5	17		23				14	39	140	110	124	68
6	16		17				14	40	135	110	*124	66
7	18		15				14	44	*134	112	124	64
8	16	a14					14	62	132	110	124	62
9	14		b14				13	105	126	109	126	60
10	14					a14	13	106	127	109	124	56
11	14						13	103	130	*105	124	56
12	14						13	99	130	105	124	52
13	13						13	95	130	106	122	49
14	15						13	95	130	105	120	48
15	14	*14		a14	a14		*13	95	130	105	120	46
16	14	11					13	96	130	108	120	44
17	14	12					23	a99	127	106	118	44
18	14	14				*14	30	102	126	106	114	43
19	16	13				14	30	101	126	108	101	43
20	15	13	a14			14	31	99	126	108	98	41
21	15	13				b14	30	103	127	108	94	40
22	16	13				b14	30	105	122	105	92	37
23	16	13				b14	29	105	118	105	91	35
24	15	13				14		103	118	105	91	32
25	14	13				14		121	118	105	91	32
26	*15	13				14		147	115	103	89	30
27	15	14				14	a30	144	115	102	87	31
28	15	13				14		144	116	101	84	31
29	15	12			-	15		144	115	99	82	30
30	a15	13			------	14		142	116	98	81	31
31	a15	------			------	14	------	138	------	96	80	------
Total	474	403	454	434	392	435	629	2,906	3,825	3,305	3,308	1,475
Mean	15.3	13.4	14.6	14.0	14.0	14.0	21.0	93.7	128	107	107	49.2
Ac-ft	940	799	900	861	778	863	1,250	5,760	7,590	6,560	6,560	2,930

Calendar year 1954: Max 240 Min - Mean 60.7 Ac-ft 43,940
Water year 1954-55: Max 147 Min 11 Mean 49.4 Ac-ft 35,790

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby streams.
b Stage-discharge relation affected by ice.

Piute Reservoir near Marysvale, Utah

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

Drainage area.--2,400 sq mi, approximately.

Records available.--March 1914 to September 1955.

Gage.--Staff gage generally read once daily. Datum of gage is 5,900.8 ft above mean sea level (levels by Office of State Engineer).

Extremes.--Maximum contents observed during year, 39,200 acre-ft Apr. 13-17 (gage height, 59.2 ft); minimum observed, 826 acre-ft Sept. 30 (gage height, 22.8 ft).
1914-55: Maximum contents, 82,300 acre-ft May 28, 1922 (gage height, 76.4 ft, original capacity table); no contents at times during several years.

Remarks.--Reservoir is formed by earth-fill dam; storage began in summer of 1910. Capacity, 74,010 acre-ft between gage height 16 ft (approximate bottom of reservoir) and gage height 76 ft (top of flashboards on spillway since 1941). Spillway crest is at gage height 70.2 ft. No dead storage. Water is used for irrigation.

Contents, in acre-feet, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,020	3,910	-	16,830	24,290	29,800	38,330	35,450	21,920	19,280	4,770	3,420
2	-	-	-	17,190	24,430	30,110	38,510	34,800	21,660	19,040	4,570	3,090
3	-	-	-	17,430	24,570	30,410	-	33,830	21,920	18,540	4,440	2,620
4	-	-	-	17,800	24,710	30,710	-	33,200	21,920	18,280	4,370	2,200
5	-	4,440	8,380	18,160	24,990	31,020	-	32,250	21,790	17,800	4,300	1,890
6	1,720	-	-	18,410	25,140	31,330	-	31,630	21,790	17,430	4,230	1,680
7	-	-	9,900	18,660	25,280	31,630	-	30,260	21,660	16,950	4,300	1,490
8	1,600	-	10,670	18,910	25,420	31,940	-	-	21,520	16,250	4,440	1,340
9	-	4,570	11,070	19,160	25,560	32,410	-	-	21,380	16,570	4,640	1,380
10	1,640	4,640	11,370	19,410	25,850	32,880	39,030	-	21,380	14,890	4,980	1,420
11	1,720	-	-	19,670	25,990	33,360	39,030	-	21,380	14,230	5,200	1,270
12	-	-	11,680	19,800	26,280	33,830	39,030	-	21,250	13,580	5,410	1,170
13	-	4,770	11,990	19,930	-	34,150	39,200	-	21,120	12,940	5,630	1,040
14	-	-	-	20,060	-	34,480	39,200	-	20,980	12,300	5,850	996
15	2,200	4,770	12,410	20,320	-	34,800	39,200	-	20,840	11,680	6,070	880
16	-	-	12,830	20,580	-	35,290	39,200	-	20,710	11,070	6,220	-
17	2,380	-	13,150	20,840	-	35,790	39,200	-	20,580	10,470	6,070	-
18	-	-	13,580	21,120	-	35,950	39,030	-	20,450	10,090	5,850	-
19	2,470	4,370	-	21,380	27,880	36,120	39,030	-	20,320	9,340	5,850	-
20	2,520	4,440	14,020	21,660	-	36,290	39,030	-	20,320	8,810	5,920	-
21	-	4,640	14,230	21,920	-	36,630	39,030	-	20,190	8,210	5,920	-
22	2,620	-	-	22,060	28,320	36,960	38,850	21,520	20,190	7,710	5,780	-
23	-	-	-	-	-	37,130	38,850	21,380	20,190	-	5,630	-
24	-	-	15,010	-	-	37,130	-	21,250	20,320	6,910	5,410	-
25	3,200	5,630	15,230	-	-	37,300	-	21,120	20,450	-	5,270	-
26	-	-	15,340	-	-	37,300	-	20,980	20,320	6,150	5,200	-
27	-	-	15,570	23,160	29,350	37,470	-	20,840	20,190	5,850	5,050	-
28	-	-	15,790	-	29,500	37,650	-	20,710	20,060	5,550	4,910	-
29	-	-	16,020	-		37,820	-	-	19,800	4,980	4,570	-
30	3,790	a7,000	16,250	23,720	-------	37,990	a36,400	-	19,540	5,120	4,170	826
31	3,850	-------	16,600	24,000	-------	38,160	-------	a21,620	-------	4,910	3,790	-------
(†)	29.6	-	43.7	49.4	53.2	58.6	-	-	46.1	31.2	29.5	22.8
(‡)	+1,740	+3,150	+9,600	+7,400	+5,500	+8,660	-1,760	-14,780	-2,080	-14,630	-1,120	-2,960

Calendar year 1954: (‡) -5,060
Water year 1954-55: (‡) -1,280

† Gage height, in feet, at end of month.
‡ Change in contents, in acre-feet.
a No gage-height record; contents interpolated or estimated on basis of inflow-outflow records.

Sevier River below Piute Dam, near Marysvale, Utah

Location.--Lat 38°19'55", long 112°11'15", in NW¼SE¼ sec. 34, T. 28 S., R. 3 W., on left bank three-quarters of a mile downstream from Piute Dam and 8 miles south of Marysvale.

Drainage area.--2,440 sq mi, approximately.

Records available.--May 1911 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,870 ft (by barometer). Prior to May 4, 1912, staff gage at site half a mile upstream at different datum. May 4, 1912, to Mar. 31, 1935, water-stage recorder at site a quarter of a mile upstream at different datum. Apr. 1, 1935, to Apr. 7, 1936, at datum 0.2 ft higher.

Average discharge.--43 years (1912-55), 237 cfs (171,600 acre-ft per year).

Extremes.--Maximum discharge during year, 592 cfs May 2 (gage height, 2.17 ft); minimum not determined, probably occurred during period of ice effect.
1911-55: Maximum discharge, 2,600 cfs May 23, 24, 1922; practically no flow at times when reservoir gates are closed.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. One small diversion between gage and Piute Reservoir. Flow regulated by Piute Reservoir (see preceding page).

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 7-20, June 4-8, July 4-18, Sept. 2-30)

-0.2	3.2	0.4	35
-.1	4.8	.6	60
0.0	7.6	1.0	145
.1	12	2.0	520
.2	18	2.2	605

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	118	50	5.6	3.4	4.2		70	528	72	135	*296	328
2	99	68	5.1	3.4	4.3		72	560	106	142	238	312
3	89	67	4.8	3.4	4.3		72	582	122	192	203	284
4	81	75	4.5	3.4	4.3		72	578	128	312	145	270
5	89	85	4.3	*3.7	4.2		72	574	175	*372	99	276
6	97	87	4.0	3.8	4.5		70	574	163	448	63	231
7	122	89	3.7	3.7	4.5		70	574	*154	528	23	217
8	118	93	3.5	3.8	4.5		70	574	252	548	18	146
9	80	108	b3.5	4.0	4.3		70	552	217	544	13	85
10	39	115	3.5	3.7	4.5	5.5	70	504	115	536	6.4	93
11	32	113	3.4	3.7	4.5		72	524	104	532	35	138
12	24	115	3.4	3.7	4.5		72	524	115	524	56	117
13	24	118			4.5		72	524	203	520	54	89
14	24	120			4.5		74	496	196	520	36	90
15	36	122			4.5		*72	488	186	512	119	102
16	65	*125			*4.5		74	472	163	484	172	89
17	68	128			4.8		74	388	160	448	166	57
18	68	130		b3.8		*5.9	72	276	148	404	145	59
19	57	130				5.9	72	266	130	404	79	115
20	44	82	b3.4			b5.9	72	266	104	396	102	132
21	33	32				b5.9	72	192	108	388	151	122
22	28	11				6.5	70	203	122	384	169	95
23	29	7.4		4.0	5.0	36	70	189	145	356	186	50
24	36	14		4.0		74	89	160	145	242	217	28
25	33	15		4.0		87	166	130	113	196	*206	50
26	*30	13		4.0		85	175	91	70	154	217	93
27	30	12		4.0		79	240	89	68	104	242	94
28	30	14		4.0		75	292	56	81	67	266	74
29	30	26		4.2	-	74	372	54	85	67	292	27
30	28	16	3.2	4.0	------	74	468	91	122	102	316	46
31	32	------	3.2	4.2	------	72	------	91	------	245	344	------
Total	1,713	2,180.4	113.5	118.1	130.4	779.6	3,448	11,170	4,052	10,806	4,674.4	3,909
Mean	55.3	72.7	3.66	3.81	4.66	25.1	115	360	135	349	151	130
Ac-ft	3,400	4,320	225	234	259	1,550	6,840	22,160	8,040	21,430	9,270	7,750

Calendar year 1954: Max 672 Min 0.7 Mean 151 Ac-ft 109,400
Water year 1954-55: Max 582 Min - Mean 118 Ac-ft 85,480

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Feb. 18 to Mar. 17; discharge estimated on basis of weather records and records for station above Clear Creek.

Sevier River above Clear Creek, near Sevier, Utah

Location.--Lat 38°34'20", long 112°15'25", in NW¼NE¼ sec. 5, T. 26 S., R. 4 W., on right bank 0.6 mile upstream from bridge on U. S. Highway 89, 0.7 mile upstream from Clear Creek, and 1 mile south of Sevier.

Drainage area.--2,700 sq mi, approximately.

Records available.--May 1911 to November 1916 (published as Sevier River at Sevier), April 1939 to September 1955 (discontinued). Records for November 1916 to September 1929 (published as Sevier River at Sevier) include flow of Clear Creek and are not equivalent.

Gage.--Water-stage recorder. Altitude of gage is 5,560 ft (by barometer). Prior to May 16, 1912, staff gage, and May 16, 1912, to Sept. 30, 1929, water-stage recorder, at site 0.8 mile downstream at different datums (datum lowered 1 ft Mar. 31, 1913).

Average discharge.--20 years (1912-16, 1939-55), 266 cfs (192,600 acre-ft per year).

Extremes.--Maximum discharge during year, 544 cfs May 7 (gage height, 2.61 ft); minimum daily not determined, occurred during period of ice effect.
1911-16, 1939-55 (not including flow of Clear Creek): Maximum discharge, 2,270 cfs May 16, 1941 (gage height, 4.83 ft); minimum, 4.6 cfs Feb. 13, 1952.
1916-29 (including flow of Clear Creek): Maximum discharge, 2,800 cfs during last week of May 1922, computed on basis of records for station near Marysvale; minimum, 10 cfs Nov. 27, 1919.

Remarks.--Records good except those for periods of ice effect, which are fair. Many diversions above station for irrigation. Flow regulated by Piute and Otter Creek Reservoirs.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.7	13	1.6	146
.8	20	2.0	271
1.0	38	2.5	476
1.3	80	3.0	738

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	163	42	(*)				80	431	119	198	304	293
2	124	58					78	481	110	217	308	275
3	114	70					78	510	166	217	280	262
4	91	69		(*)			80	519	168	268	236	250
5	88	78				25	78	519	186	331	198	250
6	90	82					80	524	204	397	154	246
7	132	82					80	534	204	449	91	230
8	157	84	22		(*)	30	78	534	254	510	50	214
9	146	88				31	78	539	*324	514	45	124
10	70	121				31	78	*481	297	510	40	86
11	50	128				31	75	472	233	505	33	126
12	43	126			22	30	*80	481	217	*505	80	152
13	36	126				28	82	481	250	500	80	138
14	34	126				28	82	467	293	490	72	106
15	35	126				26	82	449	250	490	54	99
16	43	124		21		26	84	444	236	481	176	126
17	69	126				*26	84	403	240	458	207	106
18	74	126				25	84	347	223	418	210	64
19	74	126				25	82	297	207	397	*174	56
20	60	126				21	84	290	192	388	110	*119
21	51	67				19	84	264	183	384	146	144
22	44	49				23	82	254	189	380	192	124
23	39	34				25	84	250	230	376	204	106
24	39	27	21			40	86	*236	236	324	220	50
25	48	29				84	124	226	223	286	233	32
26	46	30			25	95	189	186	174	250	230	54
27	44	28				93	226	157	121	240	233	101
28	*44	27				86	264	134	126	144	243	64
29	43	29			-	84	282	84	160	126	260	66
30	43	32			------	80	384	108	168	124	264	33
31	40	------			------	80	------	163	------	208	290	------
Total	2,174	2,386	666	651	631	1,242	3,412	11,265	6,183	11,085	5,377	4,096
Mean	70.1	79.5	21.5	21.0	22.5	40.1	114	363	206	358	173	137
Ac-ft	4,310	4,730	1,320	1,290	1,250	2,460	6,770	22,340	12,260	21,990	10,670	8,120

Calendar year 1954: Max 687 Min 14 Mean 170 Ac-ft 123,430
Water year 1954-55: Max 539 Min - Mean 135 Ac-ft 97,510

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 29 to Mar. 7, Mar. 21, 22.

Clear Creek at Sevier, Utah

Location.--Lat 38°34'55", long 112°15'30", in SW¼NE¼ sec. 32, T. 25 S., R. 4 W., on left bank 400 ft upstream from bridge on U. S. Highway 89, 1,000 ft upstream from mouth, and 0.3 mile south of Sevier.

Drainage area.--169 sq mi.

Records available.--February 1912 to September 1919 and October 1940 to September 1955 in reports of Geological Survey. April 1934 to September 1955 in reports of Sevier River water commissioner.

Gage.--Water-stage recorder. Altitude of gage is 5,530 ft (from topographic map). Prior to Oct. 1, 1940, at site 700 ft downstream at different datum. Oct. 1, 1940, to Sept. 24, 1946, at site 400 ft downstream at different datum.

Average discharge.--20 years (1912-17, 1940-55), 31.0 cfs (22,440 acre-ft per year).

Extremes.--Maximum discharge during year, 611 cfs Aug. 17 (gage height, 5.97 ft), from rating curve extended above 290 cfs by logarithmic plotting; minimum, 0.8 cfs Dec. 28. 1912-19, 1940-55: Maximum discharge that of Aug. 17, 1955; no flow Aug. 26, 1913.

Remarks.--Records good. Practically entire flow is diverted above station each year during latter part of irrigation season.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 23 to Jan. 1, Apr. 15 to July 5)

1.2	0.1	2.0	27
1.3	1.8	2.5	59
1.4	4.1	3.0	103
1.6	10		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	1.8	*11	16	9.9	13	20	28	61	18	9.4	3.4
2	1.8	1.8	18	14	11	15	24	25	59	17	6.9	3.4
3	1.8	1.8	20	13	9.9	17	19	21	51	16	5.2	3.4
4	2.0	2.0	25	*13	9.9	17	18	18	47	14	4.9	3.4
5	2.0	2.2	18	13	7.2	14	17	20	44	13	14	3.4
6	1.8	2.7	18	13	10	12	18	23	46	12	10	3.4
7	1.8	2.7	20	12	9.2	14	18	29	56	11	5.8	3.4
8	2.0	2.7	8.2	8.2	*9.9	15	19	34	68	6.6	3.6	2.9
9	2.0	2.7	9.5	9.5	11	18	22	32	*80	4.1	2.2	2.0
10	2.0	3.6	18	13	7.2	24	25	29	87	3.2	2.0	2.7
11	2.0	4.1	20	13	7.2	22	26	29	82	2.5	3.8	2.2
12	2.0	6.1	19	8.9	11	22	*23	*32	75	*2.2	8.0	2.0
13	2.0	6.6	17	8.9	11	23	26	35	70	1.6	7.6	2.0
14	2.0	6.3	13	10	11	22	45	37	63	1.4	6.3	2.0
15	2.0	6.6	14	9.2	11	19	50	42	48	1.8	6.3	2.0
16	2.0	6.6	12	12	11	16	49	37	45	4.4	6.6	2.2
17	2.0	6.6	6.1	11	14	*15	43	34	44	9.5	36	2.0
18	1.8	6.9	7.2	9.5	12	15	36	33	42	7.6	26	2.0
19	2.7	6.9	8.2	12	6.9	16	29	28	40	8.2	*17	2.5
20	3.2	6.6	9.2	12	8.9	15	25	28	38	6.9	10	*2.2
21	2.5	6.1	9.5	11	9.2	12	25	31	34	6.9	8.6	2.0
22	2.2	6.1	10	8.9	10	15	26	35	32	15	7.2	2.0
23	2.2	6.1	12	12	12	17	25	42	33	13	19	2.0
24	2.0	6.1	14	10	11	19	27	*43	32	12	13	2.0
25	2.0	6.1	18	11	12	22	28	47	28	12	19	2.2
26	1.8	6.1	17	9.9	12	19	30	45	19	20	13	2.2
27	1.8	5.8	12	7.6	13	16	28	41	18	12	8.9	2.0
28	*2.0	6.6	7.2	8.2	13	19	24	39	21	8.6	5.5	1.8
29	2.0	7.2	10	8.6	-	18	23	39	24	6.9	4.1	1.6
30	1.8	5.5	11	11	------	22	23	60	23	3.8	4.9	1.8
31	1.8	------	15	10	------	16	------	66	------	4.9	3.8	------
Total	62.8	149.0	427.1	339.4	291.4	539	811	1,082	1,410	276.1	298.6	72.3
Mean	2.03	4.97	13.8	10.9	10.4	17.4	27.0	34.9	47.0	8.91	9.63	2.41
Ac-ft	125	296	847	673	578	1,070	1,610	2,150	2,800	548	592	143

Calendar year 1954: Max 146 Min 1.0 Mean 16.4 Ac-ft 11,850
Water year 1954-55: Max 87 Min 1.4 Mean 15.8 Ac-ft 11,430

* Discharge measurement made on this day.

Sevier River near Sigurd, Utah

Location.--Lat 38°52', long 111°57', in SW¼ sec. 19, T. 22 S., R. 1 W., on left bank 200 ft downstream from bridge, half a mile downstream from Rockyford Dam, 2 miles northeast of Sigurd, and 5 miles upstream from Lost Creek.
Drainage area.--3,340 sq mi, approximately.
Records available.--July to September 1912, July 1914 to September 1955. Prior to October 1938 published as "near Vermilion."
Gage.--Water-stage recorder. Altitude of gage is 5,180 ft (by barometer). July to September 1912, staff gage a quarter of a mile downstream at different datum. July 31, 1914, to Apr. 19, 1917, staff gage, and Apr. 20, 1917, to Oct. 16, 1935, water-stage recorder, at present site at datum 2.00 ft lower.
Average discharge.--41 years (1914-55), 104 cfs (75,290 acre-ft per year).
Extremes.--Maximum discharge during year, 202 cfs July 28 (gage height, 2.36 ft); minimum daily, 0.2 cfs for many days in July, August, September.
1914-55: Maximum discharge, 2,400 cfs May 30, 1922 (gage height, 6.1 ft, present datum), from rating curve extended above 600 cfs on basis of maximum discharge for other Sevier River stations; practically no flow (seepage only) when Rockyford Reservoir gates are closed.
Remarks.--Records good above 10 cfs and fair below. Flow regulated by reservoirs above station. During irrigation season practically the entire flow through Rockyford Dam is diverted above station for irrigation below the station.
Revisions.--Revised figures of discharge, in cubic feet per second, for the water years 1927-28, and 1947, superseding those published in WSP 650, 670, and 1090, are given herewith:

Day	Discharge	Day	Discharge	Day	Discharge
1927		1927-Con.		1928-Con.	
Jan.1-31	†a112	Mar. 21	95	May 22	182
Feb. 1-5	†a115	22	101	23	200
6	118	23	101	24	192
7	118	24	101	25	172
8	116	25	101	26	148
9	114	26	93	27	145
10	107	27	91	28	134
11	103	28	91	29	127
12	99	29	91	30	122
13	97	30	90	31	120
14	103	31	82	June 1	107
15	112	Dec. 14	105	2	77
16	120	15	101	13	78
17	122	16	93	14	93
18	125	17	91	15	114
19	138	18	90	16	122
20	134	19	90	17	129
21	120	20	90	18	160
22	107	21-25	†a95	19	160
23	103	26	100	20	162
24	101	27	107	21	170
25	97	28-31	†110	22	174
26	93			23	165
27	95	1928		24	170
28	97	Jan.1-31	†a115	25	155
Mar. 1	99	Feb. 1-4	†a120	26	141
2	95	5	125	27	116
3	93	6	132	28	78
4	95	7	136	July 24	80
5	97	8	134	25	93
6	95	9	129	26	112
7	91	10	127	27	125
8	91	11	123	28	125
9	88	12	120	29	122
10	93	13	129	30	127
11	93	14-19	†a115	31	138
12	95	May 13	80	Aug. 1	138
13	93	14	99	2	136
14	97	15	110	3	145
15	95	16	167	4	157
16	91	17	205	5	167
17	90	18	213	6	165
18	90	19	192	7	153
19	91	20	180	8	112
20	91	21	172	9	67
				1947	
				June 30	47

† Average for period indicated.
a No gage-height record; discharge estimated on basis of records for other Sevier River stations.

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
January 1927	-	-	-	112	6,890
February	-	138	93	111	6,180
March	-	101	82	93.5	5,750
Water year 1926-27	-	138	-	57.9	41,900
December 1927	-	-	57	83.4	5,130
January 1928	-	-	-	115	7,070
February	-	136	34	96.4	5,540
May	-	213	34	111	6,830
June	-	174	17	93.6	5,570
July	-	138	-	39.3	2,420
August	-	167	-	48.0	2,950
Water year 1927-28	-	-	-	73.5	53,400
Calendar year 1928	-	-	-	71.0	51,500
June 1947	1,898	-	-	63.3	3,760
Water year 1946-47	24,782.9	-	-	67.9	49,150
Calendar year 1947	25,529.3	-	-	69.9	50,630

Sevier River near Sigurd, Utah--Continued

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Dec. 25, May 26 to June 16, July 16-24)

0.6	0	1.3	32
.7	2.1	1.6	62
.8	4.9	2.0	130
.9	8.5	2.3	202
1.1	18		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	56	*58	55	87	112	126	4.3	6.7	1.9	32	0.2
2	1.9	56	58	60	87	118	99	4.3	7.4	.2	5.8	.2
3	1.9	56	60	65	75	128	82	4.6	5.6	.2	.6	.2
4	1.9	55	70	68	78	143	82	4.9	4.3	.2	.4	.2
5	1.9	55	78	70	86	150	97	4.9	3.2	.6	.4	.6
6	1.9	55	72	*70	94	150	124	4.6	2.4	.8	.2	.4
7	1.9	55	69	68	92	150	122	4.6	2.1	1.0	.2	.4
8	1.9	55	63	68	94	148	114	4.6	*2.4	1.0	.2	.4
9	1.9	55	60	63	90	143	89	4.6	2.4	.6	.2	.4
10	2.1	56	60	66	*89	141	84	4.3	1.9	.2	.2	.4
11	2.1	54	61	69	84	143	90	4.3	1.9	.2	.8	.4
12	2.1	55	62	69	81	145	89	*4.3	2.1	.2	1.0	.4
13	2.1	57	62	68	81	148	*82	4.3	1.9	*.2	1.0	.4
14	2.1	57	61	66	86	141	81	3.8	1.7	.2	1.0	.4
15	2.1	58	61	65	86	*134	86	3.8	1.7	.2	1.0	.2
16	34	60	57	65	87	130	75	3.8	1.7	1.6	1.0	.2
17	49	60	55	68	92	84	82	4.3	1.9	15	1.0	.2
18	50	57	54	69	103	52	75	29	1.9	32	*1.3	.2
19	50	57	55	69	116	55	66	29	2.1	54	1.0	.4
20	50	62	55	72	120	57	66	46	14	51	.8	.4
21	50	61	49	78	118	60	57	73	19	27	.4	*21
22	50	60	50	78	112	54	63	89	22	17	.4	32
23	50	58	49	75	108	46	72	70	22	*44	1.7	33
24	50	57	50	75	99	21	68	58	14	89	1.5	33
25	51	57	51	78	96	22	49	39	*19	141	.8	37
26	*52	57	54	76	97	31	25	36	19	189	.4	42
27	52	57	52	79	99	38	7.4	40	19	197	.2	43
28	54	58	44	79	105	65	4.6	38	10	197	.2	13
29	54	58	54	79	-	124	4.6	37	6.0	150	.2	.4
30	55	58	52	82	------	139	4.3	26	6.0	75	.2	.4
31	55	------	54	84	------	132	------	12	------	55	.2	------
Total	835.7	1,712	1,790	2,196	2,642	3,204	2,145.9	696.3	225.3	1,342.3	56.3	261.4
Mean	27.0	57.1	57.7	70.8	94.4	103	71.5	22.5	7.51	43.3	1.82	8.71
Ac-ft	1,660	3,400	3,550	4,360	5,240	6,360	4,260	1,380	447	2,660	112	518

Calendar year 1954: Max 197 Min 0.2 Mean 38.8 Ac-ft 28,090
Water year 1954-55: Max 197 Min 0.2 Mean 46.9 Ac-ft 33,950

* Discharge measurement made on this day.

Salina Creek at Salina, Utah

Location.--Lat 38°57', long 111°52', in NW¼ sec. 25, T. 21 S., R. 1 W., on right bank 150 ft upstream from bridge on U. S. Highway 89 in Salina and three-quarters of a mile upstream from mouth.

Drainage area.--298 sq mi.

Records available.--April 1914 to September 1917 (fragmentary), October 1917 to September 1919, November 1942 to September 1955 (discontinued).

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5,140 ft (estimated on basis of nearby benchmark). Prior to Mar. 23, 1915, staff gage at site 150 ft downstream at different datum. Mar. 23, 1915, to Oct. 16, 1917, staff gage, and Oct. 17, 1917, to Sept. 30, 1919, water-stage recorder, at site about a quarter of a mile upstream at different datum.

Average discharge.--14 years (1917-19, 1943-55), 19.4 cfs (14,000 acre-ft per year).

Extremes.--Maximum discharge during year, 231 cfs Aug. 15 (gage height, 2.30 ft, from graph based on partial gage-height record); minimum daily, 0.1 cfs for several days in July, September.
1914-19, 1942-55: Maximum discharge, 2,650 cfs July 27, 1953 (gage height, 6.70 ft, from floodmark), from rating curve extended above 400 cfs by logarithmic plotting; no flow at times in 1950, 1951, 1954.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Diversions above and below station for irrigation.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.7	0	1.1	10
.8	.6	1.2	18
.9	2.2	1.3	28
1.0	5.2		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		3.2	*5.5	16			1.2	1.4	2.4	0.4	0.6	0.2
2		3.2	6.9	20			1.9	1.6	2.0	.4	.8	.2
3	a0.4	3.8	4.5	24			1.0	1.0	2.2	.3		.2
4		2.9	7.4	24			.7	1.1	2.9	.4		.2
5		2.7	3.8	b20			1.1	1.1	3.5	.2		.1
6		2.2		*b8		a10	1.0	1.0	2.4	.3	a.6	.2
7		2.4	b3.0	b6			.5	11	*1.2	.4		.3
8		2.7					.5	14	1.2	.4		.4
9		2.7	3.5				.7	4.5	1.6	.4	.4	.2
10		2.9	2.7		(*)		.6	1.4	1.6	.2	.4	.3
11		3.5	6.4				.6	2.7	1.2	.2	.4	.2
12		3.2	9.0				.4	*9.7	2.0	.2	.7	.2
13	a1.0	5.2	9.0			a14	*.4	19	.8	.2	.4	.2
14		3.2	8.5				1.5	11	1.1	*.2	.5	.4
15		3.2	b8.0			*12	7.4	16	1.2	.1	14	.5
16		4.5	b7.5		a7	9.6	7.0	4.8	1.2	.1	9.7	.4
17		4.1	7.4			8.5	8.8	3.8	.8	.1	*.7	.4
18		2.9	6.0			6.9	1.1	2.0	.7	.1	1.0	.4
19		2.9	6.0			4.8	.8	2.0	1.0	.1	.6	.4
20		2.9	7.4	a5		2.7	.8	2.9	.7	.2	.4	.3
21		4.5	8.5			2.9	1.1	4.1	.8	.3	.6	*.4
22		2.7	9.0			9.2	1.0	10	1.1	.3	.4	.4
23		3.2	9.6			9.0	.6	6.9	.7	.4	.4	.3
24	a2.5	3.5	11			6.9	.7	4.5	.7	5.0	5.0	.2
25		3.5	9.6			6.0	.8	4.5	.5	1.0	1.2	.4
26	(*)	3.2	7.9			3.2	1.8	4.8	.6	2.9	.7	.5
27	3.5	2.9	6.9			2.7	1.8	4.5	.5	5.2	.2	.6
28	2.2	2.4	5.6			3.1	.7	3.5	.4	1.2	.2	.7
29	3.2	1.8	11			1.8	1.0	2.7	.4	.6	.3	.7
30	3.2	3.5	12		------	11	.8	2.0	.5	.4	.2	.4
31	3.2	------	13		------	3.8	-----	2.0	------	.4	.2	------
Total	47.3	95.5	222.6	238	196	260.1	48.3	161.5	37.9	22.6	43.6	10.3
Mean	1.53	3.18	7.18	7.68	7	8.39	1.61	5.21	1.26	0.73	1.41	0.34
Ac-ft	94	189	442	472	389	516	96	320	75	45	86	20

Calendar year 1954: Max 20 Min 0 Mean 4.00 Ac-ft 2,900
Water year 1954-55: Max 24 Min 0.1 Mean 3.79 Ac-ft 2,740

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 2 discharge measurements and records for nearby streams.
b Stage-discharge relation affected by ice.

Transmountain diversions from Colorado River basin to Sevier Lake basin

The following 13 ditches and tunnels in Utah, each equipped with a water-stage recorder, divert water from the Colorado River basin to the Sevier Lake basin. Records of daily flow collected by Geological Survey available in Salt Lake City district office.

Fairview ditch diverts water from tributaries of San Rafael River and Price River to San Pitch River basin. Gage is located in SE¼ sec. 26, T. 13 S., R. 5 E.

Candland ditch diverts water from tributary of San Rafael River to San Pitch River basin. Gage is located in NW¼ sec. 1, T. 15 S., R. 5 E.

Coal Fork ditch diverts water from tributary of San Rafael River to San Pitch River basin. Gage is located in SW¼ sec. 24, T. 15 S., R. 5 E.

Twin Creek tunnel diverts water from tributary of San Rafael River to San Pitch River basin. Gage is located in SE¼ sec. 35, T. 15 S., R. 5 E.

Spring City tunnel diverts water from tributary of San Rafael River to San Pitch River basin. Gage is located in SE¼ sec. 16, T. 16 S., R. 5 E.

Black Canyon ditch diverts water from tributary of San Rafael River to San Pitch River basin. Gage is located in SE¼ sec. 10, T. 16 S., R. 5 E.

Cedar Creek tunnel diverts water from tributary of San Rafael River to San Pitch River basin. Gage is located in SE¼ sec. 10, T. 16 S., R. 5 E.

Reeder ditch diverts water from tributary of San Rafael River to San Pitch River basin. Gage is located in NW¼ sec. 32, T. 16 S., R. 5 E.

John August ditch diverts water from tributary of San Rafael River to San Pitch River basin. Gage is located in NW¼ sec. 35, T. 17 S., R. 4 E.

Madsen ditch diverts water from tributary of San Rafael River to San Pitch River basin. Gage is located in SW¼ sec. 23, T. 17 S., R. 4 E.

Ephraim tunnel diverts water from tributary of San Rafael River to San Pitch River basin. Gage is located in NW¼ sec. 24, T. 17 S., R. 4 E.

Larsen tunnel diverts water from tributary of San Rafael River to San Pitch River basin. Gage is located in SE¼ sec. 10, T. 17 S., R. 4 E.

Horseshoe tunnel diverts water from tributary of San Rafael River to San Pitch River basin. Gage is located in SW¼ sec. 2, T. 17 S., R. 4 E.

Transmountain diversions, in acre-feet, from Colorado River basin to Sevier Lake basin, water year October 1954 to September 1955

Name	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
Fairview ditch.....	0	0	0	0	0	0	0	0	236	722	319	1	1,280
Candland ditch.....	0	0	0	0	0	0	0	3	52	24	2	0	81
Coal Fork ditch....	0	0	0	0	0	0	0	10	156	26	12	6	210
Twin Creek tunnel..	3	0	0	0	0	0	0	9	188	13	8	0	221
Spring City tunnel.	33	30	31	25	22	25	45	377	1,050	89	89	68	1,880
Black Canyon ditch.	0	0	0	0	0	0	0	8	201	17	5	0	231
Cedar Creek tunnel.	6	6	0	0	0	0	0	90	159	36	21	11	329
Reeder ditch.....	5	4	0	0	0	0	0	11	135	25	68	24	272
John August ditch..	0	0	0	0	0	0	0	18	107	107	14	0	246
Madsen ditch.....	0	0	0	0	0	0	0	2	2	0	0	0	4
Ephraim tunnel.....	21	18	12	12	11	12	24	1,050	1,600	168	0	23	2,950
Larsen tunnel.....	0	0	0	0	0	0	0	88	634	57	7	0	786
Horseshoe tunnel...	0	0	0	0	0	0	0	19	337	43	10	0	409
Total in Utah.....	68	58	43	37	33	37	69	1,680	4,860	1,330	555	133	8,900

Note.--There is one diversion from the Sevier Lake basin to the Colorado River basin. This diversion is Tropic and East Fork Canal which diverts water from East Fork Sevier River to tributary of Paria River. Gage is located in SW¼ sec. 17, T. 36 S., R. 3 W. Figures of diversion, in acre-feet, for the 1955 water year are as follows: October, 104; May, 518; June, 392; July, 347; August, 256; September, 437; total for the water year, 2,050.

Pleasant Creek near Mount Pleasant, Utah

Location.--Lat 39°32'30", long 111°23'30", in W½ sec. 5, T. 15 S., R. 5 E., on left bank a quarter of a mile downstream from South Fork and 3.9 miles east of Mount Pleasant.

Drainage area.--16 sq mi, approximately.

Records available.--October 1954 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,760 ft (from river-profile map).

Extremes.--Maximum discharge during year not determined, occurred during mud-rock flow Aug. 16; minimum, 3.0 cfs July 22 caused by temporary obstruction upstream.
Maximum discharge known, 2,060 cfs July 24, 1946, from critical-depth determination of peak flow over retention dam half a mile below gage.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Records include flow of Candland ditch and Coal Fork ditch which are measured transmountain diversions from San Rafael River basin (see preceding page).

Rating tables, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used July 10 to Aug. 15, Aug. 29 to Sept. 15)

Oct. 1 to Aug. 15		Aug. 16 to Sept. 30	
1.9	6.5	6.5	6.0
2.0	10	6.8	12
2.2	24	7.0	18
2.4	44	7.5	37
2.8	108		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		9.0	8.9	7.7	8.1	8.9	8.9	16	51	30	10	*9.6
2		9.3	8.9	7.3	8.5	8.9	8.9	16	47	28	9.7	9.6
3		8.9	8.5	7.3	8.5	8.9	8.1	14	42	27	9.3	9.4
4		8.9	8.5	7.3	8.5	8.9	8.5	14	42	25	17	9.4
5		8.5	8.1	7.3	8.5	8.5	8.1	17	41	24	8.9	9.2
6		8.5	8.1	7.3	8.9	8.5	8.1	21	57	23	9.3	9.2
7		8.5	8.1	*7.3	8.9	8.9	7.7	20	73	21	9.7	9.0
8		8.5	8.1	7.3	8.9	8.9	8.1	19	*92	21	9.3	9.0
9		8.5	8.1	7.3	8.9	8.9	8.9	16	96	21	8.9	9.0
10		8.9	8.1	7.7	8.5	8.9	9.3	16	83	19	8.9	9.0
11		8.9	8.1	7.7	*8.5	8.9	8.9	21	73	18	8.9	8.8
12		9.7	8.1	7.7	8.5	9.3	8.9	24	57	16	9.7	8.8
13		9.7	7.7	8.1	8.9	9.3	*9.3	*35	*59	16	12	8.8
14		9.3	7.7	8.1	8.9	8.9	10	32	*61	*15	15	8.4
15	a9.0	9.3	7.7	8.1	8.5	8.5	10	30	73	15	11	8.4
16		9.7	7.7	8.1	8.5	8.5	10	24	66	15	a35	8.4
17		*9.7	7.7	8.1	8.9	8.9	12	21	68	14	a16	8.4
18		9.3	7.7	8.1	8.5	*8.5	12	21	70	14	*a14	8.2
19		8.9	7.7	8.1	8.5	8.9	10	25	64	14	a12	*8.4
20		9.3	7.7	8.1	8.1	8.5	10	32	62	14	a10	7.8
21		9.3	7.7	8.1	8.9	8.5	11	41	62	13	a9.5	7.8
22		9.3	8.1	8.1	8.9	8.9	11	52	57	12	a9.5	7.8
23		8.9	7.7	8.1	8.9	8.9	10	54	55	12	a9.5	7.8
24		8.9	7.7	8.1	8.9	8.9	11	52	51	13	a9.5	8.0
25		8.9	7.7	8.5	8.9	8.5	12	*47	45	16	a9.0	9.4
26		8.9	8.1	8.1	8.9	8.1	14	39	43	15	a9.0	9.0
27		8.5	8.1	8.1	8.9	8.1	12	37	42	11	a9.0	8.2
28		8.1	7.7	8.5	8.9	8.5	12	35	37	10	a9.0	8.2
29		8.5	7.7	8.5	-	8.9	13	42	34	9.7	9.2	8.0
30		8.5	7.7	8.5	------	8.5	15	48	32	9.7	9.4	8.0
31		------	7.7	8.5	------	8.5	------	50	------	9.7	9.4	------
Total	279.0	269.1	247.1	245.1	243.2	270.7	306.7	931	1,735	521.1	346.6	259.0
Mean	9.0	8.97	7.97	7.91	8.69	8.73	10.2	30.0	57.8	16.8	11.2	8.63
Ac-ft	553	534	490	486	482	537	608	1,850	3,440	1,030	687	514

Calendar year 1954: Max - Min - Mean - Ac-ft -
Water year 1954-55: Max 96 Min 7.3 Mean 15.5 Ac-ft 11,210

Peak discharge (base, 50 cfs).--June 8 (8 p.m.) 166 cfs (3.07 ft); Aug. 4 (3 p.m.) 280 cfs (3.6 ft); Aug. 14 (2:30 a.m.) 112 cfs (2.82 ft); Aug. 16 (time and discharge unknown).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of weather records and records for nearby streams.

Sevier River below San Pitch River, near Gunnison, Utah

Location.--Lat 39°09'00", long 111°52'30", in NE¼ sec. 14, T. 19 S., R. 1 W., on left bank 1,000 ft downstream from San Pitch River and 3 miles west of Gunnison.

Drainage area.--4,880 sq mi, approximately.

Records available.--October 1917 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,900 ft (from topographic map).

Average discharge.--38 years, 224 cfs (162,200 acre-ft per year).

Extremes.--Maximum daily discharge during year, 410 cfs Mar. 11; minimum daily, 23 cfs Aug. 30 to Sept. 2.
1917-55: Maximum discharge, 2,620 cfs June 1, 1922 (gage height, 5.68 ft); minimum daily, 8 cfs July 13-17, Sept. 6, 1934.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by reservoirs and many diversions above station for irrigation. Most of flow diverted above station during irrigation season.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 1 to 27)

1.0	21	2.0	152
1.2	38	2.5	267
1.5	71	3.0	410

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	81	150	140	156	169	195	206	87	72	*54	98	23
2	83	150	140	160	173	a210	202	85	75	43	91	23
3	83	148	*148	165	167	a220	186	80	75	40	70	25
4	84	150	156	171	158	a240	167	38	79	39	64	25
5	84	150	162	167	154	a260	162	36	83	30	52	32
6	90	148	165	*169	162	a270	173	35	84	26	39	45
7	84	148	165	165	b165	a280	173	37	74	27	58	57
8	84	146	156	b160	169	a300	184	46	*67	27	46	58
9	85	144	150	b155		333	177	50	59	25	52	58
10	85	140	146	156		321	138	42	46	26	47	59
11	127	136	154	162	*b165	410	128	40	47	25	47	60
12	106	132	158	162		365	132	42	47	24	45	60
13	97	136	156			330	*134	*52	45	24	48	98
14	94	134	156			*313	128	58	52	*24	37	69
15	95	134	154		165	285	127	56	57	25	44	63
16	94	220	150	b160	167	262	128	59	60	24	136	60
17	100	160	144		177	247	158	55	60	30	84	59
18	121	152	138		193	206	156	58	64	a45	*84	58
19	125	158	132	160		180	150	71	70	a45	78	61
20	130	160	132	158		171	140	75	71	56	72	60
21	127	152	134	158	b193	152	140	*94	78	74	70	65
22	132	156	130	160		148	132	119	109	100	67	*87
23	144	158	132	160	197	177	136	138	106	39	67	87
24	156	152	136	160	188	162	140	121	97	a137	58	74
25	156	152	142	b160	186	136	140	106	50	a187	60	63
26	*160	152	146	165	186	132	130	106	64	a234	28	92
27	160	152	142		188	128	123	101	65	a245	29	95
28	160	154	b135		195	132	119	100	69	a256	27	97
29	160	152	b160	b162	-	152	97	95	69	a193	26	87
30	160	148	158		------	206	88	91	60	a112	23	63
31	150	------	156	169	------	216	------	81	------	a89	23	------
Total	3,597	4,524	4,573	5,008	4,921	7,139	4,394	2,254	2,054	2,325	1,770	1,863
Mean	116	151	148	162	176	230	146	72.7	68.5	75.0	57.1	62.1
Ac-ft	7,130	8,970	9,070	9,930	9,760	14,160	8,720	4,470	4,070	4,610	3,510	3,700

Calendar year 1954: Max 360 Min 34 Mean 133 Ac-ft 96,360
Water year 1954-55: Max 410 Min 23 Mean 122 Ac-ft 88,100

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station at Sigurd and water commissioner's notes.
b Stage-discharge relation affected by ice.

Sevier Bridge Reservoir near Juab, Utah

Location.--Lat 39°22', long 112°02', in NW¼ sec. 1, T. 17 S., R. 2 W., at Sevier Bridge Dam, 13 miles southwest of Juab.

Drainage area.--5,120 sq mi, approximately.

Records available.--January 1914 to September 1955.

Gage.--Staff gage below gage height 60 ft and wire-weight gage above, read once daily.

Extremes.--Maximum contents during year, 109,800 acre-ft Apr. 24-26, 28 (gage height, 63.4 ft); minimum recorded, 2,620 acre-ft Sept. 25 (gage height, 14.7 ft).
1914-55: Maximum contents, 251,000 acre-ft Apr. 19, 20, 1922 (gage height, 80.0 ft), from former capacity table; no storage at times during 1927-28, 1930-36, 1951.

Remarks.--Reservoir was formed by a 30-foot earth-fill dam. Storage began about 1904. Dam ultimately raised to 90 ft by June 1916. Capacity, 236,000 acre-ft between gage heights 6 ft (approximate bottom of outlet tunnel) and 80.0 ft (top of flashboard on spillway). No dead storage. Water is used for irrigation.

Revisions(water years).--WSP 960: 1941.

Contents, in acre-feet, at 8 a.m., water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37,340	45,070	53,160	63,480	73,790	85,520	103,600	107,100	63,480	50,650	19,060	-
2	37,560	45,300	53,410	64,030	74,390	86,160	104,000	105,300	62,660	48,910	19,060	-
3	37,560	45,540	53,920	64,310	74,990	86,490	104,400	103,600	62,110	47,940	18,740	-
4	37,780	46,020	54,180	64,580	75,590	87,130	104,900	101,900	61,840	46,730	18,580	-
5	37,780	46,250	54,950	65,150	75,590	87,460	105,300	100,300	61,570	45,070	18,270	-
6	37,780	46,490	54,950	65,710	76,190	88,100	105,300	98,300	61,030	43,190	18,110	-
7	38,220	46,730	55,470	65,710	76,490	88,750	106,200	96,400	60,760	41,120	17,960	-
8	38,440	46,980	55,980	66,270	76,800	89,420	106,200	94,930	60,490	39,320	18,110	-
9	38,660	46,980	56,240	-	77,410	90,090	106,600	92,810	59,950	37,340	18,270	-
10	38,880	46,980	56,760	66,550	77,710	90,760	106,600	90,760	59,410	35,200	18,420	-
11	39,100	46,980	57,030	66,830	78,020	91,770	107,100	88,760	58,870	33,120	18,580	-
12	39,100	46,980	57,560	67,110	78,020	93,160	107,100	86,810	58,610	31,100	18,580	-
13	39,540	46,980	57,820	67,390	78,320	94,220	107,500	84,570	57,560	28,960	18,420	-
14	39,760	47,220	58,080	67,970	78,630	95,630	108,000	82,660	56,500	27,830	18,270	-
15	39,990	47,460	58,610	68,250	79,240	96,780	108,000	80,480	56,500	26,340	18,110	-
16	39,990	47,700	58,870	68,540	79,860	97,540	108,000	78,930	56,500	24,890	17,960	-
17	40,440	47,940	59,140	68,540	80,480	97,920	108,400	77,710	56,500	23,460	17,340	-
18	40,440	48,430	59,680	69,120	81,100	98,300	108,900	76,490	56,760	22,420	17,020	-
19	40,890	48,910	59,680	69,400	81,100	99,070	108,900	74,990	57,030	21,390	16,430	-
20	41,120	49,410	59,950	69,690	81,420	99,450	108,900	74,090	57,030	20,370	15,990	-
21	41,350	49,660	60,220	70,260	81,730	99,860	108,900	72,900	57,290	19,710	15,410	-
22	41,590	49,900	60,760	70,560	82,350	100,300	109,400	71,730	57,290	18,740	14,570	-
23	41,800	50,400	60,760	70,850	82,980	100,300	109,400	70,850	57,560	18,270	13,620	-
24	42,030	50,890	61,300	71,440	83,620	101,100	109,800	69,690	57,290	17,650	12,710	2,840
25	42,730	51,140	61,570	71,730	83,620	101,100	109,800	68,540	56,760	17,180	11,840	2,620
26	42,960	51,390	61,840	72,020	84,250	101,500	109,800	67,680	56,240	17,020	10,880	2,840
27	43,190	51,890	62,110	72,020	84,880	101,900	109,400	67,110	-	16,880	9,730	3,150
28	43,650	52,150	62,380	72,610	85,200	101,900	109,800	66,550	54,430	16,290	9,070	3,460
29	44,120	52,400	62,380	72,610	-	102,700	108,900	66,270	53,160	16,730	8,320	3,610
30	44,360	52,910	62,660	73,200	-------	102,700	108,000	65,990	51,890	17,180	a7,550	3,860
31	44,590	-------	62,930	73,500	-------	103,200	-------	64,580	-------	18,420	a7,000	-------
(†)	42.2	45.6	49.4	53.1	56.9	61.9	63.0	50.0	45.2	28.9	-	16.3
(‡)	+7,250	+8,320	+10,020	+10,570	+11,700	+18,000	+4,800	-43,420	-12,690	-33,470	-11,420	-3,140

Calendar year 1954: (‡) -55,270
Water year 1954-55: (‡) -33,480

† Gage height, in feet, at end of month.
‡ Change in contents, in acre-feet.
a No gage-height record; contents estimated on basis of records for station below reservoir.

Sevier River near Juab, Utah

Location.--Lat 39°22', long 112°02', in NE¼ sec. 2, T. 17 S., R. 2 W., on left bank 1,600 ft downstream from Sevier Bridge Dam and 11 miles southwest of Juab.

Drainage area.--5,120 sq mi, approximately.

Records available.--September 1911 to September 1955.

Gage.--Water-stage recorder and rubble masonry control since Apr. 16, 1914. Altitude of gage is 4,940 ft (by barometer). Prior to Apr. 16, 1914, staff gage 500 ft upstream at different datum. Apr. 17, 1914, to Apr. 7, 1938, water-stage recorder at present site and datum. Apr. 8, 1938, to Mar. 31, 1942, water-stage recorder at site 1,300 ft upstream at different datum.

Average discharge.--44 years, 246 cfs (178,100 acre-ft per year).

Extremes.--Maximum discharge during year, 1,160 cfs May 14 (gage height, 4.83 ft); minimum daily, 1.4 cfs Aug. 8.
1911-55: Maximum discharge, 2,140 cfs June 2, 1922 (gage height, 8.50 ft); practically no flow at times when reservoir gates are closed.

Remarks.--Records good except those for periods of no gage-height record, which are fair. No diversion between station near Gunnison and this station. Flow regulated by Sevier Bridge Reservoir (see preceding page).

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.9	1.4	2.0	238
1.0	5.0	3.0	530
1.1	14	4.0	860
1.3	56	4.9	1,180
1.5	103		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	5.7	3.7	4.3	3.2		5.0	672	584	724	170	287
2	49	5.7	3.7	5.0	3.2		5.0	814	399	654	209	282
3	51	5.7	3.7	5.0	3.2		5.0	881	328	614	209	270
4	22	32	3.7	4.3	3.2		5.0	920	279	769	209	270
5	3.7	49	3.2	4.3	3.7		5.0	898	252	864	209	296
6	3.7	49	3.2	*5.0	3.2		5.0	870	*252	940	149	334
7	3.7	49	3.7	5.0	3.7		5.0	853	261	976	49	331
8	3.7	80	3.7	5.0	3.7	a5.0	5.0	906	270	990	1.4	313
9	3.7	131	3.7	5.0	3.7		5.0	940	270	1,020	4.3	244
10	3.7	154	3.7	5.0	*3.7		5.0	1,050	310	1,030	5.0	206
11	3.7	151	3.7	5.0	4.3		*5.7	1,030	325	1,020	4.3	201
12	3.7	123	3.7	5.0	5.0		6.4	*1,040	492	1,000	127	170
13	3.7	67	3.7	4.3	5.0		6.4	1,070	596	856	209	149
14	3.7	49	3.7	3.7	5.7		5.0	1,110	227	*769	211	144
15	3.7	26	3.7	3.7	6.4	*5.0	5.0	844	4.3	758	181	123
16	3.7	4.3	3.7	3.7		5.0	5.0	664	4.3	748	*274	93
17	3.7	3.7	3.7	3.7		5.0	5.0	657	6.4	657	345	60
18	3.7	3.7	3.7	3.2		5.7	5.0	657	5.7	572	345	40
19	3.7	3.7	3.7	3.2		5.0	5.7	650	5.0	548	342	40
20	3.7	3.7	4.3	3.2		5.0	5.0	644	5.7	497	342	*40
21	4.3	3.7	4.3	3.7		5.0	5.0	644	5.7	450	435	40
22	4.3	3.7	4.3	3.2	a5.0	5.0	5.7	644	6.4	441	515	40
23	4.3	3.7	4.3	3.2		5.7	5.7	*641	150	400	536	a16
24	5.0	3.7	5.0	3.2		5.7	5.7	641	302	383	569	
25	*5.0	3.7	4.3	2.8		5.7	130	581	296	305	584	
26	5.0	3.7	5.0	2.8		5.0	123	473	357	146	572	a4.0
27	5.7	3.7	5.0	2.8		5.0	62	377	494	47	497	
28	5.7	3.7	5.0	2.8		5.0	227	360	542	14	441	
29	5.7	3.7	5.0	2.8	-	5.0	435	403	596	1.5	458	
30	5.7	*3.7	4.3	3.2	------	5.0	524	532	702	57	488	
31	5.7	------	4.3	3.2	------	5.0	------	641	------	98	363	------
Total	266.6	1,033.2	124.4	120.3	125.9	157.8	1,627.3	23,107	8,327.5	18,328.5	9,053.0	4,017.0
Mean	8.60	34.4	4.01	3.88	4.50	5.09	54.2	745	278	591	292	134
Ac-ft	529	2,050	247	239	250	313	3,230	45,830	16,520	36,350	17,960	7,970

Calendar year 1954: Max 1,100 Min 1.5 Mean 211 Ac-ft 152,500
Water year 1954-55: Max 1,110 Min 1.4 Mean 182 Ac-ft 131,500

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and water commissioner's notes.

Sevier River near Lynndyl, Utah

Location.--Lat 39°29', long 112°24', in SE¼ sec. 27, T. 15 S., R. 5 W., on right bank 1½ miles downstream from highway bridge and 3½ miles southwest of Lynndyl.

Drainage area.--6,270 sq mi, approximately.

Records available.--April 1914 to October 1919. November 1942 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,660 ft (by barometer).

Average discharge.--17 years (1914-19, 1943-55), 217 cfs (157,100 acre-ft per year).

Extremes.--Maximum discharge during year, 798 cfs July 12 (gage height, 6.26 ft); minimum daily recorded, 15 cfs Oct. 16, 17.
1914-19, 1942-55: Maximum daily discharge, 1,820 cfs June 9, 1914, based on records at Leamington; minimum recorded, 9.6 cfs Jan. 22, 1945.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by Sevier Bridge Reservoir (see p. 134). Several diversions for irrigation between reservoir and station. Records of chemical analyses and water temperatures for the water year 1955 are given in WSP 1403.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-18, Nov. 28 to Dec. 7, Feb. 27 to Mar. 26, May 3 to July 23)

1.8	13	3.5	170
1.9	16	4.0	265
2.2	30	5.0	504
2.5	50	6.0	766
3.0	100	6.1	793

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	62	b19	19		29	57	522	433	462	115	319
2	49	62	19	18		26	57	599	258	529	151	207
3	46	62	20	*17		30	56	731	256	512	232	187
4	53	62	21	16		37	54	677	237	410	244	170
5	55	61	20			84	56	720	223	484	248	170
6	44	64	19			71	59	709	236	560	242	182
7	34	73	19		(*)	48	58	688	250	638	232	226
8	28	73	19		b18	40	58	650	278	667	172	238
9	21	75	17			98	56	620	292	715	110	232
10	18	130	17			131	47	*638	*285	734	77	254
11	17	177	18			350	*46	662	280	*771	72	201
12	17	201	17			203	45	715	319	788	70	198
13	16	205	16			157	43	680	394	777	68	200
14	*16	164	16			146	38	726	576	717	126	187
15	16	125	16			42	35	744	470	591	278	182
16	15	111	16			23	33	696	150	576	238	185
17	15	71				*21	37	466	104	597	254	160
18	21	39		b17		19	42	434	91	542	350	144
19	37	33				19	45	433	86	424	357	*110
20	38	31				17	50	432	79	367	*350	99
21	37	29			b20	17	51	440	75	340	350	92
22	35	28				17	53	457	70	287	357	90
23	47	27				17	52	462	68	265	345	89
24	62	26	b17			17	52	463	64	274	343	89
25	66	25				16	52	400	219	248	350	88
26	70	47				33	52	294	209	374	355	76
27	69	36			23	52	159	240	211	209	322	66
28	*66	20			31	53	113	240	278	92	292	62
29	65	*20			-	56	107	260	359	74	228	60
30	64	b19			------	57	371	385	393	98	246	58
31	62	------	21		------	57	------	492	------	76	324	------
Total	1,247	2,158	548	529	544	1,983	2,034	16,675	7,243	14,198	7,498	4,621
Mean	40.2	71.9	17.7	17.1	19.4	64.0	67.8	538	241	458	242	154
Ac-ft	2,470	4,280	1,090	1,050	1,080	3,930	4,030	33,070	14,370	28,160	14,870	9,170

Calendar year 1954: Max 855 Min 15 Mean 183 Ac-ft 132,800
Water year 1954-55: Max 788 Min 15 Mean 162 Ac-ft 117,600

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record May 8, 9, May 18 to June 9; discharge estimated on basis of records for station near Juab and records of diversions between Juab and Lynndyl stations.

Chalk Creek near Fillmore, Utah

Location.--Lat 38°58', long 112°18', in NE¼ sec. 28, T. 21 S., R. 4 W., on left bank 1 mile east of Fillmore and 2½ miles downstream from South Fork.

Drainage area.--60 sq mi, approximately.

Records available.--May to July 1914, March 1944 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,180 ft (by barometer). May to July 1914, staff gage at site 1½ miles upstream at different datum.

Average discharge.--11 years (1944-55), 33.4 cfs (24,180 acre-ft per year).

