Surface Water Supply of the United States 1958

Part 10. The Great Basin

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

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1564

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

UNITED STATES GOVERNMENT PRINTING OFFICE, WASHINGTON : 1960

UNITED STATES DEPARTMENT OF THE INTERIOR

FRED A. SEATON, *Secretary*

GEOLOGICAL SURVEY

Thomas B. Nolan, *Director*

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington 25, D.C. - Price $1 (paper cover)

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, L. B. Leopold, chief, under the general direction of J. V. B. Wells, chief, Surface Water Branch, and F. J. Flynn, chief, Basic Records Section.

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

R. S. Lord ..... Menlo Park, Calif.
T. R. Newell ..... Boise, Idaho
K. N. Phillips ..... Portland, Oreg.
M. T. Wilson ..... Salt Lake City, Utah
W. N. Jibson (project engineer) ..... Logan, Utah

CALENDAR FOR WATER YEAR 1958

OCTOBER 1957

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 1957

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 1957

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 1958

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 1958

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 1958

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 1958

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 1958

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 1958

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 1958

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 1958

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 1958

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, 1958

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, 1958. 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 14,000 gaging stations in the 48 States and at many others in the Territories of Alaska and Hawaii. On September 30, 1958, the Geological Survey and cooperating organizations were maintaining 7,090 gaging station, including those in Alaska and Hawaii. Partial-record stations for low flow or for flood flow have been operated at many other points. In addition, discharge measurements are made at miscellaneous sites. The records for the water year October 1, 1957, to September 30, 1958, at gaging stations, partial-record stations, and miscellaneous sites in The Great Basin are given in this report.

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 Water Resources, H. O. Banks, director.

Idaho: State Department of Reclamation, M. R. Kulp, State reclamation engineer, succeeded by G. N. Carter.

Nevada: Department of Conservation and Natural Resources, H. A. Shamberger, director; Office of State Engineer, Edmund Muth.

Oregon: Office of State Engineer, L. A. Stanley.

Utah: Office of State Engineer, W. D. Criddle; Utah Water & Power Board, Charles Redd, chairman, and J. R. Bingham, director and Cedar City, A. E. Anderson, mayor.

Wyoming: Office of State Engineer, Earl Lloyd.

Work in the Bear River basin (exclusive of Malad Valley) was done under cooperative agreements with the State Department of Reclamation of Idaho, Utah Water and Power Board, and the Office of State Engineer of Wyoming; individual agreements with the three States were replaced on July 1, 1958, by a single cooperative agreement with the Bear River Commission, E. O. Larson, chairman.

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 and 5 in Nevada.

Assistance was also furnished by the Forest Service and the Soil Conservation Service of the Department of Agriculture; the Fish and Wildlife Service and the Bureau of Reclamation of the United States Department of the Interior.

The following organizations aided in collecting records:

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 or river basin	District office	Address
California a/	Menlo Park	4 Homewood Place.
Nevada	Salt Lake City, Utah	467 Federal Building.
Oregon b/	Portland	1001 NE. Lloyd Boulevard.
Utah c/	Salt Lake City	467 Federal Building.
Bear River basin d/	Logan, Utah (project office)	170 N. Main Street.
Malad River basin, Idaho	Boise	914 Jefferson Street.

a/ Except for stations in Walker Lake, Carson River, and Truckee River basins.
b/ The work in Oregon was done in collaboration with L. A. Stanley, State engineer.
c/ 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.
d/ Except stations in Malad River basins and stations 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. Some gaging-station records for California have been analyzed by electronic computer to give: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for periods of 7, 15, 30, 60, 120, and 183 consecutive days in each year; and (3) the highest mean discharge for periods of 3, 7, 15, 30, and 120 consecutive days in each year. Provisional records of discharge, information on the availability of electronic computer results, and other unpublished data concerning the gaging-station records may generally be obtained from the district offices.

DEFINITION OF TERMS AND ABBREVIATIONS

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

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied herein only to those gaging stations where a continuous record of discharge is obtained.

Partial-record station is a particular site where limited streamflow data are collected systematically over a period of years for use in hydrologic analyses.

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 (in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Acre-foot (ac-ft) is the quantity of water required to cover an acre to the depth of 1 foot and is equivalent to 43,560 cubic feet.

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, 1.983471 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.

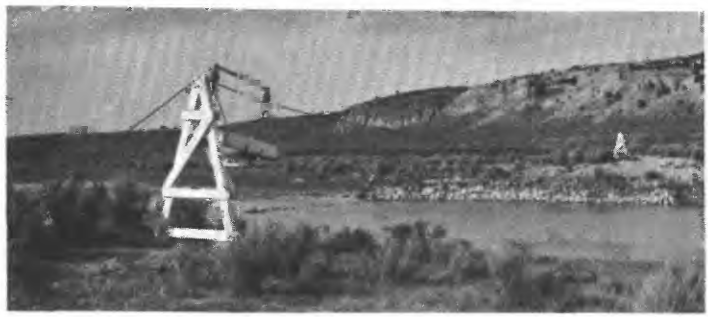
DOWNSTREAM ORDER AND STATION NUMBERS

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.

As an added means of identification, each gaging station and partial-record station has been assigned a station number. The numbers have been assigned in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and regular gaging stations, so that the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete number for each station has eight digits, but the station number as shown in this report, just to the left of the station name, consists of only the essential digits of the complete number. For example, for a station with the complete number 10-0115.00, the station number shown in this report is 115. The notation in the two places to the left of the hyphen is the part number; it is (10) for all stations in this report, with one exception, and is therefore omitted. The exception is the transmountain diversions from Colorado River basin which were numbered as part 9 stations. For those stations the "9-" is shown in the station number.

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.

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 measurements, 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 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 herein presented generally comprise a description of the station, a skeleton rating table, and a table showing the daily discharge and monthly and yearly discharge 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 1958 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 year)" have 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 recorder, 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. Discharge 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 monentary 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 published each year for all reservoirs for which records are published on a daily basis, but it is not published for reservoirs for which only monthly data are given.

At many gaging stations water samples are collected from the streams for the purpose of making chemical analyses, computing dissolved solids, suspended sediment loads, and particle-size distribution, or measuring water temperatures. For most of these samples the results are published in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States" which is issued in four volumes. In this report under "Remarks" a reference is made to quality-of-water records collected at gaging stations on a regular basis and published in the quality-of-water reports. At many other gaging stations quality-of-water data are obtained at irregular intervals and published as "miscellaneous analyses" in quality-of-water reports; such records are not referred to in "Remarks" paragraph in this report. At many gaging stations water temperature is obtained also at the time a discharge measurement is made; such temperature readings are not reported in the quality-of-water annual reports.

Data collected at partial-record stations and at miscellaneous sites are given at the end of each report. Partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements at miscellaneous sites are given in a third table. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are given in special tables after the list of measurements at miscellaneous sites.

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.

Discharge 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 of runoff in inches are not published unless satisfactory adjustments can be made for diversions, 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 columes 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.

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.

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

(A = Annual Reports; B = Bulletin)

Report	Character of data	Year
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. Also, records for all stations in California from the beginning of record through September 1910 have been republished in WSP 300 with some revisions, superseding all earlier reports for those 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, 1899-1958

Year	WSP	Year	WSP	Year	WSP	Year	WSP	Year	WSP
1899	38	1912	330	1925	610	1937	830	1949	1150
1900	51	1913	360	1926	630	1938	860	1950	1180
1901	66,75	1914	390	1927	650	1939	880	1951	1214
1902	85	1915	410	1928	670	1940	900	1952	1244
1903	100	1916	440	1929	690	1941	930	1953	1284
1904	133	1917	460	1930	705	1942	960	1954	1344
1905	176	1918	480	1931	720	1943	980	1955	1394
1906	212	1919-20	510	1932	735	1944	1010	1956	1448
1907-8	250	1921	530	1933	750	1945	1040	1957	1514
1909	270	1922	550	1934	765	1946	1060	1958	1564
1910	290	1923	570	1935	790	1947	1090		
1911	310	1924	590	1936	810	1948	1120		

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. Also, records for all stations in California from the beginning of record through September 1910 have been republished in WSP 300 with some revisions, superseding all earlier reports for those stations.

A compilation of records for the area covered by this report through September 1950 has been published in Water-Supply Paper 1314. That report contains a summary of monthly and annual discharges for all previously published records as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Extimates of discharge were made to fill short gaps whenever practical.

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.
1227-D:	Summary of floods in the United States during 1951.
1260-E:	Floods of 1952 in Nevada and Utah.
1260-F:	Summary of floods in the United States during 1952.

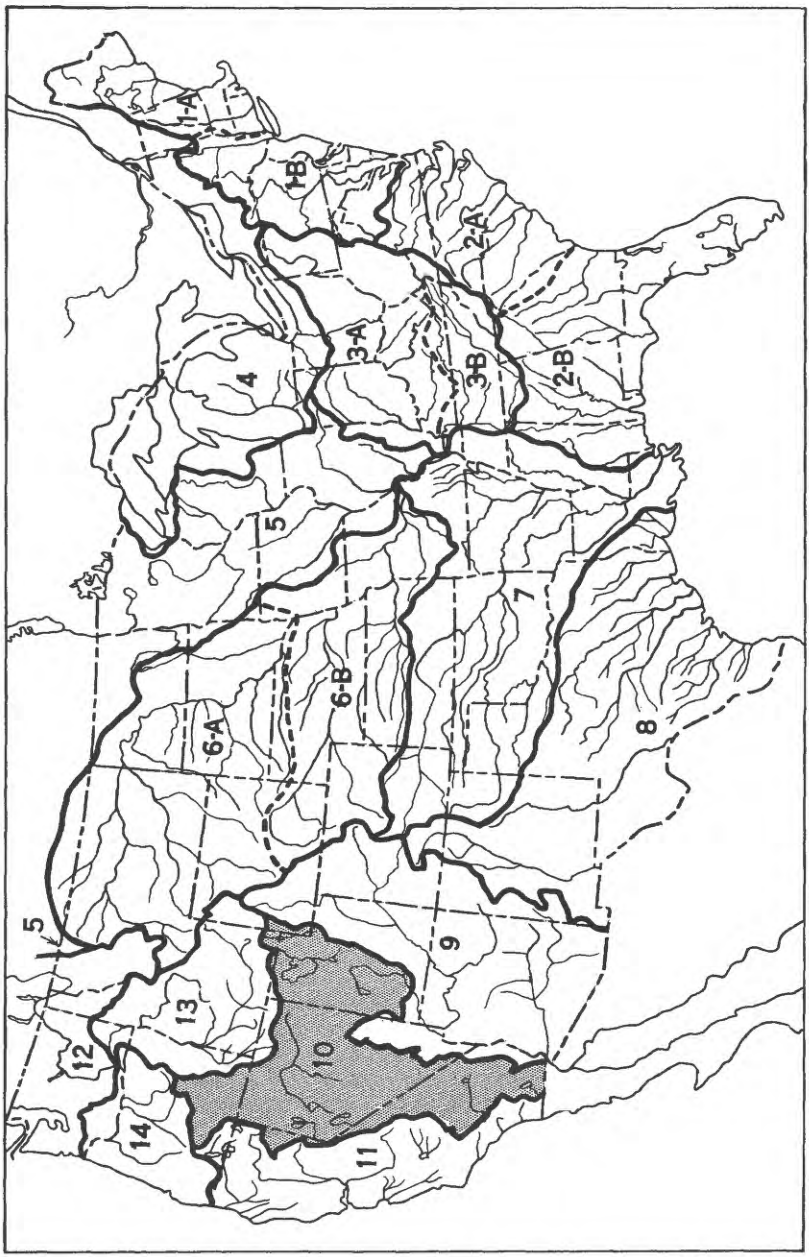

Figure 2.--Map of the United States showing areas covered by the 18 annual volumes on surface water supply. The area covered by this report is shaded.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

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 1957 to September 1958 by agencies other than the Geological Survey. The records of these stations are not contained in publications of the Geological Survey. 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
Blackwood Creek..	Near Tahoe, Calif.....	1957-58	California Department of Water Resources.
City Creek.....	Salt Lake City, Utah, near mouth of canyon.	1898-1958 a/	Salt Lake City.
Big Cottonwood Creek.	....do.....	1898-1958 a/	Do.
Donner Creek.....	Above Gold Creek near Truckee, Calif.....	1929-58	Sierra Pacific Power Co.
Emigration Creek.	Salt Lake City, Utah, near mouth of canyon.	1898-1958 a/	Salt Lake City.
Ephraim Creek....	Near Ephraim, Utah.....	1914-58	Intermountain Forest & Range Experiment Station.
Little Cottonwood Creek.	Salt Lake City, Utah, near mouth of canyon.	1898-1958 a/	Salt Lake City.
Mill Creek.....	Salt Lake City, Utah, near mouth of canyon.	1898-1958 a/	Salt Lake City.
Otter Creek Outlet.	Antimony, Utah, at former Geological Survey gaging station near Coyote.	1920-58 b/	Sevier River water commissioner.
Parleys Creek....	Salt Lake City, Utah, near mouth of canyon.	1898-1958 a/	Salt Lake City.
Sevier River.....	Delta, Utah, at former Geological Survey gaging station.	1920-58 b/	Sevier River water commissioner.
Trout Creek.....	Near Tahoe Valley, Calif.....	1957-58	California Department of Water Resources.
Truckee River....	At Derby Dam, Nev.....	1907-10 c/ 1926-58	Federal Court Watermaster for Truckee River and Truckee-Carson Irrigation District.
Do.....	Near Myers, Calif.....	1957-58	California Department of Water Resources.
Do.....	At Vista, Nev.....	1899-1907 c/ 1927-58	Federal Court Watermaster for Truckee River.
Walker River.....	Near Wabusha, Nev.....	1902-8 c/, 1920-34 c/, 1940-58	Walker River Irrigation District.

a/ Records prior to 1913 are contained in water-supply papers published by the Geological Survey.
b/ Published in the annual reports of Sevier River water commissioner.
c/ Published in water-supply papers by the Geological Survey.

HYDROLOGIC CONDITIONS

Runoff was generally above median throughout the water year except in Southern California where it was below median in October, November, August, and September. Excessive runoff occurred at times but no noteworthy floods covering large drainage areas occurred. Two cloudburst type floods in Northern Utah were outstanding. Flash floods occurred in the drainage basin of Beaver Dam Creek, a tributary to the Bear River, on July 30, and one in Round Valley, a tributary to the Weber River, on August 16. Measured rates of runoff from small drainage areas were 2,480 and 3,880 cfs per square mile, respectively. These are the highest rates of runoff measured by the Geological Survey in the northern part of Utah. For three key gaging stations in the area covered by this report, a comparison of the monthly and yearly mean discharges during the 1958 water year with the median for the 25-year period (1921-45) is shown in figure 3 on the following page.

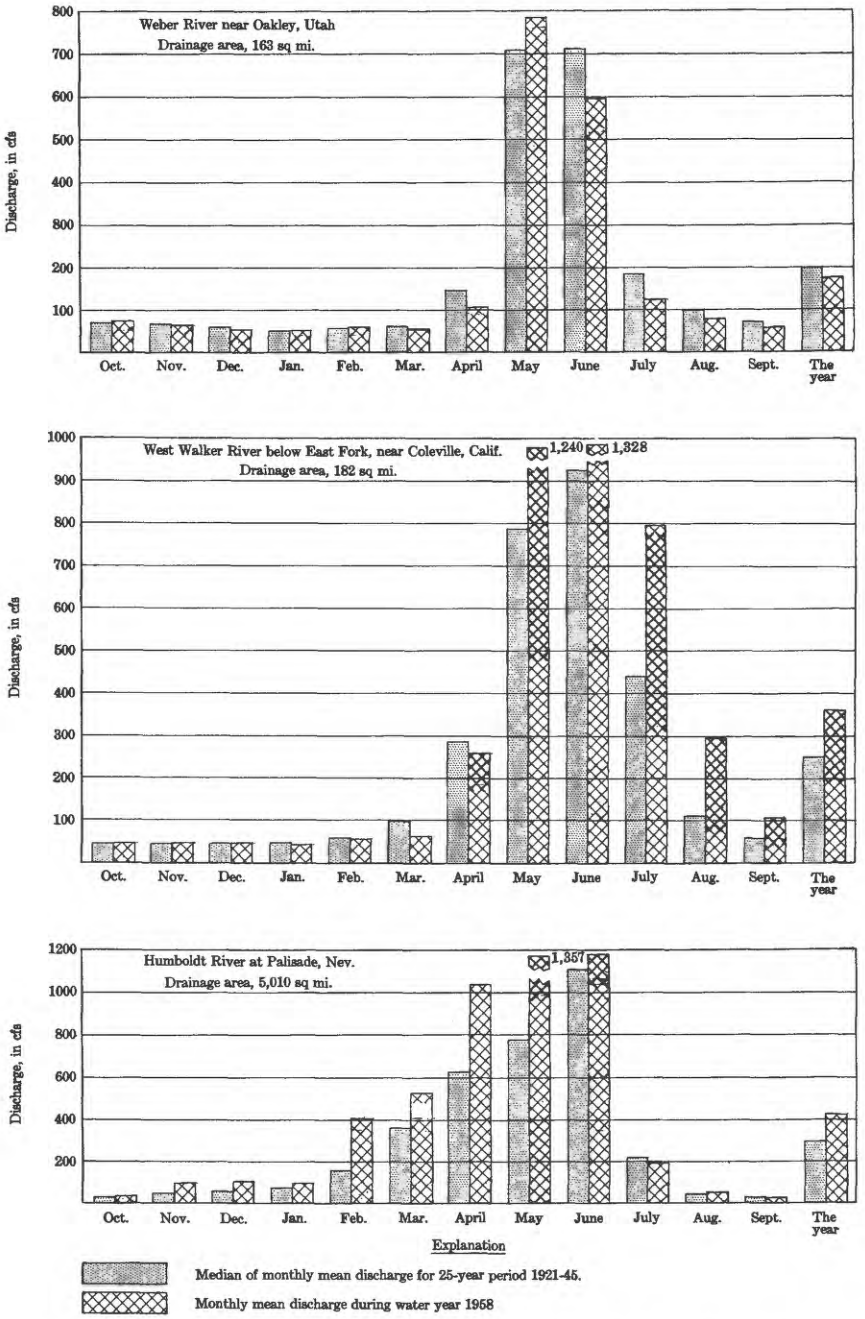

Figure 3. Comparison of discharge at three key gaging stations during 1958 water year with median discharge for 25-year period.

GREAT SALT LAKE BASIN

100. 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.

Records available.--September 1875 to December 1899, March to July 1904, and October 1912 to September 1958 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. 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. Staff gage at Midlake October 1902 to September 1956 at datum 4,197.9 ft above mean sea level, datum of 1929.

Extremes.--Maximum elevation during year, 4,197.4 ft May 1, 15, June 1; minimum, 4,195.7 ft Sept. 15.

1875-99, 1903-58: Maximum elevation observed, 4,210.9 ft June 30, 1876; minimum, 4,193.7 ft Oct. 15, Nov. 1, 1940.

Maximum elevation since 1851, 4,211.6 ft in 1873, computed from traditional data by E. C. LaRue.

Remarks.--To compensate for wind effect, elevations given for the 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 may cause substantial changes in elevation which are not shown in the published elevations.

Gage height and elevation, in feet, water year October 1957 to September 1958

Day		Gage height	Elevation
Oct.	1	9.1	4,196.0
	15	9.05	4,195.95
Nov.	1	8.95	4,195.85
	15	9.0	4,195.9
Dec.	1	9.05	4,195.95
	15	9.1	4,196.0
Jan.	1	9.25	4,196.15
	15	9.35	4,196.25
Feb.	1	9.45	4,196.35
	15	9.6	4,196.5
Mar.	1	9.9	4,196.8
	15	9.95	4,196.85
Apr.	1	10.05	4,196.95
	15	10.35	4,197.25
May	1	10.5	4,197.4
	15	10.5	4,197.4
June	1	10.5	4,197.4
	15	10.25	4,197.15
July	1	10.05	4,196.95
	15	9.85	4,196.75
Aug.	1	9.45	4,196.35
	15	9.3	4,196.2
Sept.	1	9.0	4,195.9
	15	8.8	4,195.7

105. 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 300 ft downstream from road bridge, three-quarters of a mile downstream from head, and 25 miles southeast of Evanston.

Records available.--October 1949 to September 1958 in reports of Geological Survey. April 1944 to September 1949 (irrigation season only) in reports of Bear River Hydrometric Data (U. S. Geological Survey open-file report).

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

Average discharge.--9 years (1949-58), 5.95 cfs (4,310 acre-ft per year).

Extremes.--1949-58: Maximum daily discharge, 42 cfs June 15, 1956; no flow during winter and at other times each year except 1958.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Canal diverts from East Fork Bear River for irrigation of about 2,600 acres in Hilliard Flat area in Wyoming.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.0	1.0							18	11	7.4	4.4
2	7.0	1.0							9.7	12	7.0	3.8
3	9.2	1.0						2.0	.6	12	6.8	3.8
4	9.2	1.0							4.0	12	6.8	3.8
5	8.8	1.0							13	11	6.7	3.8
6	8.6							*2.4	32	11	6.7	3.9
7	7.8						0.2	2.0	33	10	6.7	4.2
8	7.4			0.3				2.4	32	8.2	6.5	4.2
9	7.4							2.0	31	8.0	6.5	4.4
10	7.0							5.1	30	8.0	6.7	4.4
11	7.2							16	*29	14	6.7	4.4
12	7.2							16	29	14	6.7	4.8
13	7.0	(**)						16	30	14	*6.8	5.1
14	7.6							15	35	*14	7.0	5.0
15	7.8		0.5		0.2	0.2		15	35	14	7.0	4.8
16	7.0			(**)				14	35	15	6.8	4.8
17	6.8		(**)					16	36	9.5	6.8	
18	*3.4	.5						20	35	.4	7.0	
19	1.6							20	36	.4	7.0	
20	2.0							*19	35	.4	6.7	4.5
21	1.9							17	35	.4	6.8	
22	1.9						.5	15	34	3.1	6.8	
23	1.8							16	30	4.1	7.0	
24	1.8			.2				16	26	8.6	7.0	
25	1.8							16	26	8.4	6.7	
26	1.7							16	25	8.2	6.7	.2
27	1.6							16	24	8.0	5.6	
28	1.5							16	23	7.8	5.0	
29	1.4				-			16	23	7.4	4.6	
30	1.4				-------			16	*17	7.4	4.5	6.0
31	1.4	-------			-------		-------	16	-------	7.6	4.4	-------
Total	155.2	17.5	15.5	7.7	5.6	6.2	11.1	366.9	801.3	269.9	201.4	108.3
Mean	5.01	0.58	0.5	0.25	0.2	0.2	0.37	11.8	26.7	8.71	6.50	3.61
Ac-ft	308	35	31	15	11	12	22	728	1,590	535	399	215

Calendar year 1957: Max 38 Min 0 Mean 4.75 Ac-ft 3,440
Water year 1957-58: Max 36 Min - Mean 5.39 Ac-ft 3,900

* Discharge measurement made on this day.
** Field estimate made on this day.
Note.--No gage-height record Nov. 4 to May 5, July 9-13, Sept. 17-30; discharge estimated on basis of 3 field estimates, weather records, recorded range in stage, and record for Bear River near Utah-Wyoming State line.

115. 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 1958.

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

Average discharge.--16 years, 189 cfs (136,800 acre-ft per year).

Extremes.--Maximum discharge during year, 1,920 cfs May 28 (gage height, 3.54 ft); minimum, 25 cfs Apr. 10, but may have been less during periods of ice effect.
1942-58: Maximum discharge, 2,800 cfs June 6, 1957 (gage height, 4.27 ft); minimum determined, 16 cfs Apr. 11, 1951, Nov. 5, 1954, Nov. 1, 1955, Oct. 30, 1956.

Remarks.--Records good except those for periods of ice effect, which are fair. Two diversions above station for irrigation of about 200 acres above and 2,600 acres below station.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.7	28	1.2	96	2.2	550
.8	36	1.5	183	2.7	945
1.0	59	1.8	312	3.4	1,670

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	54	b48		b40		40	84	1,020	244	51	33
2	42	48	b48		b40		40	106	1,100	214	48	31
3	55	54	b48		42		38	137	*1,030	199	47	30
4	68	51	b48		40		38	183	1,000	214	42	32
5	58	58	47		40	b44	38	244	1,000	176	42	32
6	61	52	48		40		40	*322	1,170	166	40	31
7	54	59	47		b40		40	375	1,440	156	38	30
8	48	55	48		b40	44	40	343	1,290	149	38	30
9	48	50			40	44	38	381	992	143	36	31
10	47	51			40	b44	36	458	800	134	36	30
11	47	54	b48		40	b44	38	564	710	120	34	30
12	48	51		b40	*b41	b42	36	578	628	115	34	35
13	47	*52			42	42	38	446	523	106	34	78
14	50	52			40	42	42	381	496	*103	*38	48
15	52	55	48		42	42	51	322	516	101	38	42
16	48	50	48	(*)	40	40	62	312	523	98	36	40
17	50	b45	*48		42	b39	80	404	523	88	36	40
18	*48	b43	b48		44	*36	115	571	550	90	40	40
19	55	b41	b48		42	42	116	775	*557	86	44	38
20	59	b42	b48		42	40	115	1,000	543	84	36	38
21	59	b42	b48		42	38	115	1,110	510	82	36	35
22	58	b44			42	38	103	1,150	471	76	38	34
23	56	b47			46	38	88	1,220	452	71	38	35
24	61	b48		42	44	38	76	1,360	446	64	35	36
25	55	51		42	44	38	73	1,370	421	61	33	36
26	54	55	b45	40	44	38	69	*1,490	354	59	32	36
27	56	b50		40	b42	42	71	1,650	312	58	33	36
28	58	b48		40	b42	40	68	1,630	298	55	42	36
29	50	b48		42	-	38	69	1,480	270	52	42	34
30	56	b48		42	-------	40	74	1,380	252	54	36	30
31	56	-------		40	-------	38	-------	1,080	-------	56	33	-------
Total	1,648	1,498	1,456	1,248	1,163	1,277	1,889	22,906	20,197	3,474	1,186	1,087
Mean	53.2	49.9	47.0	40.3	41.5	41.2	63.0	739	673	112	38.3	36.2
Ac-ft	3,270	2,970	2,890	2,480	2,310	2,530	3,750	45,430	40,060	6,890	2,350	2,160

Calendar year 1957: Max 2,120 Min - Mean 239 Ac-ft 172,800
Water year 1957-58: Max 1,650 Min 30 Mean 162 Ac-ft 117,100

Peak discharge (base, 1,100 cfs).--May 28 (1:30 a.m.) 1,920 cfs (3.54 ft); June 8 (12:30 a.m.) 1,750 cfs (3.50 ft).

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

120. 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 1958.

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

Average discharge.--9 years, 34.1 cfs (24,690 acre-ft per year).

Extremes.--Maximum discharge during year, 450 cfs May 21 (gage height, 3.51 ft); minimum, 1.6 cfs Sept. 6.
1949-58: Maximum discharge, 690 cfs June 7, 1957 (gage height, 4.39 ft); minimum, 0.9 cfs Nov. 11, 1951, result of freezeup.

Remarks.--Records good except those for periods of ice effect, which are fair. Three small diversions for irrigation of hay meadows above station.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.3	1.4	0.8	13	2.0	143
.4	2.6	1.0	24	2.4	213
.5	4.1	1.3	50	2.9	308
.6	6.2	1.6	86		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.4	12			8.7		b8.7	35	156	10	5.4	2.6
2	8.2	9.4			9.4		b8.7	46	162	9.4	5.4	2.6
3	11	11			9.4		8.7	63	145	9.4	4.0	2.5
4	15	12			9.0		9.0	83	132	9.4	4.0	2.1
5	13	12	b11		9.0	b7.5	8.4	105	131	9.0	3.8	2.0
6	14	12			9.0		7.6	*134	151	8.7	3.8	1.9
7	12	12			9.0		8.2	120	149	8.2	4.1	2.1
8	11	12	11		9.0	7.6	8.4	81	99	7.9	3.4	2.4
9	11	11	10		8.7	8.2	8.4	98	74	7.6	3.8	2.8
10	10	12	9.8		8.7	8.2	7.3	122	63	7.6	3.0	2.8
11	11	12	10		8.2	7.9	8.4	149	*56	7.3	2.8	3.4
12	11	12	10		8.7	8.2	7.9	166	51	6.0	2.9	4.0
13	11	*11	11	b10	*9.0	8.2	8.7	128	44	5.2	*2.8	7.3
14	13	11	12		9.0	7.9	10	99	38	*4.3	3.0	5.2
15	15		11		8.7	8.2	13	83	35	4.9	3.8	4.1
16	12		11	(*)	8.2	b8.0	18	78	31	5.8	3.8	3.8
17	13		*10		7.9	b8.2	27	109	29	5.2	4.9	3.6
18	*12		11		7.9	*8.4	44	156	27	4.9	5.6	3.5
19	13		12		7.9	8.7	47	171	25	4.9	5.8	3.5
20	16		11		8.2	8.7	48	217	24	5.4	5.6	3.4
21	14		11		7.9	8.7	49	278	21	6.0	4.5	3.5
22	13	b11	11		8.4	9.4	36	291	20	4.3	6.2	3.5
23	12				9.4	9.0	27	268	17	4.5	5.2	4.1
24	14				10	9.0	21	281	16	5.4	4.0	4.9
25	12				10	9.4	24	264	18	4.0	2.4	5.4
26	11		b10	9.8	8.4	b9.6	20	*304	19	4.3	2.6	5.2
27	12			9.4	7.6	9.8	21	302	15	4.7	2.8	5.4
28	13			9.8	7.9	10	21	293	13	3.8	4.1	5.6
29	11			9.4	-	9.0	22	260	12	3.8	4.1	4.7
30	12			9.0	-------	9.0	28	234	11	4.5	3.4	4.9
31	12	-------		9.0	-------	b9.0	-------	178	-------	5.6	3.4	-------
Total	376.6	337.4	328.8	306.4	243.2	260.8	586.4	5,196	1,784	192.0	124.4	112.8
Mean	12.1	11.2	10.6	9.88	8.69	8.41	19.5	168	59.5	6.19	4.01	3.76
Ac-ft	747	669	652	608	482	517	1,160	10,310	3,540	381	247	224

Calendar year 1957: Max 497 Min - Mean 50.2 Ac-ft 36,340
Water year 1957-58: Max 304 Min 1.9 Mean 27.0 Ac-ft 19,540

Peak discharge (base, 250 cfs).--May 11 (11 p.m.) 251 cfs (2.60 ft); May 21 (10 p.m.) 450 cfs (3.51 ft).

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

157. Sulphur Creek above reservoir, near Evanston, Wyo.

Location.--Lat 41°09', long 110°48', in SW¼ sec. 35, T. 14 N., R. 11 W., on right bank 11 miles downstream from Willow Creek, 2 miles upstream from Sulphur Creek Dam, and 11½ miles southeast of Evanston.

Drainage area.--64 sq mi, approximately.

Records available.--December 1957 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 7,170 ft (from river-profile map).

Extremes.--Maximum discharge during year, 560 cfs Apr. 18 (gage height, 5.07 ft), from rating curve extended above 100 cfs by logarithmic plotting; no flow many days.

Remarks.--Records good except those for period of ice effect, which are fair.

Discharge, in cubic feet per second, December 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				2.7				22	12	0.8		0
2				2.7				24	9.5	.4		0
3			1.4	2.7	3.2			26	9.8	.3		0
4				2.9				25	8.6	.3		0
5			(*)					26	7.5	.2		0
6			1.8					*29	7.5	.3		0
7			2.2					27	7.2	.3		0
8			2.5				6.0	19	6.2	.5		0
9			2.5				(*)	*20	5.9	.7		0
10			2.5			3.5		23	5.4	.7		0
11			3.0					28	5.7	.5		0
12			3.0		(*)			37	4.8	.4		0
13			3.0					37	4.8	.2		0
14			3.3					43	4.8	.1		0
15				3.0				58	4.8	**.1		.1
16				(*)			10	55	4.8	.4		.1
17			(*)		3.5		*125	40	3.3	.5		.1
18							292	44	3.0	.4		0
19							146	45	*3.1	.1		.1
20						4.0	105	*53	3.4	.1		.1
21						*4.5	73	51	3.6	.1		0
22			3.5			5.2	47	61	4.1	0		0
23							*29	45	3.8	0		0
24							27	40	3.3	0		0
25							37	34	6.2	0		0
26						6.0	36	32	8.1	0		0
27							28	*29	4.1	0		.1
28							21	23	2.0	0		.2
29				3.2	-		20	17	1.6	0		.2
30					-------		20	15	.9	0		.2
31		-------	2.7		-------		-------	13	-------	0		-------
Total			89.5	93.2	96.5	134.2	1,106.0	1,041	159.8	7.4	0	1.2
Mean			2.89	3.01	3.45	4.33	36.9	33.6	5.33	0.24	0	0.04
Ac-ft			178	185	191	266	2,190	2,060	317	15	0	2.4

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 292 Min 0 Mean - Ac-ft -

* Discharge measurement made on this day.
** Field estimate made on this day.
Note.--Stage-discharge relation affected by ice Dec. 1 to Apr. 17.

159. Sulphur Creek below reservoir, near Evanston, Wyo.

Location.--Lat 41°09', long 110°49', in SE¼SE¼ sec. 28, T. 14 N., R. 119 W., on left bank 6.3 miles upstream from mouth and 10½ miles southeast of Evanston.

Drainage area.--68 sq mi, approximately.

Records available.--March to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 7,110 ft (from river-profile map)

Extremes.--Maximum discharge during year, 82 cfs July 14, 15 (gage height, 2.82 ft); no flow many days.

Remarks.--Records good. Flow regulated by Sulphur Creek reservoir (capacity, 4,600 acre-ft) completed December 1957.

Discharge, in cubic feet per second, March to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	4.0	11	2.8	*32	9.4
2							0	3.2	6.6	0	31	9.8
3							0	0	0	0	29	9.8
4							0	0	0	0	*24	9.4
5							0	0	0	0	21	9.4
6							0	0	0	0	21	8.8
7							0	0	0	0	21	8.8
8							0	0	0	0	21	8.4
9						(*)	*0	0	0	15	31	8.1
10							0	0	0	*62	39	9.4
11							0	19	0	71	*42	14
12							0	56	0	70	43	14
13							0	56	0	70	*42	13
14							0	56	0	76	42	13
15							0	56	0	*77	38	12
16							0	56	0	69	36	7.2
17							*0	57	4.6	66	34	7.2
18							0	57	14	54	*36	7.5
19							0	57	*13	46	36	7.5
20							0	57	8.8	46	35	7.2
21						(*)	0	57	8.8	48	27	7.2
22							1.5	58	8.8	51	22	6.8
23							*4.4	58	13	47	14	6.8
24							34	54	24	40	7.5	3.5
25							58	42	16	38	8.1	2.0
26							58	42	6.5	38	8.4	1.9
27							57	*31	6.5	37	8.4	1.6
28							57	11	13	37	8.8	1.6
29					-		48	11	18	36	9.1	1.6
30					-------		5.0	11	11	34	9.1	1.5
31		-------			-------		-------	11	-------	33	9.1	-------
Total						0	322.9	920.2	183.6	1,163.8	785.5	228.4
Mean						0	10.8	29.7	6.12	37.5	25.3	7.61
Ac-ft						0	640	1,830	364	2,310	1,560	453

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 77 Min 0 Mean - Ac-ft -

* Discharge measurement or observation of no flow made on this day.

160. 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 1958 (fragmentary prior to July 1942).

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.

Extremes.--Maximum discharge during year, 199 cfs Apr. 17 (gage height, 3.42 ft); minimum, 0.4 cfs July 8, 9.
1942-58: Maximum discharge, 1,220 cfs Apr. 23, 1952; 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, which are fair. Natural flow of stream affected by diversions for irrigation, return flow from irrigated areas, and regulation by Sulphur Creek Reservoir (capacity, about 4,600 acre-ft) completed December 1957.

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

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.4	0.2	2.0	17
1.5	1.2	2.3	35
1.6	3.2	2.7	72
1.8	8.9	2.9	98

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.6	6.0	9.5	4.9	3.6		3.0	11	13	3.9	34	8.6
2	2.4	6.2	9.5	4.9	3.6		4.2	9.6	8.6	1.0	34	8.2
3	2.8	6.3	9.5	4.6	3.6	5.0	3.9	4.6	1.8	.8	33	7.9
4	3.9	6.3	6.0	4.4	3.6		3.0	3.9	1.6	.8	29	8.2
5	4.4	3.2	2.6	4.4	3.9		3.4	3.6	1.4	.8	27	8.2
6	4.2	3.4	*2.2	4.4	4.2		3.5	3.2	2.6	.6	27	8.2
7	3.2	5.4	2.2	4.2	3.9		3.6	*3.2	3.4	.6	27	7.9
8	3.0	7.0	2.2	4.2	3.9		3.2	3.2	3.2	.6	27	7.9
9	3.6	7.2	2.2	4.2	3.9		*3.9	3.9	2.8	10	36	8.2
10	3.9	7.4		4.2	3.9		4.4	3.0	3.0	58	42	9.6
11	3.9	7.6		4.2	3.9		4.4	20	3.4	68	44	15
12	4.2	9.3	2.5	4.2	*3.9		6.3	61	3.2	68	48	15
13	4.4	*10		4.2	4.2		9.6	61	3.6	68	*46	15
14	4.4			4.2	4.2		20	69	2.8	72	46	14
15	3.4			3.9	4.2		42	69	3.2	*76	43	12
16	4.6	10	3.5	*3.9	4.2	2.5	70	68	8.9	68	40	7.3
17	*4.9		*3.5	3.9	4.4		*83	62	15	65	39	7.3
18	4.9			3.9	4.6		94	60	21	53	40	7.3
19	5.2			3.9	4.8		36	60	*18	47	40	7.3
20	5.6			3.9	5.0		27	59	16	46	38	7.6
21	6.3			3.9	5.0	(*)	18	59	17	46	30	7.0
22	5.6			3.9	5.0		15	60	19	50	25	7.0
23	5.2			3.9	7.0		13	60	24	45	15	7.0
24	6.3			3.9	8.0		41	55	32	40	9.3	4.2
25	6.0		5.0	3.6	9.0		70	44	25	37	8.9	1.6
26	5.6	9.5		3.6	7.0		78	44	18	37	9.3	1.6
27	6.0			3.6	5.0	3.0	74	*31	21	37	9.3	1.6
28	6.6			3.6	5.0	3.5	68	13	20	37	8.9	1.6
29	6.3			3.6	-	3.5	57	13	18	36	9.3	1.4
30	6.3			3.6	-------	3.5	12	13	12	36	8.6	1.4
31	6.3	-------		3.6	-------	3.5	-------	14	-------	35	8.6	-------
Total	146.0	250.3	137.9	125.4	132.5	94.5	874.4	1,044.2	342.5	1,144.1	882.2	225.1
Mean	4.71	8.34	4.45	4.05	4.73	3.05	29.1	33.7	11.4	36.9	28.5	7.50
Ac-ft	290	496	274	249	263	187	1,730	2,070	679	2,270	1,750	446

Calendar year 1957: Max 419 Min 1.0 Mean 35.5 Ac-ft 25,690
Water year 1957-58: Max 94 Min 0.6 Mean 14.8 Ac-ft 10,700

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 1-3, 9, 10, Nov. 14 to Dec. 31, Feb. 18 to Apr. 1, Apr. 6.

170. 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.--October 1944 to September 1945, October 1949 to September 1958. Records for February 1943 to September 1944 at site 1¼ miles downstream not equivalent, but would be equivalent by adding flow of Wright No. 2 and Cook Canals, in reports on Bear River Hydrometric Data, 1944 (Geological Survey open-file report).

Gage.--Water-stage recorder. Altitude of gage is 6,920 ft (from river-profile map). Prior to Oct. 1, 1944, staff gage at site 1¼ miles downstream and Oct. 1, 1944, to Sept. 30, 1945, water-stage recorder at site 500 ft upstream at different datums.

Average discharge.--10 years (1944-45, 1949-58), 10.3 cfs (7,460 acre-ft per year).

Extremes.--Maximum discharge during year, 53 cfs May 21 (gage height, 2.58 ft); no flow most of year.
1944-45, 1949-58: 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 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 18-22, May 6-25)

0.2	0	0.8	7.2
.3	.1	.9	11
.4	.3	1.1	22
.5	.8	1.5	32
.6	2.1	2.0	42

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						0		13	6.6	0.2		
2						0		15	5.1	1.3		
3						0		16	4.5	.6		
4						0		18	3.8	.2		
5						0	4.0	20	2.9	.2		
6						0		25	2.3	.1		
7						0		*27	2.5	.1		
8						0		27	2.1	.1		
9						0	*4.2	23	1.8	0		
10						0	4.2	27	1.6	0		
11						0	4.5	31	1.2	.4		
12					(*)	0	4.8	34	1.2	2.0		
13		(*)				0	6.0	33	1.3	2.3	(*)	
14						0	9.1	30	1.4	2.1		
15						0	12	30	.9	.8		
16						.6	*18	30	1.3	**.2		
17	(*)		(*)			2.0	*24	33	1.7	.2		
18						2.5	34	40	1.4	.1		
19							39	42	1.3	.1		
20							32	41	*.8	0		
21						(*)	34	42	.2	0		
22							29	40	.2	0		
23							22	42	.2	0		
24							17	35	.2	0		
25						4.0	15	27	.9	0		
26							14	23	1.1	0		
27							12	*21	1.1	0		
28							11	17	1.2	0		
29							11	13	1.3	0		
30					-------		11	9.9	1.3	0		
31		-------			-------		-------	8.0	-------	0		-------
Total	0	0	0	0	0	57.1	399.8	832.9	53.4	12.0	0	0
Mean	0	0	0	0	0	1.84	13.3	26.9	1.78	0.39	0	0
Ac-ft	0	0	0	0	0	113	793	1,650	106	24	0	0

Calendar year 1957: Max 123 Min 0 Mean 9.80 Ac-ft 7,100
Water year 1957-58: Max 42 Min 0 Mean 3.71 Ac-ft 2,690

* Discharge measurement or observation of no flow made on this day.
** Field estimate made on this day.
Note.--Stage-discharge relation affected by ice Mar. 16 to Apr. 8 (no gage-height record Mar. 16-21).

195. Chapman Canal at State line, near Evanston, Wyo.

Location.--Lat 41°24', long 111°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 1958 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 reports of Bear River Hydrometric Data (Geological Survey open-file report).

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

Average discharge.--13 years (1945-58), 16.8 cfs (12,160 acre-ft per year).

Extremes.--1942-58: Maximum daily discharge observed, 129 cfs Apr. 14, 1946; no flow at times each year.

Remarks.--Records good. 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	2.8				0	41	2.1	83	13		
2	0	3.6				0	41	2.1	87	13		
3	0	3.6				0	49	2.1	95	12		
4	0	3.2				0	49	2.1	97	12		
5	.1	4.2				0	49	2.2	90	3.2		
6	.6	3.6				0	46	2.2	83	4.0		
7	.6	3.2				0	50	*3.8	106	4.2		
8	.9	3.4				0	64	21	122	4.2		
9	0	3.8				0	58	20	118	6.0		
10	0	3.0				0	*61	21	98	8.0		
11	0	3.4			(*)	0	64	22	83	12		
12	0	*4.5				0	66	22	80	8.2		
13	0	5.0				0	69	17	73	5.8		
14	0	5.0				0	75	23	58	3.8		
15	0	5.0		(*)		0	80	33	41	2.1		
16	0	5.0				0	55	33	43	*1.2		
17	0	4.5				0	*62	30	54	.2		
18	0	2.8	(*)			0	70	12	64	0		
19	0	3.0				0	66	27	61	.6		
20	0	3.4				15	55	68	*57	.8		
21	0	0				*25	52	70	66	1.6		
22	0	0				25	*48	86	64	2.2		
23	0	0				20	46	81	64	2.2		
24	0	0				18	41	98	58	1.8		
25	0	0				16	42	123	57	1.1		
26	.7	0				10	5.5	104	58	.3		
27	1.5	0				13	3.6	*100	45	0		
28	1.5	0				13	3.0	96	34	0		
29	1.6	0			-	13	2.8	92	25	0		
30	2.1	0			-------	14	2.4	85	17	0		
31	2.2	-------			-------	46	-------	87	-------	0		-------
Total	11.8	76.0	0	0	0	228	1,416.3	1,387.6	2,081	123.5	0	0
Mean	0.38	2.53	0	0	0	7.4	47.2	44.8	69.4	3.98	0	0
Ac-ft	23	151	0	0	0	452	2,810	2,750	4,130	245	0	0

Calendar year 1957: Max 114 Min 0 Mean 21.5 Ac-ft 15,540
Water year 1957-58: Max 123 Min 0 Mean 14.6 Ac-ft 10,560

* Discharge measurement or observation of no flow made on this day.

205. 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 1958.

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

Average discharge.--16 years, 215 cfs (155,700 acre-ft per year).

Extremes.--Maximum discharge during year, 1,460 cfs May 29 (gage height, 3.94 ft); no flow Aug. 21 to Sept. 30.
1942-58: 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, 1954-58.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Diversions for irrigation of about 45,000 acres above station.

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.5	0	1.0	13	2.2	299
.6	.2	1.2	30	2.7	542
.7	1.6	1.5	80	3.3	935
.8	3.4	1.8	158	4.0	1,520

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.1	56					111	192	830	49	0.2	
2	8.1	56					82	196	698	40	.2	
3	8.7	65					89	209	672	33	.2	
4	10	61					74	245	615	36	.2	
5	12	63					61	295	602	24	.2	
					64	85						
6	15	74					58	359	615	24	a.2	
7	19	59					46	455	731	22	a.2	
8	20	63					56	503	907	20	a.2	
9	20	65					63	444	824	19	a.2	
10	22	61					*56	481	621	16	a.2	
			70									
11	20	58					52	560	465	14	a.2	
12	22	67					54	686	368	11	a.2	
13	22	72		60	*66		59	790	316	9.2	a.2	
14	24	*76					69	686	253	6.3	a.2	
15	26	74					101	653	206	6.3	**a.2	
						80						
16	26				72		206	578	*164	*6.8	a.2	
17	*30				75		320	520	149	5.1	a.2	
18	30		(*)		80		514	608	126	2.9	a.1	
19	32				85		660	777	160	2.1	a.1	
20	36	65			95		508	864	80	2.0	a.1	
21	41				100	92	429	1,020	67	2.5	0	
22	46				100	100	359	1,180	65	2.1	0	
23	47				100	115	295	1,280	56	1.8	0	
24	49				100	135	*238	1,300	56	1.5	0	
25	49				95	130	227	1,370	59	1.5	0	
			65									
26	54	70			88	125	276	1,340	138	1.3	0	
27	54				85	120	295	1,360	152	1.2	0	
28	54				85	115	276	*1,400	96	1.2	0	
29	58			64	-	115	242	1,390	70	.8	0	
30	58			(*)	-------	115	227	1,240	54	.6	0	
31	52	-------			-------	113	-------	1,100	-------	.5	0	-------
Total	972.9	1,980	2,115	1,884	2,130	2,925	6,103	24,081	10,161	353.7	3.7	0
Mean	31.4	66.0	68.2	60.8	76.1	94.4	203	777	339	11.4	0.12	0
Ac-ft	1,930	3,930	4,200	3,740	4,220	5,800	12,110	47,760	20,150	702	7.3	0

Calendar year 1957: Max 2,280 Min 6.3 Mean 281 Ac-ft 203,600
Water year 1957-58: Max 1,400 Min 0 Mean 144 Ac-ft 104,500

Peak discharge (base, 1,300 cfs).--May 29 (11 a.m.) 1,460 cfs (3.94 ft).

* Discharge measurement made on this day.
** Field estimate made on this day.
a No gage-height record; discharge estimated on basis of 1 field estimate, weather records, and diminishing flow characteristics.

210. 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 1958 in reports of Geological Survey. October 1937 to September 1943 records for site 1½ miles upstream available in files of Logan project office, Geological Survey, under name of South Fork Woodruff Creek near Woodruff.

Gage.--Water-stage recorder. Altitude of gage is 6,600 ft (from topographic map). Prior to June 21, 1939, staff gage half a mile downstream at different datum. June 22, 1939, to Sept. 30, 1943, water-stage recorder at site 1½ miles upstream at different datum.

Average discharge.--9 years (1949-58), 34.5 cfs (24,980 acre-ft per year).

Extremes.--Maximum discharge during year, 329 cfs May 21 (gage height, 4.94 ft); minimum, 5.7 cfs Dec. 22 (result of freezeup).
1949-58: Maximum discharge, 528 cfs May 25, 1950 (gage height, 5.72 ft); minimum, 1.9 cfs Feb. 26, 1957 (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.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used July 13 to Aug. 4)

1.4	8.7	2.0	53	3.5	187
1.6	20	2.5	96	4.0	235
1.8	36	3.0	140	5.0	335

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	12	11	b8.6		17	14	34	76	19	9.2	7.8
2	11	12	11	b8.6		16	13	41	68	18	8.7	7.8
3	12	12	11			14	13	55	63	18	8.7	7.8
4	13	13	b11			13	13	68	56	18	8.3	7.8
5	13	13	11		10	12	13	*81	48	18	8.3	7.4
6	13	13	*11	b9.0		12	13	103	47	18	8.3	7.4
7	13	13	11			11	13	*118	46	17	8.3	7.4
8	13	12	11				13	100	42	17	8.3	8.3
9	12	11	11		9.8		14	95	40	16	8.3	8.3
10	13	12	b11		10		*14	118	38	16	8.5	8.5
11	13	13	b11		*10		14	136	38	14	8.3	8.3
12	13	*13	b10	9.0	10		14	136	37	13	8.3	8.7
13	13	13	10		11		16	118	35	12	8.3	10
14	12	13	10		10	11	19	105	35	11	8.7	9.2
15	12	13	10		11		24	96	33	12	*9.8	8.7
16	12	12	10		13		34	107	*31	*12	8.7	8.7
17	*12	11	11	(*)	13		45	146	30	12	8.7	8.7
18	13	13	*10		13		*67	188	29	11	8.7	8.7
19	13	13	9.8		13		63	234	27	11	8.7	8.7
20	13	12	10	9.4	16	*12	54	273	26	12	8.3	8.7
21	13	b12	9.8		17	13	64	309	26	12	8.7	8.7
22	13	b12	9.8		18	14	60	305	25	12	8.7	8.7
23	13	12	b9.8		19	14	42	268	24	11	9.2	8.7
24	13	11	b9.8		20	16	33	281	24	11	8.7	8.7
25	13	11	9.8		22	17	28	253	25	11	8.3	8.7
26	13	12	9.2		25	17	26	230	24	11	7.8	9.2
27	13	b11	9.8		22	16	26	197	22	10	7.8	9.2
28	13	11	9.2	10	19	17	26	*160	20	10	7.8	9.2
29	12	b11	9.2		-	17	27	126	20	9.8	8.3	9.2
30	12	b11	9.2	(*)	-------	18	30	107	19	9.8	8.3	9.2
31	12	-------	b9.2		-------	19	-------	86	-------	9.2	8.3	-------
Total	390	363	316.6	288.2	381.8	417	845	4,674	1,074	411.8	263.1	256.2
Mean	12.6	12.1	10.2	9.30	13.6	13.5	28.2	151	35.8	13.3	8.49	8.54
Ac-ft	774	720	628	572	757	827	1,680	9,270	2,130	817	522	508

Calendar year 1957: Max 256 Min - Mean 31.4 Ac-ft 22,760
Water year 1957-58: Max 309 Min 7.4 Mean 26.5 Ac-ft 19,200

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 10 to Feb. 8, Feb. 22 to Mar. 20; discharge estimated on basis of 3 discharge measurements, weather records, and records for South Fork Ogden River near Huntsville.

230. 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 1958. March 1939 to September 1944 (fragmentary), at site a quarter of a mile downstream, records equivalent except during a few short periods each irrigation season.

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 datums.

Average discharge.--9 years (1949-58), 21.1 cfs (15,280 acre-ft per year).

Extremes.--Maximum discharge during year, 56 cfs May 22 (gage height, 1.02 ft); minimum, 5.7 cfs Mar. 18, buy may have been less during periods of no gage-height record.
1949-58: Maximum discharge, 337 cfs July 11, 1957 (gage height, 3.75 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.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.2	7.5
.3	10
.5	16
.8	35
1.1	56

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	14				11	9.8	14	39	21	16	14
2	17	14					9.8	15	37	21	16	14
3	18	14					9.5	16	35	20	16	14
4	18	13					9.8	19	34	20	16	14
5	17	13					9.5	*22	32	20	16	13
6	16	12				10	9.8	25	32	19	16	13
7	16	12					10	30	32	19	16	13
8	16	12	13				11	30	31	19	16	13
9	16	14			10		11	31	30	19	16	13
10	16						*11	38	30	19	16	13
11	16				(*)		11	40	28	19	15	13
12	16	(*)					11	41	29	19	*15	13
13	16						12	40	28	19	15	14
14	16					9.4	12	40	28	19	15	13
15	16						13	40	27	19	15	13
16	*16	15	(*)	*11			14	41	27	*19	15	13
17	16				11	*9.2	14	42	27	19	15	13
18	15				11	9.0	16	47	27	18	15	13
19	15				11	8.5	16	48	27	18	15	14
20	15				12	8.2	15	40	*27	18	14	14
21	15				12	9.2	16	52	27	18	14	13
22	15				12	9.5	16	54	26	18	14	13
23	15				12	9.5	15	50	25	18	14	13
24	15		12		13	9.5	15	50	26	17	14	13
25	15				13	9.5	14	49	25	17	14	13
26	15	14			13	9.0	13	48	25	16	14	13
27	15				13	8.8	13	46	24	16	14	13
28	15				12	8.8	13	*46	23	16	15	12
29	15				-	9.2	13	44	22	16	15	12
30	14				-------	9.8	13	42	21	16	15	12
31	14	-------			-------	9.8	-------	40	-------	16	14	-------
Total	486	424	387	341	305	294.9	376.2	1,188	851	568	466	394
Mean	15.7	14.1	12.5	11	10.9	9.51	12.5	38.3	28.4	18.3	15.0	13.1
Ac-ft	964	841	768	676	605	585	746	2,360	1,690	1,130	924	781

Calendar year 1957: Max 52 Min - Mean 18.6 Ac-ft 13,470
Water year 1957-58: Max 54 Min - Mean 16.7 Ac-ft 12,070

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 2-4, Nov. 10 to Mar. 16 (no gage-height record Nov. 22 to Dec. 15, Dec. 23 to Mar. 16; discharge estimated on basis of 2 discharge measurements, weather records, and records for nearby stations).

265. 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 3.5 miles (revised) upstream from Twin Creek, 4.8 miles (revised) 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 1958.

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

Average discharge.--14 years (1944-58), 202 cfs (146,200 acre-ft per year).

Extremes.--Maximum discharge during year, 717 cfs May 31 (gage height, 4.88 ft); minimum, 5.1 cfs Sept. 2, 20, 23.
1943-58: Maximum discharge, 2,660 cfs May 8, 1952 (gage height, 8.80 ft); minimum, that of Sept. 2, 20, 23, 1958.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Diversions for irrigation of about 96,000 acres above station.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 23 to June 12)

1.2	3	2.2	88	4.5	532
1.3	6	2.8	188	5.0	661
1.5	16	3.6	337	5.5	811
1.8	40				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	82					211	257	667	25	15	6.4
2	14	81					201	240	562	25	15	6.0
3	15	86					195	219	407	25	14	6.0
4	16	84					181	195	312	25	14	6.0
5	17	94					170	186	259	23	14	6.0
					92	130						
6	17	91					162	165	228	20	13	6.0
7	18	91					151	131	213	18	13	6.4
8	19	93					150	*148	208	22	15	6.4
9	17	91					148	197	228	17	13	6.4
10	15	90					*144	192	280	14	15	6.0
			94									
11	17	94					146	156	276	12	16	6.0
12	17	*99					143	156	261	12	*17	6.8
13	17	96		85	*98		143	118	208	11	14	6.8
14	19	101					148	204	168	10	11	6.4
15	18	109		(*)			158	263	158	10	12	6.0
						125						
16	*17	95	(*)		105		167	272	*146	*9.6	12	6.0
17	18				110		170	246	131	9.2	11	6.0
18	20				120		217	224	106	9.6	11	5.7
19	21				130		269	163	94	9.6	10	5.7
20	22	90			140	*125	359	146	87	10	9.6	5.4
21	24					145	391	170	66	11	9.2	5.7
22	25					165	359	228	54	12	9.6	6.0
23	28				150	184	345	326	48	14	9.2	5.7
24	56					226	331	445	46	14	8.8	5.7
25	65					240	316	498	42	13	8.4	6.0
			90									
26	69	95			145	235	293	501	38	12	8.0	5.7
27	73				135	222	288	544	34	13	8.0	6.0
28	75				130	219	297	*557	30	20	8.0	5.7
29	77			92	-	219	299	587	28	17	7.6	5.4
30	78			(*)	-------	210	280	628	27	15	7.2	5.4
31	81	-------			-------	211	-------	676	-------	16	6.8	-------
Total	999	2,772	2,870	2,677	3,175	4,826	6,832	9,038	5,412	474.0	355.4	179.7
Mean	32.2	92.4	92.6	86.4	113	156	228	292	180	15.3	11.5	5.99
Ac-ft	1,980	5,500	5,690	5,310	6,300	9,570	13,550	17,930	10,730	940	705	356

Calendar year 1957: Max 1,970 Min 9.2 Mean 239 Ac-ft 172,700
Water year 1957-58: Max 676 Min 5.4 Mean 109 Ac-ft 78,560

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 3, 4, Nov. 16 to Mar. 21 (no gage-height record Nov. 20 to Dec. 15, Dec. 23 to Jan. 14, Jan. 20-29, Mar. 1-19; discharge estimated on basis of weather records and records for nearby stations).

270. 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 half a mile southwest of Sage and 5 miles upstream from mouth.

Drainage area.--246 sq mi.

Records available.--April 1943 to September 1958.

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.--15 years, 19.5 cfs (14,120 acre-ft per year).

Extremes.--Maximum discharge during year, 230 cfs Apr. 19 (gage height, 3.88 ft, from floodmarks); minimum, 2.8 cfs Nov. 12.
1943-58: 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. Diversions for irrigation of about 1,100 acres above station.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.7	1.4	2.0	10	3.0	94
1.8	3.1	2.2	22	3.5	152
1.9	5.8	2.5	47	4.0	225

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.9	9.2		4	5.5	6.0		28	21	7.9	6.6	6.2
2	4.7	8.3		4	5	6.3		33	21	7.5	6.6	6.2
3	5.3	7.9		4	5.2	6.6		38	20	7.5	6.6	6.2
4	5.3	7.4			5.4			41	20	7.9	6.2	6.2
5	5.8	7.2			6.0		a13	*39	20	7.5	6.6	6.2
6	5.5	7.6			6.5			41	21	7.5	6.2	5.5
7	5.8	7.9			6.5			44	24	7.5	4.7	5.5
8	6.2	8.3			7.0		*13	43	25	7.1	4.4	5.5
9	5.8	7.9	6		8.0		16	55	23	6.6	5.0	5.5
10	5.8	7.5		a4.5			18	57	22	6.2	5.5	5.8
11	5.8	8.3				7	19	51	22	5.8	5.3	5.8
12	6.2	7.9					26	50	22	5.8	*5.3	5.8
13	6.2	8.3			(*)		32	49	22	5.0	5.5	5.8
14	6.2	*9.2					45	46	22	5.5	5.5	5.8
15	6.6	8.3					70	75	20	6.2	5.8	5.8
16	*5.8	7.9					*96	59	20	*5.5	5.8	5.8
17	5.8	7.5		*4.7	8.5		a152	50	18	6.6	5.8	5.8
18	5.8	7.9	(*)	4.7			a186	47	16	6.2	5.8	5.8
19	5.8	7.5		4.5			a198	44	16	6.6	5.5	5.3
20	6.2	7.9	5.5	4.2		(*)	a152	40	*16	7.1	5.0	5.3
21	5.8	6.0		4.2		8.0	a116	35	14	5.8	5.0	5.0
22	5.8	5.8		4.2		12	*80	35	13	5.8	5.5	5.5
23	5.8	6.5		4.2		13	47	37	11	5.8	7.1	5.5
24	6.2			4.5		13	30	33	9.6	5.5	6.6	5.3
25	6.6			5		13	31	33	9.6	5.5	6.6	5.3
26	5.8	7	5.2		7.0	13	26	33	9.6	5.8	5.8	5.5
27	5.8				6.0	11	24	32	10	5.5	5.8	5.8
28	6.6			5.5	6.0	13	22	*27	9.6	6.2	5.8	5.8
29	6.2	6.4			-	13	21	26	8.7	6.6	7.1	6.2
30	7.5	6.0			-------	17	22	20	8.3	6.6	6.6	6.2
31	8.3	-------			-------	17	-------	21	-------	6.6	5.8	-------
Total	184.9	225.6	175.5	143.7	210.1	280.9	1,533	1,262	514.4	199.2	181.4	171.9
Mean	5.96	7.52	5.66	4.64	7.50	9.06	51.1	40.7	17.1	6.43	5.85	5.73
Ac-ft	367	447	348	285	417	557	3,040	2,500	1,020	395	360	341

Calendar year 1957: Max 49 Min 2.6 Mean 10.5 Ac-ft 7,630
Water year 1957-58: Max 198 Min 3.9 Mean 13.9 Ac-ft 10,080

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 1 discharge measurement, high-water marks, weather records, and records for nearby stations.
Note.--Stage-discharge relation affected by ice Nov. 4-6, Nov. 21 to Mar. 27.

285. 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 1956, May to September 1958. Published as Bear River near Cokeville 1941-43.

Gage.--Water-stage recorder. Altitude of gage is 6,185 ft (from river-profile map). Oct. 31, 1941, to Nov. 30, 1943, at site 200 ft downstream at different datum.

Extremes.--Maximum daily discharge during year, 591 cfs June 2; minimum daily recorded, 2.8 cfs Sept. 2.
1941-43, 1952-56, 1958: Maximum daily discharge, 2,300 cfs Mar. 25, 1956; minimum daily recorded, that of Sept. 2, 1958.

Remarks.--Records good. 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.

Discharge, in second-feet, May to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								-	581	57	26	5.8
2								-	591	56	25	2.8
3								-	521	54	23	3.2
4								-	418	51	22	3.6
5								-	256	51	21	3.6
6								-	112	51	21	3.6
7								-	81	47	20	3.6
8								-	96	34	20	3.6
9								-	95	64	20	3.8
10								-	*82	47	19	3.8
11								-	78	*36	20	3.8
12								-	86	33	18	3.8
13								-	102	32	16	3.8
14								-	109	29	17	3.8
15								-	109	28	14	
16								-	103	27	8.6	
17								-	95	25	8.6	
18								-	*88	*40	9.4	
19								-	85	31	11	
20								*72	82	26	12	
21								78	*77	23	12	
22								87	74	23	13	a3.5
23								92	72	23	14	
24								100	71	24	14	
25								116	72	25	12	
26								212	70	24	12	
27								364	64	26	11	
28								356	60	23	72	
29								360	58	25	23	
30					-------			382	*59	27	16	
31		-------			-------		-------	435	-------	27	15	-------
Total								-	4,447	1,089	565.6	108.6
Mean								-	148	35.1	18.2	3.62
Ac-ft								-	8,820	2,160	1,120	215

Calendar year	: Max	Min	Mean	Ac-ft
Water year	: Max	Min	Mean	Ac-ft

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and record for Bear River near Randolph, Utah.

320. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 6,650 ft (from topographic map). Prior to Oct. 16, 1945, at site 0.8 mile downstream at different datum.

Average discharge.--16 years, 199 cfs (144,100 acre-ft per year).

Extremes.--Maximum discharge during year, 1,150 cfs May 28 (gage height, 4.13 ft); minimum, 54 cfs Mar. 27, Apr. 6, but may have been less during periods of ice effect or no gage-height record.

1942-58: Maximum discharge, 1,500 cfs June 7, 1957 (gage height, 4.56 ft); minimum, 35 cfs Mar. 21, 1955 (result of freezeup), but may have been less during periods of no gage-height record.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. One diversion for irrigation of about 200 acres above station.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	49	3.3	621
1.8	83	3.9	998
2.2	169	4.1	1,135
2.7	345		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	107	91					62	137	900	326	166	107
2	107	86					66	161	874	314	161	105
3	109	91					63	216	841	310	161	103
4	113	89	80				65	268	816	302	161	103
5	109	89					65	326	790	298	153	103
6	107	89					62	390	822	287	147	101
7	107	88	83				65	437	841	279	145	101
8	105	88	78				64	*462	835	272	142	99
9	103	85	86	(*)			64	562	790	261	137	99
10	103	82				66	64	599	716	254	137	99
11	101	85					64	616	673	246	135	99
12	101	88	78				64	650	650	239	*133	107
13	101	88					69	578	610	232	130	124
14	101	*89					73	599	572	229	128	107
15	101	88		73	70		79	583	542	229	126	107
16	*99	86	79				88	605	532	222	126	105
17	97		79				99	656	*532	*216	124	101
18	97		80				126	734	527	209	126	99
19	97		80			*66	137	790	522	209	124	99
20	97		78			64	130	829	508	209	121	97
21	97	84	76			66	140	906	494	206	117	97
22	97		76			66	140	978	476	196	119	97
23	96					66	124	*972	462	193	121	96
24	96					66	109	1,010	458	190	119	96
25	96					68	109	1,040	437	190	117	*96
26	94					68	103	1,080	411	190	115	94
27	94		76			64	103	1,110	386	184	115	94
28	94	80				68	99	1,110	374	175	117	94
29	93				-	66	105	*1,040	357	172	117	94
30	93				-------	66	115	1,010	341	190	111	94
31	91	-------			-------	65	-------	958	-------	178	107	-------
Total	3,103	2,558	2,427	2,263	1,960	2,047	2,716	21,412	18,089	7,207	4,058	3,017
Mean	100	85.3	78.3	73	70	66.0	90.5	691	603	232	131	101
Ac-ft	6,150	5,070	4,810	4,490	3,890	4,060	5,390	42,470	35,880	14,290	8,050	5,980

Calendar year 1957: Max 1,420 Min - Mean 242 Ac-ft 175,200
Water year 1957-58: Max 1,110 Min - Mean 194 Ac-ft 140,500

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 17 to Dec. 6, Dec. 10-15, Dec. 23 to Feb. 2. No gage-height record Feb. 3 to Mar. 18; discharge estimated on basis of weather records and records for nearby stations.

380. 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 1958.

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

Extremes.--Maximum discharge during year, 1,660 cfs June 2 (gage height, 5.20 ft); minimum, 84 cfs Sept. 10, 11.
1954-58: Maximum discharge, 3,780 cfs Mar. 26, 1956 (gage height, 7.54 ft); 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.3	87	3.9	732
2.6	157	5.0	1,500
3.1	325	5.2	1,660

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	138	214	b200	b205	b190	329	389	542	1,560	321	186	120
2	138	211	b185	b290	b180	317	389	537	1,600	313	177	111
3	152	214	b200	b195	b190	297	385	559	1,480	305	169	104
4	152	198	b200	b190	204	297	371	580	1,310	301	163	106
5	152	224	207	b185	204	293	350	586	1,110	297	157	102
6	163	254	217	b175	201	289	333	653	966	297	152	102
7	169	240	220	b170	b195	282	325	709	868	278	146	102
8	166	240	217	b170	201	289	321	721	850	264	141	96
9	180	237	b210	b160	201	289	329	790	838	237	135	93
10	186	230		b160	204	285	317	868	796	257	135	87
11	183	230	b200	b165	204	293	*342	880	767	268	135	93
12	180	237		b170	220	278	350	910	726	250	*125	93
13	183	247		b175	207	243	354	886	721	227	118	104
14	180	*257		b180	*207	247	376	826	704	201	116	98
15	*177	260	201	b185	207	257	411	796	692	191	116	96
16	174	247	207		211	282	464	790	664	180	111	100
17	172	237	214	(*)	220	268	495	850	619	*166	98	100
18	169	211	b200		224	264	537	952	592	163	98	93
19	172	234	*b200		234	*250	608	973	580	180	96	93
20	163	214	214	b190	240	257	641	980	*564	174	102	93
21	163	b200	214		254	264	715	987	548	169	104	93
22	166	b190	b205		274	274	767	1,040	515	169	111	93
23	169		b205		274	313	709	1,120	484	169	113	93
24	172		b205	201	282	359	*630	1,120	440	163	118	95
25	180			195	301	416	597	1,180	421	191	111	98
26	201	b200		b190	313	445	575	1,230	411	195	108	100
27	207		b210	195	329	430	542	1,470	385	195	116	98
28	214	b205		198	338	407	521	*1,560	363	183	120	98
29	211	b210		201	-	407	526	1,560	354	174	177	98
30	204	b210		201	-------	425	537	1,480	333	188	133	96
31	211	-------	b205	198	-------	421	-------	1,520	-------	201	123	-------
Total	5,447	6,651	6,386	5,748	6,509	9,767	14,206	29,655	22,261	6,887	4,010	2,948
Mean	176	222	206	185	232	315	474	957	742	222	129	98.3
Ac-ft	10,800	13,190	12,670	11,400	12,910	19,370	28,180	58,820	44,150	13,660	7,950	5,850

Calendar year 1957: Max 2,550 Min 127 Mean 521 Ac-ft 377,400
Water year 1957-58: Max 1,600 Min 87 Mean 330 Ac-ft 239,000

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

395. 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 1958.

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

Average discharge.--21 years, 410 cfs (296,800 acre-ft per year).