Extremes.--Maximum discharge during year, 364 cfs Aug. 5; minimum daily, 5.1 cfs Nov. 5. 1914, 1944-55: Maximum discharge, 509 cfs May 4, 1952; minimum daily, 4.9 cfs Dec. 9, 1951.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Records include flow of Fillmore Canal which diverts on left bank at flood control dam 400 ft upstream. During low-water periods flow is diverted 2 miles upstream and carried in a lined ditch to the head of the Fillmore Canal. One small irrigation diversion above gage.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		8.8	7.6	8.4		a8.0	17	72	75	22	13	9.2
2		8.8	7.8	8.4		a8.1	19	74	67	21	14	9.2
3		8.8	8.4	8.4		8.2	19	70	58	20	13	9.0
4		8.6	10	8.6		8.3	19	66	54	19	12	9.0
5		5.1	9.0	8.6		8.3	20	71	52	19	36	9.0
6		5.5	8.6	8.6		8.3	20	89	54	18	14	8.8
7		5.9	8.6	7.8		8.9	20	109	54	18	12	8.8
8		6.0	6.6	5.7		8.9	21	118	57	17	12	8.8
9		6.0	7.6			9.0	22	104	56	17	12	8.8
10		6.2	9.4		a7.5	9.7	23	95	54	16	12	8.6
11		6.2	8.6			13	26	98	50	16	12	8.4
12		8.0	8.2			15	24	105	47	15	14	8.2
13		8.2	8.8			20	27	110	45	16	12	8.2
14		7.8	8.4			22	32	110	48	16	12	8.2
15	a8.5	7.6	8.4			21	41	109	42	16	12	8.2
16		9.0	6.8			20	45	95	41	17	a12	8.2
17		8.2	6.2			19	52	86	38	17	a12	8.4
18		8.2	6.4			17	52	75	36	19	a12	8.6
19		8.0	6.6			17	50	67	34	21	12	8.8
20		8.0	7.2	a8.0		17	48	65	33	19	11	8.6
21		7.8	7.4			16	48	71	31	17	11	8.4
22		7.8	7.8		a7.8	16	48	90	30	16	11	8.4
23		7.8	8.0			15	45	100	28	15	11	8.4
24		7.8	8.4			15	48	99	27	15	11	9.0
25		7.8	8.4			15	60	96	27	17	13	12
26		7.6	8.2			15	74	89	26	24	12	10
27		7.6	7.8		a7.9	14	70	81	25	16	11	9.4
28	9.4	7.6	6.2		a8.0	14	61	75	24	14	10	9.0
29	9.4	7.6	8.2		-	15	58	74	24	14	10	9.0
30	9.2	6.2	8.2		------	16	62	76	23	13	9.7	9.0
31	9.2	------	8.4		------	16	------	75	------	13	9.4	------
Total	266.7	224.5	246.2	248.5	213.9	433.7	1,171	2,714	1,260	533	390.1	265.6
Mean	8.60	7.48	7.94	8.02	7.64	14.0	39.0	87.5	42.0	17.2	12.6	8.85
Ac-ft	529	445	488	493	424	860	2,220	5,380	2,500	1,060	774	527

Calendar year 1954: Max 93 Min 5.1 Mean 17.9 Ac-ft 12,960
Water year 1954-55: Max 118 Min 5.1 Mean 21.8 Ac-ft 15,700

a No gage-height record; discharge estimated on basis of weather records and record for nearby streams.

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Three Creeks near Beaver, Utah

Location.--Lat 38°17'40", long 112°25'40", in NW¼NW¼ sec. 16, T. 29 S., R. 5 W., on right bank half a mile downstream from Three Creeks Dam, half a mile upstream from Merchant Creek, and 16 miles east of Beaver.

Drainage area.--19.5 sq mi.

Records available.--July 1947 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 8,550 ft (from topographic map). Prior to Aug. 24, 1947, at site 500 ft downstream at different datum. Aug. 24, 1947, to May 11, 1950, at site 700 ft upstream at different datum.

Average discharge.--8 years, 9.90 cfs (7,170 acre-ft per year).

Extremes.--Maximum discharge during year, 33 cfs May 27 (gage height, 2.17 ft); minimum daily, 0.1 cfs May 6, 9, 10.
1947-55: Maximum discharge, 290 cfs Aug. 9, 1947 (gage height, 4.35 ft, site and datum then in use), from rating curve extended above 19 cfs on basis of slope-area determination of peak flow; minimum daily, that of May 6, 9, 10, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow affected by storage in Puffer Lake and in Three Creeks Reservoir (capacity, 2,020 acre-ft) completed in 1950.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	0.1	1.4	4.5
1.0	.3	1.5	7.0
1.1	.6	1.7	13
1.2	1.4	1.9	22
1.3	2.7	2.1	34

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.2	3.2		2.4			2.5	12	29	9.3	6.7	4.7
2	3.2	3.2	b3.0	2.4			2.8	5.8	29	9.0	6.5	4.7
3	3.3			2.4			2.5	.7	*28	8.7	7.0	4.5
4	3.3		2.7	2.4			2.4	.4	27	8.7	7.0	4.5
5	3.3		3.2	2.2			2.2	.2	26	8.1	7.0	4.5
6	3.3	b3.2	2.8	2.2			2.2	.1	25	8.1	6.7	4.5
7	3.7		2.8	2.2			2.2	.2	19	7.8	6.2	4.5
8	3.5		2.7	2.2			2.4	.2	11	7.8	5.9	*4.3
9	3.3		2.7	2.2			2.7	.1	5.7	7.8	5.9	4.1
10	3.3		2.8	2.2			2.8	.1	5.9	7.6	*5.9	3.9
11	3.3	3.2	2.8	2.1			2.8	.2	11	7.3	5.7	3.9
12	3.3	3.5	2.7	2.1			2.8	.2	18	7.3	5.9	3.7
13	3.3	b3.3	2.7	2.1			3.3	.2	18	7.3	6.2	3.7
14	3.3	b3.3	2.5	2.2				.2	18	7.0	5.7	3.5
15	3.3	3.3	2.5	2.2	a2.0	a2.1		.2	22	7.3	5.9	3.5
16	3.3	3.2	2.5	2.0			a4.0	10	28	7.8	6.2	3.5
17	3.3		2.5	2.1				23	27	7.6	6.7	3.7
18	3.3		2.4	2.1				26	25	7.6	5.9	3.7
19	3.3	b3.2	2.4	2.1				30	22	8.1	5.9	3.9
20	*3.3		2.4	2.0				29	19	7.6	5.2	3.9
21	3.3		2.4	2.0				28	16	7.8	5.0	3.7
22	3.3	(*)	2.4					26	14	7.8	5.0	3.7
23	3.3		2.4				a5.0	18	13	7.3	5.2	3.7
24	3.5		2.4					18	11	7.3	6.5	3.9
25	3.5		2.4					22	11	7.6	7.0	4.1
26		b3.1	2.2	a2.0			a6.0	27	10	8.4	6.5	4.1
27			2.2				a7.0	30	10	8.7	5.7	3.9
28	b3.3		2.1				*8.1	32	*10	6.7	5.4	3.7
29			2.2		-		9.3	32	9.9	6.5	5.2	3.7
30			2.2		------	*2.1	11	31	9.6	6.5	5.0	3.7
31	3.2	------	2.4		------	2.1	------	30	------	6.7	4.7	------
Total	103.0	95.6	79.4	65.8	56.0	65.1	128.0	432.8	528.1	239.1	185.3	119.4
Mean	3.32	3.19	2.56	2.12	2.0	2.1	4.27	14.0	17.6	7.71	5.98	3.98
Ac-ft	204	190	157	131	111	129	254	858	1,050	474	368	237

Calendar year 1954: Max 41 Min - Mean 6.45 Ac-ft 4,670
Water year 1954-55: Max 32 Min 0.1 Mean 5.75 Ac-ft 4,160

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for stations on Beaver River.
b Stage-discharge relation affected by ice.

Beaver River near Beaver, Utah

Location.--Lat 38°17', long 112°34', in SW¼SW¼ sec. 17, T. 29 S., R. 6 W., on left bank at Fishlake National Forest boundary, three-quarters of a mile downstream from Bakers Canyon and 4¼ miles east of Beaver.

Drainage area.--82 sq mi, approximately.

Records available.--June to September 1906, March 1914 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,200 ft. Prior to Mar. 30, 1914, staff gage and Mar. 30, 1914, to Oct. 15, 1937, water-stage recorder, at site 1,000 ft downstream at different datum.

Average discharge.--41 years (1914-55), 54.5 cfs (39,460 acre-ft per year).

Extremes.--Maximum discharge during year, 151 cfs May 12 (gage height, 2.93 ft); minimum daily, 13 cfs for several days during winter months.
1914-55: Maximum discharge, 1,080 cfs July 22, 1936 (gage height, 7.27 ft, site and datum then in use), from rating curve extended above 500 cfs; minimum daily recorded, 10 cfs for several days in 1915, 1931, 1934.

Remarks.--Records good except those for periods of ice effect, which are fair. No diversions above station for irrigation. Water diverted for hydroelectric power, but returned to stream above station. Some regulation by powerplants and several small reservoirs.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.0	13
2.2	27
2.5	63
2.8	117

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	16	17	b14	15	b15	18	68	*101	42	25	19
2	17	15	17	14	15	15	19	52	95	41	25	20
3	16	16	17	15	b14	16	b17	41	92	41	23	21
4	21	15	18	15	b14	15	b17	39	90	38	26	19
5	17	15	17	15	b14	16	b17	47	86	37	25	18
6	17	15	16	15	b14	b16	18	68	93	36	26	18
7	18	15	16	b15	b14	16	17	84	101	35	25	19
8	20	15	b15	b14	b14	17	17	83	103	34	25	*20
9	17	15	b15	b14	14	b20	17	66	95	28	21	18
10	18	16	[illegible]	15	b14	b20	21	74	93	28	*22	18
11	17	17	17	15	b14	18	19	93	88	33	22	17
12	18	18	b16	b14	15	18	18	111	92	31	22	17
13	15	18	16	b14	15	18	21	111	86	31	26	17
14	17	17	b15	b14	14	21	28	101	88	30	21	16
15	16	17	b15	b14	14	18	32	90	83	28	21	16
16	18	18	*b14	15	18	17	39	77	86	31	24	15
17	15	15	b14	b14	17	17	39	88	79	33	27	16
18	16	16	b14	b14	b16	b16	34	86	76	30	25	17
19	15	16	b13	*15	b14	16	32	92	73	36	27	18
20	*15	17	b13	15	b13	15	31	97	71	37	22	18
21	16	17	b14	b15	b13	b15	37	101	66	31	19	17
22	15	17	b15	b15	b13	b15	36	113	62	33	19	16
23	15	*17	b15	b14	b14	16	32	113	60	31	24	16
24	16	15	15	b14	14	16	37	111	56	29	32	16
25	17	17	15	14	*15	18	55	109	53	32	34	17
26	15	16	b14	b14	16	17	57	103	52	30	30	17
27	15	15	b14	b14	15	17	47	105	49	37	25	16
28	15	14	b13	b14	15	18	*43	109	*47	29	23	15
29	17	13	b13	b14	-	17	53	113	45	27	23	15
30	16	b15	b13	15	------	*18	63	117	44	23	21	15
31	17	------	b13	15	------	17	------	109	------	25	19	------
Total	512	478	465	448	407	524	931	2,771	2,305	1,007	749	517
Mean	16.5	15.9	15.0	14.5	14.5	16.9	31.0	89.4	76.8	32.5	24.2	17.2
Ac-ft	1,020	948	922	889	807	1,040	1,850	5,500	4,570	2,000	1,490	1,030

Calendar year 1954: Max 135 Min - Mean 32.1 Ac-ft 23,260
Water year 1954-55: Max 117 Min 13 Mean 30.4 Ac-ft 22,070

Peak discharge (base, 250 cfs).--No peak above base.
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Beaver River at Adamsville, Utah

Location.--Lat 38°16', long 112°48', in S½ sec. 30, T. 29 S., R. 8 W., on left bank 600 ft downstream from bridge on State Highway 21, a quarter of a mile upstream from Indian Creek, and three-quarters of a mile south of Adamsville.

Drainage area.--272 sq mi.

Records available.--December 1913 to September 1936, October 1937 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,000 ft (from topographic map). Prior to Oct. 1, 1937, at site 300 ft upstream at different datum.

Average discharge.--40 years (1914-36, 1937-55), 37.3 cfs (27,000 acre-ft per year).

Extremes.--Maximum discharge during year, 251 cfs Aug. 17 (gage height, 2.94 ft); no flow for several days in July and August.
1913-36, 1937-55: Maximum discharge, 1,090 cfs July 23, 1941, from rating curve extended above 500 cfs; no flow during summer periods of many years.

Remarks.--Records good except those for periods of ice effect, which are fair. No diversions between station and Rockyford Reservoir. Several ditches above station divert practically entire flow during irrigation season to supply Adamsville and Beaver districts.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.55	0	1.1	9.7
.6	.1	1.3	20
.7	.5	1.5	40
.8	1.4	1.8	68
.9	3.2	2.0	95
1.0	6.0		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	14	b30	b33	35	42	25	1.2	*5.4	0.3	0	6.7
2	1.1	24	b32	b34	33	b40	17	1.1	12	.1	0	6.0
3	1.5	26	35	36	34	b39	19	1.0	7.8	.1	0	5.4
4	.4	26	76	35	b34	b40	19	1.0	7.5	.2	0	5.1
5	2.0	26	50	35	b34	b40	16	.8	8.6	0	.6	4.0
6	3.0	27	40	33	b34	41	9.7	.6	6.4	0	1.4	2.7
7	1.5	27	36	b34	b34	44	7.1	.6	6.0	.1	1.0	2.5
8	2.2	27	35	b34	b34	44	6.0	.3	6.0	.1	.4	*2.5
9	2.0	27	35	b34	b34	49	5.1	.3	5.1	.1	1.1	2.7
10	3.7	26	34	b34	b34	51	5.7	.3	2.3	0	.9	2.2
11	4.5	27	33	b34	33	48	6.4	.3	1.7	0	*.3	2.0
12	4.2	29	33	b34	35	44	5.7	.5	1.3	0	1.1	1.5
13	1.3	33	34	b33	34	44	5.4	.5	1.5	0	5.4	1.7
14	3.0	31	33	b32	36	41	4.5	.3	5.4	0	4.2	1.3
15	4.5	30	32	b33	41	38	2.7	.3	5.4	0	1.3	1.1
16	5.4	32	*34	b33	44	37	2.3	1.5	6.0	0	2.3	1.4
17	2.5	32	38	b34	81	35	2.7	1.7	6.4	0	44	.8
18	1.8	30	36	b35	47	34	3.0	3.2	4.8	0	23	1.0
19	2.7	28	33	*b35	b45	35	2.6	1.2	2.7	0	18	1.8
20	*4.8	28	34	b35	b43	30	2.2	2.5	2.2	0	8.2	1.7
21	5.1	27	33	b34	b40	b30	1.9	2.0	3.0	0	5.4	1.5
22	6.0	27	37	b34	b40	b32	1.6	1.8	3.2	0	7.5	2.0
23	7.8	*28	36	b34	b40	33	1.3	1.5	2.3	0	5.7	1.5
24	8.6	27	35	b34	b40	32	1.3	.6	1.8	0	16	1.3
25	11	28	32	b35	*40	32	1.2	1.8	.8	.1	24	2.2
26	11	28	32	35	38	32	1.0	5.4	.6	0	23	3.7
27	11	27	b31	34	43	31	1.2	2.2	.3	0	11	2.3
28	11	27	b31	35	46	32	1.5	1.7	*2.0	0	10	2.5
29	11	27	b31	34	-	35	*1.2	3.7	2.0	0	9.0	2.7
30	11	b28	b31	35	------	*36	1.1	3.4	1.2	0	8.2	1.8
31	11	------	b32	35	------	33	------	3.0	------	0	9.3	------
Total	157.0	824	1,104	1,059	1,106	1,174	180.4	46.3	121.7	1.1	242.3	75.6
Mean	5.06	27.5	35.6	34.2	39.5	37.9	6.01	1.49	4.06	.04	7.82	2.52
Ac-ft	311	1,630	2,190	2,100	2,190	2,330	358	92	241	2.2	481	150

Calendar year 1954: Max 106 Min 0 Mean 17.1 Ac-ft 12,390
Water year 1954-55: Max 81 Min 0 Mean 16.7 Ac-ft 12,080

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Rockyford Reservoir near Minersville, Utah

Location.--Lat 38°14', long 112°50', in NE¼ sec. 11, T. 30 S., R. 9 W., at Rockyford Dam on Beaver River, 5 miles east of Minersville.

Drainage area.--510 sq mi, approximately.

Records available.--October 1937 to September 1955.

Gage.--Staff gage.

Extremes.--Maximum contents observed during year, 10,810 acre-ft Mar. 31 (gage height, 36.8 ft); minimum observed, 1,520 acre-ft Sept. 30 (gage height, 15.0 ft).
1937-55: Maximum contents observed, 23,810 acre-ft Apr. 22, 25, 28, 30, May 1, 1945; no contents Oct. 16, 31, 1939.

Remarks.--Reservoir is formed by earth-fill dam completed in 1914. Capacity, 23,260 acre-ft between gage height 0.0 ft (bottom of outlet tunnel) and 51.0 ft (spillway crest). Prior to fall of 1937 the spillway crest was at elevation 52.5 ft; capacity, 24,910 acre-ft. Dead storage negligible. Water is used for irrigation in vicinity of Minersville and Milford.

Contents, in acre-feet, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,640	-	3,830	-	-	8,690	-		-	4,710	-	-
2	-	-	-	5,590	-	-	-		6,660	-	-	2,740
3	-	-	-	-	-	-	-		6,560	-	-	-
4	-	-	-	-	-	-	-		-	-	2,870	-
5	-	-	-	-	-	-	-		-	-	-	-
6	-	-	-	-	-	-	-		-	-	-	-
7	-	-	-	-	-	-	-		-	-	-	-
8	-	-	-	-	-	-	-		-	-	-	2,300
9	-	-	-	-	-	-	-		-	-	-	-
10	-	-	-	-	-	-	-		-	-	-	-
11	-	-	-	-	-	-	-		-	-	2,550	-
12	-	-	-	-	-	-	-		-	-	-	-
13	-	-	-	-	-	-	-		-	-	-	-
14	-	-	-	-	-	-	-		-	-	-	-
15	-	-	-	-	-	-	-		-	-	-	-
16	-	-	-	-	-	-	-		-	-	-	-
17	-	-	-	-	-	-	-		-	-	-	-
18	-	-	-	-	-	-	-		-	-	-	-
19	-	-	-	6,390	-	-	-		-	-	-	-
20	-	-	-	-	-	-	-		-	-	-	-
21	-	-	-	-	-	-	-		-	-	-	-
22	-	-	-	-	-	-	-		-	-	-	-
23	-	3,440	-	-	-	-	-		-	-	-	-
24	-	-	-	-	-	-	-		-	-	-	-
25	-	-	-	-	8,360	-	-		-	-	-	-
26	-	-	-	-	-	-	-		-	-	-	-
27	-	-	-	-	-	-	-		-	-	-	-
28	-	-	-	-	8,690	-	10,270		4,880	-	-	-
29	-	-	-	-	-	-	-		-	-	-	-
30	-	a3,780	-	6,990	-------	-	a10,060		a4,760	-	-	1,520
31	2,130	-------	a5,480	a7,040	-------	10,810	-------	a6,870	-------	a3,090	a2,720	-------
(†)	17.5	-	-	-	33.6	36.8	-	-	-	-	-	15.0
(‡)	+500	+1,650	+1,700	+1,560	+1,650	+2,120	-750	-3,190	-2,110	-1,670	-370	-1,200

Calendar year 1954: (‡) -2,370
Water year 1954-55: (‡) -110

† Gage height, in feet, at end of month.
‡ Change in contents, in acre-feet.
a No gage-height record; contents interpolated.

Beaver River at Rockyford Dam, near Minersville, Utah

Location.--Lat 38°14', long 112°50', in NW¼ sec. 11, T. 30 S., R. 9 W., on right bank half a mile downstream from Rockyford Dam and 4¾ miles east of Minersville.

Drainage area.--512 sq mi.

Records available.--December 1913 to September 1955.

Gage.--Water-stage recorder. Concrete control since Nov. 12, 1916. Altitude of gage is 5,400 ft (by barometer). Prior to June 1, 1916, at site 1,500 ft upstream at different datum.

Average discharge.--40 years (1914-36, 1937-55), 39.2 cfs (28,380 acre-ft per year).

Extremes.--Maximum daily discharge during year, 86 cfs May 11-14; minimum daily, 2.9 cfs July 26, Aug. 19, 20.
1913-55: Maximum discharge, 727 cfs June 10, 1921 (gage height, 3.53 ft); minimum daily, 0.4 cfs Mar. 20,.1914.

Remarks.--Records good. One small diversion between dam and station. Flow regulated by Rockyford Reservoir (see preceding page). Numerous diversions above reservoir for irrigation and municipal use.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used July 6 to Aug. 27)

0.7	2.5	1.0	21
.8	6.3	1.2	43
.9	12	1.5	88

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.0	4.0	4.0	4.4	4.8	5.5	6.3	44	*86	32	32	35
2	4.0	4.0	4.0	4.4	4.8	5.9	6.3	44	66	33	32	44
3	4.4	4.0	4.0	4.4	4.8	5.9	6.3	44	64	33	32	44
4	4.4	4.0	4.0	4.4	4.8	5.9	6.3	44	63	33	33	43
5	4.4	4.0	4.4	4.4	4.8	5.9	6.3	56	62	35	33	42
6	4.4	4.0	4.4	4.4	4.8	6.3	6.3	58	36	38	33	38
7	4.4	4.0	4.4	4.4	4.8	6.3	6.3	58	22	42	32	36
8	4.4	4.0	4.4	4.4	4.8	6.3	6.3	60	46	42	31	*33
9	4.4	4.0	4.4	4.4	4.8	6.3	6.3	66	56	42	31	33
10	4.4	4.0	4.4	4.4	4.8	6.3	5.9	80	62	42	32	33
11	4.4	4.0	4.4	4.4	4.8	6.3	5.9	86	60	41	*31	32
12	4.4	4.0	4.4	4.4	4.8	6.3	5.9	86	60	42	30	30
13	4.4	4.0	4.4	4.4	4.8	6.3	6.3	86	60	44	16	29
14	4.4	4.0	4.4	4.8	4.8	5.9	6.3	86	58	46	3.6	29
15	4.4	4.0	4.4	4.8	5.2	5.9	6.3	78	49	31	19	29
16	4.4	4.0	*4.4	4.8	5.2	6.3	5.9	67	42	15	27	29
17	4.4	4.0	4.0	4.8	6.3	6.3	5.9	64	32	34	18	29
18	4.4	4.0	4.0	4.8	5.5	6.3	6.3	63	29	46	3.3	28
19	4.4	4.0	4.0	*4.8	5.5	6.3	6.3	58	27	46	2.9	28
20	*4.4	4.0	4.0	4.8	5.5	6.3	6.3	57	28	44	2.9	29
21	4.0	4.0	4.4	4.8	5.5	6.3	6.3	57	28	43	3.3	30
22	4.0	4.0	4.4	4.8	5.5	6.3	6.3	57	29	35	3.3	31
23	4.0	*4.0	4.4	4.8	5.5	6.3	6.3	57	30	35	21	16
24	4.0	4.0	4.4	4.8	5.5	6.3	6.3	57	31	30	4.0	5.5
25	4.0	4.0	4.4	4.8	*5.5	6.3	6.3	50	32	3.3	3.6	5.5
26	4.0	4.0	4.4	4.8	5.5	6.3	6.3	39	32	2.9	3.6	5.2
27	4.0	4.0	4.4	4.8	5.5	6.3	6.3	37	31	16	3.6	5.2
28	4.0	4.0	4.4	4.8	5.5	6.3	6.3	38	*32	29	4.0	5.2
29	4.0	4.0	4.4	4.8	-	6.3	*26	46	32	30	6.3	5.2
30	4.0	4.0	4.4	4.8	- - - -	*6.3	44	60	32	*30	12	5.2
31	4.0	- - -	4.4	4.8	- - -	6.3	- - - - -	66	- - - - -	31	13	- - - - -
Total	131.2	120.0	133.2	143.6	144.4	192.1	244.4	1,849	1,297	1,046.2	552.4	787.0
Mean	4.23	4.00	4.30	4.63	5.16	6.20	8.15	59.6	43.2	33.7	17.8	26.2
Ac-ft	260	238	264	285	286	381	485	3,670	2,570	2,075	1,100	1,560

Calendar year 1954: Max 100 Min 1.5 Mean 22.6 Ac-ft 16,350
Water year 1954-55: Max 86 Min 2.9 Mean 18.2 Ac-ft 13,170

* Discharge measurement made on this day.

Minersville Canal at Minersville, Utah

Location.--Lat 38°12'50", long 112°54'40" (revised), in NW¼ sec. 7, T. 30 S., R. 9 W., on left bank 1 mile downstream from point of diversion and 1 mile east of Minersville.

Records available.--June to September 1906 (monthly discharge only), March to October 1914, June 1951 to September 1955 (discontinued).

Gage.--Water-stage recorder and Parshall flume. Altitude of gage is 5,310 ft (by barometer). June 21 to Sept. 21, 1906, staff gage, and Mar. 13 to Oct. 17, 1914, water-stage recorder, at approximately same site at different datum.

Extremes.--1906, 1914, 1951-55: Maximum daily discharge, 63 cfs May 16, 23, June 1, 3, 1952; no flow part of each year.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. Flow diverted from Beaver River for irrigation in vicinity of Minersville.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	2.1	1.8				0	33	*32	30	30	25
2	1.8	2.1	2.1				0	33	32	30	30	29
3	1.8	2.1	2.1				0	34	32	30	29	29
4	1.8	2.1	2.1				0	34	32	30	29	29
5	1.8	2.1	2.0				0	33	32	30	28	29
6	1.8	2.1	2.0				0	33	16	31	28	29
7	1.8	2.1	2.0				0	32	.6	30	28	29
8	1.8	2.1	1.8	1.1	1.3	1.4	0	33	20	30	28	*29
9	1.8	2.1	1.7				0	32	30	30	28	29
10	1.8	2.1	1.5				0	33	30	30	28	29
11	1.8	2.1	1.5				0	33	30	30	*28	28
12	1.8	2.1	b1.5				0	33	30	30	29	28
13	1.7	2.1	1.5				0	33	30	30	18	28
14	1.7	2.1	1.5				0	33	30	30	1.2	28
15	1.7	2.1	b1.5				0	32	29	19	13	28
16	1.7	2.1	*b1.5				0	32	28	2.8	30	27
17	1.7	2.1	1.0				0	32	29	16	34	26
18	1.7	2.1	.9				0	32	28	29	5	26
19	1.7	2.1	1.2	(*)			0	32	28	29	3	26
20	1.7	2.1	.9				0	32	28	29	3	28
21	1.7	2.1	1.0				1.1	32	28	29	3	28
22	*1.5	2.1	1.0		1.4	0	1.8	32	29	29	3	28
23	1.3	*2.1	1.0	1.2			1.8	32	29	28	10	20
24	1.5	2.1	1.5				2.5	32	29	28	3	1.7
25	1.5	2.1	1.5		(*)		2.5	32	29	7.4	3	1.7
26	1.7	2.1	1.0				2.8	32	29	.9	3	1.7
27	1.7	2.1					1.3	32	*30	9.7	3	1.5
28	2.1	2.1					0	32	30	28	3	1.5
29	2.1	2.1	1.0		-		*13	33	30	29	4	1.5
30	2.1	2.1			------	*0	34	33	29	29	5	1.3
31	2.1	------			------	0	------	32	------	30	5	------
Total	54.5	63.0	44.1	35.7	37.7	19.6	60.8	1,008	838.6	793.8	495.2	645.9
Mean	1.76	2.10	1.42	1.15	1.35	0.63	2.03	32.5	28.0	25.6	16.0	21.5
Ac-ft	108	125	87	71	75	39	121	2,000	1,660	1,570	982	1,280

Calendar year 1954: Max 35 Min 0 Mean 11.7 Ac-ft 8,470
Water year 1954-55: Max 34 Min 0 Mean 11.2 Ac-ft 8,120

* Discharge measurement or observation of no flow made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Dec. 27 to Mar. 29 (stage-discharge relation affected by ice during most of period), Aug. 18 to Sept. 8; discharge estimated on basis of 4 discharge measurements, weather records, and records for stations on Beaver River at Rockyford Dam and Minersville.

Beaver River at Minersville, Utah

Location.--Lat 38°13'10", long 112°55'35", in NE¼ sec. 12, T. 30 S., R. 10 W., on right bank at Minersville.

Records available.--April 1909 to December 1913, June 1951 to September 1955 (discontinued).

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5,250 ft (from topographic map). Apr. 13, 1909, to Dec. 20, 1913, staff gage at site three-quarters of a mile downstream at different datum.

Average discharge.--8 years, 24.0 cfs (17,380 acre-ft per year).

Extremes.--Maximum discharge during year, 447 cfs Aug. 23 (gage height, 2.50 ft); minimum daily, 0.1 cfs June 23, 28.
1909-13, 1951-55: Maximum discharge observed, 608 cfs Jan. 2, 1910 (gage height, 4.70 ft, site and datum then in use); no flow part of each year 1909-13, 1954.

Remarks.--Records good except those for periods of ice effect, which are fair. Diversions above station for irrigation. Flow affected by storage in Rockyford Reservoir (see p. 141).

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.35	0.1	.7	9.6
.4	.2	.8	17
.5	1.3	1.0	41
.6	4.4		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	2.5	b2.5	3.2	4.0	6.0	8.0	10	25	2.8	1.2	7.5
2	2.5	2.5	1.7	3.2		6.5	8.0	9.6	*25	3.6	1.0	8.0
3	2.5	2.5	1.7	3.6		6.0	8.0	9.6	25	3.6	1.0	8.0
4	2.2	2.5	2.5	3.2		6.0	8.0	8.0	25	4.0	1.0	7.5
5	2.2	2.5	2.0	3.2		6.0	7.5	9.1	25	3.6	1.2	4.0
6	2.2	2.5	2.0	3.6		6.0	8.0	10	23	3.2	1.2	2.5
7	2.2	2.5	2.2			6.0	7.5	9.6	19	3.6	1.0	2.0
8	2.2	2.5	2.5		b3.8	4.9	7.5	9.1	15	4.0	1.0	*1.3
9	2.2	2.5	3.2			4.9	7.5	16	21	4.0	1.2	1.3
10	2.5	2.8	3.2			5.4	6.5	26	24	3.2	1.0	2.0
11	2.5	2.8	3.2			6.0	3.6	35	24	3.2	*.8	2.5
12	2.5	3.2	3.2			6.0	3.2	34	23	3.2	1.3	1.7
13	2.5	2.8	2.8	b3.6		4.4	2.5	30	24	4.9	2.2	1.7
14	2.8	2.8	2.8		4.0	4.4	3.6	30	22	8.0	4.4	1.5
15	2.8	2.8	2.8		3.6	6.5	4.0	31	15	11	4.4	1.5
16	2.8	3.2	(*)		4.0	6.0	4.0	33	11	11	2.2	1.3
17	2.8	2.5			6.5	6.5	4.0	27	2.0	8.0	21	1.3
18	2.5	2.5			6.0	6.5	4.4	20	.2	7.5	7.0	1.5
19	2.5	2.5		*4.0		6.0	4.4	15	.2	7.5	5.4	1.3
20	2.8	2.5				6.5	7.0	12	.2	7.5	4.9	1.5
21	2.8	2.5	b3.0			7.0	6.5	13	.2	5.4	4.0	1.5
22	*3.2	2.5			b5.0	7.0	6.5	12	1.0	.5	4.0	1.7
23	2.5	*2.5				6.5	6.0	12	.1	.3	17	2.8
24	2.8	2.5				6.0	5.4	13	.2	.4	19	4.0
25	3.6	2.5		b3.8	(*)	6.5	4.9	12	.2	.5	10	3.6
26	4.0	2.5			4.9	6.5	5.4	4.9	.3	3.2	5.4	3.2
27	3.6	2.5	b3.2		5.4	6.5	6.5	4.0	*.4	4.0	4.9	3.2
28	2.8	2.5			6.0	7.5	7.5	3.6	.1	1.0	4.4	2.8
29	2.5	2.8			-	8.6	*6.0	9.6	1.7	1.0	4.4	3.2
30	2.2	2.8			------	8.6	7.5	17	2.8	1.0	6.5	3.2
31	2.5	------	3.2	4.0	------	*8.0	-----	24	------	1.0	5.4	------
Total	82.5	78.5	87.5	113.0	125.0	195.2	179.4	509.1	355.6	125.7	149.4	89.1
Mean	2.66	2.62	2.82	3.65	4.46	6.30	5.98	16.4	11.9	4.05	4.82	2.97
Ac-ft	164	156	174	224	248	387	356	1,010	705	249	296	177

Calendar year 1954: Max 47 Min 0 Mean 7.40 Ac-ft 5,370
Water year 1954-55: Max 35 Min 0.1 Mean 5.73 Ac-ft 4,150

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Beaver River near Milford, Utah

Location.--Lat 38°28', long 113°01', in SW¼ sec. 17, T. 27 S., R. 10 W., on right bank 4 miles north of Milford.

Records available.--July 1951 to September 1955 (discontinued).

Gage.--Water-stage recorder and concrete control. Altitude of gage is 4,940 ft (by barometer).

Extremes.--Maximum discharge during year, 17 cfs Mar. 2 (gage height, 1.16 ft); no flow most of year.
1951-55: Maximum discharge, 221 cfs June 11, 1952 (gage height, 2.84 ft); no flow at times each year.

Remarks.--Records good. Most of flow is diverted for irrigation above station. Flow also affected by storage in Rockyford Reservoir.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.36	0	0.7	2.1
.4	.03	.8	4.4
.5	.2	.9	7.7
.6	.9	1.1	16

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						4.4	0.2			0	0	
2						14	.1		(*)	0	0	
3						4.7	.2			0	0	
4						2.3	.2			0	0	
5						1.6	.2			0	.1	
6						.7	.1			0	.1	
7						2.1	.1			0	0	
8						2.4	.1			0	0	(*)
9						2.1	.1			0	0	
10						3.6	.1			0	0	
11						4.4	.1			0	*0	
12						3.6	.1			0	0	
13						3.0	.1			0	0	
14						2.1	.1			0	0	
15						1.6	0			0	0	
16			(*)			1.4	0			0	0	
17						1.3	0			0	0	
18						1.1	0			0	0	
19				(*)		.9	0			0	0	
20						.2	.1			0	0	
21	(*)					.2	.1			0	0	
22						.1	.1			0	0	
23		(*)				.1	.1			0	0	
24					(*)	.1	0			.5	0	
25						.1	0			.1	0	
26						.1	0			0	0	
27						.1	0		(*)	0	0	
28						.1	0			0	0	
29					-	.1	0			0	0	
30					------	.1	*0			*0	0	
31		------			------	*.1	------		------	0	0	------
Total	0	0	0	0	0	58.7	2.2	0	0	0.6	0.2	0
Mean	0	0	0	0	0	1.89	0.07	0	0	0.02	0.01	0
Ac-ft	0	0	0	0	0	116	4.4	0	0	1.2	0.4	0

Calendar year 1954: Max 3.3 Min 0 Mean 0.14 Ac-ft 99
Water year 1954-55: Max 14 Min 0 Mean 0.17 Ac-ft 122

* Discharge measurement or observation of no flow made on this day.

Coal Creek near Cedar City, Utah

Location.--Lat 37°40'20", long 113°02'05", in NE¼ sec. 13, T. 36 S., R. 11 W., on right bank 300 ft downstream from powerplant, 4 miles downstream from South Creek, and 1.3 miles east of Cedar City.

Records available.--May 1915 to November 1919, May 1935 to September 1955. Records for May 1915 to November 1919 do not include flow of power canal operated prior to November 1919 but would be equivalent if flow of power canal is added. For amount of flow in power canal see Diversion paragraph for Coal Creek near Cedar City for these years.

Gage.--Water-stage recorder. Altitude of gage is 6,000 ft (from topographic map). Prior to Mar. 30, 1939, staff gages and Mar. 30, 1939, to May 14, 1945, water-stage recorder, at several sites about 0.5 mile upstream at various datums. May 15, 1945, to Oct. 10, 1951, May 4 to July 2, 1952, water-stage recorder at site 2 miles upstream at different datum.

Average discharge.--19 years (1935-37, 1938-55), 31.8 cfs (23,020 acre-ft per year).

Extremes.--Maximum discharge during year, 1,570 cfs Aug. 13 (gage height, 5.7 ft, from floodmark); minimum, 0.4 cfs Dec. 17.
1935-55: Maximum discharge observed, 2,910 cfs July 9, 1936 (gage height, 6.4 ft, site and datum then in use), from rating curve extended by broad-crested weir formula; minimum, that of Dec. 17, 1954, result of freezeup.

Remarks.--Records good except those for periods of no gage-height record, which are poor. No diversions above station for irrigation.

Rating tables, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 24-27, May 1-12, June 25 to July 7, Aug. 19-25)

Oct. 1 to July 20				July 21 to Sept. 30			
0.8	2.9	1.4	26	0.6	3.6	1.2	45
.9	4.5	1.7	55	.7	7.0	1.5	82
1.0	7.0	2.0	94	.8	12	2.0	172
1.2	14	2.5	180	.9	18	2.5	287
				1.0	26		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.9	8.5	10		8.8	10	16	84	*32	*12	18	a9.8
2	7.9	8.5	10		8.8	12	17	65	32	12	7.0	a9.8
3	8.5	8.5	*10		8.2	13	11	68	32	12	7.0	a9.2
4	9.4	8.2	12		8.8	13	11	98	32	12	a18	a8.8
5	8.8	7.6	8.5		8.2	13	12	133	30	12	*15	a8.5
6	8.5	7.6	9.1		8.8	14	12	*153	28	12	12	a8.2
7	8.5	7.0	8.5	a8.5	8.8	16	14	172	27	12	11	*a8.0
8	8.8	7.6	4.3		8.8	20	17	139	27	12	11	7.9
9	8.5	7.6	6.5		9.4	18	22	109	28	12	15	7.0
10	8.2	7.9	9.4		8.5	15	20	104	*27	12	16	7.0
11	8.2	8.8	9.4		8.9	16	16	*108	24	12	a17	6.7
12	8.2	13	6.8		10	16	13	100	22	12	a25	6.3
13	8.2	*11	8.5		11	19	22	*93	19	13	a45	6.3
14	8.2	9.7	7.0	8.2	13	22	23	84	18	16	a25	6.7
15	8.2	9.4	*8.2	8.2	*12	18	25	65	17	34	a30	7.0
16	7.9	11	6.8	8.8	14	15	28	50	17	a20	a21	6.7
17	7.9	9.7	5.4	8.2	13	11	25	42	16	a23	a20	7.0
18	7.9	9.1	6.0	*8.8	8.2	11	18	39	14	a25	*a19	8.4
19	*7.9	9.4	7.0	8.5	4.7	13	16	*45	13	a40	*16	8.8
20	7.9	9.4	8.2	9.1	8.6	11	16	53	12	a25	13	8.4
21	7.9	9.7	7.6	8.2	8.5	9.3	25	54	11	*a20	12	8.4
22	7.9	9.7	7.9	8.2	9.4	12	25	55	10	22	14	7.9
23	7.9	9.7	8.5	8.8	10	14	20	51	9.7	a23	14	7.9
24	9.4	9.7	9.1	8.8	9.7	16	29	47	9.1	a22	60	8.8
25	9.4	9.7	8.5	8.8	*10	18	40	44	8.8	a45	194	9.3
26	8.8	9.4	7.0	8.5	10	16	39	39	8.5	a23	a20	8.4
27	8.8	9.4	6.0	8.5	10	15	*34	37	7.9	*14	a16	7.9
28	8.2	7.6		9.1	10	16	33	35	7.3	12	a12	7.5
29	8.5	9.1		9.7	-	*14	57	34	7.9	11	a 11	7.5
30	8.2	7.0	a7.0	10	------	14	77	35	12	11	a10	7.5
31	8.5	------		9.1	------	12	------	35	------	12	a10	------
Total	259.0	270.5	244.2	268.0	268.1	452.3	733	2,270	559.2	555	734.0	237.6
Mean	8.35	9.02	7.88	8.65	9.58	14.6	24.4	73.2	18.6	17.9	23.7	7.92
Ac-ft	514	537	484	532	532	897	1,450	4,500	1,110	1,100	1,460	471

Calendar year 1954: Max 170 Min 4.3 Mean 25.4 Ac-ft 18,400
Water year 1954-55: Max 194 Min 4.3 Mean 18.8 Ac-ft 13,590

Peak discharge (base, 350 cfs).--July 15 (6:30 p.m.) 450 cfs (3.5 ft); July 20 (2 p.m.) 450 cfs (3.5 ft); Aug. 13 (8:30 a.m.) 1,570 cfs (5.7 ft); Aug. 15 (5 p.m.) 548 cfs (3.3 ft); Aug. 25 (12 m.) 1,310 cfs (5.0 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of 4 discharge measurements, engineer's notes, and records for stations on nearby streams.

Santa Clara-Pinto diversion near Pinto, Utah

Location.--Lat 37°28', long 113°28', in SW¼ sec. 19, T. 38 S., R. 14 W., on left bank 400 ft downstream from diversion tunnel outlet and 6 miles southeast of Pinto.
Records available.--October 1953 to September 1955 (records of monthly diversion only). Records of daily flow collected by Geological Survey available in Salt Lake City district office.
Gage.--Water-stage recorder.
Remarks.--This is a transmountain diversion from a tributary of Santa Clara River in Colorado River basin to Pinto Creek in Escalante Valley.

Monthly diversion, in acre-feet, water year October 1954 to September 1955

Month	Diversion	Month	Diversion
October	0	May	334
November	0	June	73
December	0	July	0
January	0	August	30
February	0	September	0
March	0		
April	114	Water year	551

MINOR BASINS IN NEVADA

Baker Creek at narrows, near Baker, Nev.

Location.--Lat 38°59', long 114°13', in sec. 22, T. 13 N., R. 69 E., on left bank half a mile downstream from Pole Canyon, 1 mile downstream from narrows, and 4¾ miles southwest of Baker.
Records available.--December 1947 to September 1955 (discontinued).
Gage.--Water-stage recorder. Altitude of gage is 6,800 ft (by barometer).
Average discharge.--7 years (1948-55), 8.91 cfs (6,450 acre-ft per year).
Extremes.--Maximum discharge during year, 75 cfs June 9 (gage height, 2.43 ft); minimum, 1.4 cfs Apr. 19.
1947-55: Maximum discharge, 178 cfs June 7, 1952 (gage height, 2.72 ft); minimum recorded, 0.4 cfs Mar. 11, 1951.
Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.1	1.2	1.4	7.2	2.2	59
1.2	2.4	1.6	15	2.5	86
1.3	4.4	1.9	33		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1	3.3				2.6	2.7	3.5	26	19	11	6.0
2	2.9	3.3		b2.1		2.6	2.9	3.5	*25	18	10	5.7
3	3.1	3.1				2.6	b2.7	3.5	22	17	9.6	5.4
4	3.5	3.1				2.6	b2.7	3.5	21	17	9.6	5.4
5	3.3	3.1	b2.7			2.6	2.7	3.7	21	16	9.6	5.4
6	3.3	2.9				2.6	2.9	4.4	26	15	9.6	5.2
7	3.1	2.9				2.7	2.6	5.2	37	14	8.6	5.2
8	2.9	3.1			a2.3	2.7	2.6	5.2	59	14	7.9	4.9
9	3.1	3.1				2.7	2.7	5.4	*68	13	7.6	*5.2
10	3.1	3.1				2.9	3.1	5.7	68	13	7.2	5.2
11	3.1	3.7	2.4			2.9	2.9	6.3	59	12	6.6	4.9
12	3.1	3.9	2.1	a2.1		2.9	2.7	7.6	57	12	6.6	4.9
13	3.1	2.9	2.9			2.7	3.1	8.6	50	11	6.6	4.6
14	2.9	3.1	2.6			2.6	3.5	10	46	10	6.9	4.6
15	2.9	3.3	2.6			2.7	3.7	11	45	10	6.0	4.6
16	2.9	3.9	2.4				3.7	11	44	10	6.3	4.6
17	2.9	2.7	(*)				3.5	11	35	9.6	6.9	4.6
18	2.9	2.9					3.1	10	32	9.3	7.6	4.6
19	2.7	2.9					2.6	10	32	9.0	8.6	4.9
20	2.9	2.9		(*)	a2.4	b2.6	3.3	10	32	8.6	8.2	4.6
21	*2.9	2.9	b2.2				3.3	11	32	8.6	8.6	4.6
22	3.1	2.9					3.3	13	32	8.6	8.2	4.4
23	3.1	2.9					3.3	16	31	11	8.2	4.4
24	3.5	*2.9			*2.4	2.6	3.7	19	*30	14	8.2	4.9
25	3.3	2.9	2.4		2.4	2.6	3.7	20	29	23	8.2	4.9
26	3.5	2.9	2.4	a2.2	2.4	2.6	3.7	20	26	17	7.6	4.9
27	3.1	3.1			2.6	2.7	3.1	20	25	15	7.2	4.6
28	3.5	2.9			2.4	2.6	3.7	19	23	14	6.9	4.4
29	3.3	2.9	b2.2		-	2.9	*3.3	20	22	13	6.6	4.4
30	3.3	2.3			------	2.6	3.3	22	20	*12	6.3	4.4
31	3.3	------			------	*2.7	------	26	------	12	6.3	------
Total	96.7	91.8	75.4	66.2	65.9	82.5	94.1	345.1	1,075	405.7	243.3	146.4
Mean	3.12	3.06	2.43	2.14	2.35	2.66	3.14	11.1	35.8	13.1	7.85	4.88
Ac-ft	192	182	150	131	131	164	187	684	2,130	805	483	290

Calendar year 1954: Max 78 Min 1.3 Mean 8.26 Ac-ft 5,990
Water year 1954-55: Max 68 Min - Mean 7.64 Ac-ft 5,530

Peak discharge (base, 20 cfs).--June 9 (11 p.m.) 75 cfs (2.43 ft).
* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of discharge measurements, weather records, and records for Lehman Creek near Baker.
b Stage-discharge relation affected by ice.

Lehman Creek near Baker, Nev.

Location.--Lat 39°01', long 114°13', in sec. 10, T. 13 N., R. 69 E., on left bank 4¾ miles west of Baker.

Records available.--December 1947 to September 1955 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 6,730 ft (by barometer). Prior to Oct. 3, 1953, at site 45 ft downstream at same datum.

Average discharge.--7 years (1948-55), 5.02 cfs (3,630 acre-ft per year).

Extremes.--Maximum discharge during year, 27 cfs June 13 (gage height, 3.88 ft); minimum not determined, occurred during period of ice effect or no gage-height record.
1947-55: Maximum discharge, 45 cfs June 2, 1952 (gage height, 1.49 ft); minimum recorded, 0.1 cfs Nov. 20, 1953.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair.

Rating tables, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to June 2				June 3 to Sept. 30			
3.2	0.9	3.5	6.5	3.3	2.2	3.7	16
3.3	1.9	3.6	10	3.4	4.4	3.9	27
3.4	3.7	3.7	15	3.5	7.5		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.5	2.2	b1.7				1.4	1.6	12	17	14	7.5
2	2.5	2.1	b1.7				1.4	1.6	*12	16	14	7.2
3	2.5	1.9	1.8					1.6	12	15	14	7.2
4	2.7	1.9	1.7					1.5	12	14	14	6.8
5	2.5	1.8	b1.7		a1.2		b1.3	1.6	13	14	14	6.4
6	2.5	1.8	b1.7					1.9	15	14	13	6.1
7	2.5	1.9	1.7					2.4	18	14	12	5.8
8	2.4	2.1		a1.3		a1.4	1.3	2.4	22	14	12	5.5
9	2.4	1.9					1.4	2.5	*24	14	12	*5.5
10	2.2	1.9	b1.6				1.4	2.7	*24	13	12	5.5
11	2.2	2.2					1.4	3.0	26	13	11	5.2
12	2.2	2.2					1.4	3.5	25	13	11	4.9
13	2.2	2.1	1.6				1.5	4.2	25	12	11	4.9
14	2.2	1.9	1.5				1.6	4.4	24	12	11	4.9
15	2.2	2.1	1.5				1.6	4.2	25	12	10	4.6
16	2.2	2.2					1.6	3.9	24	12	10	4.6
17	2.2	1.9	(*)		a1.3		1.7	3.9	23	11	10	4.6
18	2.2	2.1					1.6	3.9	23	11	10	4.6
19	2.2	1.9				b1.4	b1.5	3.9	23	11	10	4.6
20	2.1	1.9	b1.5	(*)			1.5	4.2	23	11	9.6	4.6
21	*2.1	1.9					1.5	5.2	23	11	9.6	4.6
22	2.1	1.9					1.5	6.8	22	11	10	4.4
23	2.2	1.9					1.5	8.6	21	12	9.6	4.4
24	2.4	*1.8	1.5	a1.2	*1.3	1.5	1.5	9.8	*21	12	10	4.6
25	2.2	1.8	1.4		1.3	1.6	1.6	11	21	14	9.6	4.4
26	2.4	1.8				1.5	1.6	10	20	15	9.6	4.4
27	2.2	1.8			a1.3	b1.4	b1.5	9.8	20	15	9.1	4.1
28	2.2	1.7				1.4	1.6	9.8	18	15	8.7	3.8
29	2.2	b1.7	b1.3		-	1.5	*1.5	9.8	18	15	8.3	3.6
30	2.2	b1.7			------	1.5	1.5	11	17	*14	8.3	3.6
31	2.2	------			------	*b1.4	-----	12	------	14	7.9	------
Total	71.0	58.0	47.3	38.7	35.4	44.1	44.1	162.7	606	411	335.3	152.9
Mean	2.29	1.93	1.53	1.25	1.26	1.42	1.47	5.25	20.2	13.3	10.8	5.10
Ac-ft	141	115	94	77	70	87	87	323	1,200	815	665	303

Calendar year 1954: Max 20 Min - Mean 4.68 Ac-ft 3,380
Water year 1954-55: Max 26 Min - Mean 5.50 Ac-ft 3,980

Peak discharge (base, 10 cfs).--June 13 (12 m.) 27 cfs (3.88 ft).
* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 1 discharge measurement, weather records, and records for nearby stations.
b Stage-discharge relation affected by ice.

Whitewater River at Whitewater, Calif.

Location.--Lat 33°56'50", long 116°38'20", in NE¼ sec. 2, T. 3 S., R. 3 E., on right bank 1.5 miles north of Whitewater and 3½ miles upstream from San Gorgonio River.

Drainage area.--57.4 sq mi.

Records available.--October 1948 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 1,610.98 ft (revised) above mean sea level, adjustment of 1934. Supplementary water-stage recorder and sharp-crested weir on diversion channel 400 ft west and 500 ft downstream from base gage. Feb. 24, 1950, to Sept. 30, 1952, supplementary gage used as base gage.

Average discharge.--7 years, 9.55 cfs (6,910 acre-ft per year); average combined discharge of river and infiltration line, 6 years (1949-55), 11.4 cfs (8,250 acre-ft per year).

Extremes.--Maximum discharge during year, 157 cfs Nov. 11 (gage height, 6.73 ft), from rating curve extended above 30 cfs as explained below; minimum daily, 3.6 cfs Aug. 7.

1948-55: Maximum discharge, 686 cfs June 25, 1954 (gage height, 7.52 ft), from rating curve extended above 30 cfs on basis of slope-area determination of peak flow; minimum daily, 1.1 cfs Jan. 22, 1952.

Maximum discharge known, 42,000 cfs Mar. 2, 1938, from slope-area determination of peak flow, at site 2.5 miles upstream (drainage area, 51.4 sq mi).

Remarks.--Records fair except those for periods of no gage-height record, indefinite stage-discharge relation, and those above 20 cfs, which are poor. Discharge measurements generally made three times a month. Records of daily discharge include water pumped from open sumps in ground-water seepage area surrounding station. The monthly runoff is adjusted for flow from infiltration line that bypasses station. The California Electric Power Co. diverts out of basin about 15 miles upstream to powerplants in San Gorgonio River basin and thence to an area north of Banning for irrigation. One small diversion for domestic use and 1 for irrigation are made 2 to 3 miles upstream.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	14	14	14	15	15	10	14	9.0	9.2	7.3	9.0
2	15	14	13	46	15	16	10	12	8.4	8.7	7.8	10
3	15	14	15	20	14	16	10	11	10	6.3	6.8	9.2
4	15	14	e25	15	13	17	11	9.5	8.1	8.4	6.3	6.2
5	14	14	a15	14	13	16	9.5	8.5	5.8	9.2	7.7	8.4
6	14	14	e15	19	12	15	9.5	12	7.9	8.7	5.8	8.7
7	14	14	e10	15	12	15	9.5	12	8.4	8.1	3.6	8.4
8	14	14	e10	15	13	15	9.5	13	7.3	8.7	8.1	8.4
9	14	14	e15	15	13	15	10	12	6.8	8.4	8.1	9.8
10	14	14	33	20	14	15	10	11	9.8	6.3	11	8.5
11	14	60	e15	13	14	17	11	10	11	8.7	10	7.5
12	13	a25	e15	14	14	14	11	9.5	5.8	9.2	8.7	9.5
13	13	a20	e10	12	13	14	11	12	7.8	8.4	9.2	9.5
14	13	e15	e10	11	13	14	11	10	10	7.3	11	9.2
15	14	e15	e10	11	14	14	10	10	9.1	7.3	9.2	9.0
16	13	14	9.5	31	14	13	10	10	7.5	6.3	8.3	9.5
17	12	14	e9.5	17	27	13	9.0	8.7	9.8	4.9	9.0	9.5
18	12	e14	e9.5	21	18	12	12	8.4	9.2	6.1	9.5	9.0
19	12	e14	e9.5	15	14	12	12	8.7	4.9	6.8	7.9	10
20	12	14	e9.5	12	14	12	11	9.0	6.8	7.1	7.1	10
21	12	14	9.5	11	14	12	10	8.1	9.5	7.6	6.8	9.5
22	13	e14	9.5	9.5	14	12	18	8.1	9.2	7.3	9.5	9.5
23	12	e14	7.5	11	14	12	13	8.1	8.7	6.6	16	10
24	14	e14	8.0	11	14	11	11	8.7	9.2	5.3	9.5	6.6
25	14	e14	8.0	11	13	11	11	9.2	9.2	7.1	8.5	5.6
26	14	e14	9.0	12	14	11	11	9.0	7.3	8.1	7.5	8.7
27	14	e14	9.0	12	17	12	10	9.8	9.2	7.3	5.6	9.5
28	14	e14	9.5	13	16	11	9.5	7.3	9.8	7.0	4.2	9.5
29	14	e14	10	14	-	11	9.0	4.9	9.2	7.1	6.0	9.0
30	14	14	11	14	--------	11	9.5	7.3	9.0	6.8	9.2	10
31	14	--------	11	15	--------	11	--------	8.7	--------	5.6	8.1	--------
Total	421	485	374.5	483.5	405	415	319.0	300.5	253.7	229.9	253.3	267.2
Mean	13.6	16.2	12.1	15.6	14.5	13.4	10.6	9.69	8.46	7.42	8.17	8.91
Ac-ft	835	962	743	959	803	823	633	596	503	456	502	530
(†)	123	119	123	123	111	123	119	119	81	31	73	77
(‡)	116	101	90	82	93	114	128	125	94	81	73	75
Adjusted for infiltration only												
Ac-ft	958	1,080	866	1,080	914	946	752	715	584	487	575	607

Observed				Adjusted
Calendar year 1954: Max 137	Min 2.2	Mean 13.5	Ac-ft 9,770	Ac-ft 11,180
Water year 1954-55: Max 60	Min 3.6	Mean 11.5	Ac-ft 8,340	Ac-ft 9,560

Peak discharge (base, 100 cfs).--Nov. 11 (10:30 a.m.) 157 cfs (6.73 ft); Dec. 10 (12:30 a.m.) 148 cfs (6.76 ft); Jan. 2 (1 a.m.) 129 cfs (6.61 ft).

† Runoff in acre-feet from infiltration line bypassing station, furnished by Whitewater Mutual Water Co.

‡ Runoff in acre-feet diverted from basin 15 miles upstream, furnished by California Electric Power Co.

a No gage-height record; discharge estimated on basis of normal recession patterns.

e Stage-discharge relation indefinite; discharge interpolated or estimated on basis of records for supplementary gage.

Tahquitz Creek near Palm Springs, Calif.

Location (revised).--Lat 33°48'15", long 116°33'40", in SW¼ sec. 22, T. 4 S., R. 4 E., on left bank 1.5 miles southwest of Palm Springs and 7 miles upstream from mouth.

Records available.--October 1947 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 764.5 ft above mean sea level (levels by Riverside County Flood Control and Water Conservation District).

Average discharge.--8 years, 2.66 cfs (1,930 acre-ft per year).

Extremes.--Maximum discharge during year, 248 cfs July 19 (gage height, 4.63 ft), from rating curve extended above 60 cfs as explained below; no flow Sept. 5-30.
1947-55: Maximum discharge, 1,570 cfs Aug. 31, 1954 (gage height, 8.45 ft in gage well, 10.0 ft outside, from floodmarks), from rating curve extended above 60 cfs on basis of slope-area determination of peak flow; no flow during parts of each year.

Remarks.--Records good below 100 cfs and fair above except those for period of no gage-height record, which are poor. Discharge measurements generally made twice a month.

Revisions (water years).--WSP 1244: 1948, 1951.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.5	0	1.0	2.4
.6	.2	1.2	4.5
.7	.5	1.5	8.9
.8	1.0	1.7	13

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.2	0.4	0.6	1.4	2.6	5.6	6.8	4.7	0.9	0.4	a0.1
2	.1	.2	.4	.9	1.4	2.6	6.0	6.4	4.5	.9	.3	.1
3	.1	.2	.4	1.4	1.4	2.6	5.4	6.1	4.1	.8	.3	.1
4	.1	.2	1.0	1.0	1.2	2.6	5.4	6.7	3.9	.7	.3	.1
5	.1	.2	1.1	.9	1.2	2.6	4.8	6.8	3.7	.7	.4	0
6	.1	.2	.8	1.4	1.2	2.6	4.7	7.0	3.5	.6	.3	0
7	.1	.2	.7	1.4	1.2	2.5	4.6	7.5	3.3	.6	.2	0
8	.1	.2	.6	1.4	1.2	2.7	4.6	7.5	3.1	.5	.2	0
9	.1	.2	.6	1.3	1.2	3.2	4.7	7.0	2.8	.4	.2	0
10	.1	.2	1.1	2.6	1.2	3.5	5.2	6.8	2.7	.4	.1	0
11	.1	1.2	.9	1.8	1.2	3.7	5.6	7.2	2.6	.4	.1	0
12	.1	1.5	.8	1.5	1.2	3.5	5.5	7.5	2.5	.3	.1	0
13	.1	.8	.7	1.3	1.4	3.7	6.0	7.8	2.5	.3	2.2	0
14	.1	.6	.7	1.2	1.5	3.9	6.4	7.9	2.4	.2	2.6	0
15	.1	.5	.6	1.2	1.8	3.9	6.2	7.3	2.2	.2	1.7	0
16	.1	.5	.6	1.8	2.2	3.5	6.4	6.8	2.1	.1	1.3	0
17	.1	.4	.6	1.8	9.5	3.3	6.0	6.6	2.0	.1	.9	0
18	.1	.4	.6	1.8	10	3.2	6.2	6.2	1.8	.3	.7	0
19	.1	.4	.6	1.9	5.0	3.2	6.1	5.8	1.6	13	.9	0
20	.1	.4	.6	1.5	4.2	3.2	6.0	5.8	1.6	4.2	.6	0
21	.1	.4	.6	1.4	3.6	3.0	6.0	6.0	1.4	2.2	.4	0
22	.1	.4	.6	1.3	3.4	3.1	7.2	6.0	1.3	1.6	.3	0
23	.1	.4	.6	1.3	3.2	3.3	6.7	5.6	1.2	1.3	10	0
24	.1	.4	.6	1.3	2.9	3.4	7.0	5.5	1.2	1.1	a2	0
25	.1	.4	.6	1.4	2.9	3.9	6.8	5.6	1.2	1.0	a1	0
26	.1	.4	.6	1.4	2.8	4.4	6.6	5.4	1.2	.8	a.7	0
27	.1	.4	.6	1.4	2.8	4.7	6.2	5.1	1.1	.7	a.5	0
28	.1	.4	.6	1.4	2.8	5.0	6.2	4.7	1.0	.6	a.3	0
29	.1	.4	.6	1.4	-	5.6	6.2	4.6	.9	.5	a.2	0
30	.1	.4	.6	1.4	------	5.8	6.4	4.5	.9	.4	a.1	0
31	.1	------	.6	1.4	------	5.6	-----	4.7	------	.4	a.1	------
Total	3.1	12.7	20.4	43.8	75.0	110.4	176.7	195.2	69.0	36.2	29.4	0.4
Mean	0.10	0.42	0.66	1.41	2.68	3.56	5.89	6.30	2.30	1.17	0.95	0.01
Ac-ft	6.1	25	40	87	149	219	350	387	137	72	58	0.8

Calendar year 1954: Max 30 Min 0 Mean 4.36 Ac-ft 3,160
Water year 1954-55: Max 13 Min 0 Mean 2.12 Ac-ft 1,530

Peak discharge (base, 20 cfs).--July 19 (3 p.m.) 248 cfs (4.63 ft); Aug. 23 (1 p.m.) 106 cfs (3.38 ft).

a No gage-height record; discharge estimated on basis of weather records and probable recession curve.

Palm Canyon Creek near Palm Springs, Calif.

Location.--Lat 33°44'55", long 116°32'15", in S½ sec. 11, T. 5 S., R. 4 E., on right bank three-quarters of a mile upstream from Murray Canyon Creek and 6 miles south of Palm Springs.

Drainage area.--94.0 sq mi.

Records available.--January 1930 to January 1942, October 1947 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 700 ft (from topographic map). Prior to Jan. 14, 1942, at datum 0.2 ft (revised) higher.

Average discharge.--19 years (1930-41, 1947-55), 5.19 cfs (3,760 acre-ft per year); median of yearly mean discharges, 1.2 cfs (870 acre-ft per year).

Extremes.--Maximum discharge during year, 263 cfs July 18 (gage height, 3.60 ft); no flow during most of year.
1930-42, 1947-55: Maximum discharge, 3,850 cfs Feb. 6, 1937 (gage height, 5.60 ft, datum then in use), from rating curve extended above 120 cfs on basis of velocity-area study; no flow during several months of most years.

Remarks.--Records fair except those for periods of fragmentary or no gage-height record, which are poor. Discharge measurements generally made twice a month.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				0	0.7	2.7				0	0	
2				0	.7	1.9				0	0	
3				0	.4	1.5				0	0	
4				0	.4	1.3				0	0	
5				0	.3	.7				0	0	
6				0	.2	.5				0	0	
7				0	.1	.5				0	0	
8				0	.1	.5				0	0	
9				0	.1	.5				0	0	
10				0	0	.6				0	11	
11				.6	0	.8				0	a2	
12				.1	0	.7				0	a1	
13				0	0	.6				0	a1	
14				0	.1	.6				0	a.5	
15				0	.2	.5				0	f10	
16				3.8	.8	.5				0	a.5	
17				6.2	4.8	.5				0	f3	
18				1.2	4.2	.4				14	a.5	
19				9.6	2.3	.4				5.1	f.1	
20				3.2	1.5	.4				0	0	
21				1.3	.8	.3				0	0	
22				.5	.8	.3				0	0	
23				.3	.8	.3				0	f1	
24				.2	.8	.1				0	0	
25				.2	.8	.1				0	0	
26				.2	.8	0				0	0	
27				.3	1.5	0				0	0	
28				.3	4.2	0				0	0	
29				.3	-	0				0	0	
30				.4	------	0				0	0	
31		------		.5	------	0	------		------	0	0	------
Total	0	0	0	29.2	27.4	17.2	0	0	0	19.1	30.6	0
Mean	0	0	0	0.94	0.98	0.55	0	0	0	0.62	0.99	0
Ac-ft	0	0	0	58	54	34	0	0	0	38	61	0

Calendar year 1954: Max 156 Min 0 Mean 1.42 Ac-ft 1,030
Water year 1954-55: Max 14 Min 0 Mean 0.34 Ac-ft 245

Peak discharge (base, 100 cfs).--July 18 (10 p.m.) 263 cfs (3.60 ft); Aug. 10 (6 p.m.) 178 cfs (3.25 ft); Aug. 15 (5:30 p.m.) 110 cfs (2.93 ft).

a No gage-height record; discharge estimated on basis of engineer's field notes and normal recession trend.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

Andreas Creek near Palm Springs, Calif.

Location.--Lat 33°45'35, long 116°32'55", in SE¼ sec. 3, T. 5 S., R. 4 E., on left bank at Indian Service diversion dam, 0.9 mile upstream from mouth and 5.4 miles south of Palm Springs.

Drainage area.--8.78 sq mi.

Records available.--October 1948 to September 1955.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 800 ft (from topographic map). Prior to Mar. 25, 1949, reference point at same site at different datum.

Average discharge.--7 years, 2.10 cfs (1,520 acre-ft per year).

Extremes.--Maximum discharge during year, 130 cfs Aug. 23 (gage height, 3.10 ft); minimum daily, 0.6 cfs Sept. 19.
1948-55: Maximum discharge, 1,960 cfs Aug. 31, 1954 (gage height, 7.11 ft), from rating curve extended above 80 cfs on basis of slope-area determination of peak flow; minimum daily, 0.3 cfs for many days during 1950-51.

Remarks.--Records good below 10 cfs, fair between 10 and 100 cfs, and poor above. Discharge measurements made two or more times a month. One small diversion for domestic use about 1 mile above station.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

1.3	0.4	1.6	5.0
1.4	1.4	1.7	7.9
1.5	2.9	1.8	12

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	1.6	1.8	1.8	2.9	2.7	2.4	2.5	1.2	1.1	1.1	1.2
2	1.4	1.6	1.8	2.4	2.9	2.7	2.4	2.3	1.1	1.1	.9	1.2
3	1.5	1.6	1.8	2.4	2.7	2.7	2.4	2.2	1.1	1.0	1.2	1.0
4	1.5	1.6	2.8	1.9	2.7	2.7	2.4	2.0	1.0	1.0	1.4	1.0
5	1.5	1.6	2.0	1.9	2.7	2.7	2.4	2.4	1.0	.9	1.2	.9
6	1.5	1.6	1.9	2.7	2.7	2.7	2.4	2.4	.9	.8	.9	.9
7	1.5	1.6	1.9	2.7	2.7	2.7	2.2	2.2	.9	.8	1.1	.9
8	1.6	1.6	1.9	2.7	2.7	2.7	2.2	2.2	.8	.8	1.1	.9
9	1.5	1.6	1.9	2.5	2.7	2.7	2.0	2.2	.8	.8	1.0	1.0
10	1.5	1.6	3.8	4.1	2.7	2.7	2.0	2.2	.8	.8	.9	1.0
11	1.5	3.7	2.2	3.7	2.7	3.1	1.9	1.9	.8	.8	1.0	1.0
12	1.5	2.0	2.0	2.9	2.7	2.9	1.9	1.9	.9	.8	1.0	1.1
13	1.5	1.8	1.9	2.7	2.7	2.7	1.9	1.9	1.0	.7	1.2	.9
14	1.5	1.8	1.9	2.7	2.9	2.7	2.0	1.8	1.1	.7	1.2	.8
15	1.5	1.9	1.9	2.7	3.1	2.5	2.0	1.5	1.1	.7	1.4	.7
16	1.5	1.9	1.9	4.3	3.3	2.5	2.0	1.5	1.1	.7	1.1	.7
17	1.5	1.8	1.8	3.3	9.7	2.4	1.9	1.5	1.1	.7	1.0	.8
18	1.5	1.8	1.8	3.3	5.6	2.4	2.0	1.5	.9	2.1	1.1	.7
19	1.5	1.8	1.8	3.7	4.1	2.4	2.0	1.4	.9	7.6	1.1	.6
20	1.5	1.8	1.8	3.1	3.9	2.4	2.0	1.2	.9	2.4	1.0	.7
21	1.5	1.8	1.8	2.7	3.9	2.4	2.0	1.2	.9	1.8	1.0	.8
22	1.5	1.8	1.8	2.7	3.7	2.4	3.3	1.2	.9	1.5	1.0	.8
23	1.5	1.8	1.8	2.5	3.5	2.2	2.4	1.2	.9	1.5	9.2	.8
24	1.5	1.6	1.8	2.5	3.3	2.2	2.4	1.2	.9	1.4	3.5	.7
25	1.5	1.6	1.8	2.5	3.1	2.2	2.2	1.2	.9	1.5	2.5	.8
26	1.5	1.6	1.8	2.5	3.1	2.4	2.2	1.2	1.0	1.1	2	.8
27	1.5	1.6	1.8	2.5	3.1	2.5	2.2	1.2	1.0	.9	2	.7
28	1.5	1.6	1.6	2.5	2.9	2.5	2.2	1.1	1.0	.9	2	.7
29	1.5	1.6	1.8	2.5	-	2.5	2.4	1.1	1.0	.8	1.5	.7
30	1.5	1.6	1.8	2.7	------	2.5	2.4	1.1	1.0	.9	1.5	.7
31	1.5	------	1.8	2.9	------	2.4	------	1.2	------	.9	1.5	------
Total	46.4	52.9	60.2	86.0	94.7	79.2	66.1	51.6	28.9	39.5	49.6	25.5
Mean	1.50	1.76	1.94	2.77	3.38	2.55	2.20	1.66	0.96	1.27	1.60	0.85
Ac-ft	92	105	119	171	188	157	131	102	57	78	98	51

Calendar year 1954: Max 63 Min 1.0 Mean 2.99 Ac-ft 2,170
Water year 1954-55: Max 9.7 Min 0.6 Mean 1.86 Ac-ft 1,350

Peak discharge (base, 30 cfs).--July 19 (4:30 p.m.) 60 cfs (2.55 ft); Aug. 23 (12:30 p.m.) 130 cfs (3.10 ft).

Note.--No gage-height record Aug. 24 to Sept. 1; discharge estimated on basis of probable recession curve.

Coyote Creek near Borrego Springs, Calif.

Location.--Lat 33°22'30", long 116°25'25", in SE¼ sec. 23, T. 9 S., R. 5 E., on right bank 800 ft upstream from Box Canyon and 9 miles northwest of Borrego Springs.

Records available.--November 1950 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 1,250 ft (from topographic map).

Extremes.--Maximum discharge during year, 577 cfs July 19 (gage height, 7.52 ft), from rating curve extended above 3 cfs on basis of slope-area determination of peak flow; maximum gage height, 12.4 ft Aug. 23 (backwater from debris cone at mouth of Box Canyon); minimum daily, 1.5 cfs July 14-17.
1950-55: Maximum discharge, 3,800 cfs July 28, 1951 (gage height, 14.14 ft, from floodmark), from rating curve extended above 4 cfs on basis of slope-area determination of peak flow; minimum daily, 1.4 cfs Aug. 11-17, 1953.

Remarks.--Records fair except those above 3 cfs and those for periods of indefinite stage-discharge relation, and fragmentary or no gage-height record, which are poor. Discharge measurements generally made twice a month.

Rating table, water year 1954-55, except periods of indefinite stage-discharge relation (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 11-15, July 18 to Sept. 30)

1.9	1.3	2.5	10
2.0	2.2	2.9	22
2.1	3.3	3.0	26
2.2	4.7		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a2	e2	2.7	2.7	2.5	2.4	2.6	2.2	1.9	1.6	a2	a2
2	a2	e2	2.7	2.7	2.5	2.4	2.6	2.2	1.9	1.6	a2	a2
3	a2	2.1	2.7	2.7	2.4	2.4	a2	2.2	1.9	1.6	a2	a2
4	a2	1.9	2.4	2.7	2.4	2.4	a2	2.1	1.9	1.6	f5	a2
5	a2	1.8	2.3	2.7	2.4	2.4	a3	2.0	1.8	1.6	a2	a2
6	a2	1.7	2.3	3.0	2.3	2.3	a3	2.0	1.9	1.6	a2	a2
7	a2	1.9	2.3	2.9	2.3	2.3	a2	2.0	1.8	1.6	a2	a2
8	2.1	2.0	2.2	2.8	2.3	2.4	a2	2.1	1.7	1.6	a2	a2
9	2.1	2.1	2.2	2.7	2.3	2.4	a2	2.0	1.7	1.6	a2	a2
10	2.1	2.4	2.1	3.3	2.4	2.5	a2	1.9	1.7	1.6	f4	a2
11	2.0	2.7	a2	2.4	2.4	2.5	a2	1.9	1.7	1.6	a2	a2
12	2.0	2.1	a2	2.6	2.4	2.5	a2	1.9	1.8	1.6	a2	a2
13	1.9	2.1	a2	2.5	2.3	2.5	a2	1.9	1.8	1.6	a2	a2
14	1.7	2.2	a2	2.7	2.3	2.5	2.2	1.9	1.8	1.5	a2	a2
15	1.7	2.2	a2	3.3	2.3	2.5	2.2	1.9	1.8	1.5	a2	1.6
16	1.8	2.5	a2	3.4	2.3	2.6	2.3	1.9	1.8	1.5	a2	1.6
17	1.8	3.2	2.3	3.2	2.4	2.6	2.3	1.8	1.7	1.5	a2	a2
18	1.8	3.3	2.3	2.9	2.4	2.6	2.3	1.8	1.6	25	f5	a2
19	1.8	2.5	2.3	2.8	2.4	2.5	2.3	1.8	1.6	22	a2	a2
20	1.8	2.0	2.4	2.7	2.4	2.5	2.3	1.8	1.6	2.3	a2	a2
21	1.8	1.8	2.4	2.5	2.4	2.5	2.3	1.8	1.6	2.1	a2	2.4
22	1.8	1.7	2.4	2.5	2.4	2.5	2.3	1.7	1.6	2.2	a2	a2
23	1.8	1.8	2.5	2.5	2.4	2.5	2.3	1.7	1.6	2.2	e20	a2
24	1.9	1.8	2.5	2.6	2.4	2.4	2.2	1.7	1.6	a2	a3	a2
25	1.9	2.0	2.5	2.7	2.4	2.4	2.2	1.7	1.6	a2	a2	a2
26	1.9	2.1	2.6	2.7	2.4	2.4	2.2	1.7	1.6	2.2	a2	a2
27	1.9	2.1	2.5	2.7	2.4	2.5	2.2	1.7	1.6	2.2	a2	a2
28	1.9	2.1	2.6	2.7	2.4	2.5	2.1	1.7	1.6	2.2	a2	a2
29	e2	2.6	2.7	2.6	-	2.5	2.1	1.7	1.6	2.2	a2	a2
30	e2	2.9	2.7	2.6	------	2.5	2.2	1.7	1.6	2.2	a2	a2
31	e2	------	2.7	2.5	------	2.5	-----	1.7	------	a2	a2	------
Total	59.5	65.6	73.3	85.3	66.6	76.4	67.2	58.1	51.4	99.6	89	59.6
Mean	1.92	2.19	2.36	2.75	2.38	2.46	2.24	1.87	1.71	3.21	2.9	1.99
Ac-ft	118	130	145	169	132	152	133	115	102	198	177	118

Calendar year 1954: Max 95 Min 1.6 Mean 2.51 Ac-ft 1,820
Water year 1954-55: Max 25 Min 1.5 Mean 2.33 Ac-ft 1,690

Peak discharge (base, 50 cfs).--July 18 (3:30 p.m.) 306 cfs (6.05 ft); July 19 (3:30 p.m.) 577 cfs (7.52 ft); Aug. 4 (5 p.m.) 102 cfs (4.25 ft); Aug. 10 (4:30 p.m.) 110 cfs (4.34 ft); Aug. 18 (4 p.m.) 90 cfs (4.10 ft); Aug. 23 (3:30 p.m.) discharge unknown (12.4 ft).

a No gage-height record; discharge interpolated or estimated on basis of 7 discharge measurements, weather records, and probable recession curves.

e Stage-discharge relation indefinite; discharge interpolated or estimated on basis of 2 discharge measurements, recorded gage height, weather records, and estimate of peak flow 2,000 ft below gage.

f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

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Palm Canyon Creek near Borrego Springs, Calif.

Location.--Lat 33°16'40", long 116°25'50", in NW¼ sec. 26, T. 10 S., R. 5 E., on left bank 3.5 miles northwest of Borrego Springs.

Drainage area.--21.7 sq mi.

Records available.--December 1950 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 1,200 ft (from topographic map).

Extremes.--Maximum gage height during year, 9.9 ft Aug. 23, from floodmarks (discharge not determined); no flow Oct. 1 to Nov. 17, May 29, June 6 to Aug. 3, Aug. 5-16, 18-22. 1950-55: Maximum gage height, 9.9 ft Aug. 23, 1955, from floodmarks (discharge not determined); no flow during several months each year.

Remarks.--Records good except those for periods of indefinite stage-discharge relation or no gage-height record, which are poor. Discharge measurements or observations of no flow generally made twice a month.

Rating table, water year 1954-55, except periods of indefinite stage-discharge relation (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Dec. 23 to Jan. 5)

0.96	0	1.4	2.8
1.0	.1	1.6	6.0
1.1	.3	1.8	11
1.2	.9	2.2	25
1.3	1.7	2.7	51

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0.1	0.4	0.9	1.4	0.3	0.2	0.1		0	0.3
2		0	.1	.4	.9	1.0	.3	.9	.1		0	.3
3		0	.1	.5	.7	.9	.3	.7	.1		0	.3
4		0	.1	.4	.6	.7	.3	.4	.1		4.2	.3
5		0	.1	.4	.6	.6	.5	.3	.1		0	.3
6		0	.1	.9	.6	.6	.4	.2	0		0	.3
7		0	.1	.8	.6	.6	.3	.2	0		0	.3
8		0	.1	.8	.6	.6	.3	.3	0		0	.3
9		0	.1	.6	.6	.6	.3	.3	0		0	.3
10		0	.1	1.5	.6	.6	.3	.2	0		0	.3
11		0	.1	1.6	.6	1.0	.3	.1	0		0	.3
12		0	.1	1.1	.5	.9	.3	.1	0		0	.3
13		0	.1	.9	.5	.8	.3	.1	0		0	.3
14		0	.1	.7	.5	.6	.3	.1	0		0	.3
15		0	.1	.7	.5	.6	.3	.1	0		0	.3
16		0	.2	1.4	.6	.6	.2	.1	0		0	.3
17		0	.2	1.8	.7	.6	.2	.1	0		2	.3
18		.1	.2	1.4	.8	.6	.2	.1	0		0	.3
19		.1	.3	1.9	.7	.5	.2	.1	0		0	.3
20		.1	.3	1.2	.6	.5	.2	.1	0		0	.2
21		.1	.3	1.1	.6	.5	.2	.1	0		0	.2
22		.1	.3	.9	.6	.5	.4	.1	0		0	.2
23		.1	.3	.9	.6	.5	.3	.1	0		50	.2
24		.1	.3	.8	.6	.5	.2	.1	0		.4	.2
25		.1	.3	.8	.6	.4	.2	.1	0		.4	.2
26		.1	.3	.9	.7	.4	.2	.1	0		.3	.2
27		.1	.3	.9	1.4	.4	.2	.1	0		.3	.2
28		.1	.3	.9	2.6	.4	.2	.1	0		.	.2
29		.1	.3	.9	-	.4	.2	0	0		.3	.2
30		.1	.3	.9	------	.4	.2	.1	0		.3	.2
31		------	.3	.9	------	.4	------	.1	------		.3	------
Total	0	1.3	6.0	29.3	20.4	19.1	8.1	5.7	0.5	0	58.8	7.9
Mean	0	0.04	0.19	0.95	0.73	0.62	0.27	0.18	0.02	0	.90	0.26
Ac-ft	0	2.6	12	58	40	38	16	11	1.0	0	117	16

Calendar year 1954: Max 8.3 Min 0 Mean 0.42 Ac-ft 303
Water year 1954-55: Max 50 Min 0 Mean 0.43 Ac-ft 312

Peak discharge (base, 15 cfs).--Aug. 4 (2 p.m.) 82 cfs (3.1 ft); Aug. 23 (about 4 p.m.) discharge unknown (9.9 ft).

Note.--No gage-height record Aug. 5 to Sept. 12; discharge interpolated or estimated on basis of weather records, engineer's notes, and adjoining record. Stage-discharge relation indefinite Apr. 3-28, Sept. 13-30; discharge interpolated or estimated on basis of 3 discharge measurements, weather records, engineer's notes, and record for Coyote Creek near Borrego Springs.

Deep Creek near Hesperia, Calif.

Location.--Lat 34°20'30", long 117°13'40", in SE¼ sec. 18, T. 3 N., R. 3 W., on right bank 0.5 mile upstream from confluence with West Fork Mojave River and 8 miles southeast of Hesperia.

Drainage area.--137 sq mi.

Records available.--December 1929 to September 1955. Combined creek and canal, October 1950 to September 1955.

Gage.--Water-stage recorder and broad-crested weir. Altitude of gage is 3,050 ft (from topographic map). Prior to Apr. 21, 1938, at same site at different datum. Apr. 21 to Dec. 10, 1938, at site 0.5 mile downstream at different datum.

Average discharge.--25 years (1930-55), 55.2 cfs (39,960 acre-ft per year); median of yearly mean discharges, 38 cfs (27,500 acre-ft per year). Average combined discharge of creek and canal, 5 years (1951-55), 37.1 cfs (26,860 acre-ft per year).

Extremes.--Maximum discharge during year, 313 cfs Feb. 17 (gage height, 2.70 ft); minimum daily, 0.3 cfs Sept. 15, 16.
1929-55: Maximum discharge, 46,600 cfs Mar. 2, 1938, by slope-area determination of peak flow; minimum, 0.1 cfs at times during 1932-34, 1936.

Remarks.--Records good. Discharge measurements generally made twice a month. Slight regulation by Lake Arrowhead (capacity, 48,000 acre-ft), used principally for recreation. Hesperia Water Co.'s canal diverts water about 2½ miles above station for irrigation of about 1,500 acres and domestic use. For records of combined discharge of Deep Creek and canal, see following page.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.68	0.3	1.4	9.6
.7	.4	1.5	11
.8	1.0	1.7	22
.9	2.0	1.9	42
1.0	3.4	2.1	76
1.1	5.1	2.3	130
1.3	9.3	2.5	209

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	1.0	8.8	9.8	33	57	40	53	5.9	1.6	1.2	0.9
2	.5	1.0	8.3	29	32	53	37	56	6.2	1.7	1.3	.7
3	.6	1.0	9.5	28	25	50	34	50	5.1	1.7	1.2	.6
4	.9	1.0	43	21	25	50	30	57	4.2	1.6	1.4	.6
5	.8	1.0	31	16	24	53	28	88	3.7	1.6	1.4	.6
6	.5	1.0	21	17	23	56	24	83	3.1	1.6	1.3	.4
7	.5	1.0	18	18	20	48	22	72	2.5	1.6	1.2	.4
8	.5	1.0	14	16	19	48	20	93	2.4	1.6	1.0	.4
9	.5	1.0	13	14	21	56	20	88	2.0	1.6	1.0	.4
10	.6	1.0	33	19	25	54	21	74	1.8	1.5	1.0	.4
11	.6	78	30	19	26	135	22	56	1.7	1.4	1.1	.4
12	.6	66	23	16	28	109	21	42	1.8	1.3	1.3	.4
13	.6	27	19	17	30	93	20	36	2.0	1.2	1.5	.4
14	.6	18	18	19	39	86	20	34	1.9	1.2	1.3	.4
15	.6	13	16	17	47	81	21	30	1.6	1.2	1.2	.3
16	.6	9.9	16	20	59	68	20	29	1.7	1.1	1.1	.3
17	.6	9.6	15	19	207	50	18	25	2.2	1.0	1.1	.4
18	.7	9.3	14	25	178	48	20	21	2.6	1.0	1.1	.4
19	.7	8.5	13	19	90	42	18	19	2.6	1.1	1.1	.6
20	.6	8.1	11	25	66	40	17	18	2.4	1.3	1.0	.6
21	.6	7.9	10	22	51	36	17	16	2.2	1.2	1.0	.5
22	.7	7.7	10	23	42	34	22	15	2.0	1.2	1.0	.4
23	1.0	7.5	11	22	40	32	28	13	2.0	1.2	1.0	.4
24	1.1	7.5	10	25	30	34	25	11	2.0	1.4	1.0	.4
25	1.1	7.5	9.8	25	29	37	22	10	2.2	1.4	1.0	.4
26	1.2	7.3	9.6	25	29	42	20	9.7	2.2	1.2	1.0	.4
27	1.2	7.3	8.3	25	46	50	19	9.6	1.8	1.1	1.0	.4
28	1.2	7.3	8.2	25	83	50	17	9.0	1.8	1.0	1.0	.4
29	1.2	7.5	9.6	27	-	54	15	9.2	1.8	1.0	.9	.4
30	1.2	9.1	8.8	30	------	48	18	7.9	1.8	1.1	1.0	.4
31	1.0	------	9.7	34	------	44	------	6.2	------	1.1	1.4	------
Total	23.5	336.0	479.6	666.8	1,367	1,738	676	1,140.6	77.2	40.8	35.1	13.7
Mean	0.76	11.2	15.5	21.5	48.8	56.1	22.5	36.8	2.57	1.32	1.13	0.46
Ac-ft	47	666	951	1,320	2,710	3,450	1,340	2,260	153	81	70	27

Calendar year 1954: Max 3,400 Min 0.4 Mean 53.4 Ac-ft 38,670
Water year 1954-55: Max 207 Min 0.3 Mean 18.1 Ac-ft 13,080

Peak discharge (base, 400 cfs).--No peak above base.

Deep Creek near Hesperia, Calif.--Continued

Combined discharge, in cubic feet per second, of Deep Creek and Hesperia Water Co.'s Canal near Hesperia, Calif., water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.3	4.0	9.0	10	33	63	51	58	16	8.7	6.1	5.1
2	1.5	4.1	8.5	30	32	60	48	56	16	8.5	6.3	4.8
3	1.3	4.2	9.7	28	25	56	45	54	15	8.4	6.0	4.7
4	1.6	4.2	43	21	25	56	40	67	14	8.2	6.6	3.9
5	1.9	4.1	31	16	24	56	38	98	13	8.3	6.8	1.9
6	1.7	4.1	21	18	23	56	34	94	12	8.1	6.5	1.1
7	1.7	4.1	18	19	20	50	32	83	12	7.9	5.8	.9
8	1.7	4.2	14	17	19	55	30	104	11	7.6	5.5	.9
9	1.7	4.2	13	15	21	63	30	99	9.9	7.5	5.3	.8
10	1.8	4.3	33	20	25	61	31	85	8.9	7.6	5.4	.7
11	1.9	82	30	20	26	143	32	67	8.6	7.5	5.6	.7
12	2.0	68	23	17	28	117	32	53	8.8	7.3	7.3	.6
13	2.0	27	19	18	30	101	31	47	9.0	7.1	7.3	.6
14	2.0	18	18	20	39	94	31	45	9.9	6.9	6.3	.6
15	2.0	13	16	18	48	89	32	41	9.4	6.9	5.9	.4
16	2.1	10	16	21	61	76	31	39	10	6.5	5.7	.4
17	2.0	9.8	15	20	209	58	29	35	12	6.2	5.6	.5
18	1.9	9.5	14	26	180	56	31	31	13	6.2	5.5	.4
19	2.3	8.7	13	20	92	51	29	30	12	7.3	5.3	.8
20	2.3	8.3	11	26	68	49	27	28	12	7.7	5.2	.9
21	2.3	8.1	10	22	53	44	27	26	12	7.4	5.2	.9
22	2.3	7.9	10	23	44	42	33	25	11	7.0	5.1	.8
23	2.6	7.7	11	22	42	40	39	22	10	6.9	5.0	.8
24	2.7	7.7	10	25	33	42	36	20	10	7.5	5.3	.8
25	2.9	7.7	10	25	34	46	33	20	9.0	7.6	5.3	.9
26	3.3	7.5	9.9	25	34	51	30	19	9.8	7.2	5.2	1.0
27	3.4	7.5	8.6	25	51	60	30	19	9.6	6.5	5.2	1.0
28	3.7	7.5	8.5	25	89	61	27	18	9.2	6.0	5.1	1.1
29	3.8	7.7	9.7	27	-	65	25	18	9.1	5.7	5.0	1.0
30	3.8	9.3	9.0	30	------	60	28	16	9.1	5.9	4.6	1.0
31	3.8	------	10	34	------	55	------	16	------	5.9	5.2	------
Total	71.3	374.4	481.9	683	1,408	1,976	992	1,433	331.3	224.0	176.2	40.0
Mean	2.30	12.5	15.5	22.0	50.3	63.7	33.1	46.2	11.0	7.23	5.68	1.33
Ac-ft	141	743	956	1,350	2,790	3,920	1,970	2,840	657	444	349	79

Calendar year 1954: Max 3,400 Min 1.2 Mean 57.3 Ac-ft 41,480
Water year 1954-55: Max 209 Min 0.4 Mean 22.4 Ac-ft 16,240

West Fork Mojave River near Hesperia, Calif.

Location.--Lat 34°20'20", long 117°14'35", in SE¼ sec. 13, T. 3 N., R. 4 W., on left bank at highway bridge, 0.5 mile upstream from confluence with Deep Creek and 7 miles southeast of Hesperia.

Drainage area.--74.8 sq mi.

Records available.--January 1930 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 3,050 ft (from topographic map).

Average discharge.-- 25 years, 29.1 cfs (21,070 acre-ft per year); median of yearly mean discharges, 15 cfs (10,900 acre-ft per year).

Extremes.--Maximum discharge during year, 261 cfs Feb. 27 (gage height, 2.85 ft); no flow Oct. 1 to Nov. 10, Nov. 13 to Jan. 1, May 29 to June 1, June 7 to Sept. 30. 1930-55: Maximum discharge, 26,100 cfs Mar. 2, 1938, by slope-area determination of peak flow; no flow during several months of each year.

Remarks.--Records good. Discharge measurements or observations of no flow generally made three times a month. Water diverted from Lake Gregory above station for domestic use and fire protection. One small diversion for irrigation above station.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 12 to Jan. 2, Feb. 27 to Apr. 4, May 19-24, June 12-30)

1.02	0	1.5	9.9
1.1	.2	1.7	22
1.2	.8	2.0	51
1.3	2.5	2.3	96
1.4	5.4	2.6	159

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0		0	9.9	71	7.4	39	0			
2		0		6.5	9.9	56	6.2	30	.8			
3		0		6.6	9.9	47	5.8	24	.5			
4		0		4.8	7.0	46	6.9	24	.2			
5		0		3.8	6.6	43	8.4	23	.1			
6		0		4.4	5.4	39	7.9	20	.1			
7		0		5.1	4.8	35	7.4	25	0			
8		0		4.1	4.1	35	6.6	41	0			
9		0		3.5	3.5	31	6.2	29	0			
10		0		10	3.0	31	5.4	22	0			
11		8.1		11	3.5	73	5.1	20	0			
12		.3		9.9	3.0	55	8.9	18	0			
13		0		9.9	3.0	46	8.9	16	0			
14		0		8.4	4.1	41	8.9	15	0			
15		0		6.6	7.9	39	6.2	11	0			
16		0		13	12	31	2.8	10	0			
17		0		16	59	28	1.8	8.4	0			
18		0		18	64	25	2.0	6.2	0			
19		0		16	37	22	2.8	5.4	0			
20		0		17	24	20	1.7	4.8	0			
21		0		15	20	17	1.1	3.8	0			
22		0		14	17	15	5.4	3.2	0			
23		0		14	10	15	9.4	2.3	0			
24		0		14	8.9	14	2.6	1.9	0			
25		0		14	7.4	12	2.3	3.0	0			
26		0		7.4	14	12	5.8	2.3	0			
27		0		5.8	101	11	5.8	.8	0			
28		0		5.4	140	9.9	6.2	.1	0			
29		0		5.4	-	8.9	6.2	0	0			
30		0		5.4	------	8.4	9.0	0	0			
31		------		8.4	------	7.4	------	0	------			------
Total	0	8.4	0	285.4	599.9	944.6	171.3	409.2	1.7	0	0	0
Mean	0	0.28	0	9.21	21.4	30.5	5.71	13.2	0.06	0	0	0
Ac-ft	0	17	0	566	1,190	1,870	340	812	3.4	0	0	0

Calendar year 1954: Max 953 Min 0 Mean 23.6 Ac-ft 17,080
Water year 1954-55: Max 140 Min 0 Mean 6.63 Ac-ft 4,800

Peak discharge (base, 500 cfs).--No peak above base.

Mojave River at lower narrows, near Victorville, Calif.

Location.--Lat 34°34'25", long 117°19'10", in SW¼SE¼ sec. 29, T. 6 N., R. 4 W., on left bank 500 ft upstream from bridge on U. S. Highway 66 and 3 miles northwest of Victorville.

Drainage area.--530 sq mi.

Records available.--February 1899 to July 1906, November 1930 to September 1955. Prior to Oct. 1, 1936, published as "at Victorville."

Gage.--Water-stage recorder. Altitude of gage is 2,650 ft (from topographic map). February 1899 to July 31, 1906, staff gage, and Nov. 12, 1930, to Sept. 30, 1936, water-stage recorder, at site 3 miles upstream at different datum. Oct. 1, 1936, to Mar. 1, 1938, water stage recorder at present site at datum 2.00 ft higher.

Average discharge.--24 years (1931-55), 76.2 cfs (55,170 acre-ft per year); median of yearly mean discharges, 40 cfs (29,000 acre-ft per year).

Extremes.--Maximum discharge during year, 112 cfs Nov. 11 (gage height, 2.31 ft); minimum daily, 14 cfs July 31 to Aug. 2, Aug. 26.
1930-55: Maximum discharge, 70,600 cfs Mar. 2, 1938 (gage height, 18.7 ft, present datum), by slope-area determination of peak flow; minimum daily, 6 cfs Aug. 19, 21, 26, 1951.

Remarks.--Records good. Discharge measurements generally made three times a month. Periodic regulation by Lake Arrowhead (capacity, 48,000 acre-ft, used principally for recreation). Two diversions for irrigation of about 2,000 acres above station.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Dec. 6 to May 3, May 17-19)

1.7	14	2.1	58
1.9	32	2.2	75
2.0	44		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	39	35	45	40	45	29	34	20	20	14	18
2	20	33	33	48	42	40	36	34	22	20	14	18
3	20	33	35	48	42	36	33	32	20	20	15	19
4	20	35	36	45	44	40	30	32	22	21	17	18
5	21	33	42	46	44	34	36	32	22	21	16	18
6	23	35	46	42	45	38	33	33	22	21	17	18
7	26	35	41	48	44	36	36	35	22	21	16	17
8	24	36	46	48	45	35	36	33	20	20	16	19
9	26	35	42	49	46	33	35	32	22	20	17	18
10	26	36	45	54	46	32	35	32	18	21	20	17
11	26	72	45	54	45	36	38	29	20	20	19	17
12	30	55	45	51	44	34	40	27	18	19	18	19
13	27	51	45	51	46	38	38	27	19	19	18	18
14	26	46	44	54	45	38	38	29	17	16	17	19
15	29	45	41	52	45	36	32	29	19	16	17	17
16	26	42	41	54	46	36	29	32	20	16	16	17
17	27	45	42	54	46	36	29	32	19	15	18	18
18	25	44	40	57	44	36	29	29	20	16	17	20
19	28	46	39	58	41	35	29	28	19	18	17	20
20	28	44	39	52	41	40	30	25	18	19	18	20
21	29	44	38	55	40	40	39	27	20	19	16	20
22	27	42	39	55	39	36	36	24	18	19	16	20
23	29	39	38	58	38	36	32	23	19	19	17	20
24	32	39	39	54	39	36	30	25	18	18	17	20
25	30	35	41	57	39	40	29	25	20	16	16	20
26	34	35	40	49	42	36	30	23	19	16	14	22
27	30	39	44	48	44	36	32	22	20	17	18	22
28	38	36	44	42	44	34	32	20	17	16	18	21
29	39	38	42	42	-	35	36	20	17	17	18	21
30	38	35	44	40	------	33	36	20	20	15	18	21
31	41	------	42	41	------	33	------	20	------	14	18	------
Total	862	1,222	1,273	1,551	1,206	1,129	1,003	865	587	565	523	572
Mean	27.8	40.7	41.1	50.0	43.1	36.4	33.4	27.9	19.6	18.2	16.9	19.1
Ac-ft	1,710	2,420	2,520	3,080	2,390	2,240	1,990	1,720	1,160	1,120	1,040	1,130

Calendar year 1954: Max 824 Min 15 Mean 43.9 Ac-ft 31,790
Water year 1954-55: Max 72 Min 14 Mean 31.1 Ac-ft 22,520

Peak discharge (base, 200 cfs).--No peak above base.

Mojave River at Barstow, Calif.

Location.--Lat 34°54'25", long 117°01'20", in SW¼SE¼ sec. 31, T. 10 N., R. 1 W., on left bank 75 ft upstream from bridge on U. S. Highway 91 at Barstow.
Records available.--October 1930 to September 1955.
Gage.--Water-stage recorder. Altitude of gage is 2,090 ft (from topographic map).
Average discharge.--25 years, 30.8 cfs (22,300 acre-ft per year); median of yearly mean discharges, 0.2 cfs (140 acre-ft per year).
Extremes.--No flow during year.
1930-55: Maximum discharge, 64,300 cfs Mar. 3, 1938 (gage height, 8.60 ft), by slope-area determination of peak flow; no flow for several months each year.
Remarks.--No flow since May 11, 1952. Observations of no flow made monthly. Slight regulation by Lake Arrowhead (capacity, 48,000 acre-ft, used principally for recreation). Diversions above station for irrigation of about 2,000 acres.

Mojave River at Afton, Calif.

Location.--Lat 35°02'15", long 116°23'00", in SE¼ sec. 18, T. 11 N., R. 6 E., on downstream end of right pier of Union Pacific Railroad bridge, 0.3 mile west of Afton.
Records available.--December 1929 to September 1932, October 1952 to September 1955.
Gage.--Water-stage recorder. Datum of gage is 1,400.15 ft above mean sea level, datum of 1929, supplementary adjustment of 1943. Dec. 21, 1929, to Sept. 30, 1932, recorder at site 1 mile downstream at different datum.
Average discharge.--5 years (1930-32, 1952-55), 3.26 cfs (2,360 acre-ft per year).
Extremes.--Maximum discharge during year, 285 cfs Aug. 17 (gage height, 3.93 ft), from rating curve extended above 2 cfs on basis of slope-area determination of peak flow; minimum daily, 0.6 cfs July 16.
1929-32, 1952-55: Maximum discharge, 3,550 cfs Feb. 10, 1932 (gage height, 4.70 ft, site and datum then in use); minimum daily, 0.1 cfs July 23-26, 1932.
Remarks.--Records good.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*1.0	1.4	1.4	1.6	1.5	1.5	1.2	1.3	1.2	0.8	0.8	1.0
2	1.0	1.4	1.4	1.6	1.5	1.5	1.2	1.3	1.2	.8	.8	1.0
3	1.0	*1.3	1.5	1.6	1.5	1.5	1.2	1.3	1.2	.8	.7	.9
4	1.0	1.3	1.4	1.6	1.5	1.5	1.2	1.3	1.2	.9	.8	.8
5	1.0	1.3	1.4	1.6	1.5	1.5	1.2	1.3	1.2	.8	.8	.8
6	1.0	1.4	1.5	1.6	1.5	1.4	1.2	1.4	1.2	.8	.8	.7
7	1.0	1.4	1.4	1.6	1.5	1.4	1.2	1.4	1.1	.8	.8	.7
8	1.0	1.4	1.4	1.6	1.5	1.4	1.2	1.3	1.0	.7	.8	.7
9	1.0	1.4	*1.5	1.6	1.5	1.4	1.2	1.4	1.0	.7	.8	*.7
10	1.0	1.4	1.6	1.6	1.5	1.4	1.2	1.4	.9	.8	.8	.7
11	1.0	1.5	1.6	1.6	1.5	1.4	*1.3	1.3	.9	.7	.8	.7
12	1.0	1.4	1.6	1.6	1.5	1.4	1.3	1.3	.9	.7	6.3	.7
13	1.0	1.4	1.6	1.6	1.5	1.4	1.3	1.3	1.0	.7	1.2	.8
14	1.0	1.4	1.6	1.6	1.5	1.3	1.3	1.3	1.0	.8	1.1	.8
15	1.1	1.4	1.6	1.6	1.5	1.3	1.3	1.3	1.0	.7	1.0	.8
16	1.1	1.4	1.6	1.6	*1.5	1.3	1.2	1.3	*1.0	.6	*1.0	.8
17	1.1	1.4	1.6	1.5	1.5	1.3	1.2	1.3	1.0	.7	*12	.9
18	1.1	1.4	1.6	1.5	1.5	1.3	1.2	1.2	1.0	.7	2.5	1.0
19	1.1	1.4	1.6	1.5	1.5	1.3	1.2	*1.3	1.0	*.8	1.2	1.0
20	1.1	1.4	1.6	*1.5	1.5	1.3	1.2	1.3	1.0	.8	1.1	1.0
21	1.2	1.4	1.6	1.5	1.5	1.3	1.2	1.2	.9	.8	1.1	1.1
22	1.2	1.4	1.6	1.5	1.5	1.2	1.2	1.2	.8	.8	1.1	1.1
23	1.2	1.4	1.6	1.5	1.5	1.2	1.2	1.2	.8	.8	1.2	1.0
24	1.2	1.4	1.6	1.5	1.5	*1.3	1.2	1.2	.8	.8	1.3	1.0
25	1.2	1.4	1.6	1.5	1.5	1.3	1.2	1.2	.8	.8	1.3	1.0
26	1.3	1.4	1.6	1.5	1.5	1.2	1.2	1.2	.8	.8	1.2	1.0
27	1.3	1.4	1.6	1.5	1.5	1.2	1.3	1.2	.8	.8	1.2	1.0
28	1.3	1.4	1.6	1.5	1.5	1.2	1.3	1.2	.8	.8	1.2	1.0
29	1.3	1.3	1.6	1.5	-	1.1	1.3	1.2	.8	.7	1.1	1.0
30	1.3	1.3	1.6	1.5	------	1.2	1.3	1.1	.9	.7	1.1	1.0
31	1.4	------	1.6	1.5	------	1.2	------	1.1	------	.8	1.0	------
Total	34.5	41.6	48.1	48.1	42.0	41.2	36.9	39.3	29.2	23.7	48.9	26.7
Mean	1.11	1.39	1.55	1.55	1.50	1.33	1.23	1.27	0.97	0.76	1.58	0.89
Ac-ft	68	83	95	95	83	82	73	78	58	47	97	53

Calendar year 1954: Max 2.2 Min 0.7 Mean 1.28 Ac-ft 928
Water year 1954-55: Max 12 Min 0.6 Mean 1.26 Ac-ft 913

Peak discharge (base, 100 cfs).--Aug. 12 (5:30 p.m.) 162 cfs (3.56 ft); Aug. 17 (2 p.m.) 285 cfs (3.93 ft).
* Discharge measurement made on this day.

Big Rock Creek near Valyermo, Calif.
(Formerly published as Rock Creek near Valyermo)

Location (revised).--Lat 34°25'17", long 117°50'19", in NE¼ sec. 20, T. 4 N., R. 9 W., on left bank 0.1 mile upstream from Punchbowl Canyon and 0.9 mile south of Valyermo.

Drainage area.--23.0 sq mi.

Records available.--January 1923 to September 1955. May 1938 to January 1939, at site 0.2 mile downstream, not equivalent owing to inflow from Punchbowl Canyon. Prior to October 1954, published as Rock Creek near Valyermo.

Gage.--Water-stage recorder. Altitude of gage is 4,050 ft (from topographic map). Prior to May 4, 1938, at same site at different datums. May 4, 1938, to Jan. 26, 1939, at site 0.2 mile downstream (below Punchbowl Canyon) at different datum.

Average discharge.--31 years (1923-37, 1938-55), 14.9 cfs (10,800 acre-ft per year); median of yearly mean discharges, 10 cfs (7,200 acre-ft per year).

Extremes.--Maximum discharge during year, 48 cfs Nov. 11 (gage height, 2.45 ft); minimum daily, 4.0 cfs Oct. 23-26, Oct. 29 to Nov. 1.
1923-55: Maximum discharge, 8,300 cfs Mar. 2, 1938, by slope-area determination of peak flow; minimum daily, 0.7 cfs Nov. 5, 1951.

Remarks.--Records good. Discharge measurements generally made once a week. There is evidence of appreciable infiltration into the stream bed in the immediate vicinity of station.

Cooperation.--Thirty-nine discharge measurements furnished by Los Angeles County Flood Control District.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 17-19)

1.9	1.8	2.2	17
2.0	4.8	2.3	27
2.1	9.7		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.8	4.0	6.0	6.4	7.4	12	12	14	12	6.4	6.0	4.8
2	5.2	4.4	6.0	6.0	7.4	11	12	12	12	6.4	5.6	4.8
3	5.2	4.4	8.0	6.0	7.4	10	12	13	12	6.4	5.2	4.8
4	4.8	4.4	9.7	6.0	7.4	10	12	14	11	6.4	6.0	4.8
5	4.8	4.4	9.1	6.0	7.4	10	12	17	11	6.4	5.6	4.4
6	4.8	4.4	8.6	6.0	7.4	10	11	18	11	6.0	5.2	4.4
7	4.8	4.8	7.4	6.0	7.4	10	11	18	10	6.4	5.2	4.4
8	4.8	5.2	7.0	6.0	7.4	10	11	18	10	6.0	5.2	4.4
9	4.8	5.2	7.4	6.0	7.4	10	11	18	9.7	6.0	5.2	4.4
10	4.8	5.2	8.0	6.0	7.4	10	11	19	9.7	6.4	5.2	4.4
11	4.8	15	7.0	6.0	7.4	13	12	19	9.7	6.0	5.6	4.4
12	4.8	9.1	7.0	6.0	7.4	14	12	19	9.7	6.0	5.2	4.4
13	4.8	8.0	7.0	6.0	8.0	14	12	19	9.7	6.0	5.2	4.4
14	4.8	7.0	7.0	6.0	9.1	13	12	19	9.7	6.0	5.6	4.4
15	4.8	6.0	7.0	6.0	9.7	13	12	18	9.7	6.0	5.2	4.4
16	4.8	5.6	7.0	7.0	12	12	12	17	9.7	6.0	5.6	4.4
17	4.8	5.2	6.4	7.0	26	12	12	17	9.7	6.0	5.2	4.4
18	4.4	5.2	6.4	7.0	24	12	12	17	9.1	6.0	5.2	4.8
19	4.4	4.8	6.4	6.4	20	12	12	17	8.6	6.4	5.2	4.8
20	4.4	4.4	6.4	6.4	17	12	12	16	8.6	6.4	4.8	4.4
21	4.4	4.4	6.4	6.4	16	10	12	16	7.4	6.4	4.8	4.4
22	4.4	4.8	6.4	6.4	15	10	13	15	7.4	6.4	4.8	4.4
23	4.0	5.2	6.4	6.4	14	10	12	14	7.4	6.4	4.8	4.4
24	4.0	5.2	6.4	6.4	13	9.7	12	14	7.4	6.4	4.8	4.4
25	4.0	5.2	6.4	6.4	13	9.7	12	14	7.0	6.4	4.8	4.4
26	4.0	5.6	6.4	7.0	13	9.7	12	13	7.0	6.4	4.8	4.4
27	4.4	6.0	6.4	7.0	14	10	12	13	7.0	6.0	4.8	4.4
28	4.4	6.0	6.4	7.0	12	11	12	12	7.0	6.0	4.8	4.4
29	4.0	6.0	6.0	7.0	-	12	11	12	6.4	6.0	4.8	4.4
30	4.0	5.6	6.0	7.0	------	12	14	12	6.4	5.6	4.8	4.4
31	4.0	------	6.0	7.4	------	12	------	13	------	5.6	4.8	------
Total	141.2	170.7	214.0	198.6	324.6	346.1	357	487	273.0	191.2	160.0	134.4
Mean	4.55	5.69	6.90	6.41	11.6	11.2	11.9	15.7	9.10	6.17	5.16	4.48
Ac-ft	280	339	424	394	644	686	708	966	541	379	317	267

Calendar year 1954: Max 150 Min 2.3 Mean 10.5 Ac-ft 7,600
Water year 1954-55: Max 26 Min 4.0 Mean 8.21 Ac-ft 5,940

Peak discharge (base, 50 cfs).--No peak above base.

Little Rock Creek near Little Rock, Calif.

Location.--Lat 34°27'50", long 118°01'05", in SW¼SW¼NE¼ sec. 3, T. 4 N., R. 11 W., on right bank 0.3 mile upstream from Santiago Creek, 1.65 miles upstream from Little Rock Palmdale Irrigation District's dam, and 5 miles south of Little Rock.

Drainage area.--49.0 sq mi.

Records available.--October 1930 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 3,290 ft (from topographic map). Prior to May 1943, at site 500 ft downstream at different datums (datum changed in March 1939).

Average discharge.--23 years (1930-37, 1939-55), 18.0 cfs (13,030 acre-ft per year); median of yearly mean discharges, 9.9 cfs (7,200 acre-ft per year).

Extremes.--Maximum discharge during year, 236 cfs Nov. 11 (gage height, 5.49 ft); no flow Oct. 1-24, Sept. 9-30.
1930-55: Maximum discharge, 17,000 cfs (estimated) Mar. 2, 1938; no flow during periods in most years.

Cooperation.--Gage-height record and computations of daily discharge furnished by Los Angeles County Flood Control District; records reviewed by Geological Survey.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.6	3.2	4.2	25	18	19	24	9.2	3.2	0.6	0.1
2	0	.7	3.2	5.7	24	19	19	21	8.7	3.0	.6	.1
3	0	.8	3.9	5.7	21	20	18	26	8.2	3.0	.6	.1
4	0	.8	22	5.2	19	20	18	37	7.7	2.9	.6	.1
5	0	.8	11	4.8	17	20	17	51	7.2	2.9	.5	.1
6	0	.8	8.2	4.4	16	19	16	50	6.8	2.9	.5	.1
7	0	.8	7.0	3.9	15	19	15	53	6.4	2.7	.5	.1
8	0	.9	6.4	6.4	16	19	14	48	5.9	2.5	.4	.1
9	0	1.0	6.2	6.4	16	20	14	52	5.5	2.5	.4	0
10	0	1.0	11	6.8	19	21	14	55	5.4	2.4	.4	0
11	0	49	7.7	7.7	19	43	14	49	5.2	2.2	.4	0
12	0	27	6.6	7.5	18	38	14	41	5.2	2.0	.4	0
13	0	14	6.1	7.2	19	35	13	34	5.5	1.6	.3	0
14	0	7.7	5.7	7.2	22	32	13	31	5.5	1.5	.3	0
15	0	6.9	5.5	7.9	26	30	14	26	5.2	1.4	.3	0
16	0	6.0	5.5	11	40	27	13	24	5.0	1.4	.3	0
17	0	5.0	5.4	11	116	24	13	23	4.8	1.4	.3	0
18	0	4.5	5.2	13	71	22	13	21	4.5	1.3	.3	0
19	0	4.2	4.8	13	48	21	13	19	4.2	1.3	.3	0
20	0	3.9	4.7	14	35	20	12	18	4.0	1.3	.3	0
21	0	3.9	4.7	13	31	19	12	16	3.9	1.3	.3	0
22	0	3.7	4.7	12	27	18	15	16	3.7	1.2	.2	0
23	0	3.6	4.7	13	24	17	14	15	3.7	1.1	.2	0
24	0	3.4	4.5	15	22	17	14	14	3.7	1.0	.2	0
25	.1	3.3	4.3	16	20	18	13	14	3.6	.9	.2	0
26	.1	3.2	4.3	17	20	20	13	13	3.4	.9	.2	0
27	.2	3.0	3.9	18	21	21	13	12	3.3	.8	.1	0
28	.4	2.9	3.4	19	20	21	12	11	3.3	.8	.1	0
29	.4	3.3	4.0	22	-	22	12	10	3.3	.8	.1	0
30	.5	3.3	3.9	24	------	22	16	9.5	3.3	.7	.1	0
31	.5	------	4.0	26	------	20	------	9.2	------	.7	.1	------
Total	2.2	170.0	185.7	348.0	787	702	430	842.7	155.3	53.6	10.1	0.8
Mean	0.07	5.67	5.99	11.2	28.1	22.6	14.3	27.2	5.18	1.73	0.33	0.03
Ac-ft	4.4	337	368	690	1,560	1,390	853	1,670	308	106	20	1.6

Calendar year 1954: Max 328 Min 0 Mean 12.4 Ac-ft 8,960
Water year 1954-55: Max 116 Min 0 Mean 10.1 Ac-ft 7,310

Mono Lake near Mono Lake, Calif.

Location.--Lat 38°00', long 119°08', in NE¼ sec. 31, T. 2 N., R. 26 E., on west bank 1 mile south of Mono Lake Post Office.
Records available.--June 1912 to September 1955. Records prior to September 1934 are published in WSP 765.
Gage.--Staff gage. Datum of gage is 6,410.73 ft above mean sea level, datum of 1929. Gage readings have been reduced to elevations above mean sea level.
Extremes.--1912-55: Maximum elevation observed, 6,428.1 ft July 18, 1919; minimum observed, 6,403.18 ft Sept. 30, 1955.
Cooperation.--Gage-height record furnished by city of Los Angeles, Department of Water and Power.
Revisions (water years).--WSP 765: 1912-33. WSP 1284: 1952.

Elevation, in feet, October 1954 to September 1955

Date	Elevation	Date	Elevation	Date	Elevation
Oct. 1	6,405.28	Feb. 8	6,404.79	May 27	6,404.58
8	6,405.20	11	6,404.74	June 3	6,404.52
15	6,405.17	18	6,404.92	10	6,404.51
22	6,405.09	25	6,404.80	17	6,404.45
29	6,405.01	Mar. 9	6,404.77	24	6,404.39
Nov. 5	6,404.98	11	6,404.78	July 1	6,404.26
12	6,404.97	18	6,404.75	8	6,404.16
19	6,404.98	23	6,404.76	15	6,404.12
26	6,404.93	30	6,404.78	22	6,404.06
Dec. 3	6,404.84	Apr. 8	6,404.78	29	6,404.01
10	6,404.95	15	6,404.78	Aug. 5	6,403.97
17	6,404.85	22	6,404.71	12	6,403.92
24	6,404.92	29	6,404.72	19	6,403.76
31	6,404.84	May 6	6,404.64	26	6,403.70
Jan. 7	6,404.80	9	6,404.64	Sept. 2	6,403.59
14	6,404.83	10	6,404.68	9	6,403.49
21	6,404.83	13	6,404.70	16	6,403.36
28	6,404.80	20	6,404.61	23	6,403.23
				30	6,403.18

WALKER LAKE BASIN

Walker Lake near Hawthorne, Nev.

Location.--Lat 38°35', long 118°42', in NE¼NE¼ sec. 2, T. 8 N., R. 29 E., 3 miles northwest of Hawthorne.
Records available.--August 1928 to September 1955. Occasional readings prior to August 1928.
Gage.--Benchmark, at United States Naval Depot, 4,053.41 ft above mean sea level, adjustment of 1912.
Extremes.--1928-55: Maximum elevation observed, 4,051.8 ft Mar. 13, 1928 (Indian Service); minimum observed, 3,991.32 ft Sept. 1, 1955.
An elevation of 4,078.0 ft, adjustment of 1912, was observed Sept. 27, 1908, by Geological Survey.
Remarks.--Elevations determined by spirit leveling.
Cooperation.--Records furnished by U. S. Navy Department.

Elevation, in feet, October 1954 to September 1955

Oct. 1.....	3,994.21	July 6.....	3,992.13
29.....	3,993.80	Aug. 1.....	3,991.95
Dec. 1.....	3,993.37	Sept. 1.....	3,991.32
Jan. 6.....	3,993.30		

Bridgeport Reservoir near Bridgeport, Calif.

Location.--Lat 38°19'30", long 119°12'50", in SE¼ sec. 34, T. 6 N., R. 25 E., at Bridgeport Dam on East Walker River, 4½ miles north of Bridgeport.

Drainage area.--362 sq mi.

Records available.--October 1931 to September 1955 in reports of Geological Survey. March 1926 to September 1955 in files of Walker River Irrigation District.

Gage.--Float gage read once daily. Datum of gage is at mean sea level.

Extremes.--Maximum contents during year, 20,720 acre-ft Mar. 26, Apr. 2 (elevation, 6,451.06 ft); minimum, 1,480 acre-ft Sept. 19 (elevation, 6,431.25 ft).
1926-55: Maximum contents, 44,580 acre-ft June 12, 1938 (elevation, 6,460.7 ft); no contents during fall of 1929, 1930.

Remarks.--Reservoir is formed by earth-fill, rock-faced dam. Storage began Dec. 8, 1923. Dam completed in November 1924. Capacity, 42,460 acre-ft between elevations of 6,412 ft (sill of outlet gate) and 6,460 ft (crest of spillway). No dead storage. Water is used for irrigation by Walker River Irrigation District.

Cooperation.--Elevations and capacity table furnished by Walker River Irrigation District.

Revisions (water years).--WSP 1180: 1949.