Extremes.--Maximum discharge during year, 1,520 cfs June 2 (gage height, 5.63 ft); minimum, 83 cfs Sept. 20.
1937-58: 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. Diversions for irrigation of about 124,000 acres above station.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Mar. 22 to Apr. 21, May 12-17, Aug. 7 to Sept. 30)

1.1	82	3.0	484
1.2	96	4.0	820
1.5	144	6.0	1,700
2.2	281		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	160	218	210	210	195	340	397	551	1,440	317	186	121
2	160	218	195	205	190	330	395	548	1,500	321	186	119
3	164	220	200	200	200	310	405	564	1,390	301	171	111
4	166	222	210	195	210		387	590	1,240	290	162	111
5	162	228	215	190	210		372	590	1,080	285	157	108
6	164	270	220	190	210		357	652	908	270	157	108
7	173	251	220	180	220		348	722	794	263	164	108
8	169	253	220	175	210	300	348	769	776	244	158	104
9	176	248	220	170	210		357	820	761	216	155	101
10	184	242	210	170	210		350	888	743	216	153	98
11	184	238	205	175	215		*367	900	722	232	*153	95
12	180	236	205	180	230		374	920	683	230	148	99
13	182	238	205	185	220	260	382	*924	662	216	141	106
14	180	240	205	190	*220	260	400	880	645	201	132	106
15	*178	*246	210	195	220	270	430	864	622	184	125	98
16	176	255	215		225	290	481	844	603	186	125	99
17	175	251	215		230	280	530	900	*558	*173	117	102
18	173	240	210		240	270	574	1,020	520	162	114	95
19	164	240	*210		250	265	635	1,070	508	162	105	90
20	160	230	215	200	260	265	680	1,090	493	162	108	85
21	160	210	215		270	265	725	1,080	484	157	111	88
22	162	200	210		280	*274	820	1,110	455	158	117	90
23	166	205	210		290	301	779	1,180	433	146	119	89
24	173	205	210	210	300	343	697	1,180	397	130	124	88
25	184	205	210	205	310	390	*632	1,200	387	142	122	92
26	201	205	215	200	330	422	606	1,230	387	153	117	92
27	210	210	215	200	340	424	574	1,370	374	149	116	93
28	214	210	215	205	340	405	548	1,470	355	146	117	93
29	216	215	215	210	-	405	542	*1,480	343	139	151	96
30	207	215	215	210	-------	416	548	1,420	322	144	141	98
31	216	-------	215	*200	-------	424	-------	1,420	-------	184	125	-------
Total	5,539	6,864	6,560	6,050	6,835	9,909	15,040	30,246	20,585	6,279	4,275	2,983
Mean	179	229	212	195	244	320	501	976	686	203	138	99.4
Ac-ft	10,990	13,610	13,010	12,000	13,560	19,650	29,830	59,990	40,830	12,450	8,480	5,920

Calendar year 1957: Max 2,620 Min 145 Mean 530 Ac-ft 384,000
Water year 1957-58: Max 1,500 Min 85 Mean 332 Ac-ft 240,300

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 18 to Mar. 21 (no gage-height record Nov. 22 to Dec. 10, Dec. 13-18, Dec. 26 to Jan. 17, Mar. 9-21; discharge estimated on basis of weather records and records for stations below Smiths Fork near Cokeville and at Stewart Dam).

410. Thomas Fork near Wyoming-Idaho State line

Location.--Lat 42°24'10", long 111°01'30", in SE¼NW¼ sec. 19, T. 28 N., R. 119 W., in Wyoming, on right bank 1.5 miles downstream from Giraffe Creek, 1.3 miles upstream from State line, and 3½ miles northeast of Geneva, Idaho.

Drainage area.--113 sq mi.

Records available.--October 1949 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 6,280 ft (from topographic map). Prior to Aug. 23, 1957, at site 0.2 mile upstream at different datum.

Average discharge.--9 years, 57.2 cfs (41,410 acre-ft per year).

Extremes.--Maximum discharge during year, 417 cfs May 12 (gage height, 3.45 ft); minimum, 6.0 cfs Mar. 20.
1949-58: Maximum discharge, 869 cfs May 18, 1950 (gage height, 5.55 ft, site and datum then in use); minimum, 2.6 cfs Mar. 2, 1956, result of freezeup.

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

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Apr. 17)

1.3	14	2.4	149
1.5	26	3.0	292
1.9	66	3.4	403

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	19			b17		18	89	157	53	32	18
2	19	18			b17		20	103	147	53	28	18
3	23	19	b19	17	b17		19	132	141	51	29	17
4	23	20			18		20	155	130	51	28	17
5	22	20			18		19	197	124	49	25	16
6	20	20	19	18	18		18	229	122	48	24	16
7	20	19	19		b17		18	257	118	47	23	16
8	19	19	19		16		20	*278	107	45	22	16
9	19	18			16		21	347	104	43	22	16
10	19	20			16		22	347	*101	41	22	16
						b17						
11	19	18			18		*23	361	98	39	*22	16
12	20	19		19	b18		27	389	95	38	21	18
13	20	20	b19		18		31	*389	93	36	20	26
14	20	22			*16		36	386	93	35	20	20
15	*20	*21			16		44	364	89	35	20	18
16	20	b20			17		53	364	83	35	20	18
17	19	19			19		62	364	*79	*34	20	18
18	19	22	20		b18		86	367	75	32	20	17
19	20	21	*20		b18		93	*361	75	32	20	18
20	20	20	20		b18	16	92	353	74	33	20	17
				b19								
21	20		19		b18	17	115	339	70	35	20	16
22	19		20		b18	*17	109	322	67	34	19	17
23	19				18	17	87	*292	64	32	20	17
24	20			20	18	18	72	265	76	32	21	17
25	19			19	18	20	*71	242	70	34	20	17
		b19										
26	18		b20	19	18	20	67	222	66	33	18	18
27	19			18	15	18	67	206	60	32	18	18
28	20			18	17	18	64	192	56	30	19	18
29	18			18	-	18	67	*179	55	30	21	18
30	18			17	-------	19	76	170	54	39	19	18
31	18	-------	18	*16	-------	20	-------	166	-------	35	18	-------
Total	607	584	600	571	486	541	1,537	8,407	2,743	1,196	671	526
Mean	19.6	19.5	19.4	18.4	17.4	17.5	51.2	271	91.4	38.6	21.6	17.5
Ac-ft	1,200	1,160	1,190	1,130	964	1,070	3,050	16,680	5,440	2,370	1,330	1,040

Calendar year 1957: Max 654 Min - Mean 68.7 Ac-ft 49,710
Water year 1957-58: Max 389 Min 15 Mean 50.6 Ac-ft 36,620

Peak discharge (base, 150 cfs).--May 12 (4:30 a.m.) 417 cfs (3.45 ft); June 24 (3 p.m.) 190 cfs (2.59 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 1-17; discharge estimated on basis of weather records and records for nearby stations.

440. 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 1958.

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.--42 years, 514 cfs (372,100 acre-ft per year).

Extremes.--Maximum discharge during year, 1,700 cfs June 2 (gage height, 7.06 ft); minimum, 101 cfs Sept. 12.
1913-16, 1919-58: 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, 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.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Dec. 31		Jan. 1 to Sept. 30			
3.0	196	2.6	106	5.0	936
3.5	332	3.0	191	6.0	1,310
		3.5	336	7.0	1,680
		4.0	523		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	208	248	230	220	220	*345	478	719	1,620	395	246	141
2	201	248	235	215	220	335	466	719	1,650	388	249	137
3	206	*250	235	215	225	325	470	723	1,660	374	235	133
4	210	261	230	210	225	315	462	756	1,520	360	216	127
5	201	250	235	210	225	315	443	776	1,350	353	208	125
6	198	275	245	205	225	315	421	820	1,160	326	191	131
7	206	298	250	200	225	315	406	921	1,070	313	177	131
8	213	289	250	195	225	320	406	1,010	1,020	300	186	127
9	208	284	245	195	230	320	410	1,050	973	263	184	123
10	218	281	245	190	230	315	417	1,160	966	252	165	121
11	222	272	240	190	235	310	421	1,240	925	252	*160	114
12	222	267	230	190	235	305	*439	1,290	902	260	160	106
13	222	272	230	195	240	300	451	1,360	886	255	160	114
14	220	281	*229	200	240	300	478	*1,340	836	252	152	116
15	215	281	235	205	240	300	*527	1,310	820	240	133	117
16	213	289	250	215	250	300	597	1,260	808	*227	133	121
17	213	284	250	220	255	300	689	1,270	760	211	145	123
18	218	242	250	225	265	305	784	1,340	715	230	121	*125
19	210	245	245	225	275	310	855	1,400	658	214	129	125
20	203	267	245	220	290	320	928	1,420	614	206	117	123
21	201	200	245	220	300	339	958	1,400	592	198	125	117
22	201	220	245	220	305	350	1,070	1,400	579	206	127	121
23	201	235	245	215	315	381	1,090	1,440	553	216	133	129
24	208	245	240	210	330	413	*992	1,480	523	194	143	125
25	215	245	240	*209	340	482	902	*1,440	*486	189	141	123
26	222	250	240	210	350	557	836	1,420	490	201	137	125
27	238	245	235	215	360	540	788	1,470	523	216	*137	127
28	245	245	220	215	355	507	748	1,620	511	221	139	127
29	248	235	220	215	-	482	719	*1,650	*462	214	139	127
30	245	230	220	215	-------	486	715	1,610	439	216	165	129
31	240	-------	220	220	-------	519	-------	1,570	-------	224	149	-------
Total	6,691	7,734	7,374	6,504	7,430	11,326	19,366	38,384	26,071	7,966	5,002	3,730
Mean	216	258	238	210	265	365	646	1,238	869	257	161	124
Ac-ft	13,270	15,340	14,630	12,900	14,740	22,460	38,410	76,130	51,710	15,800	9,920	7,400

Calendar year 1957: Max 2,640 Min 160 Mean 615 Ac-ft 445,400
Water year 1957-58: Max 1,660 Min 106 Mean 404 Ac-ft 292,700

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 21 to Mar. 20, Mar. 27.

460. 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 headworks at Stewart Dam.

Records available.--October 1945 to September 1958 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. Oct. 1, 1923, to Oct. 27, 1944, at site half a mile downstream at different datum.

Average discharge.--36 years, 307 cfs (222,300 acre-ft per year).

Extremes.--Maximum discharge during year, 1,280 cfs May 19 (gage height, 4.56 ft); minimum daily, 13 cfs Sept. 23, 24.
1945-58: Maximum discharge, 4,180 cfs May 7, 1952 (gage height, 8.62 ft); minimum daily, 6.5 cfs Sept. 24, 1956.

Remarks.--Records good except those for periods of ice effect or backwater from Mud Lake, 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 entering at the 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.

Rating table, water year 1957-58, except periods of ice effect or backwater from Mud Lake (gage height, in feet, and discharge, in cubic feet per second) (Shifting-control method used Nov. 22-29, Dec. 2-10, 12-22, 25-30, Jan. 5-19, 24-25, 27-31, Feb. 5-9, Mar. 26, Apr. 23, May 12, June 15-25)

0.5	19	2.0	301
1.0	85	3.0	606
1.5	181	5.0	1,470

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	79	172	b165	b165	b165	b275	438	657	1,040	68	135	27
2	118	183	159	b165	b170	b260	411	668	1,060	68	147	30
3	133	194	170	b165	b170	b250	405	668	1,090	130	149	23
4	133	192	177	b160	b170	b245	399	690	1,020	166	133	18
5	135	196	168	157	170	b240	388	716	882	161	128	17
6	128	192	172	155	170	231	374	739	712	153	133	16
7	130	224	181	151	174	262	360	812	564	163	128	16
8	137	221	185	147	174	248	346	866	472	143	130	17
9	135	219	194	135	174	250	351	882	426	111	109	16
10	139	217	179	135	177	258	360	934	417	122	106	16
11	143	255	b180	145	179	b250	354	1,030	402	107	120	16
12	147	228	181	141	180	b230	379	1,080	376	107	109	15
13	145	228	161	141	183	b230	399	1,120	368	104	85	15
14	137	238	166	139	183	b230	417	1,140	332	99	68	14
15	135	238	166	151	188	b230	463	1,100	298	95	60	14
16	126	236	174	157	183	b235	524	1,050	280	80	51	14
17	100	233	185	183	185	b240	613	1,070	262	69	49	14
18	111	192	183	174	205	240	709	1,100	233	66	51	15
19	113	210	190	174	219	236	746	1,180	183	66	35	14
20	109	217	179	b170	221	238	812	1,150	151	64	36	14
21	102	b175	183	b170	228	252	858	1,160	133	62	29	14
22	115	135	185	b165	243	265	938	1,130	126	64	35	14
23	122	147	b185	b165	240	275	1,020	1,130	120	68	41	13
24	124	163	b180	163	248	324	960	1,180	126	82	41	13
25	131	174	179	157	272	382	894	1,150	126	80	37	14
26	131	166	183	b160	285	460	815	1,090	120	97	27	14
27	143	188	185	161	b290	469	754	1,060	116	104	28	15
28	151	172	183	161	b290	460	690	1,120	99	107	29	15
29	163	174	166	163	-	426	664	1,180	92	118	29	15
30	168	b170	170	161	-------	423	668	1,140	71	122	29	16
31	166	-------	b170	163	-------	441	-------	1,060	-------	124	39	-------
Total	4,049	5,949	5,484	4,899	5,736	9,055	17,509	31,052	11,697	3,170	2,326	484
Mean	131	198	177	158	205	292	584	1,002	390	102	75.0	16.1
Ac-ft	8,030	11,800	10,880	9,720	11,380	17,960	34,730	61,590	23,200	6,290	4,610	960

Calendar year 1957: Max 2,170 Min 58 Mean 485 Ac-ft 350,900
Water year 1957-58: Max 1,180 Min 13 Mean 278 Ac-ft 201,200

b Stage-discharge relation affected by ice.
Note.--Stage-discharge relation affected by backwater from Mud Lake Sept. 4-30.

465. 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 1958 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.--36 years, 66.7 cfs (48,290 acre-ft per year).

Extremes.--Maximum daily discharge during year, 31 cfs July 4; minimum daily, 6.2 cfs July 14.
1922-58: Maximum daily discharge, 3,050 cfs June 3, 1923; no flow July 15, 1956.

Remarks.--Records good. Discharge measurements generally made once a week. Water diverted at Stewart Dam through Rainbow Inlet Canal 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.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 16 to Nov. 1, Aug. 24-28, Sept. 5-30)

0.9	4.3
1.1	12
1.3	22
1.5	33

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	20	20	8.9	9.4	13	16	14	25	27	21	17
2	20	21	20	8.9	9.4	13	15	14	25	28	22	16
3	20	20	20	8.9	9.4	14	14	14	26	29	22	16
4	20	20	19	7.3	9.4	13	14	15	26	31	22	15
5	20	20	19	7.0	9.4	14	13	15	24	30	22	12
6	21	20	19	7.3	9.4	14	13	15	23	30	23	12
7	21	20	20	7.3	9.4	14	13	15	23	20	20	11
8	21	21	20	7.3	8.9	13	13	16	24	9.8	14	10
9	21	21	20	7.0	8.9	14	13	15	25	8.5	16	9.8
10	20	21	20	7.0	8.9	14	13	15	25	7.7	20	8.9
11	20	22	20	7.3	9.4	14	13	16	25	7.3	20	8.9
12	20	22	20	8.5	10	14	13	16	24	6.6	20	8.5
13	19	22	20	8.5	10	13	13	17	25	6.6	19	8.5
14	20	22	20	8.9	10	13	13	18	24	6.2	19	8.1
15	20	22	20	8.9	11	14	13	18	25	6.6	18	8.5
16	19	22	20	8.9	11	13	14	17	27	8.1	18	9.4
17	19	22	20	9.4	11	13	15	17	27	18	18	9.4
18	19	22	20	8.5	13	13	16	20	26	18	17	9.8
19	19	21	20	8.5	14	14	17	26	26	17	17	9.8
20	19	22	20	8.5	15	13	17	26	28	17	17	9.8
21	19	21	20	9.4	13	14	17	26	29	17	17	11
22	19	20	21	9.4	13	14	17	26	28	18	18	13
23	19	20	20	9.4	15	9.8	16	24	28	19	18	16
24	19	20	20	9.4	16	13	16	25	29	20	17	15
25	19	19	20	9.4	17	15	16	25	29	20	17	15
26	19	19	16	9.4	13	10	15	24	29	20	16	15
27	19	20	11	9.4	15	9.4	14	24	29	20	16	15
28	19	20	10	8.9	13	8.5	14	25	29	20	16	15
29	20	20	10	8.9	-	15	14	27	29	21	17	15
30	20	20	9.4	9.4	-------	15	14	26	28	21	17	15
31	20	-------	9.4	9.4	-------	15	-------	26	-------	21	18	-------
Total	608	622	563.8	265.2	321.9	408.7	434	617	790	549.4	572	363.4
Mean	19.6	20.7	18.2	8.55	11.5	13.2	14.5	19.9	26.3	17.7	18.5	12.1
Ac-ft	1,210	1,230	1,120	526	638	811	861	1,220	1,570	1,090	1,130	721

Calendar year 1957: Max 35 Min 9.4 Mean 22.4 Ac-ft 16,220
Water year 1957-58: Max 31 Min 6.2 Mean 16.8 Ac-ft 12,130

475. 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 1958.

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

Average discharge.--15 years (1943-58), 22.3 cfs (16,140 acre-ft per year).

Extremes.--Maximum discharge during year, 107 cfs May 12 (gage height, 1.67 ft); minimum, 1.8 cfs Mar. 5, 7.
1942-58: Maximum discharge, 224 cfs May 18, 1950 (gage height, 2.91 ft); minimum, 1.4 cfs Feb. 22, 1951, result of freezeup.

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

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 14 to Mar. 21				Oct. 1-13, Mar. 22 to Sept. 30			
0.8	5.1	1.1	9.8	0.2	7.7	0.9	47
.9	6.6	1.3	14	.4	16	1.3	77
				.6	26	1.7	110

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	11	9.5		7.0	8.3	9.5	42	70	28	17	11
2	12	10	10		7.2	8.5	9.5	46	66	27	16	11
3	13	11	10	7.0	8.5	8.8	9.9	56	64	27	16	11
4	13	11	9.5		8.3	8.2	9.9	64	61	26	16	12
5	13	11	10		8.0	7.8	9.5	72	60	26	15	11
6	12	11	10	8.0	8.0	9.0	9.5	83	59	25	14	11
7	12	11	10		8.0	8.3	9.9	86	56	25	14	11
8	12	11	9.7		8.0	8.7	10	90	53	24	14	11
9	12	10	9.3		7.8	8.5	11	93	52	23	14	11
10	12	10	*8.7		8.0	8.2	*11	99	50	22	14	11
11	12	11	9.0		7.7	7.7	11	99	48	22	*14	11
12	12	11	10	9.0	7.8	8.5	13	104	47	20	13	12
13	12	11	10		8.0	8.2	14	*99	47	19	12	13
14	*11	12	10		8.0	7.8	15	99	47	20	13	12
15	11	*11	10		8.2	8.2	19	96	46	20	13	12
16	11	10	10		8.8	7.8	22	93	43	20	13	12
17	11	10	10		9.5	8.0	25	93	*41	*20	13	12
18	11	9.5	10	9.3	9.5	7.8	34	93	39	20	13	12
19	11	11	10	8.5	9.2	8.0	36	*95	40	20	13	12
20	12	9.8	10		9.0	8.5	38	95	38	20	13	11
21	11	8.2	9.8		9.0	8.8	43	94	36	21	12	11
22	11	9.8	9.7		8.8	*8.8	46	91	34	19	13	11
23	11	9.8	6.6		9.0	8.8	41	91	32	18	13	11
24	11	9.8	9.8		9.3	9.5	39	88	34	19	13	11
25	11	10	11	8.0	9.8	9.9	*36	87	37	18	13	11
26	11	11	10		9.2	9.9	34	83	33	18	12	11
27	11	10	9.8		9.2	9.1	33	81	30	18	12	11
28	11	10	9.8		8.7	9.1	31	79	30	16	13	11
29	11	9.5	9.8		-	9.1	32	*76	28	16	12	11
30	11	9.0	8.7		-------	9.1	35	74	28	19	11	11
31	11	-------	7.8		-------	9.5	-------	75	-------	18	11	-------
Total	359	310.4	298.5	255.8	237.5	266.4	696.7	2,616	1,349	654	415	340
Mean	11.6	10.3	9.63	8.25	8.48	8.59	23.2	84.4	45.0	21.1	13.4	11.3
Ac-ft	712	616	592	507	471	528	1,380	5,190	2,680	1,300	823	674

Calendar year 1957: Max 106 Min 6.0 Mean 23.5 Ac-ft 17,040
Water year 1957-58: Max 104 Min 6.6 Mean 21.4 Ac-ft 15,470

* Discharge measurement made on this day.
Note.--No gage-height record Jan. 1-17, 20-31; discharge estimated on basis of weather records and records for nearby stations.

555. 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 1958. 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, 1,198,000 acre-ft June 11-28 (gage height, 20.48 ft); minimum, 967,200 acre-ft Dec. 2-7 (gage height, 17.15 ft).
1921-58: 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 limits 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. 34). 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 (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 1957-58 (elevations, in feet, and usable contents, in acre-feet)

5,917.0	956,900	5,920.0	1,165,000
5,918.0	1,026,000	5,921.0	1,235,000
5,919.0	1,095,000		

Usable contents, in thousands of acre-feet, at 7 a.m., water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,002	967.9	967.9	978.9	983.7	1,006	1,047	1,105	1,186	1,192	1,113	1,047
2	1,000	967.9	967.2	979.6	984.4	1,007	1,049	1,106	1,189	1,189	1,110	1,044
3	998.2	968.6	967.2	980.3	984.4	1,008	1,051	1,108	1,191	1,187	1,108	1,042
4	996.1	969.2	967.2	981.0	985.1	1,009	1,053	1,109	1,192	1,185	1,106	1,040
5	994.8	969.9	967.2	981.6	985.1	1,011	1,054	1,110	1,194	1,184	1,104	1,036
6	992.7	969.9	967.2	982.3	985.8	1,012	1,056	1,113	1,196	1,182	1,103	1,032
7	990.6	969.9	967.2	983.0	986.5	1,013	1,057	1,114	1,196	1,180	1,102	1,029
8	989.2	970.6	967.9	983.7	987.2	1,014	1,058	1,117	1,197	1,178	1,100	1,026
9	987.8	971.3	967.9	984.4	987.8	1,015	1,060	1,118	1,197	1,175	1,099	1,024
10	986.5	971.3	967.9	985.1	988.5	1,016	1,062	1,121	1,198	1,173	1,097	1,021
11	985.1	971.3	967.9	985.1	989.2	1,017	1,063	1,124	1,198	1,170	1,096	1,019
12	983.7	971.3	967.9	985.8	989.9	1,018	1,064	1,127	1,198	1,167	1,094	1,017
13	982.3	971.3	967.9	986.5	990.6	1,019	1,065	1,130	1,198	1,165	1,092	1,015
14	981.0	972.0	967.9	986.5	992.0	1,020	1,066	1,134	1,198	1,163	1,090	1,013
15	980.3	972.7	968.6	986.5	992.7	1,021	1,068	1,139	1,198	1,160	1,088	1,011
16	979.6	972.7	968.6	987.2	994.1	1,022	1,071	1,143	1,198	1,157	1,086	1,010
17	979.6	972.7	969.2	987.2	994.8	1,024	1,073	1,145	1,198	1,154	1,084	1,009
18	978.9	972.7	969.2	986.5	996.1	1,026	1,074	1,148	1,198	1,151	1,082	1,007
19	978.2	972.7	969.9	985.8	996.8	1,027	1,076	1,151	1,198	1,146	1,080	1,005
20	978.2	972.7	970.6	985.8	997.5	1,028	1,078	1,154	1,198	1,143	1,077	1,004
21	977.5	972.0	971.3	985.1	998.2	1,029	1,079	1,157	1,198	1,138	1,074	1,002
22	976.8	972.0	972.0	985.1	999.6	1,030	1,081	1,160	1,198	1,134	1,071	999.6
23	976.1	971.3	972.7	984.4	1,000	1,031	1,084	1,164	1,198	1,131	1,068	998.2
24	975.4	970.6	973.4	984.4	1,002	1,032	1,087	1,166	1,198	1,127	1,066	996.1
25	974.7	970.6	974.0	984.4	1,002	1,033	1,090	1,170	1,198	1,125	1,063	994.1
26	974.0	969.9	974.7	983.7	1,004	1,034	1,094	1,173	1,198	1,123	1,060	992.0
27	972.7	969.9	975.4	983.7	1,004	1,035	1,097	1,175	1,198	1,121	1,058	989.2
28	972.0	969.2	976.1	983.7	1,005	1,037	1,099	1,178	1,198	1,120	1,056	987.2
29	970.6	968.6	976.8	983.7	-	1,039	1,101	1,181	1,196	1,118	1,054	984.4
30	969.2	968.6	977.5	983.7	-------	1,042	1,103	1,182	1,194	1,116	1,051	982.3
31	967.9	-------	978.2	983.7	-------	1,044	-------	1,184	-------	1,115	1,049	-------
(†)	5,917.16	5,917.17	5,917.31	5,917.39	5,917.70	5,918.27	5,919.11	5,920.28	5,920.42	5,919.28	5,918.33	5,917.37
(‡)	-36.1	+0.7	+9.6	+5.5	+21.3	+39	+59	+81	+10	-79	-66	-66.7

Calendar year 1957..... ‡ +173.3
Water year 1957-58..... ‡ -21.7

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

595. 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 headgates (at dike) and 3 miles southeast of Paris.

Records available.--October 1945 to September 1958 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.--36 years, 343 cfs (248,300 acre-ft per year).

Extremes.--Maximum discharge during year, 1,340 cfs July 18 (gage height, 18.29 ft); minimum daily, 5 cfs many days in April and May.
1922-58: Maximum daily discharge, 1,870 cfs Aug. 8, 1924; minimum daily, 1 cfs many days in 1937, 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.

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 14, Dec. 3-25, Jan. 17 to Feb. 14, June 2, 9, 24, June 26 to July 1, July 3-8, 12, 15, 17, 22, 26, Aug. 1, 3, 4, 12-15, 28, 29, Sept. 1-3, 7-12)

12.5	2	14.0	155
12.6	8	15.0	339
13.0	38	17.0	871
13.5	89	19.0	1,580

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	404	116	b370	6	346	9	7	5	470	818	947	837
2	627	113	b240	6	337	9	7	5	427	990	931	886
3	635	116	90	6	331	9	7	5	359	990	934	921
4	493	120	100	6	341	9	7	5	320	1,000	868	849
5	322	123	103	6	314	9	7	5	346	987	774	792
6	333	129	102	6	240	8	7	5	363	980	771	804
7	335	130	107	6	229	8	7	5	363	1,040	701	816
8	335	130	85	6	186	8	7	5	314	1,120	652	822
9	312	178	90	6	170	8	7	5	291	1,140	643	768
10	295	249	87	6	172	8	7	5	314	1,130	641	680
11	303	251	49	6	155	8	7	5	324	1,140	832	649
12	301	261	48	6	87	8	7	5	324	1,220	1,150	561
13	283	295	51	6	78	8	7	5	346	1,220	1,100	553
14	271	337	53	6	32	8	6	5	352	1,250	1,100	607
15	287	359	57	60	12	8	6	5	352	1,310	1,100	445
16	283	383	57	335	12	8	6	5	348	1,300	1,090	287
17	240	390	55	502	12	8	6	5	359	1,330	1,080	287
18	240	374	63	638	11	8	6	5	337	1,280	1,090	285
19	244	379	69	580	11	8	6	5	361	1,180	1,080	365
20	244	379	55	580	11	8	6	5	388	1,160	1,090	439
21	238	b360	51	580	11	8	6	5	385	1,090	1,090	446
22	240	b345	52	548	11	8	6	5	365	906	1,090	429
23	220	b355	44	532	11	8	6	5	376	797	1,080	394
24	203	b360	30	451	10	8	6	5	436	937	1,090	376
25	171	b370	12	415	10	8	6	5	545	937	1,100	392
26	113	b370	6	418	10	8	6	5	550	947	1,100	401
27	100	b375	6	422	10	8	5	5	545	928	1,050	404
28	99	b370	6	420	10	8	5	5	588	908	944	397
29	101	b370	6	420	-	8	5	180	624	921	849	328
30	103	b370	6	427	-------	8	5	477	678	928	828	257
31	108	-------	6	397	-------	8	-------	482	-------	944	834	-------
Total	8,483	8,457	2,156	7,809	3,170	253	189	1,279	12,150	32,828	29,629	16,477
Mean	274	282	69.5	252	113	8.2	6.3	41.3	405	1,059	956	549
Ac-ft	16,830	16,770	4,280	15,490	6,290	502	375	2,540	24,100	65,110	58,770	32,680

Calendar year 1957: Max 1,500 Min 6 Mean 315 Ac-ft 228,100
Water year 1957-58: Max 1,330 Min 5 Mean 337 Ac-ft 243,700

b Stage-discharge relation affected by ice.
Note.--No gage-height record Dec. 26 to Jan. 15, Feb. 15 to May 29; discharge estimated on basis of 5 discharge measurements, trend of flow, engineer's notes, and record of headgate changes.

750. 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 1958. Irrigation season only during 1944-49 and 1950-53 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. During irrigation season 1944-49, 1950-53, water-stage recorder at site 800 ft downstream at different datum.

Extremes.--Maximum discharge during year, 1,370 cfs July 18 (gage height, 4.69 ft); minimum daily, 135 cfs Dec. 31.
1896, 1898, 1944-49, 1950-58: Maximum discharge, 6,380 cfs June 9, 15, 1896 (gage height, 8.40 ft, datum then in use); minimum daily, 80 cfs Nov. 13, 14, 1955.

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.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.4	132	3.5	530
2.6	179	4.0	841
3.0	304	5.0	1,630

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*520	312	475	135	560	240	286	488	1,040	965	1,020	877
2	536	308	600	140	530	230	280	468	1,020	1,120	1,000	870
3	733	316	490	145	520	225	272	468	965	1,240	1,010	906
4	793	327	320	145	530	220	272	478	870	1,320	1,000	*972
5	682	331	260	150	530	220	266	499	766	*1,300	928	920
6	520	331	325	150	500	220	269	520	726	1,270	*841	848
7	520	335	304	150	460	220	276	541	772	1,240	813	841
8	520	335	300	150	430	220	283	*569	806	1,290	772	834
9	525	339	270	150	380	212	327	586	726	1,290	707	848
10	509	364	240	155	370	220	*381	657	688	1,280	695	793
11	488	454	*215	160	380	215	416	740	682	*1,230	701	714
12	488	468	205	160	350	200	449	746	688	1,230	913	682
13	483	478	220	160	330	200	541	726	701	1,260	1,140	651
14	483	520	235	155	280	205	688	746	733	1,270	1,130	627
15	478	558	259	155	270	205	*863	759	733	1,300	1,140	676
16	478	564	266	155	260	205	1,050	759	695	1,340	1,140	569
17	483	592	262	200	250	210	1,180	740	664	1,340	1,140	421
18	440	610	262	460	245	220	1,290	714	621	1,360	1,130	408
19	430	580	239	690	240	224	1,300	701	616	1,320	1,130	*412
20	435	560	249	720	235	227	1,200	707	639	1,280	1,130	454
21	440	445	256	730	240	227	1,120	670	657	1,240	1,130	536
22	440	270	252	720	240	233	1,050	*695	651	1,160	1,130	541
23	440	415	175	720	262	243	972	772	639	957	1,140	530
24	435	485	170	690	262	259	906	695	*657	906	1,160	483
25	403	550	240	650	269	276	827	633	720	1,000	1,160	483
26	385	575	235	620	262	280	752	621	827	1,010	1,160	494
27	343	495	160	620	*249	294	682	598	855	994	1,160	504
28	324	480	205	600	245	286	616	*569	841	1,000	1,110	509
29	312	495	200	610	-	283	569	604	863	994	980	504
30	*312	390	195	615	-------	286	536	726	884	1,000	891	464
31	312	-------	135	590	-------	290	-------	1,040	-------	1,010	877	-------
Total	14,690	13,282	8,219	11,650	9,679	7,295	19,919	20,235	22,745	36,516	31,378	19,371
Mean	474	443	265	376	346	235	664	653	758	1,178	1,012	646
Ac-ft	29,140	26,340	16,300	23,110	19,200	14,470	39,510	40,140	45,110	72,430	62,240	38,420

Calendar year 1957: Max 1,560 Min 125 Mean 607 Ac-ft 439,700
Water year 1957-58: Max 1,360 Min 135 Mean 589 Ac-ft 426,400

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 20 to Dec. 6, Dec. 9-14, Dec. 23 to Feb. 22, Feb. 28 to Mar. 8, Mar. 10-18 (no gage-height record Jan. 20-25).

795. Bear River at Alexander, Idaho

Location.--Lat 42°38'45" long, 111°41'55", 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 1958.

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

Average discharge.--43 years (1911-16, 1919-20, 1921-58), 749 cfs (542,300 acre-ft per year).

Extremes.--Maximum daily discharge during year, 1,390 cfs July 11; minimum daily, 190 cfs Jan. 5.

1911-16, 1919-58: 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 for irrigation above station. 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.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 11 to Mar. 5, July 12 to Aug. 18)

0.7	189	2.0	945
1.0	310	3.0	1,900
1.5	579		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	783	362	574	197	644	431	506	863	771	1,100	919	862
2	726	399	275	277	638	417	512	857	771	1,250	846	986
3	*651	327	351	259	648	439	491	509	794	1,260	846	965
4	878	502	432	248	631	479	534	576	801	1,270	786	970
5	1,050	537	390	190	616	508	495	568	671	1,280	797	976
6	348	574	429	240	558	456	494	577	605	1,300	887	943
7	667	457	412	261	524	431	484	663	598	1,310	*862	949
8	651	461	401	303	486	444	403	669	618	1,350	792	947
9	546	563	385	285	395	287	322	713	695	1,370	1,000	912
10	657	595	*325	234	497	410	*516	687	658	1,380	1,110	954
11	648	660	329	318	366	367	545	657	688	1,390	1,130	794
12	526	661	304	253	212	344	633	725	697	1,320	1,050	656
13	515	660	299	262	362	355	553	799	721	1,300	1,080	646
14	698	677	370	256	449	392	760	789	746	1,350	1,070	647
15	579	646	328	444	420	391	1,060	813	749	1,340	1,080	804
16	567	644	412	633	381	254	1,210	805	719	1,360	1,100	718
17	588	665	423	598	369	378	1,200	824	681	1,350	1,160	670
18	596	690	381	586	454	325	1,320	824	647	1,190	1,140	660
19	477	670	348	576	456	354	1,230	672	682	1,100	1,170	657
20	489	607	345	661	458	355	1,160	747	631	1,090	1,170	*629
21	582	591	397	745	462	407	1,270	*712	618	1,130	1,140	640
22	554	475	312	728	467	430	1,260	658	645	1,230	985	688
23	503	589	377	732	472	429	1,140	662	673	1,160	997	686
24	431	326	197	751	500	445	1,140	765	730	1,100	1,000	680
25	452	428	262	691	510	373	1,160	844	*786	1,150	1,070	672
26	459	604	393	*645	491	473	1,090	737	931	1,170	1,060	667
27	442	644	278	740	478	361	981	717	997	1,130	1,100	604
28	494	645	331	739	*443	537	991	*699	991	1,120	1,160	576
29	*500	634	269	729	-	522	963	697	977	1,130	1,140	607
30	446	657	372	732	-------	442	941	713	1,060	1,100	1,050	609
31	511	-------	323	717	-------	632	-------	750	-------	1,030	1,040	-------
Total	18,014	16,950	11,024	15,030	13,387	12,866	25,364	22,091	22,351	38,110	31,737	22,774
Mean	581	565	356	485	478	415	845	713	745	1,229	1,024	759
Ac-ft	35,730	33,620	21,870	29,810	26,550	25,520	50,310	43,820	44,330	75,590	62,950	45,170

Calendar year 1957 : Max 1,770 Min 135 Mean 694 Ac-ft 502,200
Water year 1957-58 : Max 1,390 Min 190 Mean 684 Ac-ft 495,300

* Discharge measurement made on this day.

845. 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 1958.

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.--19 years (1939-58), 30.5 cfs (22,080 acre-ft per year).

Extremes.--Maximum discharge during year, 505 cfs Apr. 18 (gage height, 3.15 ft); minimum, 2.6 cfs Sept. 23.
1938-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 27 to May 30)

0.6	2.7	1.8	77
.8	6.2	2.3	185
1.0	13	3.1	485
1.3	30		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.0	8.2	9.5			14	34	158	31	8.5	5.4	4.0
2	5.6	7.5	10			19	33	173	26	8.2	5.0	4.0
3	6.2	8.5	11			18	*32	214	24	8.8		4.0
4	8.5	8.5	12			18	32	242	22	9.2		3.4
5	8.5	8.8	*12	b12	b9.5	22	30	*274	*19	9.2		3.4
6	8.5	7.8	13			*19	29	304	16	7.5		3.4
7	6.9	7.8	13			18	30	293	15	7.2		3.6
8	7.5	7.8	13			17	33	228	13	6.9		3.6
9	8.2	7.5	13			16	39	231	14	6.9		3.8
10	5.8	7.5	13		9.9	16	42	228	14	6.9		4.0
11	4.8	8.2	b11		9.5	b15	45	220	13	7.5	a4.0	3.6
12	4.8	8.5	12		9.2	b16	61	242	13	10		4.0
13	4.6	9.2	12		9.5	15	90	207	14	6.9		5.2
14	4.6	9.9	12		9.2	15	138	*173	12	6.5		4.2
15	4.8	9.2	13		11	14	224	155	11	6.5		4.0
16	5.6	6.2	15		13	16	323	142	9.5	6.5		3.8
17	5.2	b7.8	20		15	15	366	140	8.5	6.5		3.4
18	5.4	b8.0	19		14	13	449	142	7.5	5.6		3.3
19	6.0	b9.0	16	a11	14	14	*297	138	7.2	5.8		3.0
20	6.9	b8.0	16		15	15	274	130	7.5	6.9	*3.6	3.3
21	7.2	b7.0	16		15	21	319	*120	6.9	*6.9	3.6	4.0
22	5.4	b6.0	13		18	27	263	106	6.5	6.2	3.9	3.3
23	5.8	6.2	b11		23	31	179	101	6.2	6.2	4.2	2.8
24	6.5	6.5	b12		28	35	148	89	*6.5	5.8	3.8	3.8
25	*7.2	7.5	13		30	35	124	75	6.2	6.0	3.4	4.4
26	6.9	8.5	13		22	32	114	64	6.0	6.0	3.4	4.8
27	7.5	8.8	12		20	29	112	56	5.4	5.8	3.4	3.8
28	7.8	9.2	*12	*10	19	31	*110	49	5.2	5.4	4.0	3.3
29	7.5	9.5	12	9.5	-	34	116	44	5.2	5.2	4.0	*3.8
30	7.8	9.5	b12	9.5	-------	34	132	38	7.8	6.0	3.9	4.2
31	8.2	-------	b12	9.2	-------	37	-------	34	-------	6.2	4.0	-------
Total	201.2	242.6	403.5	344.2	389.8	671	4,218	4,810	359.1	213.7	123.6	113.2
Mean	6.49	8.09	13.0	11.1	13.9	21.6	141	155	12.0	6.89	3.99	3.77
Ac-ft	399	481	800	683	773	1,330	8,370	9,540	712	424	245	225

Calendar year 1957: Max 422 Min 3.4 Mean 35.5 Ac-ft 25,710
Water year 1957-58: Max 449 Min 2.8 Mean 33.1 Ac-ft 23,980

Peak discharge (base, 150 cfs).--Apr. 18 (2 a.m.) 505 cfs (3.15 ft); May 7 (1 a.m.) 378 cfs (2.70 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.

865. 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 1958 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.--36 years, 779 cfs (564,000 acre-ft per year).

Extremes.--Maximum daily discharge during year, 2,160 cfs Apr. 17; minimum daily, 29 cfs Apr. 13.
1922-58: 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.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.7	22	1.6	153	4.0	1,170
1.0	50	2.0	259	5.0	1,860
1.3	93	3.0	647	6.0	2,700

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	972	789	780	218	828	674	851	1,340	277	928	1,300	1,090
2	898	530	569	361	755	531	857	1,230	305	900	715	925
3	806	454	390	419	867	495	852	1,100	*415	1,110	786	996
4	1,070	637	695	544	837	780	856	1,040	416	1,140	741	1,020
5	1,020	*732	695	403	835	819	764	998	403	984	806	1,000
6	773	801	633	352	883	739	740	1,190	384	1,010	798	1,040
7	1,040	725	742	439	699	681	846	1,270	378	993	779	1,050
8	915	748	588	462	752	*703	739	1,240	333	1,010	773	893
9	533	855	671	436	579	429	736	1,220	471	1,100	1,160	915
10	943	899	493	506	680	685	672	1,160	367	*1,030	1,020	825
11	803	850	597	522	661	558	894	1,120	473	*935	1,160	731
12	686	917	432	482	375	508	987	1,280	443	1,090	1,260	953
13	616	919	481	744	500	605	29	1,150	438	822	1,300	899
14	983	896	610	*450	493	603	1,210	1,240	488	1,040	1,060	561
15	760	980	551	597	688	647	1,640	1,110	460	959	1,270	748
16	723	937	562	811	529	226	2,110	1,180	530	957	859	821
17	806	911	840	1,040	548	582	2,160	1,240	485	1,010	1,060	673
18	733	954	726	1,030	929	600	1,880	1,090	463	981	1,230	719
19	749	731	648	1,010	1,040	623	1,750	981	434	1,110	*1,060	616
20	717	807	594	982	999	753	1,670	1,020	502	996	859	652
21	640	763	582	476	997	655	1,790	755	315	1,380	1,040	744
22	820	672	625	905	909	745	*1,770	775	364	835	1,350	900
23	813	723	879	934	387	668	1,890	679	461	1,160	1,390	975
24	690	445	417	959	916	693	1,430	740	630	859	1,150	828
25	607	662	231	852	901	994	1,760	698	748	764	925	681
26	667	835	468	819	845	877	1,360	646	902	946	954	749
27	694	935	856	813	750	715	1,330	487	1,020	961	975	929
28	706	723	488	942	690	872	1,490	210	849	1,060	1,230	931
29	754	953	316	888	-	837	1,300	307	840	1,070	1,180	734
30	649	904	746	902	-------	679	1,600	409	1,080	1,040	1,140	*663
31	697	-------	640	892	-------	976	-------	142	-------	1,020	1,180	-------
Total	24,281	23,687	18,545	21,190	20,872	20,952	37,963	29,047	15,674	31,200	32,510	25,261
Mean	783	790	598	684	745	676	1,265	937	522	1,006	1,049	842
Ac-ft	48,160	46,980	36,780	42,030	41,400	41,560	75,300	57,610	31,090	61,880	64,480	50,100

Calendar year 1957: Max 2,300 Min 52 Mean 843 Ac-ft 61,000
Water year 1957-58: Max 2,160 Min 29 Mean 825 Ac-ft 597,400

* Discharge measurement made on this day.

875. Mink Creek below Dry Fork, near Mink Creek, Idaho

Location.--Lat 42°15'30", long 111°40'30", in NE¼NW¼ sec. 33, T. 13 S., R. 41 E., on right bank 500 ft downstream from Dry Fork and 3 miles northeast of town of Mink Creek.

Drainage area.--19.3 sq mi.

Records available.--April 1947 to September 1952, October 1955 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 5,300 ft (from topographic map).

Average discharge.--8 years, 82.8 cfs (59,940 acre-ft per year).

Extremes.--Maximum discharge during year, 511 cfs May 28 (gage height, 3.79 ft); minimum, 16 cfs Oct. 1, Sept. 25-29.
1947-52, 1955-58: Maximum discharge, 600 cfs May 29, 1948; maximum gage height, 3.97 ft June 7, 1957; minimum discharge, 16 cfs Sept. 29, 30, Oct. 1, 1957, Sept. 25-29, 1958.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Mink Creek Canal began diverting above station in June 1950. Diversion is routed through Glendale Reservoir in Worm Creek basin for irrigation near Preston. Two other diversions above station for irrigation of about 1,000 acres above and below station.

Rating table, water year 1957-58 (gage height, in feet, and discharge in cubic feet per second)

1.5	16	2.9	200
1.7	27	3.5	400
2.0	52	3.8	515
2.4	101		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	46	39	36	28	40	45	88	424	74	30	
2	28	46	38	36	28	38	45	95	407	72	29	
3	28	45	38	35	28	37	*45	104	376	66	29	
4	33	44	38	34	28	36	44	117	384	65	28	
5	54	45	*38	34	29	36	43	130	*368	63	28	19
6	54	45	37	34	28	*36	42	156	338	61	25	
7	53	45	37	34	29	36	44	171	320	59	24	
8	53	44	37	34	30	36	45	164	306	59	25	
9	52	44	38	33	30	35	44	171	282	57	23	
10	52	44	38	33	30	35	44	182	*251	55	23	
11	50	44	36	33	30	34	46	214	236	54	23	
12	50	44	36	33	30	34	47	230	222	48	23	
13	50	44	36	33	30	33	51	211	205	44	26	18
14	50	44	36	32	30	33	57	*195	192	43	29	
15	50	43	36	32	30	34	70	192	182	44	23	
16	49	42	36	32	32	33	82	211	167	43	23	
17	50	42	38	32	32	33	90	239	156	40	25	
18	51	41	37	31	32	33	106	263	150	40	23	
19	51	41	37	31	34	33	112	292	139	39	25	
20	50	41	36	31	36	33	106	327	131	36	*25	
21	50	40	36	30	38	37	107	*349	128	*35	24	17
22	50	40	36	30	40	40	106	364	117	36	24	
23	49	40	36	30	43	44	103	404	114	36	23	
24	49	40	36	30	44	46	95	435	*109	36	23	
25	*48	40	36	30	48	47	90	447	100	36	23	
26	47	40	36	30	46	47	85	475	94	36	23	16
27	47	40	36	30	43	45	82	*491	88	35	20	
28	46	39	*36	30	40	44	80	495	82	33		
29	46	39	36	*30	-	45	*78	475	80	31	20	*16
30	46	39	36	29	-------	45	82	467	77	32		26
31	46	-------	36	28	-------	46	-------	443	-------	31		-------
Total	1,452	1,271	1,138	990	946	1,184	2,116	8,597	6,225	1,439	749	538
Mean	46.8	42.4	36.7	31.9	33.8	38.2	70.5	277	208	46.4	24.2	17.9
Ac-ft	2,880	2,520	2,260	1,960	1,880	2,350	4,200	17,050	12,350	2,850	1,490	1,070

Calendar year 1957: Max 466 Min 16 Mean 82.2 Ac-ft 59,550
Water year 1957-58: Max 495 Min - Mean 73.0 Ac-ft 52,860

* Discharge measurement made on this day.
Note.--No gage-height record Nov. 26 to Dec. 4, Aug. 28 to Sept. 28; discharge estimated on basis of weather records and records for nearby stations.

905. 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.--4,300 sq mi, approximately.

Records available.--October 1889 to September 1917 (gage heights only, January to September 1917), January 1944 to September 1958. Prior to 1903, published as "at Battle-creek."

Gage.--Water-stage recorder. Altitude of gage is 4,540 ft (from topographic map). October 1889 to September 1917 staff or wire-weight gages at several sites within 5 miles downstream at different datums.

Average discharge.--14 years (1944-58), 879 cfs (636,400 acre-ft per year).

Extremes.--Maximum discharge during year, 3,060 cfs Apr. 12 (gage height, 4.67 ft); minimum, 5.2 cfs June 21 (gage height, 0.34 ft); minimum daily, 128 cfs Apr. 13.
1889-1917: 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 not determined.
1944-58: Maximum discharge, 4,420 cfs Apr. 17, 1950 (gage height, 5.61 ft); minimum, 0.6 cfs June 14, 1949; minimum daily, 9.5 cfs July 6, 1957.

Remarks.--Records good. 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.

Revisions (calendar years).--WSP 250: 1905-6.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	847	681	866	319	895	778	960	1,450	370	735	1,040	941
2	899	479	571	498	760	620	883	1,220	378	693	719	795
3	794	453	576	478	878	537	922	1,190	432	874	650	868
4	937	704	705	635	899	772	905	1,130	502	828	571	832
5	980	797	737	437	826	766	750	889	431	789	630	856
6	723	767	669	455	922	678	702	1,250	381	799	650	807
7	931	752	844	466	748	649	995	1,270	416	742	601	853
8	932	682	619	554	831	748	809	1,230	357	810	619	816
9	623	856	718	528	633	452	808	1,220	432	985	883	841
10	901	931	614	441	695	693	665	1,240	312	657	850	707
11	755	797	594	603	734	586	777	1,220	347	*806	971	663
12	682	*889	477	590	454	501	1,190	1,310	284	886	968	787
13	608	1,010	521	794	497	606	128	1,300	410	728	1,030	785
14	927	903	537	457	524	575	1,060	1,230	351	770	851	488
15	654	982	708	611	803	717	1,490	1,200	346	804	1,080	672
16	789	953	608	966	667	268	2,200	1,190	362	803	756	788
17	818	861	921	1,070	470	585	2,300	1,200	304	810	772	674
18	675	937	771	1,060	*1,110	610	2,020	1,120	456	861	1,050	652
19	783	794	685	1,080	1,110	693	1,890	1,110	276	851	991	585
20	733	852	669	960	1,010	784	1,860	976	348	925	729	777
21	590	827	613	640	1,090	728	1,830	835	167	*1,090	805	611
22	802	755	645	992	989	688	1,900	933	196	736	1,130	723
23	742	756	765	934	567	745	2,040	873	246	952	1,210	836
24	640	554	661	1,080	888	721	1,540	*817	328	705	1,110	759
25	642	695	296	960	1,080	901	1,770	942	494	661	930	562
26	639	828	517	859	927	937	1,450	797	906	783	854	688
27	610	1,010	813	890	772	751	1,360	636	652	810	864	805
28	649	788	632	945	711	850	*1,540	422	704	841	1,060	855
29	779	1,080	306	917	-	961	1,320	475	525	880	970	708
30	664	962	840	1,020	-------	744	1,630	551	915	892	1,080	610
31	648	-------	715	937	-------	860	-------	279	-------	850	1,040	-------
Total	23,396	24,335	20,213	23,176	22,490	21,502	39,694	31,505	12,628	25,356	27,464	22,344
Mean	755	811	652	748	803	694	1,323	1,016	421	818	886	745
Ac-ft	46,410	48,270	40,090	45,970	44,610	42,650	78,730	62,490	25,050	50,290	54,470	44,320

Calendar year 1957: Max 2,560 Min 9.5 Mean 832 Ac-ft 602,600
Water year 1957-58: Max 2,300 Min 128 Mean 806 Ac-ft 583,400

* Discharge measurement made on this day.

930. Cub River near Preston, Idaho

Location.--Lat 42°08', long 111°41', in SW¼ sec. 5, T. 15 S., R. 41 E., on right bank 0.2 mile upstream from headgates of Cub River-Worm Creek Canal, 0.7 mile upstream from forest boundary, and 10 miles east of Preston.

Drainage area.--19.4 sq mi.

Records available.--March 1940 to September 1952, October 1955 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 5,320 ft (from topographic map).

Average discharge.--15 years, 87.6 cfs (63,420 acre-ft per year).

Extremes.--Maximum discharge during year, 692 cfs May 25 (gage height, 3.20 ft); minimum, 13 cfs Jan. 24, result of freezeup.
1940-52, 1955-58: Maximum discharge, 715 cfs June 7, 1957 (gage height, 3.39 ft); maximum gage height, 3.83 ft June 2, 1943; minimum discharge, 11 cfs Jan. 22, 1951.

Remarks.--Records excellent. No diversion above station.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to May 17				May 18 to Sept. 30			
0.8	18	1.8	129	0.7	26	1.9	178
.9	23	2.0	172	1.0	43	2.5	368
1.1	38	2.4	302	1.3	75	3.2	692
1.4	67						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	25	23	21	19	25	33	76	532	110	50	34
2	*32	25	22	21	19	24	32	83	509	107	50	34
3	34	25	22	21	19	24	*31	103	486	103	49	34
4	34	25	22	21	19	23	30	129	442	99	48	34
5	33	25	*22	21	20	22	28	178	*407	95	48	34
6	32	24	23	21	19	*22	27	226	415	94	48	34
7	31	24	23	21	19	22	28	252	415	91	48	34
8	30	24	22	21	19	22	28	239	398	88	47	34
9	30	24	22	21	19	22	29	232	*372	86	46	34
10	30	24	22	21	20	21	30	263	343	83	46	34
11	30	24	22	21	19	21	30	310	312	81	45	34
12	30	24	22	21	20	21	37	317	290	79	45	34
13	29	25	22	21	20	21	47	280	271	78	44	34
14	29	26	22	20	20	21	55	*246	252	75	44	33
15	29	26	21	20	21	21	67	232	235	74	43	33
16	28	24	22	20	22	20	79	239	224	72	42	32
17	28	24	24	20	22	20	92	298	216	71	42	32
18	28	24	23	20	*22	20	116	394	207	68	42	31
19	28	24	23	20	23	20	106	451	200	67	41	31
20	28	24	22	20	24	21	94	500	190	66	*40	31
21	28	24	22	20	27	23	103	*528	176	*63	40	31
22	28	23	22	19	29	29	98	588	165	61	40	31
23	27	23	22	19	30	35	84	588	157	60	39	31
24	28	23	22	21	33	39	74	613	*152	59	38	31
25	*27	23	22	20	38	42	67	667	143	57	38	30
26	26	23	22	19	31	36	63	652	134	57	37	30
27	26	23	22	19	28	33	60	*652	127	55	36	30
28	26	23	*22	20	26	32	58	622	124	54	36	30
29	26	23	22	20	-	32	*59	574	120	53	36	*30
30	26	23	22	20	-------	35	66	584	115	53	35	29
31	25	-------	22	19	-------	35	-------	570	-------	52	34	-------
Total	898	721	688	629	647	804	1,751	11,686	8,129	2,311	1,317	968
Mean	29.0	24.0	22.2	20.3	23.1	25.9	58.4	377	271	74.5	42.5	32.3
Ac-ft	1,780	1,430	1,360	1,250	1,280	1,590	3,470	23,180	16,120	4,580	2,610	1,920

Calendar year 1957: Max 676 Min 17 Mean 92.5 Ac-ft 66,940
Water year 1957-58: Max 667 Min 19 Mean 83.7 Ac-ft 60,570

* Discharge measurement made on this day.

1060. 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 1958 in reports of Geological Survey. January 1937 to September 1938 (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. 28, 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.--20 years (1938-58), 88.0 cfs (63,710 acre-ft per year).

Extremes.--Maximum discharge during year, 707 cfs Apr. 20 (gage height, 4.84 ft); minimum, 15 cfs Aug. 17.
1938-58: Maximum discharge, 1,830 cfs Dec. 23, 1955 (gage height, 6.03 ft); minimum, 4 cfs Aug. 14, 1940.

Remarks.--Records good. Diversions above station for irrigation of about 400 acres above and 2,400 acres below station. No diversion between station and Hyrum Reservoir.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Aug. 6-29)

Oct. 1 to Apr. 19				Apr. 20 to Sept. 30			
3.0	23	3.8	178	3.1	15	3.8	140
3.1	31	4.2	356	3.3	29	4.2	290
3.4	71	4.6	585	3.5	60	4.7	570

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	45	50	52	52	85	127	320	152	30	19	20
2	24	46	52	54	52	81	147	325	*146	28	18	21
3	24	45	51	53	*54	79	124	355	123	27	19	22
4	39	45	51	52	54	75	124	355	98	27	18	22
5	36	47	52	54	57	73	110	402	84	27	17	23
6	36	55	52	54	58	75	103	*474	87	28	17	23
7	36	58	57	54	58	75	105	486	82	*27	17	22
8	38	51	57	54	58	77	121	390	72	27	17	22
9	40	50	52	54	58	75	113	370	62	26	17	21
10	41	50	50	54	60	69	110	380	51	*24	17	22
11	45	51	50	54	58	71	113	390	49	24	17	22
12	48	51	51	52	60	68	130	414	47	23	*17	22
13	48	52	51	52	63	68	161	402	47	22	17	23
14	51	63	51	52	60	69	*182	330	47	23	17	22
15	50	57	51	54	63	69	220	*272	44	23	17	22
16	50	52	60	54	79	68	287	262	*41	23	17	23
17	50	52	65	52	85	66	372	281	41	23	17	22
18	47	57	60	52	87	68	530	310	41	23	17	22
19	46	57	57	52	87	68	477	340	39	*23	17	22
20	47	55	57	50	96	75	480	340	38	23	17	21
21	48	50	57	52	93	186	546	350	36	23	17	22
22	48	47	58	54	98	189	516	340	36	21	17	22
23	50	52	54	54	101	197	380	*325	33	20	19	21
24	54	52	52	54	113	182	285	305	32	20	19	20
25	50	55	57	54	189	189	244	272	32	20	*19	20
26	48	54	55	52	132	138	229	244	32	20	18	21
27	52	51	54	54	*105	115	233	229	30	20	18	20
28	54	50	54	54	93	*113	244	210	*29	20	19	23
29	51	*50	55	55	-	130	244	192	32	19	*20	23
30	47	48	*57	58	-------	147	*285	178	*30	19	*20	*23
31	*46	-------	55	55	-------	154	-------	162	-------	*19	20	-------
Total	1,368	1,548	1,685	1,655	2,223	3,194	7,342	10,005	1,713	722	552	654
Mean	44.1	51.6	54.4	53.4	79.4	103	245	323	57.1	23.3	17.8	21.8
Ac-ft	2,710	3,070	3,340	3,280	4,410	6,340	14,560	19,840	3,400	1,430	1,090	1,300

Calendar year 1957: Max 573 Min 17 Mean 94.3 Ac-ft 68,290
Water year 1957-58: Max 546 Min 17 Mean 89.5 Ac-ft 64,770

Peak discharge (base, 400 cfs).--Apr. 20 (11 p.m.) 707 cfs (4.84 ft); May 6 (12 p.m.) 624 cfs (4.79 ft).

* Discharge measurement made on this day.

1070. 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 1958.

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

Extremes.--Maximum contents observed during year, 15,660 acre-ft May 13 (elevation, 4,672.8 ft); no contents Oct. 16 to about Dec. 12.
1938-58: Maximum contents observed, 16,100 acre-ft June 12, 13, 1953 (elevation, 4,673.7 ft); no contents Oct. 16 to about Dec. 12, 1957.

Remarks.--Reservoir is formed by earth-fill dam; storage began in 1935. Usable capacity, 15,280 acre-ft between elevations 4,629.6 (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). Elevation of spillway crest, 4,660 ft. Water used for irrigation on Hyrum project. Figures given herein represent usable contents; those published in annual reports prior to 1946 represent total contents.

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

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

Capacity table, water year 1957-58 (elevation, in feet, and usable contents, in acre-feet)

4,629.6	0	4,655	7,780
4,635	1,200	4,660	9,840
4,640	2,570	4,665	12,030
4,645	4,130	4,670	14,340
4,650	5,860	4,674	16,240

Usable contents, in acre-feet, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,480		-	-	-	-	-	-	15,380	12,080	7,580	4,700
2	3,260		-	-	-	-	-	-	15,380	11,900	7,420	4,630
3	3,020		-	-	-	-	-	-	15,330	11,720	7,260	4,530
4	2,750		-	-	-	-	-	-	15,330	11,580	7,150	4,430
5	2,540		-	-	-	-	-	12,940	15,330	11,400	7,070	4,360
6	2,310		-	-	-	-	-	13,500	15,280	11,270	6,840	4,290
7	2,030		-	-	-	-	-	14,060	15,280	11,090	6,720	4,230
8	1,750		-	-	-	-	-	14,250	15,280	10,960	6,610	4,160
9	1,490		-	-	-	-	-	14,580	15,190	10,790	6,530	4,100
10	1,230		0	3,080	6,490	11,360	11,670	15,000	15,140	10,610	6,460	4,030
11	980		-	-	-	-	-	15,470	15,040	10,480	6,380	4,000
12	770		-	-	-	-	-	15,570	14,950	10,390	6,270	3,960
13	560		-	-	-	-	-	15,660	14,860	10,260	6,190	3,930
14	340		-	-	-	-	-	15,630	14,760	10,220	6,120	3,900
15	160		-	-	-	-	-	15,570	14,620	10,140	6,050	3,900
16	0		-	-	-	-	-	15,570	14,480	10,010	5,900	3,870
17	0		-	-	-	-	-	15,520	14,290	9,880	5,830	3,830
18	0		-	-	-	-	-	15,520	14,200	9,710	5,760	3,830
19	0		-	-	-	-	-	15,570	14,060	9,540	5,650	3,800
20	0		1,360	4,130	8,100	11,630	12,710	15,570	13,920	9,370	5,540	3,800
21	0		-	-	-	-	-	15,520	13,730	9,200	5,470	3,800
22	0		-	-	-	-	-	15,520	13,590	9,040	5,400	3,800
23	0		-	-	-	-	-	15,520	13,310	8,910	5,250	3,800
24	0		-	-	-	-	-	15,520	13,080	8,790	5,180	3,800
25	0		-	-	-	-	-	15,520	12,940	8,670	5,110	3,800
26	0		-	-	-	-	-	15,520	12,800	8,500	5,040	3,800
27	0		-	-	-	-	-	15,520	12,670	8,340	4,970	3,800
28	0		-	-	9,960	-	-	15,470	12,580	8,260	4,940	3,800
29	0		-	-	-	-	-	15,420	12,390	8,100	4,870	3,800
30	0		-	-	-	-	11,490	15,420	12,210	7,940	4,830	3,800
31	0	-------	2,110	5,360	-------	12,170	-------	15,420	-------	7,740	4,770	-------
(†)	4,608.4	4,625.0	4,638.4	4,648.6	4,660.3	4,665.3	4,663.8	4,672.3	4,665.4	4,654.9	4,646.9	4,644.0
(‡)	-3,610	0	+2,110	+3,250	+4,600	+2,210	-680	+3,930	-3,210	-4,470	-2,970	-970

Calendar year 1957..... ‡ -8,280
Water year 1957-58..... ‡ +190

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

1075. Little Bear River near Hyrum, Utah

Location.--Lat 41°38'00", long 111°53'00", in NE¼SW¼ sec. 6, T. 10 N., R. 1 E., on left bank 2,000 ft upstream from road bridge, 1 mile downstream from Hyrum Dam, and 1½ miles west of Hyrum.

Drainage area.--222 sq mi.

Records available.--October 1938 to September 1958.

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.--20 years, 63.9 cfs (46,260 acre-ft per year).

Extremes.--Maximum discharge during year, 492 cfs Apr. 22 (gage height, 3.02 ft); minimum daily, 0.8 cfs Sept. 17-30.
1938-58: Maximum discharge, 986 cfs Apr. 30, 1952 (gage height, 4.54 ft); minimum daily, 0.2 cfs Oct. 9-11, 26-30, 1955.

Remarks.--Records good. Diversions above station for irrigation of about 2,800 acres above and about 7,600 acres below station. Flow regulated by Hyrum Reservoir (see preceding page).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

-0.1	0.2	0.3	8.1	1.3	105
0.0	.9	.4	12	1.8	199
.1	2.3	.6	24	2.4	333
.2	4.7	.9	50	3.0	486

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*68	96	1.5	1.6	1.9	23	58	251	57	1.3	1.2	1.2
2	140	86	1.3	1.5	1.9	50	59	266	*50	1.3	1.2	1.2
3	*140	78	1.3	1.5	*1.9	40	113	232	40	1.3	1.2	1.3
4	138	68	1.3	1.5	1.9	3.7	199	86	21	1.3	1.3	1.2
5	124	60	1.3	1.5	1.9	2.8	195	88	9.4	1.3	1.3	1.2
6	175	63	1.5	1.5	1.9	2.8	189	188	7.4	1.2	1.3	1.0
7	183	64	1.5	1.5	1.9	2.8	181	350	5.7	*1.2	1.3	.9
8	181	63	1.5	1.7	1.9	2.8	177	223	4.7	1.2	1.3	.9
9	177	60	1.5	1.7	1.9	2.8	194	120	3.0	1.2	1.2	.9
10	175	59	1.3	1.7	2.0	2.8	244	51	2.5	1.2	1.2	.9
11	173	59	1.3	1.6	2.0	2.8	222	63	3.0	1.2	1.5	.9
12	165	60	1.3	1.6	2.0	2.8	205	173	2.2	1.0	3.0	.9
13	165	61	1.3	1.6	2.2	2.8	193	273	2.2	1.0	1.5	.9
14	167	46	1.3	1.6	2.2	3.0	189	269	1.9	1.0	1.5	.9
15	163	2.5	1.3	1.6	2.2	3.3	195	224	1.7	1.0	1.5	.9
16	161	1.6	1.6	1.6	2.5	3.3	216	193	1.6	1.0	1.2	.9
17	157	1.6	1.6	1.5	2.5	102	240	183	1.6	1.0	1.0	.8
18	148	1.6	1.5	1.5	2.5	165	251	175	1.6	1.0	1.0	.8
19	187	*1.6	1.5	1.6	2.5	153	312	201	1.6	1.0	1.2	.8
20	179	1.6	1.5	1.6	2.5	146	400	227	1.5	1.2	1.2	.8
21	171	1.5	1.5	1.6	2.5	142	478	235	1.5	1.2	1.2	.8
22	165	1.7	1.5	1.6	2.5	151	483	229	1.3	1.2	1.2	.8
23	159	1.3	1.5	1.6	2.5	155	475	216	1.5	1.2	1.2	.8
24	153	1.5	1.5	1.6	2.5	150	448	212	1.3	1.2	1.2	.8
25	150	1.6	1.5	1.6	3.0	151	414	181	1.5	1.2	1.0	.8
26	144	1.6	1.6	1.7	2.8	153	374	155	1.3	1.2	1.0	.8
27	138	1.5	1.6	1.7	*2.8	148	345	129	1.2	1.2	1.0	.8
28	133	1.5	1.6	1.7	3.5	*133	326	105	1.2	1.2	1.0	.8
29	124	1.9	1.6	1.9	-	131	268	80	1.6	1.2	1.0	.8
30	117	1.5	*1.6	1.9	-------	131	*235	66	1.3	1.2	1.0	*.8
31	*107	-------	1.5	1.9	-------	116	-------	69	-------	*1.2	1.2	-------
Total	4,727	949.1	45.2	50.3	64.3	2,278.5	7,878	5,513	233.3	36.1	39.1	27.3
Mean	152	31.6	1.46	1.62	2.30	73.5	263	178	7.78	1.16	1.26	0.91
Ac-ft	9,380	1,880	90	100	128	4,520	15,630	10,930	463	72	78	54

Calendar year 1957: Max 503 Min 0.8 Mean 86.9 Ac-ft 62,890
Water year 1957-58: Max 483 Min 0.8 Mean 59.8 Ac-ft 43,320

* Discharge measurement made on this day.

1080. 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 1958.

Gage.--Water-stage recorder and timber control. Altitude of gage is 4,680 ft (from topographic map). Prior to Oct. 1, 1938, at datum 0.61 ft higher.

Average discharge.--45 years, 111 cfs (80,360 acre-ft per year).

Extremes.--1913-58: Maximum daily discharge, 206 cfs Apr. 24, 1956; no flow for periods during several years.

Remarks.--Records excellent. 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.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.75	0	1.6	60
.9	7	2.1	120
1.0	12	2.7	207
1.2	25		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	115	115	103	90	86	94	107	196	201	182	175	116
2	112	115	106	90	*84	93	107	201	202	191	172	115
3	110	99	103	90	88	93	106	177	*202	193	172	104
4	110	106	103	90	87	92	106	199	201	191	172	111
5	112	*116	107	90	77	88	106	180	199	194	172	111
6	116	115	111	92	87	94	106	113	196	194	170	111
7	116	115	107	93	87	92	106	156	199	193	163	111
8	116	*115	107	93	87	*94	102	107	202	193	161	111
9	116	115	108	95	87	93	102	116	201	193	154	111
10	115	116	107	93	88	89	102	199	197	*193	155	108
11	115	116	107	93	86	90	102	196	197	194	156	110
12	115	115	*107	92	86	89	98	133	196	196	154	110
13	115	115	107	94	88	89	97	199	196	196	154	110
14	115	115	107	97	86	89	92	196	196	196	147	110
15	115	116	108	97	89	90	21	201	196	196	148	110
16	115	115	112	97	98	88	0	197	196	196	145	110
17	115	115	*112	94	97	88	0	197	196	197	145	110
18	115	115	112	97	95	89	36	197	196	196	145	110
19	115	115	107	94	*94	88	51	201	196	194	144	110
20	115	114	110	82	95	88	0	204	196	194	*145	110
21	115	107	107	92	98	93	0	182	194	196	140	110
22	114	107	108	88	99	97	*74	204	194	*194	137	110
23	115	108	94	86	102	99	190	205	193	191	128	108
24	115	108	98	90	102	100	*193	204	191	188	128	112
25	115	111	103	90	104	106	184	202	191	188	128	112
26	115	112	102	89	104	107	194	202	190	186	128	112
27	115	108	102	90	103	104	194	201	188	184	128	111
28	115	108	104	90	97	106	194	199	191	178	127	114
29	115	107	106	81	-	107	194	201	191	175	120	114
30	115	102	103	89	-------	106	196	201	191	172	116	*114
31	115	-------	98	88	-------	108	-------	201	-------	176	116	-------
Total	3,552	3,356	3,266	2,826	2,581	2,943	3,160	5,767	5,875	5,900	4,545	3,326
Mean	115	112	105	91.2	92.2	94.9	105	186	196	190	147	111
Ac-ft	7,050	6,660	6,480	5,610	5,120	5,840	6,270	11,440	11,650	11,700	9,010	6,600

Calendar year 1957: Max 201 Min 0 Mean 135 Ac-ft 97,680
Water year 1957-58: Max 205 Min 0 Mean 129 Ac-ft 93,430

* Discharge measurement made on this day.

1085. 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 1958 (fragmentary prior to October 1923).

Gage.--Water-stage recorder in flume. Prior to May 29, 1924, water-stage recorder or staff gages at several sites within a mile of present site at different datums.

Average discharge.--35 years (1923-58), 28.6 cfs (20,710 acre-ft per year).

Extremes.--1906, 1924-58: Maximum daily discharge, 136 cfs May 30, 31, 1930; no flow at times in most years.

Remarks.--Records excellent except those below 10 cfs, which are good. 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.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

-0.4	0	0.3	9.0	1.2	61
0.0	.2	.5	20	1.8	95
.1	2.0	.8	38	2.2	119
.2	4.9				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	7.4	6.5	4.6	6.5	6.5	0.2	0	76	115	44	33
2	21	7.0	7.0	4.9	6.5	6.5	.2	0	86	115	39	33
3	23	7.4	6.5	5.3	6.5	6.5	.2	36	*93	112	34	33
4	27	6.5	5.7	4.6	6.5	6.5	.2	46	91	110	33	33
5	19	6.5	4.9	4.6	5.7	6.5	.1	58	90	108	35	33
6	7.0	6.5	5.3	5.3	5.3	6.1	0	80	82	106	38	33
7	6.1	6.5	6.1	5.3	5.3	5.7	0	69	68	99	40	33
8	6.1	6.1	6.1	5.3	4.9	5.7	0	75	68	90	39	33
9	5.7	6.1	6.1	5.3	4.9	5.3	0	88	75	84	39	33
10	5.7	6.1	5.7	5.7	4.9	5.7	0	95	82	82	38	33
11	5.7	6.1	5.3	6.5	5.3	6.1	0	90	89	81	39	33
12	5.7	6.1	*5.3	6.5	5.7	5.7	0	*78	86	73	36	33
13	5.3	6.1	5.3	5.7	5.7	5.7	0	82	84	78	36	35
14	5.3	6.5	5.3	4.9	5.3	5.7	0	80	84	73	37	33
15	5.3	6.5	5.7	4.6	5.3	5.7	0	65	85	67	46	33
16	5.3	6.1	5.7	4.6	5.7	5.7	0	71	88	67	37	33
17	5.3	5.7	6.1	4.6	5.7	5.7	0	83	82	62	37	32
18	4.9	5.7	5.7	4.6	5.7	5.3	0	85	87	56	37	31
19	4.9	6.1	5.7	4.6	*5.7	4.9	0	93	86	51	36	31
20	4.6	6.1	5.3	4.6	6.1	4.9	0	105	89	48	36	30
21	4.6	6.1	5.3	4.6	6.1	5.3	0	100	99	45	36	30
22	4.6	6.5	5.3	5.3	6.5	5.7	0	109	93	*40	36	31
23	4.6	7.8	4.9	5.3	6.5	5.7	0	94	97	40	39	30
24	4.9	7.8	5.3	7.0	6.5	1.8	0	92	92	46	37	30
25	4.9	7.4	6.5	6.5	7.0	.9	0	102	94	45	36	29
26	5.3	7.0	6.5	6.1	7.0	.4	0	*103	96	42	35	29
27	5.3	6.5	5.3	6.1	7.0	.4	0	100	94	43	34	27
28	5.3	6.1	5.3	5.7	7.0	.2	0	97	*96	42	34	26
29	5.3	6.1	5.3	7.4	-	.2	0	39	99	45	*34	25
30	5.3	6.1	4.6	7.4	-------	.2	0	32	111	46	33	*19
31	*6.1	-------	4.3	7.0	-------	.4	-------	89	-------	50	33	-------
Total	249.1	194.5	173.9	170.5	166.8	137.6	0.9	2,336	2,642	2,161	1,143	930
Mean	8.04	6.48	5.61	5.50	5.96	4.44	0.03	75.4	88.1	69.7	36.9	31.0
Ac-ft	494	386	345	338	331	273	1.8	4,630	5,240	4,290	2,270	1,840

Calendar year 1957: Max 127 Min 0 Mean 24.9 Ac-ft 18,000
Water year 1957-58: Max 115 Min 0 Mean 28.2 Ac-ft 20,440

* Discharge measurement made on this day.

1090. 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 1958. Records since May 1913 equivalent to earlier records if records for Utah Power & Light Co.'s tailrace near Logan are added. Published as Logan River near Logan prior to 1913.

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 various sites within half a mile downstream, below confluence of tailrace, at different datums. May 7 to Sept. 30, 1913, water-stage recorder at present site at different datums and Oct. 1, 1913, to Sept. 3, 1938, at datum about 2.3 ft lower than present.

Average discharge.--45 years (1913-58), 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, 35 years (1923-58), 234 cfs (169,400 acre-ft per year).

Extremes.--Maximum discharge during year, 1,080 cfs May 29 (gage height, 3.64 ft); minimum daily, 12 cfs many days.

Maximum combined discharge during year (Logan River above State dam, Utah Power & Light Co.'s tailrace, and Logan, Hyde Park & Smithfield Canal), 1,300 cfs May 27; minimum daily, 99 cfs Jan. 20.

1913-58: 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.

1934-58: 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 good 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 siphons 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.9	12	2.2	315
1.0	22	2.8	591
1.3	67	3.5	998
1.7	158		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	26	13	12	12	15	18	107	702	71	15	30
2	32	26	13	12	*12	15	17	123	680	73	14	32
3	27	40	14	12	13	15	17	153	*643	58	14	40
4	26	31	14	13	12	15	19	182	581	53	14	28
5	30	*23	14	12	22	14	19	245	561	46	14	32
6	41	28	14	12	14	15	20	378	586	41	14	30
7	41	23	17	12	12	14	20	396	601	36	14	27
8	42	22	18	12	12	*13	20	400	581	41	14	25
9	42	21	16	13	12	12	18	336	561	38	15	31
10	*44	20	13	12	12	12	18	340	507	*34	15	26
11	41	20	12	13	12	13	17	400	465	27	14	25
12	42	21	*12	13	12	12	17	428	441	16	14	23
13	42	22	12	13	12	12	21	285	400	16	14	28
14	41	34	12	12	12	12	34	265	374	16	14	22
15	42	25	12	12	12	12	141	239	327	13	15	26
16	40	20	12	12	14	12	214	271	304	16	15	25
17	38	19	*16	12	14	12	265	356	304	15	14	18
18	38	16	12	12	12	12	378	446	285	15	14	19
19	38	19	13	12	12	12	344	*527	278	15	15	19
20	35	18	12	12	12	12	360	601	271	16	*14	17
21	36	15	12	12	12	13	387	712	239	16	14	17
22	36	14	12	12	13	13	327	768	226	*15	15	18
23	40	16	12	12	14	13	138	*826	205	14	28	21
24	38	16	12	13	15	16	*102	868	202	15	27	17
25	31	15	15	13	20	21	77	868	*180	15	25	15
26	32	15	15	13	19	19	53	*881	153	15	20	16
27	32	15	13	13	16	17	50	912	140	15	19	18
28	32	14	12	13	15	17	46	881	126	16	18	16
29	30	13	12	22	-	17	55	868	109	17	32	15
30	28	13	12	14	-------	17	79	862	85	17	34	*16
31	28	-------	13	12	-------	18	-------	780	-------	15	30	-------
Total	1,110	620	411	394	381	442	3,291	15,704	11,117	826	548	692
Mean	35.8	20.7	13.3	12.7	13.6	14.3	110	507	371	26.6	17.7	23.1
Ac-ft	2,200	1,230	815	781	756	877	6,530	31,150	22,050	1,640	1,090	1,370

Calendar year 1957: Max 868 Min 12 Mean 99.3 Ac-ft 71,920
Water year 1957-58: Max 912 Min 12 Mean 97.4 Ac-ft 70,490

* Discharge measurement made on this day.

1090. 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	160	148	122	107	104	116	125	303	979	368	234	179
2	165	148	126	107	102	114	124	324	968	379	225	180
3	160	146	124	107	108	114	123	366	938	363	220	177
4	163	136	123	108	106	114	125	427	873	354	219	172
5	161	146	126	107	105	108	125	483	850	348	221	176
6	164	150	130	109	106	115	126	571	864	341	222	174
7	163	144	130	110	104	112	126	621	868	328	217	171
8	164	143	131	110	104	113	122	582	851	324	214	169
9	164	142	130	113	104	110	120	540	837	315	208	175
10	165	142	126	111	105	107	120	634	786	309	208	167
11	162	142	124	112	103	109	119	686	751	302	209	168
12	163	142	124	112	104	107	115	639	723	285	204	166
13	162	143	124	113	106	107	118	566	680	290	204	173
14	161	156	124	114	103	107	126	541	654	285	198	165
15	162	148	126	114	106	108	162	505	608	276	209	169
16	160	141	130	114	118	106	214	539	588	279	197	168
17	158	140	134	111	117	106	265	636	582	274	196	160
18	158	137	130	114	113	106	414	728	568	267	196	160
19	158	140	126	111	112	105	395	821	560	260	195	160
20	155	138	127	99	113	105	360	910	556	258	195	157
21	156	128	124	109	116	111	387	994	532	257	190	157
22	155	128	125	105	118	116	401	1,080	513	249	188	159
23	160	132	111	103	122	118	328	1,120	495	245	195	159
24	158	132	115	110	124	118	295	1,160	485	249	192	159
25	151	133	124	110	131	128	261	1,170	465	248	189	156
26	152	134	124	108	130	126	247	1,190	439	243	183	157
27	152	130	120	109	126	121	244	1,210	422	242	181	156
28	152	128	121	109	119	123	240	1,180	413	236	179	156
29	150	126	123	110	-	124	249	1,110	399	237	186	154
30	148	121	120	110	-------	123	275	1,100	387	235	183	149
31	149	-------	105	107	-------	126	-------	1,070	-------	241	179	-------
Total	4,911	4,164	3,849	3,393	3,129	3,523	6,451	23,806	19,634	8,887	6,236	4,948
Mean	158	139	124	109	112	114	215	768	654	287	201	165
Ac-ft	9,740	8,260	7,630	6,730	6,210	6,990	12,800	47,220	38,940	17,630	12,370	9,810

Calendar year 1957: Max 1,180 Min 92 Mean 259 Ac-ft 187,600
Water year 1957-58: Max 1,210 Min 99 Mean 255 Ac-ft 184,300

1135. 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.--November 1913 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 5,000 ft (from topographic map). Prior to Oct. 2, 1934, at site 1,000 ft upstream at different datum.

Average discharge.--44 years (1914-58), 126 cfs (91,220 acre-ft per year).

Extremes.--Maximum discharge during year, 515 cfs May 6 (gage height, 3.92 ft); minimum daily, 85 cfs Feb. 3, 4, 7, 11.
1913-58: Maximum discharge, 1,620 cfs May 15, 1917 (gage height, 6.5 ft, from flood-marks, site and datum then in use), from rating curve extended above 800 cfs; minimum daily, 29 cfs Jan. 3, 1935.

Remarks.--Records excellent. A few small diversions for irrigation of about 200 acres above station. Low flow may be slightly regulated by powerplant above station.

Revisions (water years).--WSP 1514: 1925.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

2.2	79
2.5	145
3.0	271
3.7	460

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	109	107	96	87	87	100	115	276	221	131	113	102
2	111	107	96	92	87	98	118	300	*206	131	109	102
3	113	107	98	90	*85	96	118	336	193	129	111	102
4	*115	107	94	87	85	94	118	385	186	129	111	100
5	113	104	100	90	87	92	113	424	176	129	111	100
6	111	104	98	90	87	92	107	460	174	129	111	98
7	111	104	102	92	85	92	109	449	171	*129	109	98
8	111	102	102	90	87	94	115	412	169	131	109	98
9	111	102	100	90	87	94	120	388	164	129	111	98
10	111	100	98	90	90	94	120	396	162	129	111	98
11	113	102	96	90	85	92	118	390	159	124	111	98
12	113	102	*96	87	90	92	127	377	157	124	109	100
13	113	104	94	87	90	92	140	361	157	124	109	100
14	113	115	94	87	90	90	157	331	157	122	111	100
15	111	107	94	87	90	87	186	*315	152	122	111	100
16	111	100	100	90	96	87	213	310	150	122	111	100
17	111	102	104	87	102	87	234	318	145	120	113	100
18	109	100	98	94	100	87	318	334	145	120	111	100
19	109	100	100	92	102	87	307	350	143	120	111	98
20	109	100	98	87	102	90	287	355	138	120	111	98
21	109	100	98	90	104	100	305	361	136	118	109	98
22	109	96	100	90	107	118	326	347	138	115	111	100
23	109	96	94	87	109	120	274	326	136	115	111	98
24	109	98	94	87	109	120	236	313	136	115	109	96
25	111	100	94	90	120	127	210	302	136	115	107	98
26	109	100	96	87	111	118	193	289	134	113	107	98
27	113	100	98	87	*107	113	188	276	129	115	104	96
28	111	98	98	87	102	*111	191	266	129	115	104	96
29	109	98	98	90	-	113	203	247	131	113	*104	96
30	109	96	96	92	-------	120	*239	239	131	120	104	*96
31	*107	-------	90	90	-------	129	-------	234	-------	115	102	-------
Total	3,433	3,058	3,014	2,763	2,683	3,126	5,605	10,467	4,661	3,783	3,386	2,962
Mean	111	102	97.2	89.1	95.8	101	187	338	155	122	109	98.7
Ac-ft	6,810	6,070	5,980	5,480	5,320	6,200	11,120	20,760	9,240	7,500	6,720	5,880

Calendar year 1957: Max 407 Min 69 Mean 143 Ac-ft 103,800
Water year 1957-58: Max 460 Min 85 Mean 134 Ac-ft 97,080

Peak discharge (base, 140 cfs).--Apr. 18 (11:30 p.m.) 377 cfs (3.42 ft); May 6 (11:30 p.m.) 515 cfs (3.92 ft).

* Discharge measurement made on this day.

1170. 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 1958.

Gage.--Water-stage recorder. Prior to May 22, 1914, staff gage at same site and datum.

Average discharge.--41 years (1917-58), 52.3 cfs (37,860 acre-ft per year).

Extremes.--1912-58: Maximum daily discharge, 182 cfs June 28, July 1, 1932, June 27, 28, 1933; no flow for periods each year.

Remarks.--Records good. 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 from this canal and West Side Canal used for irrigation of about 58,000 acres below station in eastern Box Elder County.

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

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.1	0	2.4	27
1.3	1.3	3.0	55
1.5	3.4	4.0	119
1.9	10	5.0	197

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	88	21	2.8					0	163	175	129	140
2	88	20	2.8					.6	*158	175	157	139
3	88	19	2.8					1.2	148	171	156	135
4	69	*15	2.8					67	140	164	157	135
5	48	9.1	2.8					74	140	163	157	135
6	48	8.9	2.8					80	139	164	157	135
7	48	8.7	3.0					96	139	164	*156	135
8	46	7.7	2.8					118	140	163	156	134
9	39	5.6	2.8					138	140	*165	158	126
10	36	3.8	2.8					*139	140	*167	163	124
11	32	4.4	2.8					125	140	166	163	124
12	29	6.9	1.8					86	146	167	166	120
13	33	6.1	0					81	159	167	167	114
14	29	5.2	0	(*)				80	163	165	167	113
15	19	5.1	0					80	163	165	166	111
16	23	4.7	*0					94	163	163	164	104
17	23	4.3	0					97	160	159	164	99
18	23	4.0	0					102	*170	158	*167	101
19	23	3.5	0		(*)			112	169	159	163	96
20	23	3.4	0					135	169	159	161	88
21	30	3.2	0					156	168	157	158	86
22	34	3.2	0					*167	170	152	155	90
23	34	3.2	0					174	*173	147	155	97
24	*34	3.3	0					169	175	155	156	97
25	33	3.0	0					167	175	155	156	99
26	34	2.8	0					168	175	154	*151	99
27	33	*2.8	0					168	175	155	143	99
28	29	3.0	0					167	175	155	141	99
29	20	3.3	0		-			167	174	155	140	*97
30	20	2.7	0		-------			164	175	108	140	*93
31	21	-------	0		-------		-------	163	-------	47	140	-------
Total	1,177	196.9	32.8	0	0	0	0	3,535.8	4,784	4,839	4,829	3,364
Mean	38.0	6.56	1.06	0	0	0	0	114	159	156	156	112
Ac-ft	2,330	391	65	0	0	0	0	7,010	9,490	9,600	9,580	6,670

Calendar year 1957: Max 167 Min 0 Mean 52.0 Ac-ft 37,680
Water year 1957-58: Max 175 Min 0 Mean 62.4 Ac-ft 45,140

* Discharge measurement or observation of no flow made on this day.

1175. 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 1958.

Gage.--Water-stage recorder. Prior to May 22, 1914, staff gage at same site and datum.

Average discharge.--46 years, 232 cfs (168,000 acre-ft per year).

Extremes.--1912-58: Maximum daily discharge, 748 cfs May 19, 20, 1954; no flow for periods in every year except 1914.

Remarks.--Records good except those for periods of ice effect or 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 from this canal and Hammond (East Side) Canal used for irrigation of about 58,000 acres below stations in eastern Box Elder County.

Cooperation.--Gage-height record and 11 discharge measurements furnished by Utah Power & Light Co.

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Nov. 4, May 4-11, July 26 to Sept. 30)

0.6	2.1	1.5	20	4.0	249
.8	3.9	1.9	40	5.0	415
1.0	6.8	2.5	81	6.6	750
1.2	11	3.2	148		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	399	135	75		(*)			0	699	732	600	597
2	401	135	75					0	*688	732	606	602
3	397	135	75					0	677	725	604	602
4	354	*114	64					265	663	711	602	600
5	314	83	57	b22		22		318	628	713	602	602
6	313	85	57					338	606	711	608	597
7	309	85	57					383	604	709	*615	597
8	309	84	57			11		446	619	697	626	597
9	279	84	57			0		516	650	*683	628	576
10	260	84	57			0		*498	657	*686	628	576
11	200	83	56			0		455	655	683	634	568
12	216	83	54			0		340	652	683	626	536
13	224	82	49			0		410	686	681	622	516
14	214	79	49	(*)		0		393	722	672	641	498
15	185	79	49			0		365	722	663	659	467
16	193	79	*45		22	0		410	722	652	661	439
17		79				0		441	720	626	661	442
18		79	50			0		479	*720	604	*650	444
19		78			(*)	0		549	718	608	630	429
20	190	78		24		0		593	720	602	619	422
21		78	55			0		648	720	576	617	424
22		78	55			0		*663	722	564	617	422
23		78	37			0		668	*727	570	615	422
24	*182	78	22			0		688	722	574	617	422
25	177	78	22			0		706	732	570	617	422
26	178	77	22			0		692	725	574	*585	422
27	177	*75	21			0	(*)	704	720	587	587	420
28	163	75	20			0		704	720	587	600	424
29	136	75	20		-	0		704	711	585	600	*415
30	137	75	20		-------	0		699	722	553	600	*393
31	138	-------	20		-------	0	-------	702	-------	585	600	-------
Total	7,185	2,590	1,447	728	616	165	0	14,777	20,749	19,898	19,177	14,893
Mean	232	86.3	46.7	23.5	22	5.32	0	477	692	642	619	496
Ac-ft	14,250	5,140	2,870	1,440	1,220	327	0	29,310	41,160	39,470	38,040	29,540

Calendar year 1957: Max 738 Min 0 Mean 245 Ac-ft 177,200
Water year 1957-58: Max 732 Min 0 Mean 280 Ac-ft 202,800

* Discharge measurement or observation of no flow made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Oct. 17-24, Dec. 16-20; Jan. 9 to May 3; discharge estimated on basis of 5 discharge measurements and records of gate changes by employees of Utah Power & Light Co.

1180. 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 1958.
Gage.--Water-stage recorder. Datum of gage is 4,276.13 ft above mean sea level (levels by Bureau of Reclamation). Prior to Nov. 8, 1913, staff gage and Nov. 8, 1913, to Sept. 10, 1938, water-stage recorder, at site three-quarters of a mile downstream at different datums.
Extremes.--Maximum discharge during year, 3,820 cfs Apr. 23, 24 (gage height, 4.78 ft); minimum daily, 20 cfs June 14, 21, Aug. 5.
1889-1958: 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. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas.
Cooperation.--Ten discharge measurements furnished by Utah Power & Light Co.
Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1902, superseding those published in WSP 85, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1902		1902-Con.		1902-Con.		1902-Con.		1902-Con.	
Aug. 1	149	Aug. 13	69	Aug. 25	52	Sept. 6	120	Sept.18	214
2	149	14	69	26	52	7	93	19	214
3	149	15	69	27	52	8	120	20	252
4	149	16	60	28	46	9	93	21	295
5	134	17	60	29	46	10	120	22	295
6	120	18	60	30	39	11	120	23	295
7	106	19	60	31	39	12	149	24	295
8	93	20	60	Sept. 1	34	13	149	25	295
9	81	21	60	2	46	14	149	26	295
10	81	22	60	3	120	15	149	27	340
11	69	23	60	4	149	16	149	28	388
12	69	24	52	5	134	17	180	29	438
								30	490

Month	Maximum	Minimum	Mean	Runoff in acre-feet
August 1902	149	39	77.9	4,790
September	490	34	206	12,260
Calendar year 1902	3,340	34	1,015	734,800

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	870	1,330	1,440	218	*1,270	1,850	2,140	2,590	1,280	22	560	327
2	1,020	1,380	1,460	971	1,180	1,640	2,100	2,750	*1,080	21	411	448
3	1,240	1,290	1,170	921	1,080	1,270	2,520	2,830	751	22	226	499
4	1,590	*1,240	1,280	777	1,140	1,670	2,110	2,580	743	22	580	495
5	1,650	1,280	1,270	581	1,160	1,450	2,470	2,360	1,010	22	20	455
6	1,580	1,180	1,300	923	1,550	1,410	2,260	2,320	836	22	21	501
7	1,530	1,310	1,040	1,000	1,800	*1,490	2,050	2,190	698	22	22	456
8	1,470	1,200	1,300	974	1,480	1,490	1,890	2,310	739	22	22	466
9	1,280	1,350	1,340	911	1,380	1,060	1,970	2,370	413	*22	893	414
10	1,240	1,480	1,320	911	1,460	1,360	2,030	2,300	387	*24	871	386
11	1,520	*1,380	1,300	1,040	1,440	1,280	1,930	2,150	68	24	758	344
12	1,370	1,240	940	853	1,390	1,390	1,820	2,400	25	26	603	434
13	1,310	1,460	1,110	1,040	1,600	1,430	1,760	2,360	22	26	224	165
14	1,500	1,540	907	1,100	1,580	1,460	1,890	2,820	20	25	519	309
15	875	1,610	898	1,360	1,550	1,420	1,900	2,730	22	24	452	752
16	1,160	1,790	*1,320	1,370	1,570	976	1,940	2,530	22	24	698	703
17	1,340	1,650	1,080	1,440	1,520	1,380	1,980	2,320	22	25	505	678
18	1,480	1,470	1,430	1,530	2,360	1,450	3,110	2,140	22	24	*347	708
19	1,200	1,370	1,300	1,440	*3,020	1,570	3,510	1,850	22	22	22	700
20	1,220	1,540	1,230	1,620	2,610	1,690	3,580	2,120	21	24	22	635
21	1,340	1,390	1,370	1,680	2,580	1,770	*3,680	1,880	20	25	22	625
22	1,230	1,230	1,190	1,450	2,340	1,690	3,720	1,980	21	25	42	527
23	1,210	1,180	1,330	1,610	2,840	1,620	3,810	2,560	22	25	272	560
24	*1,300	1,250	826	1,640	2,590	1,530	3,790	2,370	22	25	518	644
25	1,220	1,310	894	1,510	2,220	2,100	3,800	2,090	24	25	602	771
26	1,140	1,410	1,220	1,370	2,140	2,020	3,800	1,810	22	25	*619	683
27	1,190	1,330	1,320	1,360	2,300	2,140	3,630	2,080	22	25	618	849
28	1,090	1,040	1,290	1,520	2,150	2,060	3,510	2,190	22	288	23	789
29	1,240	1,290	1,120	1,440	-	2,000	*2,920	1,630	22	291	290	*873
30	1,250	1,410	1,290	1,600	-------	1,950	2,990	1,180	22	345	351	656
31	1,400	-------	1,250	1,380	-------	2,120	-------	831	-------	545	447	-------
Total	40,055	40,930	37,535	37,540	51,300	49,736	80,610	68,621	8,422	2,109	11,580	16,852
Mean	1,292	1,364	1,211	1,211	1,832	1,604	2,687	2,214	281	68.0	374	562
Ac-ft	79,450	81,180	74,450	74,460	101,800	98,650	159,900	136,100	16,700	4,180	22,970	33,430

Calendar year 1957: Max 4,880 Min 21 Mean 1,441 Ac-ft 1,043,000
Water year 1957-58: Max 3,810 Min 20 Mean 1,220 Ac-ft 883,300

* Discharge measurement made on this day.

1190. 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, November 1940 to September 1958.

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

Average discharge.--19 years (1911-12, 1931-32, 1941-58), 17.5 cfs (12,670 acre-ft per year).

Extremes.--Maximum discharge during year, 118 cfs Mar. 21 (gage height, 2.19 ft); minimum, 9.1 cfs Mar. 4 (gage height, 0.38 ft).
1911-13, 1931-32, 1940-58: Maximum discharge, 351 cfs July 24, 1955 (gage height, 3.63 ft), from rating curve extended above 70 cfs on basis of computation of peak flow by weir formula; minimum, 6.8 cfs Aug. 19, 1948, Jan. 3, 1951; minimum gage height, 0.31 ft Aug. 19, 1948.

Remarks.--Records good except those computed on basis of partly estimated gage-height record and those for periods of no gage-height record, which are fair. Diversions above station for irrigation of about 400 acres.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

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

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*13	14	14	14	15	14	20	16	17	14	14	16
2	15	14	14	14	15	14	*25	16	17	15	14	15
3	14	14	14	14	16	14	22	16	17	15	14	15
4	14	14	14	14	16	13	20	17	16	15	14	15
5	14	*14	14	14	16	12	19	18	16	15	14	15
6	14	14	15	14	16	19	18	19	15	14	14	15
7	14	14	15	14	16	19	19	20	15	15	13	15
8	14	14	16	14	15	15	21	20	15	15	13	15
9	14	14	15	14	15	13	21	19	15	15	14	15
10	14	14	15	14	15	12	19	*21	15	14	14	15
11	14	14	14	15	15	13	19	21	15	14	14	15
12	14	14	15	15	15	13	21	25	16	14	13	17
13	14	14	15	15	15	13	22	24	*16	14	13	20
14	14	15	15	15	15	13	23	23	16	14	13	17
15	14	14	16	15	15	13	25	22	15	*14	13	16
16	14	14	*26	15	27	13	27	21	15	14	14	15
17	14	14	18	15	31	14	27	20	15	14	*14	15
18	14	14	15	15	23	13	25	20	14	14	14	16
19	14	14	14	14	23	15	26	20	14	14	14	15
20	14	14	15	14	25	f23	21	20	14	14	14	15
21	14	13	15	14	24	f63	22	21	14	14	14	15
22	14	12	14	14	*22	f52	22	21	14	14	14	15
23	14	13	13	14	43	f41	20	21	14	14	14	*15
24	14	14	12	14	59	f37	19	21	14	15	14	15
25	14	14	14	14	56	f26	18	20	14	14	14	15
26	14	14	15	14	21	20	18	20	14	14	14	15
27	14	14	14	*14	14	f20	17	19	14	14	14	15
28	14	14	14	15	14	f24	16	19	14	14	19	15
29	14	13	14	15	-	f26	16	18	14	14	17	15
30	14	14	14	17	-------	f29	16	17	14	15	16	15
31	14	-------	13	16	-------	21	-------	17	-------	16	15	-------
Total	432	416	461	449	612	647	624	612	448	445	439	462
Mean	13.9	13.9	14.9	14.5	21.9	20.9	20.8	19.7	14.9	14.4	14.2	15.4
Ac-ft	857	825	914	891	1,210	1,280	1,240	1,210	889	883	871	916

Calendar year 1957: Max 133 Min 11 Mean 17.0 Ac-ft 12,310
Water year 1957-58: Max 63 Min 12 Mean 16.6 Ac-ft 11,990

* Discharge measurement made on this day.
f Fragmentary gage-height record; discharge computed from partly estimated gage heights.
Note.--No gage-height record Apr. 20 to May 9, May 16-22, Sept. 24-30; discharge estimated on basis of weather records and records for Devil Creek above Campbell Creek, near Malad City, and Malad River at Woodruff.

1225. 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 1958.

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.--19 years (1939-58), 9.83 cfs (7,120 acre-ft per year).

Extremes.--Maximum discharge during year, 34 cfs Apr. 15; maximum gage height, 2.06 ft July 30; minimum discharge, 2.7 cfs Jan. 24 (gage height, 1.27 ft); minimum daily, 4.3 cfs Jan. 24.

1938-58: Maximum discharge observed, 160 cfs Apr. 2, 1943, from rating curve extended above 130 cfs on basis of logarithmic plotting; 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. 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). WSP 1514: 1942.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Mar. 23 to May 21)

1.4	3.5	1.7	10
1.5	5.2	1.8	14
1.6	7.4	2.0	23

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*5.6	7.0	6.7	6.1	6.3	7.0	15	13	14	7.7	6.7	6.1
2	5.9	7.0	7.0	6.3	6.1	6.7	*19	13	13	7.4	6.7	6.1
3	6.1	7.0	7.0	6.3	6.3	6.7	16	13	13	7.7	6.7	6.1
4	6.3	7.0	7.0	5.9	6.1	6.5	15	14	13	7.4	6.5	6.1
5	6.1	*7.0	7.2	5.9	6.1	6.5	13	15	12	7.4	6.3	6.1
6	5.9	7.0	7.2	6.1	6.3	6.5	13	16	12	7.4	6.3	5.9
7	5.9	6.7	7.2	6.1	6.3	6.5	14	17	12	7.4	6.3	5.6
8	5.9	6.7	6.7	6.1	6.1	6.5	17	17	11	7.2	6.3	5.9
9	5.9	6.5	6.5	6.1	6.3	6.3	18	16	11	7.2	6.3	5.9
10	5.6	6.7	6.5	6.1	6.3	6.5	15	*17	9.9	7.2	6.5	5.9
11	5.9	6.7	6.5	6.1	6.3	6.5	16	18	9.4	7.0	6.3	5.9
12	5.9	6.5	6.3	6.1	6.3	6.5	18	22	9.4	7.0	6.3	6.1
13	6.1	6.7	6.7	6.1	6.3	6.3	20	21	*9.4	6.7	6.3	6.3
14	6.1	7.0	6.5	5.9	6.3	6.5	21	19	9.1	6.7	6.1	6.1
15	6.5	6.7	6.5	6.1	6.5	6.7	22	17	8.8	6.7	6.3	5.9
16	6.5	6.5	*6.7	6.1	7.0	6.5	21	17	8.8	*6.7	6.3	5.9
17	6.5	6.5	7.0	6.3	7.0	6.5	21	17	8.5	6.7	6.1	5.9
18	6.5	6.7	6.3	6.3	7.0	6.5	23	17	8.5	6.7	*6.3	6.1
19	6.5	7.2	6.1	6.1	7.0	6.5	19	18	8.5	6.7	6.1	6.1
20	6.5	7.2	6.3	5.6	7.2	6.7	18	17	8.2	6.7	5.9	6.1
21	6.5	7.0	6.3	6.1	7.2	10	19	18	8.2	6.7	6.1	6.1
22	6.5	7.0	6.1	5.9	*7.0	13	19	18	8.0	6.7	6.1	6.1
23	6.5	7.0	5.9	5.4	8.5	18	16	18	8.0	6.7	6.3	6.1
24	6.7	7.0	6.3	4.3	9.1	19	16	18	8.0	6.7	6.1	*6.1
25	7.0	6.7	6.5	6.1	12	15	15	17	8.0	6.7	6.1	6.1
26	7.0	7.0	6.3	5.6	8.5	13	15	16	8.0	6.7	6.1	6.1
27	7.0	7.0	6.3	*5.9	7.4	12	14	16	7.7	6.7	6.1	6.1
28	7.0	7.0	6.5	6.1	7.2	14	13	15	7.7	6.7	6.3	6.1
29	7.0	6.7	6.5	6.3	-	16	13	15	7.7	6.7	6.1	6.1
30	7.0	6.7	6.3	6.1	-------	21	13	14	7.7	8.2	6.1	6.1
31	7.0	-------	6.1	6.3	-------	18	-------	15	-------	7.0	6.3	-------
Total	197.4	205.4	203.0	185.8	196.0	299.9	507	514	288.5	217.1	194.3	181.1
Mean	6.37	6.85	6.55	5.99	7.00	9.67	16.9	16.6	9.62	7.00	6.27	6.04
Ac-ft	392	407	403	369	389	595	1,010	1,020	572	431	385	359

Calendar year 1957: Max 54 Min 3.2 Mean 7.77 Ac-ft 5,620
Water year 1957-58: Max 23 Min 4.3 Mean 8.74 Ac-ft 6,330

* Discharge measurement made on this day.

1255. Malad River at Woodruff, Idaho

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

Drainage area.--485 sq mi, approximately.

Records available.--November 1938 to September 1958.

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, 238 cfs Feb. 26 (gage height, 5.18 ft); minimum observed, 15 cfs Aug. 26 (gage height, 1.82 ft).
1938-58: 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, Aug. 26, 1958; minimum gage height observed, that of Aug. 26, 1958.

Remarks.--Records good except Oct. 2 to Nov. 3 and those for periods of no gage-height record, which are 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.8	14	3.0	86
2.0	22	4.0	150
2.2	33	5.2	240
2.5	54		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*18	33	44	44	a56	a115	*140	64	22	18	17	a18
2	22	33	44	a43	57	102	a160	62	22	18	17	18
3	22	34	45	42	a57	a98	177	59	22	18	17	18
4	23	*37	46	a42	57	95	a180	59	20	18	17	17
5	22	38	46	42	a60	a94	180	55	19	18	17	17
6	22	39	45	a40	62	93	a140	54	19	18	17	17
7	22	37	46	39	a66	a93	112	50	20	18	17	17
8	22	39	54	a40	70	93	a100	48	a20	18	17	17
9	22	36	53	40	a73	a92	93	40	19	18	16	18
10	22	38	50	a40	77	92	80	*38	19	18	17	a18
11	22	40	49	41	a83	a95	80	38	19	18	17	a19
12	22	37	46	a42	89	99	82	39	20	18	17	a21
13	22	45	47	43	a83	a98	80	47	*19	18	17	18
14	22	54	47	a44	77	97	78	48	20	18	17	17
15	26	59	a50	45	a85	a105	79	41	19	*18	18	18
16	27	51	*52	a47	93	114	78	37	19	18	18	18
17	26	46	a85	49	a120	a113	82	34	19	18	*17	18
18	27	44	133	a47	142	112	82	34	20	17	17	19
19	27	44	a88	46	a145	a105	89	31	20	16	a17	20
20	27	48	60	a46	150	100	91	29	19	16	17	21
21	28	44	a65	46	a160	a110	93	27	19	16	17	22
22	28	32	67	a45	*168	127	90	26	a19	a17	17	22
23	28	37	a60	44	a175	a140	90	26	19	18	a17	*20
24	29	40	44	a45	181	151	80	26	18	18	17	a20
25	28	39	a46	47	a220	a155	87	24	18	18	17	19
26	29	43	51	a47	238	160	115	23	19	17	15	20
27	33	a40	a50	*47	a175	a140	107	24	18	16	18	19
28	33	40	50	a48	140	126	95	22	19	17	18	a20
29	33	39	a50	49	-	a120	79	24	19	18	21	20
30	33	42	50	a52	-------	117	68	24	18	16	18	20
31	23	-------	a47	56	-------	a130	-------	23	-------	17	18	-------
Total	800	1,228	1,710	1,388	3,159	3,481	3,087	1,176	582	543	534	566
Mean	25.8	40.9	55.2	44.8	113	112	103	37.9	19.4	17.5	17.2	18.9
Ac-ft	1,590	2,440	3,390	2,750	6,270	6,900	6,120	2,330	1,150	1,080	1,060	1,120

Calendar year 1957: Max 205 Min 17 Mean 47.1 Ac-ft 34,090
Water year 1957-58: Max 238 Min 15 Mean 50.0 Ac-ft 36,200

* Discharge measurement made on this day.
a No gage-height record; discharge estimated or interpolated on basis of weather records and records for Portneuf River, Marsh Creek, and other nearby streams.

1285. 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 1958.

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.--52 years (1906-58), 225 cfs (162,900 acre-ft per year).

Extremes.--Maximum discharge during year, 1,740 cfs May 27 (gage height, 3.57 ft); minimum not determined, occurred during period of ice effect or no gage-height record.
1904-58: Maximum discharge observed, 4,170 cfs 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.

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. WSP 1394: 1907-9, 1911-12, 1921-22.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 30 to Nov. 2, May 19-27, July 13 to Sept. 30)

0.0	34	1.6	370
.4	72	2.0	530
.8	136	3.0	1,080
1.2	235	3.7	1,670

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73	*72		b35	b55	b50	61	162	1,040	203	102	81
2	72	69			55		64	188	*1,090	196	96	78
3	81	73			55		61	223	1,060	180	92	75
4	86	71					62	274	1,010	178	92	65
5	80	b68		b50	b55		61	328	974	171	96	62
6	80	b69					62	380	1,070	159	94	60
7	78	69			b56		63	437	1,200	149	92	58
8	76	68			b56		62	449	1,060	142	85	57
9	73	*66			59		62	465	860	136	84	56
10	72	b62			59		61	535	*735	130	81	55
11	72	b64			59	b55	63	630	650	126	77	55
12	71	65			b56		63	665	565	123	75	65
13	72	66			b56		66	565	481	117	73	81
14	80	70			b55		73	*521	465	112	73	68
15	78	69	b55		58		85	481	481	114	73	62
16	76	b67		50	58		103	449	481	110	71	61
17	73				58		121	481	461	107	77	59
18	72				59		166	635	465	107	77	58
19	72	b60			60		168	820	453	107	73	55
20	73				62		166	1,000	*437	105	71	54
21	72				63	61	171	1,170	394	107	70	55
22	72				63	61	166	*1,230	366	107	71	52
23	71				65	61	151	1,250	332	102	73	48
24	72				65	63	140	1,370	307	100	70	50
25	71				66	63	134	1,300	290	96	69	51
26	68	b55			b60	62	134	1,470	267	91	65	51
27	68	(*)			b56	61	136	*1,600	245	90	65	51
28	69				*b55	62	136	*1,510	229	86	71	52
29	64			55	-	61	138	*1,330	212	98	*77	50
30	63		(*)		-------	61	*149	1,300	*206	107	88	*50
31	71	-------		(*)	-------	*64	-------	1,110	-------	*108	85	-------
Total	2,271	1,878	1,705	1,565	1,634	1,775	3,148	24,328	17,886	3,864	2,458	1,775
Mean	73.3	62.6	55	50.5	58.4	57.3	105	785	596	125	79.3	59.2
Ac-ft	4,500	3,720	3,380	3,100	3,240	3,520	6,240	48,250	35,480	7,660	4,880	3,520

Calendar year 1957: Max 2,320 Min - Mean 240 Ac-ft 173,500
Water year 1957-58: Max 1,600 Min - Mean 176 Ac-ft 127,500

Peak discharge (base, 1,200 cfs).--May 27 (2:30 a.m.) 1,740 cfs (3.57 ft); June 7 (11 p.m.) 1,370 cfs (3.41 ft).

* Discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Note.--No gage-height record Jan. 7-31, Feb. 2, 3 (stage-discharge relation affected by ice during most of period); discharge estimated on basis of 1 discharge measurement, weather records, trend of flow, and records for station near Peoa.

1290. 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 1958 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.--1945-58: Maximum daily discharge, 913 cfs May 21, 1956; no water diverted from Weber River for several months each year.

Remarks.--Records good. 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 99.

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

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-25, Apr. 22 to Sept. 30				Oct. 25 to Apr. 22			
0.0	0	1.5	149	2.1	12	3.0	49
.1	2.8	2.0	235	2.3	19	4.0	106
.2	7.0	3.0	459	2.7	35	4.6	164
.4	20	4.0	723				
.7	46	5.0	953				
1.0	80						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	*17	38				*22	148	520			
2	0	16	43				44	168	525			
3	0	23	40				45	190	522			
4	0	31	22				46	224	520			
5	0	32	0				45	278	284			
6	0	32	0				41	314	60			
7	0	35	0				45	342	270			
8	0	37	0				44	396	115			
9	0	36	0				*44	406	53			
10	0	36	0				46	426	67			
11	0	39	0				47	449	172			
12	0	40	0				48	517	293			
13	0	39	0				52	514	306			
14	0	42	0				58	462	301			
15	6.5	41	0				67	408	289			
16	13	38	0				80	384	268			
17	13	40	0				103	384	248			
18	13	36	0				137	492	246			
19	14	41	0				158	600	235			
20	14	41	0				154	710	218			
21	14	33	0				159	778	183			
22	16	32	0				157	*811	168			
23	18	45	0				143	818	152			
24	21	45	0				133	822	128			
25	21	48	0				127	713	117			
26	19	48	0				120	534	33			
27	19	43	0				122	508	0			
28	18	39	0		(*)		122	506	0			
29	15	36	0		-		125	500	0			
30	15	31	0		-------		*136	497	0			
31	18	-------	0		-------	(*)	-------	486	-------	(*)		-------
Total	267.5	1,092	143	0	0	0	2,670	14,785	6,293	0	0	0
Mean	8.63	36.4	4.61	0	0	0	89.0	477	210	0	0	0
Ac-ft	531	2,170	284	0	0	0	5,300	29,330	12,480	0	0	0

Calendar year 1957: Max 889 Min 0 Mean 103 Ac-ft 74,800
Water year 1957-58: Max 822 Min 0 Mean 69.2 Ac-ft 50,100

* Discharge measurement or observation of no flow made on this day.

1293. Weber River near Peoa, Utah

Location.--Lat 40°45'10", long 111°22'20", in SE¼NW¼ sec. 10, T. 1 S., R. 5 E., on left bank 60 ft downstream from bridge on U. S. Highway 189, 2.4 miles north of Peoa, and 3.2 miles upstream from Wanship Dam.

Records available.--May 1957 to September 1958.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 6,050 ft (from Bureau of Reclamation Rockport Reservoir map).

Extremes.--Maximum discharge during year, 1,230 cfs June 8 (gage height, 3.17 ft); minimum, 46 cfs Jan. 1, 2.
1957-58: Maximum discharge, 2,110 cfs June 7, 1957 (gage height, 3.37 ft); minimum, that of Jan. 1, 2, 1958.

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 Rockport Reservoir. Records do not include water diverted from Weber River basin through Weber-Provo diversion canal (see p. 61). Flow slightly regulated by several small reservoirs above station.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.7	51	2.4	386
1.8	68	2.6	579
2.0	128	3.0	1,040
2.2	233		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	93	b80	b50		118	146	128	460	118	63	68
2	93	96	b80			114	128	142	*498	116	61	66
3	104	100	b80		95	110	114	165	460	107	59	68
4	121	107	b80			107	104	186	423	114	61	63
5	114	110	110	b80		100	107	192	539	110	66	61
6	107	110	118			104	100	198	1,010	114	61	61
7	100	114	124			107	104	277	932	107	61	59
8	100	118	133		105	110	121	227	994	100	61	59
9	100	110	b121			107	151	215	801	90	66	56
10	100	107	b118		114	96	151	261	*644	85	68	54
11	100	114	b110		110	100	156	320	460	75	66	51
12	104	114	b110		96	100	186	370	268	68	58	63
13	104	114	b110		114	110	215	268	180	66	59	70
14	110	146	118		110	107	233	*240	156	61	61	68
15	110	137	128		114	110	233	221	133	63	63	63
16	107	114	156	80	118	110	215	198	137	63	70	61
17	104	107	192		118	96	186	174	137	61	75	63
18	100	96	160		121	114	233	192	137	66	78	66
19	100	100	146		128	110	209	268	137	66	78	66
20	100	100	156		142	114	180	370	*128	73	78	63
21	96	b93	137		142	156	174	508	133	73	78	66
22	100	b93	133		146	186	165	*569	121	73	75	63
23	100	b93	b92		160	204	165	559	114	78	75	63
24	96	b93	b94		174	221	165	644	121	73	75	61
25	96	93	b100		221	221	146	601	128	70	73	63
26	90	93	b102		192	174	121	*872	151	68	63	63
27	90	*85	b96		160	156	114	982	165	70	59	66
28	100	b83	b93		*142	156	110	*982	160	68	63	66
29	90	b80	b93	95	-	165	110	*896	133	68	*61	66
30	92	b80	*b90	-------	-------	198	*114	860	*118	70	63	*63
31	*93	-------	b75	(*)	-------	*192	-------	633	-------	*70	68	-------
Total	3,117	3,093	3,535	2,540	3,517	4,173	4,656	12,718	9,978	2,506	2,066	1,889
Mean	101	103	114	81.9	126	135	155	410	333	80.8	66.6	63.0
Ac-ft	6,180	6,130	7,010	5,040	6,980	8,280	9,240	25,230	19,790	4,970	4,100	3,750

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 1,010 Min - Mean 147 Ac-ft 106,700

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 7 to Feb. 9; discharge estimated on basis of 1 discharge measurement, weather records, trend of flow, and records for station near Oakley.

1295. 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 an eighth of a mile downstream from Wanship Dam, 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, April 1957 to September 1958 (discontinued).

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5,900 ft (from topographic map). Nov. 17, 1950, to Sept. 30, 1955, water-stage recorder at site 200 ft upstream at different datum.

Extremes.--Maximum discharge during year, 749 cfs Apr. 15-18 (gage height, 2.90 ft); minimum daily, 0.1 cfs Nov. 17-22 (gage height, 1.02 ft).
1950-55, 1957-58: Maximum discharge, 2,340 cfs May 30, 1951 (gage height, 4.73 ft, site and datum then in use); minimum daily, that of Nov. 17-22, 1957.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Many diversions above station for irrigation. Flow regulated by Rockport Reservoir, formed by Wanship Dam, completed in 1957 (usable capacity, 60,000 acre-ft). Records do not include water diverted from Weber River basin through Weber-Provo diversion canal (see p. 61).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.0	0	1.5	12	2.0	103
1.1	.3	1.6	21	2.2	188
1.2	1.0	1.7	33	2.5	383
1.3	2.6	1.8	50	2.9	749
1.4	6.2				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	160	324	88	91	130	222	*474	150	602	103	160	188
2	160	324	164	82	130	210	474	150	582	97	160	188
3	160	324	276	76	*126	194	474	150	382	97	155	188
4	160	263	316	76	126	194	474	146	424	97	160	194
5	160	324	316	78	133	154	474	155	*424	97	164	247
6	160	135	324	68	95	130	474	151	457	97	155	474
7	160	.3	316	44	130	141	474	169	416	94	160	474
8	160	.5	316	64	146	141	457	169	324	94	174	474
9	133	.4	316	66	146	141	457	169	331	94	179	474
10	118	.3	316	66	137	141	457	164	331	94	179	474
11	118	.3	316	66	155	141	620	164	331	94	*179	*465
12	118	.3	316	66	169	141	709	169	331	*94	179	465
13	118	.2	316	88	216	141	699	230	270	94	179	465
14	118	.4	316	118	205	141	*709	302	222	94	174	465
15	118	.3	316	155	164	133	749	302	216	94	179	465
16	114	.2	316	222	141	122	749	302	155	94	183	465
17	114	.1	309	227	141	118	749	302	*137	119	183	465
18	100		309	227	141	118	652	302	137	146	183	465
19	82		309	227	141	130	276	302	137	141	179	440
20	71	a.1	270	227	139	146	264	309	137	146	179	241
21	76		244	227	179	150	405	316	137	146	183	130
22	85		244	183	188	242	361	*270	137	146	188	130
23	103		227	164	183	465	233	146	130	150	194	133
24	133	a2.0	210	164	183	474	222	126	126	146	199	104
25	146		210	155	183	483	222	130	126	133	199	73
26	146		210	150	205	483	222	130	107	150	194	62
27	155	*a1.0	194	a147	222	282	210	130	107	150	194	59
28	141		194	a143	*222	.4	160	207	122	150	188	59
29	98	a23	194	a140	-	.4	150	324	122	146	194	59
30	229	88	*141	•a138	-------	.4	*150	506	118	150	194	57
31	*324	-------	97	133	-------	243	-------	602	-------	164	188	-------
Total	4,238	1,817.8	8,006	4,076	4,476	5,822.2	13,200	7,144	7,578	3,711	5,558	8,642
Mean	137	60.6	258	131	160	188	440	230	253	120	179	288
Ac-ft	8,410	3,610	15,880	8,080	8,880	11,550	26,180	14,170	15,030	7,360	11,020	17,140

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 749 Min 0.1 Mean 203 Ac-ft 147,300

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 1 discharge measurement, weather records, trend of flow, and records for Weber River near Coalville.

1305. 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 1958.

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.--31 years, 205 cfs (148,400 acre-ft per year).

Extremes.--Maximum discharge during year, 930 cfs Apr. 18 (gage height, 3.29 ft); minimum recorded, 22 cfs Nov. 27 (gage height, 0.50 ft), but may have been less during periods of no gage-height record.
1927-58: 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. 61). Flow slightly regulated by several small reservoirs above station, and since Apr. 1, 1957, by Rockport Reservoir (usable capacity, 60,000 acre-ft).

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Aug. 9 to Sept. 1)

0.5	24	2.0	362
.7	44	2.5	552
1.0	89	3.0	772
1.5	204	3.5	1,020

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	160	321	b106	b105	a145	239	481	210	512	75	129	174
2	160	321	162	b100	a144	233	*489	218	508	64	118	a172
3	164	321	263	b92	*136	*213	489	221	380	60	118	a173
4	167	271	312	a90	136	210	489	221	387	66	123	a177
5	170	331	312	a90	145	174	492	236	*376	79	127	a180
6	170	214	321	a86	122	143	481	236	380	75	125	a455
7	167	54	318	a67	145	157	481	245	402	72	127	
8	162	41	318	b75	150	157	477	236	295	69	138	a450
9	150	33	315	b78	150	154	473	233	282	70	145	
10	121	28	315	b80	147	154	473	227	295	68	145	
11	123	25	312	b80	162	154	598	221	318	68	*140	*446
12	123	24	312	b80	174	157	726	230	295	*68	138	450
13	125	24	308	a90	213	157	731	260	263	68	136	446
14	129	31	308	a115	221	160	*726	348	196	68	136	450
15	138	29	308	a150	182	154	763	352	190	66	134	454
16	143	27	312	a215	164	138	786	348	150	70	136	458
17	143	a24	315	a220	167	134	810	348	*118	82	150	462
18	136	a24	312		170	134	835	348	114	118	157	465
19	114	a24	308		172	143	485	348	116	129	152	450
20	100	a24	279	a225	168	167	481	335	116	121	147	274
21	98	a24	248		201	188	569	318	116	112	152	121
22	104	a24	248	a205	216	246	540	*292	118	108	160	121
23	114	a26	b235	a185	207	492	352	167	112	106	164	121
24	140	a25	b225	a180	213	508	315	118	106	106	172	110
25	150	a25	218	a170	221	512	295	102	100	97	172	74
26	157	a26	216	a164	224	508	289	102	93	108	167	60
27	157	*27	199	a160	230	382	279	95	78	110	167	54
28	157	28	174	a158	a235	68	230	110	91	114	164	54
29	123	38	174	a154	-	41	*199	248	89	114	170	53
30	210	b112	*150	a152	-------	38	201	359	89	118	172	52
31	*321	-------	b115	a149	-------	221	-------	508	-------	131	167	-------
Total	4,596	2,546	8,018	4,390	4,960	6,536	15,035	7,840	6,686	2,782	4,548	8,306
Mean	148	84.9	259	142	177	211	501	253	223	89.7	147	277
Ac-ft	9,120	5,050	15,900	8,710	9,840	12,960	29,820	15,550	13,260	5,520	9,020	16,470

Calendar year 1957: Max 731 Min 13 Mean 147 Ac-ft 106,500
Water year 1957-58: Max 835 Min 24 Mean 209 Ac-ft 151,200

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

1310. 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 1958.

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.--31 years (1927-58), 59.9 cfs (43,370 acre-ft per year).

Extremes.--Maximum discharge during year, 304 cfs May 12 (gage height, 1.70 ft); minimum daily, 5.0 cfs Aug. 12, Sept. 20-28.
1927-58: Maximum discharge, 1,540 cfs Apr. 28, 1952 (gage height, 4.67 ft); minimum, less than 1 cfs for several days in 1934.

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

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1929, superseding those published in WSP 690 are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge
1929		1929-Con.		1929-Con.	
Apr. 20	195	Apr. 25	91	Apr. 30	195
21	124	26	91	May 1	182
22	150	27	113	2	198
23	113	28	113	3	232
24	91	29	195	4	267

Month	Maximum	Minimum	Mean	Runoff in acre-feet
April 1929	264	27	86.5	5,150
May	686	140	399	24,560
Water year 1928-29	686	4	89.4	64,700

Rating table, water year 1957-58 (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	1.7	304
.6	41		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*17	25	15	17	16	24	28	87	91	18	8.1	11
2	15	25	18	21	15	22	*36	102	85	17	7.6	9.0
3	16	28	18	22	17	*27	32	119	73	17	7.2	7.2
4	20	24	18	21	22	22	31	133	68	15	6.8	7.2
5	22	25	22	21	22	21	29	157	*62	15	6.3	7.2
6	22	26	25	21	22	25	24	193	61	14	6.3	6.8
7	21	27	26	21	18	25	29	220	66	14	6.3	6.3
8	20	29	27	21	20	25	28	193	62	13	5.8	6.3
9	20	25	22	21	22	24	29	*185	57	11	6.3	5.8
10	19	24	20	21	21	15	29	223	49	9.0	5.8	5.8
11	20	28	19	21	22	18	29	231	46	8.6	*5.4	*5.8
12	19	27	19	22	16	21	31	274	43	*8.1	5.0	6.3
13	20	28	20	22	22	22	34	231	40	7.6	5.4	5.8
14	22	31	24	22	20	19	38	204	38	6.8	5.8	5.8
15	24	29	26	22	22	18	46	185	40	7.2	6.8	5.8
16	22	22	28	22	26	19	62	187	37	8.1	6.8	5.4
17	24	24	31	22	27	16	85	195	*32	8.1	7.2	5.4
18	24	19	22	22	32	25	152	220	29	9.0	7.2	5.4
19	25	28	26	22	33	20	206	237	27	9.0	11	5.4
20	25	24	28	21	36	25	169	237	27	8.6	9.8	5.0
21	25	13	26	21	36	36	190	248	27	8.1	11	5.0
22	25	12	27	21	37	41	142	*248	24	8.1	13	5.0
23	26	19	11	21	41	38	99	237	20	11	12	5.0
24	26	24	18	21	44	40	81	228	19	11	12	5.0
25	26	25	29	22	47	40	70	193	20	11	14	5.0
26	26	*25	28	22	36	33	68	*187	21	7.6	12	5.0
27	25	19	26	22	29	28	68	169	21	7.6	13	5.0
28	25	21	28	22	21	33	62	154	19	9.8	13	5.0
29	25	17	28	22	-	31	*62	133	19	7.6	12	5.4
30	25	15	*26	22	-------	34	73	119	19	7.2	13	5.4
31	*25	-------	16	21	-------	37	-------	102	-------	7.6	11	-------
Total	696	708	717	662	742	824	2,062	5,831	1,242	320.7	272.9	179.5
Mean	22.5	23.6	23.1	21.4	26.5	26.6	68.7	188	41.4	10.3	8.80	5.98
Ac-ft	1,380	1,400	1,420	1,310	1,470	1,630	4,090	11,570	2,460	636	541	356

Calendar year 1957: Max 610 Min 11 Mean 85.2 Ac-ft 61,690
Water year 1957-58: Max 274 Min 5.0 Mean 39.1 Ac-ft 28,260

Peak discharge (base, 400 cfs).--No peak above base.

* Discharge measurement made on this day.

1315. 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 1958.

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, 73,940 acre-ft June 9-12 (elevation, 5,560.0 ft); minimum, 6,960 acre-ft Sept. 6 (elevation, 5,490.5 ft).
1930-58: Maximum contents, 74,540 acre-ft June 16-20, 1956 (elevation, 5,560.4 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 elevation 5,450 (bottom of outlet tunnel) and 5,560 ft (top of radial gates in spillway) above mean sea level. Dead storage negligible. Figures given herein represent total contents. Water is used for irrigation on the Echo project.

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

Capacity table (elevation, in feet, and total contents, in acre-feet)

5,490	6,730	5,515	22,390	5,540	47,200
5,495	9,110	5,520	26,620	5,545	53,360
5,500	11,830	5,525	31,180	5,550	59,880
5,505	14,920	5,530	36,100	5,555	66,740
5,510	18,480	5,535	41,440	5,560	73,940

Total contents, in acre-feet, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21,910	27,240	26,970	34,180	35,700	40,560	44,040	50,980	70,300	59,610	27,770	8,160
2	21,830	27,770	26,880	34,080	35,800	40,780	44,040	51,230	71,160	58,550	26,880	7,830
3	21,750	28,490	26,970	33,890	35,800	41,110	43,920	51,350	71,890	57,620	26,100	7,550
4	21,670	30,140	27,150	33,790	35,900	41,330	44,040	51,480	72,330	56,450	25,230	7,320
5	21,670	30,610	27,330	33,590	36,000	41,550	44,040	51,850	72,770	55,410	24,470	7,040
6	21,750	30,420	27,860	33,490	36,100	41,770	44,150	51,970	73,060	54,380	23,790	6,960
7	21,750	30,610	28,220	33,400	36,100	42,000	44,150	52,350	73,500	53,230	23,130	7,320
8	21,750	30,710	28,490	33,400	36,200	42,220	44,150	52,730	73,800	52,220	22,310	7,780
9	21,750	30,800	28,860	33,300	36,310	42,780	44,150	53,110	73,940	51,230	21,510	8,410
10	21,830	30,800	29,310	33,100	36,310	42,780	44,150	53,360	73,940	50,240	20,870	9,060
11	21,910	30,900	29,500	33,100	36,410	42,900	44,150	53,740	73,940	49,010	20,090	9,520
12	21,910	30,900	29,770	33,000	36,520	43,010	44,270	53,870	73,940	47,920	19,320	9,840
13	21,990	30,990	30,050	32,910	36,720	43,240	44,380	55,020	73,800	46,720	18,640	10,210
14	21,990	30,990	30,330	32,910	36,930	43,350	44,380	56,060	73,360	45,540	17,890	10,700
15	21,990	31,080	30,610	32,910	37,030	43,350	44,500	57,100	73,060	44,610	17,080	11,200
16	22,230	30,900	31,080	33,000	37,240	43,580	44,840	58,150	72,620	43,580	16,440	11,710
17	22,560	30,710	31,560	33,200	37,240	43,580	45,540	58,940	72,040	42,440	15,810	12,300
18	22,800	30,330	32,040	33,400	37,240	43,690	46,370	60,010	71,310	41,330	15,060	12,950
19	23,130	30,140	32,420	33,690	37,240	43,690	47,680	60,950	70,590	40,330	14,470	13,510
20	23,290	29,770	32,810	33,890	37,240	43,810	48,520	61,900	69,870	39,360	14,010	14,080
21	23,460	29,400	33,100	33,990	37,240	43,920	49,500	62,860	69,010	38,400	13,570	14,080
22	23,710	29,130	33,200	34,180	37,550	44,270	50,110	63,680	68,150	37,550	13,010	13,890
23	23,880	28,760	33,400	34,380	37,970	44,150	50,610	64,650	67,300	36,620	12,530	13,700
24	24,040	28,490	33,590	34,580	38,180	44,040	50,850	65,060	66,460	35,700	12,000	13,510
25	24,380	28,310	33,690	34,780	38,610	43,920	50,980	65,620	65,480	34,580	11,540	13,260
26	24,630	28,040	33,790	34,880	39,140	44,040	51,230	66,040	64,510	33,400	11,090	12,950
27	24,890	27,680	34,080	34,980	39,790	44,040	51,230	66,600	63,540	32,520	10,590	12,650
28	25,230	27,500	34,180	35,080	40,010	44,040	51,230	67,160	62,580	31,560	10,150	12,350
29	25,490	27,240	34,380	35,390	-	44,040	51,230	67,440	61,630	30,610	9,620	12,180
30	25,750	27,060	34,480	35,590	-------	43,920	51,100	68,150	60,550	29,680	9,060	11,940
31	26,440	-------	34,280	35,700	-------	44,040	-------	69,150	-------	28,670	8,560	-------
(†)	5,519.8	5,520.5	5,528.2	5,529.6	5,533.7	5,537.3	5,543.2	5,556.7	5,550.5	5,522.3	5,593.9	5,400.2
(‡)	+4,370	+620	+7,220	+1,420	+4,310	+4,030	+7,060	+18,050	-8,600	-31,880	-20,110	+3,380

Calendar year 1957..... ‡ +17,980
Water year 1957-58..... ‡ -10,130

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.
Note.--Gage read at about 6 a.m. during summer and at about 9 a.m. during winter.

1320. 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 1958 (discontinued).

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.--31 years, 274 cfs (198,400 acre-ft per year).

Extremes.--Maximum discharge during year, 822 cfs Apr. 15 (gage height, 4.62 ft); minimum daily, 13 cfs Feb. 26.
1927-58: Maximum discharge, 3,060 cfs May 13, 1952 (gage height, 7.34 ft); minimum daily, 0.3 cfs Nov. 18-29, 1954, Jan. 18-24, Nov. 4-6, 1955.

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

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Mar. 22-27, 31, Apr. 1-23, May 24 to June 2, June 4-5, 20-23, 27-29)

Oct. 1 to June 29				June 30 to Sept. 30			
2.0	13	3.5	260	2.7	122	4.0	519
2.2	26	4.0	455	3.0	188	4.4	707
2.5	55	4.7	800	3.5	329		
3.0	139						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*215	32	167	178	121	100	527	278	118	600	554	367
2	225	31	158	180	129	102	*527	260	156	595	532	346
3	228	31	158	182	*129	*102	509	260	171	614	528	339
4	203	32	180	173	129	95	486	260	181	623	528	329
5	187	32	200	164	129	74	491	260	*220	609	519	319
6	187	32	203	164	127	80	491	260	292	614	532	300
7	189	33	203	156	127	78	491	260	292	604	528	281
8	189	33	200	152	133	74	491	264	260	604	523	181
9	158	33	200	150	141	74	496	260	274	595	532	140
10	141	33	203	150	137	86	491	264	303	609	528	221
11	145	33	203	150	137	102	565	264	375	643	523	*282
12	145	35	203	150	137	113	735	128	406	643	*537	279
13	154	48	205	152	145	123	740	24	*422	*647	528	231
14	173	48	187	147	158	123	*750	51	431	628	528	210
15	93	111	156	139	160	125	715	72	460	652	528	213
16	25	175	160	139	189	125	504	93	491	657	532	216
17	32	184	158	139	203	125	527	108	*486	652	528	190
18	37	203	162	137	220	125	472	108	500	643	506	181
19	36	203	162	139	230	125	205	108	527	643	477	186
20	36	205	160	139	210	125	203	108	575	657	449	196
21	36	200	167	139	154	125	378	*108	585	662	449	223
22	36	182	173	139	101	242	414	110	555	647	449	229
23	36	182	173	129	46	605	303	110	555	643	441	242
24	36	184	173	119	64	580	303	78	605	647	437	245
25	36	184	175	119	53	527	303	59	595	638	445	231
26	36	*184	175	119	13	509	307	59	595	623	449	221
27	36	178	173	119	44	429	307	58	598	619	445	196
28	36	178	175	119	83	93	307	60	610	623	449	188
29	36	180	178	119	-	88	*307	64	610	*623	469	181
30	36	184	*178	119	-------	68	307	65	*604	614	469	166
31	*35	-------	178	119	-------	218	-------	66	-------	604	418	-------
Total	3,193	3,403	5,546	4,439	3,649	5,560	13,652	4,527	12,852	19,475	15,360	7,109
Mean	103	113	179	143	130	179	455	146	428	628	495	237
Ac-ft	6,330	6,750	11,000	8,800	7,240	11,030	27,080	8,980	25,490	38,630	30,470	14,100

Calendar year 1957: Max 685 Min 0.7 Mean 219 Ac-ft 158,500
Water year 1957-58: Max 750 Min 13 Mean 271 Ac-ft 195,900

* Discharge measurement made on this day.

1325. 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 1958.

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.--19 years, 36.2 cfs (26,210 acre-ft per year).

Extremes.--Maximum discharge during year, 187 cfs May 6 (gage height, 4.75 ft); minimum observed, 3.7 cfs Dec. 31 (discharge measurement), result of freezeup.
1921-23, 1941-58: 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 1941-42.

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

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to May 11				May 12 to Sept. 30			
2.8	8.6	3.6	67	2.6	4.4	3.6	72
3.0	18	4.0	107	2.8	13	4.0	111
3.3	40	4.6	173	3.2	39	4.6	173

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*10	12		b7	a9		20	77	42	12	5.7	4.7
2	10	12	b10		a8		20	89	38	11	5.4	4.4
3	11	13					*19	111	36	11	5.0	4.7
4	13	13		b9	(*)	(*)	20	133	34	11	5.0	4.4
5	13	13	b10				18	149	*35	11	4.7	4.4
6	12	13	b12		a12		17	163	36	10	4.7	4.7
7	12	13	b13				18	171	34	9.2	4.7	4.7
8	12	12	13				19	151	33	8.4	5.0	4.7
9	12	12	b12	a9			20	*144	31	8.4	5.0	5.0
10	12	12	b11		12	b11	21	160	30	8.0	5.0	*5.0
11	12	13			12		21	168	28	7.6	*5.0	5.4
12	12	12	b10		12		23	164	28	*7.2	4.7	6.5
13	12	13			13		26	148	27	7.2	5.4	8.0
14	12	15			13		31	136	25	7.2	4.7	7.2
15	12	14	12		12		41	129	24	7.2	5.0	6.8
16	12	12	13		14		57	132	22	7.2	5.4	6.5
17	12	b12	13		15		76	143	21	7.2	5.0	6.1
18	12	b12	13	a10	15	14	109	150	*20	6.5	5.4	6.1
19	12	13	b13		15	14	110	153	19	6.5	5.4	6.5
20	13	b12	13		16	14	106	154	18	6.1	5.0	6.1
21		b9.0	12		17	17	120	*149	18	6.1	5.0	6.1
22		b8.0	12		18	18	119	144	18	6.1	6.1	6.1
23		b11	b10		20	20	86	124	17	6.1	5.7	5.7
24	a13	b12	b11		19	20	72	106	17	6.1	5.7	5.7
25		b13	b12		21	22	61	91	17	6.5	5.0	6.5
26		*b13			19	20	56	*82	17	6.1	5.0	6.5
27		b13			18	18	56	72	15	6.1	4.4	6.8
28	a12	b13	b13	a11	b14	18	57	64	14	5.7	5.0	6.5
29		b11			-	18	*59	58	13	5.7	5.0	6.5
30	*12	b9.0			-------	20	65	52	13	6.1	4.7	6.8
31	12	-------	*b6	a10	-------	22	-------	47	-------	5.7	4.7	-------
Total	376	365.0	356	303	396	442	1,543	3,814	740	236.2	157.5	175.1
Mean	12.1	12.2	11.5	9.8	14.1	14.3	51.4	123	24.7	7.62	5.08	5.84
Ac-ft	746	724	706	601	785	877	3,060	7,560	1,470	468	312	347

Calendar year 1957: Max 248 Min - Mean 34.3 Ac-ft 24,810
Water year 1957-58: Max 171 Min 4.4 Mean 24.4 Ac-ft 17,660

Peak discharge (base, 130 cfs).--Apr. 18 (11:30 p.m.) 142 cfs (4.31 ft); May 6 (11:30 p.m.) 187 cfs (4.75 ft); May 19 (10:30 p.m.) 164 cfs (4.52 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 1 discharge measurement, weather records, trend of flow, and records for nearby stations.
b Stage-discharge relation affected by ice.

1340. 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., on upstream face of concrete dam, 9 miles southeast of Morgan.

Drainage area.--144 sq mi.

Records available.--October 1937 to September 1958 in reports of Geological Survey. November 1931 to September 1958 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 at site 500 ft east of dam.

Extremes.--Maximum contents observed during year, 28,840 acre-ft June 1 (gage height, 141.0 ft); minimum observed, 12,150 acre-ft Sept. 21 (gage height, 96.9 ft).
1931-58: 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 (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.

Cooperation.--Capacity table furnished by Utah State Engineer.

Capacity table, gage height, in feet, and total contents, in acre-feet

95	11,620	120	19,120
100	13,000	130	23,300
110	15,880	141	28,820

Total contents, in acre-feet, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	-	15,840	-	-	-	-	-	28,840	-	-	-
2	-	-	-	-	15,660	15,820	-	-	-	-	-	-
3	-	14,680	-	-	-	-	-	-	-	-	21,870	-
4	-	-	-	-	-	-	-	25,220	-	-	-	-
5	-	-	-	15,660	-	-	-	-	-	-	-	-
6	14,260	-	-	-	-	-	17,700	-	-	26,900	-	-
7	-	-	-	-	-	-	-	-	-	-	-	15,100
8	-	-	15,760	-	-	-	-	-	28,350	-	-	-
9	-	-	-	-	15,180	16,170	-	-	-	-	-	-
10	-	15,040	-	-	-	-	-	-	-	-	20,550	-
11	-	-	-	-	-	-	-	26,740	-	-	-	-
12	-	-	-	15,660	-	-	-	-	-	-	-	-
13	14,290	-	-	-	-	-	18,050	-	-	25,700	-	-
14	-	-	-	-	-	-	-	-	-	-	-	13,330
15	-	-	15,660	-	-	-	-	-	28,350	-	-	-
16	-	-	-	-	15,180	16,490	-	-	-	-	-	-
17	-	15,360	-	-	-	-	-	-	-	-	19,460	-
18	-	-	-	-	-	-	-	27,260	-	-	-	-
19	-	-	-	15,660	-	-	-	-	-	-	-	-
20	14,380	-	-	-	-	-	22,700	-	-	24,450	-	-
21	-	-	-	-	-	-	-	-	-	-	-	12,150
22	-	-	15,660	-	-	-	-	-	28,350	-	-	-
23	-	-	-	-	15,360	16,920	-	-	-	-	-	-
24	-	15,600	-	-	-	-	-	-	-	-	18,410	-
25	-	-	-	-	-	-	-	27,880	-	-	-	-
26	-	-	-	15,660	-	-	-	-	-	-	-	-
27	14,520	-	-	-	-	-	25,030	-	-	23,210	-	-
28	-	-	-	-	a15,690	-	-	-	28,040	-	-	-
29	-	-	15,660	-	-	-	-	-	-	-	-	-
30	-	a15,810	-	-	-------	17,300	a25,110	-	a27,760	-	-	a10,660
31	a14,610	-------	a15,660	a15,660	-------	a17,360	-------	a28,700	-------	a22,440	17,400	-------
(†)	-	-	-	-	-	-	-	-	-	-	114.7	-
(‡)	+370	+1,200	-150	0	+30	+1,670	+7,750	+3,590	-940	-5,320	-5,040	-6,740

Calendar year 1957..... ‡ +3,700
Water year 1957-58..... ‡ -3,580

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

1345. 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 1958 in reports of Geological Survey. October 1931 to September 1958 in reports 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.--27 years (1931-58), 52.3 cfs (37,860 acre-ft per year).

Extremes.--Maximum discharge during year, 211 cfs May 20 (gage height, 1.47 ft); minimum daily, 3.6 cfs Nov. 4-6, 10-12.
1931-58: Maximum discharge, 872 cfs May 4, 1952 (gage height, 3.49 ft); minimum daily, 1.4 cfs Dec. 18-20, 1954, Dec. 28, 1954, to Jan. 30, 1955.