Capacity table, water year 1954-55 (elevation, in feet, and contents, in acre-feet)

6,431	1,400	6,445	11,380
6,435	2,920	6,450	18,780
6,440	6,240	6,455	29,160

Contents, in acre-feet at 8 a.m., water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,510	4,510	7,740	11,030	13,790	17,320	20,720	18,960	13,990	15,320	9,820	3,260
2	3,480	4,580	7,890	11,140	13,920	17,400	20,720	18,870	13,990	15,250	9,540	3,130
3	3,450	4,640	8,030	11,260	13,990	17,580	20,720	18,780	13,920	15,250	9,270	3,000
4	3,450	4,710	8,230	11,320	14,140	17,750	20,720	18,690	13,850	15,170	9,000	2,850
5	3,450	4,780	8,390	11,380	14,210	17,920	20,720	18,610	13,790	15,100	8,740	2,730
6	3,420	4,860	8,590	11,380	14,360	18,010	20,720	18,520	13,720	14,950	8,490	2,620
7	3,420	4,970	8,690	11,440	14,430	18,180	20,720	18,350	13,790	14,800	8,180	2,520
8	3,450	5,000	8,840	11,440	14,510	18,350	20,720	18,440	13,850	14,660	7,940	2,410
9	3,450	5,080	8,950	11,440	14,660	18,440	20,720	18,350	14,140	14,430	7,700	2,330
10	3,480	5,150	9,100	11,570	14,730	18,690	20,620	18,260	14,510	14,360	7,410	2,230
11	3,510	5,220	9,210	11,690	14,880	18,870	20,620	18,180	14,800	14,290	7,120	2,130
12	3,540	5,330	9,320	11,760	14,950	19,060	20,530	17,920	15,030	14,140	6,980	2,050
13	3,570	5,400	9,430	11,820	15,100	19,330	20,440	17,830	15,250	13,990	6,500	1,960
14	3,600	5,560	9,540	11,940	15,170	19,420	20,340	17,660	15,470	13,790	6,200	1,880
15	-	5,680	9,600	12,070	15,250	19,520	20,160	17,400	15,550	13,650	5,920	1,780
16	-	6,000	9,700	12,130	15,400	19,700	19,980	17,150	15,710	13,450	5,640	1,660
17	-	6,200	9,760	12,260	15,630	19,800	19,980	16,900	15,790	13,170	5,440	1,590
18	-	6,330	9,870	12,320	15,790	19,880	19,880	16,660	15,870	12,830	5,260	1,490
19	-	6,420	9,920	12,440	15,950	20,070	19,700	16,340	15,950	12,500	5,080	1,480
20	-	6,550	10,040	12,570	16,110	20,160	19,610	16,110	15,950	12,260	4,930	1,490
21	-	6,680	-	12,630	16,340	20,250	19,610	15,870	15,950	12,000	4,750	1,510
22	-	6,770	-	12,770	16,500	20,440	19,520	15,630	16,030	11,820	4,580	1,490
23	-	6,900	-	12,900	16,580	20,530	19,420	15,400	15,950	11,630	4,410	1,490
24	-	7,030	-	12,970	16,740	20,620	19,420	15,170	15,950	11,500	4,280	1,490
25	-	7,170	-	13,040	16,820	20,720	19,240	15,030	15,870	11,320	4,180	1,520
26	4,150	7,310	-	13,170	16,980	20,720	19,240	14,800	15,790	11,200	4,050	1,540
27	4,150	7,410	10,550	13,310	17,150	20,720	19,150	14,580	15,710	10,970	3,960	1,560
28	4,220	7,460	10,670	13,380	17,230	20,720	19,150	14,290	15,550	10,730	3,780	1,560
29	4,280	7,600	10,730	13,450	-	20,720	19,060	14,140	15,320	10,550	3,660	1,540
30	4,350	7,700	10,790	13,580	-------	20,720	18,960	14,060	15,320	10,320	3,540	1,540
31	4,450	-------	10,910	13,720	-------	20,720	-------	13,920	-------	10,040	3,400	-------
(†)	6,437.58	6,441.58	6,444.60	6,446.78	6,449.09	6,451.04	6,450.10	6,446.94	6,447.90	6,443.86	6,435.90	6,431.45
(‡)	+940	+3,250	+3,210	+2,810	+3,510	+3,490	-1,760	-5,040	+1,400	-5,280	-6,640	-1,860

Calendar year 1954: (‡) -17,910
Water year 1954-55: (‡) -1,970

(†) Elevation, in feet, at end of month.
(‡) Change in contents in acre-feet.

East Walker River near Bridgeport, Calif.

Location.--Lat 38°19'40", long 119°12'50", in SW¼NE¼ sec. 34, T. 6 N., R. 25 E., on right bank 1,500 ft downstream from Bridgeport Reservoir, 5 miles north Bridgeport, and 10 miles upstream from Sweetwater Creek.

Drainage area.--362 sq mi.

Records available.--July 1911 to September 1914 (gage heights only), October 1921 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,400 ft (from topographic map). Prior to Oct. 1, 1921, staff gage at site half a mile upstream at different datum. Oct. 1, 1921, to Feb. 21, 1924, water-stage recorder at site 1 mile downstream at different datum. Feb. 22, 1924, to Sept. 30, 1931, water-stage recorder, and Oct. 1, 1931, to May 25, 1939, staff gage, at present site at datum 2.34 ft lower.

Average discharge.--32 years (1922-24, 1925-55), 128 cfs (92,670 acre-ft per year).

Extremes.--Maximum daily discharge during year, 242 cfs June 12-21 (gage height, 1.61 ft); minimum daily, 2.2 cfs Dec. 12.
1921-55: Maximum discharge, 1,240 cfs Jan. 22, 1943 (gage height, 4.5 ft); minimum daily, 0.5 cfs Dec. 31, 1949, to Feb. 17, 1950, Feb. 22 to Mar. 3, 1950.

Remarks.--Records excellent. Diversion for irrigation of meadow pasture lands near Bridgeport. Flow regulated by Bridgeport Reservoir (see preceding page).

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.0	1.3	0.6	33
.1	2.5	.8	61
.2	5.0	1.0	96
.3	9.0	1.5	212
.4	15	2.0	360

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	11	7.4	12	5.0	5.0	61	66	166	125	*194	*96
2	50	11	5.8	12	5.0	5.0	61	64	154	127	194	96
3	50	12	5.4	12	5.0	5.0	60	64	159	140	191	96
4	49	12	5.4	11	5.0	5.0	60	64	168	147	184	94
5	49	11	6.6	9.0	5.0	5.0	60	73	168	147	176	94
6	40	12	7.0	9.0	5.0	5.0	60	80	176	147	176	94
7	37	12	7.0	*9.0	5.0	5.0	60	80	204	150	176	94
8	*37	12	5.4	9.0	*5.0	*5.0	58	82	212	147	181	94
9	37	12	5.4	9.0	5.0	5.0	64	82	215	138	189	92
10	37	12	4.4	9.0	5.0	5.0	66	92	215	123	199	92
11	27	11	3.0	9.0	5.0	5.4	75	120	234	120	204	91
12	20	8.2	2.2	9.0	5.0	5.4	94	123	242	131	202	91
13	21	7.8	12	6.6	5.0	5.4	92	123	242	147	199	91
14	21	7.8	26	4.4	5.0	5.4	89	147	242	159	199	91
15	21	7.8	21	4.4	5.0	5.4	82	164	242	166	181	89
16	21	8.2	20	4.4	5.0	5.4	71	164	242	178	154	89
17	21	8.2	15	4.4	5.0	5.4	*71	164	242	196	129	87
18	17	*8.2	13	4.7	5.0	5.4	71	168	242	196	129	87
19	14	8.6	13	4.7	5.0	5.4	71	189	242	196	127	76
20	15	8.6	13	4.7	5.0	5.4	70	189	242	186	127	58
21	16	9.0	11	4.7	5.0	5.4	70	189	242	181	125	58
22	14	7.0	11	4.7	5.0	5.4	55	189	*231	181	125	58
23	16	5.4	13	4.7	5.0	4.7	50	189	202	178	125	58
24	13	5.4	13	4.7	5.0	22	49	189	186	178	106	58
25	12	5.4	13	4.7	5.0	38	49	189	186	178	98	58
26	11	8.2	13	4.7	5.0	62	49	189	186	178	98	58
27	8.2	7.4	13	4.7	5.0	75	49	*181	186	178	98	58
28	8.2	7.4	13	4.7	5.0	75	54	166	186	178	98	60
29	8.2	7.4	13	4.7	-	68	64	166	156	184	96	60
30	7.8	7.4	13	4.7	------	61	64	171	125	194	96	60
31	8.6	------	13	5.0	------	81	------	181	------	194	96	------
Total	757.0	271.4	337.0	209.3	140.0	581.5	1,949	4,297	6,135	5,068	4,672	2,378
Mean	24.4	9.05	10.9	6.75	5.00	18.8	65.0	139	204	163	151	79.3
Ac-ft	1,500	538	668	415	278	1,150	3,870	8,520	12,170	10,050	9,270	4,720

Calendar year 1954: Max 316 Min 2.2 Mean 111 Ac-ft 80,080
Water year 1954-55: Max 242 Min 2.2 Mean 73.4 Ac-ft 53,150

* Discharge measurement made on this day.

East Walker River above Strosnider ditch, near Mason, Nev.

Location.--Lat 38°49', long 119°03', in sec. 14, T. 11 N., R. 26 E., on left bank 0.9 mile upstream from head of Strosnider ditch, 12 miles southeast of Mason, and 13½ miles southeast of Yerington.

Drainage area.--1,100 sq mi, approximately.

Records available.--January 1947 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 4,574.66 ft above mean sea level, datum of 1929.

Average discharge.--8 years (1947-55), 119 cfs (86,150 acre-ft per year).

Extremes.--Maximum discharge during year, 243 cfs July 22 (gage height, 2.35 ft); minimum, 8.8 cfs Mar. 24.
1947-55: Maximum discharge, 1,400 cfs July 14, 1952 (gage height, 6.21 ft), from rating curve extended above 1,100 cfs by logarithmic plotting; minimum, 3.1 cfs Mar. 21, 1948; minimum daily, 3.4 cfs Mar. 21-24, 1948.

Remarks.--Records good except those for periods of ice effect, which are fair. Diversions for irrigation above station. Flow regulated by Bridgeport Reservoir (see p. 163).

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	8.0	1.6	94
1.0	16	2.0	168
1.2	37	3.0	392

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	22	29		26	23	30	57	148	108	140	72
2	46	23	26		26	*25	34	63	144	102	133	72
3	49	22	30		28	26	36	60	133	99	124	71
4	47	22	30		b27	24	38	58	131	102	118	74
5	49	21	30		27	23	42	56	138	108	111	80
6	47	21	29		29	22	44	53	138	109	108	78
7	45	22	28		28	19	40	63	137	108	104	74
8	41	21	26	b30	27	19	36	74	148	109	106	71
9	40	21	24		26	20	34	78	162	113	106	72
10	44	23	27		27	21	37	78	170	111	104	71
11	42	24	28		27	21	*44	78	170	102	101	68
12	41	25	27		26	21	53	99	180	96	99	68
13	36	26	23		26	19	65	104	188	94	99	68
14	34	26	26		26	18	63	113	188	*101	99	64
15	33	28	27		27	17	61	124	192	109	102	64
16	32	36	36		28	17	61	*140	194	115	106	65
17	30	40	36		29	16	57	142	196	113	102	65
18	29	34	36		30	16	56	144	198	129	96	80
19	27	34			29	14	56	144	201	131	*89	80
20	26	33			26	16	56	154	205	138	88	71
21	26	33		b25	25	15	58	154	201	138	84	61
22	25	32			28	10	56	156	198	179	89	60
23	26	29			27	10	54	158	*192	154	88	57
24	27	29			27	9.6	44	158	168	144	92	54
25	28	28	b35		25	9.6	37	170	144	137	84	51
26	27	28			26	10	36	158	137	131	78	50
27	27	27		*27	26	15	37	154	142	129	75	50
28	*28	28		25	26	33	37	152	140	129	77	*49
29	25	28		25	-	45	37	144	142	127	75	49
30	24	*29		26	------	35	47	140	133	131	72	50
31	22	------	(*)	28	------	30	------	146	------	142	72	------
Total	1,068	815	973	856	755	619.2	1,386	3,572	4,958	3,738	3,021	1,959
Mean	34.5	27.2	31.4	27.6	27.0	20.0	46.2	115	165	121	97.5	65.3
Ac-ft	2,120	1,620	1,930	1,700	1,500	1,230	2,750	7,080	9,830	7,410	5,990	3,890

Calendar year 1954: Max 257 Min 19 Mean 98.1 Ac-ft 71,060
Water year 1954-55: Max 205 Min 9.6 Mean 65.0 Ac-ft 47,050

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

East Fork West Walker River near Bridgeport, Calif.

Location.--Lat 38°21'30", long 119°26'30", in NW¼NW¼ sec. 22, T. 6 N., R. 23 E., on right bank three-quarters of a mile north of Sonora Junction, 1½ miles upstream from mouth, and 14 miles northwest of Bridgeport.

Drainage area.--63 sq mi, approximately.

Records available.--April to August 1910, October 1944 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,790 ft (from topographic map). April to August 1910 staff gage at site 1 mile upstream at different datum.

Average discharge.--11 years (1944-55), 48.4 cfs (35,040 acre-ft per year).

Extremes.--Maximum discharge during year, 350 cfs June 9 (gage height, 2.08 ft); minimum, 10 cfs Nov. 6.
1910, 1944-55: Maximum discharge recorded, 660 cfs Feb. 2, 1945 (gage height, 2.69 ft), from rating curve extended above 270 cfs on basis of velocity-area study and slope-area determination at gage height 2.60 ft; maximum gage height recorded, 3.63 ft Jan. 3, 1945 (backwater from ice); minimum discharge recorded, 4.9 cfs Nov. 17, 1948.

Remarks.--Records good except those for periods of ice effect, which are fair. Small diversions above stations.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.6	10	1.2	70
.8	21	1.5	140
1.0	39	2.0	330

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	*14	18		(*)	(*)	*26	26	*97	80	27	14
2	14	14	*19				22	*24	82	80	27	14
3	*14	13	18	(*)			23	22	82	78	27	14
4	14	12					20	23	97	74	27	12
5	13	13			14	18	21	27	126	68	27	12
6	13	14					20	32	161	63	27	13
7	12	13					21	37	*204	63	27	12
8	13	12					24	32	246	62	25	12
9	13	14	16		14	19	26	30	263	63	23	12
10	13	13			14	18	25	35	284	62	22	12
11	13	14			14	20	23	40	250	62	21	12
12	13	14		15	14	20	24	47	204	62	*20	12
13	13	16			15	19	26	50	184	62	21	12
14	13	14			15	19	23	47	173	63	20	12
15	13	23			17		23	39	158	63	18	12
16	13	17			24	18	23	34	137	63	14	12
17	12	20			27		23	33	129	56	14	13
18	13	19			20		22	39	124	52	14	17
19	12	20				19	24	52	135	*51	17	19
20	13	17				20	22	65	137	49	19	17
21	13	17				22	23	86	135	52	19	16
22	13	16				16	24	106	132	55	18	14
23	13	15				21	23	116	124	50	17	14
24	14	15	14		18	25	26	104	111	46	17	16
25	17	15		15		25	27	86	104	40	17	15
26	17	14		14		27	22	84	99	37	16	14
27	18	14				24	32	90	97	35	16	*14
28	17	14		14		29	27	104	95	32	16	14
29	16	12			-	27	24	135	88	30	15	14
30	14	12		14	------	22	24	143	82	30	15	14
31	15	------		16	------	24	------	124	------	29	14	------
Total	427	450	471	461	466	632	713	1,912	4,340	1,712	617	410
Mean	13.8	15.0	15.2	14.9	16.6	20.4	23.8	61.7	145	55.2	19.9	13.7
Ac-ft	847	893	934	914	924	1,250	1,410	3,790	8,610	3,400	1,220	813

Calendar year 1954: Max 215 Min 11 Mean 34.9 Ac-ft 25,290
Water year 1954-55: Max 284 Min 12 Mean 34.6 Ac-ft 25,000

Peak discharge (base, 200 cfs).--June 9 (11:30 p.m.) 350 cfs (2.08 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 29 to Jan. 24, Jan. 27-29, Feb. 1-8, 10, 11, 13, Feb. 18 to Mar. 8, Mar. 15-18.

West Walker River below East Fork, near Coleville, Calif.

Location.--Lat 38°22'45", long 119°27'00", in SE¼ sec. 9, T. 6 N., R. 23 E., on left bank 75 ft downstream from East Fork, 200 ft upstream from bridge on U. S. Highway 395, and 13 miles southeast of Coleville.

Drainage area.--182 sq mi.

Records available.--April 1938 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,650 ft (from topographic map). Prior to Oct. 1, 1939, at site 125 ft downstream at datum 1.00 ft higher.

Average discharge.--17 years, 252 cfs (182,400 acre-ft per year).

Extremes.--Maximum discharge during year, 2,230 cfs June 10 (gage height, 5.13 ft); minimum, 13 cfs Nov. 30, result of freezeup.
1938-55: Maximum discharge, 6,220 cfs Nov. 20, 1950 (gage height, 8.10 ft); from rating curve extended above 1,900 cfs on basis of slope-area determination of peak flow; minimum, 4.0 cfs Nov. 18, 1948, result of freezeup.

Remarks.--Records good except those for periods of ice effect, which are fair. Station is above diversions except for a few small ranch ditches. Flow very slightly regulated by Poor Lake Reservoir (capacity unknown), 7 miles upstream.

Revisions (water years).--WSP 880: 1917 (runoff in acre-feet).

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.6	27	2.5	401
.8	43	3.0	607
1.1	78	4.0	1,260
1.5	140	5.0	2,100
2.0	246		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	*28	33	43	*41	*63	*102	133	*617	*405	*96	*51
2	33	28	*47			59	100	*125	522	398	92	51
3	*33	29	58	(*)		51	89	126	593	380	91	49
4	33	29	43			51	91	138	766	350	95	49
5	33	28	38		41	53	82	169	1,060	324	96	49
6	32	28	38			54	84	234	1,360	299	98	49
7	31	29	38			48	91	318	1,600	282	109	49
8	31	28	39			54	106	285	*1,740	290	94	46
9	31	30	38		41	60	130	282	1,760	293	82	45
10	31	30	41		42	55	151	366	1,890	265	78	45
11	31	32	43		42	64	138	446	1,610	268	84	43
12	30	34	46	45	40	69	142	531	1,300	273	81	42
13	30	32	40		43	70	162	589	1,090	282	77	40
14	30	36	44		43	38	156	506	974	305	75	38
15	30	62	40		50	48	154	366	898	336	74	37
16	30	46	41		72	42	166	296	732	305	72	38
17	30	41	42		91	40	164	290	720	265	70	40
18	30	39	41		64	45	140	380	715	226	70	52
19	29	38	39		61	53	140	540	755	207	69	54
20	29	38	44		65	48	133	709	790	198	68	53
21	30	36	45		68	46	130	*919	743	194	72	47
22	30	36	45		63	52	128	1,020	738	200	68	41
23	30	37	45		55	55	130	*1,090	698	185	66	38
24	27	37	40		55	70	149	926	557	171	64	40
25	28	35	36		50	77	162	607	510	153	63	39
26	28	36	40	40	44	84	128	602	493	137	61	37
27	28	37	47		34	91	154	693	477	123	61	35
28	29	36	48		63	92	158	832	493	117	60	33
29	30	32	44		-	98	142	1,100	458	110	57	33
30	29	27	43	42	------	88	137	1,240	423	106	53	32
31	29	------	47	40	------	86	-----	988	------	101	52	------
Total	937	1,034	1,313	1,350	1,414	1,900	3,939	16,846	27,082	7,546	2,348	1,295
Mean	30.2	34.5	42.4	43.5	50.5	61.3	131	543	903	243	75.7	43.2
Ac-ft	1,860	2,050	2,600	2,680	2,800	3,770	7,810	33,410	53,720	14,970	4,660	2,570

Calendar year 1954: Max 1,480 Min 27 Mean 187 Ac-ft 135,400
Water year 1954-55: Max 1,890 Min 27 Mean 184 Ac-ft 132,900

Peak discharge (base, 1,120 cfs).--May 23 (10 p.m.) 1,280 cfs (3.97 ft); May 30 (1 a.m.) 1,520 cfs (4.27 ft); June 10 (2 a.m.) 2,230 cfs (5.13 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 6, 8, 12, 14, 17-28, Jan. 2-29, Feb. 2-8, 10, 11, 13, 19-25, Feb. 28 to Mar. 6.

Topaz Reservoir near Topaz, Calif.

Location.--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 1955.

Gage.--Float and staff gages at outlet works of Topaz Reservoir. Datum of gage is at mean sea level (levels by Walker River Irrigation District).

Extremes.--Maximum contents during year, 43,000 acre-ft June 24 (elevation, 4,997.45 ft); minimum observed, 3,940 acre-ft Oct. 14 (elevation, 4,974.85 ft).
1931-55: Maximum contents observed, 60,240 acre-ft June 30, 1941 (elevation, 5,005.35 ft); minimum observed, 505 acre-ft Oct. 22-25, 1931 (elevation, 4,972.63 ft).

Remarks.--Topaz Reservoir, formerly known as 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. Storage began Jan. 30, 1922. Usable capacity, 59,440 acre-ft between elevations 4,972.3 ft (lowest practical elevation for diversion through tunnel, bottom of outlet tunnel at elevation 4,970 ft) and 5,005 ft (3 ft below top of levee). Capacity of reservoir increased from about 45,000 acre-ft to 59,440 acre-ft in October 1937 by an earth-fill, rock-faced levee at south end. Water is used for irrigation in Walker River Irrigation District.

Cooperation.--Elevations furnished by Walker River Irrigation District.

Contents, in acre-feet, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,430	4,410	7,480	-	16,310	20,510	22,590	20,060	25,260	41,760	27,250	11,640
2	4,330	-	-	-	-	-	22,340	20,120	25,640	41,550	26,730	11,140
3	4,330	-	7,800	-	-	-	-	19,970	25,760	41,350	26,020	10,660
4	4,270	-	-	-	16,570	20,920	22,320	19,790	25,910	41,150	25,330	10,190
5	4,210	4,570	-	-	-	-	22,250	19,600	26,280	40,950	24,730	9,760
6	4,140	-	8,430	-	-	-	22,270	19,380	27,020	40,650	24,090	9,300
7	4,080	-	-	12,700	-	-	22,250	19,280	28,480	40,340	23,550	8,850
8	4,020	-	-	-	-	-	22,240	19,400	30,480	40,030	23,040	8,400
9	-	-	-	-	-	-	22,200	19,320	32,330	39,670	22,510	7,960
10	-	-	9,390	-	-	-	-	19,130	33,850	39,230	21,960	7,560
11	-	-	-	-	17,600	21,660	22,030	19,120	35,930	38,800	21,460	7,190
12	-	-	-	-	-	-	21,940	19,020	37,650	38,430	20,950	6,820
13	-	-	-	-	-	-	21,850	18,930	38,860	38,000	20,410	6,480
14	3,940	-	-	13,640	18,130	-	21,760	18,830	39,630	37,510	19,940	6,150
15	-	-	-	-	-	-	21,590	18,670	40,320	37,030	19,440	5,930
16	-	-	-	-	-	-	21,490	18,320	40,870	36,650	18,950	5,460
17	-	-	10,160	-	-	-	21,390	17,950	41,230	36,180	18,500	5,180
18	-	-	-	-	19,000	22,080	21,320	17,650	41,510	35,620	18,060	4,960
19	-	6,370	-	-	-	-	21,200	17,530	41,800	35,110	17,620	4,740
20	-	-	-	-	-	-	21,120	17,750	42,100	34,530	17,200	4,860
21	-	-	-	14,660	-	-	21,030	18,080	42,430	33,850	16,800	4,800
22	4,020	-	-	-	-	-	20,930	18,720	42,630	33,240	16,420	4,710
23	-	-	10,920	-	-	-	20,870	19,420	42,800	32,690	15,980	4,640
24	-	-	-	-	-	-	20,750	20,260	43,000	32,080	15,530	4,610
25	-	-	-	-	19,910	22,390	20,750	21,070	42,980	31,440	15,040	4,530
26	-	7,400	-	-	-	22,440	-	21,220	42,840	30,820	14,560	4,460
27	-	-	-	-	-	22,510	20,530	21,290	42,690	30,200	14,100	4,430
28	-	-	-	15,400	a20,360	22,490	20,510	21,510	42,490	29,640	13,630	4,390
29	4,250	-	-	-	-	-	20,410	22,000	42,240	29,020	13,120	4,300
30	-	a7,460	-	-	-------	22,440	20,290	22,970	41,980	28,570	12,630	4,180
31	a4,350	-------	11,730	a16,070	-------	22,420	-------	24,180	-------	27,990	12,110	-------
(†)	-	-	4,979.75	-	-	4,986.20	4,984.94	4,987.23	4,996.95	4,989.44	4,979.99	4,975.00
(‡)	-170	+3,110	+4,270	+4,340	+4,290	+2,060	-2,130	+3,890	+17,800	-13,990	-15,880	-7,930

Calendar year 1954: (‡) -18,350
Water year 1954-55: (‡) -340

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.
a No elevation record; contents interpolated.

West Walker River near Hudson, Nev.

Location.--Lat 38°49', long 119°14', in SW¼ sec. 18, T. 11 N., R. 25 E., on left bank half a mile upstream from Wilson Canyon and 3 miles southeast of Hudson.

Drainage area.--964 sq mi.

Records available.--August 1914 to March 1925, January 1947 to September 1955. August 1914 to May 1921 published as "at Hudson."

Gage.--Water-stage recorder. Altitude of gage is 4,670 ft (from topographic map). Prior to May 1921, staff gage at site 2½ miles upstream at different datum. May 1921 to March 1925, water-stage recorder at approximately same site at different datum.

Average discharge.--18 years (1914-24, 1947-55), 196 cfs (141,900 acre-ft per year).

Extremes.--Maximum discharge during year, 403 cfs June 8 (gage height, 2.22 ft); minimum, 34 cfs Jan. 29, 30.
1914-25, 1947-55: Maximum discharge, 2,530 cfs June 7, 1922 (gage height, 6.35 ft, site and datum then in use); minimum daily, 13 cfs Aug. 7 to Sept. 21, 1920.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by off-channel storage in Topaz Reservoir since Jan 30, 1922 (see preceding page). Slight regulation by storage in Poor Lake Reservoir (capacity unknown). Many diversions above station for irrigation.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	28	1.6	174
1.1	53	2.0	317
1.3	91	3.0	715

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	65	50	b45	45	36	39	54	114	235	302	174	156
2	67	49	45	47	35	*39	53	114	325	287	187	156
3	70	46	46	43	b35	39	56	106	290	275	210	141
4	70	45	46	b41	b35	38	58	106	279	268	210	130
5	72	45	46	b40	36	37	58	108	298	272	194	133
6	72	45	47	39	b36	b37	56	122	325	253	184	124
7	72	45	46	b39	36	37	54	136	232	228	184	122
8	65	45	45	}	36	37	51	138	313	210	197	127
9	63	45	b45	a39	37	37	49	177	*348	200	194	130
10	60	45	47	}	36	37	45	197	333	207	184	124
11	58	45	45	}	b36	37	*54	207	313	210	177	127
12	56	45	43	}	36	35	65	283	290	204	174	114
13	54	45	43	b39	37	38	68	298	321	214	165	108
14	56	45	42	}	37	37	68	325	364	*228	147	101
15	65	49	42	}	37	37	74	329	372	253	153	94
16	65	65	43	38	38	b40	72	*325	333	246	136	96
17	58	54	}	b38	39	45	74	272	360	253	124	104
18	54	51	}	37	39	46	80	268	329	264	122	116
19	53	50	}	b36	}	46	83	249	321	242	*116	130
20	53	47	}	36	}	45	94	242	329	238	111	133
21	51	47	b42	}	b38	45	89	313	333	235	104	116
22	50	47	}	35	}	46	91	325	329	207	98	108
23	49	47	}	}	37	46	91	360	336	218	101	104
24	50	46	41	}	b35	b37	46	91	364	329	200	114
25	53	46	}	}	37	37	43	91	364	329	200	114
26	53	45	}	35	37	37	43	87	325	336	200	124
27	53	45	b41	}	36	37	42	94	321	340	197	130
28	*51	45	}	}	*b35	37	41	104	336	344	190	136
29	51	45	}	}	b35	b38	42	101	340	340	184	130
30	51	*b45	41	}	34	-	46	104	313	329	197	144
31	50	------	*42	}	35	------	54	114	321	317	194	127
					36	------	54	------	272	------	177	156
Total	1,810	1,414	1,339	1,177	1,031	1,285	2,232	7,706	9,643	7,053	4,707	3,392
Mean	58.4	47.1	43.2	38.0	36.8	41.5	74.4	249	321	228	152	113
Ac-ft	3,590	2,800	2,660	2,330	2,040	2,550	4,430	15,280	19,130	13,990	9,340	6,730

Calendar year 1954: Max 426 Min 35 Mean 136 Ac-ft 98,250
Water year 1954-55: Max 372 Min - Mean 117 Ac-ft 84,870

Peak discharge (base, 500 cfs).--No peak above base.
* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby streams.
b Stage-discharge relation affected by ice.

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CARSON RIVER BASIN

Silver Creek below Pennsylvania Creek, near Markleeville, Calif.

Location.--Lat 38°36', long 119°47', in sec. 28, T. 9 N., R. 20 E., on left bank a quarter of a mile downstream from Pennsylvania Creek and 6½ miles south of Markleeville.

Drainage area.--20 sq mi, approximately.

Records available.--December 1946 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,500 ft (from topographic map). Prior to Aug. 3, 1954, at site 150 ft upstream at datum 2.20 ft higher.

Average discharge.--7 years (1948-55), 44.5 cfs (32,220 acre-ft per year).

Extremes.--Maximum discharge during year, 426 cfs July 14 (gage height, 3.14 ft); minimum, 0.7 cfs Oct. 25, 27, 28.
1946-55: Maximum discharge, 1,260 cfs Nov. 20, 1950 (gage height, 7.95 ft, site and datum then in use), from rating curve extended above 350 cfs on basis of slope-area determination of peak flow; minimum, that of Oct. 25, 27, 28, 1955.

Remarks.--Records good. Flow partly regulated by three small reservoirs (total capacity, about 1,700 acre-ft).

Rating tables, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to May 20				May 21 to Sept. 30			
0.3	1.4	0.9	25	0.1	1.0	1.0	45
.4	3.4	1.3	63	.3	5.0	1.5	99
.5	6.1	2.0	152	.5	12	2.0	170
.7	14	2.5	233	.7	23	2.5	265

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	2.2	3.9	4.2	4.5	6.5	17	24	109	*36	16	21
2	3.0	2.4	7.5	4.2	4.5	6.1	14	24	104	35	16	21
3	3.0	2.6	8.3	4.2	4.5	6.1	13	30	117	31	16	16
4	3.0	2.6	6.1	4.2	4.2	6.1	13	43	167	31	15	7.1
5	3.0	2.4	5.6	4.2	4.2	5.8	12	78	*196	27	15	6.8
6	3.0	2.4	5.6	4.2	4.2	6.1	13	109	207	26	16	10
7	3.0	2.6	4.8	4.2	4.2	6.5	16	113	236	24	15	10
8	3.2	3.0	4.8	4.2	4.5	7.2	22	94	218	24	14	18
9	3.2	3.2	5.0	4.2	4.8	7.2	31	109	226	23	14	16
10	3.0	3.2	4.8	4.2	4.8	7.2	30	130	218	21	14	16
11	3.0	3.9	4.2	3.9	5.0	7.2	25	141	173	21	24	14
12	3.0	3.7	4.2	3.9	5.0	7.2	31	160	148	21	39	6.4
13	3.0	3.2	4.2	3.9	5.3	7.2	32	*145	138	*21	39	2.2
14	3.2	3.7	*4.2	3.9	5.6	7.2	*31	107	*129	63	38	2.0
15	3.2	7.5	4.2	4.2	5.8	6.5	37	79	113	34	37	2.2
16	3.0	4.5	4.2	3.9	9.0	*6.5	42	70	103	31	36	2.2
17	2.8	4.5	4.2	4.2	10	6.5	36	88	97	28	35	2.6
18	3.0	4.8	4.5	4.2	7.9	6.8	27	120	93	26	25	4.6
19	2.8	5.0	4.8	4.2	7.0	7.2	24	151	94	*25	15	5.9
20	3.0	4.8	4.8	4.2	6.7	6.8	23	179	88	23	14	4.6
21	3.0	4.8	4.8	4.2	6.5	6.8	21	202	83	23	14	3.8
22	*3.0	5.6	4.8	4.2	6.5	7.5	21	198	82	22	12	*3.0
23	3.0	5.8	4.8	4.2	6.5	7.5	28	213	65	21	*12	3.2
24	1.6	*5.8	4.8	4.2	6.5	11	35	170	*60	20	20	3.6
25	2.0	5.6	4.5	*4.2	6.5	13	32	142	57	19	19	3.2
26	1.8	5.6	4.2	4.2	6.5	15	27	140	53	19	18	3.0
27	1.8	5.3	4.2	4.2	6.5	15	28	159	50	18	16	2.8
28	2.0	5.0	4.2	4.8	6.5	15	*29	185	46	18	19	2.8
29	2.2	3.7	4.2	4.8	-	14	27	224	45	17	24	2.8
30	2.2	3.8	4.2	4.8	------	12	27	192	39	17	24	2.6
31	2.2	------	4.2	4.5	------	14	------	139	------	16	22	------
Total	85.0	123.2	148.8	130.8	163.7	264.7	764	3,958	3,554	781	653	219.4
Mean	2.74	4.11	4.80	4.22	5.85	8.54	25.5	128	118	25.2	21.1	7.31
Ac-ft	169	244	295	259	325	525	1,520	7,850	7,050	1,550	1,300	435

Calendar year 1954: Max 264 Min 1.6 Mean 38.0 Ac-ft 27,500
Water year 1954-55: Max 236 Min 1.6 Mean 29.7 Ac-ft 21,520

Peak discharge (base, 190 cfs).--May 12 (4 p.m.) 233 cfs (2.50 ft); May 21 (4 p.m.) 332 cfs (2.87 ft); May 29 (4 p.m.) 339 cfs (2.82 ft); June 7 (5:30 p.m.) 327 cfs (2.77 ft); July 14 (5:15 p.m.) 426 cfs (3.14 ft).

* Discharge measurement made on this day.

Markleeville Creek above Grover Hot Springs, near Markleeville, Calif.

Location.--Lat 38°42', long 119°51', in SE¼NE¼ sec. 23, T. 10 N., R. 19 E., on right bank half a mile upstream from Buck Creek, 4 miles upstream from mouth, and 4 miles west of Markleeville.

Drainage area.--14 sq mi, approximately.

Records available.--October 1946 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,880 ft (from river-profile map, extended). Prior to July 31, 1953, at site 25 ft upstream at datum 0.05 ft higher.

Average discharge.--9 years, 26.5 cfs (19,190 acre-ft per year).

Extremes.--Maximum discharge during year, 297 cfs May 29 (gage height, 5.05 ft); minimum daily, 0.3 cfs Sept. 11-14.

1946-55: Maximum discharge, 1,740 cfs Nov. 20, 1950 (gage height, 8.49 ft), from rating curve extended above 330 cfs on basis of slope-area determination of peak flow; minimum, 0.2 cfs Aug. 20, 23, Sept. 1-5, Oct. 13-16, 1949.

Remarks.--Records good except those for periods of backwater from beaver dams or indefinite stage-discharge relation, which are fair.

Rating table, water year 1954-55, except periods of backwater from beaver dams or indefinite stage-discharge relation (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 5 to Jan. 1, Jan. 25 to Apr. 19)

1.8	0.3	2.9	26
1.9	.8	3.2	46
2.0	1.5	3.6	85
2.1	2.5	4.0	130
2.3	5.8	4.5	202
2.6	14		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			1.3	2.6	2.6	3.4	11	20	87	17	1.5	0.4
2			4.0		2.6	3.2	10	20	85	17	1.4	.4
3		c0.7	6.2		2.6	3.2	9.0	21	92	17	1.3	.4
4			3.8		2.6	3.2	8.5	26	114	16	1.2	.4
5		.7	3.0		2.6	3.4	8.2	42	131	14	1.2	.4
6	(*)	.6	3.2		2.6	3.4	8.5	54	*140	13	2.6	.4
7		.7	3.0		2.6	3.6	11	57	153	*12	2.6	.4
8		*.7	2.8	e2.3	2.6	3.7	15	60	150	11	1.3	.4
9		.7	2.6		2.8	4.0	*17	89	143	11	1.1	.4
10		1.2	2.6		2.8	4.2	17	107	135	10	1.0	.4
11		1.5	2.4		2.8	4.4	16	129	106	10	.9	.3
12		1.7	2.4		3.0	4.7	17	147	90	9.5	.8	.3
13	c0.5	1.5	2.3		3.1	4.9	19	*134	88	8.8	.8	.3
14		1.7	*2.2		3.4	4.7	*19	94	*83	11	.8	.3
15		6.1	2.2		4.0	4.5	19	62	70	12	.8	.4
16		2.4	2.2		7.0	*4.4	21	52	62	9.2	.8	.4
17		1.4	2.1		7.8	4.2	20	62	56	7.6	.8	.5
18		1.4	2.1		5.1	4.0	17	94	51	6.0	.7	.9
19		1.4	2.2	e2.4	4.9	4.2	16	131	50	*5.4	.7	.9
20		1.6	2.3		4.4	4.0	15	163	46	4.9	.7	.9
21		1.5	2.3		4.0	3.8	15	193	42	4.7	.7	.7
22	(*)	1.4	2.3		3.8	3.8	15	183	40	4.7	.6	*.6
23		1.4	2.4		3.7	4.0	17	196	36	4.2	*.6	.6
24		*1.4	2.4		3.6	4.7	21	147	*31	3.7	.6	.6
25		1.4	2.3	*2.4	3.4	6.0	22	108	28	3.0	.6	.6
26		1.4	2.2	2.4	3.4	7.1	20	108	26	2.6	.6	.6
27		1.4	2.2	2.4	4.0	8.0	20	120	24	2.4	.6	.6
28	c.6	1.4	2.2	2.5	3.4	10	*21	142	24	2.3	.6	.6
29		1.2	2.2	2.6	-	10	21	187	21	2.2	.5	.6
30		1.2	2.3	2.6	------	8.2	21	*171	19	2.0	.4	.6
31		------	2.6	2.6	------	8.5	------	118	------	1.7	.4	------
Total	16.2	41.8	80.3	74.1	101.2	153.4	487.2	3,237	2,223	255.9	29.2	15.3
Mean	0.52	1.39	2.59	2.39	3.61	4.95	16.2	104	74.1	8.25	0.94	0.51
Ac-ft	32	83	159	147	201	304	966	6,420	4,410	508	58	30

Calendar year 1954: Max 203 Min - Mean 20.4 Ac-ft 14,750
Water year 1954-55: Max 196 Min 0.3 Mean 18.4 Ac-ft 13,320

Peak discharge (base, 175 cfs).--May 12 (6:30 p.m.) 205 cfs (4.52 ft); May 23 (7 p.m.) 292 cfs (5.02 ft); May 29 (7 p.m.) 297 cfs (5.05 ft); June 7 (8 p.m.) 202 cfs (4.50 ft).

* Discharge measurement made on this day.
c Backwater from beaver dam.
e Stage-discharge relation indefinite; discharge estimated on basis of weather records and records for nearby streams.

East Fork Carson River near Gardnerville, Nev.

Location.--Lat 38°51'30", long 119°41'50", in NE¼ sec. 2, T. 11 N., R. 20 E., on left bank 2 miles east of Mud Lake Reservoir, 3 miles downstream from Leviathan Creek, and 7 miles southeast of Gardnerville.

Drainage area.--344 sq mi.

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, October 1935 to December 1937, May 1939 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 4,985.11 ft above mean sea level (levels by Bureau of Reclamation). Prior to May 19, 1939, staff gages at several sites within 2 miles of present site at various datums.

Average discharge.--28 years (1890-93, 1901-3, 1908-10, 1925-28, 1935-37, 1939-55), 398 cfs (288,100 acre-ft per year).

Extremes.--Maximum discharge during year, 1,920 cfs June 9 (gage height, 3.93 ft); minimum, 34 cfs Sept. 14, but may have been less during period of ice effect.
1890-93, 1900-1906, 1908-10, 1917, 1924-29, 1935-37, 1939-55: Maximum discharge, 12,100 cfs Nov. 21, 1950 (gage height, 9.66 ft), from rating cruve extended above 6,000 cfs on basis of slope-area determination of peak flow; minimum observed, 8 cfs Dec. 4-10, 19-23, 1904.

Remarks.--Records good. Station is above all diversions in Carson Valley. Diversions for irrigation above station. Flow slightly regulated by several small reservoirs (total capacity, about 5,000 acre-ft).

Revisions (water years).--WSP 1060: Drainage area. WSP 1214: 1938(M), 1942-43(M), 1945(M).

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.5	25	2.0	420
.8	38	3.0	1,060
1.0	108	4.0	1,950
1.5	238		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	53	53	95	84	94	191	264	*831	273	132	62
2	47	52	90	75	79	102	191	251	716	264	128	60
3	48	55	175	62	76	104	162	254	756	257	128	56
4	48	55	123	60	72	98	175	277	880	244	123	50
5	48	53	90	58	75	96	152	355	1,140	232	121	42
6	48	53	94	56	80	84	164	520	1,270	214	123	44
7	*48	52	96	55	83	98	170	730	1,390	202	126	46
8	50	53	74	54	83	110	188	606	1,460	200	115	44
9	50	55	*84	52	86	123	235	632	1,490	194	102	50
10	50	56	88	54	83	132	284	768	1,480	186	104	48
11	50	56	70	60	83	135	251	922	1,230	180	96	48
12	48	*67	75	70	92	144	248	1,020	1,030	170	110	48
13	48	62	90	90	90	137	284	1,050	*957	159	106	42
14	48	60	72	*94	100	126	270	887	880	198	100	35
15	50	125	84	94	104	106	267	638	789	349	*96	35
16	50	157	75	92	128	98	297	520	678	223	94	36
17	48	86	70	88	*202	102	315	526	*638	194	94	41
18	50	81	66	82	144	*106	267	*671	600	180	92	65
19	48	74	64	76	90	115	241	866	580	*162	77	75
20	48	74	62	74	90	104	244	1,060	580	164	72	*68
21	50	72	60	76	88	96	229	1,240	532	172	74	63
22	50	70	61	80	88	115	228	*1,290	494	188	72	60
23	56	74	65	83	90	112	*217	1,310	472	194	68	55
24	52	74	75	86	90	128	260	1,240	416	135	70	65
25	48	74	60	90	90	149	301	950	382	117	65	58
26	50	72	56	90	90	159	267	887	363	104	62	53
27	50	72	52	82	86	172	257	936	344	108	62	53
28	50	72	54	70	72	191	311	1,020	333	110	58	50
29	52	70	60	70	-	200	287	1,190	322	117	65	50
30	53	58	70	75	------	172	273	1,300	304	123	67	48
31	53	------	85	80	------	162	------	1,140	------	132	63	------
Total	1,536	2,087	2,393	2,323	2,618	3,870	7,224	25,320	23,337	5,745	2,865	1,550
Mean	49.5	69.6	77.2	74.9	93.5	125	241	817	778	185	92.4	51.7
Ac-ft	3,050	4,140	4,750	4,610	5,190	7,680	14,330	50,220	46,290	11,400	5,680	3,070

Calendar year 1954: Max 2,140 Min 41 Mean 272 Ac-ft 196,900
Water year 1954-55: Max 1,490 Min 35 Mean 222 Ac-ft 160,400

Peak discharge (base, 1,300 cfs).--May 22 (1 a.m.) 1,630 cfs (3.66 ft); May 30 (1:30 a.m.) 1,610 cfs (3.64 ft); June 9 (9 p.m.) 1,920 cfs (3.93 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 1, Dec. 18 to Jan. 31, Feb. 3-6, 19-26.

West Fork Carson River at Woodfords, Calif.

Location.--Lat 38°46'00", long 119°50'00", in SE¼SW¼ sec. 34, T. 11 N., R. 19 E., on left bank 0.3 mile downstream from bridge on State Highway 8, 0.8 mile west of Woodfords, and 3¾ miles downstream from Willow Creek.

Drainage area.--66 sq mi, approximately.

Records available.--October 1900 to May 1907, 1910-11 (fragmentary), October 1938 to September 1955. April 1890 to March 1892 and June 1907 to September 1920 (except portions of 1910-11) at site 0.7 mile downstream; records not equivalent due to diversions for irrigation.

Gage.--Water-stage recorder. Altitude of gage is 5,760 ft (from river-profile map). Prior to Oct. 1, 1938, staff gage at about the same site at different datum.

Average discharge.--19 years (1901-3, 1905-6, 1939-55), 112 cfs (81,080 acre-ft per year).

Extremes.--Maximum discharge during year, 596 cfs May 12 (gage height, 3.59 ft); minimum, 8.2 cfs Nov. 30.

1900-1907, 1910-11, 1938-55: Maximum discharge, 4,730 cfs Nov. 20, 1950 (gage height, 8.35 ft, from high-water marks), from rating curve extended above 1,000 cfs on basis of slope-area determination of peak flow; minimum (1900-1907, 1938-55) that of Nov. 30, 1954.

Flood of Dec. 11, 1937, reached a stage of 9.0 ft (present datum), from floodmarks (discharge, 3,500 cfs, by slope-area method).

Remarks.--Records good. One small diversion above station for irrigation. Flow slightly regulated by several small reservoirs (total capacity, about 1,500 acre-ft).

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.3	10	2.0	160
.5	16	2.5	252
.7	24	3.0	380
1.0	43	3.5	540
1.5	90		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	16	19	21	21	25	56	97	260	70	24	21
2	15	17	23	21	21	25	55	105	221	68	40	21
3	16	17	28	b21	22	25	51	126	213	66	47	20
4	16	17	24	b21	b22	25	50	165	244	60	46	17
5	16	17	20	22	22	25	47	221	280	60	43	16
6	*16	17	22	21	b21	26	46	300	314	79	37	15
7	16	17	18	b21	21	26	55	362	344	78	25	14
8	16	17	17	b22	22	26	71	309	350	76	22	13
9	16	17	*22	22	22	23	88	344	362	75	21	12
10	16	16	20	22	21	27	97	374	359	61	23	12
11	16	18	b17	21	21	27	89	407	296	51	25	12
12	16	*20	21	21	22	27	100	437	246	47	27	12
13	16	19	20	21	22	28	116	392	*240	*45	28	20
14	16	20	20	*21	22	27	111	289	232	48	26	23
15	16	27	20	21	23	27	119	221	193	63	*19	23
16	16	24	20	21	28	b28	136	191	170	48	26	22
17	14	22	18	b21	*28	28	129	208	160	42	30	22
18	15	20	18	20	24	*26	98	258	152	37	29	22
19	15	19	19	21	b26	26	86	314	147	56	29	20
20	15	20	20	21	b28	26	82	368	144	59	30	*20
21	15	20	20	21	29	26	77	431	135	58	29	19
22	15	20	20	21	26	26	77	431	130	59	18	18
23	15	21	21	21	26	27	92	431	126	54	16	18
24	15	21	20	22	26	30	130	*380	114	39	19	20
25	16	20	b18	22	25	34	125	289	105	30	16	20
26	16	21	b18	22	22	36	72	273	101	27	14	19
27	16	21	b20	21	b16	37	111	271	95	26	14	18
28	16	20	20	22	b20	44	*115	291	91	25	14	17
29	16	19	20	22	-	47	111	336	84	25	16	22
30	16	14	20	22	------	44	107	365	74	24	22	22
31	16	------	21	21	------	46	------	325	------	24	22	------
Total	485	574	624	660	649	925	2,699	9,311	5,982	1,580	797	550
Mean	15.6	19.1	20.1	21.3	23.2	29.8	90.0	300	199	51.0	25.7	18.3
Ac-ft	962	1,140	1,240	1,310	1,290	1,830	5,350	18,470	11,870	3,130	1,580	1,090

Calendar year 1954: Max 505 Min 13 Mean 70.5 Ac-ft 51,040
Water year 1954-55: Max 437 Min 12 Mean 68.0 Ac-ft 49,260

Peak discharge (base, 500 cfs).--May 12 (9 p.m.) 596 cfs (3.59 ft); May 21 (10 p.m.) 592 cfs (3.58 ft).

* Discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Clear Creek near Carson City, Nev.

Location.--Lat 39°07', long 119°49', in sec. 1, T. 14 N., R. 19 E., on left bank 3 miles upstream from mouth and 4 miles southwest of Carson City.

Drainage area.--15 sq mi, approximately.

Records available.--March 1948 to September 1955.

Gage.--Water-stage recorder and sharp-crested weir. Altitude of gage is 4,700 ft (from river-profile map).

Average discharge.--7 years, 6.23 cfs (4,510 acre-ft per year).

Extremes.--Maximum discharge during year, 22 cfs Feb. 16 (gage height, 0.85 ft); minimum, 1.6 cfs several days in July, August, September.
1948-55: Maximum discharge, 56 cfs Dec. 3, 1950 (gage height, 1.95 ft); minimum, 1.0 cfs Aug. 4, 5, 6, 20, 1949.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Four small diversions for irrigation of about 150 acres of hay meadows and pasture above station.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.2	1.4
.3	2.9
.4	5.0
.6	11

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.3	2.9	4.0	6.6	4.6	5.3	5.8	5.3	4.4	2.2	2.0	1.7
2	2.3	2.8	5.8	5.5	4.4	5.8	5.8	5.0	4.4	2.2	2.0	1.7
3	2.3	2.8	8.7	5.3	4.2	5.8	5.5	4.8	4.2	2.2	2.0	1.7
4	2.3	2.8	6.6	b5.3	b4.2	5.5	5.5	4.6	4.2	2.3	1.8	1.7
5	2.3	2.8	5.3	5.3	4.4	5.0	5.3	5.0	4.0	2.2	1.8	1.7
6	2.3	2.9	7.2	5.0	4.4	5.3	5.0	5.3	3.7	2.2	1.8	1.7
7	2.4	2.9	5.8		4.4	a5.5	4.0	7.4	3.7	2.3	2.0	1.7
8	2.6	2.9	5.3	b4.8	4.6	a5.7	4.0	8.4	3.5	2.3	2.0	1.7
9	2.6	2.9	5.3		4.8		4.6	7.2	3.5	2.3	1.8	1.7
10	2.6	2.9	5.0	4.8	4.6		5.0	6.4	3.5	2.3	1.8	1.7
11	2.6	2.9	4.8	4.6	4.8	a5.8	5.0	5.8	3.5	2.3	1.8	1.7
12	2.6	3.1	4.8	4.8	5.0		5.0	5.8	3.5	2.2	1.8	1.7
13	2.8	3.1	5.0	*4.8	5.0		5.0	5.8	3.5	2.0	1.8	1.7
14	2.8	3.1	4.8	4.6	5.3	a5.6	5.0	5.8	3.5	2.2	1.8	1.8
15	*2.8	6.6	4.8	4.8	*6.4	a5.5	4.8	6.1	3.3	2.2	1.8	1.8
16	2.8	4.2	4.8	4.8	9.0	a5.3	*4.4	5.5	*3.3	2.0	1.8	1.8
17	2.8	3.5	4.8	b4.8	*9.9	*5.3	5.0	5.5	3.1	2.0	1.8	2.0
18	2.6	3.5	4.8	4.8	6.1	5.5	5.5	5.3	2.8	2.0	1.8	2.4
19	2.6	*3.3	4.8	4.6	b5.7	5.5	5.0	*4.8	2.6	1.8	1.8	2.2
20	2.6	3.3	4.8	4.6	b5.5	5.0	5.3	4.8	2.6	*1.6	1.7	2.0
21	2.6	3.3	4.6	4.6	b5.4	5.3	5.8	4.8	2.4	2.2	1.7	2.0
22	2.4	3.3	4.6	4.6	5.3	5.3	5.5	4.8	2.3	2.2	*1.7	2.0
23	2.6	4.0	4.8	4.6	5.0	5.3	5.3	4.6	2.3	2.2	1.7	*1.8
24	2.8	4.0	4.8	4.8	5.0	5.5	5.0	4.6	2.4	2.0	1.7	1.8
25	2.8	4.0	4.6	4.8	5.0	6.1	5.8	4.6	2.2	2.0	1.7	1.8
26	2.8	4.0	b4.3	4.8	5.0	6.1	6.6	4.4	2.3	2.0	1.7	1.8
27	2.9	4.0	b3.8	4.8	b4.8	6.1	6.9	4.4	2.4	2.0	1.8	1.8
28	2.9	4.0	4.3	4.8	b4.7	7.4	6.4	4.4	2.4	2.0	1.7	1.8
29	2.9	3.7	4.8	4.8	-	7.2	6.1	4.4	2.4	2.0	1.7	1.8
30	2.9	4.0	5.3	4.6	------	6.4	6.1	4.2	2.3	2.0	1.7	
31	2.9	------	6.1	4.6	------	6.1	------	4.6	------	2.0	1.7	------
Total	81.5	103.5	159.2	151.2	147.5	177.4	160.0	164.4	94.2	65.6	55.7	54.5
Mean	2.63	3.45	5.14	4.88	5.27	5.72	5.33	5.30	3.14	2.12	1.80	1.82
Ac-ft	162	205	316	300	293	352	317	326	187	130	110	108

Calendar year 1954: Max 19 Min 1.8 Mean 4.53 Ac-ft 3,280
Water year 1954-55: Max 9.9 Min 1.7 Mean 3.88 Ac-ft 2,810

Peak discharge (base, 15 cfs).--Feb. 16 (5:30 p.m.) 22 cfs (0.85 ft).
* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby streams.
b Stage-discharge relation affected by ice.

Carson River near Carson City, Nev.

Location.--Lat 39°06'30", long 119°42'30", in NW¼ sec. 2, T. 14 N., R. 20 E., on right bank 2 miles downstream from Clear Creek, 2½ miles upstream from bridge on road to Mexican Dam, and 5 miles southeast of Carson City.

Drainage area.--876 sq mi.

Records available.--May 1939 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 4,621.48 ft above mean sea level, datum of 1929.

Average discharge.--16 years, 399 cfs (288,900 acre-ft per year).

Extremes.--Maximum discharge during year, 1,410 cfs June 10 (gage height, 3.47 ft); minimum, 8.0 cfs Aug. 25.
1939-55: Maximum discharge, 15,500 cfs Nov. 22, 1950 (gage height, 11.40 ft), from rating curve extended above 6,000 cfs on basis of computation of peak flow over dam; minimum daily, 4 cfs Aug. 17, 1939.

Remarks.--Records good except those for periods of ice effect, which are fair. Many diversions above station for irrigation. Flow slightly regulated by several small reservoirs on tributaries.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

-0.3	8.0	1.1	117
0.0	16	1.5	208
.2	24	2.0	410
.4	35	3.0	1,000
.7	60	4.0	1,910

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	41	102	176	164	140	103	169	1,080	88	23	9.6
2	20	44	107	211	155	164	100	169	836	78	21	9.6
3	22	46	167	164	138	174	112	138	698	77	19	9.8
4	22	46	275	130	*132	169	115	112	698	91	19	12
5	22	47	211	110	138	159	*136	119	842	94	*16	14
6	24	44	171	100	144	151	110	*121	1,020	73	14	15
7	*28	42	*184	90	144	*149	107	211	1,040	*58	12	13
8	26	46	171	*90	151	157	107	560	*1,120	51	15	11
9	26	*48	146	80	169	167	114	582	1,190	44	18	9.6
10	27	46	155	90	174	179	134	587	1,260	43	18	9.4
11	28	47	151	90	157	181	159	728	1,300	56	17	9.8
12	28	50	132	90	149	181	138	830	1,140	67	18	11
13	31	53	132	110	164	179	112	916	944	52	14	9.2
14	32	57	146	130	164	167	97	923	818	47	16	10
15	31	61	138	140	169	157	82	836	734	60	18	9.2
16	26	227	136	159	176	146	88	656	582	76	17	10
17	26	208	130	140	233	140	128	516	455	53	18	15
18	30	149	123	125	261	140	144	526	375	48	16	21
19	28	134	114	130	186	138	149	656	360	48	12	22
20	28	128	110	125	155	136	159	818	328	39	11	23
21	28	123	107	125	157	128	169	944	279	33	12	24
22	28	119	105	135	162	125	125	1,140	279	33	14	22
23	28	117	115	130	157	128	132	*1,220	268	28	10	22
24	30	119	140	130	151	126	115	1,190	268	26	9.2	27
25	33	117	130	142	149	128	128	979	250	31	9.8	26
26	34	115	108	149	146	138	142	806	224	43	8.8	28
27	41	117	85	140	142	125	176	752	214	44	9.2	28
28	45	117	85	128	134	130	162	800	164	26	11	26
29	44	115	107	132	-	130	171	867	149	28	12	*20
30	44	107	144	149	------	146	169	1,140	110	28	14	19
31	42	------	153	151	------	130	------	1,240	------	21	*11	------
Total	922	2,730	4,280	3,991	4,521	4,608	3,883	21,251	19,025	1,584	452.0	495.2
Mean	29.7	91.0	138	129	161	149	129	686	634	51.1	14.6	16.5
Ac-ft	1,830	5,410	8,490	7,920	8,970	9,140	7,700	42,150	37,740	3,140	897	982

Calendar year 1954: Max 1,830 Min 13 Mean 262 Ac-ft 189,400
Water year 1954-55: Max 1,300 Min 8.8 Mean 186 Ac-ft 134,400

Peak discharge (base, 1,600 cfs).--No peak above base.
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 16-29, Jan. 4-15, 17-24, 27, 28.

Carson River near Fort Churchill, Nev.

Location.--Lat 39°17', long 119°18', in SE¼ sec. 32, T. 17 N., R. 24 E., 2 miles west of Fort Churchill and 6 miles east of Clifton.

Drainage area.--1,450 sq mi, approximately.

Records available.--April 1911 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 4,216.34 ft above mean sea level (levels by Truckee-Carson Irrigation District). Prior to Apr. 25, 1924, staff gage at site 7⅞ miles upstream at different datum. Apr. 25, 1924, to Dec. 31, 1933, water-stage recorder at site 8 miles upstream at different datum.

Average discharge.--44 years, 364 cfs (263,500 acre-ft per year).

Extremes.--Maximum daily discharge during year, 1,200 cfs June 11; no flow Oct. 1 to Nov. 16, July 3 to Sept. 30.
1911-55: Maximum daily discharge, 7,850 cfs Nov. 23, 1950; no flow during some periods in nearly every year since 1923.