Remarks.--Records good. No diversions between station and East Canyon Reservoir (see preceding page) which completely regulates flow.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.1	3.6	0.6	53
.2	9.7	1.0	117
.3	18	1.5	220

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	9.0	20	33	34	5.9	28	179	132	92	94	190
2	*17	9.0	32	33	33	5.9	28	179	138	89	92	185
3	18	6.5	32	33	33	5.9	*28	179	132	89	92	181
4	17	3.6	32	32	*33	*5.9	28	179	110	89	92	177
5	17	3.6	32	32	33	5.9	28	179	87	89	92	171
6	16	3.6	32	33	33	5.9	28	181	*87	87	90	169
7	15	4.2	32	33	33	5.9	28	183	101	87	90	164
8	15	4.2	32	33	33	5.9	28	181	108	85	89	158
9	16	4.2	32	33	33	5.9	28	181	101	85	89	154
10	15	3.6	32	33	33	5.9	28	181	94	84	89	*148
11	15	3.6	32	33	34	5.9	28	181	94	85	87	142
12	15	3.6	32	33	34	5.9	29	183	89	84	*87	136
13	15	4.2	32	33	34	5.9	38	198	76	89	87	132
14	15	4.2	33	33	34	5.9	43	205	61	90	85	126
15	15	4.2	33	33	34	5.9	44	207	57	90	85	121
16	14	4.2	33	33	17	5.9	41	207	60	90	85	113
17	14	4.2	33	33	5.3	5.9	43	207	61	89	89	103
18	14	4.2	33	34	5.3	5.9	45	207	*57	87	90	87
19	14	4.7	33	34	5.3	5.9	48	207	50	87	89	79
20	14	4.7	33	34	5.3	5.9	49	196	48	87	89	74
21	14	4.7	33	34	5.3	6.5	79	190	44	87	87	79
22	11	4.7	33	34	5.3	6.5	141	171	70	87	87	87
23	9.0	4.7	33	34	5.3	17	179	160	82	87	85	87
24	9.0	4.7	33	33	5.3	27	179	134	79	87	87	89
25	9.0	5.3	33	33	6.5	27	179	128	79	85	87	89
26	9.0	*5.3	33	33	6.5	27	179	134	78	85	87	87
27	9.7	5.3	33	32	6.5	27	179	130	78	94	87	85
28	9.0	5.3	33	32	6.5	27	*179	94	76	96	87	90
29	9.0	5.3	33	32	-	27	179	79	87	96	85	96
30	*8.4	5.3	33	33	-------	28	179	78	92	96	87	94
31	8.4	-------	*33	33	-------	28	-------	101	-------	96	145	-------
Total	413.5	143.9	998	1,024	586.4	366.0	2,340	5,199	2,508	2,750	2,793	3,693
Mean	13.3	4.80	32.2	33.0	20.9	11.8	78.0	168	83.6	88.7	90.1	123
Ac-ft	820	285	1,980	2,030	1,160	726	4,640	10,310	4,970	5,450	5,540	7,320

Calendar year 1957: Max 248 Min 3.6 Mean 50.3 Ac-ft 36,440
Water year 1957-58: Max 207 Min 3.6 Mean 62.5 Ac-ft 45,230

* Discharge measurement made on this day.

1350. 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 1958 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.--17 years (1941-58), 32.5 cfs (23,530 acre-ft per year).

Extremes.--Maximum discharge during year, 320 cfs May 22 (gage height, 3.11 ft); minimum observed, 3.9 cfs Dec. 31 (discharge measurement), result of freezeup.
1941-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Aug. 6 to Sept. 30)

0.9	4.8	1.4	19	2.5	155
1.0	6.6	1.7	39	3.0	278
1.2	11	2.0	71	3.1	308

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*8.3	7.8	b8	b6	a7	a12	19	112	124	23	11	7.1
2	8.5	8.3	8.7	b7	a7	a12	19	130	114	22	10	7.0
3	9.6	8.5	8.3		a7	a12	*19	149	114	21	10	7.0
4	10	8.3	8.3		*a7	*b12	18	173	100	a20	9.9	6.6
5	9.4	8.5	8.3		a8	b12	19	188	91	a19	9.6	6.4
6	9.0	8.3	8.3		9.4	13	18	219	*88	a19	9.3	6.4
7	8.7	8.3	9.0		9.0	12	18	234	84	a18	9.6	6.4
8	8.5	8.3	8.3		9.0	13	18	205	75	a18	9.6	6.6
9	8.5	7.8	7.8		9.1	b12	18	*202	70	17	10	6.4
10	8.5	b7.6	b7.6		9.1	b11	18	219	66	15	9.6	*6.4
11	8.7	8.0	b7.5		9.1	b11	19	217	61	*15	9.4	6.6
12	8.5	7.8	b7.5		9.1	11	23	212	58	15	*9.0	7.2
13	8.5	8.5	b7.5		9.1	11	29	191	55	15	8.7	7.0
14	10	10	b8		9.4	11	40	168	53	14	8.7	6.8
15	9.1	8.5	8.3		a9.4	11	58	159	49	15	9.0	6.6
16	8.7	b8	b10	a7	a11	11	78	179	47	15	8.7	6.4
17	8.5	b8	b10		a12	b11	102	202	45	14	8.5	6.4
18	8.3	b8	b10		a12	11	170	232	45	14	8.3	6.4
19	8.5	8.5	8.7		a12	11	a210	253	45	13	8.6	6.0
20	8.3	b7.8	8.5		a13	12	a180	290	42	13	8.2	6.0
21	8.5	b7.2	8.3		a16	18	a200	*296	39	13	8.0	5.6
22	8.3	b6.6	8.0		a17	21	a160	293	39	13	9.0	5.5
23	8.3	b7.8	b7		a18	23	a120	*272	38	13	8.3	5.8
24	9.1	b9.5	b8		a18	23	a100	272	36	13	8.0	6.4
25	8.3	a10	b8		a20	23	a85	261	34	13	7.4	6.4
26	8.0	*a10	b8		a19	21	a75	242	32	12	7.2	6.4
27	8.3	b10	b8		a15	19	a72	*227	30	12	7.2	6.4
28	8.3	b9	8		a12	18	*71	212	28	12	7.6	6.2
29	8.0	b8	8		-	18	73	186	26	12	7.2	6.2
30	*7.8	b7	7.8		-------	19	91	162	25	12	6.8	6.0
31	8.0	-------	*b5		-------	21	-------	135	-------	12	7.0	-------
Total	267.0	249.9	252.7	216	322.7	456	2,140	6,492	1,753	472	269.4	192.6
Mean	8.61	8.33	8.15	7.0	11.5	14.7	71.3	209	58.4	15.2	8.69	6.42
Ac-ft	530	496	501	428	640	904	4,240	12,880	3,480	936	534	382

Calendar year 1957: Max 217 Min 5.0 Mean 35.5 Ac-ft 25,720
Water year 1957-58: Max 296 Min 5.0 Mean 35.8 Ac-ft 25,950

Peak discharge (base, 220 cfs).--May 6 (12 p.m.) 261 cfs (3.02 ft); May 22 (4 p.m.) 320 cfs (3.11 ft)

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 2 discharge measurements, weather records, and records for nearby streams.
b Stage-discharge relation affected by ice.

1365. Weber River at Gateway, Utah

Location.--Lat 41°08'20", long 111°50'00", in NW¼SE¼ 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 1958. 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.--38 years (1920-58), 584 cfs (422,800 acre-ft per year).

Extremes.--Maximum discharge during year, 2,400 cfs Apr. 18 (gage height, 4.35 ft); minimum daily, 114 cfs Oct. 26, Nov. 10-12.
1889-1903, 1919-58: 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, which are fair. Many diversions above and below station for irrigation. Flow regulated by Rockport, Echo (see p. 66), and East Canyon Reservoirs (see p. 69). Records of chemical analyses and water temperatures for the water year 1958 are given in WSP 1574.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 6-13)

0.2	100	2.0	750
.6	185	3.0	1,340
1.0	304	4.0	2,110
1.5	505		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	281	124	b235	b255	215	262	750	1,260	590	685	630	482
2	*278	126	226	b265	b210	256	825	1,350	650	670	585	452
3	297	128	237	b280	*232	*252	*815	1,480	660	670	595	436
4	318	124	243	b270	*229	243	775	1,600	*625	695	575	420
5	274	116	271	b250	240	226	750	1,730	590	690	555	424
6	262	*118	288	b250	256	223	730	1,880	*615	665	555	408
7	268	118	318	b245	243	226	770	1,930	660	685	565	400
8	268	116	326	b240	237	226	861	*1,690	640	680	555	400
9	274	116	311	b235	243	*218	850	1,570	610	*665	570	384
10	265	114	304	b230	252	207	820	1,690	610	650	570	*352
11	259	114	301	b240	252	232	810	1,740	595	670	560	404
12	259	114	301	243	249	234	1,070	1,730	640	685	565	412
13	258	120	301	237	265	249	1,160	1,350	650	670	*536	368
14	274	156	304	240	262	252	*1,280	1,200	660	*665	541	326
15	294	156	274	232	271	252	1,450	1,160	635	650	546	322
16	182	207	301	232	329	256	1,440	1,150	675	675	580	326
17	149	226	336	232	400	246	1,600	1,350	670	670	590	318
18	134	252	318	234	404	252	2,100	1,430	*665	660	560	288
19	128	281	*297	229	432	256	1,780	1,490	655	635	528	265
20	130	268	291	220	456	274	1,610	1,490	710	645	500	252
21	130	259	284	b210	420	502	1,730	*1,470	685	660	460	259
22	128	237	294	b220	408	675	1,910	1,400	665	665	*460	281
23	134	232	278	b215	336	916	1,500	1,300	660	660	456	288
24	138	237	b278	b220	364	1,010	*1,290	1,210	695	665	436	318
25	128	*246	294	215	585	944	1,160	1,090	730	675	448	322
26	114	252	291	215	408	825	1,090	1,030	695	685	456	322
27	122	246	288	215	271	780	1,080	*949	680	660	448	304
28	122	240	288	212	256	500	*1,100	866	690	680	424	288
29	*122	240	291	220	-	460	1,090	760	680	655	456	297
30	120	b240	294	232	-------	575	1,150	690	690	670	456	291
31	122	-------	*268	229	-------	585	-------	630	-------	665	469	-------
Total	6,230	5,523	8,931	7,262	8,725	12,614	35,346	41,665	19,675	20,720	16,230	10,409
Mean	201	184	288	234	312	407	1,178	1,344	656	668	524	347
Ac-ft	12,360	10,950	17,710	14,400	17,310	25,020	70,110	82,640	39,020	41,100	32,190	20,650

Calendar year 1957: Max 2,160 Min 70 Mean 486 Ac-ft 352,100
Water year 1957-58: Max 2,100 Min 114 Mean 530 Ac-ft 383,500

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

1370. 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 1958 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 4,270 ft (by barometer).

Average discharge.--7 years (1951-58), 334 cfs (241,800 acre-ft per year).

Extremes.--Maximum discharge during year, 2,320 cfs Apr. 18 (gage height, 6.45 ft); minimum daily, 9.4 cfs Oct. 2.
1950-58: Maximum discharge, 7,070 cfs May 6, 1952 (gage height, 10.89 ft); minimum daily, 3.4 cfs May 27, 1955.

Remarks.--Records good. Many diversions above and below station for irrigation. Flow regulated by Rockport, Echo, and East Canyon Reservoirs (see p. 66, 69).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-4, Jan. 30 to Feb. 16, Apr. 15, 16, June 11-30)

0.8	7.5	1.7	88	4.0	816
1.0	16	2.0	148	5.0	1,360
1.2	28	2.5	285	6.0	2,020
1.4	46	3.0	441		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	80	201	258	209	276	729	1,220	137	201	158	122
2	*9.4	85	198	*278	206	270	878	1,290	170	182	112	112
3	21	99	201	286	223	264	874	1,390	*193	172	116	104
4	54	93	201	264	220	255	820	1,500	170	188	114	101
5	64	90	246	255	*261	*229	782	1,590	146	185	155	99
6	57	86	264	252	258	232	762	1,700	146	162	101	99
7	57	86	291	249	255	240	787	*1,800	198	185	116	88
8	59	83	321	235	238	249	*892	1,530	180	177	101	82
9	56	82	309	232	235	240	892	1,340	150	*180	116	*75
10	64	80	297	223	249	223	860	1,380	153	155	120	56
11	56	83	291	249	255	238	816	1,430	137	165	110	65
12	62	85	294	258	252	249	1,030	1,500	170	188	108	112
13	68	88	291	246	261	261	1,140	1,170	188	180	108	99
14	97	114	291	249	261	276	1,250	959	198	175	90	82
15	112	102	285	232	258	273	*1,350	874	165	162	*97	83
16	67	140	288	232	270	276	1,400	906	190	188	106	75
17	29	185	327	223	390	270	1,530	1,030	193	185	165	77
18	18	190	334	235	396	270	1,950	1,080	190	177	135	71
19	47	226	303	235	403	264	1,820	1,160	*198	201	112	62
20	64	212	291	209	435	276	1,560	1,080	220	153	95	56
21	80	204	276	212	441	422	1,600	1,050	236	155	85	50
22	80	185	282	223	409	717	1,880	940	190	180	95	65
23	86	177	267	212	390	901	1,520	829	177	167	102	71
24	93	188	264	226	330	1,080	1,300	741	201	170	93	102
25	92	*204	294	212	550	1,040	1,160	594	246	185	85	120
26	75	212	288	206	516	878	1,060	543	215	185	92	120
27	82	204	282	215	324	816	1,040	458	193	167	92	116
28	86	195	282	209	267	610	*1,040	390	195	180	86	97
29	*80	198	294	235	-	488	1,060	276	204	167	90	104
30	78	188	294	220	-------	579	1,120	215	266	182	108	102
31	80	-------	267	226	-------	650	-------	180	-------	180	114	-------
Total	1,983.4	4,244	8,614	7,296	8,762	13,312	34,902	32,145	5,615	5,479	3,377	2,667
Mean	64.0	141	278	235	313	429	1,163	1,037	187	177	109	88.9
Ac-ft	3,930	8,420	17,090	14,470	17,380	26,400	69,230	63,760	11,140	10,870	6,700	5,290

Calendar year 1957: Max 2,100 Min 3.7 Mean 295 Ac-ft 213,800
Water year 1957-58: Max 1,950 Min 9.4 Mean 352 Ac-ft 254,700

* Discharge measurement made on this day.

1375. 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 1958.

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.--37 years, 111 cfs (80,360 acre-ft per year).

Extremes.--Maximum discharge during year, 870 cfs May 6 (gage height, 4.13 ft); minimum, 32 cfs Jan. 20 (gage height, 0.90 ft).
1921-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	32	2.5	307
1.2	61	3.0	455
1.5	100	3.8	754
2.0	190		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	44	b38	b36	b38	79	118	284	207	58	42	35
2	44	44	40	(*)	b38	74	114	395	188	54	41	34
3	*47	45	39	b39	43	70	113	468	176	53	40	36
4	47	44	40		43	69	110	559	*164	53	40	36
5	45	44	40		*44	*66	105	646	151	53	40	35
6	43	44	40		45	66	100	746	144	51	39	35
7	43	44	44		44	64	98	717	137	50	38	35
8	42	43	43		44	64	*98	*604	126	*48	38	36
9	41	42	41		44	64	100	578	121	48	39	*37
10	42	42	40	a39	45	62	104	626	114	48	39	36
11	41	42	b41		45	62	107	665	110	48	38	36
12	41	43	b41		46	62	111	650	105	47	38	39
13	41	44	40		47	61	121	570	100	47	*37	39
14	42	50	40	39	46	61	142	502	96	47	38	38
15	41	46	40	39	48	61	174	458	93	48	38	38
16	41	43	45	40	57	60	244	468	90	47	38	38
17	40	42	47	40	60	59	337	520	87	45	39	37
18	40	42	44	40	61	59	468	574	85	44	38	37
19	41	43	42	40	63	59	468	600	*81	45	38	36
20	41	41	41		74	59	449	*615	78	44	39	36
21	41	b38	40	b39	81	64	475	604	77	44	38	36
22	42	b36	40		86	86	445	559	75	43	38	35
23	42	b39	b35		a88	107	395	495	73	44	38	35
24	43	41	b39	41	89	119	331	462	72	44	38	36
25	43	*43	b44	40	99	135	271	423	72	44	38	37
26	43	42	46	40	104	131	231	383	69	44	37	35
27	44	40	45	40	96	123	209	*342	66	44	37	37
28	45	40	45	40	87	113	*203	302	63	43	37	37
29	*44	b38	46	43	-	104	203	266	62	44	36	37
30	44	b36	45	43	-------	108	224	238	60	44	36	36
31	44	-------	b35	42	-------	119	-------	220	-------	43	36	-------
Total	1,321	1,265	1,286	1,227	1,705	2,490	6,668	15,539	3,142	1,459	1,186	1,090
Mean	42.6	42.2	41.5	39.6	60.9	80.3	222	501	105	47.1	38.3	36.3
Ac-ft	2,620	2,510	2,550	2,430	3,380	4,940	13,230	30,820	6,230	2,890	2,350	2,160

Calendar year 1957: Max 883 Min 35 Mean 132 Ac-ft 95,460
Water year 1957-58: Max 746 Min 34 Mean 105 Ac-ft 76,110

Peak discharge (base, 400 cfs).--Apr. 18 (9 p.m.) 570 cfs (3.33 ft); May 6 (9 p.m.) 870 cfs (4.13 ft); May 21 (2 a.m.) 638 cfs (3.57 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.

1378. Middle Fork Ogden River at Huntsville, Utah

Location.--Lat 41°17'15", long 111°46'35", in SE¼NE¼ sec. 1, T. 6 N., R. 1 E., on left bank 20 ft downstream from bridge on State Highway 162 and 1½ miles north of Huntsville.

Records available.--April to September 1958.

Gage.--Water-stage recorder and concrete control. Datum of gage is 4,915.41 ft above mean sea level, datum of 1929 (levels by Bureau of Reclamation).

Extremes.--Maximum discharge during period, 450 cfs May 5 (gage height, 2.72 ft), from rating curve extended above 230 cfs; no flow July 26 to Sept. 30.

Remarks.--Records good except those for period of no gage-height record, which are fair.

Rating table, Apr. 18 to Sept. 30, 1958 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 19, 20)

0.6	0	1.0	5.4	1.6	82
.7	.2	1.1	10	2.0	184
.8	1.1	1.2	19	2.6	393
.9	2.6	1.3	30		

Discharge, in cubic feet per second, 1958

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	54	164	21	0.6			16	118	187	1.4	0.2		
2	54	*199	17	.6			17	160	208	1.4	.1		
3	53	233	*15	.6			18	205	220	1.4	.1		
4	52	276	14	.5			19	214	227	*1.4	.1		
5	49	331	12	.5			20	202	*235	1.4	.1		
6	47	364	5.4	.4			21	249	214	1.2	.1		
7	46	317	1.9	.4			22	*224	187	1.4	.1		
8	46	*243	1.7	*.3			23	167	167	1.5	.1		
9	47	255	1.5	.3		(*)	24	126	147	1.1	.1		
10	49	278	1.5	.2			25	102	128	.8	.1		
11	50	263	1.5	.2			26	89	104	.8	0		
12	52	240	1.5	.2			27	86	*93	.7	0		
13	58	199	1.5	.2	(*)		28	93	76	.7	0		
14	68	178	1.5	.2			29	106	54	.7	0		
15	82	170	1.5	.2			30	133	39	.6	0		
							31		28		0		
Total								3,081	6,024	115.0	6.5	0	0
Mean								103	194	3.83	0.21	0	0
Runoff in acre-feet								6,110	11,950	228	13	0	0

* Discharge measurement or observation of no flow made on this day.
Note.--No gage-height record Apr. 1-17; discharge estimated on basis of records for South Fork Ogden River near Huntsville.

1379. Spring Creek at Huntsville, Utah

Location.--Lat 41°15'55", long 111°45'55", in SW¼SE¼ sec. 7, T. 6 N., R. 2 E., on left bank in pasture at north edge of Huntsville.

Records available.--April to September 1958.

Gage.--Water-stage recorder and Parshall flume. Datum of gage is 4,902.99 ft above mean sea level, datum of 1929 (levels by Bureau of Reclamation).

Extremes.--Maximum discharge during period, 28 cfs June 12 (gage height, 0.97 ft); minimum, 4.2 cfs Sept. 7.

Remarks.--Records good.

Rating table, Apr. 24 to Sept. 30, 1958 (gage height, in feet, and discharge, in cubic feet per second)

0.3	3.7
.5	9.2
.9	25

Discharge, in cubic feet per second, 1958

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	-	11	24	8.3	7.4	5.2	16	-	13	19	*7.4	5.7	6.5
2	-	11	20	8.6	7.1	5.4	17	-	12	16	7.4	5.7	6.8
3	-	11	*19	9.5	6.2	5.2	18	-	12	14	7.4	5.7	7.1
4	-	10	17	9.9	6.8	5.0	19	-	15	*14	7.4	6.2	6.8
5	-	11	20	8.9	6.5	5.2	20	-	*13	14	8.3	6.0	6.2
6	-	13	20	8.0	6.0	5.0	21	-	14	14	8.0	6.0	5.7
7	-	11	18	8.3	6.2	5.0	22	-	17	13	7.1	7.1	5.2
8	-	12	18	*8.3	5.7	5.4	23	-	18	14	7.1	6.8	5.4
9	-	14	17	8.0	6.0	*5.2	24	16	16	14	6.8	6.2	6.0
10	-	10	17	7.1	6.2	5.4	25	16	14	12	6.8	5.7	6.0
11	-	10	20	6.5	6.2	5.2	26	14	13	13	6.5	5.7	6.8
12	-	12	24	7.1	6.2	5.7	27	13	14	13	6.8	5.4	5.4
13	-	14	21	7.1	*6.0	6.5	28	13	16	11	6.5	5.4	5.4
14	-	13	22	7.1	5.7	6.5	29	12	15	9.2	6.2	5.4	5.2
15	-	13	20	7.1	5.7	6.8	30	11	18	8.9	7.1	5.2	6.2
							31		23		7.4	5.0	
Total								-	419	496.1	234.0	187.1	173.4
Mean								-	13.5	16.5	7.55	6.04	5.78
Runoff in acre-feet								-	831	984	464	371	344

* Discharge measurement made on this day.

1390. 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 1958.

Gage.--Staff gage read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

Extremes.--Maximum contents during year, 53,180 acre-ft June 2-4 (elevation, 4,876.8 ft); minimum, 2,840 acre-ft Mar. 16 (elevation, 4,833.8 ft).
1936-58: Maximum contents, 57,600 acre-ft June 11, 1957 (elevation, 4,879.0 ft); minimum, 4 acre-ft Jan. 10, 1957 (elevation, 4,819.1 ft).

Remarks.--Reservoir is formed by earth-fill, rock-faced dam; storage began Nov. 16, 1936; capacity, 110,100 acre-ft at elevation 4,900 ft (maximum super storage) about 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. During 1957 the storage capacity was increased by raising the crest of the spillway to 4,878 ft, and elevation of maximum super storage to 4,900 ft (additional capacity, 65,920 acre-ft). Dead storage negligible. Water is used for irrigation in Weber Basin and Ogden River projects.

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

Capacity table, water year 1957-58 (elevation, in feet, and usable contents, in acre-feet)

4,830.0	1,380	4,860.0	25,480
4,835.0	3,380	4,865.0	32,610
4,840.0	6,150	4,870.0	40,680
4,845.0	9,680	4,875.0	49,700
4,850.0	14,060	4,880.0	59,670
4,855.0	19,330		

Usable contents, in acre-feet, at 8 a.m., water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20,020	18,880	19,670	15,140	12,470	12,020	4,670	20,020	52,990	46,530	34,150	21,310
2	19,900	18,880	19,560	15,040	12,470	11,760	4,450	20,950	53,180	46,160	33,840	20,950
3	19,790	18,880	19,560	14,840	12,470	11,490	4,290	22,160	53,180	45,800	33,540	20,600
4	19,670	18,880	19,560	14,650	12,470	11,230	4,080	23,530	53,180	45,440	33,070	20,250
5	19,560	18,990	19,560	14,450	12,560	10,730	3,780	24,560	52,990	45,080	32,610	19,900
6	19,440	18,990	19,670	14,150	12,560	10,320	3,830	25,880	52,990	44,720	32,160	19,560
7	19,440	18,990	19,670	13,860	12,560	9,920	3,880	27,110	52,790	44,360	31,710	19,100
8	19,330	18,990	19,790	13,580	12,560	8,770	4,080	28,360	52,790	44,000	31,260	18,770
9	19,210	18,990	19,790	13,290	12,560	7,540	4,290	29,070	52,600	43,470	30,810	18,430
10	19,100	18,990	19,900	13,010	12,560	6,150	4,290	30,370	52,400	43,120	30,370	18,100
11	19,100	18,990	19,790	12,740	12,560	5,420	4,670	31,710	52,200	42,760	30,080	17,770
12	19,100	18,990	19,670	12,470	12,560	4,950	5,300	33,070	52,010	42,410	29,640	17,450
13	19,100	19,100	19,560	12,370	12,650	4,510	6,080	34,310	51,810	42,060	29,070	17,230
14	18,990	19,210	18,990	12,190	12,740	4,190	6,930	35,250	51,620	41,540	28,640	16,910
15	18,990	19,330	18,660	12,020	12,740	3,580	7,270	35,570	51,420	41,020	28,220	16,700
16	18,880	19,440	18,660	11,760	12,740	2,840	7,820	35,570	51,230	40,680	27,800	16,490
17	18,880	19,560	18,540	11,840	12,830	3,200	8,470	35,730	51,040	40,340	27,380	16,170
18	18,880	19,560	18,430	11,930	12,920	3,290	9,380	36,690	50,850	39,830	27,110	15,860
19	18,880	19,560	18,210	12,020	13,010	3,200	10,240	38,160	50,470	39,330	26,560	15,660
20	18,880	19,670	17,880	12,020	12,740	3,150	10,820	39,500	50,080	38,990	26,150	15,450
21	18,880	19,670	17,560	12,020	12,650	3,110	11,400	41,370	49,890	38,660	25,750	15,250
22	18,880	19,670	17,230	12,020	12,650	3,290	12,370	43,120	49,510	38,160	25,350	15,040
23	18,880	19,670	16,700	12,020	12,650	3,480	12,920	45,260	49,320	37,670	24,960	14,840
24	18,880	19,670	15,960	12,100	12,650	3,680	13,770	46,720	48,950	37,340	24,560	14,550
25	18,880	19,670	15,760	12,190	12,650	4,240	14,750	48,200	48,570	37,020	24,170	14,250
26	18,880	19,670	15,660	12,190	12,560	4,730	15,860	49,320	48,200	36,530	23,790	13,960
27	18,880	19,670	15,550	12,280	12,470	4,840	16,700	50,270	48,010	36,050	23,280	13,770
28	18,880	19,670	15,660	12,370	12,190	4,730	17,450	51,230	47,640	35,730	22,900	13,580
29	18,880	19,670	15,760	12,370	-	4,620	18,770	52,010	47,270	35,250	22,410	13,290
30	18,880	19,670	15,660	12,470	-------	4,620	19,330	52,400	46,900	34,780	22,040	13,100
31	18,880	-------	15,450	12,470	-------	4,780	-------	52,790	-------	34,460	21,670	-------
(†)	4,854.6	4,855.3	4,851.4	4,848.3	4,848.0	4,837.7	4,855.0	4,876.6	4,873.5	4,866.2	4,857.0	4,849.0
(‡)	-1,250	+790	-4,220	-2,980	-280	-7,410	+14,550	+33,460	-5,890	-12,440	-12,790	-8,570

Calendar year 1957..... ‡ +15,410
Water year 1957-58..... ‡ -7,030

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

1400. 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.

Drainage area.--321 sq mi.

Records available.--October 1937 to September 1958, 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; 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.--21 years (1937-38), 89.8 cfs (65,010 acre-ft per year).

Extremes.--Maximum discharge during year, 1,060 cfs Apr. 20 (gage height, 5.21 ft); minimum recorded, 0.5 cfs Sept. 11 (gage height, 1.37 ft).
1937-58: 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, Oct. 6-9, 1955, Feb. 15, 1956, when reservoir gates were closed.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow regulated by Pine View Reservoir (see p. 76). 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 tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Mar. 30 to Apr. 10)

Oct. 1 to Nov. 20		Nov. 21 to Sept. 30					
1.4	0.6	1.3	0.3	1.8	8.1	3.0	173
1.5	1.7	1.4	.7	1.9	13	3.5	322
1.6	3.6	1.5	1.5	2.1	27	4.0	507
1.7	6.7	1.6	2.8	2.4	61	5.0	950
1.8	11	1.7	4.9	2.7	107	6.0	1,450

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.8	1.8	1.1			191	434	239	52	31	24	19
2	7.8	2.0	.9	(*)		189	434	242	51	27	23	18
3	*8.3	2.2	.7			194	430	306	48	27	21	17
4	8.7	1.8	.6			194	423	515	*43	32	23	16
5	8.3	1.8	.7		*1.0	*194	287	643	40	34	28	16
6	8.3	1.8	.9			199	171	704	40	33	28	16
7	8.3	1.8	1.5			364	173	704	40	33	28	15
8	8.3	1.8	1.7			535	*230	*704	36	32	40	16
9	7.8	1.8	1.5		.9	519	322	617	34	*32	42	*18
10	7.8	1.7	6.7		1.0	434	255	568	33	31	33	17
11	7.8	1.8	1.2		1.0	379	9.3	584	31	30	29	13
12	5.6	1.8	1.2	0.9	1.0	364	15	588	29	30	29	19
13	3.6	2.2	1.2		1.1	350	20	592	27	29	*29	18
14	3.9	2.7	1.1		1.1	332	196	710	24	29	27	19
15	3.6	2.2	1.1		1.2	315	400	960	24	30	27	19
16	3.6	1.8	1.4		1.4	128	476	864	21	29	27	15
17	2.6	1.7	1.6		1.8	2.1	639	576	20	29	25	12
18	1.8	1.6	1.5		2.1	2.0	855	415	29	29	27	9.3
19	1.8	1.6	1.3		2.6	2.1	960	357	*31	29	24	2.2
20	1.8	1.3	1.4		3.0	2.5	1,000	*223	31	28	21	2.1
21	1.8	.9	1.4		3.5	7.4	921	130	34	25	20	2.0
22	1.8	1.0	1.3		3.7	19	808	71	29	16	21	1.2
23	1.8	1.3			4.2	18	606	71	23	29	23	.7
24	2.0	1.3			68	18	234	74	35	29	23	.8
25	1.8	*1.3			176	73	24	72	36	28	24	.8
26	1.8	1.3	1.0		199	168	23	71	36	28	25	.8
27	2.0	1.3		1.0	194	257	28	71	34	29	26	1.7
28	2.0	1.3			191	292	*30	71	35	32	26	3.0
29	*2.0	1.3			-	296	122	65	35	34	24	1.0
30	2.0	1.2			-------	306	233	60	35	31	22	1.0
31	1.8	-------			-------	382	-------	56	-------	27	22	-------
Total	138.3	49.4	41.0	28.7	865.6	6,726.1	10,758.3	11,923	1,016	912	811	309.6
Mean	4.46	1.65	1.32	0.93	30.9	217	359	385	33.9	29.4	26.2	10.3
Ac-ft	274	98.0	81.3	56.9	1,720	13,340	21,340	23,650	2,020	1,810	1,610	614

Calendar year 1957: Max 1,360 Min - Mean 96.5 Ac-ft 69,870
Water year 1957-58: Max 1,000 Min 0.6 Mean 92.0 Ac-ft 66,610

* Discharge measurement made on this day.
Note.--No gage-height record Dec. 20 to Feb. 8, Sept. 29, 30; discharge estimated on basis of 2 discharge measurements, weather records, and records for nearby streams.

1410. 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 1958 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, 3,360 cfs Apr. 19 (gage height, 13.24 ft); minimum daily, 23 cfs July 6.
1904-58: 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 doubtful or fragmentary gage-height record, which are fair. During summer months practically entire flow is diverted above station for irrigation. Flow regulated by Rockport reservoir beginning Apr. 1, 1957 (usable capacity, 60,000 acre-ft), Echo, East Canyon, and Pine View Reservoirs (see p. 66, 69, 76).

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	180	299	469	361	714	1,250	1,720	d79	55	47	45
2	*82	185	301	*489	354	710	1,410	1,800	d58	41	44	50
3	73	203	304	489	356	702	1,550	1,890	d65	35	32	50
4	133	202	301	496	361	697	*1,540	2,120	d74	25	35	53
5	139	198	349	476	*452	*683	1,460	2,460	d72	24	44	46
6	163	196	370	469	510	663	1,270	2,570	d61	23	52	32
7	176	191	408	461	494	700	1,250	*2,600	*32	26	32	36
8	176	186	432	447	439	877	1,280	2,410	46	*31	29	*60
9	169	184	414	447	430	946	1,390	f2,180	53	36	29	39
10	173	180	483	437	443	928	1,440	f2,070	58	41	33	40
11	147	184	528	467	452	871	1,170	f2,000	58	33	44	44
12	151	190	528	465	441	871	1,190	f2,080	44	38	38	47
13	148	198	526	472	450	863	1,370	f1,850	41	33	32	66
14	186	247	528	465	469	860	1,490	f1,740	48	55	*32	55
15	235	225	524	435	476	860	*1,900	f1,830	46	28	29	43
16	184	236	538	385	501	770	f2,100	f1,860	32	32	30	46
17	119	299	590	311	584	533	2,330	f1,700	33	34	46	51
18	110	311	584	327	616	519	2,760	f1,590	31	35	55	39
19	118	344	542	330	663	503	3,120	f1,470	35	33	49	45
20	155	349	528	298	675	496	2,790	f1,270	*35	50	39	39
21	163	328	515	291	683	531	2,790	1,190	35	33	35	40
22	180	315	524	296	656	904	2,830	1,020	44	27	35	45
23	184	299	498	294	635	952	2,650	883	38	32	32	46
24	192	303	478	304	579	1,160	2,080	*765	35	30	29	55
25	188	315	519	313	765	1,230	1,630	632	34	30	39	78
26	170	325	517	315	940	1,240	1,490	d549	42	32	33	88
27	173	318	503	313	807	1,250	1,440	d437	51	36	32	102
28	*190	304	510	318	714	1,210	*1,390	d374	41	32	42	81
29	182	306	522	332	-	1,050	1,440	d303	33	36	33	57
30	174	298	524	342	-------	1,070	1,610	d159	72	44	44	66
31	176	-------	501	354	-------	1,160	-------	*d92	-------	46	32	-------
Total	4,841	7,599	14,688	12,107	15,308	26,523	53,390	45,594	1,426	1,086	1,157	1,584
Mean	156	253	474	391	547	856	1,780	1,471	47.5	35.0	37.3	52.8
Ac-ft	9,600	15,070	29,130	24,010	30,360	52,610	105,900	90,430	2,830	2,150	2,290	3,140

Calendar year 1957: Max 3,270 Min 26 Mean 484 Ac-ft 350,100
Water year 1957-58: Max 3,120 Min 23 Mean 508 Ac-ft 367,500

* Discharge measurement made on this day.
d Doubtful gage-height record; discharge computed on basis of available recorder graph and records for nearby streams.
f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

1415. 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.

Drainage area.--2.49 sq mi.

Records available.--May 1950 to September 1958.

Gage.--Water-stage recorder and concrete control. Datum of gage is 5,095.1 ft above mean sea level, unadjusted.

Average discharge.--8 years, 3.92 cfs (2,840 acre-ft per year).

Extremes.--Maximum discharge during year, 33 cfs May 24 (gage height, 1.05 ft); minimum, 1.3 cfs Jan. 19.
1950-58: Maximum discharge, 36 cfs May 3, 1952 (gage height, 1.13 ft); no flow for part of several days in 1951, 1955.

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

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.4	0.8	0.7	7.9
.5	2.0	.8	14
.6	4.3	1.1	38

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	2.2	b2.0	b1.8	1.7	2.6	3.8	7.1	16	4.6	2.8	2.6
2	*2.6	*2.2	b2.0	b1.8	1.7	2.4	*3.8	8.8	15	*4.3	2.8	2.6
3	3.0	2.2	*2.0	b1.8	1.7	2.2	4.0	10	14	4.6	2.8	2.6
4	3.0	2.2	2.0	b1.8	1.8	2.2	4.0	12	13	4.3	2.8	*2.6
5	2.6	2.2	2.2	*1.8	2.0	*2.2	3.8	15	*12	4.6	2.8	2.6
6	2.6	2.2	2.2	1.7	*2.0	2.4	3.5	17	12	4.6	2.8	2.6
7	2.4	2.0	2.2	1.8	2.0	2.2	3.5	18	12	4.6	2.8	2.6
8	2.4	2.0	2.2		2.0	2.4	3.8	19	11	4.3	2.8	2.6
9	2.4	2.0	2.0		2.2	2.6	3.8	18	10	4.0	2.8	2.6
10	2.4	2.0	2.0		2.2	2.6	3.8	19	10	4.0	2.8	2.4
11	2.6	2.0	2.2	b1.8	2.2	2.4	3.8	19	9.9	4.0	2.6	2.6
12	2.6	2.0	2.2		2.2	2.4	4.0	19	8.8	3.8	2.6	2.8
13	2.4	2.0	2.2		2.0	2.4	4.6	18	8.4	3.8	2.6	2.8
14	3.0	2.4	2.2	1.8	2.2	2.4	5.2	16	7.5	3.8	*2.6	2.6
15	2.6	*2.0	2.6	b2.0	2.2	2.6	*6.3	*14	7.5	3.8	2.6	2.4
16	*2.6	1.8	3.0	*b2.0	2.6	2.6	7.9	14	7.1	*3.5	2.6	*2.2
17	2.4	1.8	2.8	b2.0	2.8	*2.6	9.3	15	b.7	3.2	2.6	2.2
18	2.4	2.0	*2.6	2.0	3.0	2.6	12	15	*6.3	3.2	2.6	2.2
19	2.4	2.0	2.4		3.5	2.6	12	16	5.9	3.2	2.6	2.2
20	2.4	2.0	2.4		4.0	3.0	11	22	5.6	3.2	2.6	2.2
21	2.4		2.4		4.3	3.8	12	*26	5.6	3.2	2.6	2.2
22	2.6		2.2	b1.8	4.6	4.0	11	26	5.2	3.5	2.6	2.0
23	2.4		b2.0		4.6	4.3	9.9	29	5.2	3.5	2.6	2.2
24	2.6		b2.2		4.3	4.3	8.8	31	5.2	3.5	2.6	2.0
25	2.2		b2.2		4.3	4.3	8.4	29	4.6	3.2	2.6	2.0
26	2.2	b2.0	2.2		4.0	4.0	7.5	28	4.9	3.2	2.4	2.0
27	2.2		2.2	1.8	3.5	3.8	7.1	*27	4.9	3.2	2.4	2.2
28	2.2		2.2	1.8	2.8	3.8	6.7	23	4.6	3.2	2.6	2.0
29	2.2		2.0	1.8	-	3.8	*6.7	20	4.9	3.2	2.4	2.0
30	2.2		2.0	1.8	-------	3.8	6.7	17	4.6	*3.0	2.6	2.0
31	2.2	-------	b1.8	1.8	-------	3.8	-------	16	-------	2.8	2.4	-------
Total	76.6	61.2	68.8	56.5	78.4	93.1	198.7	583.9	248.4	114.9	81.8	70.6
Mean	2.47	2.04	2.22	1.82	2.80	3.00	6.62	18.8	8.28	3.71	2.64	2.35
Ac-ft	152	121	136	112	156	185	394	1,160	493	228	162	140

Calendar year 1957: Max 26 Min 1.4 Mean 4.75 Ac-ft 3,440
Water year 1957-58: Max 31 Min 1.7 Mean 4.75 Ac-ft 3,440

Peak discharge (base, 10 cfs).--Apr. 18 (7 p.m.) 13 cfs (0.79 ft); May 24 (4 a.m.) 33 cfs (1.05 ft).

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

1420. 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.--10.0 sq mi (revised).

Records available.--November 1949 to September 1958.

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.--8 years, 13.5 cfs (9,770 acre-ft per year).

Extremes.--Maximum discharge during year, 282 cfs May 20 (gage height, 1.86 ft); minimum, 1.6 cfs Feb. 13.
1949-58: Maximum discharge, that of May 20, 1958; minimum, 0.9 cfs Aug. 25, 30, 31, 1954.

Remarks.--Records good except those for period of no gage-height record, which are fair. Records include a small transmountain diversion from Hardscrabble Creek.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 6-20, 24-26)

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	1.8	222

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	3.4	3.1	3.4	2.8	5.4	5.7	34	70	13	3.1	2.4
2	*2.9	*3.6	*3.1	3.4	3.1	5.1	*5.7	41	57	12	3.1	2.6
3	3.6	3.8	2.9	3.4	3.1	4.8	5.7	55	47	12	3.1	2.4
4	3.8	3.8	2.9	*3.4	2.9	4.5	5.7	70	43	11	3.1	*2.4
5	3.6	3.8	3.1	3.1	3.1	*4.5	5.7	86	*45	10	3.1	2.4
6	3.6	3.8	3.1	3.1	*3.1	4.5	5.4	120	45	9.8	2.9	2.3
7	3.4	3.8	3.1	3.1	3.1	4.5	5.4	138	39	9.3	2.9	2.3
8	3.1	3.8	3.1	3.1	3.1	4.5	5.7	128	35	8.9	2.8	2.4
9	3.1	3.6	3.1	3.1	3.1	4.5	5.7	120	33	8.0	3.1	2.4
10	2.8	3.6	3.1	3.4	3.1	4.5	5.7	131	29	8.0	2.8	2.3
11	2.8	3.6	3.1	3.4	2.9	4.5	6.4	135	27	7.5	2.8	2.1
12	2.8	3.6	3.1	3.4	3.1	4.5	7.5	120	24	7.5	2.6	2.8
13	2.8	3.8	3.1	3.1	2.9	4.5	9.3	*96	21	7.1	2.6	2.8
14	4.5	4.3	3.1	3.1	3.6	4.5	13	106	20	6.8	*2.6	2.6
15	3.8	*3.8	3.6	3.1	3.6	4.5	*20	110	19	6.8	2.9	2.6
16	3.1	3.6	5.4	3.1	4.0	4.3	28	124	18	*6.4	2.8	*2.6
17	*2.9	3.4	5.1	*3.1	4.0	*4.3	35	129	17	5.7	2.8	2.4
18	2.9	3.4	*4.5	3.1	4.5	4.3	52	148	16	5.7	2.8	2.4
19	2.9	3.6	4.3	3.1	5.4	4.3	52	151	*15	5.4	2.8	2.4
20	2.9	3.6	4.0	3.1	6.0	4.5	52	198	15	5.1	2.6	2.3
21	3.1	2.9	3.8	2.9	6.8	5.7	55	*160	15	4.8	2.6	2.3
22	3.1	3.4	3.6	2.9	7.1	6.0	47	*161	15	4.8	2.9	2.3
23	3.1	3.4	2.3	2.9	7.5	6.8	36	154	14	a4.6	2.8	2.3
24	4.0	3.4	3.4	3.1	7.1	7.1	29	186	14	a4.5	2.6	2.6
25	3.4	3.4	3.4	3.1	7.1	7.1	25	146	14	a4.2	2.6	2.8
26	3.4	3.4	3.1	3.1	6.8	6.4	22	*128	14	a4.0	2.4	2.8
27	3.6	3.1	3.4	3.1	6.0	6.0	21	162	13	a3.8	2.4	2.6
28	3.6	3.1	3.4	2.9	5.7	5.7	21	142	13	a3.7	2.8	2.6
29	3.4	2.9	3.6	3.1	-	5.7	*23	*106	13	a3.6	2.6	2.6
30	3.1	3.1	3.4	2.9	-------	5.7	27	93	*13	*a3.5	2.6	2.8
31	3.4	-------	2.8	2.9	-------	5.7	-------	80	-------	3.1	2.4	-------
Total	101.3	105.8	106.1	97.0	124.6	158.9	637.6	3,758	773	210.6	86.0	74.6
Mean	3.27	3.53	3.42	3.13	4.45	5.13	21.3	121	25.8	6.79	2.77	2.49
Ac-ft	201	210	210	192	247	315	1,260	7,450	1,530	418	171	148

Calendar year 1957: Max 103 Min 2.3 Mean 14.0 Ac-ft 10,150
Water year 1957-58: Max 198 Min 2.1 Mean 17.1 Ac-ft 12,350

Peak discharge (base, 80 cfs).--May 10 (6 p.m.) 174 cfs (1.55 ft); May 20 (4:30 p.m.) 282 cfs (1.86 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 1 discharge measurement, trend of flow, and records for nearby streams.

1425. Ricks Creek above diversions, near Centerville, Utah

Location.--Lat 40°56'25", long 111°52'00", 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 1958.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 4,840 ft (from topographic map).

Average discharge.--8 years, 2.42 cfs (1,750 acre-ft per year).

Extremes.--Maximum discharge during year, 34 cfs May 22 (gage height, 1.32 ft); minimum, 0.1 cfs Jan. 19.
1950-58: Maximum discharge, that of May 22, 1958; minimum, 0.1 cfs Apr. 9, 1953, Feb. 3, 1955, Jan. 19, 1958.

Remarks.--Records good.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.5	0.4	0.9	8.2
.6	1.1	1.0	13
.7	2.5	1.3	30
.8	4.8		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	1.1	0.6	0.6	0.6	0.9	*1.2	5.1	11	*2.3	1.2	0.8
2	*.9	*.9	.6	.6	.6	.9	1.2	6.0	9.1	2.1	1.2	.8
3	1.1	1.0	*.6	.6	.6	.8	1.2	6.7	7.4	2.1	1.2	.8
4	1.1	1.0	.6	*.6	.6	.8	1.3	7.8	7.1	2.1	1.2	*.8
5	1.0	1.0	.6	.6	.7	*.9	1.2	9.1	*6.7	2.1	1.1	.8
6	.9	1.0	.6	.6	*.6	.9	1.2	11	6.0	2.1	1.1	.8
7	.9	1.0	.7	.6	.6	.9	1.3	11	5.7	2.0	1.2	.8
8	.9	.9	.7	.6	.6	.9	1.4	11	5.4	2.0	1.2	.8
9	.8	.8	.7	.6	.7	1.0	1.5	11	5.1	1.8	1.2	.8
10	.8	.9	.7	.6	.6	.9	1.5	12	4.8	1.8	1.1	.8
11	.9	.9	.8	.5	.6	.9	1.5	14	4.5	1.7	1.1	.8
12	.8	.8	.8	.5	.6	.9	1.8	14	4.5	1.7	1.0	.9
13	.8	.9	.8	.5	.5	.9	2.1	*12	4.2	1.7	1.0	.9
14	1.2	.9	.8	.5	.6	.9	2.5	11	4.2	1.7	*1.1	.9
15	.9	*.7	1.1	.5	.6	1.0	*3.0	11	4.0	1.7	1.1	1.0
16	*.9	.7	1.2	*.5	.7	1.0	4.5	11	3.5	*1.7	1.1	*.9
17	.9	.7	1.2	.5	.7	*1.0	5.4	12	3.2	1.7	1.1	.8
18	.8	.7	*.9	.4	.7	.9	6.4	16	3.2	1.7	1.1	.8
19	.8	.7	.9	.4	.9	.9	6.4	19	*3.1	1.7	1.0	.8
20	.8	.7	.9	.5	.8	1.0	6.4	20	3.0	1.5	1.0	.8
21	1.0	.6	.9	.5	.8	1.2	6.7	23	3.0	1.5	.9	.8
22	1.0	.7	.9	.5	1.0	1.2	6.7	*27	3.0	1.4	1.0	.8
23	1.0	.7	.6	.5	1.2	1.2	5.7	26	3.0	1.4	1.0	.8
24	1.1	.7	.8	.5	1.2	1.2	5.1	25	3.0	1.5	1.0	.8
25	1.0	.7	.8	.5	1.3	1.3	4.5	24	3.0	1.5	.8	.8
26	1.0	.7	.8	.5	1.1	1.3	4.2	21	2.6	1.5	.8	.8
27	1.0	.6	.7	.6	1.1	1.2	3.7	*18	2.5	1.4	.8	.8
28	1.0	.6	.8	.6	.9	1.2	3.7	17	2.5	1.3	.9	.8
29	1.0	.6	.8	.6	-	1.1	*3.7	16	2.3	1.4	.8	.8
30	1.1	.6	.7	.6	-------	1.2	4.2	15	2.3	*1.4	.8	.8
31	1.1	-------	.6	.6	-------	1.3	-------	12	-------	1.3	.8	-------
Total	29.3	23.8	24.2	16.8	21.5	31.7	101.2	454.7	132.9	52.8	31.9	24.6
Mean	0.95	0.79	0.78	0.54	0.77	1.02	3.37	14.7	4.43	1.70	1.03	0.82
Ac-ft	58	47	48	33	43	63	201	902	264	105	63	49

Calendar year 1957: Max 22 Min 0.4 Mean 2.83 Ac-ft 2,050
Water year 1957-58: Max 27 Min 0.4 Mean 2.59 Ac-ft 1,880

Peak discharge (base, 10 cfs).--May 11 (10:30 p.m.) 15 cfs (1.02 ft); May 22 (4:30 p.m.) 34 cfs (1.32 ft).

* Discharge measurement made on this day.

1430. Parrish Creek above diversions, near Centerville, Utah

Location.--Lat 40°55'25", long 111°51'50", in NW¼ sec. 8, T. 2 N., R. 1 E., on right bank 1 mile northeast of Centerville. Prior to Oct. 1, 1957, at site 500 ft downstream, 75 ft downstream from diversion for Centerville pipeline.

Drainage area.--2.08 sq mi.

Records available.--November 1949 to September 1958.

Gage.--Water-stage recorder. V-notch sharp-crested weir since October 1957. Altitude of gage is 4,600 ft (from topographic map). Prior to Oct. 1, 1957, water-stage recorder at site 500 ft downstream at different datum.

Average discharge.--8 years, 1,69 cfs (1,220 acre-ft per year).

Extremes.--Maximum discharge during year, 21.9 cfs May 22 (gage height, 1.92 ft); minimum, 0.23 cfs Sept. 22.
1949-58: Maximum discharge, 30 cfs May 5, 1952; minimum, 0.2 cfs at times in 1954-56.

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

Revisions.--WSP 1394: Drainage area.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.3	.23	1.0	4.43
.4	.47	1.3	8.42
.5	.81	1.6	14.0
.7	1.85	1.9	21.3

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.36	0.44			0.44	0.73	*1.02	3.91	7.35	1.17	0.41	0.34
2	*.39	*.47		0.45	.44	.73	1.72	4.76	6.51	1.02	.39	.34
3	.50	.50	0.45	•	.47	.70	1.27	5.85	5.85	1.02	.39	*.34
4	.53	.50	(*)	*.44	.47	*.70	1.12	6.92	5.47	1.02	.39	.34
5	.53	.50		.44	.56	.66	1.02	8.26	4.88	.98	.36	.34
6	.56	.44	.44	.44	*.53	.70	1.02	10.3	4.65	.94	.34	.32
7	.50	.47	.44	.44	.47	.66	1.12	11.5	4.11	.89	.34	.29
8	.47	.47	.44	.44	.47	.66	1.32	11.5	3.81	.89	.34	.32
9	.44	.47	.41	.44	.50	.66	1.43	11.5	3.52	.89	.44	.34
10	.47	.47	.41	.44	.50	.66	1.43	11.5	3.24	.81	.39	.29
11	.47	.50	.41	.44	.47	.66	1.37	12.0	2.98	.73	.36	.27
12	.47	.47	.41	.44	.47	.63	1.48	11.4	2.89	.73	.34	.34
13	.44	.47	.41	.41	.47	.63	1.60	*10.6	2.64	.73	.32	.39
14	.70	.53	.41	.41	.53	.63	1.98	9.75	2.56	.70	*.34	.36
15	.53	.47	.44	.41	.53	.63	*2.64	9.75	2.41	.70	.39	.36
16	*.50	*.44	.44	.41	.66	.63	3.71	10.8	2.26	.56	.36	.36
17	.47		.50	.41	.70	*.59	4.88	12.6	2.12	.59	.41	.32
18	.47		.59	*.41	.70	.59	6.64	14.7	1.98	.56	.41	.32
19	.47			.41	.73	.63	8.37	16.7	1.85	.56	.44	.29
20	.41			.41	.77	.73	6.24	18.4	1.78	.56	.39	.32
21	.44			.41	.81	.89	6.37	19.5	1.72	.56	.36	.32
22	.44			.41	.89	.98	6.24	*19.7	1.54	.53	.44	.29
23	.44	.45	(*)	.41	1.02	1.02	5.11	19.5	1.54	.53	.39	.29
24	.50			.41	.94	1.02	4.22	18.2	1.48	.53	.36	.36
25	.47		.45	.44	1.07	1.07	3.52	16.2	1.48	.50	.34	.36
26	.44			.44	.94	1.02	3.15	15.1	1.48	.50	.36	.39
27	.47			.44	.85	.98	2.89	*13.6	1.43	.50	.36	.36
28	.47			.44	.77	.98	2.81	12.2	1.32	.47	.41	.36
29	.47			.47	-	.98	*2.89	10.6	1.22	.50	.39	.36
30	.47			.50	-------	1.02	3.24	9.40	1.27	*.50	.39	.36
31	.44	-------		.44	-------	1.12	-------	8.26	-------	.47	.39	-------
Total	14.73	13.91	13.85	13.40	18.17	24 29	89.82	374.96	87.34	21.64	11.74	10.04
Mean	0.475	0.464	0.447	0.432	0.649	0.784	2.99	12.1	2.91	0.698	0.379	0.335
Ac-ft	29	28	27	27	36	48	178	744	173	43	23	20

Calendar year 1957: Max 19 Min 0.3 Mean 1.92 Ac-ft 1,390
Water year 1957-58: Max 19.7 Min 0.27 Mean 1.90 Ac-ft 1,380

Peak discharge (base, 10 cfs).--May 22 (7 p.m.) 21.9 cfs (1.92 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Nov. 17 to Dec. 5, Dec. 19 to Jan. 3, May 7-10; discharge estimated on basis of 2 discharge measurements, recorded range in stage, weather records, and records for nearby streams.

1435. Centerville Creek above diversions, near Centerville, Utah

Location.--Lat 40°55'00", long 111°51'45", 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 1958.

Gage.--Water-stage recorder and concrete rating flume. Altitude of gage is 4,650 ft (from topographic map).

Average discharge.--8 years, 2.82 cfs (2,040 acre-ft per year).

Extremes.--Maximum daily discharge during year, 18 cfs May 21-24; minimum daily, 1.0 cfs several days in August and September.
1949-58: Maximum daily discharge, 30 cfs May 6, 7, 1952; minimum daily, 0.5 cfs Mar. 16, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Discharge measurements generally made twice a month. 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	a1.2	1.4	b1.2	1.2	1.2	1.9	7.0	10	2.7	1.3	
2	1.4	a1.2	1.2	b1.2	1.2	1.2	2.0	8.2	10	2.7	1.2	a1.1
3	1.7	a1.2	1.3	b1.2	a1.2	1.2	2.0	9.7	10	2.5	1.2	
4	1.7	1.3	1.3	b1.2	a1.2	1.2	2.1	11	10	2.5	1.2	1.1
5	1.7	1.4	1.3	1.2	a1.1	1.2	2.0	13	9.1	2.4	1.1	1.1
6	1.6	1.3	1.5	1.2	1.1	1.3	1.9	16	8.4	2.3	1.0	1.1
7	1.6	1.4	1.5	1.2	1.1	1.4	2.3	16	8.0	2.0	1.0	1.1
8	1.5	1.4	1.5	1.2	1.3	1.3	2.5	14	7.7	2.1	1.1	1.1
9	1.5	1.4	1.4	1.2	1.3	1.4	2.5	14	7.2	2.0	1.2	
10	1.4	1.4	1.4	1.2	1.3	1.3	2.5	15	6.9	2.0	1.2	
11	1.5	1.5	1.3	1.2	1.3	1.3	2.5	16	6.8	1.9	1.2	a1.1
12	1.5	1.4	1.4	1.2	1.1	1.3	2.8	14	6.1	1.8	1.2	
13	1.4	1.5	1.3	1.2	1.1	1.3	3.1	13	5.3	a1.7	1.0	
14	1.7	1.6	1.3	1.2	1.3	1.3	3.6	12	4.9	1.6	1.1	
15	1.5	1.5	1.4	1.2	1.2	1.3	4.3	11	4.6	a1.6	1.2	1.1
16	1.4	1.4	1.5	1.3	1.3	1.3	5.5	12	4.3	1.5	1.2	1.1
17	1.4	1.4	1.6	1.3	1.3	1.3	7.0	13	4.1	1.6	1.2	1.1
18	1.4	1.4	1.4	1.3	1.3	1.3	9.4	14	3.9	1.6	1.1	1.1
19	1.4	1.5	1.4	1.3	1.3	1.3	11	15	3.8	1.6	1.2	1.0
20	1.4	1.4	1.4	1.3	1.3	1.6	10	16	3.8	1.5		1.1
21	1.3	b1.4	1.4	1.3	1.5	1.9	10	18	3.8	1.5		1.0
22	1.3	b1.4	1.4	1.2	1.5	1.8	10	18	3.7	1.4	a1.2	1.0
23	1.3	1.4	b1.2	1.2	1.6	1.9	9.0	18	3.5	1.6		1.0
24	1.4	1.4	b1.3	1.3	1.5	2.0	7.3	18	3.4	1.5		1.1
25	1.3	1.4	b1.3	1.3	1.6	1.9	5.9	17	3.4	1.4		1.1
26	1.3	1.4	1.3	1.2	1.4	1.9	5.1	16	3.3	1.4		1.1
27	1.3	1.3	1.3	1.3	1.3	1.8	4.5	15	3.1	1.3		1.1
28	1.3	1.3	1.3	1.2	1.2	1.8	4.4	15	3.0	1.3		1.1
29	1.2	b1.3	1.3	1.3	-	1.8	4.8	13	2.9	1.3	a1.1	1.1
30	a1.2	1.4	1.3	1.2	-------	1.9	5.7	13	1.8	1.4		1.1
31	a1.2	-------	1.3	1.2	-------	1.9	-------	12	-------	1.4		-------
Total	44.2	41.5	42.2	38.2	36.1	46.6	147.6	432.9	166.8	55.2	35.7	32.6
Mean	1.43	1.38	1.36	1.23	1.29	1.50	4.92	14.0	5.56	1.78	1.15	1.09
Ac-ft	88	82	84	76	72	92	293	859	331	109	71	65

Calendar year 1957: Max 18 Min 0.8 Mean 3.16 Ac-ft 2,290
Water year 1957-58: Max 18 Min - Mean 3.07 Ac-ft 2,220

a No gage-height record; discharge estimated on basis of 1 discharge measurement, recorded range in stage, and records for nearby streams.
b Stage-discharge relation affected by ice.

1440. Stone Creek above diversions, near Bountiful, Utah

Location.--Lat 40°53'40", 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 1958.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5,080 ft (from topographic map).

Average discharge.--8 years, 3.57 cfs (2,580 acre-ft per year).

Extremes.--Maximum discharge during year, 49 cfs May 22 (gage height, 1.38 ft); minimum not determined, probably occurred during period when flow was through pipeline.
1950-58: 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 ice effect or when flow was diverted around station by a pipeline, which are fair. Records include flow in pipeline.

Rating table, water year 1957-58, except periods of ice effect or when flow was diverted around station in pipeline (gage height, in feet, and discharge, in cubic feet per second)

0.7	0.5	1.1	12
.8	1.3	1.2	19
.9	3.6	1.3	33
1.0	7.2	1.4	56

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.7	*1.2	1.6	1.3	1.2	1.6	3.3	12	16	*2.4		
2	*.8	1.2	1.6	1.4	1.1	1.4	*3.3	13	14	2.0		
3	1.0	1.2	*1.6	1.4	1.1	1.3	3.3	15	13	2.0		
4	1.4	1.2	1.6	*1.3	1.2	*1.3	3.0	18	*11	2.0		(*)
5	1.6	1.2	1.6	1.3	1.2	1.3	3.0	21	9.6	1.8		0.6
6	1.4	1.2	1.4	1.3	1.2	1.4	2.8	28	9.2	1.4		
7	1.3	1.2	1.4	1.3	*1.2	1.4	3.0	30	8.7	1.3		
8	1.3	1.2	1.4	1.2	1.1	1.4	3.6	26	8.3	1.2	0.8	
9	1.3	1.2	1.4	1.2	1.1	1.4	3.3	26	7.9	1.3		
10	1.3	1.2	1.4	1.3	1.1	1.4	3.6	33	7.5	1.2		
11	1.3	1.3	1.3	1.3	1.1	1.4	3.9	28	7.2	1.0		
12	1.4	1.3	1.3	1.4	1.1	1.4	4.6	25	7.2	1.0		
13	1.4	1.3	1.3	1.4	1.0	1.6	5.0	26	6.8	1.0	(*)	
14	2.3	1.4	1.3	1.3	1.2	1.6	6.0	*22	6.4	1.0		
15	1.8	1.3	1.4	1.3	1.2	1.4	7.5	20	5.6	*1.0		(*) .7
16	1.6	*1.3	2.0	*1.3	1.3	1.4	*9.3	22	5.6			
17	*1.4	1.2	*1.8	1.3	1.3	1.4	11	24	5.2			
18	1.4	1.2	1.4		1.4	*1.6	12	25	*4.9			
19	1.4	1.2	1.4		1.8	1.8	12	33	4.9			
20	1.4	1.2	1.4		1.6	2.0	13	39	4.6			
21	1.4	1.3	1.3		1.8	2.8	14	*39	4.2			
22	1.4	1.3	1.3		2.0	3.0	15	39	3.9			
23	1.4	1.3	.8		2.5	3.3	13	39	3.6			
24	1.4	1.3	1.3	b1.3	2.3	3.3	11	37	3.6	.9	.6	
25	1.3	1.3	1.3		3.0	3.3	11	33	3.9			.5
26	1.3	1.4	1.3		2.5	3.3	9.6	*28	3.6			
27	1.3	1.4	1.3		2.0	3.0	9.6	25	3.3			
28	1.4	1.4	1.3		1.6	3.0	9.2	21	3.3			
29	1.3	1.4	1.4		-	3.0	9.6	19	2.8			
30	1.2	1.6	1.3		-------	3.0	*11	17	2.8			
31	1.2	-------	1.0	1.2	-------	3.3	-------	17	-------	(*)		-------
Total	42.1	38.4	43.2	40.4	42.2	63.8	229.5	800	198.6	36.0	21.6	18.0
Mean	1.36	1.28	1.39	1.30	1.51	2.06	7.65	25.8	6.62	1.16	0.7	0.6
Ac-ft	84	76	86	80	84	127	455	1,590	394	71	43	36

Calendar year 1957: Max 37 Min 0.6 Mean 4.44 Ac-ft 3,220
Water year 1957-58: Max 39 Min 0.5 Mean 4.31 Ac-ft 3,130

Peak discharge (base, 15 cfs).--Apr. 22 (12:30 a.m.) 17 cfs (1.17 ft); May 22 (12:30 p.m.) 49 cfs (1.38 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Water bypassing gage in pipeline Oct. 1-3, July 15 to Sept. 30; discharge estimated on basis of 6 discharge measurements, records at station, computations of flow at outlet of pipe, and records for nearby streams.

1450. 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.

Records available.--April 1950 to September 1958.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5,240 ft (from topographic map).

Average discharge.--8 years, 7.04 cfs (5,100 acre-ft per year).

Extremes.--Maximum daily discharge during year, 58 cfs May 19, 20; minimum daily, 1.1 cfs Sept. 11.
1950-58: Maximum daily discharge, 140 cfs Apr. 28, 1952; minimum daily, 0.5 cfs for several days in August and September 1954.

Remarks.--Records good. Discharge measurements generally made twice a month. Records include flow of pipeline which diverts about a quarter of a mile above station and is measured at division box by Cippoletti weirs, and an additional flow of 0.3 cfs which is diverted around this structure.

Revisions.--WSP 1394: Drainage area.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	1.9	1.7	1.9	1.9	3.7	4.2	17	32	5.9	2.7	1.4
2	1.5	1.9	1.7	1.9	1.9	3.4	4.2	20	32	5.4	2.5	1.4
3	1.9	2.0	1.6	1.9	1.9	3.1	4.0	22	30	5.5	2.6	1.4
4	1.9	1.9	1.7	1.9	1.9	2.9	3.9	23	28	5.3	2.4	1.4
5	1.9	1.9	1.7	2.0	2.0	2.8	3.7	33	27	5.2	2.4	1.4
6	1.7	1.9	1.7	2.0	1.9	2.8	3.5	48	28	5.4	2.2	1.3
7	1.7	1.9	1.8	2.0	1.8	2.8	3.8	47	27	5.2	2.1	1.3
8	1.7	1.8	1.9	2.0	1.8	2.8	3.9	41	24	5.3	2.1	1.4
9	1.7	1.8	1.8	2.1	1.8	2.9	3.6	30	22	5.4	2.4	1.3
10	1.8	1.8	1.7	2.1	1.8	2.8	3.6	39	20	5.1	2.2	1.3
11	1.9	1.9	1.7	1.9	1.8	2.8	3.7	39	19	4.7	2.1	1.1
12	1.8	1.9	1.7	1.8	1.8	2.8	4.3	41	17	4.8	2.0	1.5
13	1.8	1.9	1.7	1.8	1.6	2.8	5.5	29	16	4.7	1.8	1.5
14	2.2	2.5	1.8	1.8	2.0	2.8	7.4	34	15	4.5	1.8	1.5
15	1.9	2.2	2.0	1.8	1.9	2.8	11	32	14	4.7	2.0	1.5
16	1.9	2.0	2.6	1.8	2.0	2.6	14	32	14	4.1	2.1	1.4
17	1.9	1.9	2.5	1.8	2.1	2.6	18	35	13	4.0	2.0	1.3
18	1.8	2.0	2.2	1.8	2.2	2.4	22	48	12	3.7	1.8	1.3
19	1.8	1.6	2.2	1.8	2.3	2.6	20	58	12	3.7	1.8	1.3
20	1.8	1.9	2.2	1.8	2.8	3.0	20	58	11	3.7	1.8	1.3
21	1.8	1.8	2.1	2.0	3.1	3.9	23	52	10	3.7	1.7	1.4
22	1.8	2.0	2.1	2.0	3.7	4.0	20	47	9.0	3.5	1.8	1.3
23	1.8	1.8	1.8	2.0	4.7	4.5	22	39	8.6	3.5	1.7	1.3
24	2.0	1.8	2.1	2.0	4.5	4.5	19	43	8.6	3.2	1.7	1.5
25	2.0	1.7	2.0	2.0	5.0	4.6	16	43	8.4	2.9	1.6	1.6
26	1.9	1.7	1.9	2.0	4.7	4.2	14	47	8.0	3.2	1.6	1.6
27	1.9	1.7	1.9	2.0	4.4	3.9	13	46	7.6	2.8	1.5	1.5
28	2.0	1.7	1.9	2.0	4.1	3.9	13	42	7.2	2.8	1.4	1.4
29	1.9	1.6	1.9	2.0	-	4.0	13	40	6.8	2.8	1.5	1.4
30	1.9	1.6	1.9	2.0	-------	4.2	14	35	6.7	3.0	1.5	1.4
31	1.9	-------	1.8	1.8	-------	4.5	-------	32	-------	2.8	1.5	-------
Total	56.9	56.0	59.3	59.7	73.4	103.4	331.3	1,192	493.9	130.5	60.3	41.7
Mean	1.84	1.87	1.91	1.93	2.62	3.34	11.0	38.5	16.5	4.21	1.95	1.39
Ac-ft	113	111	118	118	146	205	657	2,360	980	259	120	83

Calendar year 1957: Max 50 Min 1.0 Mean 7.58 Ac-ft 5,490
Water year 1957-58: Max 58 Min 1.1 Mean 7.28 Ac-ft 5,270

1460. 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 1958.

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.

Average discharge.--7 years (1951-58), 31.1 cfs (22,520 acre-ft per year).

Extremes.--Maximum discharge during year, 250 cfs May 5; minimum daily, 11 cfs Sept. 29. 1950-58: Maximum discharge, 724 cfs May 2, 1952; minimum, 1.1 cfs Dec. 13, 1951.

Remarks.--Records good. Discharge of Salt Creek diversion canal near Nephi included.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	17	16	*16	13	18	22	88	104	45	27	15
2	14	17	16	17	13	18	23	105	109	42	26	13
3	16	18	16	17	13	17	23	114	*104	41	26	13
4	17	18	16	15	13	17	21	152	100	39	24	21
5	16	17	16	15	15	16	22	186	90	38	24	21
6	16	17	*16	15	15	17	22	196	97	36	23	17
7	*16	17	15	15	13	16	22	*207	105	36	23	16
8	16	16	15	15	14	16	22	168	100	37	23	15
9	16	17	14	14	14	16	22	138	87	37	23	13
10	15	17	14	14	14	16	22	147	84	32	22	13
11	16	17	14	15	14	16	22	174	81	33	21	13
12	17	16	14	14	14	16	23	154	*76	34	21	17
13	16	17	13	13	14	15	27	130	70	34	21	17
14	18	18	14	14	13	16	35	120	68	32	21	14
15	17	*17	14	13	17	17	48	109	68	31	21	13
16	16	17	21	13	17	18	66	110	73	31	21	13
17	15	17	18	13	16	17	97	115	75	31	21	13
18	16	16	16	14	16	17	151	129	76	31	19	*13
19	17	16	16	14	16	17	168	131	73	30	*19	13
20	18	16	16	12	17	19	143	*150	69	31	19	13
21	18	16	16	12	19	23	145	150	64	29	19	13
22	21	14	16	12	22	24	158	162	63	*30	17	12
23	18	15	14	12	25	24	109	165	66	31	18	12
24	18	16	14	14	24	*25	*84	165	62	30	19	12
25	18	17	16	14	29	26	71	166	55	29	17	12
26	17	16	16	14	23	24	64	*161	*53	28	17	12
27	17	15	14	14	19	22	64	154	54	28	16	12
28	17	16	15	14	*19	22	65	148	55	27	16	13
29	18	16	16	14	-	22	65	131	51	28	16	11
30	18	15	16	*14	-------	22	74	124	50	29	16	12
31	17	-------	14	14	-------	22	-------	111	-------	29	16	-------
Total	520	494	477	436	471	591	1,900	4,460	2,282	1,019	632	417
Mean	16.8	16.5	15.4	14.1	16.8	19.1	63.3	144	76.1	32.9	204	13.9
Ac-ft	1,030	980	946	865	934	1,170	3,770	8,850	4,530	2,020	1,250	827

Calendar year 1957: Max 194 Min 4.8 Mean 34.3 Ac-ft 24,860
Water year 1957-58: Max 207 Min 11 Mean 37.5 Ac-ft 27,170

* Discharge measurement made on this day.

1465. Currant Creek near Goshen, Utah

Location.--Lat 39°53'05", long 111°53'05", in NW¼SE¼ sec. 1, T. 11 S., R. 1 W., on right bank 0.9 mile upstream from canal diversions and 5.4 miles south of Goshen.

Drainage area.--303 sq mi.

Records available.--August 1953 to October 1958.

Gage.--Water-stage recorder. Altitude of gage is 4,850 ft (from topographic map).

Average discharge.--5 years, 22.5 cfs (16,290 acre-ft per year).

Extremes.--Maximum discharge during year, 67 cfs May 17-20, 27-31 (gage height, 1.57 ft); minimum, 0.4 cfs Dec. 15.
1953-58: Maximum discharge, 77 cfs Apr. 26, 1954, May 10-12, 1955, May 18-20, 1957; minimum daily, 0.4 cfs many days during February, March, April 1955, Mar. 29, 30, 1956, Dec. 15, 1957.

Remarks.--Records good except those for period of no gage-height record, which are fair. Irrigation diversions above station. Flow regulated by Mount 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 tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 6				Jan. 7 to Sept. 30			
0.2	0.4	0.6	5.3	0.3	1.6	0.8	13
.3	1.0	.8	11	.4	2.8	1.0	22
.4	1.9	1.0	20	.5	4.6	1.3	42
.5	3.3			.6	6.8	1.6	70

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	11	5.3	2.5		3.0	3.6	29	60	46	38	37
2	19	14	5.1	2.4		3.1	3.6	30	60	53	36	34
3	18	14	5.1	2.3		3.1	3.8	31	*59	54	37	30
4	18	14	5.1	b2.3		3.1	3.8	34	57	56	27	30
5	14	14	4.6	2.3		3.1	3.8	39	52	53	27	30
6	14	14	3.3	2.3	2.4	3.1	3.8	42	48	50	32	28
7	14	15	2.4			3.1	3.3	42	49	42	35	23
8	14	15	2.4			3.3	2.6	46	49	48	34	24
9	14	15	2.4			3.3	2.5	50	50	52	35	30
10	14	15	2.5			3.1	2.5	53	51	47	37	30
11	14	15	2.5	2.3	2.4	3.3	2.5	56	51	46	37	30
12	12	15	2.5		2.4	3.4	2.5	56	53	47	37	29
13	11	15	2.0		2.4	3.4	2.5	55	53	46	37	27
14	11	15	.7		2.4	3.4	2.4	55	53	43	37	21
15	13	15	.4	(*)	2.4	3.4	2.4	55	55	40	36	20
16	14	15	1.3		2.4	3.4	2.4	56	57	40	31	20
17	13	15	2.5		2.4	3.6	2.4	59	57	38	13	*20
18	12	15	2.4		*2.4	3.6	2.4	67	57	34	13	20
19	12	15	*2.4		2.5	*3.6	2.4	67	57	32	*13	20
20	12	*15	2.4		2.5	3.6	2.2	65	57	28	15	21
21	14	15	2.4		2.6	3.6	12	66	58	30	15	25
22	12	15	2.4		2.6	3.6	27	66	58	*37	15	25
23	12	15	2.5		2.6	3.4	27	*66	59	34	15	22
24	11	15	2.4	2.4	2.6	3.4	25	66	57	24	15	21
25	12	15	2.4		2.8	3.6	*23	65	45	25	15	22
26	13	15	2.4		2.6	3.4	23	66	*36	29	16	27
27	12	15	b2.4		2.8	3.6	22	67	48	29	17	27
28	12	16	2.4		2.8	3.6	22	67	46	32	17	27
29	11	16	2.3		-	3.6	22	67	46	42	37	27
30	11	11	2.3		-------	3.6	25	67	46	43	37	24
31	*10	-------	2.5		-------	3.6	-------	64	-------	43	37	-------
Total	413	439	83.7	73.2	69.6	105.0	285.4	1,714	1,584	1,263	845	771
Mean	13.3	14.6	2.70	2.36	2.49	3.39	9.51	55.3	52.8	40.7	27.3	25.7
Ac-ft	819	871	166	145	138	208	566	3,400	3,140	2,510	1,680	1,530

Calendar year 1957: Max 77 Min - Mean 19.8 Ac-ft 14,340
Water year 1957-58: Max 67 Min 0.4 Mean 20.9 Ac-ft 15,170

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 7 to Feb. 10; discharge estimated on basis of 1 discharge measurement, weather records, and records for nearby streams.

1470. 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.

Records available.--March 1910 to September 1916, October 1954 to September 1958.

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.--10 years (1911-16, 1954-58), 14.6 cfs (10,570 acre-ft per year).

Extremes.--Maximum discharge during year, 118 cfs May 21 (gage height, 1.60 ft); minimum, 4.2 cfs Mar. 16.
1910-16, 1954-58: Maximum discharge observed, 215 cfs June 3, 1957 (discharge measurement); minimum, 1.3 cfs Jan. 21, 1955.

Remarks.--Records good.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Dec. 7 to Mar. 4)

0.4	4.0	0.9	33
.6	8.2	1.0	68
.7	11	1.4	109
.8	18		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.8	8.8	8.0	6.1	5.1	6.4	7.0	23	73	14	9.8	9.8
2	9.8	9.1	7.7	6.8	6.4	6.4	7.0	45	65	13	9.8	9.8
3	10	9.4	7.3	6.4	6.4	6.6	7.0	66	*60	13	9.8	9.4
4	10	9.1	7.5	6.4	6.1	6.6	6.8	72	69	13	9.8	9.4
5	10	9.1	7.3	6.1	6.4	6.4	6.8	79	72	13	9.8	9.4
6	9.8	8.5	7.3	6.1	6.1	6.4	7.0	69	69	13	10	9.4
7	9.8	8.5	7.3	6.1	6.1	6.4	6.8	*69	70	12	10	9.4
8	9.8	8.8	7.3	6.1	6.1	6.1	6.8	30	72	12	10	9.1
9	9.8	8.2	7.0	6.1	6.1	5.9	6.8	22	66	11	10	9.1
10	9.8	8.5	6.8	5.9	6.1	6.4	6.8	65	51	11	10	8.8
11	9.8	8.8	7.0	5.9	6.1	6.4	6.8	86	33	11	10	8.8
12	10	8.8	6.6	5.7	5.7	6.4	6.8	79	33	11	10	9.1
13	9.8	9.1	6.6	5.9	5.9	6.4	7.0	69	*28	11	10	8.8
14	10	8.8	6.6	5.7	5.5	6.4	8.0	*45	26	11	10	8.5
15	10	8.5	6.8	*5.9	5.9	6.4	8.8	56	24	11	10	8.5
16	10	8.2	7.0	6.1	6.4	5.7	11	68	24	11	10	*8.5
17	9.8	8.8	6.8	5.9	6.4	6.1	16	80	22	11	10	8.2
18	9.8	8.0	6.6	6.1	*6.4	6.6	36	82	22	10	10	8.2
19	9.8	8.2	*6.4	5.9	6.1	*6.6	45	*92	20	10	*10	8.2
20	9.8	*8.2	6.6	5.1	6.1	6.6	40	92	19	10	10	8.2
21	9.8	8.2	6.6	6.1	6.4	6.8	45	*107	19	10	10	8.2
22	9.8	7.5	6.4	6.1	6.4	6.8	36	105	18	*10	10	8.2
23	9.8	8.2	5.1	5.9	6.6	7.0	20	99	18	10	10	8.2
24	9.8	8.2	6.1	6.1	6.6	7.3	*16	96	18	9.8	10	8.2
25	9.8	8.2	7.0	6.1	6.8	7.5	13	93	17	9.4	10	8.0
26	9.4	8.2	6.6	6.1	6.6	7.3	12	*92	*14	9.8	9.8	8.0
27	9.8	7.7	6.4	6.1	6.6	7.0	12	98	14	10	9.8	8.0
28	9.8	7.5	6.4	6.1	6.6	7.3	13	98	14	10	9.8	7.7
29	9.8	7.5	6.4	6.1	-	7.0	14	90	14	9.8	9.8	7.7
30	9.8	7.7	6.4	6.1	-------	7.0	16	85	14	10	9.8	7.7
31	*9.1	-------	5.3	5.7	-------	7.0	-------	72	-------	10	9.8	-------
Total	304.1	252.3	209.2	186.8	174.0	205.2	451.2	2,324	1,078	340.8	307.8	258.5
Mean	9.81	8.41	6.75	6.03	6.21	6.62	15.0	75.0	35.9	11.0	9.93	8.62
Ac-ft	603	500	415	371	345	407	895	4,610	2,140	676	611	513

Calendar year 1957: Max 150 Min 1.9 Mean 18.8 Ac-ft 13,620
Water year 1957-58: Max 107 Min 5.1 Mean 16.7 Ac-ft 12,090

Peak discharge (base, 30 cfs).--Apr. 18 (7:30 p.m.) 72 cfs (1.10 ft); May 21 (8:30 p.m.) 118 cfs (1.60 ft).

* Discharge measurement made on this day.

1475. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 5,670 ft (by barometer).

Average discharge.--11 years, 14.0 cfs (10,140 acre-ft per year).

Extremes.--Maximum discharge during year, 191 cfs May 20 (gage height, 2.70 ft); minimum, 4.2 cfs Feb. 1.
1947-58: 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, 1.5 cfs Jan. 8, 1957.

Remarks.--Records good except those for periods of ice effect, which are fair. Flow affected by several small reservoirs.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used July 17-22)

0.8	3.7	1.7	47
1.0	7.8	2.0	77
1.2	15	2.4	132
1.4	25		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.1	7.1	6.0	b5.6	b5.2	b6.2	6.2	46	35	11	13	8.1
2	7.3	7.1	6.0	6.0	5.5	b6.2	6.4	58	32	10	13	8.1
3	8.4	7.6	6.0	6.0	5.5	6.2	6.0	69	*29	10	13	7.8
4	8.4	7.1	6.0	b5.6	5.5	6.2	6.0	81	26	10	13	7.8
5	7.6	6.9	6.0	5.7	5.5	6.2	5.7	90	24	10	12	7.6
6	7.3	6.9	6.2	5.7	5.5	6.2	5.7	105	24	11	12	7.8
7	7.3	6.9	6.2	5.7	5.5	6.2	5.7	*96	23	11	12	7.8
8	7.3	6.9	6.2	5.7	5.5	6.0	6.0	72	22	10	12	7.8
9	7.1	6.6	6.0	5.7	5.5	6.0	6.0	85	22	11	12	7.8
10	7.1	6.6	6.0	5.7	5.5	6.0	5.7	104	20	12	12	7.6
11	7.3	6.6	6.0	6.0	5.5	6.0	6.0	101	19	12	12	7.6
12	7.6	6.6	6.0	5.7	5.3	6.2	6.2	82	18	11	13	8.7
13	7.6	6.9	6.0	5.7	5.5	6.2	6.6	69	*18	11	13	8.1
14	7.8	7.1	6.0	5.7	5.7	6.2	8.1	65	17	11	13	7.6
15	7.3	6.9	6.0	*5.5	5.7	6.2	10	70	17	10	13	7.6
16	7.6	6.6	6.4	5.5	5.7	6.4	13	88	17	10	13	*7.8
17	7.3	6.6	6.6	5.5	5.7	6.2	17	102	16	10	12	7.8
18	7.3	6.2	6.4	5.5	*5.7	6.2	35	109	15	10	12	7.8
19	7.3	6.4	*6.4	5.5	6.0	*6.2	35	116	15	11	*11	7.8
20	7.3	*6.4	6.2	b5.2	6.2	6.2	38	119	15	11	10	7.8
21	7.3	6.0	6.2	5.5	6.2	6.9	48	*113	14	11	10	7.8
22	7.3	b5.8	6.0	5.5	6.2	6.8	40	106	13	*12	10	7.6
23	7.3	6.2	b5.5	b5.5	6.4	6.6	26	*89	13	12	9.9	7.6
24	7.1	6.2	5.5	5.5	6.4	6.9	*20	77	15	12	8.7	7.8
25	7.1	6.4	6.0	5.5	7.3	7.1	*17	65	14	12	8.4	7.8
26	7.1	6.4	6.0	5.5	6.6	6.6	16	57	*13	12	8.1	7.8
27	7.1	6.2	b6.0	5.5	6.6	6.4	18	50	13	13	8.1	7.6
28	7.3	6.0	6.0	5.5	6.4	6.2	22	*47	12	13	8.7	7.6
29	7.1	6.0	6.0	5.5	-	6.2	24	43	12	13	8.7	7.6
30	7.1	b5.8	6.0	5.5	-------	6.2	32	42	12	14	8.1	7.6
31	*7.1	-------	b5.0	5.5	-------	6.6	-------	39	-------	13	7.6	-------
Total	228.2	197.0	186.8	173.7	163.8	195.7	497.3	2,455	555	350	342.3	233.6
Mean	7.36	6.57	6.03	5.60	5.85	6.31	16.6	79.2	18.5	11.3	11.0	7.79
Ac-ft	453	391	371	345	325	388	986	4,870	1,110	694	679	463

Calendar year 1957: Max 136 Min 3.3 Mean 18.8 Ac-ft 13,610
Water year 1957-58: Max 119 Min 5.0 Mean 15.3 Ac-ft 11,080

Peak discharge (base, 80 cfs).--May 10 (5 p.m.) 171 cfs (2.60 ft); May 20 (4:30 p.m.) 191 cfs (2.70 ft).

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

1485. Spanish Fork at Thistle, Utah

Location.--Lat 40°00', long 111°30', in SE¼ 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 1958 in reports of Geological Survey. January 1933 to September 1958 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.--42 years (1908-25, 1933-58), 93.5 cfs (67,690 acre-ft per year).

Extremes.--Maximum discharge during year, 609 cfs May 23 (gage height, 5.42 ft); minimum, 34 cfs Feb. 1.
1908-25, 1933-58: 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.

Revisions.--Revised figures of discharge, in cubic feet per second, for the water years 1909-11, 1915, 1917, 1923-24, 1933, 1935, superseding those published in WSP 270, 290, 310, 410, 460, 570, 590, 750, and 790 are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1909		1911-Con.		1917-Con.		1917-Con.		1935	
Jan. 30	49	Jan. 6	55	Jan. 3	39	Feb. 11	52	Jan. 21	16
31	49	7	56	4	43			22	16
		8	58	5-15	†45	1922		23	17
1910				16-20	†50	Dec.16-31	†60	24	24
Jan.1-31	†80	1914		21-25	†55			25	25
Feb.1-28	†75	Dec.19-31	†52	27	50	1923		Feb. 1-8	†28
				30	50	Jan.1-31	†55	11-26	†28
1911		1915		31	50	Feb.1-19	†50		
Jan. 1	50	Jan.1-27	†52	Feb. 1	45	Dec.6-16	†65		
2	50			2	45				
3	50	1917		3	45	1933			
4	52	Jan. 1	33	4	50	Jan.1-31	†36		
5	53	2	36	5	50	Feb.1-28	†32		

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
January 1909	-	407	38	80.8	4,970
Calendar year 1909	-	865	38	173	125,000
January 1910	-	-	-	80	4,920
February	-	-	-	75	4,170
Calendar year 1910	-	485	34	115	83,000
January 1911	-	522	48.8	102	6,290
Calendar year 1911	-	522	-	61.9	44,700
December 1914	-	-	-	56.0	3,440
Calendar year 1914	-	920	-	165	119,000
January 1915	-	-	-	52.3	3,210
Water year 1914-15	-	320	19.7	78.3	56,700
January 1917	-	-	33	47.5	2,920
February	-	74	45	51.1	2,840
Water year 1916-17	-	733	30	132	96,000
Calendar year 1917	-	733	33	136	98,300
December 1922	-	-	-	60.2	3,700
Calendar year 1922	-	1,250	45	184	133,000
January 1923	-	-	-	55.0	3,380
Water year 1922-23	-	876	-	141	102,000
December 1923	-	-	-	66.3	4,070
Calendar year 1923	-	876	-	144	104,000
Water year 1923-24	-	215	17	59.5	43,180
January 1933	-	-	-	36	2,210
February	-	-	-	32	1,780
Water year 1932-33	-	474	23	60.0	43,420
Calendar year 1933	-	474	23	58.0	42,020
January 1935	686	26	14	22.1	1,360
February	784	-	-	28.0	1,560
Water year 1934-35	19,869	401	10	54.4	39,400
Calendar year 1935	21,119	401	14	57.9	41,880

† Average for period indicated.

1485. Spanish Fork at Thistle, Utah--Continued

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 14-16, 28)

Oct. 1 to May 21		May 22 to Sept. 30	
2.6	34	2.9	38
3.0	73	3.3	83
3.5	151	4.0	214
4.0	256	5.0	481
5.1	565	5.4	609

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		49	b38	b34	b45	69	105	166	286	79	44	44
2		49	40	b42	b46	65	110	196	261	74	43	42
3		53	40	b42	57	63	119	240	241	72	46	59
4		54	*42	b42	57	61	108	282	*225	70	46	45
5		50	46	b41	57	62	103	328	210	70	45	40
6		49	47	b41	56	63	96	375	214	67	45	40
7		47	50	b43	54	66	99	427	203	65	40	45
8		47	54	b45	54	68	110	433	190	63	42	46
9		46	51	*b46	56	69	110	*406	175	59	45	46
10		47	48	b47	55	62	108	451	169	59	43	44
11		47	49	50	54	63	106	499	*155	59	39	46
12		47	47	52	52	65	110	520	149	58	38	50
13		47	46	52	56	66	114	478	151	54	45	50
14		50	48	*52	54	66	128	481	149	54	46	47
15	a50	49	51	b50	55	68	146	442	143	57	47	*50
16		46	55	b49	59	72	*174	*439	134	56	50	52
17		47	67	b49	*60	67	209	454	132	55	53	53
18		44	*55	52	63	*72	285	475	128	52	49	52
19		*48	54	b50	72	*72	300	505	123	53	44	51
20		43	54	b40	*77	77	266	529	114	53	*42	50
21		40	53	b42	82	87	280	565	107	*50	40	51
22		36	53	b47	82	106	305	*583	109	*49	43	*49
23		35	b38	b45	82	147	247	583	106	53	46	47
24		36	b38	51	92	164	200	557	102	55	49	48
25		41	46	53	106	170	166	531	*102	55	43	50
26		44	46	54	97	135	147	500	96	51	39	51
27		42	b43	54	86	118	142	459	90	49	43	50
28		40	46	54	76	119	144	*408	83	48	47	50
29		40	52	55	-	114	147	367	80	47	48	48
30	*51	b37	52	55	-------	130	157	339	80	46	45	44
31	50	-------	b37	53	-------	137	-------	318	-------	44	45	-------
Total	1,551	1,350	1,486	1,482	1,842	2,763	4,841	13,336	4,507	1,776	1,380	1,440
Mean	50.0	45.0	47.9	47.8	65.8	89.1	161	430	150	57.3	44.5	48.0
Ac-ft	3,080	2,680	2,950	2,940	3,650	5,480	9,600	26,450	8,940	3,520	2,740	2,860

Calendar year 1957: Max 532 Min 23 Mean 99.9 Ac-ft 72,300
Water year 1957-58: Max 583 Min 34 Mean 103 Ac-ft 74,890

Peak discharge (base, 330 cfs).--Apr. 19 (3 a.m.) 342 cfs (4.32 ft); May 11 (11 p.m.) 565 cfs (5.03 ft); May 23 (3 a.m.) 609 cfs (5.42 ft); Sept. 3 (10 p.m.) 339 cfs (4.52 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for station at Castilla and Diamond Fork near Thistle.
b Stage-discharge relation affected by ice.

9-2820. 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 1958 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, 1932-58: Maximum daily discharge, 595 cfs July 9, 1923; minimum daily observed, 4 cfs many times when no water was 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	98								57	460	414	128
2	149								7.1	463	413	128
3	169								39	367	380	136
4	134								76	352	348	124
5	138								102	360	353	95
6	138								120	374	361	95
7	141								128	421	347	86
8	212					5			89	444	327	77
9	190								97	468	284	83
10									159	468	264	80
11									253	465	296	80
12									284	388	355	80
13									275	380	424	68
14									271	371	392	59
15		5	5	5	5		6	6	281	350	375	54
16									285	348	352	48
17									379	288	320	59
18									387	219	313	56
19									421	188	305	78
20	5								468	179	291	95
21									474	197	264	87
22									474	225	235	93
23									474	208	189	110
24						6			474	196	189	117
25									470	189	204	142
26									469	224	226	129
27									453	204	219	122
28								17	462	285	188	121
29					-			65	441	320	137	108
30					-------			89	438	357	134	101
31		-------			-------		-------	93	-------	406	134	-------
Total	1,479	150	155	155	140	171	180	426	8,807.1	10,164	9,033	2,839
Mean	47.7	5	5	5	5	5.5	6	13.7	294	328	291	94.6
Ac-ft	2,930	298	307	307	278	339	357	845	17,470	20,160	17,920	5,630

Calendar year 1957: Max 467 Min - Mean 82.8 Ac-ft 59,920
Water year 1957-58: Max 474 Min - Mean 92.3 Ac-ft 66,840

Note.--Discharge for period Oct. 10 to May 27 was estimated on basis of observed tunnel seepage Oct. 9 and May 28.

1495. 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 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 5,300 ft (from river-profile map).

Average discharge.--5 years, 116 cfs (83,980 acre-ft per year).

Extremes.--Maximum discharge during year, 478 cfs July 9 (gage height, 3.37 ft); minimum, 3.0 cfs Dec. 23.
1953-58: Maximum discharge, 1,020 cfs July 13, 1954 (gage height, 4.71 ft); minimum daily, 2.0 cfs Feb. 1, 2, 1956.

Remarks.--Records good except those for periods of 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 tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used June 30 to July 12)

Oct. 1 to July 12				July 13 to Sept. 30	
1.0	5.2	2.0	92	1.5	48
1.1	9.0	2.5	180	1.8	87
1.3	19	3.0	302	2.5	220
1.6	43	3.6	496	3.2	407

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	117	19	15	12	13	18	20	112	152	445	404	138
2	150	19	17	14	15	18	23	130	102	424	407	135
3	174	22	16	14	17	18	21	149	110	351	374	140
4	152	21	*16	12	16	17	23	168	*143	351	351	135
5	150	21	18	13	16	18	23	189	166	348	348	120
6	147	19	17	14	16	18	22	204	178	363	354	105
7	147	20	17	14	15	18	23	214	176	408	348	95
8	195	19	16	14	16	18	23	204	150	434	331	95
9	191	19	16	*15	16	17	23	*202	147	463	298	95
10	45	19	15	14	16	15	23	216	191	463	280	85
11	19	19	15	17	16	16	24	225	254	452	298	85
12		19	15	15	16	16	25	220	299	376	340	95
13		19	15	15	18	15	28	198	291	351	404	80
14		22	16	*15	16	16	34	191	286	345	383	70
15		19	15	14	18	16	43	180	294	331	368	*65
16	19	17	16	15	18	16	*54	*174	297	328	348	51
17		18	16	15	*19	15	69	174	357	293	320	67
18		18	*15	16	20	*17	102	178	385	241	309	64
19		*19	15	14	21	16	102	182	388	216	298	84
20		16	16	11	22	18	102	184	445	207	*288	108
21	19	11	15	15	22	*19	110	187	431	*216	275	101
22	19	10	15	18	22	20	107	178	438	*234	250	*103
23	19	15	7.7	15	23	20	92	170	442	218	211	120
24	19	17	13	18	23	22	81	162	452	213	205	127
25	19	18	18	16	25	25	73	149	*456	207	211	151
26	18	18	15	16	22	23	70	141	456	227	229	142
27	19	16	13	16	20	21	72	130	442	211	227	134
28	21	14	16	16	17	21	76	123	459	272	205	133
29	19	16	17	16	-	21	82	166	431	301	160	122
30	*19	13	16	16	-------	21	94	180	431	337	143	115
31	19	-------	7.7	15	-------	23	-------	182	-------	383	140	-------
Total	1,868	532	470.4	460	514	572	1,664	5,462	9,249	10,009	9,107	3,160
Mean	60.3	17.7	15.2	14.8	18.4	18.5	55.5	176	308	323	294	105
Ac-ft	3,710	1,060	933	912	1,020	1,130	3,300	10,830	18,350	19,850	18,060	6,270

Calendar year 1957: Max 523 Min 4.0 Mean 112 Ac-ft 81,420
Water year 1957-58: Max 463 Min 7.7 Mean 118 Ac-ft 85,420

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 12-20, Aug. 29 to Sept. 15; discharge estimated on basis of 1 discharge measurement, recorded range in stage, weather records, and records for Spanish Fork at Thistle and at Castilla.

1505. 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, 1½ miles northwest of Castilla, and 3 miles downstream from Diamond Fork.

Drainage area.--670 sq mi, approximately.

Records available.--May 1919 to September 1925 and October 1936 to September 1958 in reports of Geological Survey. January 1933 to September 1958 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.--31 years (1919-25, 1933-58), 220 cfs (159,300 acre-ft per year).

Extremes.--Maximum discharge during year, 880 cfs May 21 (gage height, 7.03 ft); minimum, 40 cfs Jan. 1.
1919-25, 1933-58: 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 for irrigation above station. Flow includes water diverted from Strawberry Reservoir (capacity, 270,000 acre-ft) in Colorado River basin via Strawberry tunnel (see p. 92) for irrigation in vicinity of Spanish Fork.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 4-19, June 24 to July 10)

Oct. 1 to May 16				May 17 to Sept. 30	
4.1	53	5.5	371	4.9	109
4.5	116	6.0	550	6.0	406
5.0	229	6.6	810	7.0	850

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	175	80	62	52	63	107	159	346	462	515	482	199
2	206	81	65	66	66	103	168	407	374	523	478	192
3	247	91	65	66	83	103	178	470	358	436	459	208
4	237	91	*65	65	81	98	171	546	*382	399	413	209
5	219	86	72	63	83	100	159	624	392	417	410	173
6	216	83	78	63	83	102	155	710	417	462	417	157
7	214	81	81	66	78	103	155	773	406	511	406	154
8	260	80	84	68	78	107	159	706	345	544	392	143
9	266	78	81	*72	81	107	164	*649	322	584	361	143
10	161	76	74	72	81	95	166	688	358	579	332	141
11	a95	76	74	78	80	96	166	755	*424	575	345	139
12		76	70	80	76	102	175	*787	466	507	399	152
13		76	69	81	83	102	190	719	451	474	486	139
14		84	72	*83	76	102	214	710	443	470	478	120
15		81	78	76	80	105	252	654	439	451	462	*124
16	a85	70	84	76	83	112	*304	*636	428	443	432	111
17		75	100	74	*88	102	359	675	511	392	392	117
18		70	*84	80	91	*109	550	727	544	310	378	122
19		*74	81	78	103	*107	504	780	557	272	364	134
20		65	81	61	*112	112	460	795	588	264	*351	157
21		60	80	65	118	*126	492	845	597	*275	329	154
22		53	81	75	124	146	500	815	588	*295	307	*152
23		56	57	70	126	185	391	800	579	287	270	168
24		61	58	81	136	206	325	776	570	284	258	182
25	a82	69	72	81	164	222	285	737	*570	275	264	209
26		74	74	80	153	190	263	694	562	a285	284	204
27		66	68	81	134	173	260	628	536	a280	290	194
28		62	70	80	118	173	277	*557	532	a330	267	192
29		63	81	80	-	166	288	553	502	a360	227	182
30	*83	57	81	81	-------	185	313	553	494	432	206	170
31	83	-------	57	78	-------	197	-------	532	-------	474	204	-------
Total	3,965	2,195	2,299	2,272	2,722	4,043	8,202	20,647	14,197	12,705	11,143	4,841
Mean	128	73.2	74.2	73.3	97.2	130	273	666	473	410	359	161
Ac-ft	7,860	4,350	4,560	4,510	5,400	8,020	16,270	40,950	28,160	25,200	22,100	9,600

Calendar year 1957: Max 714 Min 36 Mean 230 Ac-ft 166,700
Water year 1957-58: Max 845 Min 52 Mean 244 Ac-ft 177,000

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Spanish Fork at Thistle and Diamond Fork near Thistle.

1520. 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 1958.

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 present site at different datum. Mar. 24, 1953, to Sept. 15, 1957, water-stage recorder at present site at datum 4.0 ft higher.

Average discharge.--37 years (1904-6, 1909-19, 1920-25, 1938-58), 89.4 cfs (64,720 acre-ft per year).

Extremes.--Maximum discharge during year, 568 cfs Apr. 19 (gage height, 9.65 ft); no flow July 9-15, Aug. 1-6, 27.
1903-7, 1909-25, 1938-58: 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 no gage-height record, which are fair. Flow regulated by many diversions for irrigation and hydroelectric powerplant. During latter part of irrigation season, only waste and return waters pass gage. Station is 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.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 1-11, Nov. 29 to Feb. 3)

1.7	0	2.4	15	6.0	232
1.8	.3	3.0	36	8.0	409
2.0	4.2	4.0	85	9.0	503

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.2	85	69	68	79	115	182	290	1.4	0.9	0	0.5
2	1.6	85	77	86	74	117	182	308	3.0	*.3	0	.5
3	3.0	92	76	87	97	117	190	340	3.6	1.2	0	.5
4	4.0	102	*77	85	94	115	185	367	*5.9	1.2	0	2.2
5	7.8	95	83	83	102	113	177	390	2.2	1.2	0	.5
6	7.0	91	92	87	102	113	166	375	1.6	.7	0	.7
7	6.6	89	92	86	96	114	166	402	1.6	.7	.2	.7
8	12	90	96	87	96	117	175	358	3.6	.7	.5	.7
9	14	89	98	88	102	122	171	274	5.6	0	.5	.9
10	18	91	89	86	103	114	179	300	12	0	.5	1.4
11	26	90	86	93	98	109	177	320	1.4	0	.5	1.2
12	27	89	85	91	94	113	183	325	2.0	0	.9	.9
13	35	89	83	95	102	114	190	300	2.8	0	.9	1.6
14		100	83	92	96	113	201	258	1.6	0	.9	.9
15		99	93	*88	98	113	221	234	2.2	0	.7	.7
16		89	106	87	106	126	*270	*204	1.8	.2	.7	.7
17	a35	90	117	86	107	122	318	206	1.6	.2	.7	.9
18		85	109	95	*109	*177	424	276	1.1	.2	.5	4.8
19		*93	103	91	122	124	469	342	.9	.2	.7	.5
20		84	*103	79	*138	*134	416	312	.5	.3	.3	.9
21		77	102	81	138	145	420	293	3.1	.7	*.5	.7
22		69	101	89	143	174	406	260	.5	.5	.3	.3
23		70	88	83	150	206	375	234	.9	.3	.3	.3
24		73	81	92	152	231	330	199	.9	.2	.3	3.6
25		78	87	95	181	248	294	162	.9	.2	.3	3.8
26	a80	85	97	94	188	220	200	138	.7	.2	.3	1.4
27		79	91	96	158	197	268	83	.7	.3	0	.7
28		71	90	92	139	193	265	12	2.1	.5	.2	1.6
29		71	102	91	-	180	272	14	.3	*.3	.3	1.4
30		71	105	95	-------	195	285	2.2	.7	.2	1.1	1.2
31		-------	83	95	-------	214	-------	1.4	-------	.3	.5	-------
Total	1,289.2	2,561	2,844	2,745	3,264	4,545	7,827	7,579.6	67.2	11.7	12.6	36.9
Mean	41.6	85.4	91.7	88.5	117	147	261	245	2.24	0.38	0.41	1.23
Ac-ft	2,560	5,080	5,640	5,440	6,470	9,010	15,520	15,030	133.0	23.2	25.0	73.2

Calendar year 1957: Max 489 Min - Mean 91.4 Ac-ft 66,190
Water year 1957-58: Max 469 Min 0 Mean 89.8 Ac-ft 65,000

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, recorded range in stage, and records for other Spanish Fork stations.

1525. 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 1958.

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.--23 years (1904-5, 1907-16, 1945-58), 52.2 cfs (37,790 acre-ft per year).

Extremes.--Maximum discharge during year, 398 cfs May 6 (gage height, 4.91 ft); minimum, 4.0 cfs Dec. 7.
1904-16, 1945-58: 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 except those for period of no gage-height record, which are fair. Several diversions for irrigation above station. 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 4-13, May 24 to June 25)

2.0	12	3.2	135
2.3	30	3.7	224
2.7	70	4.2	327

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	18	17	15	17	23	33	180	107	33	19	18
2	15	19	19	17	17	23	35	226	100	31	*19	18
3	18	20	18	16	18	23	34	264	92	31	19	15
4	18	20	18	14	18	23	36	285	90	31	20	16
5	18	20	18	15	20	22	35	293	87	31	20	18
6	18	20	18	15	21	21	34	316	82	31	19	18
7	20	20	20	16	20	21	36	*323	79	29	19	15
8	20	20	20	16	20	21	36	296	71	28	18	16
9	19	19	20	16	20	21	37	262	70	26	18	17
10	19	19	18	17	20	20	38	279	68	25	18	17
11	18	20	18	17	20	20	39	296	73	25	17	16
12	20	20	18	17	20	21	41	*264	79	24	17	17
13	20	20	18	17	20	21	51	210	71	24	17	20
14	20	23	18	17	20	21	63	193	69	24	18	17
15	19	21	18	17	21	21	*81	181	61	22	18	18
16	20	20	20	*16	20	21	113	176	61	20	17	17
17	21	20	20	15	21	21	146	174	59	19	17	17
18	21	20	20	16	21	21	244	185	53	19	17	17
19	20	20	20	15	*21	*21	291	*198	58	19	18	17
20	20	20	*20	14	22	21	283	189	56	19	16	17
21	20	*18	20	14	23	22	285	189	54	19	*14	16
22	20	16	20	15	24	26	279	*202	52	19	14	17
23	20	18	16	16	25	28	196	212	49	19	14	17
24	20	18	16	18	25	29	153	206	48	19	14	17
25	20	18	17	19	30	32	129	189	47	19	15	17
26	20	19	17	18	28	32	120	172	41	19	14	17
27	20	18	17	19	26	30	117	165	40	19	16	17
28	20	18	18	18	23	31	122	*148	40	19	16	17
29	20	18	18	18	-	30	134	138	36	19	17	17
30	*19	16	18	18	-------	32	153	135	36	19	17	17
31	19	-------	14	18	-------	34	-------	121	-------	19	19	-------
Total	597	576	567	509	601	753	3,394	6,667	1,929	720	531	510
Mean	19.3	19.2	18.3	16.4	21.5	24.3	113	215	64.3	23.2	17.1	17.0
Ac-ft	1,180	1,140	1,120	1,010	1,190	1,490	6,730	13,220	3,830	1,430	1,050	1,010

Calendar year 1957: Max 236 Min 12 Mean 44.5 Ac-ft 32,170
Water year 1957-58: Max 323 Min 14 Mean 47.5 Ac-ft 34,400

Peak discharge (base, 120 cfs).--Apr. 18 (11:55 p.m.) 351 cfs (4.24 ft); May 6 (11 p.m.) 398 cfs (4.91 ft).

* Discharge measurement made on this day.
Note.--No gage-height record June 26 to Aug. 1; discharge estimated on basis of recorded range in stage and records for nearby streams.

1535. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 8,110 ft (by barometer).

Average discharge.--9 years, 52.5 cfs (38,010 acre-ft per year).

Extremes.--Maximum discharge during year, 554 cfs May 26 (gage height, 3.39 ft); minimum, 3.1 cfs Oct. 29.
1949-58: Maximum discharge, 825 cfs June 6, 1957 (gage height, 3.66 ft); minimum, 1.7 cfs Oct. 30, 1956.

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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.8	2.3	1.6	43
.9	4.0	2.0	99
1.0	6.4	2.4	186
1.1	9.6	3.1	430
1.3	19		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.0	7.3	5.8	6.1			b7.0	38	304	99	51	15
2	*8.6	6.4	6.1	6.1			7.3	49	290	97	50	16
3	8.6	7.0	5.8	5.8			6.7	63	*269	97	50	24
4	8.9		5.5	5.8			7.3	83	246	96	41	19
5	7.6		5.8	5.8			b7.3	103	224	96	41	15
6	8.3		5.8	5.8			b6.7	125	276	94	45	13
7	7.0			5.5			7.3	137	321	96	45	11
8	6.4			5.5		5.6	7.3	129	276	94	47	8.9
9	6.1			5.5			7.0	135	230	92	48	9.6
10	5.8	b6.0		5.5			7.6	160	*186	92	50	9.3
11	6.4		b5.8	5.5			6.7	183	137	91	50	9.6
12	7.0			5.5			8.3	178	127	91	49	14
13	6.7			5.5			9.6	129	117	94	47	16
14	7.0			5.5			12	117	112	94	50	12
15	7.0		5.8	5.5			15	104	104	96	51	12
16	7.3			5.5	5.6		22	112	99	94	49	13
17	7.6			5.5			30	158	97	94	48	9.3
18	7.3	(*)		5.5			45	240	96	92	51	6.4
19	8.0			5.3			48	314	89	92	48	5.5
20	8.3			5.0			45	378	94	84	42	4.2
21	8.3		b5.8	5.0		6.0	46	*414	133	77	40	4.0
22	8.3			4.8			41	394	137	74	25	4.0
23	8.0	b5.7		5.0			35	414	131	69	15	4.0
24	8.6			5.5			30	410	123	69	14	4.0
25	7.3			5.5			27	382	108	78	12	3.8
26	7.0		6.1	5.5		*b6.5	27	*410	101	78	11	3.6
27	7.0		6.1	5.8		b7.0	27	414	99	77	13	3.6
28	*7.6		6.1	5.8		7.3	*27	*385	101	69	*16	3.5
29	6.1		6.4	5.8	-	7.0	29	367	125	64	16	3.6
30	7.0		6.4	5.8	-------	7.0	32	325	*112	63	15	*3.6
31	7.6	-------	6.1	5.8	-------	7.0	-------	282	-------	*50	14	-------
Total	231.7	178.2	182.2	172.0	156.8	185.8	634.1	7,132	4,864	2,643	1,144	280.5
Mean	7.47	5.94	5.88	5.55	5.60	5.99	21.1	230	162	85.3	36.9	9.35
Ac-ft	460	353	361	341	311	369	1,258	14,150	9,650	5,240	2,270	556

Calendar year 1957: Max 601 Min - Mean 59.6 Ac-ft 43,140
Water year 1957-58: Max 414 Min 3.5 Mean 48.8 Ac-ft 35,320

Peak discharge (base, 400 cfs).--May 26 (7:30 p.m.) 554 cfs (3.39 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Oct. 1, Jan. 31 to Mar. 25; discharge estimated on basis of weather records, recorded range in stage, and records for station near Hailstone.

9-2725. Duchesne tunnel near Kamas, Utah

Location.--Lat 40°36', long 111°00', in NE¼ sec. 2, T. 3 S., R. 8 E., on left bank 600 ft downstream from tunnel outlet, 3 miles upstream from Soapstone Creek, and 14 miles east of Kamas.

Drainage area.--40 sq mi, approximately.

Records available.--October 1953 to September 1958.

Gage.--Water-stage recorder with Parshall flume, and Sparling water meter for low flow. Datum of gage is 8,098.5 ft (Bureau of Reclamation design plan).

Extremes.--Maximum discharge during year, 587 cfs June 6; minimum daily, 1.5 cfs May 27 to June 3, when flow was cut off at head of tunnel.
1953-58: Maximum discharge, 677 cfs June 29, 1957; maximum gage height, 4.65 ft June 9, 1955; minimum daily discharge, 1.5 cfs Sept. 9-11, 1957, May 27 to June 3, 1958, when flow was cut off at head end of tunnel.

Remarks.--Records good Apr. 14 to May 20, June 5 to Aug. 10, when most of flow was through Parshall flume, and fair for remainder of year. Flow is diversion from Duchesne River in Colorado River basin to Jordan River basin, and includes about 1.5 cfs tunnel seepage.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	11					9.0	29	1.5	58	15	11
2	10	11					9.0	37	1.5	54	14	6.8
3	10	11						50	1.5	50	14	8.7
4	11	12						69	2	49	13	10
5	11	12				10		92	252	47	13	10
6	11	12						120	507	43	13	
7	12	12						134	552	40	12	8.8
8	12	12					10	123	445	35	12	
9	12	12						130	88	28	12	8.5
10	12	12						155	117	27	12	8.0
11	12	11						161	192	25	11	8.0
12	12	11						181	216	23	11	20
13	12	11						148	204	26	11	22
14	11	11					12	138	191	28	12	12
15	11	11	10	10	10		12	119	185	27	12	11
16	11	12					18	117	181	27	12	9.1
17	12	12					25	152	177	24	11	10
18	12	*11					38	209	177	24	13	9.4
19	12						43	279	165	22	14	9.4
20	12					9.0	39	167	150	22	11	8.1
21	12						38	2	134	21	13	8.1
22	12						34	2	125	21	16	8.7
23	*12						32	2	118	20	12	8.7
24	12						29	2	115	20	11	8.2
25	11	11					27	2	107	19	11	8.2
26	11					(*)	27	2	92	18	10	8.0
27	11						24	1.5	82	18	6.0	8.0
28	*11						*23	1.5	75	18	*11	7.8
29	11				-		24	1.5	70	17	12	7.8
30	11				-------		25	1.5	*63	17	10	*7.7
31	11	-------			-------		------	1.5	-------	*18	10	------
Total	353	339	310	310	280	288.0	598.0	2,649.5	4,786.5	886	370.0	289.6
Mean	11.4	11.3	10	.10	10	9.29	19.9	85.5	160	28.6	11.9	9.65
Ac-ft	700	672	615	615	555	571	1,190	5,260	9,490	1,760	734	574

Calendar year 1957: Max 571 Min 1.5 Mean 42.1 Ac-ft 30,490
Water year 1957-58: Max 552 Min 1.5 Mean 31.4 Ac-ft 22,740

* Discharge measurement made on this day.

1545. 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 September 1958 (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.--1931-58: Maximum daily discharge, 870 cfs June 4, 1957; no water diverted from Weber River or Beaver Creek for several months in each year.

Remarks.--Records good. 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 61.

Rating tables, Oct. 15, 1957, to June 26, 1958 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 15 to Apr. 22				Apr. 22 to June 26			
1.8	3.6	3.0	48	0.5	25	2.0	231
2.2	14	4.0	104	.8	54	3.0	442
2.6	29	4.7	172	1.0	76	4.0	701
				1.5	146	4.4	816

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	20	33				8.0	140	520			
2	-	20	39				24	160	520			
3	-	23	36				43	186	510			
4	-	33	32				43	215	508			
5	-	34	9.0				49	273	338			
6	-	34	6.6				38	313	36			
7	-	37	4.2				46	330	303			
8	-	39	-				46	400	162			
9	-	37	-				42	412	91			
10	-	36	-				44	433	80			
11	-	40	-				44	442	165			
12	-	40	-				45	500	287			
13	-	39	-				50	492	297			
14	-	42	-				*57	471	299			
15	4.3	40	-				67	424	275			
16	14	37	-				84	392	265			
17	18	40	-				102	396	240			
18	19	39	-				132	454	237			
19	19	38	-				163	563	231			
20	19	36	-				153	660	217			
21	16	27	-				162	*732	173			
22	13	20	-				158	796	162			
23	18	39	-				143	796	149			
24	19	40	-				131	802	130			
25	22	46	-				122	723	124			
26	21	46	-				115	576	58			
27	22	41	-				116	535	-			
28	21	36	-				116	530	-			
29	19	33	-				118	522	-			
30	18	26	-		-------		128	520	-			
31	19	-------	-		-------		-------	500	-------			-------
Total	301.3	1,058	159.8	-	-	-	2,589.0	14,688	6,377	-	-	-
Mean	-	35.3	-	-	-	-	86.3	474	-	-	-	-
Ac-ft	598	2,100	317	-	-	-	5,140	29,130	12,650	-	-	-

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 802 Min - Mean - Ac-ft 49,940

* Discharge measurement made on this day.

1550. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 6,100 ft (from river-profile map).

Extremes.--Maximum discharge during year, 2,820 cfs May 22 (gage height, 6.30 ft); minimum, 32 cfs Feb. 2.
1949-58: Maximum discharge, 3,880 cfs June 4, 1957 (gage height, 7.28 ft); 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 station and by storage in several small reservoirs at headwaters.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Dec. 8, 9, 16-23, Jan. 19-23, 28-31, Feb. 1, 7-21, Apr. 28 to May 26, May 28, June 17-21)

Oct. 1 to May 30				May 31 to Sept. 30			
0.8	44	3.0	620	1.3	40	4.0	930
1.1	83	4.0	1,040	1.9	133	5.0	1,510
1.5	162	5.0	1,600	2.4	254	5.4	1,790
2.0	292	6.1	2,510	3.0	469		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	97	b115		51	b66	77	465	1,480	*225	96	59
2	78	93	b130		b60	b65	113	536	1,480	217	87	53
3	97	106	b120		b60	b65	140	643	*1,380	220	85	46
4	a105	119	b115		b60	b65	138	766	1,370	228	76	56
5	94	125	b100		b60	b65	142	906	1,260	220	70	60
6		121	b80		b60	b65	123	1,040	1,330	209	66	56
7		132	b70		58	65	144	1,120	1,760	194	60	49
8		132	67		60	65	151	1,120	1,520	187	57	52
9		132	76		60	62	149	1,100	960	182	50	49
10		142	b80	b70	59	53	149	1,180	755	177	50	46
11	a80	151	b80		59	63	151	1,300	*805	*171	50	46
12		149	b80		54	b62	158	1,450	900	171	50	63
13		151	b80	(*)	64	60	b169	1,260	880	166	49	96
14		162	b80		60	58	*b176	1,200	860	166	48	78
15		155	b80		63	58	b227	*1,080	820	164	57	68
16		147	82		65	54	b295	1,050	775	160	56	64
17	a92	b138	*95		67	*59	366	1,160	720	157	54	63
18	a96	*b130	86		72	64	509	1,540	710	160	54	59
19	a100	b130	83	64	77	56	576	1,960	*690	151	60	53
20	a98	b126	86	46	*83	63	540	2,340	640	149	53	49
21	a90	b105	83	54	85	83	544	*2,350	619	141	52	45
22	a82	b120	78	70	86	83	505	*2,420	593	135	50	55
23	a94	b130	70	56	102	92	458	2,280	555	131	53	46
24	a100	b140		b70	106	98	410	2,330	522	128	60	48
25	a100	b150		b70	123	98	382	2,100	510	128	*56	50
26	a100	b150		b70	98	80	370	2,030	390	126	52	52
27	a100	*b140	b70	b70	77	68	373	*2,070	279	124	50	50
28	*104	b130		68	b70	83	373	*1,960	254	122	60	49
29	92	b120		70	-	82	382	*1,910	251	108	68	*50
30	88	b105		70	-------	92	423	1,810	237	*110	63	52
31	97	-------		65	-------	98	-------	1,530	-------	108	60	-------
Total	2,765	3,928	2,576	2,103	1,999	2,190	8,713	46,006	25,305	5,035	1,852	1,662
Mean	89.2	131	83.1	67.8	71.4	70.6	290	1,484	844	162	59.7	55.4
Ac-ft	5,480	7,790	5,110	4,170	3,960	4,340	17,280	91,250	50,190	9,990	3,670	3,300

Calendar year 1957: Max 3,420 Min 59 Mean 377 Ac-ft 273,100
Water year 1957-58: Max 2,420 Min 45 Mean 285 Ac-ft 206,500

Peak discharge (base, 1,200 cfs).--May 12 (3 a.m.) 1,560 cfs (4.77 ft); May 22 (2 a.m.) 2,820 cfs (6.30 ft); June 7 (3 a.m.) 1,970 cfs (5.64 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for Duchesne tunnel, Weber-Provo canal, and station near Kamas.
b Stage-discharge relation affected by ice.

1590. 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 1958.

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, 155,900 acre-ft June 8 (elevation, 5,418.25 ft); minimum, 89,320 acre-ft Sept. 30 (elevation, 5,388.48 ft).
1940-58: Maximum contents, 155,900 acre-ft June 24, 25, 1957, June 8, 1958; maximum elevation, 5,418.25 ft June 8, 1958; minimum since reservoir first filled in June 1946, 64,980 acre-ft Oct. 22-24, 1954 (elevation, 5,374.0 ft).

Remarks.--Reservoir is formed by earth-fill dam with concrete cutoff wall. Storage began in October 1940. Capacity, 152,560 acre-ft between elvations 5,280 (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.

Capacity table, water year 1957-58 (elevation, in feet, and contents, in acre-feet)

5,385	83,040	5,405	123,000
5,390	92,120	5,410	134,600
5,395	101,800	5,415	147,300
5,400	112,000	5,420	160,800

Total contents, in acre-feet, at 12 p.m., water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100,900	102,200	106,900	103,900	99,310	98,870	96,930	100,500	152,600	148,200	124,500	103,100
2	100,600	102,400	106,900	103,800	99,200	98,890	96,910	101,000	153,500	147,400	123,900	102,500
3	100,300	102,500	106,900	103,600	99,000	98,670	96,890	101,600	153,900	146,700	123,200	101,900
4	99,940	102,800	106,900	103,500	98,860	98,530	96,730	102,300	154,300	146,000	123,600	101,200
5	99,660	103,100	106,900	103,200	98,770	98,530	96,600	103,500	154,500	145,600	121,900	100,600
6	99,580	103,400	106,900	103,000	98,600	98,570	96,560	105,000	154,700	144,900	121,000	100,200
7	99,350	103,500	106,900	102,800	98,470	98,510	96,560	106,400	155,500	144,200	120,200	99,660
8	99,350	103,800	106,800	102,600	98,380	98,300	96,560	108,000	155,900	143,400	119,600	99,120
9	99,270	104,000	106,600	102,500	98,280	98,050	96,250	109,800	155,000	142,400	118,900	98,530
10	99,370	104,200	106,400	102,400	98,140	97,780	95,830	111,500	153,600	141,500	118,100	98,010
11	99,370	104,400	106,100	102,300	97,990	97,520	95,260	113,200	152,300	140,700	117,400	97,530
12	99,530	104,600	105,700	102,200	97,850	97,350	94,740	114,900	151,400	140,000	116,600	97,120
13	99,740	105,000	105,400	102,100	97,740	97,120	94,320	116,600	151,200	139,100	115,900	96,540
14	99,940	105,400	105,300	102,000	97,640	96,810	93,980	118,300	151,300	138,400	115,200	96,060
15	100,000	105,700	105,200	101,900	97,580	96,600	93,780	119,600	151,600	137,600	114,400	95,680
16	100,100	105,900	105,200	101,700	97,530	96,500	93,930	120,400	151,800	137,400	113,700	95,300
17	100,200	106,100	105,200	101,700	97,490	96,460	94,430	121,900	151,900	135,800	113,100	94,840
18	100,200	106,300	105,200	101,500	97,470	96,040	94,860	123,500	151,900	134,900	112,300	94,440
19	100,300	106,600	105,200	101,200	97,530	95,700	95,510	125,900	151,700	134,100	111,600	94,120
20	100,600	106,600	105,200	101,000	97,620	95,600	96,330	128,900	151,600	133,400	110,900	93,700
21	100,800	106,700	105,300	100,900	97,720	95,700	96,960	131,900	151,600	132,600	110,200	93,180
22	100,800	106,700	105,200	100,800	97,810	95,830	97,370	134,600	151,600	131,900	109,400	92,800
23	100,900	106,700	105,200	100,700	98,090	96,060	97,910	137,900	151,400	131,100	108,700	92,330
24	101,100	106,700	105,100	100,500	98,380	96,270	98,470	141,400	151,200	130,300	108,000	91,820
25	101,200	106,700	104,900	100,400	98,790	96,430	98,830	144,300	151,100	129,500	107,300	91,360
26	101,300	106,800	104,700	100,300	99,120	96,620	99,180	146,000	150,900	128,700	106,600	90,970
27	101,500	106,900	104,600	100,200	99,160	96,730	99,510	147,500	150,600	128,100	106,000	90,590
28	101,600	106,900	104,500	100,100	98,980	96,750	99,740	148,500	149,900	127,500	105,400	90,220
29	101,800	106,900	104,400	99,940	-	96,790	100,000	149,800	149,300	126,700	104,900	89,780
30	101,900	106,900	104,200	99,800	-------	96,950	100,200	150,800	148,700	125,900	104,300	89,320
31	102,100	-------	104,000	99,590	-------	96,960	-------	151,700	-------	125,200	103,700	-------
(†)	5,395.15	5,397.56	5,396.13	5,393.89	5,393.58	5,392.54	5,394.22	5,416.67	5,415.53	5,406.00	5,395.95	5,388.48
(‡)	†800	+4,800	-2,900	-4,410	-610	-2,020	+3,240	+51,500	-3,000	-23,500	-21,500	-14,380

Calendar year 1957..... ‡ +27,020
Water year 1957-58..... ‡ -11,980

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

1595. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 5,270 ft (from topographic map).

Extremes.--Maximum discharge during year, 1,690 cfs June 8 (gage height, 6.07 ft); minimum daily, 171 cfs Mar. 26.
1953-58: Maximum discharge, 2,190 cfs June 26, 1957 (gage height, 6.74 ft); no flow Feb. 2, 3, 1957, when reservoir gates were closed.

Remarks.--Records good. Flow regulated by Deer Creek Reservoir (see preceding page) 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 and water diverted to Provo River by Weber-Provo diversion canal (see p. 99) and Duchesne tunnel (see p. 98).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 21-29, Apr. 9-15)

2.3	151
3.0	329
4.0	645
5.0	1,080
6.0	1,660

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	340	191	259	280	288	305	402	343	932	475	472	368
2	340	188	252	283	280	310	405	343	951	*475	417	371
3	332	188	252	286	288	310	405	346	1,060	485	414	379
4	316	186	254	286	286	275	405	343	1,100	491	423	377
5	299	186	259	283	291	239	405	346	1,050	491	432	374
6	208	188	259	288	288	239	411	379	1,110	507	453	374
7	193	188	254	286	278	294	411	394	1,250	501	444	371
8	193	184	257	286	283	371	414	435	1,440	497	438	371
9	193	181	316	283	275	368	484	432	1,650	507	435	371
10	193	179	343	283	283	365	631	438	1,520	504	435	368
11	181	181	343	272	286	365	627	554	1,350	501	423	368
12	188	179	340	276	283	363	627	578	966	497	420	365
13	188	179	340	*275	280	365	627	578	736	491	420	357
14	172	179	340	288	275	368	*616	588	598	488	420	346
15	176	179	340	288	275	368	602	*595	564	488	420	340
16	191	179	343	283	262	368	397	588	564	497	420	326
17	188	176	*340	286	249	*368	385	584	571	497	420	324
18	188	*174	343	283	239	371	385	592	571	497	420	318
19	188	174	335	283	226	377	388	602	571	510	417	321
20	191	223	239	286	*223	374	385	602	571	510	414	321
21	193	254	239	283	223	354	388	606	537	494	408	321
22	193	254	236	280	223	335	388	602	517	491	408	318
23	193	254	257	283	223	332	371	606	504	491	411	326
24	196	254	278	283	220	332	343	609	488	485	408	326
25	193	252	283	280	223	335	346	686	488	481	*388	326
26	196	254	280	286	223	171	346	*970	485	478	391	326
27	193	254	280	286	272	337	343	1,320	485	420	391	329
28	193	252	280	283	302	354	346	1,330	485	340	394	329
29	*193	252	280	288	-	354	346	1,230	481	485	385	329
30	191	262	280	286	-------	354	343	1,120	481	*478	382	316
31	191	-------	278	286	-------	591	-------	1,020	-------	478	379	-------
Total	6,583	6,224	8,979	8,792	7,347	10,412	12,972	19,759	24,076	15,030	12,902	10,356
Mean	212	207	290	284	262	336	432	637	803	485	416	345
Ac-ft	13,060	12,350	17,810	17,440	14,570	20,650	25,730	39,190	47,750	29,810	25,590	20,540

Calendar year 1957: Max 2,130 Min 0 Mean 425 Ac-ft 307,900
Water year 1957-58: Max 1,650 Min 171 Mean 393 Ac-ft 284,500

* Discharge measurement made on this day.

1610. 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 1958.

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, 1,700 cfs June 8 (gage height, 5.58 ft); minimum daily, 178 cfs Oct. 14.
1911-58: 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 periods of no gage-height record, which are fair. Flow regulated by Deer Creek Reservoir (see p. 101) 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 and water diverted to Provo River by Weber-Provo diversion canal (see p. 99) and Duchesne tunnel (see p. 98).

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 18-20)

Oct. 1 to Nov. 20, Apr. 14 to Sept. 30				Nov. 21 to Apr. 13	
1.5	99	4.0	857	2.2	208
2.0	191	5.0	1,400	3.0	430
3.0	474	6.0	1,980	3.6	641

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	345	205	273	291	291	310	417	400	999	540	498	409
2	348	207	285	294	288	315	424	412	1,020	*532	451	409
3	339	205	267	296	296	315	420	419	1,100	543	444	412
4	322	202	267	291	294	290	420	422	1,150	550	454	412
5	302	200	273	291	299	280	424	438	1,100	547	467	406
6	219	202	275	294	294	260	424	467	1,160	557	488	403
7	198	205	273	296	283	310	424	494	1,300	554	477	406
8	198	198	273	294	283	370	424	515	1,470	554	477	406
9	198	196	327	294	286	375	483	512	1,670	565	471	403
10	198	198	355	291	291	375	634	522	1,530	561	471	400
11	189	198	355	283	288	375	630	641	1,380	554	458	400
12	196	198	358	288	286	375	634	663	1,030	550	461	397
13	193	200	355	286	286	375	637	645	790	543	461	390
14	178	205	352	294	280	380	*634	656	648	543	458	378
15	185	200	358	296	280	380	615	*859	615	540	458	369
16	207	198	367	*294	273	380	431	858	622	543	458	354
17	205	198	361	291	257	380	422	656	630	543	454	351
18	205	196	358	291	252	380	435	659	637	543	454	348
19	205	196	350	291	*242	380	438	674	637	550	448	351
20	205	233	260	291	240	*379	438	682	634	550	444	351
21	205	*270	260	291	242	373	444	689	604	532	*444	348
22	207	270	260	291	240	352	444	689	590	529	444	351
23	207	267	270	291	237	355	425	693	575	529	444	354
24	207	265	290	291	242	355	397	693	565	526	444	354
25	207	262	300	288	254	355	394	765	561	518	428	357
26	207	265	*302	288	247	210	394	1,060	543	518	428	357
27	209	262	296	291	286	344	387	*1,400	547	438	435	354
28	209	265	296	288	307	364	390	1,370	550	372	438	357
29	*209	265	294	294	-	364	394	1,290	554	*515	428	357
30	209	273	291	291	-------	367	390	1,190	550	512	422	348
31	207	-------	288	291	-------	404	-------	1,090	-------	505	419	-------
Total	6,918	6,704	9,469	9,032	7,644	10,807	13,867	22,121	25,761	16,456	14,026	11,292
Mean	223	223	305	291	273	349	462	714	859	531	452	376
Ac-ft	13,720	13,300	18,780	17,910	15,160	21,440	27,500	43,880	51,100	32,640	27,820	22,400

Calendar year 1957: Max 2,140 Min 41 Mean 453 Ac-ft 328,200
Water year 1957-58: Max 1,670 Min 178 Mean 422 Ac-ft 305,600

* Discharge measurement made on this day.
Note.--No gage-height record Dec. 20-25, Mar. 1-19; discharge estimated on basis of recorded range in stage, weather records, trend of flow, and records for station below Deer Creek Dam.

1615. 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 1958.

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 datums.

Extremes.--Maximum discharge during year, 55 cfs May 27 (gage height, 1.29 ft); minimum, 8.1 cfs July 28.
1911-58: Maximum discharge observed, 123 cfs May 27, 1922; minimum, 5.4 cfs May 28, 29, 1954, Sept. 11, 1955, July 28, 1956.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow affected by irrigation diversions above and diversion for city of Provo municipal supply which bypasses gaging station.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.4	7.4
.6	14
.8	23
1.3	52

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	22	20	18	19	17	17	18	33	18	21	22
2	18	22	20	18	18	17	17	19	28	*20	21	23
3	19	22	19	18	18	17	17	20	23	19	21	23
4		22	19	18	18	17	17	22	*22	18	21	23
5		22	19	18	18	17	17	22	22	17	19	24
6		22	19	18	18	16	16	23	24	17	14	25
7		22	20	18	17	16	17	24	25	16	16	24
8		21	19	18	17	16	17	25	25	17	16	25
9		21	19	18	17	16	17	25	23	16	17	25
10	20	21	19	18	17	16	16	23	23	12	17	25
11		21	19	18	17	16	16	23	22	12	18	25
12		22	19	18	17	16	16	24	21	13	18	25
13		22	19	18	17	16	16	24	20	15	18	25
14		23	19	19	17	16	16	25	20	17	17	25
15		22	19	19	17	16	*16	*24	19	20	16	25
16		22	22	*19	18	16	17	23	19	18	15	25
17		21	21	19	18	16	17	23	18	16	20	25
18		21	20	19	18	16	17	23	18	17	22	24
19		21	19	19	*18	16	18	24	18	17	21	24
20		21	19	19	18	*16	18	25	18	16	22	24
21		*21	19	19	18	19	18	31	18	16	*20	
22	22	20	18	19	18	18	18	40	17	13	25	
23		20	18	19	18	18	19	41	16	15	26	
24		20	18	19	18	18	19	44	17	18	25	
25		20	18	19	21	18	18	48	17	17	24	
26		20	*18	19	18	17	18	*49	16	16	24	24
27		20	18	19	18	17	18	51	15	15	23	
28		20	18	19	17	17	18	49	16	14	24	
29	*22	20	18	19	-	17	18	46	16	*13	24	
30	22	20	18	19	-------	17	17	43	16	20	23	
31	22	-------	18	19	-------	17	-------	38	-------	21	22	-------
Total	647	634	588	576	498	518	516	939	605	509	630	726
Mean	20.9	21.1	19.0	18.6	17.8	16.7	17.2	30.3	20.2	16.4	20.3	24.2
Ac-ft	1,280	1,260	1,170	1,140	988	1,030	1,020	1,860	1,200	1,010	1,250	1,440

Calendar year 1957: Max 47 Min 8.1 Mean 17.5 Ac-ft 12,670
Water year 1957-58: Max 51 Min 12 Mean 20.2 Ac-ft 14,650

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 1-28, June 16-21, Sept. 21-30; discharge estimated on basis of recorded range in stage and records for nearby streams.

1630. 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 1958. 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. November 1938 to Aug. 23, 1957, water-stage recorder at present site at datum 2.00 ft higher.

Average discharge.--22 years (1933-34, 1937-58), 179 cfs (129,600 acre-ft per year).

Extremes.--Maximum discharge during year, 900 cfs May 27 (gage height, 4.69 ft); minimum, 3.3 cfs Aug. 6 (gage height, 1.29 ft).
1903-5, 1933-34, 1937-58: Maximum discharge, 2,520 cfs May 6, 1952 (gage height, 6.37 ft); practically no flow during several periods.

Remarks.--Records good except those for period of no gage-height record, which are fair. Station is below all diversions. At times entire flow is diverted above station for irrigation. Flow regulated by Deer Creek Reservoir (see p. 101) 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 (see p. 99) and Duchesne tunnel (see p. 98). Certain diversions for industrial use are made above station and reach Provo Bay, an arm of Utah Lake; however, part of this flow is used for irrigation.

Revisions.--Revised figures of discharge, in cubic feet per second, for the water years 1904 and 1934, superseding those published in WSP 100 and 765, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1903		1933-Con.		1933-Con.		1933-Con.		1934-Con.	
Oct. 16-30	†5	Nov. 28	18	Dec. 11	154	Dec. 24	183	Jan. 4	251
Nov. 1-17	†20	29	23	12	148	25	176	5	240
		30	32	13	240	26	181	6	188
1933		Dec. 1	50	14	360	27	181	7	161
Nov. 19	26	2	77	15	240	28	178	8	154
20	29	3	129	16	198	20	172	9	154
21	16	4	131	17	188	30	172	10	150
22	16	5	125	18	188	31	190	11	154
23	17	6	123	19	203			12	156
24	18	7	121	20	203	1934		13	169
25	18	8	131	21	198	Jan. 1	203		
26	16	9	144	22	200	2	273		
27	16	10	169	23	193	3	266		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
October 1903	-	0	2.74	169
November	-		74.6	4,440
Water year 1903-4	1,620	0	229	166,500
November 1933	32	8	18.3	1,090
December	360	50	172	10,600
January 1934	273	150	180	11,090
Water year 1933-34	360	0	58.4	42,300

† Average for period indicated.

1630. Provo River at Provo, Utah--Continued

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-5, July 21 to Aug. 6)

1.2	3.5	1.9	47	3.5	439
1.3	5.9	2.2	92	4.0	624
1.5	14	2.6	175	4.6	860
1.7	27	3.0	279		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	199	282	294	288	321	420	315	388	5.6	4.2	9.8
2	41	199	276	294	291	318	430	306	385	*5.4	3.5	7.2
3	45	212	273	297	297	321	430	309	415	6.2	3.9	5.1
4	50	209	273	297	297	309	430	276	464	5.6	4.4	6.2
5	51	209	276	297	309	257	430	204	425	7.2	5.6	9.4
6	59	212	285	297	312	257	430	164	464	10	3.7	14
7	74	216	291	294	309	262	430	154	558	6.8	3.5	13
8	89	219	282	285	288	334	450	166	675	6.2	3.5	14
9	96	214	306	285	291	343	500	129	852	5.9	4.2	14
10	109	209	350	288	294	346	640	109	792	5.6	4.9	13
11	109	212	353	279	297	346	640	150	682	4.6	4.4	13
12	123	212	356	285	294	353	640	139	446	4.6	6.8	17
13	121	216	356	282	297	359	640	129	232	5.1	7.5	22
14	135	238	356	291	294	359	640	129	96	5.4	4.9	19
15	131	235	356	291	291	359	600	121	57	5.9	8.2	20
16	152	227	369	291	288	366	*425	*113	47	5.6	5.6	19
17	152	224	369	*294	276	366	422	102	38	5.4	4.6	22
18	150	224	369	297	271	369	429	100	35	6.5	4.6	19
19	166	222	369	291	*257	372	439	98	30	5.1	6.2	19
20	175	229	303	291	254	*375	436	98	35	4.6	6.8	20
21	175	265	271	288	254	370	436	105	34	4.4	*6.5	23
22	177	*271	268	285	254	360	439	113	26	4.2	5.4	21
23	177	271	273	288	257	360	439	113	25	3.9	6.8	20
24	180	268	288	285	254	360	412	107	13	3.7	7.5	22
25	185	268	297	288	276	360	405	150	9.4	3.9	9.0	23
26	187	265	297	288	271	230	388	385	7.2	3.7	19	22
27	187	268	*297	288	279	360	375	*706	6.5	4.9	9.0	23
28	192	265	303	288	321	370	353	682	5.9	5.9	11	25
29	*199	265	303	291	-	370	340	640	6.8	*4.6	8.2	24
30	202	271	300	291	-------	370	324	528	6.5	3.9	9.0	24
31	*202	-------	294	288	-------	400	-------	478	-------	4.2	10	-------
Total	4,126	7,014	9,641	8,988	7,961	10,602	13,812	7,318	7,256.3	164.6	202.4	522.7
Mean	133	234	311	290	284	342	460	236	242	5.31	6.53	17.4
Ac-ft	8,180	13,910	19,120	17,830	15,790	21,030	27,400	14,520	14,390	326	401	1,040

Calendar year 1957: Max 1,300 Min - Mean 232 Ac-ft 168,000
Water year 1957-58: Max 852 Min 3.5 Mean 213 Ac-ft 153,900

* Discharge measurement made on this day.
Note.--No gage-height record Mar. 21 to Apr. 15; discharge estimated on basis of records for other Provo River stations.

1645. 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 1958 in reports of Geological Survey. January 1927 to September 1945 available 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.--31 years, 53.5 cfs (38,730 acre-ft per year).

Extremes.--Maximum discharge during year, 624 cfs May 26 (gage height, 7.36 ft); minimum, 5.6 cfs Feb. 15.
1927-58: 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.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 7-15 and June 20 to Sept. 7)

4.6	9.0	5.2	64	6.5	363
4.7	14	5.6	127	7.0	522
4.9	30	6.0	219	7.1	555

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	18	20	15	13	15	17	82	312	127	44	26
2	20	20	20	16	14	14	16	103	306	122	43	27
3	23	21	19	15	15	15	15	123	294	*114	42	*28
4	23	21	20	14	*15	15	15	143	288	113	41	29
5	22	21	20	15	15	15	15	156	*309	107	41	28
6	22	20	20	14	14	15	14	183	351	106	39	26
7	21	*21	20	14	14	15	15	186	372	104	39	26
8	21	20	19	14	14	15	15	174	339	106	38	27
9	20	19	19	14	14	14	15	181	309	106	39	26
10	20	19	18	14	13	*14	14	201	280	103	39	26
11	20	20	18	14	13	14	15	206	*266	98	37	26
12	20	19	18	14	13	14	16	201	*252	96	37	33
13	20	20	18	14	14	14	18	179	232	93	36	30
14	20	21	18	14	13	14	22	165	222	88	35	28
15	20	19	18	13	12	15	*30	165	222	*87	36	27
16	20	17	23	14	13	15	40	*166	224	82	36	26
17	19	15	21	*13	14	14	50	206	230	80	36	26
18	19	12	18	14	13	14	74	230	238	77	33	26
19	19	15	18	13	14	14	80	263	235	72	34	25
20	20	15	*18	13	*14	*15	90	306	232	70	33	25
21	20	13	16	14	16	18	92	345	219	65	*32	25
22	20	*18	15	14	18	17	81	425	211	64	32	24
23	20	20	13	14	19	17	*64	*463	206	63	31	23
24	20	23	13	14	18	17	54	467	196	59	29	24
25	19	25	15	14	28	18	49	486	179	58	*27	24
26	19	23	*15	14	20	16	47	*525	160	54	26	24
27	20	20	16	14	16	15	46	489	158	51	26	23
28	19	20	16	14	15	17	48	435	158	48	29	24
29	19	20	16	15	-	16	52	391	149	*48	28	23
30	19	20	15	14	-------	16	63	360	137	47	27	23
31	18	-------	b15	14	-------	17	-------	330	-------	46	27	-------
Total	622	575	548	436	424	474	1,182	8,335	7,286	2,554	1,072	778
Mean	20.1	19.2	17.7	14.1	15.1	15.3	39.4	269	243	82.4	34.6	25.9
Ac-ft	1,230	1,140	1,090	865	841	940	2,340	16,530	14,450	5,070	2,130	1,540

Calendar year 1957: Max 425 Min 10 Mean 53.6 Ac-ft 38,800
Water year 1957-58: Max 525 Min 12 Mean 66.5 Ac-ft 48,170

* Discharge measurement made on this day.

Transmountain diversions from Colorado River basin to Jordan River basin

The following ditches and tunnels 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 are available in Salt Lake City district office.

Strawberry River and Willow Creek ditches divert water from the Strawberry River basin to Daniels Creek. The combined flow is gaged in sec. 4, T. 2 S., R. 12 W., Uinta Special Meridian.

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. (see p. 100 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 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. 92 for complete record of daily discharge).