Remarks.--Several diversions above station for irrigation, including diversions for irrigation of 720 acres between present site and site used prior to Jan. 1, 1934. Practically entire flow is diverted during late irrigation season.

Cooperation.--Records of daily discharge furnished by Truckee-Carson Irrigation District.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	47	155	170	137	152	107	1,130	66		
2		0	62	176	176	140	140	110	1,140	12		
3		0	66	198	161	161	119	116	985	0		
4		0	125	164	158	176	101	88	720	0		
5		0	226	155	155	170	110	48	660	0		
6		0	206	137	152	164	119	33	880	0		
7		0	183	128	161	155	131	27	1,020	0		
8		0	183	115	161	149	125	88	1,000	0		
9		0	175	95	167	158	104	357	1,080	0		
10		0	144	95	176	167	104	385	1,110	0		
11		0	144	98	183	170	107	397	1,200	0		
12		0	144	100	173	176	122	520	1,160	0		
13		0	132	105	164	176	140	631	1,030	0		
14		0	125	110	170	173	134	784	880	0		
15		0	136	120	176	164	116	784	744	0		
16		0	132	135	180	155	92	646	631	0		
17		93	129	150	189	149	78	475	505	0		
18		148	125	146	219	143	72	397	397	0		
19		121	121	142	240	137	95	416	343	0		
20		105	121	140	207	134	125	520	309	0		
21		97	113	142	183	137	131	646	276	0		
22		90	117	149	176	134	125	784	252	0		
23		82	125	152	183	128	137	985	231	0		
24		78	125	149	180	131	101	1,020	213	0		
25		82	136	152	173	128	88	1,040	201	0		
26		82	129	164	167	122	78	824	198	0		
27		78	97	164	170	131	78	668	186	0		
28		78	100	158	167	131	78	631	180	0		
29		78	112	155	-	134	84	683	170	0		
30		78	125	152	------	134	92	784	164	0		
31		------	144	164	------	152	------	1,080	------	0		------
Total	0	1,290	4,049	4,365	4,937	4,616	3,278	16,054	18,995	78	0	0
Mean	0	43.0	131	141	176	149	109	518	633	2.52	0	0
Ac-ft	0	2,560	8,030	8,660	9,790	9,160	6,500	31,840	37,680	155	0	0

Calendar year 1954: Max 1,500 Min 0 Mean 233 Ac-ft 169,000
Water year 1954-55: Max 1,200 Min 0 Mean 158 Ac-ft 114,400

Note.--Stage-discharge relation affected by ice Dec. 28, 29, Jan. 8-21.

Marys River above Hot Springs Creek, near Deeth, Nev.

Location.--Lat 41°15', long 115°17', in NE¼SE¼ sec. 24, T. 39 N., R. 59 E., on right bank 1 mile upstream from Hot Springs Creek, 7 miles north of Cross Ranch, and 13 miles north of Deeth.

Drainage area.--415 sq mi.

Records available.--October 1943 to September 1955. Published as "below Hot Springs Creek, near Deeth" prior to October 1950.

Gage.--Water-stage recorder. Altitude of gage is 5,500 ft (from river-profile map). Prior to Nov. 3, 1950, at site 1¼ miles downstream at different datum.

Average discharge.--12 years, 60.0 cfs (43,440 acre-ft per year).

Extremes.--Maximum discharge during year, 189 cfs May 25 (gage height, 2.55 ft); minimum, 0.1 cfs Aug. 27.
1943-55: Maximum discharge 1,250 cfs Apr. 29, 1952 (gage height, 6.57 ft); minimum, 0.1 cfs Sept. 5, 1950, Aug. 27, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Several diversions above station for irrigation.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used June 25-30, Aug. 4 to Sept. 30)

0.1	0.1	0.7	13
.2	.5	1.0	29
.3	1.6	1.5	70
.4	3.4	2.0	121
.5	5.8	2.5	186

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	2.8	3.6	5.8		b13	32	49	129	27	a1.8	0.2
2	1.3	2.8	3.8	5.8		b13	33	72	123	24	a1.4	.2
3	.8	2.8	4.3			13	31	74	114	24	a1.0	.2
4	1.0	2.8	4.8				29	68	106	23	*.7	.3
5	1.0	2.8	4.5			b13	28	63	102	23	.9	.2
6	1.0	3.2	4.3				27	79	97	18	1.0	.2
7	1.0	3.0	4.8	(*)	b7.0	b14	27	111	103	16	1.0	.2
8	1.0	*4.1	4.1			b14	26	143	*121	15	.8	.2
9	1.2	*3.0	4.1	b5.5		15	28	155	141	13	.6	*.2
10	1.2	3.0	4.1			18	42	*165	149	12	.6	.2
11	1.2	3.0	4.1			22	56	154	150	13	.5	.2
12	1.4	3.2	4.1			25	55	157	107	13	.5	.2
13	1.4	3.2	4.5			28	48	154	92	12	.6	.2
14	1.4	3.4	4.5			28	44	175	84	7.8	.6	.3
15	1.6	3.9	4.5			b27	42	178	95	6.3	.6	.3
16	1.8	6.3	4.3		b8.0	b25	40	159	101	5.0	.6	.4
17	1.9	4.1	4.1			24	40	145	86	4.3	.3	.6
18	*2.3	3.6	4.1			23	*48	128	75	3.2	.3	.6
19	2.3	3.6	3.8			22	53	111	70	3.0	.3	.8
20	2.1	3.6	3.6		10	b21	49	107	66	3.0	.3	.5
21	2.4	3.6	3.6		*10	b21	44	119	56	4.3	.3	.5
22	2.4	3.6	4.1		10	*21	41	152	52	5.0	.3	.5
23	2.4	3.8	4.1		b11	22	39	*178	48	4.3	.3	.5
24	2.3	4.1	4.5	b6.0	b11	25	38	182	44	3.6	.3	.5
25	2.4	4.3	4.5		b12	28	39	185	38	3.8	.4	.6
26	2.4	4.5	4.3		12	28	42	171	33	3.6	.4	.6
27	2.6	4.3	4.1		12	27	46	149	30	3.0	.2	.5
28	2.6	4.1	4.1		b12	28	47	128	27	2.8	.2	.6
29	2.8	4.1	4.3		-	30	44	114	*32	2.8	.3	.5
30	2.8	3.8	4.8		------	33	42	111	30	a2.4	.2	.5
31	2.8	-----	5.5		------	32	-----	123	------	a2.1	.2	------
Total	56.2	107.3	131.9	179.1	240.0	679	1,200	4,059	2,501	303.3	17.5	11.5
Mean	1.81	3.58	4.25	5.78	8.57	21.9	40.0	131	83.4	9.79	0.55	0.38
Ac-ft	111	213	262	355	476	1,350	2,380	8,050	4,960	602	35	23

Calendar year 1954: Max 122 Min 0.4 Mean 21.1 Ac-ft 15,270
Water year 1954-55: Max 185 Min 0.2 Mean 26.0 Ac-ft 18,820

Peak discharge (base, 200 cfs).--No peak above base.
* Discharge measurement made on this day.
a No gage-height record; discharge interpolated.
b Stage-discharge relation affected by ice.

Lamoille Creek near Lamoille, Nev.

Location.--Lat 40°41'30", long 115°28'30", in NE¼ sec. 6, T. 32 N., R. 58 E., on left bank at Lamoille Creek bridge at mouth of canyon, 300 ft downstream from Elko-Lamoille powerplant and 3 miles south of Lamoille.

Drainage area.--25 sq mi, approximately.

Records available.--May 1915 to June 1923, October 1943 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,240 ft (from topographic map). Prior to Oct. 1, 1943, staff gages at various sites nearby at different datums.

Average discharge.--18 years (1915-16, 1917-22, 1943-55), 42.5 cfs (30,770 acre-ft per year).

Extremes.--Maximum discharge during year, 323 cfs June 9; minimum, 1.0 cfs Dec. 8. 1915-23, 1943-55: Maximum discharge recorded, 588 cfs July 6, 1950, but may have been exceeded by that of June 1917 when gage washed out; minimum, 1.0 cfs Jan. 24, 1918, Dec. 8, 1954.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Records include flow of McDermott ditch, which diverts about 200 ft upstream from gage. Elko-Lamoille powerplant diverts about 6 miles upstream but flow is returned to channel at powerplant 300 ft upstream from station.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	3.4	a2.8	2.7		2.8	3.6	9.0	101	75	17	6.6
2	3.2	3.4	a3.0	2.5		2.8	3.6	8.6	92	75	16	6.6
3	3.2	3.4	a3.2	2.5		2.8	3.2	8.3	89	72	14	6.3
4	3.4	3.4	a3.2	2.4		2.8	3.6	9.0	95	71	13	6.0
5	*3.3	3.2	a2.9	2.4		2.8	3.6	10	111	71	14	6.0
6	3.2	3.2	*a2.8	2.4		b3.0	3.8	13	*152	64	18	5.7
7	3.2	3.2	2.5	2.5		3.0	4.0	17	196	61	16	5.7
8	3.4	3.2	b2.5	a2.6		3.0	4.2	20	241	58	14	5.5
9	3.4	3.2	b2.5	a2.8		3.0	4.7	20	275	56	13	5.2
10	3.4	3.2	2.5	a3.0		3.2	4.9	24	264	53	12	5.2
11	3.4	3.2	2.5	a2.8	a2.7	3.2	4.7	32	261	55	12	5.2
12	3.6	3.6	b2.5	a2.7		3.4	4.4	43	252	51	11	4.9
13	4.0	3.2	2.7	a2.5		3.2	4.7	52	228	*52	12	4.9
14	3.8	3.2	2.7	*a2.4		3.2	4.9	48	207	51	13	4.9
15	3.8	3.8	2.7	2.8		3.0	4.9	39	207	53	12	4.9
16	3.6	4.2	b2.6	2.8		b3.0	5.2	*36	177	56	10	4.9
17	3.6	3.4	b2.5	2.5		3.0	5.7	33	153	49	11	5.2
18	3.6	3.4	b2.5	2.7		3.0	6.0	32	158	43	*11	5.2
19	3.6	3.4	b2.6	2.7		2.8	5.5	37	162	52	10	5.5
20	3.6	3.4	2.7	2.7		b2.8	5.5	55	*162	51	9.7	5.7
21	3.6	3.2	2.8	2.7		b2.8	5.7	91	161	42	9.0	5.2
22	3.4	3.2	2.8	2.7	*2.7	2.8	6.3	108	153	37	8.6	5.2
23	3.6	3.2	2.7	2.7	2.7	3.0	6.0	114	145	35	8.3	4.9
24	3.8	3.0	2.7	2.7	2.7	3.2	6.6	111	128	33	8.3	4.9
25	3.8	3.0	2.5	2.5	2.7	3.2	7.6	*91	115	30	8.6	4.9
26	3.8	2.8	b2.4	2.7	2.7	3.2	7.6	82	107	26	8.6	5.2
27	3.6	3.0	b2.4	2.5	2.7	3.4	6.9	77	104	23	8.4	*5.2
28	3.6	2.7	b2.4	a2.4	b2.8	3.4	7.3	81	101	22	8.1	4.7
29	3.6	a2.5	b2.5	a2.4	-	*3.4	*8.0	100	96	20	8.1	4.2
30	3.6	a2.7	b2.6	a2.5	-------	3.4	8.3	126	77	19	7.4	4.2
31	3.4	-------	2.7	a2.6	-------	3.2	-------	123	-------	18	6.6	-------
Total	109.5	96.9	82.4	80.8	75.7	94.8	161.0	1,649.9	4,770	1,474	348.7	158.7
Mean	3.53	3.23	2.66	2.61	2.70	3.06	5.37	53.2	159	47.5	11.2	5.29
Ac-ft	217	192	163	160	150	188	319	3,270	9,460	2,920	692	315

Calendar year 1954: Max 209 Min 2.4 Mean 25.0 Ac-ft 18,060
Water year 1954-55: Max 275 Min - Mean 24.9 Ac-ft 18,050

Peak discharge (base, 310 cfs).--June 9 (8:30 p.m.) 323 cfs.
* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for stations nearby streams.
b Stage-discharge relation affected by ice.

North Fork Humboldt River at Devils Gate, near Halleck, Nev.

Location.--Lat 41°11', long 115°29', in SE¼ sec. 13, T. 38 N., R. 57 E., on right bank 16 miles north of Halleck and 26 miles upstream from mouth.

Drainage area.--830 sq mi, approximately.

Records available.--November 1913 to September 1921, October 1943 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 5,368 ft above mean sea level (Geological Survey planetable benchmark). November 1913 to September 1921 at site a quarter of a mile upstream at different datum.

Average discharge.--17 years (1914-19, 1943-55), 68.9 cfs (49,880 acre-ft per year).

Extremes.--Maximum discharge during year, 43 cfs Mar. 30 (gage height, 2.41 ft); minimum, 1.7 cfs Aug. 29.
1913-21, 1943-55: Maximum discharge, 2,450 cfs Apr. 20, 1952 (gage height, 9.63 ft); minimum, 1 cfs Aug. 20-28, Sept. 30, 1913.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Many diversions above station.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used June 7-19)

1.4	1.6	1.8	12
1.5	3.1	2.0	20
1.6	5.3	2.5	48

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.8	10	b10			b15	36	22	24	6.8	2.9	2.4
2	6.8	11	b11				38	22	24	6.5	2.8	2.6
3	6.8	10	12				36	21	26	6.5	2.6	2.8
4	7.5	9.8	12			a15	32	22	26	6.2	*2.4	2.3
5	8.8	9.8	11				30	22	24	5.3	2.8	2.3
6	7.8	9.8			a10		29	23	22	4.9	3.5	2.3
7	7.8	9.8		(*)			30	22	21	4.9	4.4	2.4
8	8.1	10	(*)			a17	30	22	19	3.8	4.6	2.4
9	9.4	*9.5		b9.0			32	22	17	3.3	4.9	2.3
10	8.4	10				a18	34	*24	15	4.0	4.0	2.4
11	8.1	9.1				a20	34	27	19	4.9	3.5	2.6
12	8.8	9.1				22	33	29	22	4.6	3.3	2.4
13	8.4	9.5				26	30	29	24	3.8	4.0	2.4
14	8.4	9.5				26	27	28	24	3.3	4.0	2.6
15	8.1	10	b10			24	26	34	28	*3.8	3.5	*3.1
16	7.8	12			a 11	26	24	39	*28	3.5	3.3	3.5
17	11	11				20	24	41	29	3.1	3.3	4.0
18	*8.8	11			b11	20	*22	39	37	3.5	3.1	4.9
19	8.8	11			b11	20	22	35	33	3.5	3.1	5.6
20	8.8	11				22	23	29	26	3.5	2.9	6.5
21	9.1	11			(*)	22	23	27	20	2.9	2.8	6.5
22	11	11			b13	*20	24	26	18	2.6	2.6	6.5
23	8.8	11				20	25	24	15	6.0	2.4	5.6
24	8.4	11		a9.0		24	26	26	14	4.2	2.4	5.6
25	9.1	10				26	24	30	12	3.8	2.6	5.9
26	9.1	11			b14	24	24	33	11	2.9	2.6	6.5
27	10	11	b9.0			26	24	29	9.1	2.9	2.8	6.5
28	9.5	b10				31	24	26	8.1	2.9	2.6	6.2
29	9.1	b9.0			-	33	24	25	7.8	2.9	2.3	6.2
30	11	b9.0			------	39	23	23	7.5	2.3	2.4	5.9
31	9.8	------			------	36	------	23	------	2.8	2.4	------
Total	270.1	306.9	307.0	279.0	318	686	833	844	610.5	125.9	96.8	123.2
Mean	8.71	10.2	9.90	9.0	11.4	22.1	27.8	27.2	20.4	4.06	3.12	4.11
Ac-ft	536	609	609	553	631	1,360	1,650	1,670	1,210	250	192	244

Calendar year 1954: Max 92 Min 2.3 Mean 19.6 Ac-ft 14,210
Water year 1954-55: Max 41 Min 2.3 Mean 13.2 Ac-ft 9,510

Peak discharge (base, 170 cfs).--No peak above base.
* Discharge measurement made on this day.
a No gage-height record (stage-discharge relation affected by ice during most of period); discharge estimated on basis of weather records and records for nearby stations.
b Stage-discharge relation affected by ice.

Humboldt River near Elko, Nev.

Location.--Lat 40°56', long 115°38', in SE¼NW¼ sec. 11, T. 35 N., R. 56 E., on right bank 1 mile southwest of Ryndon, 5 miles downstream from North Fork, and 10 miles northeast of Elko.

Records available.--June 1895 to October 1902, October 1944 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 5,142.32 ft above mean sea level, datum of 1929. June 1895 to October 1902 staff gage at site 11 miles downstream at different datum.

Average discharge.--16 years (1897-1902, 1944-55), 225 cfs (162,900 acre-ft per year).

Extremes.--Maximum discharge during year, 414 cfs June 18 (gage height, 3.71 ft); minimum daily, 0.4 cfs Sept. 18, 21-23.
1895-1902, 1944-55: Maximum discharge, 3,860 cfs Apr. 30, 1952 (gage height, 9.60 ft); no flow for several days in August and September 1948.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	0.8	2.0				107	94	185	36	1.1	0.8
2	1.1	1.0	2.6				108	99	200	28	.8	.8
3	1.0	1.0	4.0		a5.0	a20	116	79	193	30	.8	.8
4	1.1	1.0	6.0				112	70	174	41	.8	.8
5	1.1	1.0	5.6			(*)	105	37	170	35	*1.0	.8
6	1.5	1.0	4.6			a25	105	41	161	30	1.3	.8
7	*1.5	1.0	6.8			a30	105	61	146	24	1.3	.8
8	1.1	1.0	5.6			a34	104	66	133	20	1.2	.7
9	1.2	1.0	4.8		a6.0	39	100	70	128	17	1.0	.6
10	1.1	1.0	6.0	a4.0		45	98	68	142	15	1.1	.7
11	1.2	1.2	5.3			49	98	68	166	19	1.0	.6
12	1.2	1.2	5.0	(*)		56	98	79	246	24	1.1	*.6
13	1.2	1.1	*5.6			80	96	86	*312	22	1.0	.6
14	1.1	1.2	5.6			105	94	98	337	15	1.1	.6
15	1.1	1.2	b5.5			110	80	104	323	11	1.1	.7
16	1.2	1.2	b5.5		a8.0	112	66	*121	357	8.5	1.0	.5
17	1.1	*1.2	b5.0			120	69	146	408	6.8	1.0	.5
18	1.2	1.2				113	73	157	405	6.4	1.0	.4
19	1.1	1.2	b4.5			107	74	157	345	7.2	1.1	.6
20	.7	1.2				80	76	144	252	7.6	1.0	.8
21	.8	1.2				88	84	128	189	8.1	1.1	.4
22	.8	1.2			a 11	*92	87	121	153	5.3	1.1	.4
23	.7	1.2				102	90	121	142	3.7	1.0	.4
24	.7	1.2			a13	104	104	149	120	3.4	1.0	.5
25	.8	1.6		a4.5	a13	107	102	185	98	4.6	.8	.7
26	.8	2.2	a4.5		-	99	105	*176	77	3.4	.8	.7
27	.8	2.2			a16	102	107	200	60	2.4	.8	.6
28	.8	2.6				110	107	189	54	2.2	.8	.6
29	.8	2.4				108	*94	168	*46	1.6	.8	.6
30	.8	2.2			------	107	92	153	45	1.3	.8	.6
31	.8	------			------	108	------	161	------	1.1	.8	------
Total	31.6	39.7	148.3	131.0	239.0	2,332	2,856	3,596	5,767	440.6	30.6	19.0
Mean	1.02	1.32	4.78	4.23	8.54	75.2	95.2	116	192	14.2	0.99	0.63
Ac-ft	63	79	294	260	474	4,630	5,660	7,130	11,440	874	61	38

Calendar year 1954: Max 237 Min 0.4 Mean 45.2 Ac-ft 32,760
Water year 1954-55: Max 408 Min 0.4 Mean 42.8 Ac-ft 31,000

Peak discharge (base, 550 cfs).--No peak above base.
* Discharge measurement made on this day.
a No gage-height record (stage-discharge relation affected by ice during most of period); discharge estimated on basis of 2 discharge measurements, weather records, and records for nearby stations.
b Stage-discharge relation affected by ice.

South Fork Humboldt River near Lee, Nev.

Location.--Lat 40°34', long 115°33', in SE¼ sec. 16, T. 31 N., R. 57 E., on left bank 400 ft downstream from Kleckner Creek and 2½ miles east of Lee.

Drainage area.--54 sq mi, approximately.

Records available.--February 1945 to September 1955 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 5,970 ft (from topographic map).

Average discharge.--10 years, 67.2 cfs (48,650 acre-ft per year).

Extremes.--Maximum discharge during year, 592 cfs June 9 (gage height, 3.31 ft); minimum, 2.0 cfs Nov. 29.
1945-55: Maximum discharge, 935 cfs May 27, 1951 (gage height, 3.81 ft); minimum, that of Nov. 29, 1954.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. A few small diversions above station for irrigation.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.6	1.4	1.5	69
.7	3.4	2.0	168
.8	6.6	2.5	298
.9	11	3.0	466
1.0	17	3.5	677
1.2	32		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.5	6.6	4.2	b4.2			11	47	194	105	14	6.0
2	5.2	6.2	4.8	b4.1			12	44	175	99	13	6.0
3	4.8	6.2	5.2	b4.0		5.0	12	42	163	92	12	5.5
4	5.2	6.2	5.5	b3.9			12	44	163	89	12	5.5
5	5.2	5.8	4.5	b3.9			13	51	192	83	14	5.5
6	*5.2	5.8	4.5	b3.9		5.5	15	63	262	79	16	5.4
7	5.2	5.8	4.8	b3.9		*6.0	16	82	341	71	19	5.4
8	5.2	*5.8	b4.5	b3.9		6.6	18	87	*429	62	17	5.2
9	5.5	5.8	*b4.5	b4.0		7.0	20	*80	474	58	15	5.2
10	5.5	5.5	4.5	*b4.2		7.8	23	87	462	56	14	5.2
11	5.5	5.5	b4.5	4.2		7.8	*22	107	444	62	12	5.2
12	5.5	6.2	b4.5	3.9		8.2	21	123	418	56	12	5.0
13	6.6	6.2	4.5	3.9		8.6	22	125	384	51	12	5.0
14	6.2	5.8	b4.2	3.9		8.6	23	107	350	*48	14	5.0
15	6.2	6.6	4.2	3.9	4.5	8.0	23	87	338	48	13	5.0
16	6.2	8.2	b4.0	4.2		8.0	24	80	295	45	11	5.3
17	5.8	6.2	b4.0	3.9		8.0	25	74	262	42	*11	5.4
18	6.2	5.8	b4.0	4.2		8.0	26	71	254	38	11	6.0
19	6.2	5.5	b4.0	4.5		7.8	23	75	254	37	10	*7.0
20	6.2	5.8	b4.0	4.5		7.6	23	98	251	38	9.6	7.4
21	6.2	5.5	b4.1	b4.5		8.2	24	143	*243	35	9.1	6.5
22	6.6	5.5	b4.1	b4.5		9.0	25	180	235	32	8.6	5.5
23	6.2	5.5	b4.2	4.5		9.5	25	*200	225	30	7.8	5.5
24	6.6	5.5	b4.2	4.5		10	29	207	204	26	7.8	5.0
25	7.0	5.8	4.2	4.5		10	30	175	182	24	8.6	5.2
26	6.6	5.2	4.2	4.2		10	32	156	163	22	9.1	5.4
27	6.2	5.2	b4.1	4.0		11	29	145	152	21	7.4	5.4
28	6.6	4.2	b3.9	4.0		11	31	152	143	19	7.0	5.4
29	6.6	2.9	b4.0	4.0	-	11	36	182	141	17	6.6	5.2
30	6.2	b2.9	b4.1	4.5	------	11	42	217	117	15	6.2	5.0
31	6.6	------	b4.2	4.5	------	10	------	222	------	14	6.1	------
Total	184.5	169.7	134.2	128.8	126.0	249.2	687	3,553	7,910	1,514	345.9	165.3
Mean	5.95	5.66	4.33	4.15	4.5	8.04	22.9	115	264	48.8	11.2	5.51
Ac-ft	366	337	266	255	250	494	1,360	7,050	15,690	3,000	686	328

Calendar year 1954: Max 319 Min 2.9 Mean 39.4 Ac-ft 28,540
Water year 1954-55: Max 474 Min 2.9 Mean 41.6 Ac-ft 30,080

Peak discharge (base, 450 cfs).--June 9 (7 p.m.) 592 cfs (3.31 ft).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 26 to Mar. 7, Mar. 15 to Apr. 10, Aug. 31 to Sept. 30; discharge estimated on basis of 2 discharge measurements, weather records, and records for stations on nearby streams.

Huntington Creek near Lee, Nev.

Location.--Lat 40°33', long 115°43', in SW¼ sec. 19, T. 31 N., R. 56 E., on right bank 5½ miles upstream from mouth and 6 miles west of Lee.

Records available.--December 1948 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,315 ft (from river-profile map).

Average discharge.--6 years (1949-55), 34.2 cfs (24,760 acre-ft per year).

Extremes.--Maximum discharge during year, 104 cfs June 11 (gage height, 2.54 ft); minimum, 0.5 cfs Sept. 5 (gage height, 1.02 ft).
1948-55: Maximum discharge, 1,210 cfs Apr. 29, 1952 (gage height, 6.54 ft), from rating curve extended above 530 cfs on basis of logarithmic plotting; minimum, that of Sept. 5, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair.

Revisions (water years).--WSP 1244: 1949(M). WSP 1344: 1953.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 25 to Sept. 30)

0.8	0.4	1.3	12
.9	1.3	1.6	30
1.0	2.8	2.0	64
1.1	5.1	2.5	121

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a2.7	4.4	b5.8			b8.0	16	9.1	21	7.7	2.0	1.1
2	a2.6	b4.4	b6.4			b9.0	17	11	38	7.3	1.8	1.1
3	a2.6	b4.4	7.0			b10	17	9.9	33	6.4	1.7	1.0
4	a2.9	b4.4	9.5			11	16	*8.0	31	6.1	1.7	.8
5	a3.2	b4.4	b9.0			b11	16	7.3	28	5.1	2.3	.6
6	*3.0	b4.5	b9.0			b12	16	7.0	23	4.6	4.2	.8
7	2.8	b4.5	b8.5			b13	16	6.4	22	4.2	4.6	.8
8	2.8	b4.6	b8.0			*14	16	7.0	22	4.0	3.5	.8
9	3.0	4.6	*b7.5			14	14	8.0	82	3.7	2.8	.9
10	3.3	4.9	7.0	(*)		34	14	7.7	84	3.7	2.6	1.1
11	3.5	5.1	7.0			32	*12	7.7	100	3.3	2.1	1.2
12	3.5	5.4				38	11	7.7	89	3.7	2.1	1.2
13	3.7	5.7	b7.0			46	16	11	80	4.9	2.8	1.3
14	4.0	5.4				43	15	16	68	*5.7	3.7	1.3
15	4.0	5.7				31	15	27	68	4.6	2.8	1.4
16	4.2	8.0		b6.0	b7.0	25	14	28	78	4.4	2.5	1.6
17	4.4	6.4				26	12	28	72	4.2	2.5	1.7
18	4.4	6.1				25	11	25	56	3.5	2.3	2.0
19	4.4	*6.1				22	10	22	44	2.8	2.3	2.3
20	4.2	6.4				20	11	17	34	3.0	2.1	3.5
21	4.4	6.1				24	10	15	*22	3.5	2.1	3.3
22	4.2	6.4				18	9.1	18	20	3.5	2.1	2.6
23	4.0	6.4				20	7.3	21	15	3.0	*2.0	2.6
24	4.2	6.4	b6.5			22	8.3	25	13	3.5	1.8	2.3
25	4.2	6.4				23	8.3	*30	12	3.5	1.7	2.3
26	4.2	6.7				22	9.5	25	11	2.6	1.4	2.8
27	b4.0	b6.4				20	9.9	18	9.9	2.3	1.4	2.8
28	b4.2	6.4				22	12	16	8.7	2.3	1.4	2.8
29	b4.2	b6.0			-	22	9.9	14	8.7	2.1	1.4	2.8
30	b4.2	b5.5			------	21	8.0	13	8.7	2.1	1.3	3.0
31	4.4	------			------	19	------	17	------	2.0	1.2	------
Total	115.4	168.1	216.7	186.0	196.0	677.0	377.3	482.8	1,182.0	123.3	70.2	53.8
Mean	3.72	5.60	6.99	6.0	7.0	21.8	12.6	15.6	39.4	3.98	2.26	1.79
Ac-ft	229	333	430	369	389	1,340	748	958	2,340	245	139	107

Calendar year 1954: Max 35 Min 0.9 Mean 9.80 Ac-ft 7,090
Water year 1954-55: Max 100 Min 0.6 Mean 10.5 Ac-ft 7,630

Peak discharge (base, 200 cfs).--No peak above base.
* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of engineer's notes and records for stations on nearby streams.
b Stage-discharge relation affected by ice.

South Fork Humboldt River above Dixie Creek, near Elko, Nev.

Location.--Lat 40°41'05", long 115°48'45", in NW¼SW¼ sec. 5, T. 32 N., R. 55 E., 1½ miles upstream from Dixie Creek and 10½ miles south of Elko.

Records available.--December 1948 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,140 ft (from topographic map).

Average discharge.--6 years (1949-55), 104 cfs (75,290 acre-ft per year).

Extremes.--Maximum discharge during year, 676 cfs June 11 (gage height, 4.32 ft); minimum, 0.6 cfs Sept. 15 (gage height, 2.15 ft).
1948-55: Maximum discharge, 1,700 cfs Apr. 29, 1952 (gage height, 5.46 ft); minimum, 0.6 cfs Sept. 11, 1954, Sept. 15, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair.

Revisions (water years).--WSP 1284: 1952(M).

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used July 13 to Sept. 30)

1.7	0.4	2.4	25
1.8	1.0	2.7	58
1.9	2.2	3.0	111
2.7	4.3	3.5	245
2.1	7.5	4.0	456
2.2	12	4.5	766

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.5	5.1	6.4			13	41	38	219	91	7.1	2.2
2	2.0	4.3	7.5			15	43	45	201	75	5.8	2.2
3	2.0	4.0	9.3			18	41	45	184	72	5.1	1.9
4	2.2	4.0	13			17	40	42	170	67	4.8	1.8
5	2.5	4.3	12			16	38	40	170	62	5.1	1.5
6	2.0	4.6	13			17	40	40	201	52	9.3	1.4
7	2.2	4.0	12			*20	40	40	295	45	10	1.2
8	*2.9	4.0				25	38	57	388	44	8.4	1.0
9	3.1	4.0				38	40	*58	510	41	6.8	1.0
10	3.3	4.0	*11	(*)		46	41	57	599	37	6.1	1.0
11	3.6	4.3				56	42	66	624	41	6.1	1.0
12	3.6	4.6				62	*38	72	611	41	4.6	.8
13	3.8	4.6				58	40	75	*568	35	13	.8
14	3.8	4.6				50	43	95	505	*35	13	.8
15	4.0	5.8		9	11	40	42	99	494	37	13	.8
16	4.6	8.0				40	38	103	505	42	12	.8
17	4.8	7.5				41	38	111	406	35	*10	1.0
18	6.1	7.5				42	41	95	331	28	8.8	1.4
19	5.4	*7.5				40	40	78	299	25	5.4	1.6
20	4.8	7.5				39	40	80	270	29	5.8	2.2
21	2.9	7.1	10			40	36	97	245	24	7.1	2.5
22	3.1	7.5				44	37	147	*232	24	5.8	2.7
23	3.8	7.5				43	35	155	219	21	2.9	2.9
24	4.6	7.5				42	33	201	207	21	2.9	2.7
25	6.1	7.1				44	36	*207	193	21	2.9	2.7
26	5.1	7.1				48	42	184	176	16	3.1	2.9
27	4.0	7.1				45	43	162	160	13	3.3	2.9
28	4.3	7.1				45	41	147	140	11	3.1	2.9
29	5.4	6.5			-	48	40	152	135	10	2.9	2.7
30	5.4	6.0			------	48	36	181	118	8.8	2.7	2.7
31	4.8	------			------	43	------	226	------	8.8	2.4	------
Total	118.7	174.7	317.2	279	308	1,183	1,183	3,195	9,375	1,110.6	199.3	54.0
Mean	3.83	5.82	10.2	9	11	38.2	39.4	103	313	35.8	6.43	1.80
Ac-ft	235	347	629	553	611	2,350	2,350	6,340	18,600	2,200	395	107

Calendar year 1954: Max 318 Min 0.7 Mean 44.5 Ac-ft 32,200
Water year 1954-55: Max 624 Min 0.8 Mean 47.9 Ac-ft 34,720

Peak discharge (base, 400 cfs).--June 11 (1 p.m.) 676 cfs (4.32 ft).
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 29, 30, Dec. 8 to Mar. 20 (no gage-height record Jan. 30 to Mar. 7; discharge estimated on basis of 1 discharge measurement, weather records, and records for nearby streams).

South Fork Humboldt River near Elko, Nev.

Location.--Lat 40°43'15", long 115°49'50", in NW¼NW¼ sec. 30, T. 33 N., R. 55 E., on right bank a quarter of a mile upstream from head of canyon, 1.5 miles downstream from highway bridge, 9 miles upstream from mouth, and 10 miles southwest of Elko.

Drainage area.--1,150 sq mi, approximately.

Records available.--August 1896 to September 1922, October 1923 to September 1932, October 1936 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 5,100 ft (from topographic map). Prior to November 1913, staff gages at several sites about 1 mile upstream at various datums. November 1913 to February 1927 water-stage recorder near present site at different datum. March 1927 to September 1932 staff gage at site 1 mile upstream at different datum.

Average discharge.--47 years (1896-1903, 1904-9, 1910-18, 1923-26, 1927-32, 1936-55), 127 cfs (91,940 acre-ft per year).

Extremes.--Maximum discharge during year, 688 cfs June 10 (gage height, 3.51 ft); no flow Oct. 1-24.
1896-1922, 1923-32, 1936-55: Maximum discharge, 2,400 cfs Jan. 26, 1914, from rating curve extended above 1,200 cfs; no flow Aug. 10 to Oct. 24, 1954.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Many diversions above station for irrigation. Station is below all diversions except those of Hunter & Banks ranch 3 miles downstream.

Revisions (water years).--WSP 1090: 1932.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.0	0	1.7	64
1.1	.6	2.0	124
1.2	2.8	2.5	274
1.3	7.6	3.0	471
1.4	18	3.5	684

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0.8	b3.0			10	32	34	222	75	7.6	1.8
2	0	.8	b4.0			12	34	38	203	59	6.5	1.5
3	0	.6	6.0			15	32	40	182	56	5.0	1.5
4	0	.5	b8.0			14	30	36	171	52	4.5	1.3
5	0	.5				13	29	35	162	46	5.0	1.1
6	0	.7				15	29	*36	194	38	8.2	1.1
7	*0	.7	b10			16	*29	35	292	35	12	.9
8	0	.6				19	32	50	398	*34	8.9	.8
9	0	.6				25	34	54	525	30	7.6	.7
10	0	.6	(*)			37	36	56	623	29	6.5	.6
11	0	.6	b9.0			44	36	62	627	30	6.5	.6
12	0	.7				54	34	69	614	30	6.0	.5
13	0	.8				48	35	73	571	29	14	.5
14	0	.8		(*)		43	35	90	*500	29	13	.4
15	0	.9		7.0	9.0	38	35	100	479	29	12	.3
16	0	1.3				35	34	100	508	30	*11	.2
17	0	2.4				36	32	115	402	29	9.7	.2
18	0	2.8				38	35	100	327	24	15	.2
19	0	2.6				36	35	80	289	20	7.0	.2
20	0	2.4	b8.0			35	35	80	260	23	5.5	.2
21	0	2.7				*37	32	*88	229	20	7.0	.1
22	0	*2.8				b38	32	144	*216	20	6.5	.2
23	0	4.0				40	32	154	203	19	4.0	.4
24	0	3.0				36	29	202	188	19	2.4	.9
25	.6	2.4				36	32	216	171	20	9.0	1.1
26	1.1	2.5			(*)	38	35	*185	152	16	3.2	1.1
27	.3	2.4				35	38	160	134	13	2.8	1.1
28	.2	b2.2				35	36	146	115	9.7	2.8	1.1
29	.6	b2.0			-	36	35	149	111	9.7	2.4	1.1
30	1.1	b1.5	8.0		------	36	30	176	94	8.2	2.4	1.1
31	.8	------			------	35	------	226	------	7.0	2.1	------
Total	4.7	47.2	250.0	217.0	252.0	985	994	3,129	9,162	888.6	216.1	22.8
Mean	0.15	1.57	8.06	7.0	9.0	31.8	33.1	101	305	28.7	6.97	0.76
Ac-ft	9.3	94	496	430	500	1,950	1,970	6,210	18,170	1,760	429	45

Calendar year 1954: Max 330 Min 0 Mean 39.8 Ac-ft 28,810
Water year 1954-55: Max 627 Min 0 Mean 44.3 Ac-ft 32,060

Peak discharge (base, 410 cfs).--June 10 (4 p.m.) 688 cfs (3.51 ft).
* Discharge measurement or observation of no flow made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Dec. 28 to Mar. 21 (stage-discharge relation affected by ice during most of period); discharge estimated on basis of 3 discharge measurements, weather records, and records for stations on nearby streams.

Humboldt River near Carlin, Nev.

Location.--Lat 40°43'40", long 116°00'30", in sec. 21, T. 33 N., R. 53 E., on right bank 4½ miles southwest of Moleen, 5 miles upstream from Susie Creek, 5½ miles east of Carlin, and 15 miles southwest of Elko.

Drainage area.--4,310 sq mi, approximately.

Records available.--October 1943 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 4,931.91 ft above mean sea level (levels by Nevada State Highway Department).

Average discharge.--12 years, 336 cfs (243,300 acre-ft per year).

Extremes.--Maximum discharge during year, 741 cfs June 16 (gage height, 3.49 ft); minimum, 0.3 cfs Oct. 11.
1943-55: Maximum discharge, 5,220 cfs May 1, 1952 (gage height, 9.35 ft); minimum, 0.3 cfs Sept. 10, Oct. 11, 1954.
High water of February 1943 reached a stage of 9.8 ft (discharge, 5,900 cfs, by slope-area determination of peak flow).

Remarks.--Records good except those for periods of ice effect, which are fair. Many diversions above station for irrigation.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic-feet per second)

0.3	0	1.3	62
.4	1.0	1.6	109
.5	2.0	2.0	193
.6	4.0	2.5	337
.7	8.0	3.0	520
.8	13	3.5	736
1.0	28		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.7	3.4	7.5			*33	144	99	331	152	9.3	3.6
2	.8	3.4	9.0			36	144	100	315	130	10	2.6
3	1.5	3.8	9.0		12	40	144	102	315	104	5.6	1.9
4	1.8	4.8	10			42	140	100	299	97	4.8	1.7
5	1.4	5.6	9.5			44	144	97	302	90	*4.4	1.5
6	1.0	5.6	8.5			46	144	*95	299	75	5.6	1.3
7	.9	6.0	9.0		15	50	*140	89	357	54	10	1.2
8	.9	6.0	8.5			53	136	94	427	*45	7.2	1.1
9	.9	5.6	8.5			59	134	100	496	38	5.6	1.3
10	.7	5.6	8.5			86	136	95	561	39	4.4	1.6
11	.6	5.2	8.0			107	140	90	650	39	4.0	1.7
12	.5	5.6	8.0	(*)	21	161	134	97	624	37	3.6	1.8
13	.8	6.0	*8.0			142	128	100	599	34	4.0	1.7
14	1.0	5.6	8.0			146	124	104	*561	41	4.0	1.6
15	*1.2	5.6	7.5			144	120	130	599	37	5.6	1.5
16	1.3	6.0	7.0	10		134	120	138	695	37	5.2	1.6
17	1.4	*6.8	6.0			134	117	140	699	35	3.8	1.8
18	1.4	5.6	5.6			142	117	142	624	32	3.2	2.0
19	1.6	5.6	5.2		27	144	111	132	586	29	3.4	2.0
20	1.7	5.6	5.2			138	109	*146	574	25	5.6	2.2
21	1.7	4.8	4.8			126	107	155	508	22	3.4	2.0
22	1.9	4.0				122	107	163	438	20	2.6	1.9
23	2.4	3.8				122	109	193	388	19	2.4	1.9
24	2.2	4.0				124	107	*196	*331	19	1.9	1.9
25	2.2	4.8	5.0			124	104	248	293	19	1.9	1.9
26	2.2	6.0			30	126	113	248	254	15	2.6	2.2
27	2.2	6.8				128	122	*283	226	14	2.4	*2.6
28	3.4	9.5				126	122	248	198	11	3.0	2.2
29	8.0	6.8	6.0		-	146	115	251	175	8.0	4.4	2.2
30	4.0	6.4	8.0		------	146	109	277	177	6.8	5.6	3.4
31	3.6	------	10		------	150	-----	308	------	6.4	4.8	------
Total	55.8	164.3	220.3	310	624	3,321	3,741	4,760	12,901	1,330.2	144.3	57.9
Mean	1.80	5.48	7.11	10	22.3	107	125	154	430	42.9	4.65	1.93
Ac-ft	111	326	437	615	1,240	6,590	7,420	9,440	25,590	2,640	286	115

Calendar year 1954: Max 308 Min 0.4 Mean 79.1 Ac-ft 57,300
Water year 1954-55: Max 699 Min 0.5 Mean 75.7 Ac-ft 54,810

Peak discharge (base, 900 cfs).--No peak above base.
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 1, 8, 9, 11, 12, 14-16, Dec. 22 to Mar. 6.

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Humboldt River at Palisade, Nev.

Location.--Lat 40°36'25", long 116°12'05", in SE¼SE¼ sec. 35, T. 32 N., R. 51 E., on right bank a quarter of a mile downstream from Southern Pacific Railroad bridge, half a mile downstream from Palisade, and three-quarters of a mile upstream from Pine Creek.

Drainage area.--5,010 sq mi, approximately.

Records available.--November 1902 to October 1906, July 1911 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 4,825.55 ft above mean sea level, datum of 1929. Prior to Apr. 1, 1939, staff or chain gages (water-stage recorder Apr. 22 to June 3, 1935) at several sites within half a mile of present site at various datums.

Average discharge.--47 years (1903-6, 1911-55), 360 cfs (260,600 acre-ft per year).

Extremes.--Maximum discharge during year, 710 cfs June 17 (gage height, 3.85 ft); minimum, 7.6 cfs Sept. 7, 8.
1902-6, 1911-55: Maximum discharge, 6,250 cfs Feb. 26, 1943 (gage height, 9.92 ft); minimum, 2 cfs Aug. 25-28, 1931.

Remarks.--Records excellent except those for periods of ice effect or no gage-height record, which are good. Diversion above station for irrigation of about 150,000 acres of hay and pasture land.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.4	7.0	2.1	110
1.5	14	2.5	205
1.6	24	3.0	355
1.8	53	3.8	700

Discharge, in cubic feet per second, water year October 1954 to September 1055

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	*20	23	37	25	53	158	134	320	139	*17	12
2	13	19	24	36	25	62	160	137	299	130	18	11
3	13	19	27	*31	27	68	158	137	305	112	20	10
4	13	19	28	32	28	68	153	134	296	102	16	9.5
5	14	20	28	33	28	70	153	128	293	95	15	8.8
6	13	21	28		29	70	155	123	287	89	18	8.8
7	13	21	28		29	70	150	121	311	80	18	8.8
8	14	22	25		30	81	148	121	390	70	19	8.8
9	15	23	24		32	93	146	128	449	63	17	8.8
10	15	23	27		b32	125	148	125	492	68	14	9.5
11	15	22	24		b32	162	150	119	605	67	13	10
12	14	23	22	b30	b33	185	146	117	591	62	13	10
13	14	23	25		34	182	141	121	568	56	14	9.5
14	15	23	24		37	175	141	123	532	55	14	10
15	15	23	25		38	170	134	139	*546	55	14	8.8
16	15	28	22		40	150	134	162	635	51	13	8.8
17	15	25			43	150	134	170	695	48	13	8.8
18	16	25			b42	160	139	175	615	48	13	9.5
19	16	24		29	b42	162	134	162	573	45	13	9.5
20	16	24		28	42	155	132	158	550	42	13	11
21	15	23	b22	28	40	144	130	170	506	39	12	12
22	15	23		27	43	139	130	170	429	36	12	12
23	15	22		28	42	137	130	195	390	33	12	12
24	16	22		28	43	137	130	205	*341	33	12	11
25	16	22		28	43	139	128	230	299	30	12	11
26	16	22		27	47	141	125	245	260	29	11	12
27	16	23	b20		45	139	141	*254	233	27	11	12
28	17	24		b27	*48	144	*144	248	208	25	11	12
29	17	25	b23		-	146	141	230	175	23	*11	12
30	22	*23	b27	30	------	175	141	257	*170	21	11	*12
31	20	------	b32	28	------	*160	-----	287	------	19	12	------
Total	472	676	744	921	1,020	4,012	4,254	5,225	12,363	1,792	432	309.9
Mean	15.2	22.5	24.0	29.7	36.4	129	142	169	412	57.8	13.9	10.3
Ac-ft	936	1,340	1,480	1,830	2,020	7,960	8,440	10,360	24,520	3,550	857	615

Calendar year 1954: Max 330 Min 8.8 Mean 90.9 Ac-ft 65,810
Water year 1954-55: Max 695 Min 8.8 Mean 88.3 Ac-ft 63,910

Peak discharge (base, 560 cfs).--June 17 (5:30 a.m.) 710 cfs (3.85 ft).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Aug. 15-28; discharge estimated on basis of records for nearby stations.

Pine Creek near Palisade, Nev.

Location.--Lat 40°35'45", long 116°10'25", in NW¼SE¼ sec. 1, T. 31 N., R. 51 E., on right bank 1¼ miles upstream from mouth and 1½ miles southeast of Palisade.

Records available.--November 1902 to December 1904 (gage heights only), January 1912 to September 1914, January 1946 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,900 ft (from topographic map). Prior to Jan. 1, 1946, staff gages at site half a mile downstream at different datums. Jan. 1 to July 18, 1946, water-stage recorder at site 1,000 ft downstream at different datum.

Average discharge.--11 years (1912-14, 1946-55), 14.3 cfs (10,350 acre-ft per year).

Extremes.--Maximum discharge during year, 788 cfs Aug. 13 (gage height, 4.54 ft), from rating curve extended above 200 cfs on basis of slope-area determinations at gage heights 4.54 and 4.69 ft; no flow for many days.
1912-14, 1946-55: Maximum discharge, 1,010 cfs Mar. 27, 1952 (gage height, 4.69 ft), from rating curve extended above 330 cfs on basis of slope-area determination of peak flow; no flow for several days during 1951, 1953-55.

Remarks.--Records good except those for periods of ice effect or no gage-height record, or those below 3 cfs, which are fair. Diversions above station for irrigation.

Revision (water years).--WSP 1120: 1946 (calendar year mean).

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	*6.5	b6.0	a7.5	6.5	b11	9.7	0.2	0.2	0.1	*0	0.2
2	3.4	6.5	10	a7.0		14	10	.2	.2	0	.1	.2
3	3.4	6.5	11	*7.0		21	11	.2	.1	0	.1	.2
4	3.6	6.2	13	7.0		24	10	.2	.1	0	.1	.2
5	3.6	6.5	12	7.0		24	10	.2	.1	0	.2	.2
6	3.6	6.8	11			26	8.5	.2	0	0	.4	.2
7	3.6	6.5	12			24	6.8	.2	0	0	.3	.2
8	3.8	6.8	b11		b7.0	35	7.0	.2	0	0	.2	.2
9	3.9	6.0	b10			35	6.8	.2	0	0	.3	.2
10	3.8	7.0	11			26	6.8	.2	0	0	.3	.3
11	3.9	7.8	b10			35	6.8	.2	0	0	.3	.3
12	3.9	7.8	b9.5				6.5	.1	0	0	.4	.3
13	*3.9	8.5	9.7	b6.5		a30	6.2	.1	0	0	*29	.3
14	3.9	8.5	b10				5.7	.1	0	0	1.1	.3
15	4.0	8.5	10		7.0		4.2	.2	*.1	0	1.1	.3
16	4.2	10			7.0	a23	3.4	.2	.1	0	1.0	.3
17	4.4	9.3					3.2	.2	0	0	.5	.4
18	4.8	9.3					3.4	.2	0	0	16	.4
19	5.0	8.9					3.2	.2	0	0	3.1	.4
20	5.5	9.7		5.8			3.2	.2	0	0	2.2	.5
21	5.5	9.7		6.2	b8.0	a17	3.2	.2	0	0	1.8	.5
22	5.8	9.7			(*)		2.7	.2	0	0	1.4	.5
23	5.8	9.7	b8.0				1.4	.2	.1	0	.3	.4
24	5.8	9.7					.8	.2	.2	0	.3	.5
25	6.0	10					.7	.2	.2	0	1.1	.5
26	5.2	11		b6.5	8.5	a13	.5	.2	.2	0	1.3	.5
27	4.5	10			8.5		.5	.2	.2	0	.5	.5
28	4.8	10			b9.0		*.5	.2	.2	0	.1	.4
29	6.0	b6.0			-	a 11	.4	.2	.2	0	*0	.5
30	6.5	*b5.6			------	a 11	.2	.2	.2	0	.1	1.4
31	6.5	------	a8.0		------	*a10	------	.2	------	0	.1	------
Total	142.0	245.0	284.2	203.5	209.5	639	143.3	5.9	2.4	0.1	63.7	11.3
Mean	4.58	8.17	9.17	6.56	7.48	20.6	4.78	0.19	0.08	0.003	2.05	0.38
Ac-ft	282	486	564	404	416	1,270	284	12	4.8	0.2	126	22

Calendar year 1954: Max 22 Min 0 Mean 4.73 Ac-ft 3,420
Water year 1954-55: Max 35 Min 0 Mean 5.34 Ac-ft 3,870

Peak discharge (base, 50 cfs).--Mar. 8 (5:30 p.m.) 69 cfs (2.24 ft); Aug. 13 (2:30 p.m.) 788 cfs (4.54 ft); Aug. 18 (6 p.m.) 144 cfs (2.78 ft).

* Discharge measurement or observation of no flow made on this day.

a No gage-height record; discharge estimated on basis of 1 discharge measurement, engineer's notes, and weather records.

b Stage-discharge relation affected by ice.

Humboldt River near Argenta, Nev.

Location.--Lat 40°40', long 116°40', in NW¼ sec. 2, T. 32 N., R. 47 E., on left bank 2½ miles east of Argenta and 15½ miles east of Battle Mountain.

Records available.--February 1946 to September 1955.

Gage.--Water-stage recorder.

Average discharge.--9 years, 283 cfs (204,900 acre-ft per year).

Extremes.--Maximum discharge during year, 523 cfs June 18 (gage height, 4.91 ft); minimum daily, 0.2 cfs Sept. 15-30.
1946-55: Maximum daily discharge, 5,700 cfs May 2, 1952; minimum daily, that of Sept. 15-30, 1955.

Remarks.--Records good except those for periods of ice effect, which are fair. Many diversions above station for irrigation.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	0	2.5	44
1.6	.3	3.0	102
1.7	1.2	3.5	182
1.8	2.9	4.0	286
1.9	5.6	5.0	561
2.1	14		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	0.3	0.4	10		45	149	124	192	130	0.9	0.5
2	.3	.3	.4	10			150	124	209	116	.8	.5
3	.3	.3	.4	12	11		149	119	209	102	.8	.5
4	.3	.3	.4			55	149	116	207	90	.7	.4
5	.3	.3	.4	15			145	*113	205	77	.7	.3
6	.3	.3	.4		13	67	145	108	201	68	.7	.3
7	.3	.3	2.3	11	13	73	149	102	199	61	.7	.3
8	.3	.3		7.4		77	*147	99	205	57	.7	.3
9	.3	.3	2.5	8.2		91	144	93	234	52	*.7	.3
10	.3	.3		8.2	19	*116	140	93	268	46	.7	.3
11	*.3	.4	4.5	9.5		136	138	97	295	43	.7	.3
12	.3	.4		10		173	144	94	343	43	.7	.3
13	.3	.3	6.5	*8.6	21	175	142	87	379	39	.7	.3
14	.3	.4		8.2		177	137	88	398	37	.6	.3
15	.3	.4	9.0	7.8		164	136	97	*397	24	.6	.2
16	.3	.4	(*)	8.5		156	131	105	408	24	.6	.2
17	.3	.4		8.8		142	128	124	462	20	.6	.2
18	.3	.4		9.5	26	144	137	131	514	*14	.6	.2
19	.4	.4		10		145	136	134	486	9.0	.6	.2
20	.4	.4		11	30	147	131	131	451	5.6	.6	.2
21	.4	.4	7.0		32	144	130	125	433	3.8	.6	.2
22	.4	.4			36	136	126	134	403	2.9	.6	.2
23	.3	*.4				131	128	136	353	2.5	.6	.2
24	.3	.4	5.0			128	124	126	316	1.8	.5	.2
25	.4	.4	4.4	10	40	128	124	136	284	1.3	.5	.2
26	.3	.4	4.7			131	120	147	249	1.2	.5	.2
27	.3	.4	4.0			131	116	*162	213	1.2	.5	.2
28	.3	.4	3.5			133	125	169	186	1.1	.5	.2
29	.3	.4	3.6		-	136	128	175	168	1.0	.5	*.2
30	.3	.4	5.0		------	134	126	166	*145	1.0	.5	.2
31	.3	------	7.4		------	149	------	178	------	.9	.5	------
Total	9.8	10.9	142.8	313.7	683	3,729	4,072	3,833	9,012	1,076.3	19.5	8.1
Mean	0.32	0.36	4.61	10.1	24.4	120	136	124	300	34.7	0.63	0.27
Ac-ft	19	22	283	622	1,350	7,400	8,080	7,600	17,880	2,130	39	16

Calendar year 1954 : Max 310 Min 0.3 Mean 70.9 Ac-ft 51,310
Water year 1954-55 : Max 514 Min 0.2 Mean 62.8 Ac-ft 45,440

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Dec. 8-24, 27, 28, Jan. 2-6, 13, 14, 16, 17, Jan. 21 to Feb. 28, Mar. 2-7.

Rock Creek near Battle Mountain, Nev.

Location.--Lat 40°51', long 116°36', in NE¼ sec. 17, T. 34 N., R. 48 E., on left bank at mouth of canyon, 22 miles northeast of Battle Mountain.

Records available.--March 1918 to September 1925 (fragmentary October 1923 to September 1925), March 1927 to May 1929 (fragmentary), January 1946 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,600 ft. Prior to Jan. 3, 1946, at different datum.

Average discharge.--14 years (1918-23, 1946-55), 31.5 cfs (22,810 acre-ft per year).

Extremes.--Maximum discharge during year, 141 cfs Mar. 11 (gage height, 1.91 ft); no flow Oct. 1-15, June 24 to Sept. 30.
1918-25, 1927-29, 1946-55: Maximum discharge, 3,000 cfs Apr. 7, 1952 (gage height, 5.60 ft); no flow at times during July, August, September, and October nearly every year.

Remarks.--Records good except those for periods of ice effect, which are fair. Several irrigation diversions in valleys upstream. Station is above all diversions in Boulder Flat and is below all tributaries. Flow slightly affected by small reservoir in Squaw Valley, 30 miles upstream.

Revisions (water years).--WSP 1214: 1950(M).

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.0	0	0.6	4.2
.1	.2	.8	9.8
.2	.4	1.0	19
.3	.8	1.2	32
.4	1.4	1.4	50
.5	2.5	1.7	90

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	1.3	b0.7	1.3	1.0	3.0	15	22	4.7	(*)		
2	0	1.3	.9	1.3	.9	b3.4	14	23	3.2			
3	0	1.3	1.2	1.1	.8	b3.7	18	25	2.2			
4	0	1.3	1.3	1.0	.8	*b4.4	19	25	1.9			
5	0	1.3	1.4	1.0	1.0	b4.8	16	*23	1.7			
6	0	1.3	1.2		1.1	b5.9	16	20	1.4			
7	0	1.3	1.3		1.2	5.6	16	22	1.1			
8	0	1.3	b1.0	b.7	1.4	6.4	*18	22	1.0			
9	0	1.3	.9		1.6	6.9	20	19	.8			
10	0	1.4	b.9	1.0		31	27	17	.8			
11	*0	1.3	b.8	1.0	b1.6	83	33	17	.5			
12	0	1.4	1.0			44	34	19	.4			
13	0	1.6	1.0	*b.8		30	29	16	.4			
14	0	1.6	1.1		b2.0	20	27	12	.7			
15	0	1.7	1.1	.7	b2.0	11	24	11	.8			
16	.1	1.9	*1.0	.6		9.0	19	12	.8			
17	.5	1.6	.8	.7	b2.3	9.0	17	8.5	.9			
18	.6	1.2	.8	.8		8.1	20	5.4	.8			
19	.7	1.1	.8	.8		6.7	24	5.2	.6			
20	.8	1.1	.7	.8	b2.0	3.6	25	4.4	.6			
21	.9	1.2	.7	.8		3.4	22	4.2	.5			
22	1.0	1.1	.7	.8		4.7	17	6.1	.4			
23	1.0	*1.1	.7	.9	b2.2	4.4	17	7.9	.2			
24	1.0	1.0	.7	1.0		3.7	19	10	0			
25	1.1	1.0	.8	1.0		3.4	17	12	0			
26	1.1	1.0	.7	.9	b2.5	3.5	20	14	0			
27	1.2	1.0	.6	.8		3.2	18	*13	0			
28	1.2	b.9	.4	.8		3.2	14	10	0			
29	1.2	b.8	.5	.9	-	3.2	15	7.6	0			(*)
30	1.3	b.7	.6	1.0	------	7.6	17	6.6	0			
31	1.3	------	1.1	.9	------	16	------	5.9	------			------
Total	15.0	37.4	27.4	27.1	49.7	355.8	607	425.8	26.4	0	0	0
Mean	0.48	1.25	0.88	0.87	1.78	11.5	20.2	13.7	0.88	0	0	0
Ac-ft	30	74	54	54	99	706	1,200	845	52	0	0	0

Calendar year 1954 : Max 24 Min 0 Mean 2.88 Ac-ft 2,090
Water year 1954-55 : Max 83 Min 0 Mean 4.31 Ac-ft 3,110

Peak discharge (base, 75 cfs).--Mar. 11 (2:30 p.m.) 141 cfs (1.91 ft).
* Discharge measurement or observation of no flow made on this day.
b Stage-discharge relation affected by ice.