Transmountain diversions, in acre-feet, water year October 1957 to September 1958

Name	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
Strawberry tunnel..	2,930	298	307	307	278	339	357	845	17,470	20,160	17,920	5,630	66,840
Duchesne tunnel....	700	672	615	165	555	571	1,190	5,260	9,490	1,760	734	574	22,740
Hobble Creek ditch.	0	0	0	0	0	0	0	379	226	1	0	0	606
Strawberry River and Willow Creek ditches.	134	0	0	0	0	0	0	133	1,430	583	234	160	2,670
Total in Utah....	3,760	970	922	922	833	910	1,550	6,620	28,620	22,500	18,890	6,360	92,850

1670. 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 1958.
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.--45 years (1913-58), 368 cfs (266,400 acre-ft per year).
Extremes.--1904, 1913-58: Maximum daily discharge, 1,410 cfs June 10, 1952; no flow at times when gates were closed.
Remarks.--Records good. Figures 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	516	17	20	31	57	105	23	293	727	770	803	808
2	*517	17	20	25	57	112	20	291	739	798	797	786
3	460	17	20	14	63	114	25	296	718	827	792	*799
4	353	17	20	14	64	112	19	291	716	832	798	773
5	307	17	20	16	69	121	21	298	717	836	822	709
6	329	17	18	16	75	119	20	436	712	836	822	738
7	369	17	16	15	75	117	20	546	716	833	822	744
8	361	17	16	15	73	121	23	594	*696	829	817	726
9	373	17	16	16	75	89	*53	641	691	834	818	688
10	376	17	16	18	73	117	212	688	704	857	816	686
11	376	17	16	20	70	117	199	710	696	859	815	674
12	374	17	16	21	84	110	224	700	684	859	811	646
13	371	17	17	24	83	*138	243	681	668	850	813	629
14	372	16	17	24	93	148	*250	673	654	849	813	644
15	106	17	17	28	93	125	256	640	659	842	814	644
16	16	17	17	31	93	43	260	632	692	820	801	628
17	16	17	18	31	93	31	266	633	730	823	783	618
18	16	17	18	28	96	23	234	692	736	847	779	593
19	16	17	18	21	103	20	253	731	736	833	775	601
20	16	17	18	28	94	19	270	723	733	813	789	598
21	16	17	18	32	89	15	250	735	729	809	790	613
22	16	17	18	33	94	14	233	748	728	805	778	615
23	16	17	17	35	91	16	295	754	742	788	776	596
24	16	17	17	37	101	16	291	753	734	*763	784	608
25	16	17	17	42	105	15	284	749	741	765	782	627
26	16	17	17	43	94	17	294	747	742	793	780	613
27	17	17	17	45	91	18	245	742	742	802	774	606
28	17	17	17	49	100	18	282	749	730	811	769	600
29	17	17	17	52	-	20	278	741	740	817	750	603
30	17	18	22	52	-------	19	286	735	731	820	770	582
31	17	-------	29	56	-------	14	-------	731	-------	817	770	-------
Total	5,821	510	560	911	2,348	2,083	5,629	19,373	21,483	25,437	24,623	19,795
Mean	188	17.0	18.1	29.4	83.9	67.2	188	625	716	821	794	660
Ac-ft	11,550	1,010	1,110	1,810	4,660	4,130	11,160	38,430	42,610	50,450	48,840	39,260

Calendar year 1957: Max 790 Min 2.5 Mean 256 Ac-ft 185,200
Water year 1957-58: Max 859 Min 14 Mean 352 Ac-ft 255,000

* Discharge measurement made on this day.

1705. Surplus Canal at Salt Lake City, Utah

Location.--Lat 40°43'40", long 111°55'35", 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 1958.

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. Dec. 31, 1946, to Aug. 22, 1958, auxiliary water-stage recorder about 1 mile downstream.

Average discharge.--15 years (1943-58), 197 cfs (142,600 acre-ft per year).

Extremes.--Maximum discharge during year, 850 cfs May 28 (gage height, 6.67 ft); minimum daily, 40 cfs Aug. 16.
1942-58: Maximum discharge, 1,700 cfs June 7, 1952; maximum gage height, 8.84 ft May 7, 1952; minimum daily discharge, 9.6 cfs Jan. 13, Feb. 20, June 26, 1956.

Remarks.--Records good. 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 and industrial area (see p. 111 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*166	109	101	94	*152	*242	230	*301	639	155	67	154
2	181	110	*114	*98	149	242	242	309	654	114	75	166
3	210	131	107	94	157	253	237	307	618	82	67	168
4	246	149	114	90	170	264	*242	302	574	89	74	160
5	224	133	112	85	173	264	216	312	545	91	106	*173
6	210	130	109	117	179	280	202	336	592	90	122	195
7	205	128	106	93	176	307	213	368	677	95	120	200
8	210	123	102	87	171	296	262	350	648	91	130	199
9	224	110	99	87	168	290	246	333	590	90	141	198
10	222	104	90	85	189	275	294	325	500	84	115	187
11	222	106	84	88	203	282	346	362	450	82	106	157
12	218	107	77	88	192	285	346	403	394	80	78	168
13	214	109	81	88	216	288	352	408	373	80	*57	177
14	259	114	88	87	227	302	*362	384	346	80	54	189
15	*262	*117	91	90	*205	*309	382	*384	350	*85	52	*198
16	134	117	*96	91	205	283	420	371	*326	80	40	190
17	123	110	107	93	206	248	437	362	325	80	52	187
18	120	106	122	*96	210	254	504	371	354	80	74	202
19	117	109	109	91	213	235	517	410	371	80	102	186
20	104	94	106	87	213	221	543	450	357	80	147	152
21	104	94	101	112	206	213	532	490	326	80	146	166
22	104	90	104	130	202	210	490	576	322	80	131	166
23	104	91	99	123	211	189	515	637	330	77	107	179
24	110	96	94	131	214	194	493	646	357	82	88	194
25	104	99	102	130	262	189	472	646	334	102	85	200
26	104	101	106	128	291	194	457	684	296	87	77	189
27	106	98	101	131	264	195	432	724	234	74	98	179
28	123	104	99	134	251	195	403	785	210	91	122	197
29	118	101	104	150	-	182	366	*780	195	80	141	195
30	110	99	96	168	-------	174	304	748	*181	78	109	173
31	*110	-------	94	160	-------	206	-------	713	-------	*81	133	-------
Total	5,068	3,289	3,115	3,326	5,675	7,561	11,057	14,577	12,468	2,700	3,016	5,444
Mean	163	110	100	107	203	244	369	470	416	87.1	97.3	181
Ac-ft	10,050	6,520	6,180	6,600	11,260	15,000	21,930	28,910	24,730	5,360	5,980	10,800

Calendar year 1957: Max 816 Min 26 Mean 160 Ac-ft 115,800
Water year 1957-58: Max 785 Min 40 Mean 212 Ac-ft 153,300

* Discharge measurement made on this day.

1710. Jordan River at Salt Lake City, Utah

Location.--Lat 40°43'40", long 111°55'25", 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 1958.

Gage.--Water-stage recorder. Datum of gage is 4,220.73 ft above mean sea level, datum of 1929.

Average discharge.--15 years (1943-58), 149 cfs (107,900 acre-ft per year).

Extremes.--Maximum discharge during year, 279 cfs Aug. 15 (gage height, 4.76 ft); minimum daily, 25 cfs May 10, 11, 13, 14, 16-18.
Maximum combined discharge during year (Jordan River and Surplus Canal), 915 cfs May 28; minimum daily, 206 cfs Dec. 12.
1942-58: 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, 141 cfs July 13, 1955.

Remarks.--Records good except those for period of no gage-height record, which are fair. 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.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*178	134	131	138	*127	*93	75	*55	34	88	242	244
2	184	138	*135	*138	125	99	64	64	35	131	240	244
3	194	146	133	135	116	97	59	64	59	138	236	237
4	189	154	133	129	108	80	*64	64	88	125	237	235
5	183	150	132	129	107	83	57	52	81	165	242	*252
6	179	148	133	143	111	87	53	40	102	166	240	251
7	185	145	130	130	111	98	53	46	141	168	236	250
8	196	143	129	127	111	86	70	31	128	190	238	248
9	199	156	125	129	116	83	53	a26	104	189	246	244
10	194	153	122	128	98	81	87	a25	103	198	251	237
11	185	152	125	130	79	92	106	a25	102	235	242	226
12	183	148	129	130	86	82	93	a26	97	219	243	229
13	184	141	130	130	101	75	110	a25	84	224	*260	239
14	164	143	132	131	112	81	*119	a25	77	236	268	239
15	*165	*144	131	132	*105	*86	103	*a26	34	*242	265	*241
16	160	142	*131	134	108	79	74	a25	*73	252	258	244
17	148	137	138	135	102	62	58	a25	79	247	241	249
18	149	136	143	*138	84	69	73	a25	96	237	219	251
19	149	140	138	138	87	59	83	39	113	234	222	242
20	150	143	138	136	89	56	90	62	117	231	242	234
21	153	138	140	117	88	53	82	66	109	253	242	230
22	152	134	140	103	88	53	75	84	106	246	235	228
23	151	134	141	102	96	43	82	78	109	255	228	226
24	146	135	139	107	93	54	51	71	125	237	222	230
25	152	137	136	108	85	51	49	64	116	237	222	232
26	151	137	137	111	86	58	43	66	92	231	221	232
27	149	135	140	114	78	58	40	59	82	228	226	232
28	136	136	140	116	87	60	34	60	48	235	236	234
29	136	133	140	119	-	53	36	*53	65	232	245	232
30	133	131	140	130	-------	49	44	46	*84	241	231	228
31	*134	-------	140	129	-------	72	-------	44	-------	*248	237	-------
Total	5,111	4,243	4,171	3,916	2,784	2,232	2,080	1,461	2,663	6,558	7,413	7,140
Mean	165	141	135	126	99.4	72.0	69.3	47.1	88.8	212	239	238
-ft	10,140	8,420	8,270	7,770	5,520	4,430	4,130	2,900	5,280	13,010	14,700	14,160

Calendar year 1957: Max 199 Min 31 Mean 144 Ac-ft 103,900
Water year 1957-58: Max 268 Min 25 Mean 136 Ac-ft 98,730

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 1 discharge measurement and records for Surplus Canal at Salt Lake City.

1710. Jordan River at Salt Lake City, Utah--Continued

Combined discharge, in cubic feet per second, of Jordan River & Surplus Canal at Salt Lake City, Utah, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	344	243	232	232	279	335	305	356	673	243	309	398
2	365	248	249	236	274	341	306	373	689	245	315	410
3	404	277	240	229	273	350	296	371	677	220	303	405
4	435	303	247	219	278	344	306	366	662	214	311	395
5	407	283	244	214	280	347	273	364	626	256	348	425
6	389	278	242	260	290	367	255	376	694	256	362	448
7	390	273	236	223	287	405	266	414	818	263	356	450
8	406	266	231	214	282	382	332	381	776	281	368	447
9	423	266	224	216	284	373	299	359	694	279	387	442
10	416	257	212	213	287	356	381	350	603	282	366	424
11	407	258	209	218	282	374	452	387	552	317	348	383
12	401	255	206	218	278	367	439	429	491	299	321	397
13	398	250	211	218	317	363	462	433	457	304	317	416
14	423	257	220	218	339	383	481	409	423	316	322	428
15	427	261	222	222	310	395	485	410	384	327	317	439
16	294	259	227	225	313	362	494	396	399	332	298	434
17	271	247	245	228	308	310	495	387	404	327	293	436
18	269	242	265	234	294	323	577	396	450	317	293	453
19	266	249	247	229	300	294	600	449	484	314	324	428
20	254	237	244	223	302	277	633	512	474	311	389	386
21	257	232	241	229	294	266	614	556	435	333	388	396
22	256	224	244	233	290	263	565	660	428	326	386	394
23	255	225	240	225	307	232	597	715	439	332	335	405
24	256	231	233	238	307	248	544	717	482	319	310	424
25	256	236	238	238	347	240	521	710	450	339	307	432
26	255	238	243	239	377	252	500	750	388	318	298	421
27	255	233	241	245	342	253	472	783	296	302	324	411
28	259	240	239	250	338	255	437	845	258	326	358	431
29	254	234	244	269	-	235	402	833	260	312	386	427
30	243	230	236	298	-------	223	348	794	265	319	340	401
31	244	-------	234	289	-------	278	-------	757	-------	329	370	-------
Total	10,179	7,532	7,286	7,242	8,459	9,793	13,137	16,038	15,131	9,258	10,429	12,584
Mean	328	251	235	234	302	316	438	517	504	299	336	419
Ac-ft	20,190	14,940	14,450	14,360	16,780	19,420	26,060	31,810	30,010	18,360	20,690	24,960

Calendar year 1957: Max 876 Min 167 Mean 304 Ac-ft 219,700
Water year 1957-58: Max 845 Min 206 Mean 348 Ac-ft 252,000

1736. Midway Creek near Hatch, Utah

Location.--Lat 37°31', long 112°43', in sec. 10, T. 38 S., R. 8 W., on right bank 200 ft south of State Highway 14, 0.7 mile east of Navajo Lake Resort turnoff, and 19 miles southwest of Hatch.

Records available.--August 1957 to September 1958.

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during year, 153 cfs June 6 (gage height, 2.64 ft); no flow most of year.
1957-58: Maximum discharge that of June 6, 1958; no flow during most of period.

Remarks.--Records good.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.4	0	0.7	2.6	1.2	20
.5	.1	.8	4.6	1.6	48
.6	1.0	.9	7.4	2.1	93

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								0	81			
2								0	77			
3	(*)							0	71			
4								0	63			
5								0	76			
6								0	*90			
7								0	*62			
8								0	34			
9								0	19			
10								0	12			
11								0	6.5			
12								0	3.5			
13								0	1.3			
14								0	0			
15								0	0			
16								0	0			
17								0	0			
18								0	0			
19								0	0			
20								0	0			
21								0	0		(*)	
22								0	0			
23								0	0			
24								0	0			
25								0	0			
26								0	0			
27								*0	0			
28								0	0			
29					-		(*)	11	0			
30					-------			47	0			
31		-------			-------		-------	71	-------			-------
Total	0	0	0	0	0	0	0	129	596.3	0	0	0
Mean	0	0	0	0	0	0	0	4.16	19.9	0	0	0
Ac-ft	0	0	0	0	0	0	0	256	1,180	0	0	0

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 90 Min 0 Mean 1.99 Ac-ft 1,440

* Discharge measurement or observation of no flow made on this day.
Note.--No flow Aug. 8 to Sept. 30, 1957.

1739. Duck Creek near Hatch, Utah

Location.--Lat 37°31', long 112°42', in SW¼ sec. 12, T. 38 S., R. 8 W., on right bank 150 ft north of State Highway 14, 200 ft east of Duck Lake dam, 400 ft downstream from Duck Creek Spring, 3 miles east of Navajo Lake, and 18 miles southwest of Hatch.

Records available.--October 1953 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 8,530 ft (by barometer).

Extremes.--Maximum discharge during year, 226 cfs June 6 (gage height, 3.61 ft); minimum recorded, 1.7 cfs Apr. 13, but may have been less during period of no gage-height record.
1953-58: Maximum discharge, that of June 6, 1958; minimum not determined; less than 0.4 cfs during some periods of ice effect or no gage-height record.

Remarks.--Records good except those for period of no gage-height record, which are fair. Station is above all diversions.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.1	0.9	1.5	8.0	2.5	72
1.2	1.8	1.7	15	3.0	130
1.3	3.2	2.1	38	3.5	205

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	6.4	3.8	3.2	2.2	1.9		9.9	188	39	25	19
2	15	6.7	3.8	3.4	2.2	1.9		9.9	186	39	24	20
3	*15	6.9	3.6	*3.4	2.2	2.0		11	182	38	24	20
4	14	6.4	3.6	3.2	2.0	2.0		14	174	37	24	19
5	14	6.2	3.8	3.0	2.0	*1.9		18	180	36	23	20
6	14	5.9	3.8	3.0	2.0		a1.8	24	191	36	23	19
7	14	5.9	3.4	3.0	2.0			29	172	35	23	19
8	12	*5.6	3.4	2.9	2.0			34	147	34	23	19
9	11	5.4	3.4	2.7	2.0			38	122	34	22	19
10	9.9	5.4	3.2	2.6	2.0			41	106	34	22	*19
11	10	5.4	3.4	2.6	2.0		*1.9	48	92	33	22	19
12	9.6	5.4	3.2	2.6	2.0		1.8	50	82	22	22	20
13	9.0	4.9	3.0	2.6	2.0		1.7	48	73	32	22	19
14	8.6	5.1	3.2	2.4	2.0		1.8	44	66	32	22	19
15	8.3	5.1	3.2	2.4	2.2		1.9	42	62	31	22	19
16	8.0	4.9	3.4	2.3	2.2		2.0	41	*59	31	22	18
17	7.7	4.6	3.4	2.3	2.2		2.4	45	57	31	22	18
18	7.7	4.6	3.4	2.3	2.0		3.0	52	55	30	22	18
19	7.7	4.6	3.4	2.3	2.0	a1.9	4.2	59	53	29	22	18
20	8.0	4.2	3.4	2.3	2.0		5.6	64	52	29	22	18
21	7.7	4.2	3.4	2.3	2.0		6.9	*68	49	29	*22	18
22	7.5	4.0	3.2	2.3	2.0		9.6	71	48	28	22	18
23	6.9	3.8	3.4	2.3	2.0		11	78	45	28	22	18
24	6.9	4.0	3.2	2.3	2.0		9.9	84	45	28	21	18
25	6.9	4.4	3.4	2.3	2.0		9.3	88	44	27	21	18
26	6.7	*4.6	3.2	2.2	2.0		8.3	93	44	27	21	18
27	6.9	4.6	3.4	2.3	2.0		9.0	100	42	26	21	17
28	6.7	4.4	3.2	2.3	1.9		9.6	105	41	*26	21	18
29	6.7	4.2	3.4	2.3	-		10	111	41	25	21	17
30	6.4	4.2	3.2	2.2	-------		10	133	40	25	20	17
31	6.4	-------	3.2	2.2	-------		-------	180	-------	25	20	-------
Total	294.2	152.0	105.0	79.5	57.1	59.1	137.9	1,832.8	2,738	967	685	556
Mean	9.49	5.07	3.39	2.56	2.04	1.91	4.60	59.1	91.3	31.2	22.1	18.5
Ac-ft	584	301	208	158	113	117	274	3,640	5,430	1,920	1,360	1,100

Calendar year 1957: Max 129 Min 0.5 Mean 14.6 Ac-ft 10,550
Water year 1957-58: Max 191 Min 1.7 Mean 21.0 Ac-ft 15,200

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of trend of flow and records for nearby streams.

1740. Asay Creek above West Fork, near Hatch, Utah

Location.--Lat 37°33', long 112°31', in sec. 33, T. 37 S., R. 6 W., half a mile downstream from Asay Creek spring, 2 miles upstream from West Fork Asay Creek, and 8 miles southwest of Hatch.

Records available.--July 1954 to September 1958.

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during year, 419 cfs May 11 (gage height, 3.63 ft); minimum, 13 cfs Jan. 28.
1954-58: Maximum discharge, that of May 11, 1958; minimum recorded, 13 cfs sometime during period Jan. 22 to Mar. 30, 1956 (from recorded range in stage), Jan. 28, 1958.

Remarks.--Records good.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Dec. 15, Apr. 21 to May 3)

Oct. 1 to Apr. 20				Apr. 21 to Sept. 30	
1.3	12	1.8	46	1.6	40
1.4	17	2.0	69	1.9	76
1.5	22	2.2	95	2.4	160
1.6	29	2.4	122	3.0	280
1.7	37			3.4	367

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*31	27	21	21	15	19	20	153	170	87	53	44
2	31	28	21	20	15	19	19	155	164	84	53	43
3	31	28	21	19	14	19	19	171	156	81	53	44
4	31	26	21	19	15	18	19	198	149	78	53	45
5	30	26	21	19	15	18	19	232	146	75	51	45
6	29	26	21	18	15	*18	19	286	140	73	53	46
7	29	26	21	18	15	18	19	308	137	72	53	49
8	29	25	21	18	15	18	19	303	132	70	51	54
9	28	25	21	17	15	18	19	301	130	69	50	48
10	28	25	21	17	15	17	19	299	127	68	50	46
11	28	25	21	18	15	17	20	347	123	68	49	45
12	30	25	21	18	15	17	21	341	122	68	48	53
13	29	24	21	17	16	17	22	310	118	66	48	51
14	28	24	21	18	16	17	23	290	116	65	48	47
15	28	24	21	17	16	17	29	274	115	62	48	46
16	27	24	22	17	16	17	40	*272	115	61	48	45
17	26	24	24	17	16	17	51	272	*113	61	48	45
18	26	23	22	17	16	18	75	267	110	61	51	45
19	26	23	22	17	16	18	97	263	110	60	50	44
20	27	22	22	17	17	19	112	259	106	60	62	41
21	28	22	22	16	19	22	120	257	105	59	*54	40
22	27	22	22	16	21	22	147	253	103	57	60	40
23	26	22	22	15	22	21	155	242	101	59	56	51
24	26	22	21	15	22	21	146	234	100	60	50	49
25	26	22	21	15	24	21	137	224	98	*59	49	*44
26	25	22	21	15	20	21	139	216	96	57	47	44
27	25	*22	21	15	19	21	149	208	91	56	45	43
28	25	22	21	15	19	21	158	198	91	55	45	49
29	26	21	21	15	-	20	160	192	90	54	44	46
30	26	21	21	15	-------	21	155	185	88	54	44	42
31	26	-------	21	15	-------	20	-------	175	-------	53	44	-------
Total	858	718	661	526	474	587	2,147	7,685	3,562	2,012	1,558	1,374
Mean	27.7	23.9	21.3	17.0	16.9	18.9	71.6	248	119	64.9	50.3	45.8
Ac-ft	1,700	1,420	1,310	1,040	940	1,160	4,260	15,240	7,070	3,990	3,090	2,730

Calendar year 1957: Max 98 Min - Mean 31.7 Ac-ft 22,930
Water year 1957-58: Max 347 Min 14 Mean 60.7 Ac-ft 43,950

* Discharge measurement made on this day.

1745. 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.--340 sq mi, approximately (revised).

Records available.--June 1911 to September 1928, June 1939 to September 1958.

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 Sept. 30, 1928, and June 20, 1939, to Oct. 3, 1949, water-stage recorder, at several sites within 2 miles of present site at various datums.

Average discharge.--27 years (1912-13, 1914-16, 1917-18, 1922-23, 1924-27, 1939-58), 123 cfs (89,050 acre-ft per year).

Extremes.--Maximum discharge during year, 833 cfs May 29 (gage height, 4.02 ft); minimum not determined, occurred during period of ice effect.
1911-28, 1939-58: 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, 33 cfs Dec. 16, 1956 (gage height, 1.15 ft).

Remarks.--Records good except those for periods of ice effect or no gage-height record, 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 tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 20-30)

Oct. 1 to May 10				May 11 to Sept. 30			
1.3	44	2.5	330	1.7	81	4.0	787
1.5	72	3.0	491	2.0	147	4.1	825
2.0	185	3.3	595	3.0	437		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*55	69	b54	b50	b48	b54	72	237	768	208	110	93
2	55	76	b54	b50	49	b53	74	232	757	201	108	93
3	54	92	b55	b50	47	b52	70	240	739	193	105	97
4	54	76	b55	b52	50	b52	70	284	760	188	103	97
5	54	74	55	b52	50	b52	66	340	688	182	103	97
6	53	72	54	b50	49	*53	66	410	691	180	108	95
7	54	70	b53	b50	49	54	67	488	670	175	110	89
8	54	69	56	b50	50	b52	66	511	632	170	108	123
9	53	69	54	b51	53	b51	67	532	590	172	105	105
10	53	67	b53	b50	54	b50	*81	578	562	a170	101	97
11	60	69	*b52	50	51	b52	85	638	528	a165	99	95
12	66	69	b52	b48	49	55	79	670	497	a160	95	150
13	56	*66	b52	b50	50	55	94	586	463	a155	101	121
14	55	66	53	b47	49	b54	123	548	434	a150	97	110
15	56	66	55	b48	58	55	142	*507	402	a150	101	103
16	61	67	83	b50	100	56	160	497	362	a125	99	101
17	56	b60	94	b50	100	63	185	531	*321	a120	103	99
18	55	b58	60	50	105	96	238	586	303	a114	108	95
19	56	b60	b56	b49	153	204	256	652	285	a114	108	95
20	72	61	b54	b48	152	240	257	706	273	a120	134	95
21	69	b61	55	b48	145	274	266	*743	265	a120	*123	95
22	64	b58	56	b48	139	151	281	743	259	a114	140	95
23	61	b60	b53	b46	129	146	299	757	253	a114	140	128
24	60	61	53	*49	118	126	260	765	245	a114	112	147
25	58	61	53	50	118	125	229	a770	242	a114	105	*105
26	58	61	53	51	70	107	223	a770	236	114	105	101
27	58	55	b53	50	b60	98	229	787	231	114	101	99
28	58	b54	53	b49	57	79	249	791	225	114	108	105
29	61	b52	54	49	-	79	253	791	220	*116	99	108
30	58	b53	53	50	-------	90	249	776	212	116	95	97
31	63	-------	b52	b49	-------	83	-------	772	-------	116	93	-------
Total	1,800	1,952	1,742	1,534	2,202	2,811	4,857	18,238	13,059	4,466	3,327	3,130
Mean	58.1	65.1	56.2	49.5	78.6	90.7	162	588	435	144	107	104
Ac-ft	3,570	3,870	3,460	3,040	4,370	5,580	9,630	36,170	25,900	8,860	6,600	6,210

Calendar year 1957: Max 546 Min - Mean 91.9 Ac-ft 66,550
Water year 1957-58: Max 791 Min 46 Mean 162 Ac-ft 117,260

Peak discharge (base, 500 cfs).--Mar. 21 (8 p.m.) 546 cfs (3.15 ft); May 29 (6:30 a.m.) 833 cfs (4.02 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for stations near Circleville and Kingston.
b Stage-discharge relation affected by ice.

1800. 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 1958.

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 0.23 ft (revised) higher.

Average discharge.--17 years (1914-22, 1923-24, 1950-58), 172 cfs (124,500 acre-ft per year).

Extremes.--Maximum discharge during year, 820 cfs May 13 (gage height, 4.08 ft, from reconstructed gage-height graph); minimum, 46 cfs Oct. 2.
1912, 1914-27, 1949-58: 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, 19 cfs July 12, 1955.

Remarks.--Records good except those for periods of doubtful 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.2	42
1.6	89
2.0	159
3.0	414
4.0	788

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	157	118	107	98	121	139	341	a580	151	76	90
2	48	137	119	106	98	119	132	319	a580	149	70	88
3	50	256	116	106	101	114	134	316	a620	149	70	96
4	51	209	111	109	107	112	125	335	a600	147	63	111
5	51	155	118	109	116	111	116	393	a520	135	62	119
6	50	143	125	102	112	*112	114	451	a540	126	63	106
7	51	135	116	102	106	112	112	550	a540	121	64	101
8	51	135	130	101	98	112	111	550	a500	116	67	126
9	54	132	132	106	101	107	106	525	a460	116	81	151
10	55	126	123	102	106	104	*119	546	a430	119	81	123
11	70	126	*119	106	118	111	174	576	a400	116	88	116
12	137	125	118	98	109	112	155	719	396	111	73	185
13	94	*132	116	102	106	107	147	748	387	107	68	295
14	83	145	118	98	102	106	207	610	364	104	74	187
15	85	139	123	100	106	111	256	*518	347	95	76	170
16	95	143	130	102	149	118	324	*471	319	86	70	167
17	85	135	178	104	274	137	467	464	284	79	102	*167
18	81	119	174	106	286	187	d542	477	254	75	90	170
19	92	135	130	102	326	264	d561	528	232	74	76	165
20	144	130	123	95	406	396	d553	602	209	79	*76	159
21	200	130	130	96	314	436	d522	*649	200	82	109	155
22	178	116	126	95	316	433	d532	682	200	*76	111	147
23	128	119	123	*89	282	274	*511	637	187	73	188	145
24	114	130	116	96	277	282	436	a620	*176	78	128	193
25	107	125	114	102	262	249	378	a620	187	82	96	180
26	102	126	112	106	218	237	344	a620	178	83	96	165
27	102	123	114	102	145	198	330	a620	163	79	95	155
28	102	116	111	100	125	187	333	a620	167	75	106	161
29	101	109	118	102	-	155	370	a620	174	75	109	163
30	96	112	116	104	-------	149	381	a630	165	79	98	159
31	104	-------	109	98	-------	163	-------	a620	-------	78	89	-------
Total	2,810	4,120	3,826	3,153	4,964	5,536	8,731	16,977	10,359	3,115	2,715	4,515
Mean	90.6	137	123	102	177	179	291	548	345	100	87.6	150
Ac-ft	5,570	8,170	7,590	6,250	9,850	10,980	17,320	33,670	20,550	6,180	5,390	8,960

Calendar year 1957: Max 409 Min 25 Mean 98.3 Ac-ft 71,170
Water year 1957-58: Max 748 Min 48 Mean 194 Ac-ft 140,500

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for stations near Kingston and at Hatch.
d Doubtful gage-height record; discharge computed from reconstructed graph, based on recorder graph, and records for stations near Kingston and at Hatch.

1835. 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 1958.

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.--44 years, 136 cfs (98,460 acre-ft per year).

Extremes.--Maximum discharge during year, 694 cfs May 13 (gage height, 2.65 ft); minimum, 8.4 cfs July 20.
1914-58: 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 29 to May 31)

0.6	7	1.3	129
.7	14	1.6	231
.8	24	2.0	404
1.0	55	2.5	670

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	209	135	132	123	148	167	250	516	57	9.8	30
2	14	184	148	129	126	151	157	205	505	52	11	24
3	14	357	144	129	129	148	154	201	*532	52	13	23
4	13	291	132	130	138	144	151	201	510	48	11	24
5	16	209	135	130	148	141	141	270	458	48	10	37
6	21	201	154	123	148	144	135	312	463	45	10	31
7	22	180	151	123	138	148	132	385	463	25	12	30
8	22	180	160	123	132	144	138	419	424	22	12	52
9	22	177	157	129	141	144	*132	399	399	22	13	78
10	25	167	148	129	144	138	a132	414	362	24	13	76
11	34	170	144	132	154	144	a148	453	321	20	13	66
12	107	167	*141	126	148	148	a148	610	274	16	13	101
13	98	*160	141	129	151	141	a163	637	274	14	11	299
14	76	167	144	123	141	144	a163	549	243	14	12	167
15	74	167	148	123	144	151	a235	453	231	11	13	148
16	96	177	154	126	177	160	a362	*395	212	12	18	144
17	84	167	194	126	287	177	500	339	180	10	22	*135
18	78	151	201	135	312	224	554	376	148	11	23	135
19	98	160	160	135	352	295	576	414	126	13	21	138
20	132	163	148	126	438	404	571	510	118	9.8	*17	132
21	235	160	154	122	366	458	538	571	86	9.8	25	129
22	209	148	157	120	362	479	544	604	98	*10	53	129
23	154	141	144	*118	334	308	*527	571	101	12	84	135
24	138	157	141	118	344	316	424	538	*86	11	91	160
25	132	157	138	129	316	283	352	544	84	11	59	160
26	126	157	138	129	366	266	304	538	84	12	40	132
27	132	151	135	129	184	216	278	*544	78	12	34	138
28	132	135	135	129	*157	198	270	554	74	13	40	154
29	129	132	138	129	-	177	291	538	72	13	41	154
30	126	141	141	132	-------	167	291	554	68	11	37	135
31	138	-------	132	126	-------	184	-------	538	-------	10	32	-------
Total	2,710	5,283	4,592	3,939	6,100	6,490	8,678	13,886	7,590	650.6	813.8	3,296
Mean	87.4	176	148	127	218	209	289	448	253	21.0	26.3	110
Ac-ft	5,380	10,480	9,110	7,810	12,100	12,870	17,210	27,540	15,050	1,290	1,610	6,540

Calendar year 1957: Max 419 Min 6.2 Mean 83.3 Ac-ft 60,300
Water year 1957-58: Max 637 Min 9.8 Mean 175 Ac-ft 127,000

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for other Sevier River stations.

1850. Antimony Creek near Antimony, Utah

Location.--Lat 38°06', long 111°53', in NW¼ sec. 22, T. 31 S., R. 1 W., on right bank 5 miles upstream from mouth and 5 miles southeast of Antimony.

Drainage area.--26 sq mi, approximately.

Records available.--October 1946 to September 1948, August 1957 to September 1958.

Gage.--Water-stage recorder. Prior to August 1957, at different datum.

Extremes.--1957: Maximum discharge during period August to September, 142 cfs Aug. 12 (gage height, 2.73 ft); minimum daily, 16 cfs Sept. 17, 29, 30.
1957-58: Maximum discharge during water year, 331 cfs May 9 (gage height, 3.20 ft); minimum daily, 14 cfs many days June to September.
1946-48, 1957-58: Maximum discharge, that of May 9, 1958; minimum, 11 cfs Aug. 22, 1947.

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

Rating tables, Aug. 1, 1957, to Sept. 30, 1958 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Aug. 7-12, 1957, Jan. 23 to Feb. 20, Apr. 21 to May 10, May 25-28, 1958)

Aug. 1, 1957, to May 5, 1958		May 6 to Sept. 30, 1958	
0.9	13	0.4	14
1.2	22	.8	32
1.5	34	1.3	68
1.7	44	2.0	146
		2.6	250

Discharge, in cubic feet per second, 1957

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1		f18	7	19	18	13	a18	17	19	a19	a17	25	18	17
2		18	8	18	17	14	a18	f17	20	a19	a17	26	f18	17
3		f18	9	18	17	15	a20	f17	21	a19	17	27	18	17
4	a19	18	10	18	17	16	a19	17	22	*19	17	28	18	17
5		18	11	18	17	18	a19	16	23	18	17	29	18	16
6		18	12	24	17	18	a19	a17	24	18	17	30	19	16
												31	f18	-
Total													581	514
Mean													18.7	17.1
Runoff in acre-feet													1,150	1,020

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of trend of flow.
f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*16				17	16	17	16	64	14	14	15
2	16				17	16	16	16	53	14	14	15
3	16				17	17	16	22	*46	14	14	14
4	16	15			17	17	17	28	38	14	14	15
5	16				17	17	16	40	34	14	14	15
6	16				17	*17	17	54	33	14	14	15
7	16				17	17	17	90	30	14	14	15
8	16				17	17	17	136	25	14	14	16
9	16				17	17	*17	181	23	14	14	16
10	16	16			17	16	17	210	22	14	14	16
11	18		(*)		17	16	17	180	21	14	14	16
12	17			17	17	16	17	129	20	14	14	16
13	17				17	16	17	89	19	14	14	15
14	17	*17			17	17	17	70	18	14	15	15
15	16	17			17	16	19	*85	18	14	14	16
16	17	17	17		17	16	19	144	17	14	14	16
17	17	16			17	16	18	210	17	14	14	*15
18	16	16			17	16	16	242	16	14	14	16
19	16	16			17	16	16	240	16	14	14	15
20	16	16			17	16	18	*227	16	14	*14	15
21	16	16			18	17	19	*220	15	14	14	16
22	15	16			18	16	19	180	15	*14	14	16
23	15			*17		16	*18	184	15	14	14	16
24	15			17		16	26	177	14	14	14	16
25				17		16	17	158	*14	14	14	16
26		16		17		16	17	158	14	14	14	16
27				17		16	17	*152	14	14	16	16
28	15			17		16	16	146	14	14	16	17
29				17	-	16	16	141	14	14	15	16
30				17	-------	17	16	99	14	14	15	17
31				17	-------	17	-------	78	-------	14	15	-------
Total	493	477	527	527	478	508	522	4,102	689	434	442	469
Mean	15.9	15.9	17.0	17.0	17.1	16.4	17.4	132	23.0	14.0	14.3	15.6
Ac-ft	978	946	1,050	1,050	948	1,010	1,040	8,140	1,370	861	877	930

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 242 Min 14 Mean 26.5 Ac-ft 19,200

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 25 to Nov. 13, Nov. 23 to Jan. 22, Feb. 23-28; discharge estimated on basis of 1 discharge measurement, weather records, recorded range in stage, and records for East Fork Sevier River near Kingston.

1880. 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 and October 1945 to September 1958 in reports of Geological Survey. 1915 and 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, 55,000 acre-ft May 20 (gage height, 37.0 ft); minimum observed, 7,000 acre-ft Oct. 10 (gage height, 10.5 ft).
1914-15, 1934-58: Maximum contents observed, 55,000 acre-ft May 1, 1946, May 20, 1948, June 10, 20, 1949, June 10, 1952, May 20, 1958 (gage height, 37.0 ft); minimum observed, 200 acre-ft Sept. 10, 1956 (gage height, 1.0 ft).

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.

Capacity table, water year 1957-58 (gage height, in feet, and usable contents, in acre-feet)

10.0	6,500	30.0	38,000
15.0	12,000	35.0	50,000
20.0	19,200	37.0	55,000
25.0	28,200		

Usable contents, in acre-feet, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,200	9,100	13,170	17,050	21,000	28,200	36,000	48,080	54,750	52,250	44,000	30,200
2	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-
10	7,000	10,460	14,210	18,520	22,080	29,460	37,600	52,250	54,750	51,000	40,160	26,580
11	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-
20	7,900	11,740	15,580	19,920	24,600	30,800	42,320	55,000	54,000	47,840	35,600	23,160
21	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	a27,800	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-
30	-	a13,040	-	-	-------	-	a47,560	-	a52,090	-	-	23,520
31	a9,000	-------	16,900	a20,910	-------	35,800	-------	a54,770	-------	a44,320	a30,650	-------
(†)	-	-	18.6	-	-	28.9	-	-	-	-	-	22.4
(‡)	+1,700	+4,040	+3,860	+4,010	+6,890	+8,000	+11,760	+7,210	-2,680	-7,770	-13,670	-7,130

Calendar year 1957..... ‡ +10,500
Water year 1957-58..... ‡ +16,220

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

1890. 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 1958.

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.--45 years, 84.3 cfs (61,030 acre-ft per year).

Extremes.--Maximum discharge during year, 581 cfs May 22 (gage height, 3.18 ft); minimum observed, 6.0 cfs Jan. 23 (result of discharge measurement).
1913-58: 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 fair. 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 19 to May 7)

0.4	9.2	1.1	56	2.5	332
.5	12	1.5	111	3.0	505
.8	28	2.0	206	3.2	585

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	19			b11	19	21	108	264	53	167	240
2	49	18			b12	18	20	106	105	53	167	237
3	49	26			13	19	20	111	*61	53	167	237
4	49	25			13	18	20	123	56	53	165	237
5	48	19	b12		14	18	20	163	52	54	163	235
6	49	17			14	18	20	242	48	54	196	235
7	49	15			13	18	20	326	48	53	261	235
8	48	15			14	18	20	406	48	52	261	235
9	48	15	12		15	18	*20	445	46	52	261	235
10	48	14			15	19	19	449	45	52	258	230
11	51	14	(*)		15	18	18	438	41	52	258	230
12	47	14	b12		14	19	19	420	43	53	256	237
13	18	14			15	19	19	424	42	53	256	235
14	15	*14			15	19	19	383	40	77	256	228
15	17	14	12		16	20	19	*281	38	161	256	230
16	22	14	12	b10	16	20	23	276	36	163	258	228
17	21	14	13		17	22	29	326	32	163	256	*226
18	18	b13	12		17	24	43	424	34	165	254	226
19	17	b13	b12		19	22	104	501	33	165	251	224
20	21	b14	b12		20	23	146	*532	30	165	*249	162
21	24	14	b12		19	33	146	517	29	167	249	74
22	23	b13	12		19	30	175	569	29	*167	246	a28
23	19	b13		(*)	21	25	*200	556	28	169	246	a28
24	16	b13			20	22	185	532	30	169	244	a26
25	15	b13			19	20	139	517	*56	167	244	a26
26	14	13	b12		19	22	110	501	56	167	244	a24
27	14	b13			19	23	114	420	52	167	244	a24
28	14	b12			*20	21	118	383	52	167	244	a22
29	14	b12			-	21	118	341	53	165	242	a22
30	14	b12	12		-------	20	111	320	53	165	240	a20
31	14	-------	b10		-------	20	-------	309	-------	167	240	-------
Total	914	449	371	310	454	646	2,055	11,449	1,580	3,583	7,299	4,876
Mean	29.5	15.0	12.0	10.0	16.2	20.8	68.5	369	52.7	116	235	163
Ac-ft	1,810	891	736	615	900	1,280	4,080	22,710	3,130	7,110	14,480	9,670

Calendar year 1957: Max 195 Min - Mean 47.2 Ac-ft 34,160
Water year 1957-58: Max 569 Min - Mean 93.1 Ac-ft 67,410

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of water commissioners notes, trend of flow, and records for nearby streams.
b Stage-discharge relation affected by ice.

1910. Piute Reservoir near Marysvale, Utah

Location.--Lat 38°19'30", long 112°11'30", in NE¼NW¼ 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 1958.

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, 74,010 acre-ft June 5-10 (gage height, 76.0 ft); minimum not determined, less than 800 acre-ft Oct. 4-8.
1914-58: 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 (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.

Capacity table, water year 1957-58 (gage height, in feet, and usable contents, in acre-feet)

23.0	880	50.0	24,850
25.0	1,560	60.0	40,620
30.0	4,100	70.0	59,880
35.0	7,790	76.0	74,010
40.0	12,510		

Usable contents, in acre-feet, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,450	8,900	-	27,440	33,990	45,340	56,930	65,030	-	60,320	34,960	25,280
2	1,170	9,340	17,560	27,580	-	-	57,140	64,570	73,510	58,820	34,800	25,420
3	976	-	17,920	27,730	34,480	45,900	57,340	63,890	73,510	57,750	-	25,280
4	-	10,570	18,160	27,880	34,800	46,260	57,550	63,210	73,760	56,730	34,480	25,140
5	-	10,870	18,410	-	35,130	46,450	57,750	62,530	74,010	53,710	34,640	24,850
6	-	11,170	18,660	28,170	35,450	46,640	-	62,080	74,010	-	34,150	24,290
7	-	11,470	19,040	28,320	35,790	46,820	58,170	61,860	74,010	52,920	33,670	-
8	-	11,780	-	28,460	36,120	47,000	58,390	61,860	-	51,940	33,040	23,720
9	880	12,090	19,410	28,610	-	-	58,600	62,080	74,010	50,970	32,250	23,720
10	976	-	19,800	28,760	36,630	47,380	58,820	62,310	74,010	50,000	-	23,720
11	1,070	12,510	20,190	28,910	36,960	47,560	59,030	-	73,760	48,870	31,330	23,720
12	1,380	12,830	20,580	-	37,300	47,740	59,450	62,980	73,510	47,740	30,710	23,720
13	-	13,150	20,980	29,350	37,470	47,930	-	63,660	73,260	-	30,110	24,140
14	1,970	13,370	21,250	29,500	37,820	48,310	60,320	64,340	73,010	44,980	29,500	-
15	2,200	13,580	-	29,800	38,160	48,680	60,980	64,800	-	43,690	28,910	25,140
16	2,420	13,800	21,660	30,110	-	-	61,640	64,800	72,500	42,780	28,320	25,420
17	2,620	-	21,920	30,410	38,850	49,250	62,310	64,800	72,500	41,880	-	25,850
18	2,820	14,230	22,340	30,710	39,380	50,000	62,980	-	72,250	41,160	27,150	26,280
19	3,200	14,450	22,750	-	40,090	50,580	63,890	65,730	72,000	40,440	26,720	26,570
20	-	14,780	23,160	31,170	40,800	51,160	-	66,420	71,750	-	26,420	26,860
21	3,790	15,120	23,580	31,330	41,520	51,940	65,730	67,370	71,260	39,200	25,990	-
22	4,770	15,340	-	31,480	42,240	52,530	66,650	68,330	-	38,510	25,710	26,720
23	5,700	15,570	25,420	31,630	-	-	67,130	69,300	69,780	37,990	25,560	26,420
24	6,680	-	25,850	31,940	43,150	53,320	67,370	70,030	68,810	37,650	-	24,850
25	6,990	16,020	26,140	32,250	43,690	53,910	67,610	-	67,850	37,300	25,420	26,140
26	7,390	16,250	26,280	-	44,240	54,510	67,370	71,260	66,890	36,960	25,420	25,990
27	-	16,490	26,570	32,720	44,610	55,110	-	71,750	65,730	-	25,420	25,850
28	7,710	16,720	27,000	32,880	44,980	55,510	66,420	72,250	64,570	36,290	25,280	-
29	8,040	16,950	-	33,040	-	55,910	65,960	72,760	-	35,950	25,280	25,710
30	8,290	17,190	27,150	33,360	-------	-	65,730	73,010	61,860	35,620	25,280	25,560
31	8,550	-------	27,300	33,670	-------	56,530	-------	73,260	-------	35,290	a25,280	-------
(†)	35.9	44.2	51.7	55.9	62.4	68.4	72.6	75.7	70.9	56.9	50.3	50.5
(‡)	+6,870	+8,640	+10,110	+6,370	+11,310	+11,550	+9,200	+7,530	-11,400	-26,570	-10,010	+280

Calendar year 1957..... ‡ +16,630
Water year 1957-58..... ‡ +23,880

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

1915. 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 1958.

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.--46 years (1912-58), 231 cfs (167,200 acre-ft per year).

Extremes.--Maximum discharge during year, 778 cfs June 30, July 1, 2 (gage height, 2.77 ft); minimum, 4.0 cfs Oct. 15 (gage height, -0.12 ft).
1911-58: Maximum discharge, 2,600 cfs May 23, 24, 1922; practically no flow at times when reservoir gates were closed.

Remarks.--Records good. One small diversion between gage and Piute Reservoir. Flow regulated by Piute Reservoir (see preceding page). Records of chemical analyses for the water year 1958 are given in WSP 1574.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 10-17)

-0.1	4.8	0.8	132
0.0	7.5	1.0	178
.1	12	1.5	295
.2	18	2.0	478
.4	35	2.8	798
.6	60		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	203	53	23	11	9.1	10	9.1	566	582	774	298	268
2	196	52	9.1	10	9.1	10	9.6	566	566	754	292	290
3	190	37	9.1	11	9.1	10	9.6	566	*474	718	275	355
4	173	32	9.1	11	9.1	10	9.6	634	298	682	278	402
5	115	23	9.1	11	9.1	9.6	10	682	355	674	344	482
6	69	18	9.1	11	9.6	9.6	10	694	438	670	474	474
7	47	16	9.1	10	9.6	9.6	10	694	486	642	538	422
8	49	14	8.7	11	9.6	9.6	10	694	426	638	586	382
9	49	15	8.7	10	9.6	9.6	*10	690	402	682	606	318
10	49	21	9.1	10	9.6	9.1	10	698	398	702	602	312
11	46	24	9.1	10	9.1	9.1	10	706	386	702	606	312
12	30	38	*9.1	9.6	9.1	9.1	10	710	374	718	610	282
13	16	43	10	9.6	9.1	9.1	10	706	358	718	630	254
14	4.8	*53	11	10	9.1	9.1	10	706	341	722	654	238
15	11	50	12	9.6	9.1	9.1	10	650	324	674	658	238
16	30	37	12	9.6	9.1	9.6	12	*630	312	638	610	219
17	49	36	12	9.6	9.1	9.6	46	618	304	610	590	169
18	53	37	12	9.6	9.1	9.6	66	586	292	550	566	*171
19	54	37	13	9.6	9.6	9.6	66	590	324	554	510	233
20	56	39	12	9.6	9.6	9.6	69	594	366	530	*498	275
21	56	40	12	9.1	9.6	9.6	88	594	406	*518	498	275
22	46	40	12	9.1	9.6	9.6	295	598	474	474	490	275
23	30	52	13	9.6	10	9.6	410	630	526	398	390	282
24	22	45	13	*9.6	10	9.3	*474	674	*546	398	378	278
25	21	44	12	9.6	10	9.6	514	686	558	398	355	268
26	23	40	12	9.6	10	9.6	534	686	650	378	348	268
27	42	18	12	9.6	10	9.6	542	*686	670	338	366	268
28	39	27	12	9.6	*10	9.6	554	686	718	331	348	263
29	44	30	11	9.6	-	9.6	574	694	766	324	324	272
30	45	30	11	9.1	-------	9.6	574	666	770	324	275	285
31	54	-------	11	9.1	-------	9.1	-------	622	-------	315	272	-------
Total	1,911.8	1,041	347.3	306.4	264.7	295.7	4,965.9	20,202	13,890	17,548	14,269	8,830
Mean	61.7	34.7	11.2	9.88	9.45	9.54	166	652	463	566	460	294
Ac-ft	3,790	2,060	689	608	525	587	9,850	40,070	27,550	34,810	28,300	17,510

Calendar year 1957: Max 466 Min 4.0 Mean 106 Ac-ft 76,810
Water year 1957-58: Max 774 Min 4.8 Mean 230 Ac-ft 166,300

* Discharge measurement made on this day.

1942. Clear Creek above diversions, near Sevier, Utah

Location.--Lat 38°34'45", long 112°17'20", in NW¼SW¼ sec. 31, T. 25 S., R. 4 W., on left bank at south side of State Highway 13, 1.8 miles west of Sevier, 2.3 miles upstream from mouth, and 17 miles southwest of Richfield.

Drainage area.--164 sq mi.

Records available.--August 1957 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 5,680 ft (from topographic map).

Extremes.--1957: Maximum discharge during period August to September, 112 cfs Aug. 20 (gage height, 2.38 ft); minimum, 7.5 cfs Sept. 13.
1957-58: Maximum discharge during water year, 301 cfs May 24 (gage height, 3.36 ft); minimum, 2.6 cfs Nov. 22, result of freezeup.

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

Rating tables, Aug. 1, 1957, to Sept. 30, 1958 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 22-31)

Aug. 10, 1957, to June 9, 1958				June 10 to Sept. 30, 1958			
1.1	4.2	1.7	26	0.9	7.3	1.5	28
1.2	5.7	2.0	56	1.0	8.8	1.9	54
1.3	7.8	2.4	121	1.2	14	2.3	102
1.5	15	3.0	282				

Discharge, in cubic feet per second, 1957

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1	a17	16	7	a15	12	13	16	8.8	19	14	9.2	25	16	9.5
2	a16	15	8	a15	11	14	15	8.6	20	18	10	26	16	9.5
3	a16	14	9	a15	12	15	*16	10	21	25	12	27	16	9.5
4	a16	14	10	14	10	16	14	10	22	22	12	28	13	*8.3
5	a16	13	11	16	10	17	14	10	23	20	9.5	29	15	8.0
6	a15	12	12	17	9.8	18	14	9.2	24	18	9.5	30	18	9.8
												31	18	-
Total													506	322.2
Mean													16.3	10.7
Runoff in acre-feet													1,000	639

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

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	16	6.8	6.4	7.3	13	23	62	162	58	12	8.4
2	9.8	15	8.8	9.2	10	12	23	75	157	56	12	8.5
3	7.8	18	7.0	10	13	13	25	86	*155	53	10	8.0
4	11	16	6.4	7.3	13	13	22	117	132	52	11	8.5
5	13	16	11	6.4	16	13	21	128	125	48	10	9.6
6	12	16	15	7.0	14	14	21	165	134	45	10	9.6
7	12	15	14	7.8	12	14	22	177	148	45	10	9.2
8	12	14	16	8.0	12	14	22	193	123	44	12	12
9	12	14	14	9.5	14	12	*21	175	102	42	17	10
10	11	14	10	9.2	12	11	20	172	88	42	16	9.4
11	12	15	9.8	11	12	12	23	207	84	a38	13	10
12	12	15	*10	9.5	11	12	23	210	78	a35	12	14
13	11	15	10	12	12	11	27	170	71	a33	11	13
14	11	16	13	12	10	13	37	*132	66	a32	10	12
15	13	*14	14	9.5	14	14	53	112	64	a30	11	12
16	13	14	15	10	16	17	85	108	62	a28	12	12
17	12	14	16	9.8	16	18	131	123	63	a27	12	10
18	*12	7.8	14	13	15	19	135	155	60	a25	11	*9.8
19	13	15	7.8	12	16	19	132	175	61	a23	*10	10
20	14	8.0	14	7.0	18	21	130	199	64	a20	9.8	10
21	15	13	15	9.5	19	29	154	*213	60	*18	9.8	9.8
22	16	5.5	14	12	21	28	167	239	56	16	13	8.4
23	14	10	6.0	8.0	26	25	139	242	*61	18	12	8.4
24	13	11	8.6	*13	25	25	*97	257	84	19	9.2	10
25	12	12	11	12	25	26	74	251	78	17	9.8	12
26	12	14	10	12	20	25	69	*242	73	15	9.8	11
27	12	11	9.5	12	*15	23	69	233	68	13	8.6	10
28	13	8.8	11	11	10	22	66	*221	64	16	10	10
29	13	8.8	14	11	-	21	60	207	61	15	11	10
30	12	6.2	14	11	-------	22	56	193	62	14	10	10
31	13	-------	6.0	10	-------	24	-------	180	-------	14	8.2	-------
Total	378.6	388.1	351.7	308.1	424.3	555	1,947	5,419	2,666	951	343.2	305.6
Mean	12.2	12.9	11.3	9.94	15.2	17.9	64.9	175	88.9	30.7	11.1	10.2
Ac-ft	751	770	698	611	842	1,100	3,860	10,750	5,290	1,890	681	606

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 257 Min 5.5 Mean 38.5 Ac-ft 27,850

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

1950. 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 1958 in reports of Geological Survey. April 1934 to September 1958 in reports of Sevier River water commissioner (discontinued).

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.--23 years (1912-17, 1940-58), 31.0 cfs (22,440 acre-ft per year).

Extremes.--Maximum discharge during year, 278 cfs May 27 (gage height, 4.40 ft); minimum, 1.8 cfs Aug. 24-27.
1912-19, 1940-58: Maximum discharge, 611 cfs Aug. 17, 1955 (gage height, 5.97 ft), from rating curve extended above 290 cfs by logarithmic plotting; no flow Aug. 26, 1913.

Remarks.--Records good except those for periods of fragmentary or no gage-height record, which are fair. Practically entire flow is diverted above station each year during latter part of irrigation season.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Nov. 25, Apr. 17 to May 8, May 17, Sept. 16-18)

Oct. 1 to May 16				May 17 to Sept. 30			
1.3	1.8	2.5	59	1.5	1.1	2.5	40
1.4	4.1	3.0	103	1.6	2.2	3.0	84
1.7	14	4.0	230	1.7	3.8	4.0	216
2.0	27			1.8	6.0	4.3	262
				2.0	12		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.4	12	11	10	12	16	23	56	179	50	5.8	2.3
2	4.1	17	12	11	14	14	24	62	163	47	6.3	2.5
3	3.6	18	11	12	16	15	25	66	149	44	4.6	2.5
4	3.6	18	11	10	16	15	23	87	137	42	2.9	2.3
5	4.4	18	14	8.2	18	15	23	105	127	37	2.9	2.6
6	4.4	18	17	8.5	16	17	23	131	129	38	2.9	2.8
7	4.4	17	16	9.5	16	17	23	144	f137	38	2.8	2.2
8	4.4	16	17	10	15	16	23	144	120	37	2.8	2.2
9	4.7	15	16	12	16	15	*23	139	100	34	3.6	2.3
10	5.2	15	14	12	16	14	22	143	85	31	3.1	2.3
11	5.2	16	14	13	15	14	25	180	80	30	2.8	2.5
12	3.6	16	*14	12	14	16	25	177	75	28	2.6	3.8
13	3.4	16	f14	15	15	14	27	143	70	27	3.1	4.0
14	3.4	16	f16	15	14	16	33	*115	65	25	2.6	3.1
15	3.4	*16	18	12	16	17	42	99	62	23	3.2	3.1
16	3.6	16	18	12	18	19	59	100	60	22	3.8	3.1
17	3.4	17	18	12	18	19	80	112	60	20	3.6	3.1
18	*3.6	12	17	16	17	20	107	131	60	17	3.1	*2.8
19	4.4	17	f12	15	18	20	119	170	60	f8.9	*2.9	2.6
20	6.5	13	f17	11	19	22	118	191	60	6.0	2.8	2.6
21	9.5	12	18	13	20	26	137	*201	58	*f4.0	2.6	2.6
22	11	8.6	17	15	21	27	143	219	56	3.6	2.8	2.6
23	9.2	13	f12	12	23	25	124	225	*f60	5.8	2.6	2.6
24	7.9	13	f14	*16	23	24	*90	249	69	5.8	2.0	3.1
25	6.9	15	f14	16	23	25	75	260	68	5.0	1.8	2.6
26	6.6	17	f14	16	20	25	66	259	62	4.6	1.9	2.6
27	7.2	14	f13	15	17	23	66	259	60	3.6	1.9	2.6
28	8.9	12	f14	15	*14	23	63	252	58	3.6	2.5	2.6
29	8.6	13	17	15	-	23	56	238	54	4.8	2.8	2.6
30	9.5	9.5	17	15	-------	23	52	210	54	5.8	2.8	2.5
31	11	-------	10	14	-------	25	-------	191	-------	5.5	2.5	-------
Total	180.0	446.1	457	398.2	480	600	1,739	5,058	2,577	657.0	94.4	81.1
Mean	5.81	14.9	14.7	12.8	17.1	19.4	58.0	163	85.9	21.2	3.05	2.70
Ac-ft	357	885	906	790	952	1,190	3,450	10,030	5,110	1,300	187	161

Calendar year 1957: Max 440 Min 2.9 Mean 47.4 Ac-ft 34,330
Water year 1957-58: Max 260 Min 1.8 Mean 35.0 Ac-ft 25,320

* Discharge measurement made on this day.
f Fragmentary gage-height record; discharge computed from partly estimated gage heights.
Note.--No gage-height record Dec. 31 to Jan. 23, June 8-22, July 20; discharge computed on basis of weather records and records for station above diversion near Sevier.

2050. 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 1958. 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.--44 years (1914-58), 101 cfs (73,120 acre-ft per year).

Extremes.--Maximum discharge during year, 549 cfs May 26 (gage height, 3.71 ft); minimum, 0.9 cfs Oct. 1 (gage height, 0.56 ft).
1914-58: 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 were closed.

Remarks.--Records good. Flow regulated by reservoirs above station. During irrigation season practically the entire flow through Rockyford Dam is diverted above station for irrigation below station.

Revisions (water years).--WSP 1394: 1927-28, 1947.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 1-26)

0.5	.5	1.4	32
.6	1.1	1.8	68
.7	2.4	2.3	134
.9	7.0	3.0	288
1.1	14	3.6	505

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.9	66	55	72	78	105	65	77	412	14	58	57
2	1.2	67	55	69	76	103	71	64	368	19	52	41
3	20	71	55	65	78	100	70	36	223	19	64	30
4	56	76	*56	67	83	96	65	21	132	18	60	23
5	24	78	62	65	89	95	61	8.2	*139	21	45	26
6	26	74	68	66	96	94	62	4.5	82	41	42	36
7	26	69	69	70	99	92	62	4.5	35	41	44	37
8	*24	68	71	72	98	92	60	5.5	35	42	38	55
9	6.2	67	74	75	96	91	64	9.1	*52	18	33	53
10	1.1	67	75	76	98	91	70	29	112	11	31	57
11	1.2	67	75	76	99	92	79	58	120	14	25	71
12	1.5	67	74	78	100	92	70	67	121	28	24	84
13	2.1	66	74	76	98	94	68	*99	109	28	24	105
14	1.8	*50	75	77	98	95	68	151	81	16	20	139
15	41	38	76	76	99	96	60	176	107	10	18	164
16	48	75	76	75	99	98	57	192	144	27	14	160
17	41	83	77	76	99	99	58	170	132	37	26	104
18	49	75	80	75	100	100	54	148	100	47	34	*100
19	53	68	83	78	100	98	27	123	74	56	*40	95
20	55	66	81	75	100	94	23	146	67	62	71	70
21	56	64	83	68	99	85	*56	199	64	44	91	41
22	61	61	85	70	98	81	55	233	64	37	77	52
23	59	59	87	75	98	50	28	250	32	*38	71	72
24	57	59	78	72	100	32	*22	266	23	52	67	40
25	57	61	71	81	103	37	25	300	21	55	72	34
26	59	64	69	81	*105	*42	37	402	*20	74	68	42
27	60	66	69	79	107	44	59	497	24	66	77	36
28	59	64	68	77	107	44	68	457	23	68	67	31
29	61	59	74	*77	-	43	86	*442	21	61	73	29
30	59	57	83	77	-------	43	74	442	18	63	96	30
31	57	-------	*80	79	-------	44	-------	427	-------	80	63	-------
Total	1,124.0	1,972	2,258	2,295	2,700	2,462	1,724	5,503.8	2,955	1,207	1,585	1,914
Mean	36.3	65.7	72.8	74.0	96.4	79.4	57.5	178	98.5	38.9	51.1	63.8
Ac-ft	2,230	3,910	4,480	4,550	5,360	4,880	3,420	10,920	5,860	2,390	3,140	3,800

Calendar year 1957: Max 283 Min 0.7 Mean 60.9 Ac-ft 44,050
Water year 1957-58: Max 497 Min 0.9 Mean 75.9 Ac-ft 54,940

* Discharge measurement made on this day.

2051. Sheep Creek near Salina, Utah

Location.--Lat 38°47', long 111°41', in SW¼ sec. 27, T. 23 S., R. 2 E., Salt Lake meridian, in Fishlake National Forest, on left bank 1.6 miles south of Gooseberry Ranger Station, 1.9 miles upstream from mouth, and 15 miles southeast of Salina.

Records available.--October 1957 to September 1958 (discontinued).

Gage.--Water-stage recorder and concrete control.

Extremes.--Maximum discharge during year, 5.60 cfs May 23, 28 (gage height, 1.49 ft); minimum not determined, occurred during period of ice effect or no gage-height record.

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

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.8	0.01	1.2	0.62
.9	.05	1.3	1.37
1.0	.12	1.4	2.88
1.1	.29	1.5	6.00

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0.12				0.07	0.07	0.21	2.67	0.50	0.19	0.12
2		.11		a0.05	b0.05	.07	.07	.25	2.48	.47	.19	.11
3		.11				.07	.07	.32	2.48	.47	.19	.11
4		.16			.05	.07	.07	.40	2.30	.47	.18	.12
5	a0.11	.32			.05	.07	.07	.47	*2.30	.47	.16	.12
6		.15			.05	.07	.07	.50	2.30	.47	.18	.11
7		.13			.05	.07	.07	.50	2.30	.43	.15	.11
8		.13			.04	.07	.07	.50	2.14	.40	.16	.11
9	(*)	.16			.04	.07	.07	.54	1.99	.37	.18	.11
10	.10	.18			.04	.07	.07	.67	1.99	.34	.16	.10
11	.12	.16			.05	.07	.07	.72	1.84	.34	.15	.09
12	.13	.13			.05	.07	.07	.62	1.72	.34	.13	.12
13	.11	*.11			.05	.07	.08	.50	1.72	.32	.13	.13
14	.11	.10			.06	.07	.08	.47	1.60	.29	.13	.11
15	.11	.10	0.06		.06	.07	.11	.62	1.48	.29	.15	.11
16	.12				.06	.07	.15	.85	1.37	.25	.16	.10
17	.11				.06	.07	.19	1.17	1.27	.23	.15	.10
18	.11			b.05	.06	.07	.23	1.37	1.17	.23	.15	*.10
19	.12	a.10			.06	.07	.25	1.60	1.08	.21	.15	.11
20	.11				.06	.07	.23	1.72	1.00	.19	.13	.10
21	.11				.07	.07	.25	1.99	.78	.19	.15	.10
22	.10				.07	.07	.25	2.48	.62	*.19	*.15	.10
23	.12	a.09			.07	.07	.21	2.88	.72	.21	.15	.10
24	.12				.07	.07	.18	2.48	.67	.21	.13	.10
25	a.12				.07	.07	.15	2.88	.67	.21	.13	.10
26	.15				.07	.07	.15	3.11	*.67	.19	.13	.10
27	.13				.07	.07	.15	3.11	.62	.19	.12	.10
28	.13	a.08			.07	.07	.15	*3.62	.62	.19	.13	.10
29	.12				-	.07	.15	3.11	.58	.19	.15	.09
30	.12				-------	.07	.18	3.11	.54	.21	.13	.08
31	.11	-------			-------	.07	-------	2.67	-------	.21	.12	-------
Total	3.57	3.53	1.86	1.55	1.60	2.17	3.98	45.44	43.70	9.27	4.66	3.16
Mean	0.115	0.118	0.06	0.05	0.057	0.070	0.133	1.47	1.46	0.299	0.150	0.105
Ac-ft	7.1	7.0	3.7	3.1	3.2	4.3	7.9	90	87	18	9.2	6.3

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 3.62 Min - Mean 0.341 Ac-ft 247

* 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 Sheep Creek stations.
b Stage-discharge relation affected by ice.

2052. West Fork Sheep Creek near Salina, Utah

Location.--Lat 38°47', long 111°41', in SW¼SE¼ sec. 21, T. 23 S., R. 2 E., on right bank 1,100 ft upstream from mouth, 1 mile south of Gooseberry Ranger Station, and 14.5 miles southwest of Salina.

Records available.--October 1957 to September 1958 (discontinued).

Gage.--Water-stage recorder and concrete control.

Extremes.--Maximum discharge during year, 6.19 cfs May 16 (gage height, 1.63 ft), from rating curve extended above 1.30 cfs by logarithmic plotting; no flow many days.

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

Rating table, water year 1957-58, except period of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.8	0	1.2	1.30
.9	.09	1.3	2.14
1.0	.33	1.5	4.47
1.1	.72		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0.02				0.01	0.01	0.55	0.67	0.03		
2		.02				.01	.01	.66	.63	.02		
3		.02	(*)			.01	.01	.97	.55	.02		
4		.02		(*)		.01	.01	1.58	.47	.02		
5		.02	b0			.01	.01	2.10	*.37	.02		
6		.02				.01	.01	2.34	.33	.02		
7		.02			a0	.01	.01	2.35	.28	.01		
8		.02				.01	.01	2.14	.25	.01		
9	a0	.01				.01	.01	2.89	.22	.01		
10		.01				.01	.01	3.00	.20	0		
11		.01				.01	.01	3.71	.20	0		
12		.01				.01	.01	2.57	.17	0		
13		*0				.01	.02	2.25	.15	0		
14		0				.01	.02	2.25	.13	0		
15		0		a0		.01	.04	3.00	.13	0		
16		0			a.01	.01	.07	5.97	.11	0		
17	*.00	0				.01	.13	3.97	.11	0		
18	.00	0				.01	.20	3.46	.09	0		(*)
19	.01	0				.01	.22	3.34	.07	0		
20	.01	0	a0		.01	.01	.28	3.46	.07	0		
21	.01	0			.01	.01	.43	3.59	.09	0		
22	.01	0			.02	.01	.43	3.21	.07	*0	(*)	
23	.01	0			.02	.01	.25	3.00	.07	0		
24	.01				.02	.01	.11	2.57	.05	0		
25	.01				.01	.01	.09	2.25	.05	0		
26	.01	b0			.01	.01	.09	1.95	*.05	0		
27	.01				.01	.01	.13	1.53	.04	0		
28	.01				.01	.01	.15	1.30	.04	0		
29	.01				-	.01	.18	1.11	.04	0		
30	.01				-------	.01	.39	.87	.04	0		
31	.01	-------			-------	.01	-------	.77	-------	0		-------
Total	0.13	0.20	0	0	0.18	0.31	3.35	72.71	5.74	0.16	0	0
Mean	0.004	0.007	0	0	0.006	0.010	0.112	2.35	0.191	0.005	0	0
Ac-ft	0.3	0.4	0	0	0.4	0.6	6.6	144	11	0.3	0	0

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 3.97 Min 0 Mean 0.227 Ac-ft 164

* Discharge measurement or observation of no flow made on this day.
a No gage-height record; discharge estimated on basis of weather records, trend of flow, and records for other Sheep Creek stations.
b Stage-discharge relation affected by ice.

2053. Sheep Creek at mouth, near Salina, Utah

Location.--Lat 38°48', long 111°41', in NE¼NE¼ sec. 21, T. 23 S., R. 2 E., Salt Lake meridian, in Fishlake National Forest, on left bank 200 ft south of Gooseberry Ranger Station and Youth Camp, 700 ft upstream from junction with Gooseberry Creek, and 14 miles southeast of Salina.

Records available.--October 1957 to September 1958 (discontinued).

Gage.--Water-stage recorder and concrete control.

Extremes.--Maximum discharge during year, 25.3 cfs May 11 (gage height, 2.30 ft); minimum, 0.01 cfs Sept. 2.

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

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.0	0.02	1.3	0.84	1.7	4.55
1.1	.12	1.4	1.48	1.9	8.30
1.2	.38	1.5	2.30	2.1	14.9

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0.18			b0.10	0.10	0.10	2.77	5.35	0.90	0.14	0.03
2		.18			b.10	.10	.10	3.60	5.19	.84	.16	.03
3		.16	(*)		.09	.09	.12	5.23	4.87	a.77	.14	.03
4		.14			.09	.09	.12	6.39	4.71	a.71	.12	.04
5		.16	b0.10		.09	.09	.12	9.13	*4.55	a.66	.10	.06
6		.18			.09	.09	.12	9.01	4.71	a.62	.10	.07
7		.18			.09	.09	.12	8.26	4.43	a.59	.09	.04
8		.18			.09	.09	.12	7.79	4.30	a.56	.14	.05
9	a0.18	.16	.10		.09	.09	.12	9.76	3.93	.54	.16	.04
10		.16	.10		.09	.09	.12	10.2	3.68	.50	.14	.03
11		.18	.10		.09	.09	.12	12.8	3.43	.50	.07	.03
12		.18	.10	b0.10	.09	.09	.12	8.30	3.31	.46	.07	.12
13		*.18	.12		.09	.09	.16	*7.49	3.21	.46	.07	.10
14		.18	.10		.07	.09	.26	7.66	3.11	.46	.07	.09
15		.16	.12		.07	.09	.37	8.80	3.01	.46	.12	.09
16		.20	.12		.07	.09	.69	11.3	3.01	.38	.12	.07
17		.18	.10		.07	.09	.96	12.9	2.80	.35	.10	.06
18	*.20	.18	.10		.07	.09	1.27	13.6	2.91	.29	.09	*.05
19	.23	.18	.10		.07	.10	1.34	13.8	2.70	.26	.06	.04
20	.29	.18	.10		.07	.10	1.55	13.0	2.50	.26	.05	.04
21	.23	.18	.10		.09	.14	2.03	13.6	2.21	.20	.05	.04
22	.20	.16	.10		.10	.12	2.30	*13.5	1.95	.20	*.10	.03
23	.20	.16	.10		.14	.10	1.63	12.1	2.03	*.29	.09	.03
24	.20	b.16	.12		.10	.10	1.02	10.3	1.71	.29	.07	.07
25	.16	b.16	.12	.10	.10	.10	*.79	9.46	1.55	.26	.04	.07
26	.16		.12	.10	.10	.10	.84	8.88	*1.48	.20	.04	.07
27	.18		.12	.10	.10	.10	1.34	8.08	1.20	.18	.04	.06
28	.18	b.14	.12	.09	.10	.10	1.27	*7.44	1.14	.18	.09	.06
29	.16		.12	.09	-	.10	1.41	6.80	1.02	.20	.12	.06
30	.14		*.12	.09	-------	.10	2.12	6.36	1.02	.16	.06	.06
31	.16	-------	b.10	.09	-------	.10	-------	5.67	-------	.16	.05	-------
Total	5.75	5.00	3.30	3.06	2.51	3.00	22.76	283.98	91.02	12.89	2.86	1.66
Mean	0.185	0.167	0.106	0.099	0.090	0.097	0.759	9.16	3.03	0.416	0.092	0.055
Ac-ft	11	9.9	6.5	6.1	5.0	6.0	45	563	181	26	5.7	3.3

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 13.8 Min 0.03 Mean 1.20 Ac-ft 868

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of trend of flow, weather records, and records for other Sheep Creek stations.
b Stage-discharge relation affected by ice.