Humboldt River at Battle Mountain, Nev.

Location.--Lat 40°39', long 116°56', in SE¼ sec. 8, T. 32 N., R. 45 E., on left bank 1 mile northeast of Battle Mountain. Reese River, when flowing, enters Humboldt River several miles below station.

Records available.--May 1896 to December 1897, March 1921 to April 1924, January 1946 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,600 ft (from topographic map). Prior to Mar. 1, 1921, staff gage at approximately same site at different datum. Mar. 1, 1921, staff gage at approximately same site at different datum. Mar. 1, 1921, to Apr. 19, 1924, staff gage at site 900 ft downstream at different datum.

Average discharge.--10 years (1921-22, 1946-55), 288 cfs (208,500 acre-ft per year).

Extremes.--Maximum discharge during year, 403 cfs June 19 (gage height, 4.30 ft); minimum daily, 0.1 cfs for several days in October, November, and September.
1921-24, 1946-55: Maximum daily discharge, 5,800 cfs May 3, 4, 1952; no flow Sept. 8 to Oct. 22, 1948, Sept. 21-26, 1949.

Remarks.--Records good. Records do not include flow in secondary channels or ditches, much of which is used for irrigation. Many diversions above station for irrigation.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.8	0	1.7	27
.9	.2	2.0	51
1.0	1.0	2.5	106
1.1	2.4	3.0	172
1.2	4.5	4.0	342
1.4	11	4.3	403

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.1	0.2	8.1	11	37	141	114	150	*113	4.7	0.2
2	.1	.1	.3	9.5	12	45	140	106	159	105	4.2	.2
3	.1	.2	.6	8.2	11	48	138	107	169	91	3.8	.1
4	.1	.2	.7	11	11	*48	140	105	168	80	3.4	.1
5	.1	.2	.8	14	11	48	138	*104	172	72	3.0	.1
6	.2	.2	1.6	12	12	64	138	100	171	63	2.8	.1
7	.2	.2	1.4	10	12	70	140	96	168	57	2.8	.1
8	.2	.2	1.2	9.0	14	81	*139	94	164	47	2.4	.1
9	.2	.2	1.0	7.7	16	80	138	91	*171	39	*2.2	.1
10	.1	.2	1.2	8.1	19	*96	135	88	198	32	2.1	.1
11	.2	.2	1.9	8.4	16	113	131	89	223	31	1.8	.1
12	*.1	.2	3.4	8.8	20	139	132	88	246	25	1.6	.1
13	.1	.2	5.8	*8.4	20	150	134	87	290	23	1.5	.1
14	.1	.2	5.0	8.4	20	162	132	84	310	22	1.2	.1
15	.1	.2	5.8	8.1	20	157	128	85	321	20	1.0	.1
16	.1	.2	*6.6	8.8	24	139	126	89	329	18	1.0	.1
17	.1	.2	5.5	8.4	22	132	122	96	344	16	.8	.1
18	.1	.2	5.4	9.1	22	126	124	95	*380	*14	.8	.1
19	.1	.2	5.3	9.5	25	128	126	105	397	11	.7	.1
20	.1	.3	5.3	9.8	29	132	124	110	374	11	.6	.1
21	.1	.3	5.5	10	29	131	121	108	360	11	.5	.1
22	.2	.3	5.5	9.8	34	128	121	106	348	10	.4	.1
23	.1	*.3	5.8	9.8	38	123	117	110	312	9.5	.4	.1
24	.1	.2	5.8	10	40	121	116	112	286	9.1	.3	.1
25	.1	.2	5.8	10		118	116	111	258	8.4	.3	.1
26	.1	.2	5.3	11	37	119	112	113	237	7.7	.3	.1
27	.2	.2	4.7	10		119	101	121	213	7.4	.3	.1
28	.2	.2	4.2	10		122	118	124	175	6.7	.2	.1
29	.2	.2	3.6	10	-	122	114	130	158	6.4	.2	*.1
30	.1	.2	3.2	11	------	124	112	136	134	5.8	.2	.1
31	.1	------	5.5	10	------	151	-----	140	------	5.0	.2	------
Total	4.0	6.2	113.9	296.9	636	3,373	3,814	3,244	7,385	977.0	45.7	3.2
Mean	0.13	0.21	3.67	9.58	22.7	109	127	105	246	31.5	1.47	0.11
Ac-ft	7.9	12	226	589	1,260	6,690	7,560	6,430	14,650	1,940	91	6.3

Calendar year 1954: Max 300 Min 0.1 Mean 65.8 Ac-ft 47,620
Water year 1954-55: Max 397 Min 0.1 Mean 54.5 Ac-ft 39,460

* Discharge measurement made on this day.

Reese River near Ione, Nev.

Location.--Lat 38°51', long 117°28', in sec. 4, T. 11 N., R. 40 E., on right bank 2½ miles upstream from Indian Creek, 8 miles southeast of Ione, and 58 miles southwest of Austin. Prior to Sept. 9, 1955, at site 200 ft upstream.

Drainage area.--44 sq mi, approximately.

Records available.--August 1951 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 7,350 ft (from topographic map). Prior to Sept. 9, 1955, at site 200 ft upstream at different datum.

Extremes.--Maximum discharge during year, 18 cfs June 16 (gage height, 1.01 ft); minimum daily, 0.6 cfs Sept. 2-14.
1951-55: Maximum discharge, 266 cfs Apr. 28, 1952 (gage height, 3.07 ft, site and datum then in use), from rating curve extended above 190 cfs by logarithmic plotting; minimum daily, that of Sept. 2-14, 1955.

Remarks.--Records fair except those for periods of no gage-height record, which are poor. No diversion above station.

Rating tables, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Sept. 8				Sept. 9-30	
0.2	0.5	0.6	4.8	0.5	0.5
.3	1.0	.7	7.0	.6	.9
.4	1.8	.8	10	.7	1.9
.5	3.1	1.0	18		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	1.5	1.3				6.3	7.0	14	5.6	2.3	0.7
2	1.1	1.6	1.5				5.6	6.3	14	5.4	2.2	.6
3	1.1	1.6	1.7				b3.6	6.5	13	5.4	2.0	.6
4	1.2	1.6	bl.8				b4.5	7.6	13	5.4	1.8	.6
5	1.4	1.6	bl.5			a2.8	b4.8	7.8	13	5.4	2.2	.6
6	1.4	1.6	bl.2	a1.8			5.0	8.4	13	5.2	2.5	.6
7	1.3	1.5	bl.1		a2.4		5.4	12	14	5.2	1.8	.6
8	1.4	1.6	*bl.3				5.4	13	14	5.0	1.5	.6
9	1.4	1.6	1.7				6.3	12	14	5.0	1.4	*.6
10	1.4	1.7	1.7				7.0	13	14	5.0	1.3	.6
11	1.4	1.8	bl.4				6.0	13	14	5.4	1.0	.6
12	1.4	2.8	bl.4	*2.4			6.3	14	13	5.0	1.0	.6
13	1.4	1.9	bl.6	2.4			7.0	14	13	4.6	1.3	.6
14	1.4	1.8	bl.2	2.3	*2.5		6.8	14	12	4.5	1.2	.6
15	1.5	2.0	1.7	2.4	2.5	a3.0	6.8	12	13	4.5	1.0	.7
16	1.4	2.4	bl.4	2.4	2.7		7.0	13	15	4.6	1.0	.7
17	1.5	1.6	bl.4	2.5	2.7		7.3	12	*12	4.6	.9	.8
18	1.5	1.5	bl.9	2.5	2.4		7.0	11	11	3.6	.9	1.0
19	1.5	1.5	1.9	2.4	2.4		6.0	*10	10	3.6	.8	1.3
20	1.5	1.7	1.9				7.0	11	9.0	4.0	.9	1.3
21	1.5	1.9	1.9				6.0	12	8.7	5.6	1.4	1.2
22	1.5	2.3	2.0				6.5	12	8.1	8.1	1.1	1.1
23	1.6	2.2	2.4			a4.0	6.0	13	7.8	5.0	1.0	1.1
24	1.6	2.2	2.3		a2.2		6.0	14	7.6	4.5	1.5	1.4
25	1.3	2.2	bl.6	a2.4			6.5	14	7.3	5.2	1.5	1.5
26	*1.2	2.0	bl.4			a5.0	6.3	14	7.0	4.1	1.3	1.5
27	1.2	2.0				a5.4	5.2	14	6.8	*3.2	1.0	1.4
28	1.3	1.9				a5.6	*6.8	14	6.5	3.1	.9	1.3
29	1.4	1.5	a1.8		-	*5.8	6.5	14	6.3	2.8	.8	1.3
30	1.5	bl.4		------	------	5.6	6.3	15	6.0	2.7	.8	1.3
31	1.5	------			------	5.0	------	17	------	2.4	.7	------
Total	42.9	54.5	51.2	67.9	66.2	110.4	183.2	370.6	330.1	143.7	41.0	27.4
Mean	1.38	1.82	1.65	2.19	2.36	3.56	6.11	12.0	11.0	4.64	1.32	0.91
Ac-ft	85	108	102	135	131	219	363	735	655	285	81	54

Calendar year 1954: Max 22 Min 0.8 Mean 4.75 Ac-ft 3,440
Water year 1954-55: Max 17 Min 0.6 Mean 4.08 Ac-ft 2,950

Peak discharge (base, 130 cfs).--No peak above base.
* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and adjacent record.
b Stage-discharge relation affected by ice.

Humboldt River near Valmy, Nev.

Location.--Lat 40°48', long 117°04', in NE¼NW¼ sec. 30, T. 34 N., R. 44 E., on left bank 3½ miles east of Valmy and 13 miles northwest of Battle Mountain.

Records available.--March 1950 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,440 ft (from topographic map).

Average discharge.--5 years, 289 cfs (20,920 acre-ft per year).

Extremes.--Maximum discharge during year 314 cfs June 20 (gage height, 3.27 ft); no flow Oct. 1 to Jan. 22, Aug. 6 to Sept. 30.
1950-55: Maximum daily discharge, 5,800 cfs May 5, 6, 1952; no flow at times in most years.

Remarks.--Records good except those for period of no gage-height record, which are fair. Diversions above station for irrigation.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Mar. 9-23)

0.9	0	1.5	9.0
1.0	.2	1.6	14
1.1	.5	1.8	29
1.2	1.3	2.0	55
1.3	2.8	3.0	262
1.4	5.3	3.4	338

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			(*)	0		34	126	109	135	117	3.4	
2				0		34	128	113	139	105	2.3	
3				0		44	131	102	148	94	1.4	
4				*0		45	131	102	155	84	.8	
5				0	a9.0	45	131	102	148	*76	.2	
6				0		54	128	100	144	71	0	
7				0		64	128	96	139	90	0	
8				0	a10	70	128	94	137	69	0	
9				0	a12	76	128	90	*136	60	*0	
10				0		72	128	88	142	52	0	
11				0	a15	94	126	86	155	46	0	
12	(*)			0		111	124	86	170	45	0	
13				0		131	126	84	185	38	0	
14				0		142	128	82	215	31	0	
15				0		155	124	80	234	28	0	
16			(*)	0	a20	153	122	84	246	25	0	
17				0		135	120	88	256	22	0	
18				0		124	120	94	*270	*19	0	
19				0		117	*117	94	297	17	0	
20				0	a25	120	120	*100	310	15	0	
21				0	a25	122	120	107	297	12	0	
22				0	a28	124	117	107	284	11	0	
23				.1	a31	*121	115	100	270	12	0	(*)
24				1.1	a33	115	113	107	240	11	0	
25				2.3	*32	113	113	111	217	9.9	0	
26					29	113	111	109	194	8.2	0	
27					34	111	107	111	179	7.4	0	
28					32	111	100	115	161	6.3	0	
29				a5.0	-	111	109	120	146	6.0	0	
30					------	111	109	124	135	5.3	0	
31		------			------	117	-----	131	------	4.7	0	------
Total	0	0	0	33.5	534.0	3,089	3,628	3,116	5,884	1,197.8	8.1	0
Mean	0	0	0	1.08	19.1	99.6	121	101	196	38.6	0.26	0
Ac-ft	0	0	0	66	1,060	6,130	7,200	6,180	11,670	2,380	16	0

Calendar year 1954: Max 271 Min 0 Mean 62.3 Ac-ft 45,110
Water year 1954-55: Max 310 Min 0 Mean 47.9 Ac-ft 34,700

* Discharge measurement or observation of no flow made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby stations.

Humboldt River at Comus, Nev.

Location.--Lat 41°00', long 117°19', in SE¼ sec. 14, T. 36 N., R. 41 E., on left bank at Comus section house of Southern Pacific Railroad, 9 miles northwest of Golconda and 32 miles northwest of Battle Mountain.

Records available.--September 1917 to June 1923, May 1925 to May 1926, February 1946 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,350 ft (from topographic map). Prior to February 1946, staff gage at site half a mile downstream at different datum.

Average discharge.--14 years (1917-22, 1946-55), 255 cfs (184,600 acre-ft per year).

Extremes.--Maximum discharge during year, 243 cfs June 25 (gage height, 3.60 ft); no flow for several days in August.
1917-23, 1925-26, 1946-55: Maximum discharge, 5,860 cfs May 6, 1952 (gage height, 11.52 ft); no flow during periods in 1918-20, 1954-55.

Remarks.--Records good. Diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.1	**0.1	0.1	0.1	2.0	104	104	111	112	0	0.1
2	.1	**.1	.1	.1	.1	4.5	118	108	116	99	.1	.1
3	.1	.1	.1	.1	.1	3.5	117	108	123	87	.1	.2
4	.1	.1	.1	**.1	.1	5.1	118	99	129	80	.1	.2
5	.1	.1	.1	.1	.1	6.7	117	96	136	*72	.2	.2
6	.1	.1	.1	.1	.1	6.4	118	94	128	61	.3	.3
7	.1	.1	.1	.1	.1	11	117	92	122	57	.3	.2
8	.1	.1	.1	.1	.1	17	116	90	120	64	.3	.3
9	.1	.1	.1	.1	.1	30	117	86	*116	61	*.3	.2
10	.1	.1	.1	.1	.1	40	118	82	108	55	.2	.2
11	.1	.1	.1	.1	.1	38	117	79	110	47	.2	.3
12	.1	.1	.1	.1	.1	46	116	78	122	41	.2	.3
13	.1	.1	.1	.1	.1	61	114	78	136	36	.2	.3
14	.1	.1	.1	.1	.1	80	116	76	153	30	.2	.3
15	.1	.1	.1	.1	.1	94	116	65	169	25	.2	.2
16	.1	.1	.1	.1	.1	105	112	73	179	21	.1	.2
17	.1	.1	.1	.1	.1	106	111	75	187	18	.1	.2
18	.1	.1	.1	.1	.1	100	110	*72	*196	*16	.1	.1
19	.1	.1	.1	.1	.1	98	*108	79	211	16	.1	.1
20	.1	.1	.1	.1	.1	94	110	60	227	11	.1	*.1
21	.1	.1	.1	.1	.1	98	111	71	236	8.0	.1	.1
22	.1	.1	.1	.1	.1	104	111	78	230	5.7	.1	.1
23	.1	.1	.1	.1	.1	106	106	80	223	4.2	.1	.1
24	.1	.1	.1	.1	.1	105	105	80	221	2.8	0	.1
25	.1	.1	.1	.1	*.1	100	104	85	227	1.7	0	.1
26	.1	.1	.1	.1	.4	*99	104	87	196	.8	0	.1
27	.1	.1	.1	.1	1.3	98	100	87	158	.4	0	.1
28	.1	.1	.1	.1	.2	99	100	87	147	1.4	0	.1
29	.1	.1	.1	.1	-	99	96	93	137	.4	0	.1
30	.1	.1	.1	.1	------	99	100	98	125	.1	.1	.1
31	.1	------	.1	.1	------	98	------	102	------	.1	.1	------
Total	3.1	3.0	3.1	3.1	4.4	2,053.2	3,327	2,642	4,799	1,034.6	3.9	5.1
Mean	0.10	0.10	0.10	0.10	0.16	66.2	111	85.2	160	33.4	0.13	0.17
Ac-ft	6.1	6.0	6.1	6.1	8.7	4,070	6,600	5,240	9,520	2,050	7.7	10

Calendar year 1954: Max 258 Min 0 Mean 54.5 Ac-ft 39,470
Water year 1954-55: Max 236 Min 0 Mean 38.0 Ac-ft 27,530

Peak discharge (base, 330 cfs).--No peak above base.
* Discharge measurement made on this day.
** Field estimate made on this day.

Little Humboldt River near Paradise Valley, Nev.

Location.--Lat 41°25', long 117°22', in SE¼ sec. 20, T. 41 N., R. 41 E., on right bank 3½ miles downstream from Bullshead Ranch and 9½ miles southeast of Paradise Valley.

Drainage area.--1,030 sq mi, approximately.

Records available.--October 1921 to June 1928 (fragmentary), October 1943 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,470 ft (from river-profile map). Prior to Nov. 21, 1946, at site 1 mile downstream at different datum.

Average discharge.--12 years (1943-55), 23.9 cfs (17,320 acre-ft per year).

Extremes.--Maximum discharge during year, 28 cfs May 26 (gage height, 1.88 ft); minimum, 5.0 cfs Sept. 6, 11.
1921-28, 1943-55: Maximum discharge, 1,100 cfs Feb. 2, 1952 (gage height, 7.71 ft); minimum, 4.5 cfs Aug. 12, 1954.

Remarks.--Records excellent. Bullshead Ranch diverts water for irrigation above station. Station is above all diversions in Paradise Valley.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

1.5	3.0
1.6	8.1
1.8	22
2.0	39

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.6	7.1	7.1	8.1	6.1	8.7	7.6	14	22	7.1	6.1	6.1
2	6.6	7.1	7.1	8.1	6.1	10	7.6	14	22	7.1	5.6	5.6
3	6.6	*7.1	*7.6	8.1	6.1	9.4	7.6	16	22	6.6	5.6	5.6
4	6.6	7.1	7.6	8.1	6.1	8.7	7.6	17	21	6.6	6.1	5.6
5	6.6	7.1	7.1	8.1	6.1	8.1	8.7	17	21	7.1	6.1	5.6
6	6.1	7.1	7.1	*7.6	6.1	8.1	9.4	15	21	7.1	6.6	5.6
7	6.1	7.1	7.1	7.6	5.6	8.7	9.4	16	20	*7.1	6.6	5.6
8	6.6	7.1	7.1	7.1	5.6	10	10	17	20	6.6	6.6	5.6
9	6.6	7.1	7.1	7.1	6.1	9.4	10	17	19	6.6	6.6	5.6
10	6.6	7.1	7.6	7.1	5.6	10	10	17	18	7.1	6.6	5.6
11	6.1	7.1	7.1	6.6	5.6	8.7	10	*20	*17	7.1	*6.6	5.6
12	6.1	7.1	7.6	6.6	5.6	11	12	23	15	6.6	6.6	5.6
13	7.1	7.1	7.6	6.6	5.6	11	13	24	15	7.1	6.6	5.6
14	6.6	7.1	7.6	6.6	5.6	11	13	23	15	7.1	6.1	5.6
15	6.6	7.6	7.6	7.1	7.6	11	13	23	17	7.1	6.1	6.1
16	6.6	7.6	7.6	7.1	7.1	9.4	13	25	16	7.1	6.1	6.1
17	6.6	7.6	7.6	6.6	7.1	9.4	13	26	14	7.1	6.1	6.1
18	7.1	7.1	7.6	6.6	7.1	8.7	12	27	14	6.6	6.1	6.1
19	6.6	7.1	7.6	6.6	7.1	8.7	12	24	13	6.6	6.1	6.1
20	6.6	7.6	7.6	6.6	7.1	8.1	12	23	12	6.1	6.1	6.6
21	6.6	7.1	7.6	6.6	7.1	7.6	*13	22	11	6.1	6.1	6.1
22	6.6	7.1	7.6	6.6	7.6	7.6	13	22	11	6.1	6.1	6.1
23	7.1	7.1	7.1	6.6	*7.6	7.6	12	22	8.7	6.1	6.1	*6.6
24	7.1	7.6	7.6	6.6	7.6	7.6	12	24	7.6	6.1	6.1	6.6
25	7.1	7.1	7.6	6.1	8.1	*7.6	12	26	7.6	6.1	6.1	6.6
26	7.1	7.1	7.6	6.1	8.1	7.6	12	27	7.1	6.1	6.1	6.6
27	7.1	7.1	7.1	6.1	8.1	7.6	13	27	7.1	6.1	6.1	6.6
28	7.1	7.1	6.6	6.1	8.1	8.7	11	25	6.6	6.1	6.1	6.6
29	7.1	7.1	7.1	5.6	-	8.1	12	23	7.1	6.1	6.1	6.6
30	7.1	7.1	7.6	5.6	------	8.1	13	23	6.6	6.1	6.1	6.6
31	7.1	------	8.1	6.1	------	8.1	------	23	------	6.1	6.1	------
Total	208.1	215.5	229.6	212.1	187.3	274.3	333.9	662	434.4	204.6	192.1	181.0
Mean	6.71	7.18	7.41	6.84	6.69	8.85	11.1	21.4	14.5	6.60	6.20	6.03
Ac-ft	413	427	455	421	372	544	662	1,310	862	406	381	359

Calendar year 1954: Max 18 Min 5.0 Mean 8.66 Ac-ft 6,270
Water year 1954-55: Max 27 Min 5.6 Mean 9.14 Ac-ft 6,610

Peak discharge (base, 35 cfs).--No peak above base.
* Discharge measurement made on this day.

Martin Creek near Paradise Valley, Nev.

Location.--Lat 41°32'00", long 117°25'40", in NW¼SW¼ sec. 12, T. 42 N., R. 40 E., on left bank 0.6 mile upstream from Humboldt County Recreation Park and 7 miles northeast of Paradise Valley.

Drainage area.--1.2 sq mi.

Records available.--October 1921 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,700 ft (from extension of river-profile map). Prior to Oct. 22, 1946, at several sites within 400 ft of present site at different datums.

Average discharge.--33 years (1921-26, 1927-55), 29.0 cfs (21,000 acre-ft per year).

Extremes.--Maximum discharge during year, 87 cfs Mar. 7 (gage height, 2.27 ft); minimum, 4.3 cfs Dec. 11.
1921-55: Maximum discharge, 9,000 cfs Jan. 21, 1943 (gage height, 11.1 ft, datum then in use), by slope-area determination of peak flow; minimum, 1.8 cfs Feb. 6, 1945.

Remarks.--Records good. No diversion above station.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

1.3	3.0
1.4	5.9
1.6	15
1.9	40
2.2	77

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.6	7.0	7.0	9.1	9.1	11	15	30	42	13	5.2	4.6
2	5.6	7.0	8.2	9.1	9.5	16	17	32	39	12	5.2	4.9
3	5.9	*7.0	*9.1	8.2	8.6	15	14	29	40	12	5.2	4.9
4	5.6	7.0	8.6	7.8	8.6	12	12	30	42	12	5.2	4.9
5	5.6	7.0	7.4	7.8	9.1	8.2	12	35	46	11	5.2	4.9
6	5.6	6.6	7.8	*8.2	9.1	7.4	12	47	50	10	5.2	5.2
7	5.6	6.6	7.4	7.8	9.1	23	14	57	52	*9.5	5.6	5.2
8	5.9	6.6	5.6	7.0	9.1	25	18	61	51	9.5	5.2	4.9
9	5.9	6.6	6.3	7.0	9.1	25	23	61	50	9.5	5.2	5.2
10	5.9	6.6	7.8	7.4	8.2	19	29	56	49	9.5	5.2	5.2
11	5.9	7.0	4.9	7.8	7.4	15	22	*61	*44	11	*4.9	5.2
12	5.9	7.8	5.9	7.8	8.2	13	20	63	42	10	4.9	5.2
13	6.3	7.8	7.8	7.8	9.1	12	18	63	41	9.1	4.9	5.2
14	6.3	7.4	7.0	7.4	9.1	10	17	52	37	7.8	4.9	5.6
15	6.3	8.6	7.8	7.4	9.5	8.5	15	47	36	7.4	4.9	5.6
16	6.3	9.1	5.9	7.4	10	9.1	15	42	32	7.0	4.9	5.9
17	6.3	8.2	5.9	7.4	10	8.6	16	38	29	7.0	4.9	6.3
18	6.3	7.8	6.3	7.8	8.2	8.6	17	34	26	6.6	4.9	6.6
19	6.3	7.4	6.3	7.8	7.4	8.6	15	37	23	6.6	4.9	6.3
20	6.3	7.4	5.9	8.2	8.6	7.7	16	46	22	6.3	4.9	6.6
21	6.6	7.4	6.6	8.6	9.1	9.0	*17	58	19	5.9	4.9	6.6
22	6.6	7.4	7.0	8.6	9.1	8.6	22	57	18	5.9	4.9	6.3
23	6.6	7.4	7.4	8.6	*8.6	9.5	22	57	17	5.9	4.9	*6.3
24	6.6	7.4	8.2	8.6	9.1	9.5	23	61	18	5.9	4.9	6.3
25	6.6	7.4	8.6	8.2	10	*15	23	51	17	5.6	4.9	6.3
26	6.6	7.8	7.4	7.8	9.5	13	22	47	16	5.6	4.9	6.3
27	6.6	7.8	7.0	7.0	9.1	12	19	41	15	5.6	4.9	6.3
28	6.6	7.0	6.3	7.4	8.6	17	20	40	14	5.6	4.6	6.3
29	6.6	6.3	7.0	7.4	-	20	19	44	17	5.6	4.9	6.3
30	6.6	5.6	7.8	7.8	------	15	22	51	16	5.6	4.6	6.3
31	7.0	------	8.6	8.2	------	13	------	49	------	5.6	4.6	------
Total	192.4	218.0	220.8	244.4	250.1	404.3	546	1,477	960	249.6	154.4	171.7
Mean	6.21	7.27	7.12	7.88	8.93	13.0	18.2	47.6	32.0	8.05	4.98	5.72
Ac-ft	382	432	438	485	496	802	1,080	2,930	1,900	495	306	341

Calendar year 1954: Max 112 Min 4.0 Mean 11.5 Ac-ft 8,330
Water year 1954-55: Max 63 Min 4.6 Mean 13.9 Ac-ft 10,090

Peak discharge (base, 100 cfs).--No peak above base.
* Discharge measurement made on this day.

Humboldt River near Rose Creek, Nev.

Location.--Lat 40°52', long 118°00', in NW¼ sec. 36, T. 35 N., R. 35 E., on right bank 5½ miles southwest of Rose Creek and 15½ miles southwest of Winnemucca.

Records available.--April 1948 to September 1955.

Gage.--Water-stage recorder.

Average discharge.--7 years, 238 cfs (172,300 acre-ft per year).

Extremes.--Maximum discharge during year, 214 cfs June 27 (gage height, 2.50 ft); minimum, 7.5 cfs Sept. 7, 14.
1948-55: Maximum discharge, 5,810 cfs May 8, 1952 (gage height, 11.41 ft); minimum, 6.5 cfs Sept. 2, 1949.

Remarks.--Records excellent except those for periods of ice effect, which are fair. Many diversions above station for irrigation.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharges, in cubic feet per second)

0.6	5.8	1.5	68
.8	14	1.9	117
1.1	32	2.3	179

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	14	*b16			21	54	56	27	118	17	8.7
2	13	14	18			21	51	59	25	108	17	8.7
3	13	*15	20			20	50	56	24	103	16	8.7
4	13	15	19	(*)		20	50	55	22	84	15	8.7
5	13	15	19			20	50	50	24	72	15	8.7
					b20							
6	13	15	19			19	50	50	29	64	15	8.3
7	13	15				20	52	49	30	*49	14	8.3
8	13	16				20	57	45	34	43	13	8.3
9	13	15				22	63	47	32	40	13	8.3
10	13	15	b19			24	64	52	58	36	12	8.3
11	13	16				24	60	46	*68	34	*12	8.3
12	13	16				25	60	43	59	30	12	8.3
13	13	16	19			26	62	41	56	30	12	8.3
14	13	16	b19			32	59	40	53	32	11	8.3
15	12	17	18			35	58	40	51	33	11	8.7
				b18	b21							
16	12	17	18			35	57	41	50	56	11	8.7
17	12	17				38	54	41	55	59	11	9.1
18	12	17				48	51	*40	62	41	11	10
19	12	17				52	49	39	100	36	11	10
20	12	17				54	48	38	124	32	10	*10
21	12	17			22	54	*46	36	113	30	10	10
22	13	19			22	49	43	35	128	28	9.5	10
23	13	21			22	46	42	35	*156	26	9.5	10
24	12	21	b18		21	40	41	38	157	24	9.1	10
25	12	19			*21	*38	45	37	157	21	9.1	10
26	12	19			22	38	52	30	159	20	9.1	9.5
27	12	19			21	37	60	25	176	19	9.1	9.5
28	13	19			22	42	62	21	165	19	9.1	9.5
29	13	19			-	46	60	19	159	19	9.1	9.5
30	13	b15			------	52	56	23	136	18	8.7	10
31	13	------			------	55	------	28	------	18	8.7	------
Total	392	503	569	558	583	1,073	1,606	1,255	2,489	1,342	360.0	272.7
Mean	12.6	16.8	18.4	18	20.8	34.6	53.5	40.5	83.0	43.3	11.6	9.09
Ac-ft	778	998	1,130	1,110	1,160	2,130	3,190	2,490	4,940	2,660	714	541

Calendar year 1954: Max 271 Min 11 Mean 54.4 Ac-ft 39,400
Water year 1954-55: Max 176 Min 8.3 Mean 30.1 Ac-ft 21,840

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

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

Location.--Lat 40°40', long 118°12', in NE¼ sec. 1, T. 32 N., R. 33 E., on left bank 3 miles northwest of Imlay and 9 miles downstream from headgates.
Records available.--October 1946 to September 1955.
Gage.--Water-stage recorder. Altitude of gage is 4,170 ft (from topographic map).
Extremes.--No flow for entire year.
1946-55: Maximum discharge, 117 cfs Apr. 25, 1952 (gage height, 3.69 ft); no flow for long periods.
Remarks.--This canal diverts water from Humboldt River in NW¼ sec. 29, T. 33 N., R. 35 E., for storage in Taylor-Pitt Reservoir 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 irrigation.

Humboldt River near Imlay, Nev.

Location.--Lat 40°41'30", long 118°12'10", in SE¼ sec. 25, T. 33 N., R. 33 E., on right bank 1 mile upstream from old Calahan Dam and 4 miles northwest of Imlay.
Drainage area.--13,500 sq mi., approximately.
Records available.--June 1935 to September 1941, April 1945 to September 1955.
Gage.--Water-stage recorder. Altitude of gage is 4,130 ft (from topographic map). Prior to Apr. 28, 1945, at site 1 mile downstream at different datum.
Average discharge.--16 years, 155 cfs (112,200 acre-ft per year).
Extremes.--Maximum discharge during year, 152 cfs June 28 (gage height, 2.46 ft); minimum, 0.7 cfs Sept. 14.
1935-41, 1945-55: Maximum discharge, 6,080 cfs May 9, 1952 (gage height, 12.15 ft); no flow at times in several years.
Remarks.--Records excellent except those for periods of ice effect, which are fair. Humboldt-Lovelock Irrigation Light & Power Co.'s feeder canal diverts water from river above station to Pitt-Taylor Reservoirs. This water is ordinarily released during irrigation season through Rye Patch Reservoir to Humboldt River for irrigation in Lovelock district. No diversion into Pitt-Taylor Reservoir this water year. Flow affected by many other diversions above station for irrigation.

Rating tables, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Mar. 10				Mar. 11 to Sept. 30			
0.9	7.7	0.4	0.7	0.7	5.5	1.6	57
1.1	17	.5	1.7	.9	12	2.0	97
1.3	29	.6	3.3	1.2	27	2.5	154

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	13	16				52	62	24	121	13	1.8
2	10	13	19				*52	60	25	108	12	1.7
3	10	*13	24				40	62	*25	97	*11	1.6
4	10	13	25			b19	38	60	24	93	11	*1.5
5	*10	13	22		b18		40	*58	22	81	10	1.3
6	10	13	24				51	53	21	*68	9.5	1.1
7	9.6	14	22				47	50	21	60	9.1	1.1
8	10	14	b21			b22	37	50	21	50	8.8	.8
9	10	14	*19			b25	38	48	21	42	8.1	.9
10	9.6	14				b30	44	47	21	38	7.5	.9
11	9.6	15			(*)	34	48	51	22	37	6.7	.9
12	9.6	15	b18			33	49	49	47	33	6.4	1.7
13	10	15				31	49	44	45	30	5.8	1.2
14	10	16		(*)		30	51	38	42	27	5.2	.9
15	10	17				31	50	38	40	27	5.0	2.0
16	11	17		b16		35	48	38	39	27	4.8	1.8
17	10	17				36	47	37	38	27	4.6	2.1
18	10	17				37	46	36	39	48	4.6	3.0
19	10	17				40	44	35	45	38	4.3	4.6
20	10	17			b19	48	42	33	56	31	4.1	5.2
21	10	17				49	42	33	94	27	3.9	5.2
22	11	17				*51	44	31	90	25	3.5	4.8
23	10	18				48	38	30	98	24	3.1	4.8
24	11	18	b16			44	37	21	122	22	2.8	4.8
25	12	20				42	37	32	130	20	2.3	4.8
26	12	20				39	36	32	132	18	2.1	4.8
27	12	20				38	41	30	134	17	2.0	4.8
28	12	20				39	51	27	142	16	2.0	4.6
29	12	18			-	41	70	26	146	15	1.8	4.6
30	12	16			------	42	64	24	138	15	2.0	4.8
31	13	------			------	47	------	24	------	14	1.8	------
Total	366.4	481	556	496	523	1,045	1,373	1,269	1,864	1,296	178.8	84.1
Mean	10.5	16.0	17.9	16	18.7	33.7	45.8	40.9	62.1	41.8	5.77	2.80
Ac-ft	647	954	1,100	984	1,040	2,070	2,720	2,520	3,700	2,570	355	167

Calendar year 1954: Max 270 Min 0 Mean 49.8 Ac-ft 36,030
Water year 1954-55: Max 146 Min 0.8 Mean 26.0 Ac-ft 18,830

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Rye Patch Reservoir near Rye Patch, Nev.

Location.--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, and 2 miles northwest of Rye Patch.

Drainage area.--13,700 sq mi, approximately.

Records available.--February 1936 to September 1955.

Gage.--Mercury indicating gage. Datum of gage is at mean sea level (Southern Pacific Railroad datum).

Extremes.--Maximum contents during year, 14,390 acre-ft May 20-22 (elevation, 4,105.00 ft); no contents Aug. 7-11.
1936-55: Maximum contents, 196,900 acre-ft Apr. 9, 1946 (elevation, 4,134.62 ft); no contents Aug. 7-11, 1955.

Remarks.--Reservoir is formed by earth-fill, rock-faced dam; storage began Feb. 20, 1936. Capacity, 179,100 acre-ft between elevations 4,072.5 ft (sill of trash-rack structure) and 4,133.0 ft (top of spillway gates). Dead storage negligible. Elevation of spillway (gate sill) is 4,116 ft. Water is used for irrigation on Humboldt project.

Cooperation.--Records of daily elevation furnished by Pershing County Water Conservation District of Nevada.

Contents, in acre-feet, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,380	2,580	3,970	5,560	6,930	8,490	10,860	13,040	8,320	5,810	1,420	73
2	1,420	2,620	4,030	5,640	6,970	8,580	10,910	13,110	7,670	6,030	1,140	122
3	1,460	2,660	4,080	5,710	7,010	8,670	11,030	13,250	6,970	6,320	866	143
4	1,500	2,700	4,140	5,740	7,050	8,720	11,140	13,320	6,280	6,470	555	164
5	1,540	2,750	4,200	5,810	7,140	8,810	11,250	13,470	5,640	6,660	326	203
6	1,580	2,790	4,260	5,880	7,180	8,860	11,310	13,610	5,060	6,780	112	245
7	1,630	2,820	4,320	5,880	7,220	8,900	11,360	13,750	4,500	6,970	0	286
8	1,660	2,860	4,380	5,960	7,260	9,000	11,420	13,750	4,000	7,090	0	311
9	1,700	2,910	4,440	5,990	7,300	9,090	11,480	13,820	3,540	7,180	0	351
10	1,740	2,950	4,500	6,030	7,340	9,180	11,590	13,820	3,140	7,220	0	376
11	1,780	3,000	4,560	6,060	7,380	9,280	11,650	13,970	2,880	7,180	0	401
12	1,810	3,040	4,620	6,100	7,420	9,320	11,700	14,040	2,770	7,180	112	423
13	1,860	3,090	4,680	6,170	7,460	9,420	11,770	14,110	2,750	7,090	164	448
14	1,900	3,140	4,710	6,210	7,500	9,510	11,830	14,180	2,750	7,010	229	472
15	1,920	3,190	4,740	6,240	7,580	9,560	11,890	14,180	2,860	6,930	270	484
16	1,960	3,240	4,800	6,280	7,670	9,610	11,950	14,180	3,020	6,780	346	502
17	2,000	3,290	4,870	6,320	7,710	9,660	12,020	14,250	3,090	6,660	376	527
18	2,030	3,340	4,900	6,360	7,790	9,710	12,080	14,250	3,190	6,510	411	555
19	2,070	3,390	4,930	6,440	7,840	9,760	12,140	14,320	3,290	6,320	448	577
20	2,100	3,440	5,000	6,470	7,920	9,860	12,210	14,390	3,390	6,030	472	599
21	2,140	3,490	5,060	6,510	7,970	9,910	12,270	14,390	3,460	5,710	502	629
22	2,180	3,540	5,100	6,510	8,050	10,020	12,330	14,390	3,540	5,200	540	643
23	2,210	3,590	5,130	6,550	8,100	10,120	12,460	13,820	3,750	4,830	570	673
24	2,250	3,640	5,130	6,590	8,180	10,220	12,460	13,390	3,950	4,410	592	698
25	2,290	3,700	5,200	6,630	8,270	10,320	12,520	12,780	4,110	3,950	606	698
26	2,330	3,750	5,230	6,660	8,320	10,370	12,590	12,140	4,470	3,540	629	698
27	2,370	3,810	5,290	6,700	8,400	10,470	12,650	11,530	4,740	3,160	658	715
28	2,410	3,860	5,360	6,780	8,450	10,580	12,710	10,910	5,000	2,770	521	733
29	2,450	3,920	5,420	6,820	-	10,630	12,780	10,270	5,260	2,410	371	759
30	2,490	3,950	5,460	6,860	------	10,740	12,900	9,660	5,530	2,100	222	786
31	2,530	------	5,490	6,890	------	10,800	------	9,090	------	1,730	154	------
(†)	4,090.65	4,093.55	4,096.05	4,097.95	4,099.80	4,102.20	4,103.95	4,100.50	4,096.10	4,088.45	4,078.80	4,084.60
(‡)	+1,180	+1,420	+1,540	+1,400	+1,560	+2,350	+2,100	-3,810	-3,560	-3,800	-1,576	+632

Calendar year 1954: (‡) -74,710
Water year 1954-55: (‡) -564

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

Humboldt River near Rye Patch, Nev.

Location.--Lat 40°27'33", long 118°18'30", in NE¼ sec. 18, T. 30 N., R. 33 E., on left bank 1,000 ft downstream from Rye Patch Dam and 1½ miles northwest of Rye Patch.

Drainage area.--13,700 sq mi, approximately.

Records available.--January 1896 to December 1909, September 1910 to September 1922, September 1924 to September 1932 (fragmentary), October 1935 to September 1941, October 1943 to September 1955. Prior to October 1935, published as "near Oreana."

Gage.--Water-stage recorder. Altitude of gage is 4,050 ft (from topographic map). Prior to Oct. 1, 1935, at site 7 miles downstream at different datum. Oct. 1, 1935, to Oct. 13, 1945, at site half a mile downstream at different datum.

Average discharge.--41 years (1899-1909, 1910-16, 1917-22, 1930-32, 1935-41, 1943-55), 205 cfs (148,400 acre-ft per year).

Extremes.--Maximum discharge during year, 359 cfs May 29 (gage height, 2.76 ft); no flow for many days.
1896-1922, 1924-32, 1935-41, 1943-55: Maximum discharge, 4,720 cfs May 11, 12, 1952 (gage height, 10.26 ft); no flow at times during some years.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow completely regulated by Rye Patch Reservoir (see preceding page). Many diversions above station for irrigation. Records of chemical analyses and water temperatures for the water year 1955 are given in WSP 1403.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									349		153	
2	0.3						(*)		343		147	
3		(*)							*338		*138	
4	0							0.3	330		126	(**)
5	*0					0.1		(**)	325	0.4	107	
6	0								310	(*)	52	
7	0				0.3				274		32	
8	0					0			250		27	
9	0		(**)			0			215	19	25	
10	0				(**)	0			155	60	23	
11	0					0			102	44	9.4	
12	0								50	65		
13	0								40	80		
14	0			(*)		.2		.2	15	80		
15	0									80		
16	0		0.3	0.3			0.3					0.2
17	0				.2	0				80		
18	0					0				80		
19	0					0				107		
20	0					0				157		
21	0					0		47		192	.3	
22	0					*0		233		219		
23	0							284	.4	224		
24	0							297		222		
25	0				.1	.1		336		228		
26	0							333		222		
27	0							330		190		
28	0							328		186	34	
29	0				-			333		182	56	
30	0				------	.2		356		178	53	
31	0	------			------		------	351	------	171	48	
										157	36	------
Total	0.9	0	9.3	9.3	6.1	2.8	9.0	3,232.6	3,102.4	3,226.2	1,070.9	6.0
Mean	0.02	0	0.3	0.3	0.22	0.09	0.3	104	103	104	34.5	0.2
Ac-ft	1.8	0	18	18	12	5.6	18	6,410	6,150	6,400	2,120	12

Calendar year 1954: Max 578 Min 0 Mean 132 Ac-ft 95,480
Water year 1954-55: Max 356 Min 0 Mean 29.2 Ac-ft 21,170

* Discharge measurement or observation of no flow made on this day.
** Field estimate made on this day.
Note.--No gage-height record Oct. 1 to May 20, June 15 to July 8, Aug. 12-26, Sept. 1-30; discharge estimated on basis of 3 discharge measurements, 3 observations of no flow and 4 field estimates.

Humboldt River near Lovelock, Nev.

Location.--Lat 40°03', long 118°28', in NE¼ sec. 11, T. 25 N., R. 31 E., on right bank 900 ft below breached dam of Lovelock Land and Development Co. and 9 miles south of Lovelock.

Drainage area.--14,200 sq mi, approximately.

Records available.--February 1912 to September 1927, June 1950 to September 1955.

Gage (revised).--Water-stage recorder. Altitude of gage is 3,900 ft (from topographic map). Prior to June 17, 1912, staff gage, and June 17, 1912 to September 1927, water-stage recorder, at site 600 ft downstream at diferent datums. June 14, 1950, to Nov. 13, 1951, water-stage recorder at site 300 ft upstream at same datum.

Average discharge.--14 years (1913-16, 1918-22, 1924, 1927, 1950-55), 104 cfs (75,290 acre-ft per year).

Extremes.--Maximum discharge during year, 6.3 cfs June 20 (gage height, 1.38 ft); no flow for part of July 26.
1912-27, 1950-55: Maximum discharge, 3,540 cfs May 19, 1952 (gage height, 9.36 ft); no flow for several months during many years prior to construction of Rye Patch Dam.

Remarks.--Records good except those for periods of ice effect, which are fair. Flow regulated by Rye Patch Reservoir (since Feb. 20, 1936) and irrigation in Lovelock Valley.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.6	1.3	b1.0			b1.8	0.8	0.6	1.2	1.9	0.5	1.8
2	3.3	1.3	1.5			1.8	*.8	.6	1.2	2.2	1.3	1.8
3	2.8	*1.3				1.6	.9	.5	*1.1	2.2	*1.0	1.2
4	2.3	1.3				1.6	1.0	.4	1.2	2.2	1.0	*1.4
5	*2.2	1.3	b5.0			1.4	1.0	*.3	1.8	2.2	.8	1.6
6	2.0	1.2				1.0	1.0	.3	1.8	*2.0	1.1	1.5
7	2.0	1.2			b4.0	.8	1.1	.2	1.9	2.2	1.3	1.4
8	1.9	1.2				.4	1.2	.2	1.5	2.0	1.1	1.3
9	1.9	1.2	(*)			.4	.8	.2	.6	1.5	2.2	1.2
10	1.9	1.2			(*)	.4	.6	.2	.4	1.5	1.3	1.2
11	1.9	1.2				.6	.7	.2	.3	1.8	1.2	1.1
12	1.9	1.3				1.3	.8	.2	.3	2.0	2.2	1.3
13	1.5	1.3				1.4	1.0	.2	.5	1.4	1.5	1.8
14	1.5	1.3		(*)	3.3	1.0	1.1	.2	.5	1.2	1.4	1.6
15	1.5	1.3		b4.0	b3.3	.9	1.1	.5	1.6	1.2	1.9	1.5
16	1.5	1.3			3.3	b.7	1.1	.5	1.5	1.0	2.0	1.8
17	1.5	1.3				.5	1.1	.4	1.3	.8	2.3	2.0
18	1.5	1.2			b3.0	.4	1.2	.3	.7	.7	2.3	1.9
19	1.5	1.2	b4.0			.4	1.2	.3	.6	.9	1.9	1.8
20	1.5	1.2				b.4	1.2	.3	3.1	1.0	1.9	1.9
21	1.5	1.2				.3	1.3	.3	5.3	.9	1.6	1.8
22	1.5	1.2				*.4	1.0	.2	2.8	.6	1.5	1.6
23	1.5	1.2			b2.5	.7	.6	.3	1.9	.2	1.6	1.9
24	1.5	1.2				.7	.7	1.0	2.8	.1	1.6	1.5
25	1.4	1.2			1.9	.6	1.2	1.3	3.1	.1	1.6	2.2
26	1.4	1.2			1.9	.6	1.0	.5	3.6	.1	1.6	3.0
27	1.3	1.2			b1.8	.6	1.0	.4	2.6	.2	1.6	2.4
28	1.3	1.2			b1.8	.9	.5	.4	1.0	.6	1.6	2.2
29	1.3	b.8			-	1.0	.4	.4	1.3	1.0	1.9	2.0
30	1.3	b.8			------	.8	.5	.5	1.8	.2	1.5	1.9
31	1.3	------			------	.6	------	1.3	------	.2	1.6	------
Total	55.0	36.3	123.5	124.0	91.3	26.0	27.9	13.2	49.3	36.1	47.9	51.6
Mean	1.77	1.21	3.98	4.0	3.26	0.84	0.93	0.43	1.64	1.16	1.55	1.72
Ac-ft	109	72	245	246	181	52	55	26	98	72	95	102

Calendar year 1954: Max 63 Min 0.6 Mean 6.93 Ac-ft 5,020
Water year 1954-55: Max - Min 0.1 Mean 1.87 Ac-ft 1,350

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Pyramid Lake near Nixon, Nev.

Location.--Lat 39°50'30", long 119°28'00", in SE¼SE¼ sec. 24, T. 23 N., R. 22 E., at southwest corner of concrete bridge No. 296 B, 150 ft southwest of milepost 297, 6 miles west of Nixon, and 11.5 miles south along Southern Pacific Railroad from station at Sutcliffe.
Records available.--1867 to 1925 (occasional elevations in some years), June 1926 to September 1955.
Gage.--Benchmark N-21 of U. S. Coast and Geodetic Survey at elevation of 3,940.04 ft above mean sea level, datum of 1929. Prior to January 1934, elevations were determined from benchmark No. 1 of General Land Office, referred to general adjustment of 1912 (to convert these records to the datum of 1929, add 0.56 ft).
Extremes.--1926-55: Maximum elevation observed, 3,848.5 ft June 1926; minimum observed, 3,801.43 ft Nov. 15, 1950.

Elevation, in feet, October 1954 to September 1955

Nov. 23.....	3,804.73	Apr. 27.....	3,803.65
Dec. 30.....	3,804.30	June 16.....	3,803.60
Mar. 3.....	3,804.10	Aug. 17.....	3,802.65

Truckee River near Truckee, Calif.

Location.--Lat 39°17'30", long 120°12'30", in SW¼NE¼ sec. 28, T. 17 N., R. 16 E., on left bank 1.4 miles upstream from Donner Creek and 2.5 miles southwest of Truckee.
Drainage area.--565 sq mi (revised).
Records available.--December 1944 to September 1955.
Gage.--Water-stage recorder. Altitude of gage is 5,920 ft (from topographic map).
Average discharge.--10 years, 355 cfs (257,000 acre-ft per year).
Extremes.--Maximum discharge during year, 552 cfs Aug. 8 (gage height, 2.51 ft); minimum, 69 cfs Apr. 5.
1944-55: Maximum discharge, 6,480 cfs Nov. 20, 1950 (gage height, 7.62 ft), from rating curve extended above 2,300 cfs on basis of slope-area determination of peak flow; minimum, 11 cfs Jan. 27, 1948.
Remarks.--Records excellent. Flow regulated by Lake Tahoe Reservoir (operating capacity, about 730,000 acre-ft).

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

1.3	67	2.0	275
1.6	140	2.5	545

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	381	235	267	275	275	221	101	103	204	386	473	437
2	340	235	311	271	255	280	96	111	200	386	473	437
3	340	235	284	275	255	275	85	124	224	386	479	431
4	325	235	194	275	263	284	82	*146	275	381	515	431
5	311	235	188	275	259	302	74	181	330	398	521	431
6	311	235	197	275	259	302	76	235	355	408	545	437
7	311	235	191	275	267	302	89	267	386	403	545	437
8	311	235	188	280	293	302	111	271	381	414	545	437
9	311	235	188	275	293	298	129	293	370	425	527	437
10	311	235	184	275	298	263	140	306	360	425	497	443
11	311	271	181	271	298	210	124	325	302	420	473	449
12	311	311	181	271	298	194	124	355	267	420	437	455
13	311	306	178	271	302	243	126	330	259	431	437	449
14	311	311	178	271	302	243	118	255	210	443	431	437
15	311	365	178	271	255	243	121	200	175	449	431	437
16	311	263	175	275	255	247	129	175	157	443	431	437
17	311	255	152	280	271	263	132	188	149	437	431	443
18	311	259	116	280	267	263	108	221	143	437	437	443
19	316	263	116	280	263	267	96	267	137	443	431	443
20	316	263	*124	280	255	267	101	316	132	449	431	443
21	316	263	175	275	251	263	126	365	126	455	431	443
22	320	263	181	275	251	263	143	350	126	461	431	443
23	320	263	184	275	251	259	152	350	111	467	431	443
24	320	263	235	275	*210	235	154	311	*230	467	431	437
25	316	259	235	275	204	194	137	247	235	461	431	443
26	316	259	235	*275	204	160	116	243	228	455	431	443
27	*316	259	235	275	204	154	111	255	251	461	431	443
28	280	263	235	275	224	157	111	271	311	461	431	437
29	235	*263	235	275	-	126	108	330	360	*461	437	443
30	239	263	239	275	------	101	106	320	370	461	*437	*425
31	235	------	251	275	------	*94	------	263	------	461	437	------
Total	9,585	7,835	6,211	8,526	7,282	7,275	3,426	7,974	7,344	13,455	14,249	13,194
Mean	309	261	200	275	260	235	114	257	245	434	460	440
Ac-ft	19,010	15,540	12,320	16,910	14,440	14,430	6,800	15,820	14,570	26,690	28,260	26,170

Calendar year 1954: Max 1,160 Min 94 Mean 263 Ac-ft 190,300
Water year 1954-55: Max 545 Min 74 Mean 291 Ac-ft 211,000

* Discharge measurement made on this day.

Prosser Creek near Boca, Calif.

Location.--Lat 39°22', long 120°07', in NW¼ sec. 32, T. 18 N., R. 17 E., on left bank a quarter of a mile upstream from mouth and 2 miles southwest of Boca.

Drainage area.--51 sq mi, approximately.

Records available.--April 1889 to November 1890, October 1902 to June 1903 (gage heights only), June 1951 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 5,574.66 ft above mean sea level (levels by Bureau of Reclamation). April 1889 to November 1890 and October 1902 to June 1903, staff gages at same site at different datums.

Extremes.--Maximum discharge during year, 357 cfs May 12 (gage height, 3.36 ft); minimum, 4.0 cfs Sept. 7.

1951-55: Maximum discharge, 1,150 cfs Mar. 9, 1954 (gage height, 5.18 ft); maximum gage height, 5.71 ft Jan. 9, 1953 (backwater from ice); minimum discharge, that of Sept. 7, 1955.

Maximum discharge known, 4,320 cfs Nov. 20, 1950 (gage height, 9.0 ft, present datum, from floodmarks), from rating curve extended above 1,100 cfs on basis of slope-area determination of peak flow.

Remarks.--Records good except those for period of ice effect, which are fair.

Rating table, water year 1954-55, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	4.0	2.1	90
1.0	7.0	2.5	152
1.1	11	3.0	257
1.3	21	3.5	393
1.7	48		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.1	10	30			15	98	82	145	52	10	5.2
2	8.5	10	29			17	80	86	136	50	10	5.2
3	8.5	10	39				66	94	156	51	9.7	5.2
4	8.5	*10	32				61	112	185	48	9.3	5.2
5	8.9	10	32			21	61	145	219	43	8.9	5.2
6	8.9	10	30				73	189	225	40	8.5	5.2
7	8.9	10	25				88	227	234	38	8.1	4.6
8	9.7	11					115	255	*236	36	8.1	4.9
9	9.7	14				23	128	260	234	36	7.8	5.2
10	9.3	13			(*)	25	138	257	227	34	7.8	5.2
11	9.3	13	20	(*)		28	110	260	202	33	7.4	5.2
12	8.9	21				31	106	282	183	32	7.0	5.2
13	8.9	16	(*)			31	109	272	171	30	7.0	5.2
14	8.9	14			18	30	102	212	152	28	7.0	5.8
15	9.3	67				28	99	162	126	29	6.7	6.7
16	9.3	41		15		29	109	145	108	27	6.7	6.4
17	8.9	24				30	123	156	103	24	*6.7	7.0
18	8.9	19				*32	95	183	99	*22	6.7	7.8
19	9.3	19				32	83	227	98	20	6.4	7.8
20	9.3	18				32	82	241	96	19	6.1	7.8
21	9.3	16				31	84	282	93	17	6.1	*7.4
22	9.3	16				33	79	262	89	16	5.8	7.0
23	9.7	16				36	83	250	84	16	5.8	7.8
24	9.7	16	15			46	106	239	72	14	5.8	10
25	9.7	16				56	106	179	69	14	5.8	8.5
26	10	16			15	64	78	177	69	13	5.8	7.8
27	10	16			14	69	*96	187	66	13	5.8	7.8
28	9.7	16			14	106	99	191	62	12	5.8	7.4
29	9.7	13			-	112	91	221	57	12	5.5	7.4
30	9.7	22			------	79	88	*227	54	12	5.5	7.4
31	9.7	------			------	78	-----	208	------	11	5.5	------
Total	286.5	523	617	465	493	1,230	2,836	6,270	4,050	842	219.1	194.5
Mean	9.24	17.4	19.9	15	17.6	39.7	94.5	202	135	27.2	7.07	6.48
Ac-ft	568	1,040	1,220	922	978	2,440	5,630	12,440	8,030	1,670	435	386

Calendar year 1954: Max 776 Min 6.7 Mean 61.9 Ac-ft 44,850
Water year 1954-55: Max 282 Min 4.6 Mean 49.4 Ac-ft 35,760

Peak discharge (base, 300 cfs).--May 12 (12 p.m.) 357 cfs (3.36 ft); May 22 (12:30 a.m.) 349 cfs (3.33 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Dec. 8 to Mar. 16.

Little Truckee River near Hobart Mills, Calif.

Location.--Lat 39°30', long 120°16', in sec. 14, T. 19 N., R 15 E., on right bank half a mile upstream from Independence Creek and 7½ miles northwest of Hobart Mills.

Drainage area.--33 sq mi, approximately.

Records available.--December 1946 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 6,330 ft (from topographic map).

Average discharge.--8 years (1947-55), 88.8 cfs (64,290 acre-ft per year).

Extremes.--Maximum discharge during year, 605 cfs May 20 (gage height, 3.92 ft), from rating curve extended above 550 cfs by logarithmic plotting; minimum, 2.1 cfs Aug. 25.
1946-55: Maximum discharge, 7,010 cfs Nov. 20, 1950 (gage height, 7.53 ft), from rating curve extended above 1,100 cfs on basis of slope-area determination of peak flow; minimum, 1.1 cfs Aug. 19, 20, 23, 24, 1949.

Remarks.--Records good except those for periods of ice effect, which are fair. One transmountain diversion to Sierra Valley above station.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.8	0.9	2.0	99
1.0	5.2	2.5	186
1.2	14	3.0	301
1.5	36	4.0	616

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	4.5	7.1				32	48	225	8.6	3.8	3.6
2	4.3	4.5	12				34	52	201	8.2	3.8	3.1
3	4.7	4.5	12				32	62	238	10	3.6	3.1
4	4.7	4.5	10				26	*76	262	8.6	3.6	3.4
5	4.7	4.5				11	27	100	338	7.9	3.6	3.6
6	4.7	4.5					27	143	365	6.7	3.6	3.6
7	4.7	4.5					32	184	*385	6.0	3.6	3.4
8	5.0	5.2		8.0	9.0	12	39	243	397	5.6	3.4	3.4
9	5.0	7.5				12	47	278	379	5.2	3.1	3.6
10	5.0	6.3	8.4			14	53	319	362	5.2	2.7	3.4
11	4.7	7.1				15	47	354	306	5.0	2.7	3.8
12	4.7	13				15	52	403	274	5.0	2.7	3.1
13	4.5	8.2				15	60	406	274	5.0	2.7	3.1
14	4.5	7.9				14	57	317	231	5.0	2.5	4.5
15	4.7	48					62	234	184	5.2	2.5	3.8
16	4.5	20			11		75	199	146	5.2	2.7	3.6
17	4.5	12			14		80	225	122	5.0	2.7	3.8
18	4.5	10			12	12	73	281	108	4.7	2.7	4.5
19	4.5	9.0					69	357	98	4.5	2.7	6.7
20	4.7	9.0	(*)				60	424	84	4.5	2.7	6.3
21	4.5	8.2			11		57	*467	76	4.3	2.5	5.6
22	4.5	7.9				12	53	442	66	4.3	2.5	5.2
23	4.5	7.9	7.5	8.5		12	58	430	52	4.0	2.5	6.0
24	4.5	7.5			(*)	15	69	403	*35	4.0	2.5	7.5
25	4.7	7.5				16	63	284	30	3.8	2.3	6.0
26	4.5	7.1		(*)	10	18	52	284	26	3.4	2.5	5.6
27	*4.5	6.7			9.5	21	75	304	18	3.4	2.5	5.2
28	4.5	6.3			10	29	60	311	14	3.4	2.9	5.0
29	4.5	*6.2			-	31	53	360	10	*3.6	3.4	5.0
30	4.5	6.5			------	33	49	371	9.0	3.6	*3.4	*4.7
31	4.5	------			------	*33	-----	324	------	4.0	3.4	------
Total	141.7	266.5	253.5	256.0	278.5	478	1,573	8,685	5,315.0	162.9	91.8	133.2
Mean	4.57	8.88	8.18	8.26	9.95	15.4	52.4	280	177	5.25	2.96	4.44
Ac-ft	281	529	503	508	552	948	3,120	17,230	10,540	323	182	264

Calendar year 1954: Max 567 Min 1.9 Mean 60.9 Ac-ft 44,080
Water year 1954-55: Max 467 Min 2.3 Mean 48.3 Ac-ft 34,980

Peak discharge (base, 500 cfs).--May 12 (10 p.m.) 503 cfs (3.68 ft); May 20 (11 p.m.) 605 cfs (3.92 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 29, 30, Dec. 5 to Mar. 10, Mar. 12, 13, 15-21.

Sagehen Creek near Truckee, Calif.

Location.--Lat 39°25'50", long 120°14'10", in NE¼NE¼ sec. 7, T. 18 N., R. 16 E., on left bank 1.5 miles upstream from bridge on State Highway 89 and 7.5 miles north of Truckee.

Drainage area.--11.1 sq mi.

Records available.--October 1953 to September 1955.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 6,400 ft (from topographic map). Prior to Dec. 2, 1953, staff gage at site 100 ft upstream at different datum.

Extremes.--Maximum discharge during year, 59 cfs May 8 (gage height, 2.75 ft); minimum, 1.4 cfs Aug. 22.
1953-55: Maximum discharge, 72 cfs Apr. 22, 1954 (gage height, 2.21 ft), from rating curve extended above 27 cfs on basis of logarithmic plotting; minimum, 1.3 cfs Aug. 24, 1954.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. No storage or diversion above station.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.4	1.3	1.9	9.5
1.5	2.0	2.1	17
1.6	2.9	2.6	48
1.7	4.5		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	2.2	2.5	3.4	2.9	3.2	8.1	10	19	3.8	2.1	1.7
2	2	2.2	2.9	3.3	2.9	2.7	7.1	12	18	3.8	2.1	1.7
3	2	2.2	4.9	3.2	2.9	2.7	6.1	14	16	3.9	2.1	1.7
4	2	2.2	3.9	b3.1	b2.9	2.7	5.6	18	17	3.6	2.0	1.7
5	2	2.2	3.6	3.0	2.9	2.8	5.6	24	17	3.4	2.0	1.7
6	2	2.2	3.8	3.0	3.0	2.8	6.6	32	16	3.3	2.0	1.7
7	2	2.3	3.4	3.0	2.9	2.9	8.1	34	17	3.3	2.0	1.7
8	2	2.5	3.3	b2.9	2.9	3.0	10	43	18	3.2	2.0	1.7
9	2	2.6	3.3	2.9	2.9	3.2	12	42	18	3.2	1.9	1.8
10	2	2.4	3.3	2.9	2.9	3.3	12	41	16	3.2	1.9	1.8
11	2	2.8	3.3	2.8	2.9	3.3	11	42	14	3.0	1.9	1.8
12	2	3.3	3.3	2.9	2.8	3.4	12	*44	15	2.9	1.9	1.8
13	2	2.6	3.3	2.9	2.9	3.4	12	*40	14	2.9	1.9	1.8
14	2	2.8	3.3	2.8	3.0	3.3	12	32	12	*2.7	1.9	2.0
15	2	16	3.2	2.8	3.3	3.3	*13	27	10	2.8	1.9	2.1
16	2	5.4	3.2	2.9	3.6	3.2	13	24	9.2	2.7	1.9	1.9
17	2	3.6	3.2	3.0	4.1	3.2	12	26	*8.7	2.6	1.9	2.0
18	2	3.2	*3.2	3.0	3.6	3.2	9.5	28	7.8	2.5	1.9	2.0
19	*2.1	2.9	3.0	3.0	b3.4	3.3	8.7	32	7.3	2.5	1.9	*2.0
20	2.1	2.9	2.9	2.9	b3.2	3.2	8.1	*34	6.8	2.4	1.9	2.0
21	2.1	2.8	2.9	2.9	b3.1	3.2	8.1	36	6.3	2.5	1.9	1.9
22	2.1	2.9	2.8	2.9	3.0	3.2	9.2	34	6.1	2.5	1.8	1.9
23	2.1	2.8	2.9	3.0	2.9	3.3	12	33	5.6	2.4	1.9	2.1
24	2.1	2.9	2.9	2.9	*2.9	3.9	14	31	5.4	2.3	1.9	2.2
25	2.1	2.8	2.9	2.9	2.7	4.9	11	26	5.1	2.2	1.9	2.0
26	2.1	2.8	b2.9	2.9	2.7	5.4	10	26	4.9	2.2	1.9	1.9
27	2.2	2.7	b2.8	3.0	2.8	5.8	10	24	4.5	2.2	1.9	1.9
28	2.2	2.7	2.8	3.0	3.3	10	10	23	4.3	2.2	1.9	1.9
29	2.2	2.6	2.9	2.9	-	8.7	9.5	24	4.1	2.2	1.8	1.9
30	2.2	2.5	2.9	2.9	------	7.1	8.7	21	3.9	2.2	1.8	1.9
31	2.2	------	3.2	2.9	------	*6.6	------	23	------	2.2	1.8	------
Total	63.8	96.0	98.7	91.9	85.3	124.2	295.0	900	327.0	86.8	59.6	56.2
Mean	2.06	3.20	3.18	2.96	3.05	4.01	9.83	29.0	10.9	2.80	1.92	1.87
Ac-ft	127	190	196	182	169	246	585	1,790	649	172	118	111

Calendar year 1954: Max 59 Min 1.7 Mean 7.83 Ac-ft 5,670
Water year 1954-55: Max 44 Min 1.7 Mean 6.26 Ac-ft 4,540

Peak discharge (base, 50 cfs).--May 8 (5 p.m.) 59 cfs (2.75 ft).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Oct. 1-18, Dec. 12-17; discharge estimated on basis of recorded range in stage and weather records.

Truckee River at Reno, Nev.

Location.--Lat 39°32', long 119°47', in sec. 12, T. 19 N., R. 19 E., on left bank half a mile east of Reno and 5 miles upstream from Steamboat Creek.

Drainage area.--1,070 sq mi, approximately.

Records available.--July 1906 to September 1919, January 1947 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,440 ft (from topographic map). July 1906 to September 1919, staff gage at site 1 mile upstream at different datum.

Average discharge.--21 years, 814 cfs (589,300 acre-ft per year).

Extremes.--Maximum discharge during year, 1,020 cfs June 9 (gage height, 4.02 ft); minimum, 62 cfs Sept. 3.
1906-19, 1947-55: Maximum discharge, 19,900 cfs Nov. 21, 1950, from rating curve extended above 14,000 cfs; maximum gage height, 13.83 ft Nov. 21, 1950; minimum discharge observed, 18 cfs July 2, 3, 1912.

Remarks.--Records excellent. Flow regulated by Lake Tahoe, Boca Reservoir, Donner and Independence Lakes, and by several powerplants. Many diversions above station.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

2.0	99	3.0	450
2.3	175	4.0	1,010
2.6	280		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	214	210	374	428	405	441	455	188	530	120	132	112
2	148	224	410	392	396	360	496	178	480	122	135	118
3	135	238	475	374	374	*382	423	172	640	135	138	120
4	132	238	423	392	382	382	432	188	630	145	142	120
5	128	232	369	432	432	396	405	214	630	116	160	114
6	132	224	432	382	378	400	423	207	661	114	188	118
7	128	224	405	405	374	400	418	336	716	116	197	120
8	132	250	352	470	382	414	436	520	874	116	194	120
9	128	308	369	515	387	436	460	*515	772	130	197	125
10	125	304	382	500	392	441	480	520	738	142	166	125
11	125	300	352	475	387	418	428	530	716	145	160	138
12	138	328	352	470	396	378	*418	590	678	125	112	157
13	151	336	360	455	396	392	410	666	772	120	112	135
14	148	336	352	364	400	423	324	525	678	184	122	140
15	*151	470	364	374	405	400	250	336	545	201	120	138
16	163	510	356	387	423	382	218	242	*436	154	114	135
17	154	387	348	382	450	405	261	238	360	132	103	163
18	160	387	369	441	432	410	276	246	320	*118	*107	191
19	175	387	348	460	410	414	228	304	257	118	107	204
20	194	378	336	446	414	418	185	414	232	120	99	210
21	197	378	356	432	396	418	191	555	188	138	103	*207
22	194	382	340	428	396	423	210	605	169	185	99	204
23	204	*378	348	423	392	418	185	555	160	210	101	204
24	214	364	374	423	382	436	201	650	114	160	99	221
25	214	356	356	396	387	475	257	446	103	138	99	228
26	218	360	336	400	382	441	242	328	110	140	105	235
27	210	360	348	396	387	480	261	336	112	138	105	235
28	204	360	436	*400	369	540	261	378	151	138	110	224
29	210	360	455	405	-	605	191	410	194	138	114	204
30	210	344	*418	405	------	500	178	570	125	135	103	197
31	207	------	414	405	------	432	------	605	------	132	105	------
Total	5,243	9,913	11,709	13,057	11,106	13,260	9,602	12,567	13,091	4,325	3,948	4,962
Mean	169	330	378	421	397	428	320	405	436	140	127	165
Ac-ft	10,400	19,660	23,220	25,900	22,030	26,300	19,050	24,930	25,970	8,580	7,830	9,840

Calendar year 1954: Max 2,720 Min 101 Mean 366 Ac-ft 265,200
Water year 1954-55: Max 874 Min 99 Mean 309 Ac-ft 223,700

Peak discharge (base, 1,600 cfs).--No peak above base.
* Discharge measurement made on this day.

Franktown Creek at Franktown, Nev.

Location.--Lat 39°16', long 119°51', in sec. 9, T. 16 N., R. 19 E., on right bank half a mile west of Franktown and 3 miles upstream from Washoe Lake.

Drainage area.--14 sq mi, approximately.

Records available.--April 1948 to September 1955 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 5,200 ft (from topographic map). Gage destroyed by flood Dec. 3 or 4, 1950; re-established May 21, 1951, at same site at different datum.

Average discharge.--6 years (1948-50, 1951-55), 13.9 cfs (10,060 acre-ft per year).

Extremes.--Maximum discharge during year, 44 cfs Mar. 28 (gage height, 2.17 ft); minimum, 0.9 cfs Aug. 31, Sept. 5, 6, 7.
1948-55: Maximum discharge, 800 cfs Dec. 3 or 4, 1950 (gage height unknown), by slope-area determination of peak flow; minimum, 0.2 cfs Feb. 7, 8, 9, 1949, Dec. 4, 1953 (flow dammed by snowslide).

Remarks.--Records good. Small diversions on tributaries above station for irrigation. During summer, flow sometimes supplemented by diversion from North Creek, a tributary to Lake Tahoe.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.9	0.6	1.2	4.2
1.0	1.4	1.5	11
1.1	2.6	2.0	32

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.7	4.4	4.0	6.4	5.6	7.9	17	14	*15	7.2	1.7	1.2
2	2.6	4.4	11	5.8	6.0	7.9	14	14	14	6.9	1.7	1.3
3	2.7	4.4	15		6.0	7.9	14	15	13	6.9	1.7	1.3
4	2.6	4.4	7.4	5.4	6.4	7.4	12	17	13	7.4	2.0	1.3
5	2.6	4.6	7.2		6.2	7.2	12	21	13	6.7	*2.2	1.2
6	2.6	4.4	*6.9	5.4	6.0	6.9	14	23	13	6.2	2.0	1.2
7	2.6	4.4	5.4		6.0	7.4	16	25	12	6.0	1.9	1.2
8	3.0	4.6	6.7	5.2	6.2	8.1	18	27	14	*5.6	1.9	1.3
9	3.0	4.8	6.7		*6.4	8.9	20	*23	*17	5.6	1.8	1.3
10	2.4	4.8	6.2	5.2	6.0	*8.9	19	24	16	5.4	1.7	1.4
11	2.3	5.4	6.0	5.0	6.0	9.7	17	26	14	5.2	1.6	1.4
12	2.3	6.2	6.2	*5.0	6.2	10	*17	26	13	4.6	1.6	1.3
13	2.7	4.4	5.8	4.8	6.4	9.4	17	24	14	4.2	1.6	1.3
14	2.9	5.6	6.0	5.0	6.9	8.6	16	23	16	4.0	1.6	1.5
15	2.9	20	6.0	4.6	7.9	8.4	16	21	14	4.4	1.6	1.9
16	2.6	9.7	5.8	5.2	9.4	9.7	17	19	13	3.7	1.6	1.7
17	2.3	7.5	5.4	5.6	13	8.4	17	17	13	3.2	1.6	2.6
18	2.6	6.0	5.2	5.8	11	8.6	14	17	12	2.9	1.5	4.8
19	3.0	*5.4	5.4	5.6	11	8.6	14	*15	12	2.9	1.5	4.8
20	3.2	5.0	5.0	5.6	8.1	8.4	13	16	12	2.6	1.5	*3.7
21	3.2	5.0	5.0	5.4	7.4	9.2	13	19	12	2.7	1.4	3.0
22	3.4	4.8	5.0	5.4	7.6	8.6	18	21	11	3.0	1.4	2.7
23	3.5	4.6	5.4	5.8	7.4	9.4	20	21	11	2.9	1.3	2.6
24	3.5	4.8	5.6	5.8	7.4	12	21	20	10	2.6	1.3	2.7
25	*3.5	6.0	5.0	6.0	7.2	13	16	18	9.7	2.3	1.3	2.7
26	3.7	5.8	4.6	6.0	5.8	13	10	17	9.4	2.4	1.4	2.7
27	4.0	5.4	4.0	5.6	5.8	14	20	16	9.2	2.4	1.5	2.7
28	4.2	4.6	5.0	5.8	7.4	31	20	15	8.6	2.6	1.4	2.4
29	4.2	3.7	5.2	6.0	-	17	15	16	8.4	2.4	1.3	2.6
30	4.2	3.8	5.0	6.2	------	15	13	16	7.9	2.3	1.3	2.7
31	4.2	------	6.0	6.2	------	15	------	17	------	2.2	1.2	------
Total	95.2	168.9	189.1	171.0	202.7	325.5	480	603	370.2	129.4	49.1	64.5
Mean	3.07	5.63	6.10	5.52	7.24	10.5	16.0	19.5	12.3	4.17	1.58	2.15
Ac-ft	189	335	375	339	402	646	952	1,200	734	257	97	128

Calendar year 1954: Max 84 Min 1.6 Mean 8.98 Ac-ft 6,500
Water year 1954-55: Max 31 Min 1.2 Mean 7.80 Ac-ft 5,650

Peak discharge (base, 50 cfs).--No peak above base.
* Discharge measurement made on this day.

McDermitt Creek near McDermitt, Nev.

Location.--Lat 41°58', long 117°50', in SE¼SE¼ sec. 8, T. 47 N., R. 37 E., on left bank 6½ miles southwest of McDermitt.

Records available.--October 1948 to September 1955.

Gage.--Water-stage recorder and concrete control.

Average discharge.--7 years, 29.7 cfs (21,500 acre-ft per year).

Extremes.--Maximum discharge during year, 109 cfs Apr. 22 (gage height, 2.78 ft); no flow Sept. 8-15, result of temporary storage or use upstream.
1948-55: Maximum discharge, 1,240 cfs Apr. 26, 1952 (gage height, 6.83 ft), from rating curve extended above 600 cfs; no flow Sept. 8-15, 1955; minimum discharge unaffected by regulation, 0.3 cfs Sept. 2, 1955.

Remarks.--Records good except those for periods of ice effect, which are fair.

Revisions (water years).--WSP 1214: 1949-50(P).

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 26 to Nov. 4)

1.2	0	1.8	3.4
1.3	.2	1.9	6.4
1.4	.4	2.0	11
1.5	.7	2.2	26
1.6	1.2	2.4	51
1.7	1.9		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.2	3.6	2.8	4.4	4.4	b6.2	8.5	13	20	5.3	2.7	0.5
2	3.2	3.6	*2.9	4.4	4.4	b6.6	11	19	18	4.4	2.5	.4
3	3.2	3.6	4.4	3.6	4.1	b5.9	9.8	17	18	4.6	2.4	.5
4	3.4	*3.6	5.6	3.6	3.6	b5.4	8.5	18	21	6.4	2.4	.6
5	3.2	3.6	5.3	*5.3	3.8	b5.2	8.5	21	23	6.4	2.4	.7
6	3.4	3.6	5.0	5.0	3.8	b5.2	7.6	27	23	*5.1	2.5	.6
7	3.4	3.6	b4.8	4.4	4.1	b5.8	6.4	33	23	4.4	2.7	.1
8	3.4	3.6	b4.0	4.4	4.4	b6.8	10	30	21	4.1	2.5	0
9	3.6	3.8	b4.0	5.0	4.6	b8.0	14	30	19	3.6	2.0	0
10	3.6	4.1	b4.2	5.3	3.6	b9.0	17	28	*17	4.0	*1.9	0
11	3.6	4.1	2.8	5.0	3.6	10	13	29	17	6.4	1.8	0
12	3.8	4.4	4.4	4.1	4.1	10	10	*28	21	6.0	1.6	0
13	3.8	4.6	3.6	4.4	3.8	9.4	9.4	29	24	4.6	1.5	0
14	3.8	4.6	3.6	4.4	4.4	8.0	8.0	28	19	4.4	1.5	0
15	3.4	5.0	4.4	4.4	4.6	6.8	5.6	28	20	6.8	1.8	0
16	3.4	5.6	3.0	4.6	5.0	6.8	4.6	30	17	7.2	1.8	.3
17	3.6	5.3	b3.0	4.6	5.0	6.7	5.0	27	13	5.9	1.8	1.1
18	3.4	4.6	b3.0	4.6	b6.0	6.6	8.0	23	11	5.3	1.8	1.2
19	3.4	4.4	2.5	5.0	b5.5	6.7	8.9	18	9.8	5.0	1.8	1.7
20	3.4	4.4	b3.0	5.0	5.0	5.5	*8.9	17	8.9	4.6	1.6	1.8
21	3.4	4.4	b3.2	5.0	5.3	5.7	9.4	22	7.6	4.1	1.5	*1.9
22	3.4	4.1	3.6	4.6	5.6	7.6	49	28	7.2	3.6	1.2	1.6
23	3.4	4.1	4.1	4.6	b6.0	8.9	26	29	6.0	3.8	.9	1.5
24	3.4	4.4	4.6	4.4	*b5.4	*8.0	19	36	6.4	4.6	.8	1.6
25	3.6	4.4	4.1	4.6	6.4	9.4	18	35	7.2	4.4	.7	1.8
26	3.6	4.1	b3.0	4.4	6.4	8.5	16	25	7.6	3.8	.7	1.8
27	3.8	4.1	b2.7	3.8	b6.2	8.9	13	22	8.0	3.6	.8	1.8
28	4.1	3.8	2.7	4.4	b5.8	9.8	12	17	6.4	3.6	.9	1.8
29	3.6	b3.4	3.2	4.1	-	16	11	18	7.2	3.6	.9	1.8
30	3.6	b2.6	3.2	4.4	------	13	9.8	21	6.8	3.4	.8	2.0
31	3.6	------	3.8	4.4	------	9.8	------	22	------	3.2	.7	------
Total	108.7	123.1	114.5	140.2	134.9	246.2	365.9	768	434.1	146.2	50.9	27.1
Mean	3.51	4.10	3.69	4.52	4.82	7.94	12.2	24.8	14.5	4.72	1.64	0.90
Ac-ft	216	244	227	278	268	488	726	1,520	861	290	101	54

Calendar year 1954: Max 206 Min 0.8 Mean 10.7 Ac-ft 7,770
Water year 1954-55: Max 49 Min 0 Mean 7.29 Ac-ft 5,270

Peak discharge (base, 150 cfs).--No peak above base.
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

East Fork Quinn River near McDermitt, Nev.

Location.--Lat 41°59', long 117°35', in sec. 9, T. 47 N., R. 39 E., on right bank 1 mile downstream from South Fork and 7 miles east of McDermitt.

Records available.--October 1948 to September 1955.

Gage.--Water-stage recorder.

Average discharge.--7 years, 26.3 cfs (19,040 acre-ft per year).

Extremes.--Maximum discharge during year, 208 cfs May 6 (gage height, 4.98 ft); minimum, 0.1 cfs Sept. 6, 7.
1948-55: Maximum discharge, 940 cfs Apr. 6, 1952 (gage height, 6.63 ft); minimum observed, that of Sept. 6, 7.

Remarks.--Records good except those for periods of backwater from beaver dams, which are fair.

Rating table, water year 1954-55, except period of backwater from beaver dam
(gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 28 to Dec. 2, Apr. 16-26)

2.6	0	3.1	8.7
2.7	.5	3.3	17
2.8	1.6	3.6	35
2.9	3.4	4.0	70
3.0	5.8	4.6	140

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			2.6	3.8	4.5	5.8	17	101	32	6.3	1.1	0.2
2		2.2	*2.8	3.8	4.5	6.1	24	90	30	6.3	1.0	.2
3			3.2	3.2	4.5	5.8	20	75	28	6.3	1.0	.2
4	2.1	(*)	3.4	3.4	4.3	5.0	18	98	28	6.3	.9	.3
5		2.2	3.4	*3.6	5.3	4.3	16	129	26	5.8	.8	.3
6		2.6	3.4	3.6	4.8	5.0	15	133	24	*5.3	.9	.2
7		2.8	3.8	3.4	5.0	5.5	27	121	23	5.0	.9	.2
8		3.0	2.6	3.8	5.0	6.6	62	108	21	4.8	.9	.3
9		3.2	3.0	3.6	4.8	8.4	105	107	19	4.5	.7	.5
10	2.3	3.6	3.2	3.8	3.6	10	102	97	*18	5.0	*.7	.3
11		3.8	2.6	3.8	4.3	13	59	90	18	5.5	.7	.3
12		4.5	2.8	3.6	5.3	13	48	*85	18	5.0	.6	.3
13		4.3	3.4	3.6	4.5	12	45	80	17	4.1	.6	.3
14		4.1	3.4	3.2	5.0	9.7	48	70	17	3.4	.7	.3
15		4.5	3.4	3.6	5.3	8.1	43	66	16	3.2	.6	.5
16		4.5	2.8	4.1	5.3	7.8	42	68	16	3.0	.6	.5
17		4.5	2.8	3.8	7.5	8.1	52	67	14	2.6	.5	.7
18	2.5	4.1	2.8	4.1	5.3	7.8	55	57	13	2.4	.5	.7
19		3.8	2.6	3.8	5.8	7.8	42	*52	12	2.2	.5	1.0
20		3.8	2.4	3.6	5.8	6.6	*36	52	10	2.2	.4	.9
21		3.6	2.6	3.8	5.8	6.9	60	55	9.0	2.0	.4	*.8
22		3.6	2.6	3.6	6.3	8.1	96	53	8.1	2.0	.3	.8
23		3.6	2.8	4.1	5.8	8.4	83	50	7.8	2.0	.3	.8
24	2.8	3.6	2.8	3.8	*5.3	*9.0	78	54	8.4	1.6	.4	.8
25		3.6	3.0	4.1	6.1	11	69	49	8.1	1.5	.4	.8
26	3.0	3.6	2.6	3.4	5.8	11	64	45	7.5	1.3	.5	.8
27		3.6	2.4	3.4	5.5	10	52	41	6.9	1.3	.4	.7
28	2.7	3.0	2.1	3.8	5.3	14	57	38	7.5	1.3	.4	.7
29	2.5	2.6	2.2	4.1	-	16	69	36	9.7	1.3	.3	.8
30	2.3	2.4	2.6	4.5	------	15	81	35	7.5	1.2	.3	.8
31	2.2	------	3.6	4.8	------	15	------	35	------	1.1	.3	------
Total	75.2	101.3	89.7	116.6	146.3	280.8	1,585	2,237	480.5	105.8	18.6	16.0
Mean	2.43	3.38	2.89	3.76	5.23	9.06	52.8	72.2	16.0	3.41	0.60	0.53
Ac-ft	149	201	178	231	290	557	3,140	4,440	953	210	37	32

Calendar year 1954: Max 67 Min - Mean 7.15 Ac-ft 5,170
Water year 1954-55: Max 133 Min 0.2 Mean 14.4 Ac-ft 10,420

Peak discharge (base, 100 cfs).--Apr. 10 (1 a.m.) 181 cfs (4.82 ft); Apr. 22 (3 a.m.) 112 cfs (4.27 ft); May 6 (8:30 p.m.) 208 cfs (4.98 ft).
* Discharge measurement made on this day.
Note.--Backwater from beaver dam Oct. 1 to Nov. 4; discharge estimated on basis of general trend of recorded trace, weather records, and records for nearby stations.

Quinn River near McDermitt, Nev.

Location.--Lat 41°47' (corrected), long 117°48', in SW¼ sec. 15, T. 45 N., R. 37 E., on left bank 1½ miles upstream from Flat Creek and 15½ miles south of McDermitt.

Records available.--October 1948 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,240 ft (from river-profile map).

Average discharge.--7 years, 32.1 cfs (23,240 acre-ft per year).

Extremes.--Maximum discharge during year, 30 cfs May 16 (gage height, 1.27 ft); minimum, 0.2 cfs Sept. 6, 7, 8.
1948-55: Maximum discharge, 1,580 cfs Apr. 27, 1952 (gage height, 8.39 ft); minimum, 0.2 cfs Dec. 22, 1948, Sept. 6, 7, 8, 1955.

Remarks.--Records good except those for period of no gage-height record, which are fair. Several diversions above station for irrigation.

Rating tables, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Feb. 23		Feb. 24 to Sept. 30			
0.3	0.2	0.2	0.2	0.6	4.2
.4	.8	.3	.6	.8	9.2
		.4	1.3	1.0	17
		.5	2.5	1.5	44

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	0.6	0.7				0.7	0.9	2.6	0.6	0.5	0.3
2	.5	.6	*.7	a0.7			.8	.7	2.1	.6	.5	.3
3	.6	.6	.7				.8	.7	1.8	.7	.4	.3
4	.6	.6	.6				.9	.7	1.7	.7	.4	.3
5	.6	*.6	.6	*.7			.8	.7	1.5	.6	.4	.3
6	.6	.6	.6				.8	.8	1.2	*.6	.4	.3
7	.6	.6	.6				.9	.7	1.0	.6	.4	.3
8	.6	.6	.6				.9	.7	.8	.5	.4	.3
9	.6	.6	.6				.9	2.2	.7	.5	.4	.3
10	.5	.7	.6				.9	9.0	*.7	.5	*.3	.4
11	.6	.7	.6				.9	12	.7	.5	.3	.4
12	.6	.8	.6		a0.7	a0.7	.8	*14	.7	.5	.3	.3
13	.6	.7	.7				.8	14	.8	.4	.3	.4
14	.6	.7	.8				.8	16	.8	.4	.3	.4
15	.5	.8	.8				.8	18	.9	.4	.3	.4
16	.5	.7	.8				.8	24	.9	.4	.4	.4
17	.5	.7	.8				.9	27	1.0	.4	.3	.4
18	.5	.7	.8				.8	20	1.0	.4	.3	.4
19	.5	.6	.7	a.7			.8	*17	.9	.4	.3	.4
20	.5	.6	.8				*.8	16	.9	.4	.3	.4
21	.5	.6	.8				.8	15	.9	.4	.3	.4
22	.6	.6	.8				.8	14	.8	.5	.3	*.4
23	.6	.6	.7				.8	13	.8	.6	.3	.4
24	.6	.6	.7		*.7	*.7	.8	14	.8	.5	.3	.4
25	.6	.6	.7			.7	.9	18	.7	.4	.3	.4
26	.6	.6	.6		a.7	.7	.9	16	.7	.4	.4	.4
27	.6	.7	.6			.7	.9	12	.7	.5	.4	.4
28	.6	.7				.8	1.0	8.9	.6	.6	.3	.4
29	.6	.7			-	.7	.9	5.9	.6	.6	.3	.4
30	.6	.7	a.7		------	.7	.8	4.0	.6	.5	.3	.4
31	------	------			------	.7	------	3.3	------	.5	.3	------
Total	17.6	19.5	21.4	21.7	19.6	21.8	25.2	319.2	29.9	15.6	10.7	11.0
Mean	0.57	0.65	0.69	0.70	0.70	0.70	0.84	10.3	1.00	0.50	0.35	0.37
Ac-ft	35	39	42	43	39	43	50	633	59	31	21	22

Calendar year 1954: Max 1.4 Min 0.3 Mean 0.73 Ac-ft 530
Water year 1954-55: Max 27 Min 0.3 Mean 1.46 Ac-ft 1,060

Peak discharge (base, 100 cfs).--No peak above base.
* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby streams.

Susan River at Susanville, Calif.

Location.--Lat 40°25', long 120°40', in NE¼ sec. 31, T. 30 N., R. 12 E., on left bank 0.5 mile west of Susanville and 1.1 miles upstream from Piute Creek.

Drainage area.--192 sq mi.

Records available.--June 1900 to December 1905 (gage heights only 1902), March to May 1913, February 1917 to June 1921, October 1950 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 4,225.72 ft above mean sea level, datum of 1929. Prior to Oct. 1, 1950, staff gages at several sites in vicinity of old power-plant about 0.9 mile upstream at various datums.

Average discharge.--8 years (1917-20, 1950-55), 78.1 cfs (56,540 acre-ft per year).

Extremes.--Maximum discharge during year, 261 cfs Mar. 29 (gage height, 2.95 ft); minimum daily, 2.6 cfs Aug. 16, 18, 19.
1900-1905, 1913, 1917-21, 1950-55: Maximum discharge, 2,590 cfs Jan. 9, 1953 (gage height, 5.50 ft), from rating curve extended above 850 cfs by logarithmic plotting; minimum, 0.8 cfs Aug. 10, 1918.

Remarks.--Records good except those for periods of ice effect, which are fair. Flow regulated by McCoy Flat and Hog Flat Reservoirs (combined capacity, 25,300 acre-ft). Diversions for irrigation of about 1,400 acres above station.

Rating tables, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 8		Jan. 9 to Sept. 30			
0.9	3.9	0.6	2.4	1.7	36
1.0	5.2	.8	4.0	2.0	65
1.2	9.7	1.0	6.3	2.4	126
1.5	21	1.2	11	2.8	218
1.8	40	1.4	18		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.7	6.4	11	27	12	20	78	84	157	6.7	3.0	2.8
2	4.7	6.2	12	22	11	17	68	84	146	6.5	3.0	2.8
3	4.8	6.0	13	15	10	17	54	81	136	7.0	3.0	2.8
4	4.8	6.0	14	13	*9	18	48	81	126	6.8	2.9	2.8
5	4.9	6.0	14	12	9	17	42	86	105	6.7	2.9	2.9
6	4.9	6.0	22	12	10	19	45	105	50	6.3	2.7	2.9
7	5.1	6.2	25	12	10	17	51	122	35	6.0	2.8	2.9
8	5.8	6.4	16	12	10	20	57	146	29	6.0	2.8	3.0
9	5.6	7.2	*18	11	11	30	66	130	25	6.0	2.8	3.0
10	5.4	7.0	17	10	12	44	85	121	24	6.2	2.8	3.0
11	5.4	7.2	17	11	13	63	66	121	22	6.0	2.7	3.0
12	5.1	12	16	10	14	63	60	*117	24	5.6	2.7	3.0
13	5.4	9.2	15	10	15	52	58	106	29	5.6	2.8	3.0
14	5.6	8.4	16	10	16	42	*51	88	25	5.3	2.8	3.4
15	5.4	37	14	10	17	30	46	75	20	5.3	2.7	3.7
16	5.1	30	14	12	20	26	45	66	*17	5.0	2.6	3.4
17	5.1	19	14	11	30	*28	50	63	15	4.7	2.7	4.7
18	5.2	*15	13	11	26	30	49	65	13	4.5	2.6	6.0
19	5.4	12	13	11	28	32	45	75	13	4.4	2.6	4.5
20	5.8	12	13	11	28	27	42	84	11	4.2	2.7	4.1
21	5.8	11	12	11	*28	26	47	89	10	4.2	2.7	*3.9
22	*5.4	11	12	11	22	30	63	84	9.4	4.3	2.7	3.8
23	5.4	11	12	11	22	35	73	78	8.8	4.1	2.7	3.8
24	5.6	10	15	11	20	41	81	121	8.6	3.4	2.7	3.8
25	6.0	10	14	11	16	48	77	138	8.4	3.1	2.7	3.8
26	6.0	11	13	11	16	50	78	132	8.1	3.1	2.8	3.9
27	5.8	10	12	11	15	56	85	146	7.9	3.0	2.9	3.8
28	6.0	11	12	10	23	110	88	150	7.6	3.1	2.8	3.7
29	6.2	10	12	9	-	173	81	148	8.6	*3.2	2.8	3.7
30	5.8	10	14	10	------	100	81	164	7.6	3.3	2.8	3.7
31	6.0	------	17	11	------	75	------	164	------	3.1	2.8	------
Total	168.2	330.2	452	370	473	1,356	1,860	3,314	1,107.0	152.7	86.0	105.6
Mean	5.43	11.0	14.6	11.9	16.9	43.7	62.0	107	36.9	4.93	2.77	3.52
Ac-ft	334	655	897	734	938	2,690	3,690	6,570	2,200	303	171	209

Calendar year 1954: Max 1,080 Min 3.6 Mean 78.7 Ac-ft 56,960
Water year 1954-55: Max 173 Min 2.6 Mean 26.8 Ac-ft 19,390

Peak discharge (base, 300 cfs).--No peak above base.
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 30, Dec. 1, 11, 16-21, 26-27, Jan. 3 to Feb. 12.

Willow Creek near Susanville, Calif.

Location.--Lat 40°29', long 120°32', in NW¼ sec. 5, T. 30 N., R. 13 E., on left bank 4 miles upstream from Peters Valley Creek and 8 miles northeast of Susanville.

Drainage area.--92.5 sq mi, excludes that of Eagle Lake basin.

Records available.--October 1950 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 4,836.27 ft above mean sea level, unadjusted.

Average discharge.--5 years, 25.8 cfs (18,680 acre-ft per year).

Extremes.--Maximum discharge during year, 62 cfs Mar. 10 (gage height, 2.86 ft); minimum, 9.0 cfs June 22.
1950-55: Maximum discharge, 626 cfs Apr. 6, 1952 (gage height, 5.32 ft), from rating curve extended above 420 cfs; minimum, 8.1 cfs Nov. 16, 1951.

Remarks.--Records good. Diversions for irrigation of about 5,200 acres above station. Some flow at times enters Willow Creek from Eagle Lake through abandoned tunnel.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-25, May 26 to July 5, Aug. 7 to Sept. 30)

2.0	9.0
2.2	13
2.4	22
2.6	35
2.8	55

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	15	21	20	20	18	14	14	10	11	11	9.7
2	11	15	21	20	20	20	14	13	11	11	11	9.9
3	11	15	22	20	20	23	14	12	11	11	11	9.7
4	11	15	23	22	*19	20	14	12	10	11	11	9.7
5	12	16	23	23	19	19	12	13	10	11	11	9.7
6	12	16	26	22	19	18	12	12	10	11	11	9.7
7	12	16	31	22	19	20	12	12	10	11	11	9.7
8	12	16	33	21	19	25	12	12	10	11	11	9.9
9	12	17	*29	18	20	39	12	11	10	11	11	9.9
10	12	17	28	18	20	47	12	11	9.9	11	11	10
11	12	18	25	18	20	53	12	11	10	11	11	10
12	12	18	26	18	20	53	11	*10	10	11	11	10
13	12	18	23	18	20	42	12	10	9.7	11	11	10
14	12	18	23	18	20	34	*12	10	9.6	11	10	10
15	12	20	23	18	23	29	12	10	9.7	11	10	10
16	12	20	22	18	26	29	12	10	*9.8	11	10	10
17	13	20	20	18	30	*29	15	10	9.7	11	10	11
18	13	*20	17	18	20	27	20	11	9.7	11	10	10
19	14	22	15	18	18	26	21	11	9.6	11	10	10
20	14	23	15	18	20	24	20	10	9.6	11	10	10
21	14	24	14	18	19	24	20	10	9.6	11	10	*10
22	*14	24	14	19	23	18	19	10	9.6	11	10	11
23	14	24	15	19	23	16	16	10	9.6	11	10	11
24	14	24	15	20	26	16	14	10	9.6	11	10	11
25	14	24	15	20	26	15	13	10	9.6	11	9.9	11
26	14	23	15	20	23	14	15	10	9.9	*11	9.9	11
27	14	23	14	20	20	14	17	10	9.9	11	9.9	11
28	14	23	14	20	18	16	18	10	10	11	9.9	11
29	14	23	14	20	-	16	16	10	10	11	9.9	11
30	14	22	14	20	------	15	14	11	10	11	9.9	12
31	15	------	18	20	------	14	------	10	------	11	9.7	------
Total	397	589	628	602	590	773	437	336	296.9	341	322.1	308.9
Mean	12.8	19.6	20.3	19.4	21.1	24.9	14.6	10.8	9.90	11.0	10.4	10.3
Ac-ft	787	1,170	1,250	1,190	1,170	1,530	867	666	589	676	639	613

Calendar year 1954: Max 63 Min 9.6 Mean 17.1 Ac-ft 12,410
Water year 1954-55: Max 53 Min 9.6 Mean 15.4 Ac-ft 11,150

Peak discharge (base, 200 cfs).--No peak above base.
* Discharge measurement made on this day.

Pine Creek near Westwood, Calif.

Location.--Lat 40°35', long 121°06', in SE¼ sec. 5, T. 31 N., R. 8 E., on right bank 1 mile southwest of Bogard Guard Station and 19 miles north of Westwood.

Drainage area.--22.6 sq mi.

Records available.--October 1950 to September 1955.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5,700 ft (from topographic map).

Average discharge.--5 years, 7.53 cfs (5,450 acre-ft per year).

Extremes.--Maximum discharge during year, 24 cfs May 10 (gage height, 3.25 ft); no flow Sept. 1, 2, 6-9, 11-13.
1950-55: Maximum discharge, 154 cfs May 26, 1952 (gage height, 3.91 ft), from rating curve extended above 90 cfs; no flow Sept. 1, 2, 6-9, 11-13, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. No regulation or diversion above station.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.3	0	2.7	1.6
2.4	.1	2.8	3.6
2.5	.2	2.9	6.6
2.6	.7	3.1	16

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	1.0	2.2	bl.4		bl	1.5	2.6	3.6	0.8	0.2	0
2	1.3	1.0	2.4	bl.2		bl	1.5	3.1	3.1	1.0	.2	0
3	1.3	.9	5.0	1.1		bl.2	1.7	3.8	2.9	1.1	.1	.1
4	1.2	.9	5.0			bl.4	1.9	4.1	2.9	1.0	.1	.1
5	1.0	.9	1.3				2	5.6	2.4	.9	.1	.1
6	1.0	.9	.8				2	7.7	2.0	.7	.2	0
7	1.3	1.0	.7				2	10	1.9	.6	.2	0
8	1.5	1.0	*1.0				2	14	1.9	.6	.1	0
9	1.5	2.0	1.1				2	14	1.6	.8	.2	0
10	1.3	1.5	1.0				2	14	1.9	.8	.1	.1
11	1.2	1.3	1.2				2.3	14	1.9	.6	.1	0
12	1.0	4.1	2.0				2.6	*13	2.2	.6	.1	0
13	1.1	1.6	2.6				3	10	6.6	.6	.1	0
14	1.0	1.3	2.2				*3.5	7.7	3.1	.5	.1	.4
15	1.0	4.4	1.3				4.4	6.6	2.4	.5	.1	.5
16	1.1	4.7	1.7		bl		4.7	6.3	*2.2	.6	.1	.2
17	1.1	3.1	2.0	bl			3.1	7.0	1.9	.6	.1	.4
18	1.0	1.9	2.0			bl.5	3.1	7.0	1.9	.4	.1	.7
19	1.1	1.6	2.4				3.6	7.7	1.6	.3	.1	.3
20	1.1	1.9	2.4				2.4	8.9	1.3	.2	.1	.2
21	1.0	1.6	2.0				2.4	11	1.1	.2	.1	.2
22	*1.0	1.6	1.9		(*)		2.4	9.4	1.0	.4	.1	.2
23	1.1	1.5	1.7				3.1	8.5	.9	.4	.1	.1
24	1.1	1.3	1.6				4.1	8.9	1.0	.3	.1	.2
25	1.0	1.3	1.6				2.4	7.7	1.1	.1	.1	.2
26	.9	1.5	bl.6				3.1	*6.6	1.0	.1	.1	.2
27	.9	1.3	bl.6				3.8	5.9	.9	.2	.1	.2
28	.9	1.0	bl.6				3.1	5.0	.9	.2	.1	.1
29	.9	.6	bl.6		-		2.4	5.0	.9	.3	.1	.1
30	.9	.9	bl.6		------		2.4	4.7	.8	.3	.1	.1
31	.9	------	bl.5		------		------	4.1	------	.2	.1	------
Total	33.8	49.6	58.6	31.7	28	45.1	80.5	243.9	58.9	15.9	3.6	4.7
Mean	1.09	1.65	1.89	1.02	1.0	1.45	2.68	7.87	1.96	0.51	0.12	0.16
Ac-ft	67	98	116	63	56	89	160	484	117	32	7.1	9.3

Calendar year 1954: Max 68 Min 0.6 Mean 6.87 Ac-ft 4,980
Water year 1954-55: Max 14 Min 0 Mean 1.79 Ac-ft 1,300

Peak discharge (base, 35 cfs).--No peak above base.
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 3 to Apr. 14 (stage-discharge relation affected by ice during most of period); discharge estimated on basis of 1 discharge measurement and weather records.

Twentymile Creek near Adel, Oreg.

Location.--Lat 42°04', long 119°57', in NW¼ sec. 25, T. 40 S., R. 23 E., on left bank 2 miles downstream from Twelvemile Creek and 8 miles southwest of Adel.

Drainage area.--194 sq mi, including 46 sq mi in Cowhead Lake area.

Records available.--March 1910 to July 1916, December 1917 to September 1919, March 1921 to June 1922 (published as "near Warner Lake"), September 1940 to September 1955.

Gage.--Water-stage recorder and concrete control. Datum of gage is 4,560.43 ft above mean sea level, datum of 1929, supplementary adjustment of 1947. Prior to June 30, 1922, staff gage or water-stage recorder at site three-quarters of a mile downstream at various datums. Sept. 21, 1940, to Nov. 30, 1944, water-stage recorder at site 1½ miles upstream at different datum. Mar. 12, 1945, to June 28, 1952, water-stage recorder at site 70 ft upstream at datum 2.9 ft higher.

Average discharge.--20 years (1910-15, 1918-19, 1940-44, 1945-55), 47.8 cfs (34,600 acre-ft per year).

Extremes.--Maximum discharge during year, 520 cfs Apr. 30 (gage height, 4.93 ft); no flow part of Sept. 7.
1910-16, 1917-19, 1921-22, 1940-55: Maximum discharge, 3,000 cfs Dec. 27, 1942 (gage height, 4.28 ft, site and datum then in use), from rating curve extended above 400 cfs by logarithmic plotting; no flow part of Sept. 7, 1955.

Remarks.--Records good except those for periods of ice effect and those for Mar. 11 to Sept. 30, which are poor. Diversions for irrigation of 240 acres above station.

Revisions (water years).--WSP 1090: 1945.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.7	5.2	b5	6.5	b6.5	7.3	138	228	64	12	2.0	0.7
2	3.7	5.2	6.1	b5	b7	6.9	84	112	72	11	1.9	1.4
3	4.0	5.2	6.1	b5.5	b6.5	5.2	50	57	84	11	1.9	1.3
4	4.0	5.2	6.1	b6	b6	b5	37	70	100	11	2.0	.9
5	4.0	5.2	5.6	b7	b6.5	b5	23	47	109	11	1.9	.7
6	3.7	5.2	5.6	b6.5	b7	b7	31	*52	109	8.2	1.9	.6
7	3.7	5.2	5.6	b6.5	b7.5	8.6	126	47	104	8	1.7	.3
8	3.7	5.2	b5	b6	6.9	11	*166	39	104	*7.5	1.7	1.0
9	3.7	5.2	b5	b5.5	*6.5	*18	159	37	*100	7	1.6	1.9
10	3.7	5.6	b5.5	b5.5	b7	19	134	37	98	8	1.2	2.0
11	3.7	5.6	b5	b5	b7	70	66	41	77	7.5	.7	2.3
12	3.7	6.9	b5	b5.5	6.9	72	44	54	70	7	.4	2.3
13	4.0	6.1	5.6	*5.6	b7	46	56	62	54	6.5	.6	2.0
14	4.0	5.2	b5.5	b5	7.3	b30	56	47	59	6.1	.9	3.4
15	3.7	8.2	b6	b5.5	8.2	b15	58	50	54	6.5	.6	3.7
16	3.7	8.6	*b6.5	b5.5	11	11	40	35	35	6.1	.4	2.6
17	4.0	6.9	b6	b6	8.6	10	37	41	27	3.7	.6	2.8
18	4.0	6.1	b6	6.5	b7.5	11	38	86	24	3.1	.5	2.8
19	4.8	5.2	b6	b6.5	b8	b9	22	67	20	3.4	.3	2.6
20	6.1	5.2	b6	b6.5	b8	b9	14	77	16	3.1	.6	2.6
21	5.2	5.6	b6	7.3	b8	b8.5	43	109	14	3.4	1.0	2.6
22	4.8	5.6	b6	7.3	b8	8.6	170	98	12	3.7	1.0	3.1
23	4.8	5.6	b6	b7	b8	9.6	97	94	9.6	3.1	.9	3.1
24	4.8	6.1	6.1	b6.5	b8	17	47	98	8.2	2.8	.9	3.4
25	5.2	5.6	b6	8.6	b7	67	72	67	8	2.5	.9	3.4
26	5.2	5.6	b5.5	b7.5	b7.5	s1	35	77	8	2.8	1.3	3.4
27	5.2	5.6	b5	b7	7.7	79	24	77	8	2.8	1.6	3.4
28	5.2	5.2	b5.5	b6.5	b7	336	115	84	7.5	3.1	1.6	3.1
29	5.2	4.8	b6.5	b7	-	205	128	98	14	3.1	1.4	1.3
30	5.2	b4.5	b6.5	6.9	------	86	263	104	12	2.8	1.0	2.8
31	5.2	------	b6.5	6.9	------	90	------	88	------	2.8	.5	------
Total	135.6	170.6	178.8	196.1	208.1	1,363.7	2,373	2,280	1,481.3	180.6	35.5	67.5
Mean	4.37	5.69	5.77	6.33	7.43	44.0	79.1	73.5	49.4	5.83	1.15	2.25
Ac-ft	269	338	355	389	413	2,700	4,710	4,520	2,940	358	70	134

Calendar year 1954: Max 1,000 Min 2.6 Mean 46.9 Ac-ft 33,950
Water year 1954-55: Max 336 Min 0.3 Mean 23.8 Ac-ft 17,200

Peak discharge (base, 400 cfs).--Mar. 28 (8 to 10 p.m.) 494 cfs (4.82 ft); Apr. 30 (6:30 p.m.) 520 cfs (4.93 ft).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Camas Creek near Lakeview, Oreg.

Location.--Lat 42°13', long 120°06', in N½ sec. 2, T. 39 S., R. 22 E., on left bank 0.2 mile downstream from Blue Creek and 12 miles east of Lakeview.

Drainage area.--63 sq mi, approximately.

Records available.--September 1912 to May 1915, December 1949 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 5,472.41 ft above mean sea level (Oregon State Highway Department construction survey benchmark). Sept. 11, 1912, to May 9, 1915, water-stage recorder or staff gage at site 500 ft upstream at different datum.

Average discharge.--7 years (1912-14, 1950-55), 46.8 cfs (33,880 acre-ft per year).

Extremes.--Maximum discharge during year, 299 cfs May 12 (gage height, 3.12 ft); minimum, 1.5 cfs Aug. 4.
1912-14, 1949-55: Maximum discharge, 660 cfs Apr. 28, 1952 (gage height, 4.24 ft); minimum, that of Aug. 4, 1955.

Remarks.--Records good except those for periods of ice effect, which are poor. Diversions for irrigation of about 1,200 acres above station.

Revisions.--WSP 410: Drainage area.

Rating tables, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Apr. 9				Apr. 10 to Sept. 30			
0.4	3.0	1.2	32	0.4	1.5	1.5	59
.5	4.5	1.5	54	.5	3.2	2.0	111
.7	9.0	2.1	117	.6	6.0	2.5	180
.9	16			.8	15	3.0	275
				1.1	30		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.3	4.9	5.7	b5	6.5	b7	89	91	48	13	2.0	2.8
2	5.3	5.1	6.3	b5	6.3	b7.5	48	97	44	11	1.8	2.8
3	5.3	5.1	6.5	b5.5	6.1	b7	45	114	42	10	1.8	2.6
4	5.3	5.1	6.8	b6	b6.0	b7	35	109	45	12	1.8	2.6
5	5.3	5.3	6.8	b5.5	b6.0	b6.5	28	143	42	16	1.8	2.4
6	5.3	5.7	7.0	b5.5	b6.5	b6.5	32	*180	*37	12	2.0	2.4
7	5.5	5.3	b7	b5	b6.5	b7	53	202	34	10	2.1	2.4
8	5.7	5.5	b6.5	b5	6.8	b7.5	*80	227	31	9.2	2.2	2.4
9	5.5	6.1	7.2	b5.5	6.3	*b7.5	109	215	28	12	2.2	2.4
10	5.5	6.8	7.8	b5.0	5.5	b7.5	133	215	26	16	2.2	2.4
11	5.5	6.8	7.5	b4.8	b6	7.8	92	225	24	*13	2.4	2.4
12	5.3	12	10	b5.0	b6	8.0	86	233	24	10	2.4	2.2
13	5.5	11	10	b5.5	b6	b8	100	190	22	8.0	2.4	2.4
14	5.1	8.8	8.5	b5.5	b6	b7.5	97	133	22	6.4	2.6	5.1
15	4.9	16	b7.5	b5.5	6.3	b7.0	83	123	22	6.8	*2.8	5.7
16	4.9	17	b6.5	b6.5	6.3	b7.5	70	128	21	6.8	3.0	4.2
17	4.9	15	*b6	b6	b6	b7.5	54	125	19	5.1	3.0	4.8
18	4.7	9.7	b6.5	b6.5	b6	b7.5	52	123	18	4.5	3.0	4.2
19	5.1	8.2	b7	b6	b6	b7.0	40	132	16	4.2	3.2	4.0
20	5.5	9.0	b7	*b6	b6.5	b7.0	34	151	14	3.7	3.2	3.7
21	4.9	8.5	b7	b6	*b6.5	b7.0	44	168	13	3.2	3.4	3.7
22	4.9	8.2	b7	6.1	6.8	7.8	76	134	12	3.2	3.4	3.7
23	4.5	8.2	b7	5.9	7.0	8.0	78	115	11	3.0	3.4	4.0
24	4.5	8.0	b7	5.9	b6.5	9.7	82	104	12	2.6	3.2	4.0
25	4.5	7.8	b7.5	5.7	6.8	14	75	90	12	2.4	3.2	3.7
26	4.2	7.5	b7	b5.5	b7	19	44	81	15	2.2	3.4	3.4
27	4.4	6.5	b6	b5.5	b6.5	24	50	69	12	2.2	3.4	3.4
28	4.5	6.1	b6	b6	b6.5	40	64	64	10	2.2	3.4	3.4
29	4.5	b5.5	b6.5	b6	-	52	65	59	20	2.2	3.0	3.4
30	4.5	b5	b6.5	b6.5	------	90	84	58	17	2.2	2.8	3.4
31	4.9	------	b6	b6.5	------	66	------	52	------	2.0	2.8	------
Total	155.7	239.7	217.6	175.9	177.2	483.3	2,022	4,150	713	217.1	83.3	100.0
Mean	5.02	7.99	7.02	5.67	6.33	15.6	67.4	134	23.8	7.00	2.69	3.33
Ac-ft	309	475	432	349	351	959	4,010	8,230	1,410	431	165	198

Calendar year 1954: Max 378 Min 4.2 Mean 40.5 Ac-ft 29,290
Water year 1954-55: Max 233 Min 1.8 Mean 23.9 Ac-ft 17,320

Peak discharge (base, 200 cfs).--May 12 (2 a.m.) 299 cfs (3.12 ft); May 21 (3 to 4 a.m.) 206 cfs (2.65 ft).
* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Drake Creek near Adel, Oreg.

Location.--Lat 42°12', long 120°00', near center of sec. 9, T. 39 S., R. 23 E., on left bank 400 ft downstream from highway bridge, 700 ft downstream from Parsnip Creek, 1 mile upstream from mouth, and 6½ miles west of Adel.

Drainage area.--47 sq mi, approximately.

Records available.--March to May 1915, December 1922 to May 1923, December 1949 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 5,076.42 ft above mean sea level (Oregon State Highway Department construction survey benchmark). Prior to May 9, 1923, staff gage at highway bridge at different datum. Dec. 16, 1949, to June 21, 1951, water-stage recorder at site 900 ft upstream at different datum.

Average discharge.--5 years (1950-55) 13.9 cfs (10,060 acre-ft per year).

Extremes.--Maximum discharge during year, 243 cfs May 19 (gage height, 2.22 ft); minimum, 1.9 cfs Mar. 1 (gage height, 0.44 ft).
1915, 1922-23, 1949-55: Maximum discharge, 866 cfs Apr. 5, 1952 (gage height, 3.58 ft), from rating curve extended above 160 cfs by logarithmic plotting; minimum, that of Mar. 1, 1955.

Remarks.--Records good except those for periods of ice effect, which are poor. Diversions for irrigation of about 620 acres above station

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.5	2.5	1.0	20
.6	4.5	1.2	37
.7	6.8	1.5	77
.8	10	1.7	112

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.6	5.9	b5.0	b4.2	b4.8	2.9	41	73	4.5	a4.5	6.8	4.3
2	5.6	5.9	b5.0	b4.4	b4.6	5.0	19	20	4.5	a4.5	6.8	4.3
3	5.6	5.9	5.4	b4.6	b4.6	5.4	10	15	4.7	a4.5	6.8	4.3
4	5.6	5.9	5.4	b5	b4.4	5.4	6.8	13	4.7	a4.5	6.8	4.1
5	5.4	5.6	5.4	b5	b4.2	6.8	6.1	12	4.5	a4.5	6.8	4.3
6	5.4	5.6	5.6	b4.8	b4.2	6.6	5.9	*13	*4.5	a4.5	6.8	4.3
7	5.6	5.9	b5.5	b4.6	b4.4	6.6	13	10	4.7	a4.5	6.8	4.3
8	5.6	5.6	b5.5	b4.0	b4.4	8.4	*21	9.0	4.7	a4.5	6.8	4.3
9	5.4	5.6	b6	b4.4	b4.8	*8.1	23	8.7	4.3	a4.5	6.8	4.3
10	5.4	5.9	6.1	b4.2	b4.6	7.1	21	8.1	a4.4	a4.5	6.8	4.3
11	5.4	5.9	b6	b4	b4.2	6.6	10	7.4	a4.5	4.5	6.6	4.3
12	5.6	6.1	b6.5	b4.2	b4.4	7.8	6.3	6.6	a4.5	4.3	6.6	4.3
13	5.9	5.6	b7.5	b4.4	b4.4	5.9	5.9	6.3	a4.5	4.3	6.3	4.3
14	5.6	5.6	b6	4.3	b4.4	5.9	6.3	6.1	a4.5	4.3	6.3	5.2
15	5.4	6.1	b6.5	4.3	b4.4	6.6	12	6.6	a4.5	4.3	6.3	5.0
16	5.4	6.3	b5.0	4.5	b4.6	6.3	11	6.3	a4.5	4.3	6.3	4.5
17	5.6	6.1	*b5.5	b4.6	b4.5	6.1	8.4	6.3	a4.5	4.1	6.3	4.5
18	5.4	5.6	b6	b4.6	b5	6.1	8.7	62	a4.5	4.1	6.1	4.5
19	5.9	5.6	b6	b4.8	b5.5	5.2	8.1	104	a4.5	4.1	5.9	4.5
20	6.1	5.9	b6	*b5	b6.5	6.1	7.4	21	a4.5	4.1	5.4	4.3
21	5.9	5.6	b6	b5	*b6.5	5.4	16	9.0	a4.5	4.1	5.2	4.3
22	6.1	5.6	b6	b4.8	5.9	5.2	46	6.3	a4.5	4.1	5.2	4.3
23	5.9	5.4	b6	b4.8	6.3	5.6	15	5.4	a4.5	4.1	5.0	4.1
24	5.9	5.4	b6	b4.8	7.1	6.1	12	5.4	a4.5	4.1	4.5	4.1
25	5.9	5.4	b6	b4.6	6.1	9.0	19	5.0	a4.5	4.1	4.5	4.1
26	5.9	5.4	b5.5	b4.6	5.9	9.4	16	5.0	a4.5	4.1	4.5	4.1
27	5.9	5.4	b4.8	b4.4	5.0	8.7	13	4.7	a4.5	4.7	4.3	4.1
28	5.9	5.2	b5	b4.6	b4.0	16	19	4.5	a4.5	6.8	4.3	4.1
29	5.9	5.4	b5	b4.6	---	42	16	4.5	a4.5	6.8	4.3	4.1
30	5.9	b5	b5	b4.8	------	16	54	4.5	a4.5	6.8	4.3	4.1
31	5.9	------	b4.8	b4.8	------	15	------	4.5	------	6.8	4.3	------
Total	176.6	170.4	176.0	141.7	139.9	263.3	476.9	473.2	135.5	143.9	180.5	129.6
Mean	5.70	5.68	5.68	4.57	5.00	8.49	15.9	15.3	4.52	4.64	5.82	4.32
Ac-ft	350	338	349	281	277	522	946	939	269	285	358	257

Calendar year 1954: Max 77 Min 4 Mean 8.73 Ac-ft 6,330
Water year 1954-55: Max 104 Min 2.9 Mean 7.14 Ac-ft 5,170

Peak discharge (base, 150 cfs).--Apr. 30 (11 to 12 p.m.) 155 cfs (1.87 ft); May 19 (12:30 a.m.) 243 cfs (2.22 ft).
* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage.
b Stage-discharge relation affected by ice.