2100. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 6,760 ft (from river-profile map).

Extremes.--Maximum discharge during year, 209 cfs May 27; maximum gage height, 8.60 ft June 6; minimum daily discharge, 8.2 cfs Jan. 8, Feb. 2.
1954-58: Maximum discharge not determined, occurred during mud-rock flow Aug. 16, 1955 (estimated flow 750 cfs, below debris basin located half a mile below gage); minimum, 3.0 cfs July 22, 1955, caused by temporary obstruction upstream.
Maximum discharge known, 2,060 cfs July 24, 1946, from critical depth measurement of peak flow over retention dam half a mile below gage.

Remarks.--Records good except those for May 17 to June 7, 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-3, Nov. 7-22, Jan. 13 to Feb. 9, May 17-25, May 28 to June 7, July 22 to Sept. 30)

Oct. 1 to May 22		May 22 to Sept. 30	
6.5	5.1	5.5	7.0
7.0	24	5.7	20
7.5	46	6.1	66
7.9	72	6.9	185
8.4	127		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	10	10	9.0	8.2	10	10	19	136	31	12	10
2	11	10	*9.7	9.0	8.6	10	10	20	*128	31	12	11
3	11	11	9.7	8.6	*8.6	10	10	21	123	30	12	10
4	10	10	9.7	8.6	9.0	10	10	23	114	30	12	9.4
5	11	10	9.7	8.6	9.0	10	10	26	128	29	11	10
6	10	10	9.7	8.6	9.0	10	10	23	139	29	11	9.4
7	*10	10	9.7	8.6	9.3	10	10	24	156	29	11	10
8	10	10	9.3	8.2	9.7	10	10	23	123	28	11	10
9	10	10	9.3	8.6	10	10	10	23	104	27	11	10
10	10	10	9.7	9.0	10	10	10	25	93	26	11	10
11	10	10	9.7	9.0	10	10	10	34	79	25	11	11
12	11	*10	9.7	9.0	10	10	10	43	69	26	11	18
13	10	10	9.7	8.6	10	10	11	*41	62	25	11	12
14	11	10	9.7	8.6	11	10	11	40	58	23	11	12
15	11	10	9.7	8.6	11	10	12	38	60	21	11	*12
16	11	10	9.3	8.6	11	10	12	42	57	22	11	11
17	11	10	9.0	9.0	10	10	13	46	57	21	11	11
18	11	10	9.0	8.6	10	10	16	66	57	20	11	11
19	11	10	9.0	8.6	10	10	21	70	56	20	11	11
20	12	10	9.0	8.6	10	10	21	*77	53	20	*10	11
21	11	9.7	8.6	9.0	10	10	20	122	53	19	10	11
22	11	9.7	8.6	9.0	10	10	*19	131	51	19	10	11
23	11	10	8.6	8.6	10	9.7	18	158	51	19	10	11
24	10	10	8.6	9.0	*10	9.7	17	152	*47	*16	11	11
25	10	10	9.0	9.0	10	9.7	17	138	41	14	11	11
26	10	10	9.3	9.0	10	9.7	17	150	39	14	10	11
27	11	10	9.0	9.0	10	9.7	17	*159	39	13	10	11
28	11	10	9.0	9.0	10	*9.7	17	183	37	13	12	11
29	11	10	9.0	9.0		9.7	17	156	36	13	12	11
30	10	10	9.0	8.6	-------	9.7	18	152	33	13	11	10
31	10	-------	9.0	8.6	-------	9.7	-------	141	-------	13	10	-------
Total	328	300.4	288.0	271.8	274.4	307.3	414	2,368	2,279	679	340	328.8
Mean	10.6	10.0	9.29	8.77	9.80	9.91	13.8	76.4	76.0	21.9	11.0	11.0
Ac-ft	651	596	571	539	544	610	821	4,700	4,520	1,350	674	652

Calendar year 1957: Max 166 Min 6.2 Mean 22.9 Ac-ft 16,610
Water year 1957-58: Max 183 Min 8.2 Mean 22.4 Ac-ft 16,230

Peak discharge (base, 50 cfs).--May 27 (12 p.m.) 209 cfs (7.04 ft).

* Discharge measurement made on this day.

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, water year October 1957 to September 1958

Name	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
Fairview ditch....	0	0	0	0	0	0	0	33	581	648	388	0	1,650
Candland ditch....	0	0	0	0	0	0	0	32	206	52	9	2	301
Coal Fork ditch...	0	0	0	0	0	0	0	34	108	14	2	1	159
Twin Creek tunnel.	0	0	0	0	0	0	0	6	207	12	0	1	226
Spring City tunnel	61	49	34	25	22	25	24	493	1,250	139	61	57	2,240
Black Canyon ditch	0	0	0	0	0	0	0	7	263	11	0	0	281
Cedar Creek tunnel	13	9	0	0	0	0	0	64	204	40	18	10	358
Reeder ditch.....	16	0	0	0	0	0	0	137	288	62	23	11	537
John August ditch.	0	0	0	0	0	0	0	0	107	99	14	1	221
Madsen ditch.....	0	0	0	0	0	0	0	2	2	0	0	0	4
Ephraim tunnel....	37	30	18	18	17	18	18	1,520	2,220	220	28	31	4,180
Larsen tunnel.....	0	0	0	0	0	0	0	264	898	81	1	0	1,240
Horseshoe tunnel..	0	0	0	0	0	0	0	140	482	27	0	1	650
Total in Utah...	127	88	52	43	39	43	42	2,730	6,820	1,400	544	115	12,050

Transmountain diversions from Sevier Lake basin to Colorado River basin

Tropic and East Fork Canal 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, water year October 1957 to September 1958

Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
260	0.8	0	0	0	0	4.0	667	1,380	1,230	1,050	295	4,890

2110. Twin Creek near Mount Pleasant, Utah

Location.--Lat 39°29'30", long 111°24'25", in NW¼ sec. 30, T. 15 S., R. 5 E., on right bank 3½ miles southeast of Mount Pleasant.

Drainage area.--12 sq mi, approximately.

Records available.--October 1954 to September 1958.

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

Extremes.--Maximum discharge during year, 111 cfs June 6 (gage height, 1.98 ft), from rating curve extended above 60 cfs; maximum gage height, 2.18 ft May 27; minimum discharge, 3.1 cfs Mar. 26.
1954-58: Maximum discharge, 117 cfs June 26, 1957, from rating curve extended above 70 cfs; maximum gage height, 2.18 ft May 27, 1958; minimum discharge, 1.8 cfs Mar. 18, 1955.

Remarks.--Records good except those for periods of ice effect or indefinite stage-discharge relation, which are fair. Records include flow of Twin Creek tunnel, a measured transmountain diversion from San Rafael River basin (see p.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 12-21, 26, 27, June 19 to July 22)

Oct. 1 to May 17				May 18 to Sept. 30			
0.6	3.2	0.9	11	1.1	2.8	1.5	34
.7	4.5	1.0	20	1.2	6.7	1.7	67
.8	6.9			1.3	13	1.9	105
				1.4	22		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.2	5.5	b5.0	b4.8	b4.3	b5.0	4.3	8.0	53	16	5.3	4.5
2	6.6	5.2	*5.0	4.7	4.3	b5.0	4.3	8.4	*53	16	5.3	4.9
3	7.2	5.2	5.0	4.7	*4.3	b5.0	4.5	8.4	55	15	5.3	4.9
4	7.2	5.2	5.0	b4.6	4.3	b5.0	4.5	9.2	51	14	5.3	4.5
5	7.2	5.0	5.0	b4.6	4.5	b5.0	4.5	9.2	49	14	5.3	4.5
6	7.2	5.0	5.0	4.5	4.7	4.8	4.7	11	71	14	5.3	4.5
7	*6.9	5.0	5.0	4.5	4.5	4.8	4.7	13	90	13	5.8	4.5
8	6.9	5.0	5.0	4.5	4.5	4.8	4.7	11	71	13	5.8	4.5
9	6.6	4.7	5.0	4.5	4.5	4.7	4.7	11	63	12	5.8	4.5
10	6.6	4.7	5.0	4.5	4.7	4.8	4.8	14	56	12	5.8	4.1
11	6.2	4.8	4.8	4.7	4.7	4.8	4.8	17	55	11	5.8	4.1
12	7.2	*5.0	4.8	4.7	4.7	4.8	4.8	19	*55	11	5.8	4.9
13	6.6	5.0	4.8	4.7	4.7	4.5	5.0	*16	49	11	5.8	4.9
14	6.9	5.0	4.8	4.7	4.8	4.5	5.5	17	48	11	5.8	4.5
15	6.6	5.0	4.7	4.7	4.8	4.5	6.0	17	48	11	5.8	4.5
16	6.6	5.0	4.8	4.7	4.8	4.5	6.6	18	43	11	5.8	*4.5
17	6.2	5.0	4.8	4.8	4.8	4.5	7.6	20	42	10	5.8	4.1
18	6.0	4.8	4.8	4.8	5.0	4.5	8.8	22	40	9.4	5.3	4.1
19	6.0	4.8	4.8	4.8	5.0	4.3	8.8	31	39	8.8	*5.3	4.1
20	6.6	4.8	4.8	b4.8	5.0	4.5	8.8	*39	37	8.8	5.3	3.8
21	6.2	4.8	4.7	b4.8	5.2	4.5	9.2	42	33	8.8	5.3	4.1
22	6.0	b5.0	4.7	4.7	5.5	4.5	*8.8	42	31	8.6	5.3	4.1
23	5.7	b5.0	b4.8	b4.7	5.5	4.5	8.4	48	26	8.8	5.3	4.1
24	5.7	5.2	b4.8	4.7	*5.2	4.5	7.6	43	*26	*7.7	4.9	4.9
25	5.7	5.5	b4.8	4.5	5.2	4.3	7.6	35	24	7.2	4.9	4.5
26	5.5	5.5	4.8	4.5	5.2	4.3	7.6	39	23	6.2	4.9	4.5
27	5.7	5.2	b4.8	4.5	5.2	4.3	7.6	*53	21	5.8	4.9	4.1
28	5.5	b5.2	4.8	4.5	5.0	*4.3	7.6	55	20	5.8	4.9	
29	5.5	5.2	4.8	4.5	-	4.3	7.6	63	19	5.3	4.9	4.1
30	5.5	b5.0	4.7	4.3	-------	4.5	7.6	56	17	5.3	4.5	
31	5.5	-------	4.8	4.3	-------	4.5	-------	49	-------	5.3	4.5	-------
Total	196.0	151.3	150.4	143.3	134.9	142.8	192.0	844.2	1,308	316.8	165.8	131.5
Mean	6.32	5.04	4.85	4.62	4.82	4.61	6.40	27.2	43.6	10.2	5.35	4.38
Ac-ft	389	300	298	284	268	283	381	1,670	2,590	628	329	261

Calendar year 1957: Max 106 Min 3.8 Mean 12.4 Ac-ft 9,010
Water year 1957-58: Max 90 Min 3.8 Mean 10.6 Ac-ft 7,680

Peak discharge (base, 30 cfs).--June 6 (8:30 p.m.) 111 cfs (1.98 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Stage-discharge relation indefinite May 13 to June 24; discharge computed on basis of gage heights and 7 discharge measurements.

2170. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 4,900 ft (from topographic map).

Average discharge.--41 years, 220 cfs (159,300 acre-ft per year).

Extremes.--Maximum discharge during year, 932 cfs May 29 (gage height, 4.61 ft); minimum, 41 cfs July 16 (gage height, 1.14 ft).
1917-28: 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. Flow regulated by reservoirs and many diversions above station for irrigation. Most of flow diverted above station during irrigation season.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.1	39	3.0	419
1.5	90	4.0	716
2.0	183	4.6	928

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69	164	160	191	194	550	316	162	726	69	162	146
2	69	168	*158	187	191	516	318	181	*678	51	115	120
3	73	177	160	189	200	475	318	198	598	49	122	109
4	76	187	162	183	206	458	309	225	427	49	109	104
5	111	177	172	177	221	397	299	285	351	55	96	94
6	108	181	187	172	245	336	285	304	356	60	73	94
7	103	183	202	175	238	336	287	290	285	72	72	101
8	103	181	204	181	232	328	285	292	240	73	76	104
9	104	179	202	185	258	292	254	267	236	69	81	138
10	*101	179	204	187	306	267	258	314	256	56	84	154
11	90	181	200	196	403	276	245	369	276	55	104	150
12	91	*183	196	196	501	292	254	*461	258	55	96	158
13	94	183	196	196	498	331	254	371	247	52	90	172
14	99	183	198	191	495	341	247	338	212	55	73	191
15	108	179	200	189	467	344	256	384	194	51	64	*227
16	125	168	208	185	458	351	251	430	221	45	61	267
17	127	177	206	185	444	361	196	516	234	45	73	240
18	129	194	204	189	411	371	212	571	223	63	84	217
19	133	191	202	191	408	382	311	592	181	79	*113	206
20	158	183	206	189	408	384	302	562	156	87	113	198
21	187	172	208	183	430	387	*292	562	146	99	144	152
22	179	172	206	202	453	422	336	619	142	94	162	131
23	191	160	198	196	510	395	338	678	129	*88	154	123
24	166	160	191	200	568	348	212	713	90	99	150	131
25	164	164	194	200	601	*331	140	710	76	118	158	108
26	162	177	191	202	592	318	115	719	69	115	162	125
27	144	181	189	*204	*598	314	120	814	*69	144	148	133
28	158	172	187	202	571	324	127	890	67	137	158	137
29	154	170	191	202	-	318	141	901	67	142	127	142
30	160	164	208	202	-------	314	152	868	78	162	125	146
31	162	-------	*210	202	-------	314	-------	811	-------	154	140	-------
Total	3,898	5,290	6,000	5,929	11,107	11,173	7,430	15,397	7,288	2,542	3,489	4,518
Mean	126	176	194	191	397	360	248	497	243	82.0	113	151
Ac-ft	7,730	10,490	11,900	11,760	22,030	22,160	14,740	30,540	14,460	5,040	6,920	8,960

Calendar year 1957: Max 937 Min 34 Mean 185 Ac-ft 133,630
Water year 1957-58: Max 901 Min 45 Mean 230 Ac-ft 166,700

* Discharge measurement made on this day.

2185. Sevier Bridge Reservoir near Juab, Utah

Location.--Lat 39°22'20", long 112°01'55", in NW¼NW¼ 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 1958.

Gage.--Staff gage below gage height 60 ft and wire-weight gage above, read once daily.

Extremes.--Maximum contents observed during year, 134,400 acre-ft Apr. 17 (gage height, 67.9 ft); minimum observed, 25,790 acre-ft Aug. 26-28 (gage height, 33.2 ft).
1914-58: Maximum contents, 251,000 acre-ft Apr. 19, 20, 1922 (gage height, 80.0 ft), from former capacity table; no storage at times in 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 (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.

Capacity table, water year 1957-58 (gage height, in feet, and usable contents, in acre-feet)

33	25,420	50	64,600
35	29,150	60	95,600
40	39,500	70	148,400
45	51,390		

Usable contents, in acre-feet, at 8 a.m., water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41,350	48,190	59,140	70,560	82,040	104,400	126,500	124,800	91,430	63,210	38,000	27,080
2	41,570	48,670	59,410	70,850	82,660	105,800	127,100	123,100	91,770	-	37,780	27,450
3	-	48,910	59,950	71,440	82,980	106,600	-	120,900	92,100	59,680	37,120	27,640
4	41,570	49,160	60,220	71,440	83,300	107,500	128,300	119,300	92,450	58,080	36,480	-
5	41,570	49,660	60,490	71,730	83,620	108,400	128,800	117,700	92,100	57,030	36,050	28,210
6	41,350	49,900	60,760	72,020	84,250	108,900	128,800	115,700	91,430	55,980	35,410	28,400
7	41,570	50,400	61,300	72,610	84,880	109,800	128,800	113,600	91,430	54,430	34,780	28,580
8	41,570	50,890	61,840	72,900	85,200	110,300	130,100	112,600	91,100	52,910	34,160	-
9	41,570	51,390	62,110	73,200	85,520	110,800	130,100	110,300	90,430	51,140	33,530	28,400
10	41,800	51,640	62,380	73,500	86,490	111,200	130,700	108,000	90,090	49,660	33,120	28,210
11	41,800	51,890	62,660	74,090	87,130	111,700	131,300	106,200	-	48,190	32,710	28,020
12	41,800	52,400	63,210	74,390	87,780	112,600	131,900	104,400	88,750	46,730	32,310	27,830
13	42,030	52,910	63,480	74,690	88,430	113,100	132,500	104,000	88,100	44,830	31,910	-
14	42,030	53,410	64,030	74,990	89,420	113,600	133,100	103,600	-	44,360	31,500	27,640
15	42,260	53,670	64,310	75,290	90,760	114,100	133,800	103,200	87,780	43,650	31,100	27,830
16	42,490	53,920	-	75,590	91,430	114,600	133,800	102,700	87,460	43,190	30,320	28,020
17	42,960	54,430	-	76,190	92,450	115,700	134,400	101,900	86,490	42,490	29,930	28,400
18	43,190	54,690	65,710	76,490	93,510	116,200	-	101,100	85,200	41,800	29,350	28,400
19	43,650	54,950	65,990	77,100	94,220	116,700	133,800	100,700	-	41,120	28,960	28,770
20	43,890	55,730	66,550	77,100	94,930	117,700	133,100	99,860	-	40,890	28,400	29,150
21	44,120	-	66,830	77,410	95,630	118,800	132,500	98,690	80,790	40,670	27,830	29,540
22	44,590	56,500	67,390	78,020	96,780	119,300	132,500	97,920	79,550	40,440	27,450	29,930
23	45,070	56,760	67,680	78,320	97,920	119,800	132,500	97,160	78,020	-	26,890	-
24	44,540	57,030	67,970	78,930	98,690	120,900	131,900	96,020	76,490	40,220	26,530	30,320
25	45,780	57,290	68,250	79,240	99,860	122,000	131,300	94,930	74,990	39,760	25,980	30,520
26	46,250	57,820	68,830	79,550	101,100	122,000	130,700	93,870	72,900	39,540	25,790	30,710
27	46,490	58,080	69,120	80,170	102,300	123,100	129,500	92,810	71,140	39,320	25,790	31,100
28	46,730	58,350	69,400	80,480	103,600	123,100	128,300	92,100	68,830	39,100	25,790	31,300
29	47,220	58,610	69,690	80,790	-	124,200	127,100	91,430	-	-	26,160	31,710
30	47,460	58,870	69,980	81,420	-------	124,800	125,400	91,100	64,860	38,440	26,530	31,910
31	47,700	-------	70,260	81,730	-------	125,400	-------	90,760	-------	38,220	26,890	-------
(†)	43.5	47.9	52.0	55.8	62.0	66.4	66.4	58.6	50.1	39.4	33.8	36.4
(‡)	+6,580	+11,170	+11,390	+11,470	+21,870	+21,800	0	-34,640	-25,900	-26,640	-11,330	+5,020

Calendar year 1957..... ‡ +50,380
Water year 1957-58..... ‡ -9,210

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

2190. Sevier River near Juab, Utah

Location (revised).--Lat 39°22'30", long 112°02'20", in SE¼ sec. 35, T. 16 S., R. 2 W., on left bank half a mile downstream from Sevier Bridge Dam and 12 miles southwest of Juab.

Drainage area.--5,120 sq mi, approximately.

Records available.--September 1911 to September 1958.

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.--47 years, 240 cfs (173,800 acre-ft per year).

Extremes.--Maximum discharge during year, 1,380 cfs May 8 (gage height, 5.19 ft); minimum not determined, occurred during period of no gage-height record.
1911-58: Maximum discharge, 2,140 cfs June 2, 1922 (gage height, 8.50 ft); practically no flow at times when reservoir gates were 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 tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to June 2, Sept. 7-30				June 3 to Sept. 6			
1.0	9.9	3.0	579	1.2	34	3.0	530
1.2	45	4.0	914	1.6	128	4.0	860
1.5	116	5.0	1,300	2.0	238	4.7	1,100
2.0	260	5.2	1,380				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5							921	572	874	348	
2	3.5			(*)				1,020	*475	870	412	
3	72							1,060	476	874	432	
4	108							1,060	548	730	398	3.1
5	90		(*)					1,170	545	600	371	
6	56							1,230	521	671	368	
7	56							1,240	497	685	368	71
8	*56							*1,310	497	864	366	163
9	54						3.5	1,370	497	864	366	200
10	51							1,340	503	856	316	215
11	51							1,290	509	853	284	215
12	27							982	515	825	284	212
13								658	426	534	308	209
14		(*)						596	360	377	374	154
15		3.3	3.5	3.5	3.5	3.5		698	363	389	392	124
16								795	576	392	392	124
17							144	856	842	389	337	124
18							344	900	912	383	*305	*124
19							347	984	902	300	302	43
20							353	1,040	860	149	374	
21	3.3						443	1,030	881	144	421	
22							471	1,030	902	144	418	
23							385	1,130	888	*203	418	
24						(*)	*430	1,250	*874	250	354	
25							530	1,270	937	250	290	3.1
26							579	1,270	1,010	247	244	
27					(*)		642	1,160	1,060	244	157	
28							685	1,060	1,080	241	33	
29				(*)	-		792	1,060	1,070	279		
30					-------		866	1,060	954	305	3.1	
31		-------			-------		-------	765	-------	308		-------
Total	690.7	99.0	108.5	108.5	98.0	108.5	7,067.0	32,605	21,052	15,094	9,441.3	2,030.7
Mean	22.3	3.3	3.5	3.5	3.5	3.5	236	1,052	702	487	305	67.7
Ac-ft	1,370	196	215	215	194	215	14,020	64,670	41,760	29,940	18,730	4,030

Calendar year 1957: Max 907 Min - Mean 122 Ac-ft 88,050
Water year 1957-58: Max 1,370 Min - Mean 242 Ac-ft 175,600

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 1, 2, Oct. 13 to Apr. 16, Aug. 29 to Sept. 6, Sept. 20-30; discharge estimated on basis of 6 discharge measurements, weather records, and water commissioner's notes.

2240. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 4,660 ft (by barometer).

Average discharge.--20 years (1914-19, 1943-58), 207 cfs (149,900 acre-ft per year).

Extremes.--Maximum discharge during year, 1,010 cfs May 11 (gage height, 6.89 ft); minimum, 5.2 cfs Nov. 25 (gage height, 1.79 ft), result of freezeup.
1914-19, 1942-58: Maximum daily discharge, 1,820 cfs June 9, 1914, based on records at Leamington; minimum, that of Nov. 25, 1957.

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. 133). Several diversions for irrigation between reservoir and station. Records of chemical analyses and water temperatures for the water year 1958 are given in WSP 1574.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Mar. 21 to Apr. 25, Aug. 14-21)

2.0	11	3.0	90	5.0	474
2.2	19	3.5	157	6.0	748
2.5	38	4.0	242	7.0	1,050

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	40	14	34	13	37	46	783	702	783	325	46
2	29	40	14	*b41	12	16	54	809	*464	660	343	39
3	25	46	14	b42	12	14	56	881	416	546	410	34
4	27	46	14	b41	13	13	56	941	355	561	448	33
5	58	44	*14	b44	15	12	56	947	348	581	428	32
6	105	42	14	b44	14	12	55	938	348	449	364	30
7	*97	34	14	b44	14	12	57	896	338	317	357	29
8	76	21	12	b44	12	13	60	*887	309	364	357	40
9	75	16	12	b44	30	12	59	887	301	376	357	79
10	73	15	11	b44	49	12	56	968	301	559	355	170
11	73	16	14	b44	47	12	55	1,000	303	565	338	205
12	80	15	b35	b35	46	12	51	971	294	597	292	223
13	62	14	42	b20	48	19	47	845	283	616	272	229
14	55	15	48	b15	46	20	46	487	262	686	275	221
15	40	*14	50	b15	46	20	46	379	174	483	312	212
16	39	14	53	b15	46	22	41	416	154	342	360	162
17	37	13	47	b15	45	22	46	613	230	352	364	*156
18	38	26	34	b15	46	22	48	594	523	357	348	150
19	41	43	38	b15	47	20	216	566	671	354	*312	136
20	42	30	40	b15	47	20	334	632	677	359	307	135
21	45	15	39	14	47	40	352	694	627	190	329	86
22	46	14	36	15	46	51	396	708	596	190	403	61
23	43	14	30	16	47	52	*461	708	629	*193	400	59
24	43	13	b35	16	43	*50	443	725	*624	203	398	56
25	41	12	b35	14	44	50	413	792	618	270	381	53
26	40	12	b33	15	46	50	505	860	629	270	292	51
27	40	12	b36	15	42	50	566	887	711	270	268	48
28	41	14	b36	16	*42	51	602	851	751	272	216	46
29	43	15	b36	14	-	40	660	745	794	275	150	44
30	40	13	37	*14	-------	48	702	711	803	281	97	40
31	40	-------	40	14	-------	48	-------	774	-------	318	59	-------
Total	1,570	678	927	789	1,005	872	6,585	23,895	14,235	12,639	9,917	2,905
Mean	50.6	22.6	29.9	25.5	35.9	28.1	220	771	474	408	320	96.8
Ac-ft	3,110	1,340	1,840	1,560	1,990	1,730	13,060	47,400	28,230	25,070	19,670	5,760

Calendar year 1957: Max 698 Min 11 Mean 116 Ac-ft 84,270
Water year 1957-58: Max 1,000 Min 11 Mean 208 Ac-ft 150,800

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record July 3-22; discharge estimated on basis of records for station near Juab and records of diversion between stations near Juab and Lynndyl.

2325. 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 2¼ miles downstream from South Fork.

Drainage area.--60 sq mi, approximately.

Records available.--May to July 1914, March 1944 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 5,180 ft (by barometer). May to July 1914, staff gage at site 1¼ miles upstream at different datum.

Average discharge.--14 years (1944-58), 33.4 cfs (24,180 acre-ft per year).

Extremes.--Maximum discharge during year, 258 cfs May 11; minimum daily, 9.1 cfs Jan. 23. 1914, 1944-58: Maximum discharge, 509 cfs May 4, 1952; minimum daily, 4.4 cfs Nov. 21, 1956.

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 diversion above station for irrigation.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	13	11	10	10	21	23	86	118	25	16	12
2	12	14	11	*11	11	21	23	100	109	24	16	11
3	13	15	11	10	11	19	23	119	*101	23	15	11
4	15	12	11	10	11	18	23	145	94	23	15	11
5	13	13	*11	9.7	13	18	23	174	88	22	15	12
6	13	13	11	10	12	17	22	203	84	21	15	11
7	13	13	11	10	12	17	23	219	81	20	15	11
8	*13	13	11	10	12	17	24	*215	73	20	15	11
9	12	13	11	10	12	17	24	207	66	19	15	11
10	12	13	11	10	12	17	24	214	63	19	15	11
11	13	13	11	10	12	17	25	229	59	18	15	10
12	14	13	11	10	12	17	26	217	56	18	15	13
13	13	13	11	11	12	16	27	188	53	18	15	13
14	14	*13	11	11	12	16	32	162	49	18	14	12
15	13	13	11	11	12	16	40	148	46	18	14	11
16	13	13	12	11	12	17	56	151	44	18	14	11
17	13	13	12	10	13	17	76	170	42	19	14	*10
18	13	12	12	11	13	17	106	201	40	18	*14	11
19	14	13	12	11	14	17	128	224	38	18	14	10
20	15	12	12	9.5	16	18	150	236	35	18	14	10
21	15	12	12	11	17	20	143	245	35	18	14	10
22	15	9.7	12	11	18	21	150	*252	34	18	15	10
23	14	11	9.5	9.1	22	22	*136	245	32	*18	14	10
24	14	12	11	11	23	*22	115	233	*31	18	13	11
25	13	12	12	11	25	22	97	221	31	17	13	11
26	13	12	11	11	23	22	86	*208	29	17	12	11
27	14	11	11	11	*23	22	84	197	28	17	13	11
28	14	11	11	11	22	23	84	178	28	17	13	11
29	13	10	11	11	-	22	81	159	27	17	13	11
30	13	9.7	11	*11	-------	21	81	145	27	16	13	11
31	13	-------	10	11	-------	23	-------	129	-------	16	12	-------
Total	414	370.4	346.5	325.3	417	590	1,935	5,820	1,641	586	440	330
Mean	13.4	12.3	11.2	10.5	14.9	19.0	64.5	188	54.7	18.9	14.2	11.0
Ac-ft	821	735	687	645	827	1,170	3,840	11,540	3,250	1,160	873	655

Calendar year 1957: Max 341 Min 6.0 Mean 46.6 Ac-ft 33,740
Water year 1957-58: Max 252 Min 9.1 Mean 36.2 Ac-ft 26,200

* Discharge measurement or observation of no flow made on this day.

Note.--No gage-height record July 21, 22, July 25 to Aug. 17; discharge estimated on basis of recorded range in stage and records for nearby streams.

2340. 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 1958.

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.--11 years, 11.0 cfs (7,960 acre-ft per year).

Extremes.--Maximum discharge during year, 133 cfs May 31 (gage height, 3.28 ft); minimum recorded, 3.1 cfs Dec. 23, but may have been less during periods of ice effect or no gage-height record.

1947-58: Maximum discharge, 290 cfs Aug. 9, 1947 (gage height, 4.35 ft, site and datum then in use), from rating curve extended above 160 cfs on basis of slope-area measurement of peak flow; minimum daily, 0.1 cfs May 6, 9, 10, 1955, when gates of Three Creeks Dam were closed.

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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	3.0	2.5	58
1.5	6.7	3.0	104
1.8	16	3.1	114
2.1	31		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.7	7.5	b5.8	4.8				13	108	26	12	7.7
2	8.0	7.5	b5.8	4.6				15	112	28	12	7.5
3	8.0	7.2	b5.8	4.6				18	108	43	12	7.7
4	8.0	7.5	*b5.7	4.6				24	101	48	10	8.8
5	7.7	7.2	b5.7	4.4				28	96	47	10	8.5
6	7.7	7.0	b5.7					31	92	46	10	8.5
7	7.5	b7.0	5.6					34	82	53	10	8.3
8	7.5	b6.8	5.6		4.2		4.5	39	75	67	11	8.5
9	7.5	b6.8	5.4					41	71	*66	12	8.3
10	7.5	b6.7	5.2					45	65	65	11	8.0
11	8.8	6.7	5.2	4.5				48	55	62	10	8.0
12	8.5	b6.6	5.2					48	*58	54	9.6	11
13	8.0	b6.6	5.2					45	52	53	9.9	12
14	8.0	b6.6	5.2					40	46	56	*10	8.5
15	8.3	b6.6	5.2				5.5	37	47	66	11	8.3
16	8.3	b6.6	5.2			4.5	6.5	38	44	65	10	8.0
17	*7.7	b6.6	5.2				b9.0	42	41	66	11	7.7
18	7.7	b6.6	5.0				b11	48	40	71	9.3	7.7
19	7.5	b6.4	4.8				b13	56	34	76	9.0	7.5
20	8.8	b6.3	5.2				15	37	35	76	8.8	7.5
21	8.0	6.0	5.2				18	23	35	75	8.8	7.5
22	7.7	b5.8	5.0		4.5		22	25	35	75	8.8	7.5
23	7.7	b5.7	4.6				22	27	35	72	8.5	*7.5
24	7.7	b5.6	5.0	4.2			16	28	34	81	8.3	7.7
25	7.7	b5.6	5.0	(*)			*13	30	33	80	8.0	7.5
26	7.7	b5.6	5.0				13	31	31	65	8.0	7.0
27	8.0	b5.6	4.8				14	31	30	28	8.3	7.0
28	7.7	b5.6	4.8				14	24	28	12	9.0	7.2
29	7.7	5.6	4.8		-		12	22	28	12	8.3	7.2
30	7.5	b5.7	4.8		-------		12	26	27	12	8.0	7.0
31	7.7	-------	4.6		-------		-------	80	-------	12	7.7	-------
Total	243.8	193.6	161.3	135.2	121.5	139.5	279.0	1,074	1,678	1,658	300.3	241.1
Mean	7.86	6.45	5.20	4.36	4.34	4.50	9.30	34.6	55.9	53.5	9.69	8.04
Ac-ft	484	384	320	268	241	277	553	2,130	3,330	3,290	596	478

Calendar year 1957: Max 145 Min 0.9 Mean 17.6 Ac-ft 12,710
Water year 1957-58: Max 112 Min - Mean 17.1 Ac-ft 12,350

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Jan. 6 to Apr. 15; discharge estimated on basis of 1 discharge measurement, weather records, and records for stations on Beaver River.

2345. 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 4½ miles east of Beaver.

Drainage area.--82 sq mi, approximately.

Records available.--June to September 1906, March 1914 to September 1958.

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.--44 years (1914-58), 54.8 cfs (39,670 acre-ft per year).

Extremes.--Maximum discharge during year, 606 cfs May 27 (gage height, 3.98 ft); minimum daily, 14 cfs Nov. 27.
1914-58: 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 several days in 1915, 1931, 1934.

Remarks.--Records good except those for periods of ice effect or indefinite stage-discharge relation, 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 tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 10-16, May 4 to Aug. 7)

Oct. 1 to Apr. 24				Apr. 25 to Sept. 30			
2.1	12	2.6	64	2.1	19	3.0	163
2.2	18	2.9	124	2.3	37	3.5	313
2.3	26			2.6	79	4.0	507

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	31	b23	b21	b19	b20	24	84	372	103	39	29
2	26	30	24	b21	19	b20	23	93	368	107	42	30
3	28	30	b24	21	19	b20	23	107	342	124	43	31
4	29	24	24	b21	19	b20	23	144	324	124	38	32
5	29	31	*25	b21	20	b20	*22	166	313	124	37	32
6	28	31	26	b21	19	19	21	186	331	117	36	31
7	24	*27	24	b21	19	19	22	195	324	124	37	31
8	23	24	24	b21	19	19	*23	192	286	126	41	31
9	24	27	24	22	19	b19	24	244	257	*135	52	28
10	24	24	23	b22	19	b19	23	244	241	132	39	28
11	27	26	23	b22	19	20	24	235	*217	128	37	26
12	33	27	23	b21	19	19	24	209	206	117	37	44
13	28	24	24	b21	19	b19	24	186	186	113	37	37
14	28	28	24	b21	20	19	32	*171	176	113	*38	35
15	26	*24	23	b21	19	19	49	176	176	121	35	35
16	30	27	26	b21	20	19	61	206	171	117	37	34
17	*31	22	24	b20	20	18	82	244	166	113	36	32
18	24	b23	24	20	22	20	100	293	161	109	37	33
19	29	24	b23	20	23	24	109	335	156	111	33	31
20	28	23	26	b19	24	26	109	360	151	109	33	32
21	28	b21	24	*b18	24	27	117	368	146	105	31	29
22	28	b19	24	b18	27	24	113	387	139	105	34	31
23	28	b17	b23	b18	28	24	106	419	132	105	35	*29
24	30	16	b23	19	24	24	*90	435	128	111	32	32
25	28	15	b23	19	24	24	*79	415	117	109	31	31
26	29	15	b23	19	24	23	76	415	111	99	30	31
27	29	14	b23	20	*21	23	81	507	103	71	28	28
28	29	b20	23	19	b20	24	79	467	105	49	33	28
29	28	b23	22	19	-	23	77	427	105	45	33	30
30	28	b23	21	19	-------	24	76	368	107	42	29	28
31	31	-------	b21	b19	-------	24	-------	368	-------	42	29	-------
Total	861	710	731	625	588	662	1,736	8,646	6,117	3,250	1,109	939
Mean	27.8	23.7	23.6	20.2	21.0	21.4	57.9	279	204	105	35.8	31.3
Ac-ft	1,710	1,410	1,450	1,240	1,170	1,310	3,440	17,150	12,130	6,450	2,200	1,860

Calendar year 1957: Max 656 Min 14 Mean 71.8 Ac-ft 52,020
Water year 1957-58: Max 507 Min 14 Mean 71.2 Ac-ft 51,520

Peak discharge (base, 250 cfs).--May 9 (7 p.m.) 276 cfs (2.99 ft); May 27 (9 p.m.) 606 cfs (3.98 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Stage-discharge relation indefinite Apr. 10 to June 11; discharge computed on basis of 3 discharge measurements, recorder graph, and staff-gage readings.

2370. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 6,000 ft (from topographic map). Prior to Sept. 15, 1936, water-stage recorder and Sept. 15-30, 1936, staff gage, at site 225 ft upstream at different datum. Oct. 16, 1937, to May 28, 1946, water-stage recorder at site 75 ft downstream at datum 0.50 ft higher.

Average discharge.--43 years (1914-36, 1937-58), 37.5 cfs (27,150 acre-ft per year).

Extremes.--Maximum discharge during year, 480 cfs May 28 (gage height, 3.73 ft); minimum, 3.7 cfs July 13 (gage height, 0.73 ft).
1913-36, 1937-58: Maximum discharge, 1,090 cfs July 23, 1941 (gage height, 4.68 ft, site and datum then in use), from rating curve extended above 500 cfs; no flow during summer months many years.

Remarks.--Records good except those for periods of ice effect or no gage-height record, 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 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 22 to Sept. 30)

0.9	3.2	2.2	124
1.0	6.0	2.6	190
1.2	14	3.0	270
1.4	27	4.0	509
1.8	68		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	94	b51		46	52	69	32	296	4.5	6.0	14
2	11	92	b51		49	55	61	34	257	4.8	6.0	12
3	11	110	51	45	50	53	55	43	233	4.5	17	10
4	11	114	51		56	51	60	48	213	4.5	7.5	9.3
5	13	103	*51		81	51	*56	56	179	6.8	6.4	14
6	12	98	54		69	49	49	63	176	6.7	6.4	17
7	13	87	54		57	52	49	66	176	11	6.4	18
8	13	*74	54	43	59	51	54	77	160	7.5	8.2	17
9	12	71	53		68	51	49	82	136	6.7	6.0	15
10	12	67	51		63	50	48	127	109	*6.4	7.8	12
11	16	66	49		60	49	44	150	96	4.8	5.7	14
12	22	66	49		55	50	33	152	*72	4.2	6.3	28
13	22	64	51	40	59	51	33	116	69	4.0	12	31
14	22	67	50		57	52	33	94	60	4.8	*14	23
15	24	*67	52		63	55	39	*81	42	4.2	17	22
16	25	68	56		62	74	51	82	34	4.0	31	19
17	*24	66	66		60	74	85	98	26	4.2	27	21
18	26	60	59	39	57	66	134	134	23	4.8	23	29
19	28	62	53		56	55	176	213	20	5.1	17	27
20	36	62	56		55	56	158	274	19	6.4	13	24
21	52	61	55	*b39	55	59	153	245	19	6.4	11	22
22	122	56	52	b39	60	57	150	274	11	6.4	13	22
23	96	b52	50	40	68	56	128	326	9.7	6.4	16	*18
24	89	b50	48	40	69	56	92	372	14	6.4	14	17
25	63	b48	47	41	64	52	62	396	11	6.4	12	19
26	60	b48	46	44	66	49	43	398	7.8	6.4	12	20
27	60	48		48	*60	51	39	444	6.0	6.4	14	22
28	60	48		49	53	57	39	450	5.7	6.7	24	25
29	57	b49	45	48	-	62	40	418	5.7	6.4	23	34
30	55	b51		49	-------	55	39	351	5.1	5.1	20	27
31	63	-------		47	-------	62	-------	305	-------	4.2	18	-------
Total	1,122	2,069	1,585	1,319	1,677	1,713	2,121	6,001	2,491.0	177.1	420.7	602.3
Mean	36.2	69.0	51.1	42.5	59.9	55.3	70.7	194	83.0	5.71	13.6	20.1
Ac-ft	2,230	4,100	3,140	2,620	3,330	3,400	4,210	11,900	4,940	351	834	1,190

Calendar year 1957: Max 655 Min 0.9 Mean 56.8 Ac-ft 41,090
Water year 1957-58: Max 450 Min 4.0 Mean 58.4 Ac-ft 42,240

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Dec. 22 to Jan. 20, Jan. 23, 24; discharge estimated on basis of observer's notes, recorded range in stage, weather records, and records for Beaver River near Beaver.

2385. 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 1958.

Gage.--Staff gage.

Extremes.--Maximum contents observed during year, 21,060 acre-ft Mar. 30 (gage height, 49.0 ft); minimum observed, 4,500 acre-ft Sept. 23 (gage height, 25.0 ft).
1937-58: Maximum contents observed, 23,810 acre-ft Apr. 22, 25, 28, 30, May 1, 1945; no contents Oct. 16, 31, 1939, and part of August to November 1956.

Remarks.--Reservoir is formed by earth-fill dam completed in 1914. Capacity, 23,260 acre-ft between gage height 0.0 (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.

Capacity table, water year 1957-58 (gage height, in feet, and usable contents, in acre-feet)

25	4,500	40	13,110
30	6,720	45	17,280
35	9,590	50	22,160

Usable contents, in acre-feet, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	9,250	-	14,890	-	-	-	-	-	-	-	-
2	-	9,320	12,540	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	12,950	15,290	-	-	20,690	-	-	-	8,420	-
6	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	20,970	-	-	-	-	-
8	-	10,470	13,190	-	17,280	-	-	-	19,180	14,320	-	-
9	-	-	-	-	-	19,550	-	-	-	-	-	-
10	-	10,810	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	7,380	-
15	7,380	-	-	-	-	-	-	15,130	-	-	-	-
16	-	11,150	-	-	-	20,030	-	-	-	-	-	-
17	7,540	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	15,770	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	19,360	-	-	-	-	-
21	-	-	14,080	15,770	-	-	-	-	-	-	-	-
22	-	-	-	-	18,510	-	-	-	-	-	-	-
23	-	12,100	-	-	-	20,500	-	-	-	-	-	4,500
24	-	-	-	-	-	-	-	-	-	-	6,990	-
25	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	18,800	-	18,230	-	-	9,720	-	-
28	-	-	14,800	-	a18,930	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-
30	-	a12,440	-	16,530	-------	21,060	a17,710	16,810	a15,620	-	-	a4,540
31	a9,140	-------	a14,870	a16,610	-------	a21,000	-------	a17,070	-------	a9,140	5,210	-------
(†)	-	-	-	-	-	-	-	-	-	-	26.7	-
(‡)	+1,160	+3,300	+2,430	+1,740	+2,320	+2,070	-3,290	-640	-1,450	-6,480	-3,930	-670

Calendar year 1957..... ‡ +10,950
Water year 1957-58..... ‡ -3,440

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

2390. 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 1958.
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.--43 years (1914-36, 1937-58), 39.3 cfs (28,450 acre-ft per year).
Extremes.--Maximum daily discharge during year, 212 cfs May 29; minimum daily, 6.3 cfs Oct. 25-28.
1913-58: Maximum discharge, 727 cfs June 10, 1921 (gage height, 3.53 ft); minimum daily, 0.4 cfs Mar. 20, 1914.
Revisions.--The maximum discharge recorded for the water year 1920 has been revised to 548 cfs June 1, 1920 (gage height, 3.12 ft), superseding figure published in WSP 510.
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.
Revisions.--Revised figures of discharge, in cubic feet per second, for periods in the water years 1920 and 1924, superseding those published in WSP 510 and 590, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1920		1920-Con.		1920-Con.		1924-Con.		1924-Con.	
June 1	510	June 13	68	June 25	64	May 8	94	May 20	94
2	504	14	68	26	71	9	94	21	94
3	441	15	68	27	71	10	94	22	94
4	333	16	68	28	57	11	94	23	104
5	276	17	68	29	57	12	94	24	107
6	188	18	68	30	56	13	94	25	107
7	188	19	68			14	94	26	107
8	188	20	57	1924		15	94	27	107
9	166	21	44	May 4	75	16	94	28	84
10	90	22	56	5	81	17	94	29	76
11	68	23	64	6	94	18	94	30	76
12	68	24	64	7	94	19	94	31	76

Month	Maximum	Minimum	Mean	Runoff in acre-feet
June 1920	510	44	139	8,250
Water year 1919-20	510	5	39.2	28,500
May 1924	107	73	90.9	5,590
Water year 1923-24	107	7	40.6	29,500

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used June 15 to Sept. 30)

0.8	6.3	1.1	31	1.8	144
.9	12	1.4	72	2.2	235

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	6.9	7.5	8.1	10	12	34	169	205	161	100	114
2	31	6.9	7.5	8.1	10	13	46	138	122	159	93	114
3	31	6.9	7.5	8.1	10	13	46	136	107	159	91	105
4	31	6.9	7.5	8.1	10	13	46	136	95	159	88	90
5	32	6.9	*6.9	8.7	11	13	*57	144	95	146	85	64
6	36	6.9	6.9	8.7	11	13	75	189	116	136	83	39
7	35	6.9	6.9	8.7	11	13	83	198	116	126	80	44
8	35	*6.9	6.9	8.7	11	13	83	198	118	107	82	49
9	39	6.9	6.9	8.7	11	13	93	198	120	*111	80	44
10	57	6.9	6.9	9.3	11	14	113	198	122	128	80	44
11	66	6.9	6.9	9.3	11	14	120	198	122	138	80	46
12	58	6.9	6.9	9.3	11	14	130	196	*124	144	83	46
13	47	6.9	6.9	9.3	11	14	128	196	124	146	91	46
14	47	6.9	6.9	9.3	11	14	130	196	118	144	*91	46
15	25	6.9	6.9	9.3	11	14	130	*182	113	138	91	38
16	7.5	6.9	6.9	9.3	11	14	130	159	102	136	90	21
17	*6.9	6.9	8.1	9.3	11	14	138	176	98	136	90	18
18	6.9	6.9	7.5	9.9	11	15	157	196	107	136	88	18
19	6.9	6.9	8.1	9.9	12	15	157	198	114	138	90	17
20	6.9	6.9	7.5	9.9	12	15	157	201	114	138	91	16
21	7.5	6.9	8.1	*9.9	12	15	167	203	114	138	93	17
22	6.9	6.9	7.5	9.9	12	16	189	203	116	132	95	17
23	6.9	6.9	8.1	9.9	12	16	194	205	118	120	95	*18
24	6.9	6.9	7.5	9.9	12	16	194	205	124	116	93	30
25	6.3	6.9	8.1	9.9	13	16	192	208	136	118	91	37
26	6.3	6.9	8.1	9.9	13	16	192	208	138	116	95	37
27	6.3	7.5	7.5	9.9	*12	16	192	208	138	114	109	37
28	6.3	7.5	8.1	9.9	12	16	189	210	148	116	116	37
29	6.9	7.5	8.1	9.9	-	16	189	212	150	111	114	37
30	6.9	7.5	8.1	9.9	-------	16	189	210	154	102	114	37
31	6.9	-------	8.1	10	-------	16	-------	208	-------	103	114	-------
Total	711.2	209.4	231.3	289.0	316	448	3,940	5,882	3,686	4,072	2,876	1,321
Mean	22.9	6.98	7.46	9.32	11.3	14.5	131	190	123	131	92.8	44.0
Ac-ft	1,410	415	459	573	627	889	7,810	11,670	7,310	8,080	5,700	2,620

Calendar year 1957: Max 124 Min 3.3 Mean 37.1 Ac-ft 26,870
Water year 1957-58: Max 212 Min 6.3 Mean 85.7 Ac-ft 47,580

* Discharge measurement made on this day.

2418. Ashdown Creek near Cedar City, Utah

Location.--Lat 37°38'15", long 112°54'15", in SW¼ sec.29, T.36 S., R.9 W., on right bank 0.8 mile upstream from Rattlesnake Creek, 2.2 miles upstream from mouth, and 8 miles southeast of Cedar City.

Records available.--January 1957 to September 1958.

Extremes.--1957: Maximum discharge during period January to September, 131 cfs Aug. 23 (gage height, 1.79 ft); minimum not determined, occurred during period of fragmentary gage-height record.

1957-58: Maximum discharge during water year, 228 cfs Sept. 12, from rating curve extended above 85 cfs by logarithmic plotting; maximum gage height, 3.12 ft Sept. 28; minimum discharge not determined, probably occurred during period of ice effect or no gage-height record.

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

Rating table, Jan. 14, 1957, to Sept. 30, 1958, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 14 to May 25, 1957, June 11-16, Sept. 26-28, 1958)

0	1.8	0.5	20
.1	3.6	1.0	54
.2	6.5	1.5	102

Discharge, in cubic feet per second, January to September 1957

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					f3.1	f5.8	f10	41	68	25	8.5	5.8
2					f3.1	f5.5	f9.7	38	f61	23	8.5	5.6
3					f3.1	f5.2	f6.9	45	f80	21	8.5	5.5
4					f2.9	f4.9	f8.1	37		20	8.9	5.5
5					f2.9	f4.4	f10	45		18	8.9	5.5
6					f2.9	f4.9	f15	49		18	8.5	5.5
7				a3.0	f3.1	f9.7	f14	52	a63	17	7.7	5.2
8					f3.1	f15	f18	46		15	7.7	5.2
9					f3.6	f12	f21	*47		17	7.7	5.2
10					f3.4	f9.3	f30	32		16	7.7	5.2
11					f3.8	f10	*f28	21		15	7.7	4.9
12					f5.8	f8.9	28	18	*a75	13	8.1	5.2
13					f8.1	f6.9	32	16	73	13	8.1	5.2
14				*3.1	f14	b6.9	32	24	72	12	9.3	4.4
15				2.9	f12	b6.9	32	22	71	12	8.5	4.4
16				3.1	f10	f6.9	29	26	63	11	7.7	4.4
17				b3.1	f9.3	f5.5	28	28	61	13	7.3	4.4
18				b3.1	f7.3	f5.5	20	35	64	12	7.3	4.4
19				b3.1	f5.2	f6.9	17	58	65	*11	f6.9	4.4
20				b3.1	f4.6	f8.5	16	34	63	10	f7.3	4.4
21				3.6	f4.4	f9.3	14	28	60	10	9.3	4.4
22				b3.1	f4.4	f7.7	10	25	*54	10	f6.9	4.4
23				3.1	f4.6	f7.7	17	24	49	9.7	f12	4.4
24				3.1	f4.9	f10	19	20	45	9.7	*7.3	4.1
25				3.1	f5.5	f9.3	18	34	43	10	6.9	4.1
26				3.1	f6.9	f10	19	43	40	9.7	6.5	4.1
27				3.4	f8.9	f12	24	47	38	9.3	6.2	4.1
28				f3.1	f8.1	f17	22	58	36	9.3	6.5	4.1
29				f3.4	-	f15	25	57	32	9.3	8.5	4.1
30				f3.1	-------	f15	30	54	28	8.3	6.5	4.1
31		-------		f3.1	-------	f11	-------	60	--------	8.9	6.2	-------
Total				95.7	159.0	273.6	602.7	1,164	1,725	416.8	243.6	142.4
Mean				3.09	5.68	8.83	20.1	37.5	57.5	13.4	7.86	7.75
Ac-ft				190	315	543	1,200	2,310	3,420	827	483	282

Calendar year 1956 :	Max	Min	Mean	Ac-ft
Water year 1956-57 :	Max	Min	Mean	Ac-ft

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 1 discharge measurement and records for nearby streams.
b Stage-discharge relation affected by ice.
f Fragmentary gage-height record; discharge computed from partly estimated gage height.

2418. Ashdown Creek near Cedar City, Utah--Continued

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.1	9.3		b4.9		4.5	7.7	32	87	14	7.3	4.4
2	4.4	8.1		b4.9		5.4	b6.9	35	86	*14	7.3	4.4
3	*4.4	6.5				6.0	6.5	44	84	13	6.9	5.2
4	4.1		5.5			6.0	b7.3	49	76	13	6.5	4.6
5	3.8					6.0	b8.1	58	77	13	6.5	10
6	3.8					6.0	b8.1	63	81	13	7.7	4.6
7	3.8		5.2			6.0	7.3	61	77	12	7.3	4.1
8	3.8		5.2		4.9	6.0	6.9	60	66	12	6.9	6.9
9	3.8					6.0	6.2	68	54	12	6.5	4.4
10	3.8					6.0	b8.5	72	48	11	6.9	3.8
11	9.8		b5.2			6.0	12	68	*44	*11	6.2	3.4
12	6.5					6.0	15	54	40	10	6.2	39
13	5.2					5.6	17	43	38	10	9.5	33
14	5.8	b6	5.2			5.2	20	43	34	10	7.7	
15	6.2		5.5		6.0	5.0	25	49	32	9.7	6.9	
16	8.1		5.8	4.9	8.0	4.5	*34	61	31	9.7	9.9	
17	6.2		5.5		11	4.2	47	72	30	9.7	7.2	
18	8.9		5.5		12	4.2	50	76	29	9.3	3.8	
19	7.7		b5.2		13	4.5	53	90	28	8.9	3.8	
20	15		b5.2		14	4.5	51	90	27	8.9	11	4.6
21	11		5.2		15	5.0	58	94	25	8.9	8.2	
22	9.3		4.9		18	5.0	54	96	25	8.5	*6.5	
23	14				15	5.0	35	93	23	10	5.5	
24	14				14	5.0	29	95	21	10	5.2	
25	10		4.9		8.9	5.0	26	99	20	8.9	4.9	
26	7.7				6.9	6.0	31	94	18	8.5	4.9	*4.6
27	8.5	5.5			b6.0	8.0	30	95	17	8.1	6.8	4.6
28	8.1		4.9		b4.5	8.0	35	95	17	8.1	7.2	18
29	7.7	(*)	4.9		-	8.0	32	99	16	7.7	4.9	9.0
30	6.5	5.5	b4.9		-------	8.0	28	92	15	7.7	4.6	4.6
31	6.5	-------	b4.9		-------	8.0	-------	89	-------	7.7	4.4	-------
Total	222.5	183.4	161.5	151.9	220.9	178.6	755.5	2,229	1,266	318.3	205.1	223.8
Mean	7.18	6.11	5.21	4.90	7.89	5.76	25.2	71.9	42.2	10.3	6.62	7.46
Ac-ft	441	364	320	301	438	354	1,500	4,420	2,510	631	407	444

Calendar year 1957: Max 75 Min 2.9 Mean 14.8 Ac-ft 10,700
Water year 1957-58: Max 99 Min 3.4 Mean 16.8 Ac-ft 12,130

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Nov. 30 to Dec. 6, Jan. 3 to Feb. 20, Mar. 1-31, Apr. 11-15, Sept. 14-25, 29, 30; discharge estimated on basis of weather records and records for nearby streams.

2420. 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.

Drainage area.--79 sq mi, approximately.

Records available.--May 1915 to November 1919, May 1935 to September 1958. 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 and concrete control. 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.--22 years (1935-37, 1938-58), 32.2 cfs (23,310 acre-ft per year).

Extremes.--Maximum discharge during year, 2,360 cfs Sept. 12 (gage height, 4.3 ft, from floodmark), from rating curve extended above 330 cfs by logarithmic plotting; minimum, 0.5 cfs Dec. 31.

1935-58: 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, 0.4 cfs Dec. 17, 1954, result of freezeup.

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

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 28 to May 2, May 4-19)

1.0	4.0	1.4	43	1.7	133
1.1	8.4	1.5	60	1.9	261
1.2	16	1.6	88	2.5	751

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.4	21	11	11	8.9	10	16	80	220	31	15	12
2	8.4	24	12	13	10	12	16	*98	199	30	15	12
3	9.0	21	9.7	*10	9.7	12	16	145	174	28	14	16
4	*9.0	21	12	8.3	11	12	15	145	133	27	14	14
5	9.0	21	*13	8.3	10	12	14	180	114	27	13	22
6	9.0	19	12	10	10	a12	15	157	123	27	14	15
7	8.4	*20	a12	10	9.7	a12	16	157	*114	26	14	12
8	8.4	21	a12	10	10	a12	16	199	110	24	16	16
9	9.0	20	a12	10	11	a12	16	192	101	23	15	15
10	9.0	21	12	11	10	a12	16	332	105	*21	14	12
11	16	21	12	10	10	a12	22	264	*92	20	13	11
12	20	19	12	9.7	9.7	a12	20	254	80	19	13	f161
13	14	16	12	10	*10	a11	23	206	74	18	14	f63
14	14	16	12	9.7	9.7	a10	34	*180	66	16	20	f14
15	15	15	13	10	11	a10	45	220	62	16	16	13
16	16	16	14	10	12	8.4	46	298	60	16	20	12
17	15	14	14	10	14	8.4	68	487	58	16	24	11
18	16	11	12	10	15	8.4	69	543	57	16	18	11
19	16	16	8.4	9.7	16	9.0	77	568	55	16	15	10
20	34	12	13	9.3	16	9.0	94	507	*51	16	24	10
21	24	13	13	9.0	18	9.7	123	595	48	16	21	10
22	21	8.4	13	9.7	23	10	132	*587	46	16	*22	*10
23	22	13	9.0	9.7	22	9.7	*84	676	45	18	16	11
24	26	16	12	9.7	19	10	58	654	43	21	15	14
25	22	21	11	9.7	21	9.7	58	610	41	16	14	11
26	18	21	13	9.7	14	*12	66	491	39	16	14	11
27	19	13	12	9.7	12	16	77	393	37	16	16	11
28	19	11	13	9.0	11	16	88	329	34	15	16	f109
29	19	9.7	13	9.0	-	15	84	314	33	15	15	f20
30	18	6.5	12	9.0	-------	a16	77	299	33	15	13	11
31	20	-------	7.7	8.4	-------	a17	-------	254	-------	15	13	-------
Total	491.6	497.6	368.8	302.6	363.7	357.3	1,501	10,414	2,447	612	496	680
Mean	15.9	16.6	11.9	9.76	13.0	11.5	50.0	336	81.6	19.8	16.0	22.7
Ac-ft	975	987	732	600	721	709	2,980	20,660	4,850	1,210	984	1,350

Calendar year 1957: Max 254 Min 3.6 Mean 34.1 Ac-ft 24,660
Water year 1957-58: Max 676 Min 6.5 Mean 50.8 Ac-ft 36,760

Peak discharge (base, 350 cfs).--Apr. 22 (5:30 p.m.) 409 cfs (2.03 ft); May 11 (3 p.m.) 863 cfs 2.82 ft); May 21 (6 p.m.) 1,220 cfs (3.07 ft); Sept. 12 (12:30 p.m.) 2,360 cfs (4.3 ft); Sept. 13 (3:30 a.m.) 683 cfs (2.36 ft); Sept. 28 (6 p.m.) 442 cfs (2.07 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for nearby stations.
f Fragmentary gage-height record; discharge computed from partly estimated gage heights.

9-4085. Santa Clara-Pinto diversion near Pinto, Utah

Location.--Lat 37°28'00", long 113°28'30", 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 1958 (records of monthly diversion only). Records of daily flow collected by Geological Survey available in Salt Lake City district office.

Gage.--Water-stage recorder and artificial rock-masonry control. Altitude of gage is 6,860 ft (by barometer).

Extremes.--Maximum discharge during year, 72 cfs May 26 (gage height, 1.96 ft); no flow most of year.
1953-58: Maximum discharge, that of May 26, 1958; no flow most of each year.

Remarks.--Records good. This is a transmountain diversion from a tributary of Santa Clara River in Colorado River basin to Pinto Creek in Escalante Valley in The Great Basin.

Monthly diversion, in acre-feet, water year October 1957 to September 1958

Month	Diversion	Month	Diversion
October	0	May	2,850
November	0	June	747
December	0	July	0
January	0	August	0
February	3.4	September	0
March	17	Water year	4,150
April	532		

SALTON SEA BASIN

2540.05 Salton Sea near Westmoreland, Calif.

Location.--Lat 33°11'37", long 115°49'54", in NE¼SE¼ sec. 21, T. 11 S., R. 11 E., at outer end of third mooring pier from western shore at Sandy Beach, 15.5 miles northwest of Westmoreland. Prior to Oct. 23, 1951, at site on west shore, 22 miles northwest of present gage.

Drainage area.--8,360 sq mi, approximately.

Records available.--November 1904 to September 1958. Records prior to 1932 are published in WSP 735.

Gage.--Water-stage recorder. Datum of gage is 250.00 ft below mean sea level, datum of 1929, adjustment of 1934; gage readings have been reduced to elevations below mean sea level. Prior to January 1925 staff gages at various sites along eastern shore, but all elevations have been converted to datum of 1901. From January 1925 to Oct. 22, 1951, staff gages and reference marks at site on western shore 22 miles northwest at datum 0.91 ft lower.

Extremes.--1951-52: Maximum elevation during year, 237.9 ft below mean sea level May 12-14; minimum, 240.0 ft below mean sea level Oct. 23-25.
1952-53: Maximum elevation during year, 236.9 ft below mean sea level Apr. 3 to May 24; minimum, 238.5 ft below mean sea level Oct. 1-13.
1953-54: Maximum elevation during year, 235.6 ft below mean sea level Apr. 20-27, May 14 to June 6; minimum, 237.3 ft below mean sea level Oct. 1-6, 11, 12, 22-28.
1954-55: Maximum elevation during year, 235.1 ft below mean sea level Mar. 27 to May 25; minimum, 236.1 ft below mean sea level Oct. 1-15, Oct. 26 to Nov. 6.
1955-56: Maximum elevation during year, 234.7 ft below mean sea level Apr. 16 to May 3; minimum, 235.7 ft below mean sea level Oct. 1 to Nov. 26.
1956-57: Maximum elevation during year, 234.7 ft below mean sea level Apr. 9-17, Apr. 29 to May 6; minimum, 235.8 ft below mean sea level Nov. 2-5.
1957-58: Maximum elevation during year, 234.5 ft below mean sea level May 19-25; minimum, 235.8 ft below mean sea level Oct. 3-14.
1904-58: Maximum elevation, 195.0 ft below mean sea level (former site and datum) during February and March 1907; minimum since 1906, 250.7 ft below mean sea level (former site and datum) during November 1924.

Remarks.--Records excellent. Bottom of sea is 273.5 ft below mean sea level (determined in 1904-5). See WSP 300, 735, and 918 for condensed history of Salton Sea. Area and capacity tables as computed from survey of 1956 above elevation 240 ft below mean sea level and tied-in to former survey for portion below this elevation are given below.

Elevation (feet below mean sea level)	Area (thousands of acres)	Capacity (thousands of acre-feet)	Elevation (feet below mean sea level)	Area (thousands of acres)	Capacity (thousands of acre-feet)
273.5	0	0	258	142	1,419
273	12.0	3.0	256	148	1,709
272	30.0	24.0	254	154	2,011
271	45.0	61.5	252	161	2,326
270	58.0	113.0	250	168	2,655
269	69.5	176.8	248	175	2,998
268	80.0	251.5	246	183	3,356
267	89.7	336.4	244	191	3,730
266	98.3	430.4	242	199	4,120
265	106	532.5	240	206	4,525
264	113	642.0	235	222	5,596
262	125	880.7	230	235	6,739
260	135	1,142			

Month-end elevation, in feet, below mean sea level, October 1951 to September 1958

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1951-52	239.9	239.6	239.3	238.8	238.5	238.0	238.0	238.0	238.2	238.3	238.4	238.5
1952-53	238.3	238.2	237.8	237.4	237.3	237.0	236.9	237.0	237.0	237.0	237.3	237.3
1953-54	237.2	237.0	236.8	236.4	236.0	235.8	235.7	235.6	235.7	235.8	236.1	236.1
1954-55	236.1	235.9	235.8	235.5	235.3	235.1	235.1	235.2	235.4	235.4	235.5	235.7
1955-56	235.7	235.6	235.4	235.2	235.0	234.8	234.7	234.8	234.9	235.1	235.5	235.6
1956-57	235.7	235.6	235.5	235.2	234.9	234.8	234.7	234.9	235.0	235.3	235.6	235.7
1957-58	235.6	235.6	235.4	235.2	234.9	234.7	234.6	234.6	234.8	235.1	235.3	235.6

2557. 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 500 ft upstream from Box Canyon and 9 miles northwest of Borrego Springs.

Drainage area.--144 sq mi.

Records available.--November 1950 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 1,250 ft (from topographic map).

Average discharge.--8 years, 2.56 cfs (1,850 acre-ft per year).

Extremes.--Maximum discharge during year, about 500 cfs Aug. 13 (gage height, 10.84 ft), from rating curve extended above 3 cfs on basis of slope-area measurement at gage height 7.52 ft for peak of July 19, 1955; minimum daily recorded, 1.5 cfs Sept. 20.
1950-58: 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 measurement of peak flow; minimum daily, 1.2 cfs July 14-16, 19-24, 1956.

Remarks.--Records good except those above 3 cfs and those for periods of no gage-height record, which are poor. Discharge measurements generally made twice a month.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	1.8	1.9	2.1	2.6	1.7	22				2	
2	1.7	1.8	1.9	2.2	2.6	1.7	14				2	
3	1.7	1.8	2.0	2.2	2.7	1.7	86				2	
4	1.8	1.9	2.0	2.3	7.3	1.8	15				2	
5	1.7	2.0	2.0	2.3	2	1.7	5				1.6	1.8
6	1.7	2.0	2.0	2.3	2	2.6	2				1.6	
7	1.7	2.0	2.0	2.3	2	1.7	40				1.6	
8	1.7	2.0	2.0	2.2	2	2.0	5	1.5		1	1.6	
9	1.7	2.1	2.0	2.1	2	2.2					1.6	1.7
10	1.8	2.1	2.0	2.1	2	2.4	3				1.6	1.9
11	1.9	2.0	2.0	2.1	1.9	2.6					1.6	1.7
12	1.8	1.8	2.0	2.1	2	2.5					1.6	1.7
13	1.9	1.9	2.0	2.1	2	2.0					29	2.0
14	1.9	1.9	2.0	2.1	2	1.8					8.8	2.0
15	1.9	1.8	2.4	2.1	2	2.0	2.5		1.2		2.7	1.6
16	1.9	1.8	2.0	2.1	2	13					2.6	1.6
17	1.8	1.8	2.0	2.1	2	2.5					2.6	1.6
18	1.8	1.8	2.0	2.1	2	1.8					2.5	1.6
19	1.8	1.8	2.0	2.1	2	1.8					2.7	1.6
20	1.8	1.8	2.0	2.2	3	1.8					2.7	1.5
21	1.9	1.8	2.0	2.2	2	1.8				1.2	17	1.6
22	1.8	1.8	2.0	2.2	2	9.4					2	1.6
23	1.8	1.8	2.0	2.2	2						2	1.7
24	1.8	1.8	2.0	2.2	2.1		2	1			2	1.8
25	1.8	1.8	2.0	2.2	2.0						2.0	1.8
26	1.8	1.8	2.0	2.4	1.7	2					2.5	1.8
27	1.8	1.8	2.0	2.3	1.7					1.2	2.6	1.8
28	2.1	1.8	2.0	2.4	1.7					1.2	4.0	1.9
29	1.9	1.8	2.0	2.4	-					1.2		2.0
30	2.0	1.8	2.1	2.5	-------					14	2	2.0
31	1.9	-------	2.1	2.5	-------	2.2	-------	-------	-------	3		-------
Total	56.3	55.9	62.4	68.7	63.3	80.7	239.5	38.5	36.0	48.8	114.5	52.9
Mean	1.82	1.86	2.01	2.22	2.26	2.60	7.98	1.24	1.2	1.57	3.69	1.76
Ac-ft	112	111	124	136	126	160	475	76	71	97	227	105

Calendar year 1957: Max 5.1 Min 1.3 Mean 1.95 Ac-ft 1,420
Water year 1957-58: Max 86 Min - Mean 2.51 Ac-ft 1,820

Peak discharge (base, 50 cfs).--Apr. 1 (8:30 p.m.) 230 cfs (9.48 ft); Apr. 3 (1:30 p.m.) 380 cfs (10.51 ft); Apr. 7 (stage and discharge unknown); July 30 (8:30 p.m.) 447 cfs (10.86 ft); Aug. 13 (4:30 p.m.) about 500 cfs (10.84 ft); Aug. 21 (6 p.m.) 140 cfs (8.32 ft).

Note.--No gage-height record Feb. 20-23, Mar. 23-30, Apr. 2, Apr. 4 to July 26, July 31 to Aug. 4, Aug. 12, 22-24, Aug. 29 to Sept. 8 and indefinite stage-discharge relation Feb. 5-10, 12-19, Mar. 18-21, July 27-29; discharge interpolated or estimated on basis of 18 discharge measurements, recorded range in stage, weather records, and records for Palm Canyon Creek near Borrego Springs.

2557.1. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 1,200 ft (from topographic map).

Average discharge.--8 years, 0.56 cfs (405 acre-ft per year).

Extremes.--Maximum discharge during year, 123 cfs Apr. 3 (gage height, 3.53 ft); no flow for several months.
1950-58: Maximum gage height, 9.9 ft, from floodmarks, Aug. 23, 1955 (discharge not determined); no flow for several months each year.

Remarks.--Records good except those for periods of no gage-height record, which are poor.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0.1	0.3	0.3	0.8	5.2	1	0.1	0		
2		0	.1	.3	.3	.8	6.6	1	.1	0		
3		0	.1	.3	.9	.7	48	1	.1	0		
4		0	.1	.3	5.9	.7	39	1	.1	0		
5		0	.1	.3	4.3	.7	15	*1.0	0	0	(*)	
6		*0	.1	.3	1.6	1.7	1.6	.9	0	0		
7		0	.1	*.3	.7	1.8	28	.9	*0	0		
8		0	.1	.3	.7	1.5	4	.9	0	0		
9		0	.2	.3	.7	1.4	2	.8	0	0		(*)
10		0	.2	.3	.7	1.3	2	.9	0	0		
11		0	*.2	.3	*.6	1.6	2	1.1	0	0		
12		0	.2	.3	.6	1.8	2	.9	0	0		
13		0	.2	.3	.6	*2.0	2	.7	0	0		
14		0	.2	.3	.5	1.7	2	.6	0	0		
15		0	.4	.3	.5	1.9	2	.6	0	0		
16		0	.4	.2	.5	28	1.5	.5	0	0		
17		0	.4	.2	.5	5	1.5	.5	0	0		
18		0	.4	.2	.5	3	1.5	.4	0	0		
19		0	.3	.2	1.0	3	1.5	.3	0	0		
20		0	.3	.2	1.2	3	1.5	*.3	0	0		
21		0	.3	.2	.7	3	*1.6	.2	0	0		
22	(*)	0	.3	.2	.5	31	1.3	.1	0	*0		
23		0	.3	*.3	.5	4	1.2	.1	*0	0		
24		0	*.3	.3	*.5	3	1.1	.1	0	0		
25		0	.3	.3	1.3	3	1	.1	0	0		
26		0	.3	.4	1.4	3	1	.1	0	0		
27		*0	.3	.5	.9	2.5	1	.1	0	0		
28		0	.3	.4	.8	2.5	1	.1	0	0		
29		0	.3	.4	-	2.5	1	0	0	.1		
30		.1	.3	.3	-------	2.5	1	0	0	0		
31		-------	.3	.3	-------	*2.6	-------	0	-------	0		-------
Total	0	0.1	7.5	9.1	29.2	122.0	180.1	16.2	0.4	0.1	0	0
Mean	0	0.003	0.24	0.29	1.04	3.94	6.00	0.52	0.01	0.003	0	0
Ac-ft	0	0.2	15	18	58	242	357	32	0.8	0.2	0	0

Calendar year 1957: Max 1.6 Min 0 Mean 0.21 Ac-ft 152
Water year 1957-58: Max 48 Min 0 Mean 1.00 Ac-ft 723

Peak discharge (base, 15 cfs).--Mar. 16 (1:30 p.m.) 66 cfs (2.90 ft); Mar. 22 (8:30 a.m.) 88 cfs (3.17 ft); Apr. 3 (3:30 p.m.) 123 cfs (3.53 ft); Apr. 7 (11 a.m.) 57 cfs (2.89 ft).