Deep Creek above Adel, Oreg.

Location.--Lat 42°11', long 119°59', in E½ sec. 15, T. 39 S., R. 23 E., on right bank a third of a mile downstream from Drake Creek and 5 miles west of Adel.

Drainage area.--249 sq mi.

Records available.--September 1922 to September 1923 and October 1932 to September 1955, in reports of Geological Survey. September 1922 to September 1923 and October 1929 to September 1941 in reports of State engineer.

Gage.--Water-stage recorder. Datum of gage is 4,966.7 ft above mean sea level (Oregon State Highway Department construction survey benchmark). Prior to Dec. 21, 1922, staff gage at same site and datum.

Average discharge.--27 years (1922-23, 1929-55), 113 cfs (81,810 acre-ft per year).

Extremes.--Maximum discharge during year, 589 cfs May 13 (gage height, 3.31 ft); minimum, 5.3 cfs Sept. 4 (gage height, 0.37 ft).
1922-23, 1929-55: Maximum discharge, 5,030 cfs Dec. 11, 1937 (gage height, 7.5 ft, from floodmark), from rating curve extended above 1,200 cfs on basis of velocity-area studies; minimum, 1.7 cfs July 20, 27-29, 1934.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. Diversions for irrigation of about 5,500 acres above station.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.35	4.6	1.5	101
.4	6.4	2.0	190
.5	10	2.5	310
.6	14	3.0	470
.8	25	3.5	670
1.0	41		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	21	18	b16	20	18	200	270	270	59	11	5.6
2	17	20	b19	b17	19	22	113	215	265	51	10	6.0
3	17	20	b20	b18	b19	b21	87	238	278	49	11	6.0
4	17	20	b21	b20	b18	b21	71	232	292	49	11	5.6
5	17	20	b21	a20	b17	b20	59	289	308	56	10	6.0
6	18	19	b22	a19	b18	b19	72	*373	316	47	10	6.0
7	18	20	20	a18	19	b21	110	424	319	39	10	5.6
8	18	20	b20	a15	20	23	*164	463	328	34	10	5.6
9	19	21	b21	a17	20	*24	245	449	*328	36	10	6.0
10	19	22	24	a16	b18	25	310	438	319	47	10	6.4
11	19	23	24	a15	b18	b24	206	474	278	*43	10	6.4
12	18	30	25	a17	18	b24	178	502	262	32	9.6	6.4
13	20	34	31	a18	18	b23	182	480	245	26	9.6	6.4
14	21	27	22	a16	18	b22	192	355	235	21	9.3	10
15	21	37	26	a17	19	b21	182	322	215	19	*8.9	16
16	20	51	19	a19	20	b23	154	305	182	21	8.9	13
17	20	41	*b21	a18	20	b23	137	288	158	18	8.9	12
18	20	33	b23	a19	b19	b23	127	329	136	16	8.6	13
19	22	28	b23	a18	b20	b23	104	407	124	14	8.2	12
20	29	26	b23	*b21	b20	b21	95	407	101	14	7.8	12
21	24	26	b22	22	*b20	b22	123	494	84	12	7.8	11
22	22	25	b22	20	b20	24	215	449	75	12	7.5	12
23	20	25	b22	20	b20	25	188	407	69	12	7.1	12
24	20	25	b22	20	b20	29	190	410	69	9.6	6.8	12
25	20	23	b23	19	b21	47	200	355	68	8.9	6.4	12
26	20	22	b21	b18	b21	73	134	328	72	8.6	6.4	12
27	19	21	b18	b18	b20	114	133	313	66	8.9	6.4	11
28	20	b18	b19	b18	b18	150	174	313	54	11	6.4	11
29	20	b17	b20	b19	-	193	168	334	98	11	6.4	11
30	20	b18	b20	19	------	112	246	343	83	11	6.0	11
31	20	------	b19	20	------	116	------	316	------	11	5.6	------
Total	612	753	671	567	538	1,346	4,759	11,322	5,697	807.0	265.6	281.0
Mean	19.7	25.1	21.6	18.3	19.2	43.4	159	365	190	26.0	8.57	9.37
Ac-ft	1,210	1,490	1,330	1,120	1,070	2,670	9,440	22,460	11,300	1,600	527	557

Calendar year 1954: Max 982 Min 12 Mean 122 Ac-ft 87,980
Water year 1954-55: Max 502 Min 5.6 Mean 75.7 Ac-ft 54,780

Peak discharge (base, 600 cfs).--No peak above base.
* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Twentymile Creek near Adel and Camas Creek near Lakeview, weather records, 1 discharge measurement, and recorded range in stage.
b Stage-discharge relation affected by ice.

Honey Creek near Plush, Oreg.

Location.--Lat 42°25', long 119°55', in NW¼ sec. 29, T. 36 S., R. 24 E., on right bank at mouth of canyon, 1 mile northwest of Plush and 4 miles downstream from Twelvemile Creek.

Drainage area.--156 sq mi.

Records available.--May to December 1909 (gage heights only), January 1910 to September 1914, March to May 1915, March to August 1921, March to June 1922, and October 1949 to September 1955 in reports of Geological Survey. April 1930 to September 1941 in reports of State engineer. October 1941 to September 1949 in files of State engineer.

Gage.--Water-stage recorder. Datum of gage is 4,538.00 ft above mean sea level, datum of 1929, supplementary adjustment of 1947. Prior to Feb. 23, 1910, staff gage at wagon bridge at Plush at different datum. Feb. 24, 1910, to Jan. 12, 1912, staff gage, Jan. 13, 1912, to May 16, 1915, water-stage recorder, Mar. 15 to Apr. 6, 1921, staff gage, Apr. 7 to Aug. 31, 1921, water-stage recorder, and Mar. 19 to June 30, 1922, staff gage, all at site half a mile upstream from present gage at different datums.

Average discharge.--25 years (1910-14, 1930-41, 1945-55), 25.3 cfs (18,320 acre-ft per year).

Extremes.--Maximum discharge during year, about 320 cfs May 20; minimum, 0.2 cfs July 27, Aug. 3, Aug. 5 to Sept. 15, 22-30.

1909-15, 1921-22, 1930-55: Maximum discharge, about 3,840 cfs Apr. 15, 1915 (gage height, 9.20 ft, site and datum then in use), from rating curve extended above 2,300 cfs by logarithmic plotting (flood caused by failure of storage dam on Snyder Creek); maximum discharge due to natural causes, 2,240 cfs Feb. 24, 1910 (gage height, 6.30 ft, site and datum then in use); no flow at times.

Remarks.--Records fair except those for periods of ice effect or no gage-height record, which are poor. About 2,300 acres is irrigated above station.

Revisions.--WSP 410: Drainage area.

Rating tables, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 6, 7)

Oct. 1 to May 6				May 7 to Sept. 30			
0.2	0.8	0.9	18	0.0	0.2	0.7	16
.3	1.8	1.2	31	.1	.6	1.0	32
.4	3.3	1.8	63	.2	1.2	2.0	94
.6	8.0			.3	2.5	3.0	174
				.4	4.6	4.1	287

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	4.2	4.0	4.0	4.6	5.8	a7	23	47	20	0.3	0.2
2	1.5	4.2	4.4	3.6	4.4	5.8	a7	14	41	16	.3	.2
3	1.6	4.0	4.8	3.8	3.8	5.8	a6	16	38	14	.2	.2
4	1.6	4.0	5.1	4.2	4.2	5.5	a5	20	38	14	.3	.2
5	1.5	4.0	5.3	4.6	4.0	5.2	4.0	37	40	13	.2	.2
6	1.5	4.0	5.8	4.4	4.6	5.4	*6.0	*58	37	11	.2	.2
7	1.6	4.2	4.2	4.0	5.4	5.8	9.8	79	34	10	.2	.2
8	1.6	4.0	4.4	3.6	5.2	6.8	9.2	108	30	8.8	.2	.2
9	1.7	3.7	4.6	4.0	*4.8	*7.2	6.5	104	*25	9.6	.2	.2
10	1.8	3.7	4.8	4.0	4.2	6.8	9.8	100	24	12	.2	.2
11	2.2	4.4	3.6	3.2	4.6	7.2	13	106	24	11	.2	.2
12	2.2	4.8	4.0	4.0	5.0	8.0	10	*110	24	9.6	.2	.2
13	2.4	6.2	4.4	*4.6	4.4	7.5	8.6	107	25	7.2	.2	.2
14	2.7	5.8	4.0	4.6	4.8	a7	9.2	79	25	*5.4	.2	.2
15	2.6	7.0	a3.6	4.8	5.0	a6	12	74	26	5.4	.2	.2
16	2.4	10	*3.2	4.6	5.6	a6	12	71	24	6.4	.2	.3
17	2.2	7.5	3.8	4.0	5.2	a6	12	81	20	5.1	.2	.3
18	2.1	6.2	4.0	4.4	5.0	a6	14	125	16	4.3	.2	.5
19	2.4	5.8	4.4	4.0	4.8	a6	11	190	15	3.2	.2	.4
20	3.0	5.5	4.8	5.0	5.2	a5.5	11	287	14	2.6	.2	.3
21	3.2	5.5	4.6	5.2	5.6	a6	15	244	12	1.8	.2	.3
22	2.8	5.3	4.6	5.0	5.8	a6.5	34	134	10	a1.2	.2	.2
23	2.8	5.5	4.6	4.6	6.0	a7	26	102	*9.2	a.9	.2	.2
24	2.8	5.8	4.6	4.0	5.8	a7.5	25	95	10	a.7	.2	.2
25	2.6	5.5	5.2	4.4	6.0	a8	22	89	13	a.4	.2	.2
26	2.4	5.3	5.0	4.0	6.2	a8.5	16	72	34	a.3	.2	.2
27	2.4	5.3	4.6	3.6	5.8	a8	15	66	29	a.2	.2	.2
28	2.2	4.4	5.2	4.0	5.0	a8.5	19	60	*22	a.3	.2	.2
29	2.4	3.7	5.0	4.8	-	a8	15	59	42	a.3	.2	.2
30	3.3	4.2	4.6	5.4	------	a8	19	59	31	a.3	.2	.2
31	4.0	------	4.4	4.8	------	a7	------	50	------	a.3	.2	------
Total	70.9	153.7	139.6	133.2	141.0	208.3	391.1	2,819	779.2	195.3	6.5	6.9
Mean	2.29	5.12	4.50	4.30	5.04	6.72	13.0	90.9	26.0	6.30	0.21	0.23
Ac-ft	141	305	277	264	280	413	776	5,590	1,550	387	13	14

Calendar year 1954: Max 211 Min 0.4 Mean 25.7 Ac-ft 18,640
Water year 1954-55: Max 287 Min 0.2 Mean 13.8 Ac-ft 10,010

Peak discharge (base, 200 cfs).--May 20 (time unknown) about 320 cfs.

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of 1 discharge measurement, weather records, and records for Deep Creek near Adel.

Note.--Stage-discharge relation affected by ice Dec. 8 to Feb. 21, Feb. 28, Mar. 4-6.

438899 O - 57 - 15

Chewaucan River above Conn ditch, near Paisley, Oreg.

Location.--Lat 42°41', long 120°35', in SW¼ sec. 27, T. 33 S., R. 18 E., on right bank at footbridge 20 ft downstream from former powerplant of Paisley Electric Co., 700 ft upstream from diversion dam of Conn ditch, a quarter of a mile downstream from Mill Creek, and 2½ miles west of Paisley.

Drainage area.--275 sq mi.

Records available.--April 1912 to September 1921, May 1924 to September 1955. Published as "above Mill Creek near Paisley" November 1912 to September 1914, and as "near Paisley" October 1914 to September 1921.

Gage.--Water-stage recorder. Datum of gage is 4,504.9 ft above mean sea level (river-profile survey). Apr. 3 to July 13, 1912, reference point at present site at different datum. Nov. 6, 1912, to Sept. 30, 1914, staff gage, and Oct. 1, 1914, to Sept. 30, 1921, water-stage recorder, at various sites half a mile upstream above Mill Creek at various datums.

Average discharge.--40 years (1912-21, 1924-55), 129 cfs (93,390 acre-ft per year).

Extremes.--Maximum discharge during year, 374 cfs May 21 (gage height, 3.01 ft); maximum gage height, 3.23 ft Dec. 30 (backwater from ice); minimum discharge, 16 cfs Nov. 30 (gage height, 1.33 ft).

1912-21, 1924-55: Maximum discharge, 1,680 cfs Dec. 11, 1937 (gage height, 4.93 ft); no flow part of each day Dec. 7, 1929, Dec. 12, 1932 (result of freezeup). Maximum discharge known, 4,000 cfs Nov. 23, 1909, from records at site 2 miles downstream below Conn ditch where records are equivalent at high flows.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. Diversions for irrigation of about 2,500 acres above station.

Revisions.--WSP 860: Drainage area.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	15	2.2	122
1.5	27	2.5	195
1.8	57	3.0	370
2.0	87		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	45	b40	b38	b50	b42	103	109	225	64	25	20
2	43	45	84	a34	b46	44	74	98	216	63	24	25
3	43	44	76	a36	b42	b42	60	109	222	65	24	24
4	43	42	64	a38	b40	b40	67	111	239	73	24	24
5	43	43	56	a46	b46	b40	55	*134	236	68	*24	24
6	42	43	58	a44	b46	b40	68	175	236	60	24	24
7	42	46	b40	a40	b55	b44	*81	195	232	55	23	23
8	43	44	b36	a38	b60	b55	100	225	228	55	24	23
9	43	45	b46	a44	b55	b65	112	239	222	64	24	24
10	43	55	b46	a38	b46	*70	143	242	210	65	23	24
11	44	52	a36	a36	b50	71	107	267	192	58	23	24
12	44	60	b46	a42	b46	77	90	281	180	52	22	24
13	49	53	b48	a40	b44	70	100	267	*170	47	21	24
14	47	52	b40	a38	b50	51	98	210	152	44	21	31
15	47	67	b44	a40	b55	52	84	198	145	45	21	47
16	45	81	b48	a44	b55	56	84	182	127	55	20	37
17	44	58	a50	a42	b50	56	85	180	112	44	20	45
18	44	52	a50	a48	b40	b50	82	175	103	40	20	35
19	45	50	a52	a42	b42	b48	71	207	98	37	20	33
20	55	49	*b48	a46	b44	b44	78	264	92	35	20	31
21	44	49	b46	a50	b42	b50	89	316	84	33	20	30
22	43	*50	b44	57	*b46	b55	107	302	74	33	20	29
23	41	50	b44	a50	b42	61	93	295	79	32	20	30
24	39	50	b46	a46	b44	65	92	288	84	31	20	29
25	42	46	b48	a50	b46	84	92	260	81	31	20	29
26	42	46	b42	a42	b42	89	90	256	87	30	20	29
27	43	45	b36	a36	b42	87	74	242	76	30	20	29
28	40	35	b44	a42	b40	111	98	239	71	28	20	29
29	40	b32	b42	47	-	127	89	256	82	27	20	28
30	42	b26	b48	b54	------	81	103	270	71	27	20	28
31	45	------	b42	b58	------	70	------	250	------	26	19	------
Total	1,353	1,455	1,490	1,346	1,306	1,937	2,667	6,842	4,426	1,417	666	856
Mean	43.6	48.5	48.1	43.4	46.6	62.5	88.9	221	148	45.7	21.5	28.5
Ac-ft	2,680	2,890	2,960	2,670	2,590	3,840	5,290	13,570	8,780	2,810	1,320	1,700

Calendar year 1954: Max 1,160 Min 26 Mean 198 Ac-ft 14,300
Water year 1954-55: Max 316 Min 19 Mean 70.6 Ac-ft 51,100

Peak discharge (base, 500 cfs).--No peak above base.

* Discharge measurement made on this day.

a No gage-height record; discharge-estimated on basis of records for Silver Creek near Silver Lake and Deep Creek above Adel.

b Stage-discharge relation affected by ice.

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Ana River near Summer Lake, Oreg.

Location.--Lat 43°00', long 120°45', in SE¼ sec. 6, T. 30 S., R. 17 E., on left bank 300 ft downstream from diversion dam and 2 miles northeast of Summer Lake Post Office.

Records available.--June 1951 to September 1955 in reports of Geological Survey. October 1929 to September 1939 (river only) and May to September 1928, April 1931 to July 1941 (fragmentary records for Summer Lake Canal only) in reports of State engineer.

Gage.--Water-stage recorder. Altitude of gage is 4,160 ft (from plans of Ana River diversion dam). Oct. 1, 1929, to Sept. 30, 1939, at site 80 ft downstream at different datum.

Average discharge.--7 years (1930-32, 1935-36, 1951-55), 91.4 cfs (66,170 acre-ft per year).

Extremes.--Maximum discharge during year, 110 cfs Sept. 29; minimum daily, 25 cfs May 3. 1929-39, 1951-55: Maximum discharge, 186 cfs Sept. 15, 1936 (gage height, 3.87 ft); no flow in canal; minimum daily, 6 cfs May 16, 1952.

Remarks.--Records good. All records presented herein include flow in Summer Lake Canal which diverts 300 ft above station for irrigation of lands along west side of Summer Lake. Flow regulated by gates at diversion dam. Source of stream is Ana River Springs, about three-quarters of a mile above station, which are flooded over by pondage behind diversion dam.

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	83	84	89	91	96	94	92	85	84	88	86
2	76	83	84	89	92	94	94	89	84	84	88	88
3	86	83	84	89	92	94	94	25	83	84	90	88
4	86	83	84	87	92	94	94	32	82	84	92	88
5	84	83	84	87	92	96	94	*46	83	84	90	89
6	86	83	84	87	92	96	94	45	84	84	90	89
7	85	83	92	87	92	*96	94	71	84	82	89	88
8	81	85	104	87	92	96	94	79	84	85	87	88
9	79	85	104	87	92	96	94	73	84	87	87	88
10	79	85	104	*87	92	96	94	81	84	87	87	88
11	82	85	104	87	92	94	94	82	84	87	87	89
12	83	85	95	87	92	94	*94	80	83	*87	84	86
13	82	85	91	87	92	94	94	78	83	88	86	86
14	82	85	91	87	93	94	93	78	83	91	86	89
15	82	85	91	87	93	94	93	80	83	86	86	88
16	82	85	91	87	93	94	93	80	*83	85	86	87
17	82	85	90	87	93	94	93	80	83	84	87	87
18	82	*85	89	87	93	94	93	*79	83	83	87	87
19	82	85	89	87	93	94	93	80	84	89	87	87
20	82	85	89	90	93	94	93	83	84	93	87	87
21	82	85	89	90	93	94	93	78	84	94	87	86
22	82	85	89	90	93	94	92	81	84	90	87	87
23	82	84	89	90	93	94	92	82	84	87	87	80
24	82	84	89	90	93	94	92	82	84	87	87	82
25	82	84	89	90	93	94	92	82	84	87	87	89
26	82	84	89	90	93	94	92	84	84	88	87	88
27	82	84	89	90	93	94	92	82	84	89	87	87
28	82	84	89	90	96	94	92	81	83	89	88	85
29	82	84	89	90	-	94	92	83	84	87	87	90
30	82	84	87	91	------	94	92	84	84	87	87	107
31	82	------	87	91	------	94	-----	85	------	87	88	------
Total	2,541	2,528	2,803	2,741	2,593	2,928	2,794	2,317	2,509	2,690	2,710	2,634
Mean	81.9	84.3	90.4	88.4	92.6	94.5	93.1	74.7	83.6	86.8	87.4	87.8
Ac-ft	5,040	5,010	5,560	5,440	5,140	5,810	5,540	4,600	4,980	5,340	5,380	5,220

Calendar year 1954: Max 104 Min 54 Mean 86.5 Ac-ft 62,650
Water year 1954-55: Max 107 Min 25 Mean 87.1 Ac-ft 63,060

* Discharge measurement made on this day.

Silver Creek near Silver Lake, Oreg.

Location.--Lat 43°07', long 121°04', in SW¼ sec. 28, T. 28 S., R. 14 E., on right bank 1½ miles downstream from diversion dam of Silver Lake Irrigation District, 1½ miles southwest of town of Silver Lake, and 3 miles upstream from Bridge Creek.

Drainage area.--221 sq mi.

Records available.--January 1905 to March 1907, January 1909 to September 1955.

Gage.--Water-stage recorder and, since Sept. 15, 1932, concrete control. Datum of gage is 4,361.22 ft above mean sea level, datum of 1929, supplementary adjustment of 1947. Prior to May 24, 1932, staff gages or water-stage recorder at practically same location at datum 1.00 ft higher, or staff gages at diversion dam outlets 1½ miles upstream at different datum.

Average discharge.--43 years (1905-6, 1909-27, 1929-41, 1943-55), including Silver Lake Irrigation District Canal, 26.2 cfs (18,970 acre-ft per year).

Extremes.--Maximum discharge during year, 53 cfs June 3-6 (gage height, 2.50 ft); maximum gage height, 2.72 ft Feb. 27 (ice jam); minimum discharge, 3.4 cfs Sept. 7.
1905-7, 1909-55: Maximum discharge, 1,800 cfs Mar. 20, 1907 (gage height, 10.08 ft, present datum), from rating curve extended above 700 cfs; no flow at times in 1931, 1932, 1934, 1937.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. Flow regulated by reservoir (capacity, 800 acre-ft) above diversion dam 1½ miles above station and by Thompson Valley Reservoir (capacity, 17,400 acre-ft) 11 miles above station, both of which are owned by the Silver Lake Irrigation District. No water was diverted above station by Silver Lake Irrigation District Canal during year; canal out of repair.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.6	2.0	2.0	18
1.7	4.7	2.2	30
1.8	8.5	2.5	53

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	13	10	a6.5	b9	b10	11	12	51	42	23	6.2
2	13	13	10	a6.5	b8.5	10	11	12	52	42	23	5.8
3	13	13	9.8	a7	b8	b10	11	12	53	42	23	5.5
4	13	13	9.8	a7	b8.5	b10	11	12	53	41	22	5.5
5	13	13	9.8	a7	b9	b10	11	*12	53	41	22	5.1
6	13	13	9.8	a7	b9.5	b10	11	12	52	41	20	4.7
7	13	13	9.8	a7	b10	*9.4	11	12	51	41	14	4.4
8	13	13	b9.8	a7.5	b10	9.4	11	13	51	41	12	4.4
9	13	13	9.0	a7.5	b9.5	9.4	11	15	49	41	11	4.4
10	13	13	b9	*b8	b10	9.4	11	17	49	41	11	4.4
11	13	13	b8.5	b8	b10	9.4	11	20	49	41	10	4.4
12	13	13	b8	b7.5	9.4	9.4	11	25	48	*41	9.8	4.2
13	13	13	7.7	b7.5	b11	9.4	11	30	48	41	11	4.2
14	13	13	b7.5	b8	b10	b9.4	11	30	47	40	18	4.7
15	13	13	7.4	b8	b10	b9.4	11	30	47	39	18	5.1
16	13	13	b7	b8.5	b10	b9.4	11	32	46	39	18	5.5
17	13	12	b7	b8.5	b11	9.4	11	34	46	39	18	5.5
18	13	*12	b7	b8.5	b11	9.4	11	34	45	39	17	5.8
19	13	12	b6.5	b8.5	b11	9.4	11	33	44	39	18	5.5
20	13	12	6.2	b9	b10	b9.4	11	34	44	38	18	5.5
21	13	12	b6.5	b9	b10	9.0	11	36	43	38	18	5.5
22	13	12	7.0	b9.5	b10	9.0	11	43	43	38	18	5.1
23	13	12	7.0	b9	b10	9.0	11	49	43	38	17	5.1
24	13	12	b7	b8.5	b10	9.4	11	50	43	38	17	4.7
25	13	12	b7	b8.5	b10	9.4	11	51	43	38	16	4.7
26	13	12	b7	b8.5	b10	9.8	11	50	43	35	9.0	4.7
27	13	11	b7	b8.5	b10	9.8	11	49	43	23	8.5	*4.4
28	13	11	7.0	b8	b10	9.8	11	48	42	24	7.4	4.4
29	13	11	a7	b8.5	-	11	11	48	42	24	7.0	4.4
30	13	b11	a7	b10	------	11	12	50	42	23	6.6	4.4
31	13	------	a6.5	b9.5	------	11	------	51	------	23	6.6	------
Total	403	372	245.6	250.5	275.4	299.8	331	956	1,405	1,151	467.9	148.2
Mean	13.0	12.4	7.92	8.08	9.84	9.67	11.0	30.8	46.8	37.1	15.1	4.94
Ac-ft	799	736	487	497	546	595	656	1,900	2,790	2,280	928	294

Calendar year 1954: Max 424 Min 6.2 Mean 61.0 Ac-ft 44,200
Water year 1954-55: Max 53 Min 4.2 Mean 17.3 Ac-ft 12,510

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Chewaucan River near Paisley.
b Stage-discharge relation affected by ice.

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Silvies River near Burns, Oreg.

Location.--Lat 43°43', long 119°11', in NW¼ sec. 31, T. 21 S., R. 30 E., on left bank 1 mile downstream from dam site for proposed lower Silvies Reservoir, 5 miles downstream from Emigrant Creek, and 11 miles northwest of Burns.

Drainage area.--934 sq mi.

Records available.--May 1903 to July 1906, December 1908 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,190 ft (by barometer). Prior to Dec. 1, 1911, and June 24, 1917, to Apr. 6, 1922, staff gage at site 3 miles downstream at different datums. Dec. 1, 1911, to June 23, 1917, water-stage recorder at site 1½ miles downstream at different datum. Apr. 7, 1922, to Oct. 1, 1941, water-stage recorder at present site and datum. Oct. 2, 1941, to Oct. 3, 1951, water-stage recorder at site 400 ft downstream at present datum.

Average discharge.--42 years (1903-5, 1909-12, 1917-21, 1922-55), 156 cfs (112,900 acre-ft per year).

Extremes.--Maximum discharge during year, 581 cfs May 8, 9 (gage height, 6.04 ft); minimum, 4.0 cfs Aug. 17, 18.
1903-6, 1908-55: Maximum discharge, 4,960 cfs about Apr. 6, 1952 (gage height, 15.2 ft); no flow July 19 to Sept. 22, 1934.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. Diversions for irrigation above station primarily with floodwaters.

Revisions.--WSP 860: Drainage area.

Rating tables, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to May 12				May 13 to Sept. 30			
0.9	9.5	3.0	183	0.7	2.6	2.0	87
1.0	14	4.0	310	.8	4.5	4.0	310
1.5	42	6.0	575	1.0	14	6.0	575
2.0	81			1.5	44		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	23	a20	34	26	38	100	272	174	33	13	4.5
2	13	22	a24	a28	25	40	80	301	165	32	12	4.5
3	13	22	a26	a26	27	38	65	*322	160	33	9.7	4.5
4	14	22	a30	*24	23	36	70	319	155	33	10	4.5
5	*16	21	28	22	26	34	80	365	141	34	10	4.5
6	16	22	a26	21	30	34	*83	458	135	32	9.3	4.5
7	16	22	a24	20	34	40	104	520	135	30	8.2	4.5
8	16	24	a20	21	*35	42	132	*565	128	29	8.2	4.5
9	16	24	a23	22	32	46	173	561	*115	29	7.7	4.5
10	16	26	a27	23	30	48	205	533	116	33	*7.2	4.5
11	16	29	a26	21	32	50	209	518	108	40	6.3	4.5
12	16	29	25	20	34	50	211	502	102	35	5.5	4.8
13	18	30	a26	22	36	50	214	480	89	*30	5.1	4.8
14	18	30	a28	23	38	46	207	426	84	26	5.1	7.2
15	18	32	a27	24	38	40	201	392	84	25	5.1	10
16	18	*38	a26	23	36	40	199	397	77	26	4.8	15
17	20	37	a25	22	34	44	219	388	75	25	4.2	13
18	20	34	24	24	32	46	215	391	73	21	*4.0	11
19	20	33	22	22	30	44	200	398	69	27	4.5	9.3
20	20	32	a22	20	25	40	188	391	64	24	4.5	8.2
21	20	31	a23	23	28	46	193	379	52	21	4.5	7.2
22	21	29	a23	25	30	50	249	363	41	20	4.5	7.7
23	20	32	a24	24	29	55	242	328	33	19	4.5	8.2
24	20	31	a25	23	27	*60	262	307	35	18	4.5	7.7
25	20	30	a25	23	26	65	271	285	36	17	4.5	7.7
26	20	28	a23	22	27	70	315	271	35	18	4.5	8.2
27	20	30	a21	21	30	70	289	258	35	18	4.5	8.8
28	18	30	a24	20	34	90	287	231	34	16	4.5	8.8
29	19	30	a28	23	-	85	278	213	44	16	4.5	8.8
30	21	24	a30	25	------	80	258	200	42	16	4.5	8.8
31	22	------	a32	28	------	90	------	189	------	14	4.5	------
Total	553	847	777	719	854	1,607	5,799	11,523	2,636	790	193.9	214.7
Mean	17.8	28.2	25.1	23.2	30.5	51.8	193	372	87.9	25.5	6.25	7.16
Ac-ft	1,100	1,680	1,540	1,430	1,690	3,190	11,500	22,860	5,230	1,570	385	426

Calendar year 1954: Max 800 Min 7.7 Mean 127 Ac-ft 92,250
Water year 1954-55: Max 565 Min 4.0 Mean 72.6 Ac-ft 52,600

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records for Burns and records for Silver Creek near Riley and Malheur River near Drewsey.
Note.--Stage-discharge relation affected by ice Nov. 30, Jan. 1, Jan. 4 to Apr. 5.

Donner und Blitzen River near Frenchglen, Oreg.

Location.--Lat 42°47', long 118°52', in NW¼ sec. 20, T. 32 S., R. 32½ E., on left bank 1½ miles upstream from upper diversions for Malheur Migratory Waterfowl Refuge, 2 miles downstream from Fish Creek, and 3½ miles southeast of Frenchglen.

Drainage area.--180 sq mi, approximately.

Records available.--December 1937 to September 1955 in reports of Geological Survey. May 1910 to September 1921 (published as "near Diamond") and July 1929 to September 1930 in reports of State engineer.

Gage.--Water-stage recorder and concrete control. Datum of gage is 4,254 ft above mean sea level (surveys of U. S Fish and Wildlife Service). Prior to December 1937 staff gages at several sites downstream at various datums.

Average discharge.--25 years (1911-13, 1914-16, 1917-21, 1938-55), 125 cfs (90,500 acre-ft per year).

Extremes.--Maximum discharge during year, 1,060 cfs Apr. 22 (gage height, 4.42 ft); minimum, 11 cfs Jan. 4, Feb. 5.
1910-21, 1937-55: Maximum discharge, 3,390 cfs May 19, 1953 (gage height, 6.29 ft), from rating curve extended above 1,100 cfs on basis of velocity-area studies and logarithmic plotting; minimum, 8 cfs Jan. 14, 1940 (ice jam upstream).

Remarks.--Records excellent except those for periods of ice effect, which are fair. No regulation or diversion above station.

Revisions.--WSP 330: Drainage area (former site). WSP 860: Drainage area (present site).

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.9	23	3.0	220
2.0	29	3.5	430
2.3	56	4.0	730
2.6	107		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	37	32	40	36	35	112	128	340	105	45	32
2	37	37	46	37	35	35	64	125	344	101	44	32
3	37	37	40	b24	33	35	55	112	395	97	43	32
4	37	36	38	24	b30	33	49	*125	440	91	42	32
5	36	36	37	*44	b36	b23	72	174	516	99	41	32
6	*35	36	37	38	34	b30	102	252	600	87	40	32
7	35	36	35	30	36	46	97	219	588	84	40	32
8	35	36	b32	39	39	48	101	371	612	82	39	32
9	35	36	b38	50	*35	46	114	376	*695	84	39	33
10	35	37	37	63	b23	44	171	390	570	91	39	33
11	35	37	28	54	b30	49	112	410	492	85	38	33
12	36	46	33	53	42	52	84	400	405	80	37	33
13	40	41	43	48	39	48	75	358	340	77	37	33
14	39	40	37	40	39	38	91	283	344	*75	37	37
15	37	43	35	40	39	33	107	259	267	78	37	43
16	37	46	25	39	42	36	101	259	227	82	35	39
17	36	*40	b24	35	38	38	110	376	213	75	35	40
18	36	38	27	35	27	39	154	423	200	66	35	38
19	36	37	29	35	26	38	112	425	196	63	34	37
20	38	36	35	36	39	32	158	395	193	60	34	37
21	37	36	40	35	35	38	281	455	186	57	34	36
22	36	36	39	36	39	40	458	455	171	57	34	36
23	36	36	40	36	35	53	148	425	159	59	33	36
24	35	36	41	34	35	*80	116	405	135	62	33	36
25	36	35	34	35	35	154	123	353	125	55	*33	35
26	35	35	28	28	35	209	114	353	121	50	34	35
27	36	35	27	28	33	135	85	303	118	50	34	35
28	38	32	40	31	35	314	101	327	121	50	33	35
29	37	30	56	b32	-	155	128	405	138	49	33	36
30	37	25	50	40	------	203	103	455	116	48	32	36
31	37	------	42	37	------	66	------	405	------	47	32	------
Total	1,129	1,104	1,125	1,176	980	2,225	3,699	10,201	9,367	2,246	1,136	1,048
Mean	36.4	36.8	36.3	37.9	35.0	71.8	123	329	312	72.5	36.6	34.9
Ac-ft	2,240	2,190	2,230	2,330	1,940	4,410	7,340	20,230	18,580	4,450	2,250	2,080

Calendar year 1954: Max 588 Min 24 Mean 96.0 Ac-ft 69,480
Water year 1954-55: Max 695 Min 23 Mean 97.1 Ac-ft 70,270

Peak discharge (base, 650 cfs).--Apr. 22 (1:30 a.m.) 1,060 cfs (4.42 ft); June 9, (10 p.m.) 824 cfs (4.13 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.

Bridge Creek near Frenchglen, Oreg.

Location.--Lat 42°50', long 118°51', in NW¼ sec. 33, T. 31 S., R. 32½ E., on right bank at mouth of canyon, 3½ miles northeast of Frenchglen.

Drainage area.--30 sq mi, approximately.

Records available.--March 1911 to September 1916, December 1937 to September 1955.

Gage.--Water-stage recorder and concrete control. Datum of gage is 4,184.93 ft above mean sea level (surveys of U. S. Fish and Wildlife Service). Mar. 18, 1911, to Sept. 30, 1916, staff gage at site half a mile upstream at different datum. Dec. 21, 1937, to May 17, 1938, staff gage at site 1,000 ft downstream at different datum. May 18, 1938, to Aug. 22, 1939, staff gage at present site and datum.

Average discharge.--21 years (1912-16, 1938-55), 14.1 cfs (10,210 acre-ft per year).

Extremes.--Maximum discharge during year, 251 cfs May 19 (gage height, 2.37 ft), from rating curve extended above 65 cfs by logarithmic plotting; minimum, 8.3 cfs Mar. 6, 7, 15, 16.
1911-16, 1937-55: Maximum discharge, 415 cfs May 19, 1953 (gage height, 2.73 ft), from rating curve extended above 65 cfs by logarithmic plotting; minimum observed, 7 cfs Feb. 24, 25, 1912, Dec. 30, 1937, to Jan. 4, 1938.

Remarks.--Records excellent. No regulation or diversion above station. Low-water flow is sustained by large springs.

Rating table, water year 1954-55 (gage height, in feet, and discharge, in cubic feet per second)

0.9	6.7	1.2	23
1.0	11	1.4	41
1.1	16	1.6	67

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	12	12	11	9.5	8.7	9.1	13	19	11	10	12
2	12	12	12	11	9.5	8.7	9.5	14	18	11	10	12
3	12	12	11	11	9.5	8.7	9.1	13	18	11	10	12
4	12	12	11	11	9.1	8.7	9.1	*14	17	11	10	12
5	12	12	12	*11	9.1	8.7	9.1	19	17	11	10	12
6	*12	12	12	11	9.1	8.3	9.1	20	16	11	10	12
7	12	12	12	11	9.1	13	9.9	21	15	11	10	12
8	12	12	12	11	9.1	13	9.9	23	14	11	11	12
9	12	12	12	11	*9.1	12	11	22	*14	11	11	12
10	12	12	12	11	9.1	11	13	22	13	11	11	12
11	12	12	12	11	9.1	9.9	14	23	13	11	11	12
12	12	12	12	11	8.7	9.5	12	23	12	11	11	12
13	12	12	12	11	9.1	9.1	11	21	12	11	11	12
14	12	12	12	11	9.9	8.7	10	20	12	*11	11	12
15	12	12	12	11	9.9	8.7	10	19	12	11	11	12
16	12	12	12	10	9.9	8.7	13	19	12	10	11	12
17	12	*12	12	10	10	8.7	14	39	11	10	11	12
18	12	12	12	10	9.1	8.7	16	38	10	10	11	12
19	12	12	12	10	8.7	8.7	14	66	10	10	11	12
20	12	12	12	10	8.7	8.7	13	52	10	10	11	12
21	12	12	11	10	8.7	8.7	14	39	10	10	11	12
22	12	12	11	10	8.7	8.7	23	33	10	10	12	12
23	12	12	11	10	8.7	9.1	19	28	10	10	12	12
24	12	12	11	10	8.7	*9.1	15	27	10	10	*12	12
25	12	12	11	10	8.7	8.7	13	24	10	10	12	12
26	12	12	11	10	8.7	8.7	14	24	10	10	12	12
27	12	12	11	10	8.7	8.7	11	22	10	10	12	12
28	12	12	11	9.9	8.7	8.7	10	22	11	10	12	12
29	12	12	11	9.9	-	9.1	12	23	11	10	12	12
30	12	12	11	9.9	------	9.1	12	24	11	10	12	12
31	12	------	11	9.9	------	9.1	------	21	------	10	12	------
Total	372	360	359	324.6	254.9	287.9	368.8	788	378	325	344	360
Mean	12.0	12.0	11.6	10.5	9.10	9.29	12.3	25.4	12.6	10.5	11.1	12.0
Ac-ft	738	714	712	644	506	571	732	1,560	750	645	682	714

Calendar year 1954: Max 30 Min 9.9 Mean 12.8 Ac-ft 9,300
Water year 1954-55: Max 66 Min 8.3 Mean 12.4 Ac-ft 8,970

Peak discharge (base, 30 cfs).--Mar. 7 (8 p.m.) 30 cfs (1.29 ft); May 17 (5:30 p.m.) 102 cfs (1.83 ft); May 19 (8 p.m.) 251 cfs (2.37 ft).
* Discharge measurement made on this day.

Silver Creek near Riley, Oreg.

Location.--Lat 43°41', long 119°39', in E½ sec. 1, T. 22 S., R. 25 E., on right bank 0.4 mile downstream from Rough Creek, 1.4 miles upstream from Nicoll Creek, and 14 miles northwest of Riley.

Drainage area.--228 sq mi.

Records available.--June 1951 to September 1955.

Gage.--Water-stage recorder. Altitude of gage is 4,450 ft (by barometer).

Extremes.--Maximum discharge during year, 275 cfs May 8 (gage height, 3.72 ft); maximum gage height, 4.27 ft Mar. 3 (ice jam); minimum discharge, 0.4 cfs Sept. 7.
1951-55: Maximum discharge, 1,300 cfs Apr. 6, 1952 (gage height, 6.65 ft); minimum, that of Sept. 7, 1955.

Remarks.--Records good except those for periods of ice effect, which are fair. Diversions above station for irrigation of about 500 acres.

Rating tables, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Oct. 22		Oct. 23 to Sept. 30			
1.4	2.3	1.2	0.4	2.0	25
1.5	4.0	1.3	1.0	2.4	59
		1.4	2.1	3.0	140
		1.5	4.3	3.6	250
		1.7	10		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.3	3.0	2.3	2.8	1.6	2.2	17	107	38	9.5	2.0	0.7
2	2.4	2.6	3.3	2.4	1.4	2.1	16	116	34	9.1	1.7	.7
3	2.4	2.6	4.0	1.9	1.5	2.0	15	*128	33	9.1	1.6	.6
4	2.4	2.6	4.3	1.5	1.3	1.9	14	138	32	9.5	1.6	.6
5	*2.4	2.4	4.0	*1.8	1.4	1.9	14	178	28	9.8	1.6	.6
6	2.4	2.6	3.8	1.9	1.5	2.1	18	234	26	9.1	1.4	.6
7	2.4	3.5	3.2	1.6	1.6	2.4	25	236	23	8.8	1.4	.5
8	2.3	3.3	2.8	1.8	*1.6	3.2	40	234	21	8.1	1.4	.6
9	2.3	3.5	3.4	2.0	1.6	3.0	71	194	19	8.5	1.3	.6
10	2.3	4.0	3.2	2.2	1.3	3.0	80	174	*18	9.5	1.2	.6
11	2.4	4.0	2.8	1.9	1.4	3.2	77	160	17	8.1	1.1	.7
12	2.4	4.6	3.0	2.0	1.6	2.8	69	148	16	6.8	1.0	.7
13	2.9	4.9	3.2	2.2	1.8	2.6	70	126	16	*6.0	.9	.7
14	3.1	4.6	3.0	1.7	1.8	2.4	70	104	15	5.4	.9	1.3
15	3.1	6.3	2.8	1.8	2.1	2.6	63	98	14	5.4	.9	3.8
16	2.9	*7.1	2.4	1.5	2.4	3.6	64	100	14	5.4	.9	3.5
17	2.8	5.7	2.7	1.4	1.9	3.8	70	91	13	4.9	*.9	3.0
18	2.8	4.6	2.4	2.0	1.6	4.0	66	106	13	4.0	.9	2.3
19	2.9	4.0	2.2	1.6	1.6	3.6	57	138	12	3.8	.8	2.0
20	3.2	3.8	2.3	1.5	1.8	3.8	61	138	12	3.3	.7	1.7
21	3.5	3.5	2.5	1.6	2.1	4.2	61	130	11	2.8	.7	1.6
22	3.2	3.5	2.6	1.9	2.3	5.0	74	110	10	2.8	.7	1.6
23	2.8	3.5	2.9	2.1	1.8	*4.8	77	95	10	3.8	.7	1.6
24	2.6	3.5	2.6	1.9	1.6	9.0	88	86	10	3.8	.7	1.6
25	2.6	2.8	2.1	2.0	1.7	10	96	76	10	3.0	.7	1.6
26	2.3	2.8	2.0	1.7	1.9	10	98	69	10	2.6	.7	1.6
27	2.4	2.7	1.9	1.4	1.7	10	85	62	9.8	2.8	.7	1.6
28	2.4	2.8	2.5	1.3	1.8	13	85	54	10	2.6	.7	1.6
29	3.0	2.7	3.2	1.5	-	16	85	49	12	2.4	.7	1.7
30	2.8	2.5	3.0	1.7	------	15	86	47	10	2.3	.7	1.8
31	3.3	------	4.0	1.8	------	13	------	42	------	2.1	.7	------
Total	83.0	110.0	90.4	56.4	47.7	166.2	1,812	3,768	516.8	175.1	31.9	42.1
Mean	2.68	3.67	2.92	1.82	1.70	5.36	60.4	122	17.2	5.65	1.03	1.40
Ac-ft	165	218	179	112	95	330	3,590	7,470	1,030	347	63	84

Calendar year 1954: Max 364 Min 1.6 Mean 31.4 Ac-ft 22,750
Water year 1954-55: Max 236 Min 0.5 Mean 18.9 Ac-ft 13,680

Peak discharge (base, 350 cfs).--No peak above base.
* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 26 to Dec. 1, Dec. 6 to Apr. 5 (no gage-height record Jan. 7 to Feb. 7, Feb. 19, 22, Mar. 2, Mar. 5-22; discharge estimated on basis of weather records and records for South Fork John Day River near Dayville).

Trout Creek near Denio, Oreg.

Location.--Lat 42°10', long 118°28', in SW¼ sec. 26, T. 39 S., R. 36 E., on right bank 0.4 mile upstream from bridge at mouth of canyon, 5 miles east of Trout Creek Ranch, and 14 miles northeast of Denio.

Drainage area.--79 sq mi, approximately.

Records available.--March 1911 to March 1912, April 1922 to November 1923, April 1925 to September 1955.

Gage.--Water-stage recorder. Datum of gage is 4,351.59 ft above mean sea level, datum of 1929. Mar. 25, 1911, to Mar. 31, 1912, staff gage at bridge 0.4 mile downstream at different datum. Apr. 28, 1922, to June 14, 1932, water-stage recorder at site 10 ft upstream at datum 0.50 ft higher.

Average discharge.--24 years (1922-23, 1932-55), 14.6 cfs (10,570 acre-ft per year).

Extremes.--Maximum discharge during year, 53 cfs May 22 (gage height, 2.69 ft); maximum gage height, 2.82 ft Dec. 31 (backwater from ice); minimum discharge, 0.8 cfs Sept. 7.
1911-12, 1922-23, 1925-55: Maximum discharge, 343 cfs Aug. 1, 1933 (gage height, 5.26 ft), from rating curve extended above 125 cfs; probably no flow at times.
Maximum stage known, 6.0 ft (caused by cloudburst), probably occurred in 1924 or 1925.

Remarks.--Records fair except those for periods of ice effect or no gage-height record, which are poor. Diversions for irrigation of about 800 acres above station.

Rating table, water year 1954-55, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Aug. 5 to Sept. 30)

1.2	0.9	2.0	10
1.3	1.3	2.2	18
1.4	1.8	2.5	34
1.6	3.0	2.7	49
1.8	5.5		

Discharge, in cubic feet per second, water year October 1954 to September 1955

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.3	4.6	3.6	6	5.5	4.3	5.9	10	29	8.8	2.0	1.1
2	3.3	4.4	5.0	5	5	4.2	6.1	9.3	29	7.4	2.0	1.0
3	3.3	4.4	5.4	3.6	5	4.2	5.7	9.0	29	7.0	1.8	1.0
4	3.3	4.4	5.2	3.6	5	4.2	6.3	9.6	30	7.4	1.9	.9
5	3.4	4.4	5.0	4	6	4	6.1	10	33	7.2	2.1	.9
6	3.4	4.4	4.9	4.6	5.5	5	*6.3	12	35	6.1	2.1	.9
7	3.4	4.4	5.0	4.2	5.5	6	6.3	14	33	4.0	2.1	1.1
8	3.5	4.6	3.8	4.6	6	7	7.0	*23	32	3.7	2.0	1.2
9	3.7	4.8	4.0	4.6	5.4	6.5	7.6	35	32	3.9	2.0	1.4
10	3.6	4.8	5.9	4.6	4	6	8.8	38	30	4.6	*2.0	1.4
11	3.6	5.0	4.6	5	5	5.5	8.5	40	29	4.9	2.0	1.4
12	*3.7	5.4	4.0	5	5	5.5	9.3	46	29	4.6	2.0	1.3
13	4.0	5.7	5.9	5	5	5	8.2	46	28	4.4	2.0	1.3
14	4.2	5.4	5.9	5	4.6	4.6	8.8	39	26	*3.9	2.1	1.3
15	4.0	5.5	4.8	5	4.6	5	9.0	35	24	3.8	2.1	1.4
16	3.9	6.3	4	4.2	5	5.5	8.8	33	22	3.8	2.0	1.5
17	3.8	*5.5	4	4.2	5	6	9.6	27	20	2.9	1.9	1.7
18	3.9	5.4	4.6	5	4.2	6	10	24	17	2.9	2.0	1.6
19	3.9	5.2	5	4.6	4.8	5.5	9.3	26	16	2.9	1.8	1.6
20	4.6	5.4	5.5	5	5.5	5	9.0	30	14	2.8	1.8	2.0
21	4.6	5.4	6	5.5	5	5.5	9.3	45	12	2.7	1.8	2.0
22	4.4	5.5	6	6	5.5	5.5	9.9	47	10	2.7	1.6	2.0
23	4.3	5.5	6	6	5	6	10	43	10	2.6	1.6	2.2
24	4.4	5.4	6	6	4.6	6	11	46	11	2.8	*1.6	2.2
25	4.4	5.4	5.5	5.5	4.6	6	12	37	12	2.5	1.6	2.2
26	4.6	5.4	4.6	4.6	4.6	6	11	35	9.9	2.4	1.7	2.2
27	4.6	5.2	4	4.6	5	6	10	34	9.9	2.4	1.8	2.2
28	4.8	5.0	4.8	4.6	5	6.1	10	33	11	2.3	1.8	2.1
29	4.8	4.4	5.5	5	-	6.1	9.0	33	11	2.4	1.8	2.2
30	4.8	3	6	6	------	5.9	9.0	36	9.3	2.3	1.6	2.3
31	4.6	------	6.5	5.5	------	5.9	------	35	------	2.3	1.6	------
Total	124.1	150.2	157.0	152.1	140.9	170.0	257.8	939.9	643.1	124.4	58.2	47.6
Mean	4.00	5.01	5.06	4.91	5.03	5.48	8.59	30.3	21.4	4.01	1.88	1.59
Ac-ft	246	298	311	302	279	337	511	1,860	1,280	247	115	94

Calendar year 1954: Max 34 Min 2.3 Mean 7.96 Ac-ft 5,760
Water year 1954-55: Max 47 Min 0.9 Mean 8.12 Ac-ft 5,880

Peak discharge (base, 50 cfs).--May 12 (4 to 7 a.m.) 51 cfs (2.67 ft); May 22 (5 to 6:30 a.m.) 53 cfs (2.69 ft).

* Discharge measurement made on this day.

Note.--No gage-height record Jan. 15 to Feb. 13, Feb. 15-28, Mar. 2-14, 16-27; discharge estimated on basis of weather records at Burns and records for Malheur River near Drewsey and Donner and Blitzen River near Frenchglen. Stage-discharge relation affected by ice Nov. 30, Dec. 1, Dec. 15 to Jan. 14, Mar. 15.

Measurements of streamflow in the Great Basin made at points other than regular gaging stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. Measurements believed to have been made under base-flow conditions are identified by an asterisk (*) to the left of the discharge figure. These measurements when correlated with the simultaneous discharge of a nearby stream where continuous records are available will give a picture of the low-flow potentiality of stream. The column headed, "Measured previously" shows the water years in which measurements were made at the same, or practically the same, site.

Determinations of peak flow at points other than regular gaging stations are given in a separate table on page 227.

Discharge measurements made at points other than gaging stations in the Great Basin during the water year 1955

Great Salt Lake basin

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Discharge (cfs)
Otter Creek..	Bear River...	NW¼NE¼ sec. 3, T. 11 N., R. 6 E., at road crossing 3.3 miles upstream from South Branch Otter Creek and 5 1/3 miles northwest of Randolph, Utah.	16.7		July 20	*2.06
Otter Creek†.	....do.....	NE¼ sec. 3, T. 11 N., R. 6 E., above diversions 3 miles above South Branch Otter Creek and 5¼ miles northwest øf Randolph, Utah.	17.1	1950-54	Oct. 29	*3.96
					Dec. 8	*3.76
					Mar. 10	*3.54
					Apr. 13	*4.31
					May 16	*3.79
					June 8	*3.97
					June 29	*3.35
					July 20	*3.83
					Aug. 23	*3.77
					Sept.21	*3.27
South Branch (Fork) Otter Creek.	Otter Creek..	SW¼ sec. 10, T. 11 N., R. 6 E., above diversions 1¾ miles above Middle Branch Otter Creek and 4½ miles northwest of Randolph, Utah.	5.0	1950-54	Oct. 29	*3.97
					Dec. 8	*3.22
					Mar. 9	*4.04
					Apr. 13	*4.89
					May 16	*3.95
					June 8	*4.37
					June 29	*4.13
					July 20	*4.38
					Aug. 23	*3.77
					Sept.21	*3.98
Middle Branch (Fork Otter Creek.	South Branch Otter Creek.	SW¼ sec. 3, T. 11 N., R. 6 E., above diversions 1½ miles above mouth and 5 miles northwest of Randolph, Utah.	3.5	1950-54	Oct. 29	*5.06
					Dec. 8	*4.23
					Mar. 9	*4.06
					Apr. 13	*4.62
					May 16	*4.95
					June 8	*4.65
					June 29	*4.21
					July 20	*4.69
					Aug. 23	*4.74
					Sept.21	*4.16
Otter Creek..	Bear River...	NE¼ sec. 7, T. 11 N., R. 7 E., a quarter of a mile below South Branch Otter Creek and 3 miles north of Randolph, Utah.	34.7		Jan. 27	19,0
					Mar. 10	*13.7
Sublette Creek.	....do.....	NE¼NE¼ sec. 29, T. 24 N., R. 119 W., at mouth 3 miles south of Cokeville, Wyo.	28.0	1951, 1953-54	Nov. 4	*1.31
Second Spring above Collett Creek††.	....do.....	SW¼SE¼ sec. 8, T. 24 N., R. 119 W., 1 mile south of Cokeville, Wyo.	-	1954	Nov. 4	*1.45
First Spring above Collett Creek††.	....do.....	....do.....		1954	Nov. 4	*3.42
Collett Creek††.	....do.....	NE¼SW¼ sec. 8, T. 24 N., R. 119 W., at mouth 200 ft below railroad bridge and ½ mile south of Cokeville, Wyo.	-	1954	Nov. 4	*21.0
South Branch Smiths Fork††.	....do.....	NW¼SW¼ sec. 6, T. 24 N., R. 119 W., at mouth 1¼ miles northwest of Cokeville, Wyo.	-	1954	Nov. 5	*8.57
Smiths Fork..	....do.....	SE¼NW¼ sec. 6, T. 24 N., R. 119 W., at mouth 1½ miles northwest of Cokeville, Wyo.	-	1954	Nov. 5	*27.8
South Fork Ryan Creek††	....do.....	NW¼NW¼ sec. 6, T. 24 N., R. 119 W., at mouth 1¾ miles northwest of Cokeville, Wyo.	-	1954	Nov. 5	*.50
Ryan Creek††.	....do.....	NW¼NW¼ sec. 6, T. 24 N., R. 119 W., ¼ mile upstream from mouth and 1¾ miles northwest of Cokeville, Wyo.	-	1954	Nov. 5	*.80
Bear River...	Great Salt Lake.	NE¼ sec. 1, T. 25 N., R. 120 W., at Ineck's ranch, 2¼ miles southeast of Border, Wyo.	2,480		Mar. 25	108
Malad River..	Bear River...	Sec. 10, T. 14 S., R. 35 E., at springs, at flow line, 1 mile upstream from dam on Samaria Reservoir No. 2, 5¾ miles northwest of Malad City, Idaho, and 8¾ miles upstream from Little Malad River.	a3.3	1948-54	Oct. 30	*10.1
					Dec. 6	*8.21
					Jan. 12	*8.28
					Feb. 24	*9.56
					Mar. 27	12.6
					Apr. 26	12.9
					May 23	13.1

* Base flow.
† Previously published as North Fork Otter Creek.
†† A distributary of Smiths Fork.
a Flow derived largely from springs.

Discharge measurements made at points other than gaging stations in the Great Basin during the water year 1955--Continued

Great Salt Lake basin--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Discharge (cfs)
Malad River..	Bear River...	Sec. 10 T. 14 S., R. 35 E., at springs, at flow line, 1 mile upstream from dam on Samaria Reservoir No. 2, 5⅝ miles northwest of Malad City, Idaho, and 8¼ miles upstream from Little Malad River.	a3.3	1948-54	June 19 July 24 Aug. 24	*9.53 *9.64 *8.89
		Warner Lakes basin, Oreg.				
Parsnip Springs.	Camas Creek..	At mouth, below gaging station on Camas Creek.	-	1914, 1950-51, 1953-54	Mar. 9	1.22
		Albert Lake basin, Oreg.				
Chewaucan River.	Albert Lake..	NE¼ sec. 13, T. 35 S., R. 20 E., at highway crossing, 4 miles northwest of Valley Falls.	b490	1951, 1953-54	Mar. 10	3.60
		Silver Lake basin, Oreg.				
Silver Creek (Silver Lake inlet).	Silver Lake..	At former gaging station in sec. 21, T. 28 S., R. 15 E., 5½ miles east of town of Silver Lake.	b520	1919,1922, 1952	Mar. 10	3.38
		Malheur and Harney Lakes basin, Oreg.				
Fence Creek..	Donner und Blitzen River.	Sec. 29, T. 32½ S., R. 33 E., at outlet of Fish Lake, 16 miles southeast of Frenchglen.	b1		Aug. 25	*.02
Mud Creek....	....do.....	Sec. 4, T. 32 S., R. 32½ E., 1½ miles above mouth, about 3 miles east of Frenchglen.	b30		Aug. 25	.15
Krumbo Creek.	....do.....	Sec. 19, T. 30 S., R. 32 E., 10 miles northeast of Frenchglen.	b30		Aug. 26	4.69
Kiger Creek..	....do.....	At former gaging station in sec. 10, T. 30 S., R. 33 E., 2½ miles southeast of Diamond.	b75	1907, 1909-21, 1930,1939, 1940-41	Aug. 26	6.80
McCoy Creek..	Kiger Creek..	Sec. 2, T. 30 S., R. 32 E., 4 miles southwest of Diamond.	b45	1907, 1909-21, 1930,1941	Aug. 26	3.32
Donner und Blitzen River.	Malheur Lake.	Former gaging station near Voltage.	b760	1916-19, 1921-22, 1938-49, 1951-54	Aug. 26	13.5
Malheur Lake Outlet.	Harney Lake..	Sec. 26, T. 26 S., R. 31 E., at highway bridge 21 miles south of Burns.	-	1943, 1952-53	June 9	c0

* Base flow.
a Flow derived largely from springs.
b Approximately.
c Also no flow during year prior to this date.

The following table contains determinations of peak discharge made at crest stage by indirect methods or by current meter or computed from rating curve at points other than regular gaging stations.

Determinations of peak discharge during water year October 1954 to September 1955

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Discharge (cfs)
Rose Creek...	Jordan River.	On section line between secs. 3 and 10, T. 4 S., R. 2 W., about 2 miles southwest of Herriman, Utah.	9.88		Aug. 6	1,460

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