* Discharge measurement or observation of no flow made on this day.

Note.--No gage-height record Feb. 7-10, Mar. 17-21, 23-30, Apr. 8-20, Apr. 25 to May 4, June 14-17; discharge interpolated or estimated on basis of 4 discharge measurements, recorded range in stage, and weather records.

2560. Whitewater River at White Water, Calif.

Location.--Lat 33°56'48", long 116°38'24", in NW¼NW¼NE¼ sec. 2, T. 3 S., R. 3 E., on right bank 1.5 miles north of White Water and 3½ miles upstream from San Gorgonio River.

Drainage area.--57.4 sq mi.

Records available.--October 1948 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 1,610.98 ft 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. From Feb. 24, 1950, to Sept. 30, 1952, supplementary gage used as base gage.

Average discharge.--10 years, 10.9 cfs (7,890 acre-ft per year); average combined discharge of river and infiltration line, 9 years (1949-58), 12.5 cfs (9,050 acre-ft per year).

Extremes.--Maximum discharge during year, about 1,500 cfs Apr. 3 (gage height, 8.35 ft), from rating curve extended above slope-area measurement of 680 cfs by logarithmic plotting; maximum gage height, 10.55 ft Feb. 4 (backwater from debris); minimum daily discharge, 0.9 cfs Feb. 2.

1948-58: Maximum discharge, that of Apr. 3, 1958; no flow Jan. 9, 11, 1957. Maximum discharge known, 42,000 cfs Mar. 2, 1938, from slope-area measurement of peak flow, at site 2.5 miles upstream (drainage area, 51.4 sq mi).

Remarks.--Records good except those for period Dec. 15 to Apr. 30, 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. Water is diverted 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 one for irrigation are made 2 to 3 miles upstream.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.1	2.2	4.4	12	1.4	2.7	a200	68	45	33	e50	34
2	7.3	2.8	5.1	9.4	.9	6.6	a40	80	43	33	e50	33
3	6.8	11	5.1	14	26	5.2	182	55	42	34	e40	32
4	6.8	4.8	5.2	13	128	4.9	71	49	42	33	e40	32
5	5.6	2.9	4.3	21	a16	5.2	54	48	42	33	e40	33
6	3.4	3.8	5.5	9.2	a10	7.3	37	49	42	33	e40	32
7	7.1	36	4.7	5.3	a7	7.0	48	50	42	32	e40	51
8	4.8	4.9	5.2	4.0	a5	7.0	21	50	42	32	e40	90
9	2.2	6.1	5.1	3.6	a3	7.0	a20	50	42	31	e40	45
10	5.8	18	4.9	4.3	a2	5.6	a25	55	42	31	a40	43
11	6.5	34	4.9	1.4	1.3	6.6	26	59	42	31	a40	38
12	4.4	4.9	4.6	1.1	2.0	4.8	36	59	43	31	a40	37
13	3.4	5.1	5.2	3.9	3.8	2.9	50	57	42	31	38	36
14	5.2	4.9	4.8	3.1	4.3	3.8	68	54	39	32	46	34
15	4.9	4.9	61	2.8	5.4	1.6	118	50	38	32	42	32
16	5.6	4.6	57	2.6	4.8	212	204	49	37	32	36	31
17	5.1	3.6	67	7.1	3.9	a35	186	49	36	32	37	31
18	5.3	4.9	2.8	2.5	4.6	a25	167	49	34	31	38	30
19	4.4	4.9	4.8	1.6	17	a20	164	49	34	31	38	29
20	4.8	4.9	11	3.4	2.4	a15	77	52	36	31	38	27
21	3.1	4.4	14	3.4	2.4	a25	39	50	36	32	a36	29
22	4.6	4.9	12	3.0	2.4	a60	140	52	33	32	a36	28
23	4.4	4.4	3.9	3.0	2.2	a25	127	54	33	33	a36	30
24	4.4	4.4	3.3	5.2	2.2	a12	74	55	34	33	a36	31
25	4.8	5.1	5.2	3.4	21	a12	73	57	32	33	a36	30
26	4.0	5.1	4.0	59	8.0	a12	101	55	31	33	36	30
27	4.4	4.9	4.8	26	4.8	a11	75	54	31	33	36	30
28	3.8	4.4	3.6	11	3.7	a11	69	52	31	33	36	29
29	2.1	7.0	9.5	3.4	-	a10	69	52	32	56	37	29
30	2.8	4.4	4.8	2.8	-------	a10	69	50	33	e60	36	28
31	3.0	-------	4.0	2.2	-------	a10	-------	49	-------	e55	34	-------
Total	146.9	185.8	341.7	247.7	295.5	583.2	2,630	1,641	1,131	1,072	1,206	1,044
Mean	4.74	6.19	11.0	7.99	10.6	18.8	87.7	52.9	37.7	34.6	38.9	34.8
Ac-ft	291	369	678	491	586	1,160	5,220	3,250	2,240	2,130	2,390	2,070
(†)	16	20	24	53	75	101	52	98	89	86	72	83
(‡)	64	62	70	58	51	72	125	382	466	433	342	255

Adjusted for infiltration only

Ac-ft	307	389	702	544	661	1,260	5,270	3,350	2,330	2,220	2,460	2,150

Observed

Calendar year 1957: Max 250 Min 0 Mean 7.02 Ac-ft 4,980
Water year 1957-58: Max 212 Min 0.9 Mean 28.8 Ac-ft 20,870

Adjusted

Calendar year 1957: Ac-ft 5,330
Water year 1957-58: Ac-ft 21,640

Peak discharge (base, 100 cfs).--Dec. 15 (2:30 p.m.) 343 cfs (8.00 ft); Jan. 26 (10:30 a.m.) 304 cfs (8.25 ft); Feb. 4 (4 p.m.) 250 cfs (10.55 ft); Mar. 16 (6:30 a.m.) 646 cfs (9.95 ft); Apr. 1 (4:30 p.m.) 607 cfs (8.22 ft); Apr. 3 (10:30 a.m.) about 1,500 cfs (8.35 ft); Apr. 22 (3 a.m.) 299 cfs (8.20 ft); July 29 (4 p.m.) about 140 cfs (7.08 ft); Sept. 7 (3 p.m.) 132 cfs (6.45 ft).

† Runoff, in acre-feet, from infiltration line bypassing station; furnished by White Water 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 11 discharge measurements, probably recession curves, weather records and records for nearby streams.

e Stage-discharge relation indefinite; discharge estimated as "a" above.

2580. Tahquitz Creek near Palm Springs, Calif.

Location.--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.

Drainage area.--16.7 sq mi.

Records available.--October 1947 to September 1958.

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.--11 years, 3.17 cfs (2,290 acre-ft per year); median of yearly mean discharges, 1.8 cfs (1,300 acre-ft per year).

Extremes.--Maximum discharge during year, 99 cfs Mar. 16 (gage height, 3.20 ft); no flow Oct. 1 to Nov. 27.

1947-58: 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 measurement of peak flow; no flow parts of each year.

Remarks.--Records good.

Revisions (water years).--WSP 1244: 1948, 1951.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 21 to May 20, Sept. 1-18)

0.5	0	1.2	4.5	2.1	23
.6	.2	1.5	8.9	2.3	30
.7	.5	1.7	13	2.5	40
.8	1.0	1.9	17	3.0	76
1.0	2.4				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	(*)	0	0.3	1.0	1.2	3.9	17	42	43	11	4.4	1.5
2		0	.2	*.9	1.2	3.6	18	49	41	11	4.2	1.4
3		0	.2	.8	3.8	3.4	29	45	*39	11	3.7	1.3
4		0	.2	.7	15	3.3	24	46	37	10	3.4	1.2
5		0	.3	.7	7.8	3.1	21	50	35	9.7	3.3	1.2
6		0	.4	.7	5.3	4.1	19	54	34	9.2	*3.2	1.4
7		0	.4	.7	4.2	3.2	20	45	33	8.8	3.4	1.6
8		0	.4	.8	3.6	3.3	*17	45	33	8.2	3.6	1.4
9		0	.4	.8	3.2	3.1	17	47	32	7.6	3.2	1.1
10		0	.4	.8	3.0	2.8	17	55	30	7.1	3.0	.8
11		0	.4	.8	*2.8	3.1	17	52	27	6.8	2.9	.7
12		0	*.4	.7	2.7	*3.0	17	45	25	6.5	2.8	.6
13		0	.3	*.7	2.7	3.0	17	*45	24	6.1	2.8	.6
14		0	.3	.7	2.6	2.8	17	46	23	5.7	2.8	.7
15		0	4.8	.7	2.5	3.2	18	47	22	5.7	2.8	.9
16		0	5.7	.6	2.5	38	20	49	22	5.5	2.7	.8
17		0	4.4	.6	2.6	*23	23	52	21	5.3	3.1	.7
18		0	3.2	.6	2.7	18	28	53	21	*5.2	2.6	*.7
19		0	2.4	.6	4.8	14	36	57	19	4.9	2.4	.7
20		0	2.0	.6	4.8	13	45	58	19	4.8	*2.4	.6
21		0	1.7	.6	3.6	22	56	59	18	4.6	2.4	.6
22		0	1.5	.6	3.7	40	49	56	18	4.4	2.4	.6
23		0	1.4	.6	3.6	24	*44	60	17	4.2	2.2	.6
24		0	1.2	.6	3.6	20	43	60	16	4.2	2.0	1.0
25		0	1.2	.6	*6.8	17	43	74	15	3.9	1.8	1.1
26		0	1.2	2.7	6.1	15	42	*71	14	3.8	2.1	.8
27		*0	1.1	2.6	4.8	16	42	67	*13	3.7	2.2	.7
28		.1	1.1	2.0	4.2	*15	41	62	13	3.8	5.2	.6
29		.2	1.1	1.6	-	13	41	58	12	6.3	2.9	.7
30		.3	1.0	1.4	------	13	42	54	12	5.5	2.1	*.6
31	(*)	----	1.0	*1.3	------	12	------	49	------	4.8	1.6	------
Total	0	0.6	40.6	29.1	115.4	361.9	880	1,652	728	199.3	89.6	27.2
Mean	0	0.02	1.31	0.94	4.12	11.7	29.3	53.3	24.3	6.43	2.89	0.91
Ac-ft	0	1.2	81	58	229	718	1,750	3,280	1,440	395	178	54

Calendar year 1957: Max 43 Min 0 Mean 1.65 Ac-ft 1,200
Water year 1957-58: Max 74 Min 0 Mean 11.3 Ac-ft 8,180

Peak discharge (base, 20 cfs).--Feb. 4 (6 a.m.) 24 cfs (2.12 ft); Mar. 16 (11 a.m.) 99 cfs (3.20 ft); Mar. 22 (3 a.m.) 56 cfs (2.68 ft); Apr. 3 (12 m.) 54 cfs (2.67 ft).

* Discharge measurement or observation of no flow made on this day.

2585. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 700 ft (from topographic map). Prior to Jan. 14, 1942, at datum 0.2 ft higher.

Average discharge.--22 years (1930-41, 1947-58), 4.94 cfs (3,580 acre-ft per year); median of yearly mean discharges, 1.1 cfs (800 acre-ft per year).

Extremes.--Maximum discharge during year, 1,130 cfs Apr. 3 (gage height, 4.90 ft); no flow most of time.
1930-42, 1947-58: 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 for several months most years.

Remarks.--Records good except those above 100 cfs, which are fair. Discharge measurements or observations of no flow generally made twice a month.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 4 to Apr. 1, Apr. 3-5)

1.1	0	1.5	3.2	2.5	102
1.2	.1	1.6	6.2	3.0	216
1.3	.4	1.8	16	3.5	380
1.4	1.3	2.0	32	4.0	590

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					0	1.3	208	11	0.9	0	0	0
2					0	1.2	199	9.6	.9	0	0	0
3					0	1.0	474	9.1	.8	0	0	0
4					163	.9	290	8.1	.8	0	0	0
5					47	.8	152	7.7	.7	0	0	0
6					17	3.7	116	6.9	.6	0	0	1.3
7					12	5.1	197	6.9	.5	0	0	1.3
8					7.3	2.5	114	6.9	.5	0	0	.5
9					5.4	2.1	80	6.9	.5	0	0	.3
10					4.2	1.5	66	7.3	.5	0	0	0
11					3.4	1.7	57	8.1	.5	0	0	0
12					2.7	2.1	51	7.3	.5	0	0	0
13					2.5	2.1	45	5.8	.4	0	0	0
14					2.1	1.5	39	5.4	.4	0	0	0
15					1.5	2.3	35	4.5	.2	0	.3	0
16					1.4	190	32	3.9	.2	0	34	0
17					1.2	48	30	3.2	.2	0	0	0
18					.9	24	28	2.9	.2	0	0	0
19					4.3	24	27	2.5	.1	0	0	0
20					6.8	24	24	2.5	.1	0	0	0
21					3.4	28	23	2.1	.2	0	2.1	0
22					2.3	108	21	1.9	.1	0	.8	0
23					2.1	46	20	1.7	.1	0	.1	0
24					1.7	33	18	1.5	0	0	0	0
25					2.1	25	16	1.3	.1	0	0	0
26					1.9	20	14	1.3	0	0	0	0
27					1.4	36	13	1.3	0	0	0	0
28					1.3	51	12	1.3	0	0	1.6	0
29					-	26	12	1.3	0	0	1.0	0
30					-------	19	11	1.0	0	0	.1	0
31		-------			-------	17	-------	1.0	-------	3.4	0	-------
Total	0	0	0	0	298.9	748.8	2,424	142.2	10.0	3.4	40.0	3.4
Mean	0	0	0	0	10.7	24.2	80.8	4.59	0.33	0.11	1.29	0.11
Ac-ft	0	0	0	0	593	1,490	4,810	282	20	6.7	79	6.7

Calendar year 1957: Max 0.9 Min 0 Mean 0.01 Ac-ft 9.2
Water year 1957-58: Max 474 Min 0 Mean 10.1 Ac-ft 7,290

Peak discharge (base, 100 cfs).--Feb. 4 (8 a.m.) 332 cfs (3.52 ft); Mar. 16 (8:30 a.m.) 504 cfs (3.93 ft); Mar. 22 (6 a.m.) 216 cfs (3.12 ft); Apr. 1 (7 p.m.) 890 cfs (4.55 ft); Apr. 3 (1:30 p.m.) 1,130 cfs (4.90 ft); Aug. 16 (1:30 p.m.) 860 cfs (4.50 ft).

2590. 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 Bureau of Indian Affairs diversion dam, 0.9 mile above mouth and 5.4 miles south of Palm Springs.

Drainage area.--8.78 sq mi.

Records available.--October 1948 to September 1958.

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.--10 years, 2.15 cfs (1,560 acre-ft per year); median of yearly mean discharges, 1.7 cfs (1,200 acre-ft per year).

Extremes.--Maximum discharge during year, 75 cfs Mar. 16 (gage height, 2.67 ft); minimum daily, 0.7 cfs Oct. 1, 2.
1948-58: 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 measurement of peak flow; minimum daily, 0.3 cfs for many days in 1950-51.

Remarks.--Records good. One small diversion for domestic use about 1 mile above station.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 7-11)

1.3	0.4
1.4	1.4
1.5	2.9
1.6	5.0
1.8	12
2.0	20
2.5	58

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*0.7	1.9	1.5	1.9	2.2	4.1	18	8.7	3.9	2.1	2.1	1.2
2	.7	1.8	1.5	*1.8	2.2	3.9	17	8.7	3.9	2.1	1.9	*1.2
3	.9	2.9	1.5	1.6	7.0	3.7	31	8.7	3.9	2.1	1.9	1.1
4	.9	1.6	1.5	1.6	29	3.5	*27	8.7	3.7	2.1	1.9	1.1
5	1.0	1.5	2.9	1.6	*9.4	3.3	19	8.7	3.5	1.9	1.9	1.1
6	1.0	1.5	2.1	1.6	4.7	4.3	16	8.7	3.3	1.9	*1.9	1.8
7	1.0	1.3	1.9	1.6	3.9	3.9	18	8.7	3.3	1.9	1.8	1.5
8	1.0	1.3	1.8	1.6	3.7	3.7	*13	8.7	3.3	1.9	1.8	1.3
9	1.0	1.3	1.8	1.6	3.5	3.5	12	8.7	3.3	1.9	1.8	1.3
10	1.0	1.2	1.8	1.8	3.3	3.3	12	8.7	*3.2	1.9	1.5	1.3
11	1.1	1.2	1.8	1.8	2.9	3.7	12	8.7	3.9	1.8	1.5	1.3
12	1.1	*1.2	*1.8	1.8	2.9	*3.5	12	8.4	3.9	1.8	1.5	1.5
13	1.1	1.2	1.8	*1.8	2.9	3.3	11	*8.4	3.9	1.8	1.6	1.6
14	*1.6	1.3	1.9	1.8	2.9	3.3	11	8.1	3.7	1.8	1.6	1.6
15	1.1	1.5	8.7	1.8	2.7	3.9	11	8.1	3.5	1.8	1.6	1.6
16	1.1	1.8	4.3	1.8	2.5	43	11	7.8	3.5	1.8	2.4	1.6
17	1.1	1.9	6.0	1.8	2.5	*20	11	7.4	3.5	1.8	1.9	1.6
18	1.1	1.6	*2.9	1.8	2.4	11	12	6.8	3.3	*1.8	1.8	*1.6
19	1.1	1.6	2.4	1.8	5.5	8.4	13	6.8	2.9	1.8	1.8	1.6
20	1.1	1.5	2.2	1.8	3.9	7.4	13	6.5	2.7	1.8	*1.8	1.6
21	1.2	1.5	2.1	1.9	3.5	11	13	5.9	2.7	1.9	2.1	1.6
22	1.2	1.5	2.1	1.9	3.3	33	13	5.6	2.7	1.9	1.9	1.6
23	1.2	1.5	2.1	1.8	3.5	17	*12	5.2	2.5	1.9	1.8	1.6
24	1.2	1.5	2.1	1.8	3.5	12	11	5.2	2.4	1.9	1.8	1.6
25	1.2	1.5	2.1	1.9	*8.4	11	10	4.9	2.2	1.9	1.8	1.5
26	1.2	1.5	1.9	6.6	4.3	9.0	9.6	*4.7	2.2	1.9	1.8	1.3
27	1.2	*1.5	1.9	3.9	4.1	10	9.0	4.5	*2.2	1.9	1.8	1.2
28	1.9	1.5	1.9	2.5	4.1	*9.6	9.0	4.3	2.1	1.9	1.8	1.2
29	1.6	1.5	1.9	2.2	-	7.8	8.7	4.3	2.1	3.1	1.6	1.2
30	2.0	1.5	1.9	2.2	-------	6.8	8.7	4.1	2.1	2.4	1.5	*1.2
31	*3.6	-------	1.9	*2.2	-------	6.8	-------	3.9	-------	2.2	1.3	-------
Total	38.2	46.1	74.0	63.6	134.7	278.7	404.0	216.6	93.3	60.7	55.2	42.5
Mean	1.23	1.54	2.39	2.05	4.81	8.99	13.5	6.99	3.11	1.96	1.78	1.42
Ac-ft	76	91	147	126	267	553	801	430	185	120	109	84

Calendar year 1957: Max 26 Min 0.4 Mean 1.57 Ac-ft 1,140
Water year 1957-58: Max 43 Min 0.7 Mean 4.13 Ac-ft 2,990

Peak discharge (base, 30 cfs).--Feb. 4 (7:30 a.m.) 48 cfs (2.38 ft); Mar. 16 (9:30 a.m.) 75 cfs (2.67 ft); Mar. 22 (3:30 a.m.) 55 cfs (2.50 ft); Apr. 3 (11 a.m.) 68 cfs (2.65 ft).

* Discharge measurement made on this day.

2605. Deep Creek near Hesperia, Calif.

Location.--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 1958. November 1904 to September 1922, published as "East Fork of Mojave", in reports of California Division of Water Resources. Combined creek and canal, October 1950 to September 1958.

Gage.--Water-stage recorder and broad-crested weir. Altitude of gage is 3,050 ft (from topographic map). Prior to Sept. 30, 1922, staff gage and water-stage recorder at same site at different datum. December 1929 to Apr. 20, 1938, at same site at different datum. Apr. 21 to Dec. 10, 1938, at site 0.25 mile downstream at different datum.

Average discharge.--28 years (1930-58), 56.0 cfs (40,540 acre-ft per year); median of yearly mean discharges, 35 cfs (25,340 acre-ft per year). Average combined discharge of creek and canal, 8 years (1950-58), 47.9 cfs (34,680 acre-ft per year).

Extremes.--Maximum discharge during year, 12,400 cfs Apr. 3 (gage height, 8.59 ft), from rating curve extended above 4,000 cfs on basis of slope-area measurement at gage height 11.30 ft; minimum daily, 1.0 cfs Sept. 16-18.
1929-58: Maximum discharge, 46,600 cfs Mar. 2, 1938, by slope-area measurement of peak flow; minimum, 0.1 cfs at times in 1932-34, 1936.

Remarks.--Records good except those for periods of backwater, which are fair. 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 below station. For records of combined discharge of Deep Creek and canal, see following page.

Rating table, water year 1957-58, except periods of backwater from beaver dam (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-11, 21, 22, Nov. 10-21, June 30 to July 6)

0.8	1.0	1.4	9.6	2.5	209
.9	2.0	1.5	11	3.0	518
1.0	3.4	1.6	16	3.5	980
1.1	5.1	1.8	30	4.0	1,620
1.2	7.3	2.0	57	5.0	3,430
1.3	9.3	2.2	100	6.0	5,730

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	4	3.5	9.6	25	81	2,500	253	36	9.6	3.5	2.9
2	1.3	4	3.5	9.0	22	74	1,360	238	37	9.4	3.5	2.8
3	1.4	20	3.5	8.1	886	68	4,590	224	34	9.0	3.7	2.9
4	1.4	19	3.5	7.5	3,920	65	1,440	214	33	9.6	3.7	2.6
5	1.6	14	8	6.6	735	61	790	214	30	9.6	3.7	2.6
6	1.7	14	10	5.9	253	65	672	209	29	9.6	3.8	113
7	1.8	13	9	5.5	179	68	690	200	29	8.0	4.0	34
8	1.8	12	8	5.3	141	74	600	175	29	5.9	4.4	9.9
9	1.8	11	7	5.3	134	81	575	166	29	5.3	4.0	4.9
10	1.8	11	6	5.3	127	72	584	162	28	5.1	3.5	2.2
11	1.9	9.7	5	5.3	100	78	514	162	28	4.9	3.2	1.8
12	2	9.6	4	5.3	88	76	402	166	27	5.1	3.2	1.4
13	2	9.5	4	5.3	78	81	382	141	26	4.6	3.4	1.3
14	2	9.4	4	5.3	72	100	382	124	26	4.2	4.2	1.2
15	2	8.8	721	5.1	70	106	375	118	25	3.8	6.2	1.1
16	2.5	8.1	1,100	4.9	66	3,170	416	112	22	3.8	4.2	1.0
17	2.5	7.9	1,660	4.7	66	795	466	109	23	4.0	4.6	1.0
18	2.5	7.5	248	4.9	63	402	518	100	23	4.0	4.6	1.0
19	2.5	7.1	118	4.9	326	332	600	93	21	3.8	4.2	1.4
20	2.5	6.4	78	4.9	269	286	627	93	20	3.7	3.8	1.4
21	4.7	5.1	57	4.7	162	350	681	86	20	3.5	3.5	1.5
22	7.9	5	36	4.4	134	1,110	609	78	20	3.5	3.2	1.5
23	7.5	5	29	4.4	112	534	510	74	20	3.5	3.2	1.7
24	7	5	29	4.7	95	395	409	70	17	3.5	3.2	1.9
25	7	5	22	4.6	156	350	363	70	17	3.7	3.1	2.4
26	7	4	17	222	155	286	325	53	13	3.8	3.1	1.8
27	6	4	14	132	112	248	269	48	10	3.5	3.1	1.5
28	6	4	11	66	88	286	264	42	9.7	3.2	2.9	1.7
29	6	4	14	45	-	319	248	40	10	3.2	2.9	2.0
30	5	4	15	35	-------	286	248	37	11	3.2	2.9	2.2
31	5	-------	9.6	20	-------	214	-------	36	-------	3.4	2.9	-------
Total	107.3	251.1	4,257.6	661.5	8,634	10,513	22,409	3,907	702.7	161.0	113.4	208.6
Mean	3.46	8.37	137	21.3	308	339	747	126	23.4	5.19	3.66	6.95
Ac-ft	213	498	8,440	1,310	17,130	20,850	44,450	7,750	1,390	319	225	414

Calendar year 1957: Max 4,070 Min 0.2 Mean 38.2 Ac-ft 27,630
Water year 1957-58: Max 4,590 Min 1.0 Mean 142 Ac-ft 103,000

Peak discharge (base, 400 cfs).--Dec. 17 (8 a.m.) 4,440 cfs (5.45 ft); Jan. 26 (1 p.m.) 840 cfs (3.36 ft); Feb. 4 (1:30 p.m.) 5,980 cfs (6.11 ft); Feb. 19 (6:30 p.m.) 1,410 cfs (3.86 ft); Mar. 16 (8 a.m.) 5,750 cfs (6.01 ft); Apr. 1 (4:30 p.m.) 8,870 cfs (7.28 ft); Apr. 3 (10 a.m.) 12,400 cfs (8.59 ft); Sept. 6 (4 p.m.) 1,740 cfs (4.08 ft).

Note.--Backwater from beaver dam Oct. 12-20, Oct. 23 to Nov. 2, Nov. 22 to Dec. 14; discharge interpolated.

2605. 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	4	3.5	15	30	85	2,500	259	45	15	4.8	3.9
2	1.3	4	3.5	16	26	78	1,360	244	46	15	4.7	3.8
3	1.4	20	3.5	14	892	74	4,590	230	43	15	4.7	3.6
4	1.4	19	4.1	14	3,920	71	1,440	220	42	15	4.9	3.5
5	1.6	14	11	13	738	66	792	220	38	14	4.7	3.5
6	1.7	14	14	13	256	71	674	215	37	13	4.8	117
7	1.8	13	14	13	182	74	692	206	37	13	6.3	42
8	1.8	12	13	12	143	80	602	184	37	12	8.8	16
9	1.8	11	11	12	136	86	576	175	36	11	6.7	10
10	1.8	11	7.9	12	128	80	585	171	35	9.9	5.4	6.4
11	1.9	9.7	8.4	12	100	89	518	171	36	8.7	4.8	6.2
12	2	9.6	11	12	90	87	409	174	35	8.1	4.6	5.5
13	2	9.5	10	12	84	92	388	149	34	7.5	5.6	4.5
14	2	9.4	10	12	78	111	388	134	34	7.1	10	4.2
15	2	8.8	727	11	77	116	381	130	33	6.7	13	4.4
16	2.5	8.1	1,100	11	74	3,180	422	122	29	6.7	10	4.1
17	2.5	7.9	1,660	11	73	801	472	119	30	7.1	8.8	3.6
18	2.5	7.5	248	11	70	410	523	109	30	7.2	7.8	3.5
19	2.5	7.1	118	11	329	339	605	102	27	6.9	6.8	3.6
20	2.5	6.4	78	10	269	293	632	102	26	6.5	5.9	3.5
21	4.7	5.1	60	10	162	357	686	96	26	6.1	5.2	3.5
22	7.9	5	43	10	136	1,120	614	88	26	6.1	4.9	3.6
23	7.5	5	35	9.8	118	541	515	83	24	5.8	4.9	4.2
24	7	5	35	11	101	402	414	79	21	5.2	4.9	5.2
25	7	5	28	10	162	357	368	79	20	5.8	4.7	8.2
26	7	4	22	229	162	293	331	64	18	5.9	4.7	7.3
27	6	4	19	138	118	255	276	58	16	5.0	4.7	6.5
28	6	4	17	71	94	295	271	52	15	4.7	4.5	6.5
29	6	4	18	51	-	326	254	50	14	4.7	4.5	6.7
30	5	4	18	40	-------	293	254	47	15	4.5	4.5	6.8
31	5	-------	14	25	-------	220	-------	45	-------	4.7	4.1	-------
Total	107.3	251.1	4,364.9	851.8	8,748	10,740	22,532	4,177	905	263.9	184.7	311.3
Mean	3.46	8.37	141	27.5	312	346	751	135	30.2	8.51	5.96	10.4
Ac-ft	213	498	8,660	1,690	17,350	21,300	44,690	8,280	1,800	523	366	617

Calendar year 1957: Max 4,070 Min 0.2 Mean 40.5 Ac-ft 29,300
Water year 1957-58: Max 4,590 Min 1.2 Mean 146 Ac-ft 106,000

2610. West Fork Mojave River near Hesperia, Calif.

Location.--Lat 34°20'27", long 117°14'24", in SW¼SW¼ sec. 18, T. 3 N., R. 4 W., on left bank at highway bridge, 0.5 mile upstream from confluence with Deep Creek and 6.5 miles southeast of Hesperia.

Drainage area.--74.8 sq mi.

Records available.--January 1930 to September 1958. December 1904 to June 1922 in reports of California Department of Water Resources.

Gage.--Water-stage recorder. Altitude of gage is 3,050 ft (from topographic map). Prior to June 30, 1922, staff gage and water-stage recorder several hundred feet downstream at different datum.

Average discharge.--28 years (1930-58), 28.5 cfs (20,630 acre-ft per year); median of yearly mean discharges, 12 cfs (8,690 acre-ft per year).

Extremes.--Maximum discharge during year, 10,200 cfs Apr. 3 (gage height, 10.48 ft), from rating curve extended above 3,000 cfs on basis of slope-area measurement at gage height 16.1 ft; no flow most of time.

1930-58: Maximum discharge, 26,100 cfs Mar. 2, 1938, by slope-area measurement of peak flow; no flow for several months each year.

Revisions.--Figures of maximum discharge for the water years 1930 and 1932 have been revised to 800 cfs Mar. 14, 1930 (gage height, 4.20 ft), and 8,500 cfs Feb. 8, 1932 (gage height, 10.00 ft), superseding those published in WSP 705 and 735, respectively.

Remarks.--Records good except those for periods of no gage-height record, which are poor. Discharge measurements or observation of no flow generally made twice a month. Water diverted from Lake Gregory above station for domestic use and fire protection. One small diversion for irrigation above station.

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for high-water periods in the water years 1932 and 1938, superseding those published in WSP 735 and 860, are given herewith:

1932		1938	
Feb. 8	1,740	Mar. 1	2,380
9	3,430		
10	807		

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
February 1932	-	3,430	78	397	22,830
Water year 1931-32	-	3,430	0	47.6	34,570
Calendar year 1932	-	3,430	0	44.9	32,570
March 1938	27,249	7,000	187	879	54,050
Water year 1937-38	38,617.4	7,000	0	106	76,610
Calendar year 1938	39,951.2	7,000	0	109	79,250

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0	1	17	66	1,810	74	7.3			0
2			0	.5	15	60	969	61	6.3			0
3			0	0	327	54	3,120	60	6.5			0
4			0	0	1,850	49	856	60	5			0
5			0	0	581	43	540	60	5			0
6			0	0	210	59	460	50	4			3
7			0	0	132	63	754	50	4			1
8			0	0	91	55	497	50	4			0
9			0	0	72	49	343	50	3			0
10			0	0	58	42	225	50	3			0
11			0	0	51	54	162	40	2			0
12			0	0	42	49	120	40	2			0
13			0	0	42	44	100	40	2			0
14			0	0	35	41	90	40	1			0
15			8.7	0	31	43	80	40	1			0
16			214	0	26	723	90	40	1			0
17			316	0	25	338	100	35	.7			0
18			72	0	24	200	110	30	.6			0
19			31	0	239	143	120	25	.5			0
20			20	0	149	111	130	20	.5			0
21			17	0	74	138	140	18	.4			0
22			15	0	55	513	130	17	.4			0
23			12	0	44	294	120	15	.3			0
24			10	0	37	203	110	15	.3			0
25			9	0	140	159	100	14	.2			0
26			8	144	123	126	90	12	.2			0
27			7	63	84	236	80	12	.2			0
28			5	35	73	219	75	12	.1			0
29			4	28	-	182	75	7.2	.1			0
30			3	24	-------	152	72	6.5	.1			0
31		-------	2	21	-------	143	-------	12	-------			-------
Total	0	0	753.7	316.5	4,647	4,651	11,668	1,055.7	61.7	0	0	4
Mean	0	0	24.3	10.2	166	150	389	34.1	2.05	0	0	0.13
Ac-ft	0	0	1,490	628	9,220	9,230	23,140	2,090	122	0	0	7.9

Calendar year 1957: Max 316 Min 0 Mean 6.62 Ac-ft 4,790
Water year 1957-58: Max 3,120 Min 0 Mean 63.4 Ac-ft 45,930

Peak discharge (base, 500 cfs).--Dec. 17 (7 a.m.) 760 cfs (4.00 ft); Feb. 4 (1:30 p.m.) 2,740 cfs (6.15 ft); Feb. 19 (4:30 p.m.) 748 cfs (4.18 ft); Mar. 16 (6:30 a.m.) 1,300 cfs (4.88 ft); Mar. 22 (7:30 a.m.) 868 cfs (4.18 ft); Apr. 1 (5:30 p.m.) 5,140 cfs (7.83 ft); Apr. 3 (10 a.m.) 10,200 cfs (10.48 ft); Apr. 7 (5 a.m.) 1,010 cfs (4.36 ft).

Note.--No gage-height record Dec. 22 to Jan. 2, Apr. 12-29, May 4-19, June 4 to Sept. 30; discharge estimated on basis of 14 discharge measurements, weather records, and records for Deep Creek near Hesperia.

2615. Mojave River at lower narrows, near Victorville, Calif.

Location.--Lat 34°34'22", long 117°19'08", in SW¼SW¼SE¼ sec. 29, T. 6 N., R. 4 W., on left bank 1,000 ft upstream from bridge on U. S. Highway 66, 2,500 ft downstream from The Atchison, Topeka and Santa Fe Railway Co. bridge, and 3 miles northwest of Victorville.

Drainage area.--530 sq mi.

Records available.--February 1899 to July 1906, November 1930 to September 1958. Prior to Oct. 1, 1936, published as "at Victorville."

Gage.--Water-stage recorder. Altitude of gage is 2,650 ft (from topographic map). Prior to Aug. 1, 1906, staff gage and Nov. 12, 1930, to Dec. 8, 1936, water-stage recorder, at site 3.8 miles upstream at different datum. Dec. 9, 1936, to Mar. 28, 1938, water-stage recorder at present site at datum 2.00 ft higher.

Average discharge.--27 years (1931-58), 75.0 cfs (54,300 acre-ft per year); median of yearly mean discharges, 41 cfs (29,700 acre-ft per year).

Extremes.--Maximum discharge during year, 15,900 cfs Apr. 3 (gage height, 9.20 ft); minimum daily, 13 cfs Sept. 3, 4, 11.
1930-58: Maximum discharge, 70,600 cfs Mar. 2, 1938 (gage height, 18.7 ft, present datum), by slope-area measurement of peak flow; minimum daily, 6 cfs Aug. 19, 21, 26, 1951.

Remarks.--Records good below 100 cfs and poor above. Discharge measurements generally made twice a month. Periodic regulation by Lake Arrowhead (capacity, 48,000 acre-ft, used principally for recreation). Diversions and pumping for irrigation of about 5,000 acres above station.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	32	30	39	37	37	3,960	193	19	19	18	15
2	19	34	30	40	38	37	2,940	171	19	21	17	14
3	19	37	30	40	43	35	5,010	152	20	20	18	13
4	19	34	29	39	943	35	2,230	143	19	20	17	13
5	19	34	29	41	807	33	1,230	129	17	20	17	15
6	19	34	29	42	192	34	778	121	18	21	19	17
7	19	33	29	42	75	37	1,010	99	18	21	21	14
8	19	31	29	42	53	31	953	78	20	20	20	14
9	19	30	30	42	46	29	1,140	76	20	20	19	14
10	19	30	31	41	48	29	1,140	73	21	20	18	14
11	20	31	30	39	48	35	1,060	65	20	20	17	13
12	21	30	30	37	48	31	778	52	20	20	18	14
13	21	32	30	35	46	31	702	50	20	17	19	14
14	22	32	31	35	45	30	619	60	20	15	18	14
15	24	34	42	35	41	31	523	42	20	17	20	15
16	25	35	40	35	41	663	474	31	20	15	20	15
17	26	37	90	35	41	895	423	30	20	16	19	14
18	27	39	85	35	38	488	454	25	18	18	19	15
19	27	39	42	35	42	344	523	25	18	16	18	15
20	26	39	37	39	41	319	578	24	18	17	18	15
21	27	39	31	39	34	327	647	22	18	17	18	16
22	26	38	32	39	32	827	633	24	20	16	18	16
23	26	38	31	39	32	736	564	21	20	16	18	17
24	26	38	31	39	33	487	467	24	20	16	18	18
25	26	37	32	40	34	376	400	21	20	16	17	18
26	27	34	33	42	41	323	348	25	19	16	17	19
27	27	32	34	41	37	264	286	24	18	17	18	16
28	27	31	35	40	37	363	205	24	19	16	17	16
29	28	31	37	38	-	376	190	21	16	17	16	16
30	29	30	37	38	-------	335	187	20	17	18	16	17
31	34	-------	38	37	-------	260	-------	19	-------	18	15	-------
Total	732	1,024	1,124	1,200	2,993	7,878	30,452	1,884	572	556	558	456
Mean	23.6	34.1	36.3	38.7	107	254	1,015	60.8	19.1	17.9	18.0	15.2
Ac-ft	1,450	2,030	2,230	2,380	5,940	15,630	60,400	3,740	1,130	1,100	1,110	904

Calendar year 1957: Max 282 Min 12 Mean 28.5 Ac-ft 20,670
Water year 1957-58: Max 5,010 Min 13 Mean 135 Ac-ft 98,040

Peak discharge (base, 200 cfs).--Dec. 17 (9:30 p.m.) 314 cfs (2.93 ft); Feb. 4 (10 p.m.) 2,070 cfs (4.50 ft); Mar. 16 (2:30 p.m.) 1,680 cfs (4.55 ft); Mar. 22 (1:30 p.m.) 1,570 cfs (4.37 ft); Apr. 1 (10 p.m.) 10,800 cfs (7.67 ft); Apr. 3 (1:30 p.m.) 15,900 cfs (9.20 ft).

2625. Mojave River at Barstow, Calif.

Location.--Lat 34°54'25", long 117°01'20", in SE¼SW¼ 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 1958.

Gage.--Water-stage recorder. Altitude of gage, 2,090 ft (from topographic map).

Average discharge.--28 years, 28.5 cfs (20,630 acre-ft per year); median of yearly mean discharges, 0.1 cfs (72 acre-ft per year).

Extremes.--Maximum discharge during year, 9,140 cfs Apr. 3 (gage height, 4.64 ft); no flow most of year.
1930-58: Maximum discharge, 64,300 cfs Mar. 3, 1938 (gage height, 8.60 ft), by slope-area measurement of peak flow; no flow for several months each year.

Remarks.--Records good. Slight regulation by Lake Arrowhead (capacity, 48,000 acre-ft, used principally for recreation). Diversions and pumping for irrigation of about 15,000 acres above station.

Revisions.--Revised figures of discharge, in cubic feet per second, for the water year 1932, superseding those published in WSP 735, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1932		1932-Con.		1932-Con.		1932-Con.		1932-Con.	
Feb. 9	2,410	Feb. 16	387	Feb. 23	224	May 1	12	May 8	6.3
10	2,260	17	440	24	339	2	6.3	9	2.1
11	1,040	18	400	25	326	3	5.7	10	1.1
12	424	19	387	26	326	4	6.8	11	.7
13	375	20	314	27	314	5	12	12	.3
14	387	21	263	28	302	6	9.4	13	.2
15	351	22	224	29	314	7	9.4	14	.3

Month	Maximum	Minimum	Mean	Runoff in acre-feet
February 1932	2,410	0	407	23,420
May	12	0	2.34	144
Water year 1931-32	2,410	0	51.6	37,460
Calendar year 1932	2,410	0	51.6	37,460

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						0	0			0		0
2						0	*985			0		0
3						0	1,840			0		0
4						*0	*2,500			0		0
5						0	*688			0		0
6						0	*747			0		0
7						0	*546			0	(*)	3.6
8						0	*717			0		0
9						0	201		(*)	*0		0
10						0	*240			0		0
11						0	*214			0		0
12						0	139			0		0
13		(*)				0	90			0		0
14						0	*102			0		0
15						0	89	(*)		0		0
16	(*)					0	56			0		0
17			(*)			*10	*56			0		*0
18						6.9	97			0		0
19						*4.1	92			0		0
20						0	125			0		0
21						*0	*145			0		0
22						0	198			0		0
23						24	117			0		0
24						6.0	68			0		0
25						*4.6	1.5			0		0
26						*0	1.5			0		0
27						0	0			0	(*)	0
28				(*)		0	*0			0		0
29					-	0	0			2.7		0
30						0	0			.1		0
31						0				0		
Total	0	0	0	0	0	55.6	10,055.0	0	0	2.8	0	3.6
Mean	0	0	0	0	0	1.79	335	0	0	0.09	0	0.12
Ac-ft	0	0	0	0	0	110	19,940	0	0	5.6	0	7.1

Calendar year 1957: Max 0 Min 0 Mean 0 Ac-ft 0
Water year 1957-58: Max 2,500 Min 0 Mean 27.7 Ac-ft 20,070

Peak discharge (base, 100 cfs).--Mar. 17 (1 p.m.) about 100 cfs (3.00 ft); Mar. 23 (4:30 a.m.) 201 cfs (2.97 ft); Apr. 3 (10:30 p.m.) 9,140 cfs (4.64 ft).

* Discharge measurement or observation of no flow made on this day.

2630. 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 1958.

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, water-stage recorder at site 1.7 miles downstream at different datum.

Average discharge.--8 years (1930-32, 1952-58), 2.80 cfs (2,030 acre-ft per year).

Extremes.--Maximum discharge during year, 1,570 cfs Aug. 7 (gage height, 5.30 ft); minimum daily, 0.2 cfs June 25, Sept. 2-4.
1929-32, 1952-58: 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.
Revisions.--The maximum discharge for the water year 1931 has been revised to 250 cfs Aug. 12, 1931 (gage height, 1.66 ft), superseding figure published in WSP 720.

Remarks.--Records good below 300 cfs and fair above. Natural flow affected by groundwater withdrawals, diversions, municipal use, and storage in two small reservoirs.

Revisions.--Revised figures of discharge, in cubic feet per second, for high-water period in the water year 1931, superseding those published in WSP 720, are given herewith:

1931
Aug. 5..... 5.4
12..... 54
13..... 19

Month	Maximum	Minimum	Mean	Runoff in acre-feet
August 1931	54	0.6	3.17	195
Water year 1930-31	54	0.6	1.75	1,270
Calendar year 1931	54	0.6	1.76	1,270

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	1.1	1.1	1.6	1.4	1.2	1.2	1.4	0.8	0.4	0.3	0.3
2	.6	1.1	1.1	1.6	1.4	1.2	*1.3	1.3	.6	.4	.3	.2
3	.6	1.1	1.1	1.6	1.6	1.2	7.8	1.3	.7	.5	.3	.2
4	.6	1.1	1.1	1.6	1.6	*1.2	*340	1.2	.7	.4	.3	.2
5	.6	1.1	1.1	1.6	1.4	1.2	*396	1.2	.7	.3	.3	.3
6	.6	1.1	1.1	1.6	1.3	1.3	*96	1.2	.7	.3	.4	.3
7	.6	1.1	1.1	1.6	1.3	5.3	*37	1.2	.7	.3	*91.0	.3
8	.6	1.1	1.1	1.8	1.3	1.4	*23	1.2	.7	.3	5.5	.3
9	.6	1.1	1.1	1.8	1.3	1.2	67	1.2	*.7	*.3	1.1	.3
10	.6	1.1	1.1	1.8	1.3	1.2	6.6	1.2	.6	.3	.6	.3
11	.7	1.1	1.1	1.6	1.3	1.2	*2.6	1.3	.6	.3	.4	.3
12	.8	1.1	1.1	1.6	1.3	1.2	2.0	1.3	.6	.3	.4	.3
13	.8	1.1	1.1	1.6	1.3	1.2	1.8	1.2	.6	.3	.4	.3
14	.9	*1.1	1.1	1.6	1.2	1.1	1.6	1.2	.6	.3	.4	.6
15	.9	1.1	1.1	1.6	1.3	1.2	1.4	1.2	.5	.3	.5	.7
16	*.9	1.1	1.1	1.6	1.3	1.2	1.3	1.1	.5	.3	.5	.4
17	1.0	1.1	*1.1	1.6	1.3	1.1	1.2	1.0	.4	.3	.5	*.8
18	1.0	1.1	1.2	1.6	1.3	1.1	1.2	.9	.3	.3	.5	.8
19	.9	1.1	1.2	1.6	1.4	1.1	1.1	.8	.3	.3	.4	.8
20	.9	1.1	1.2	1.4	1.6	1.1	1.1	*.8	.3	.3	.3	.6
21	1.0	1.1	1.2	1.6	1.3	1.2	1.1	.8	.3	.3	.3	.6
22	1.0	1.1	1.2	1.6	1.2	1.3	1.0	.7	.3	.3	.3	.3
23	1.0	1.1	1.2	1.6	1.2	1.1	1.1	.7	.3	.3	.3	.4
24	1.0	1.1	1.2	1.6	1.2	1.0	1.1	.7	.3	.3	.3	.5
25	1.0	1.1	1.3	1.8	1.2	1.0	1.2	.7	.2	.3	.3	.5
26	1.0	1.1	1.4	2.0	1.1	1.0	1.3	.7	.3	.3	.3	.5
27	1.0	1.1	1.4	1.6	1.1	1.0	1.4	.7	.3	.3	*.3	.6
28	1.1	1.1	1.4	*1.6	1.2	1.0	1.3	.8	.3	.3	.3	.6
29	1.2	1.1	1.4	1.6	-	1.0	1.3	.8	.3	.3	.3	.6
30	1.2	1.1	1.6	1.4	-------	1.0	1.4	.8	.3	.3	.3	.6
31	1.2	-------	1.6	1.4	-------	1.0	-------	.8	-------	.3	.3	-------
Total	26.5	33.0	37.3	50.2	36.7	39.5	1,003.4	31.4	14.7	9.8	107.7	13.5
Mean	0.85	1.10	1.20	1.62	1.31	1.27	33.4	1.01	0.49	0.32	3.47	0.45
Ac-ft	53	65	74	100	73	78	1,990	62	29	19	214	27

Calendar year 1957: Max 1.9 Min 0.4 Mean 1.01 Ac-ft 730
Water year 1957-58: Max 396 Min 0.2 Mean 3.85 Ac-ft 2,780

Peak discharge (base, 100 cfs).--Apr. 4 (8 p.m.) 1,080 cfs (5.00 ft); Apr. 9 (1 a.m.) 110 cfs (3.73 ft); Aug. 7 (4:30 p.m.) 1,570 cfs (5:30 ft).

* Discharge measurement made on this day.

2635. Big Rock Creek near Valyermo, Calif.

Location.--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 1958. 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.--34 years (1923-37, 1938-58), 15.0 cfs (10,860 acre-ft per year); median of yearly mean discharges, 9.2 cfs (6,700 acre-ft per year).

Extremes.--Maximum discharge during year, 399 cfs Dec. 15 (gage height, 4.05 ft); minimum daily, 2.5 cfs Oct. 9.
1923-58: Maximum discharge, 8,300 cfs Mar. 2, 1938, on basis of slope-area measurement of peak flow; minimum daily, 0.7 cfs Nov. 5, 1951.
Revisions.--The figures of maximum discharge 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)
735	1932	Feb. 8, 1932	800	4.15
830	1937	Feb. 6, 1937	360	3.25
880	1939	Dec. 18, 1938	450	9.70

Remarks.--Records good except those for periods of no gage-height record, which are fair. Discharge measurements generally made four or more times a month. There is evidence of appreciable infiltration into the stream bed in the immediate vicinity of station.

Cooperation.--Thirty discharge measurements furnished by Los Angeles County Flood Control District.

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water years 1932 and 1937, superseding those published in WSP 735 and 830, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1932		1932-Con.		1937-Con.		1937-Con.		1937-Con.	
Feb. 8	250	Feb. 13	51	Feb. 7	147	Feb. 16	86	Mar. 15	82
9	378	14	44	8	55	17	67	16	222
10	148			13	71	Mar. 12	72	17	136
11	80	1937		14	241	13	92	19	78
12	61	Feb. 6	158	15	136	14	67	20	66

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
February 1932	-	378	7	55.7	3,210
Water year 1931-32	-	378	2.6	22.8	16,500
Calendar year 1932	-	378	4.4	23.3	16,900
February 1937	1,651.0	241	7.5	59.0	3,270
March	1,906	222	35	61.5	3,780
Water year 1936-37	10,947.9	241	2.2	30.0	21,710
Calendar year 1937	11,185.3	-	-	30.6	22,180

2635. Big Rock Creek near Valyermo, Calif.--Continued

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 4-6, 11-19, Apr. 27 to Sept. 30)

1.76	2.5	2.0	8.8	2.6	54
1.8	3.2	2.1	13	3.0	115
1.9	5.6	2.3	26	3.5	233

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	2.6	3.4	a10	10	39	118	86	70	31	18	12
2	2.8	2.8	3.4	a10	10	36	86	89	67	33	17	12
3	2.8	2.8	3.4	9.5	48	33	161	91	66	a32	17	12
4	2.8	3.0	3.8	9.1	203	30	108	91	63	a32	17	12
5	2.8	3.0	5.1	9.1	95	28	81	97	60	a31	17	12
6	2.6	2.8	4.6	8.4	59	30	77	101	60	a30	17	12
7	2.6	2.8	4.6	8.4	44	30	71	97	58	a30	17	12
8	2.6	2.8	4.1	8.0	39	29	67	94	57	a29	17	12
9	2.5	2.8	4.1	8.0	39	28	67	99	53	a28	16	12
10	2.6	3.0	4.1	8.0	36	28	68	101	52	a28	16	12
11	2.8	3.0	4.1	8.0	33	29	80	91	50	a27	16	12
12	2.8	3.0	4.1	8.0	32	27	86	83	48	a26	15	12
13	2.8	3.0	4.1	8.0	30	26	87	78	50	a25	16	12
14	2.8	3.0	4.1	7.7	29	24	91	78	46	a24	16	11
15	2.8	3.0	129	7.7	27	34	95	78	44	a23	16	11
16	2.8	3.0	165	7.4	26	177	102	81	44	23	15	11
17	2.8	2.8	122	7.1	25	99	108	85	44	23	14	10
18	2.8	3.0	49	7.1	24	81	117	86	42	a22	14	9.9
19	2.8	2.8	a30	6.8	110	73	130	86	42	a21	14	9.5
20	2.8	2.6	a25	6.5	75	74	136	84	41	a21	13	9.1
21	2.8	2.6	a20	6.2	60	81	138	81	40	a20	13	8.4
22	2.6	2.8	a15	6.2	52	83	126	77	38	a20	13	8.4
23	2.6	2.8	a14	6.2	46	73	110	74	37	19	12	9.1
24	2.6	3.0	a13	6.2	41	66	95	77	37	a19	12	9.1
25	2.6	3.2	a12	6.2	50	58	87	77	36	a18	12	8.8
26	2.6	3.4	a12	22	48	55	87	77	34	a18	12	9.1
27	2.6	3.4	a12	17	45	58	86	78	32	a17	12	8.4
28	2.6	3.4	a11	12	42	54	86	75	32	17	12	8.4
29	2.6	3.4	a11	11	-	52	83	73	31	18	12	8.4
30	2.6	3.4	a11	11	-------	50	83	71	31	18	12	8.0
31	2.6	-------	a10	11	-------	47	-------	70	-------	17	12	-------
Total	83.7	89.0	718.0	277.8	1,378	1,632	2,917	2,606	1,405	740	452	313.6
Mean	2.70	2.97	23.2	8.96	49.2	52.6	97.2	84.1	46.8	23.9	14.6	10.5
Ac-ft	166	177	1,420	551	2,730	3,240	5,790	5,170	2,790	1,470	897	622

Calendar year 1957: Max 165 Min 2.5 Mean 7.81 Ac-ft 5,650
Water year 1957-58: Max 203 Min 2.5 Mean 34.6 Ac-ft 25,020

Peak discharge (base, 50 cfs).--Dec. 15 (6 p.m.) 399 cfs (4.05 ft); Feb. 4 (11 a.m.) 295 cfs (3.65 ft); Feb. 19 (2 p.m.) 210 cfs (3.42 ft); Mar. 16 (4:30 a.m.) 264 cfs (3.60 ft); Apr. 3 (7:30 a.m.) 242 cfs (3.52 ft).

a No gage-height record; discharge estimated on basis of 7 discharge measurements, recorded range in stage, and weather records.

2640. 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 1958.

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.--26 years (1930-37, 1939-58), 18.0 cfs (13,030 acre-ft per year); median of yearly mean discharges, 9.6 cfs (7,000 acre-ft per year).

Extremes.--Maximum discharge during year, 1,070 cfs Dec. 15 (gage height, 7.15 ft); no flow Oct. 1 to Nov. 2.
1930-58: Maximum discharge, 17,000 cfs (estimated) Mar. 2, 1938; no flow during periods in most years.
Revisions.--Figures of maximum discharge for the water years 1935 and 1944 have been revised to 925 cfs Feb. 5, 1935 (gage height, 3.77 ft, site and datum then in use), and 902 cfs Feb. 22, 1944 (gage height, 6.85 ft), superseding those published in WSP 790 and 1010, respectively.

Cooperation.--Records furnished by Los Angeles County Flood Control District; records reviewed by Geological Survey.

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water years 1935 and 1944, superseding those published in WSP 790 and 1010, are given herein. Complete table of daily discharge is given for the water year 1935, but only revised figures are given for water year 1944.

Feb. 22, 1944..... 567
Feb. 23, 1944..... 180

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
Calendar year 1935.....	7,176.5	716	0	19.7	14,240
February 1944.....	1,757	567	19	60.6	3,480
Water year 1943-44.....	17,917.7	567	.8	49.0	35,540
Calendar year 1944.....	17,035.3	567	1.2	46.5	33,790

Discharge, in cubic feet per second, water year October 1934 to September 1935

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	2.2	3.6	12	35	24	29	30	9.5	1.4	0.1	
2	0	2.2	3.4	12	34	29	29	29	9	1.5	.1	
3	0	2.1	3.2	12	33	28	30	27	8	1.9	0	
4	0	1.9	3.0	14	106	27	36	25	8	1.9	0	
5	0	1.9	3.0	80	716	26	35	24	7.5	1.5	0	
6	0	1.8	2.9	60	384	25	33	22	7	1.4	0	
7	0	1.8	2.7	48	189	28	33	22	7	1.3	0	
8	0	1.8	17.0	40	120	27	372	20	6	1.2	0	
9	0	1.7	40.0	50	88	25	216	20	6	1.2	0	
10	0	1.7	23	72	74	24	118	19	5.5	1.1	0	
11	0	1.7	18	60	65	24	89	19	5.5	1.0	0	
12	0	1.5	19	51	58	27	76	18	5	.8	0	
13	0	1.5	251	45	54	32	67	18	5	.8	0	
14	0	1.5	494	37	50	38	62	17	5	.7	0	
15	0	1.5	186	46	47	44	60	17	4.7	.6	0	
16	0	6.5	88	40	43	38	57	16	4.2	.6	0	
17	0	8.5	62	33	40	34	53	16	4.0	.6	0	
18	39	7.5	50	30	37	32	50	16	3.6	.5	0	
19	42	8	38	28	36	31	47	15	3.4	.5	0	
20	19	7.5	30	25	36	29	46	14	2.9	.4	0	
21	12	6	24	23	35	28	45	14	2.5	.4	0	
22	8	5	22	23	34	27	44	13	2.4	.3	0	
23	6	5	19	23	32	26	42	13	2.2	.3	0	
24	5	4.7	16	25	30	28	40	12	1.9	.2	0	
25	4.2	4.5	16	31	28	28	37	11	1.8	.1	0	
26	3.8	4.2	14	35	27	28	34	11	1.7	.1	0	
27	3.2	4.0	13	36	26	28	32	10	1.4	.1	0	
28	3.0	4.0	16	37	25	29	31	10	1.4	.1	0	
29	2.5	3.8	15	36	-	29	33	10	1.4	.1	0	
30	2.4	3.6	13	35	-------	29	35	10	1.4	.1	0	
31	2.2	-------	12	35	-------	29	-------	10	-------	.1	0	-------
Total	152.3	109.6	1,517.8	1,134	2,482	901	1,911	528	134.9	22.8	0.2	0
Mean	4.91	3.65	49.0	36.6	88.6	29.1	63.7	17.0	4.50	0.74	0.006	0
Ac-ft	302	217	3,010	2,250	4,920	1,790	3,790	1,050	268	45	0.4	0

Calendar year 1934: Max 494 Min 0 Mean 9.04 Ac-ft 6,540
Water year 1934-35: Max 716 Min 0 Mean 24.4 Ac-ft 17,640

2640. Little Rock Creek near Little Rock, Calif.--Continued

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	1.7	8.4	10	52	238	96	21	7.2	3.4	0.9
2		0	1.7	7.9	9.8	46	196	96	20	7.0	3.0	.9
3		.2	1.7	7.9	114	42	363	92	20	6.8	2.5	.6
4		1.7	1.7	7.5	521	37	237	90	19	6.8	2.0	.5
5		1.4	5.0	7.0	222	34	177	87	18	6.3	1.4	.4
6		1.4	7.2	6.8	126	36	152	87	17	5.8	1.2	.9
7		1.4	6.5	6.3	92	37	154	83	16	5.2	2.0	1.1
8		1.6	5.8	6.1	80	39	145	78	16	4.5	2.5	1.0
9		1.7	4.9	6.1	75	39	157	73	15	4.3	2.2	1.0
10		1.9	4.3	6.3	65	38	170	70	15	3.9	1.4	.8
11		2.0	3.4	6.3	57	41	194	63	15	3.8	1.1	.6
12		2.2	3.2	6.3	51	40	199	58	14	3.4	.9	.5
13		2.0	3.0	6.3	45	41	194	54	14	3.4	.9	.5
14		2.0	2.8	6.3	40	45	190	52	14	3.4	2.6	.9
15		2.0	231	6.1	36	70	190	50	13	3.6	2.8	1.0
16		2.0	373	5.8	34	429	187	47	13	3.6	3.0	.9
17		2.0	190	5.8	34	241	192	46	12	3.8	2.8	.8
18		2.0	90	5.4	32	174	206	44	11	3.9	2.2	.6
19		2.0	58	5.4	234	143	215	43	11	3.8	1.7	.6
20		2.0	42	5.2	175	127	231	40	11	3.8	1.4	.4
21		2.0	31	4.9	123	160	213	39	10	3.8	1.0	.4
22		1.9	26	4.9	108	164	192	37	9.6	3.9	.9	.4
23		1.7	21	4.7	94	136	170	36	9.1	3.9	.9	.4
24		1.7	17	4.7	83	116	147	34	8.4	3.8	1.0	1.4
25		1.7	15	4.9	94	102	130	31	7.5	3.6	1.0	2.0
26		1.6	13	33	78	91	118	29	7.0	3.4	1.1	1.4
27		1.6	12	23	64	89	112	27	6.5	3.2	1.1	1.1
28		1.6	11	15	59	84	105	26	6.1	2.6	1.1	1.0
29		1.6	10	13	-	83	101	25	6.4	2.3	1.2	1.0
30		1.7	9.6	11	-------	82	98	23	6.8	2.6	1.2	1.0
31		-------	9.1	11	-------	79	-------	22	-------	3.6	1.1	-------
Total	0	48.6	1,211.6	259.3	2,755.8	2,937	5,373	1,678	382.4	131.0	52.6	25.0
Mean	0	1.62	39.1	8.36	98.4	94.7	179	54.1	12.7	4.23	1.70	0.83
Ac-ft	0	96	2,400	514	5,470	5,830	10,660	3,330	758	260	104	50

Calendar year 1957: Max 399 Min 0 Mean 9.60 Ac-ft 6,940
Water year 1957-58: Max 521 Min 0 Mean 40.7 Ac-ft 29,470

2646. Oak Creek near Mojave, Calif.

Location.--Lat 35°03'00", long 118°21'25", in NW¼ sec. 15, T. 11 N., R. 14 W., on upstream right wing wall of culvert, 0.1 mile west of junction of Oak Creek and Willow Springs Roads, 100 ft downstream from unnamed tributary, and 10.5 miles west of Mojave.

Drainage area.--15.8 sq mi.

Records available.--August 1957 to September 1958.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 4,100 ft (from topographic map).

Extremes.--1957: No flow for period Aug. 1 to Sept. 30.
1957-58: Maximum discharge during year, 22 cfs Apr. 18 (gage height, 1.51 ft); no flow Oct. 1 to Dec. 13.

Remarks.--Records good.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.54	0.01	0.9	2.1	1.3	12
.6	.1	1.0	3.8	1.4	16
.7	.3	1.1	5.9	1.6	26
.8	1.0	1.2	8.5		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0	0.1	0.2	0.4	2.0	10	4.4	2.2	1.5	0.7
2			0	.1	.2	.3	1.9	11	4.6	*2.2	1.4	.7
3			0	.2	.4	.3	4.0	10	4.2	2.0	1.2	.7
4			0	.2	3.1	.3	*2.7	10	*4.2	2.0	1.2	.7
5			0	.2	.6	.3	2.9	*8.9	3.8	1.9	.9	.7
6			0	.2	.3	.3	4.2	7.7	3.8	1.8	.7	.8
7			0	.2	.3	.2	5.9	8.5	3.8	1.6	.7	.9
8			0	.2	.2	.2	5.7	8.2	3.8	1.6	.7	.9
9			0	.2	.2	.2	6.2	8.2	3.8	1.5	.7	.8
10			0	.2	.2	.2	7.5	8.0	3.6	1.6	.7	.8
11			0	.2	.2	.3	*8.8	8.5	3.4	1.6	.6	.9
12			0	.2	.3	*.5	9.8	8.2	3.4	1.5	.6	.9
13		(*)	0	.2	.2	.5	11	8.0	3.4	1.5	*.7	.9
14			.1	.2	.2	.5	12	7.7	3.3	1.5	.7	.9
15			.2	.2	.2	2.4	14	7.5	3.3	1.6	.7	.8
16	(*)		.2	.2	.2	1.6	16	7.2	3.3	*1.7	.7	.8
17			*.1	.2	.2	1.0	16	6.9	2.9	1.8	.5	*.8
18			.1	.2	.2	.8	16	6.9	*2.2	1.9	.7	.8
19			.1	.2	1.4	.8	16	6.9	2.2	2.2	.8	.8
20			.1	.2	.5	1.0	16	7.2	2.4	1.8	.7	.8
21			.1	.2	.2	1.4	16	*6.9	2.2	1.7	.7	.8
22			.1	.2	.2	1.8	16	6.7	2.2	1.7	.7	.8
23			.1	.2	.2	1.2	*16	6.4	1.9	1.7	.7	1.0
24			.1	.2	*.2	1.1	15	6.4	1.9	1.8	.7	1.0
25			.1	.2	1.4	1.1	15	5.9	1.9	2.0	.7	.9
26			.1	.2	.9	*1.1	13	5.3	2.0	1.9	*.7	.9
27			.1	.2	.5	1.7	13	4.8	2.0	1.8	.7	.9
28			.1	*.2	.5	1.5	11	4.4	1.9	*1.8	.8	.9
29			.1	.2	-	1.4	11	4.6	2.0	1.5	.8	.8
30			.1	.2	-------	1.4	11	4.2	2.2	1.5	.8	.8
31		-------	.1	.2	-------	1.5	-------	4.0	-------	1.5	.8	-------
Total	0	0	2.0	6.0	13.4	27.3	315.6	225.1	90.0	54.4	24.5	24.9
Mean	0	0	0.06	0.19	0.48	0.88	10.5	7.26	3.00	1.75	0.79	0.83
Ac-ft	0	0	4.0	12	27	54	626	446	179	108	49	49

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 16 Min 0 Mean 2.15 Ac-ft 1,550

* Discharge measurement or observation of no flow made on this day.

2870. 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 town of Mono Lake.

Records available.--June 1912 to September 1958. Records prior to September 1934 are published in WSP 765.

Gage.--Staff gage or reference point. Datum of gage is 6,410.73 ft above mean sea level, datum of 1929. Prior to Oct. 2, 1945, at datum 20.07 ft lower. Gage readings have been reduced to elevations above mean sea level.

Extremes.--1912-58: Maximum elevation observed, 6,428.1 ft July 18, 1919; minimum observed, 6,400.85 ft Dec. 13, 1957.

Cooperation.--Records furnished by city of Los Angeles, Department of Water and Power.

Revisions (water years).--WSP 765: 1912-33. WSP 1284: 1952.

Elevation, in feet, water year October 1957 to September 1958

Date	Elevation	Date	Elevation	Date	Elevation
Oct. 4	6,401.10	Feb. 5	6,401.06	June 13	6,401.97
11	6,400.95	14	6,401.06	20	6,402.06
18	6,400.93	21	6,401.24	27	6,402.10
25	6,400.92	28	6,401.27	July 3	6,402.07
Nov. 1	6,400.94	Mar. 7	6,401.31	10	6,402.18
8	6,400.94	14	6,401.34	18	6,402.18
15	6,400.91	21	6,401.49	25	6,402.20
22	6,400.89	28	6,401.49	Aug. 1	6,402.18
27	6,400.88	Apr. 7	6,401.63	8	6,402.19
Dec. 6	6,400.89	16	6,401.72	15	6,402.12
13	6,400.85	23	6,401.72	22	6,402.10
20	6,400.98	25	6,401.70	29	6,402.05
27	6,401.01	May 1	6,401.77	Sept. 5	6,401.92
Jan. 3	6,401.02	9	6,401.83	12	6,401.82
10	6,401.02	16	6,401.87	19	6,401.72
17	6,401.03	23	6,402.02	26	6,401.62
24	6,401.04	29	6,401.97		
31	6,401.05	June 6	6,401.96		

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 1958. Occasional readings prior to August 1928.

Gage.--Bench mark, at United States Naval Depot, 4,053.41 ft above mean sea level, adjustment of 1912.

Extremes.--1928-58: Maximum elevation observed, 4,051.8 ft Mar. 13, 1928 (Indian Service); minimum observed, 3,988.97 ft Apr. 9, 1958.
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, water year October 1957 to September 1958

Oct. 4	3,989.62	Apr. 9	3,988.97
Nov. 1	3,989.34	May 2	3,989.23
Dec. 2	3,989.22	June 2	3,989.50
Jan. 7	3,989.07	July 7	3,990.46
Feb. 5	3,989.03	Aug. 4	3,990.39
Mar. 11	3,989.01	Sept. 3	3,990.31

2890. Virginia Creek near Bridgeport, Calif.

Location.--Lat 38°11', long 119°12', in W½ sec. 22, T. 4 N., R. 25 E., on right bank 3 miles upstream from mouth, 1¼ miles downstream from Clearwater Creek, and 4½ miles southeast of Bridgeport.

Drainage area.--64 sq mi, approximately.

Records available.--October 1953 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 6,700 ft (from topographic map).

Average discharge.--5 years, 17.3 cfs (12,520 acre-ft per year).

Extremes.--Maximum discharge during year, 375 cfs Apr. 20 (gage height, 5.61 ft), from rating curve extended above 170 cfs as explained below; minimum, 3.2 cfs Nov. 29.
1953-58: Maximum discharge, 1,300 cfs Dec. 23, 1955 (gage height, 8.40 ft), from rating curve extended above 170 cfs on basis of slope-area measurement of peak flow; minimum, 1.5 cfs July 8, 1954.

Remarks.--Records good except those above 80 cfs, which are fair. Flow partly regulated by Virginia Lakes and other lakes near headwaters of Virginia Creek. Diversions for irrigation of about 3,000 acres above station.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 13, 16, 17, May 1-8, Aug. 16 to Sept. 30)

Oct. 1 to Apr. 17		Apr. 18 to Sept. 30	
2.3	4.0	3.3	9.3
2.5	10	3.5	18
2.8	25	3.8	37
3.3	72	4.3	87
		4.8	170

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.1	9.4	8.4	8.4	b8.5	b10	12	48	55	34	23	14
2	5.4	9.4	8.1	8.4	b8.4	b10	12	66	53	32	26	14
3	5.4	10	8.4	8.4	8.1	b10	10	89	47	33	25	13
4	5.7	10	8.7	7.8	9.0	b10	14	119	42	34	23	*12
5	5.7	10	9.4	7.1	10	10	b13	*148	39	34	20	13
6	5.7	9.4	8.1	7.8	10	11	16	130	40	35	18	13
7	5.7	9.7	9.0	8.4	9.4	10	16	123	41	37	19	14
8	5.7	11	8.4	*8.7	9.0	10	16	107	41	*37	22	15
9	5.7	10	8.7	8.4	9.0	b9.0	16	100	37	34	22	14
10	6.0	10	9.0	9.0	9.0	9.7	20	98	35	33	18	13
11	6.8	10	9.4	8.7	9.0	10	24	90	39	33	19	13
12	7.4	10	8.7	8.4	9.7	9.7	29	68	37	33	18	13
13	7.1	12	9.4	8.1	9.4	b9.7	*31	*63	*47	34	19	13
14	6.8	10	9.7	8.4	9.7	9.7	33	61	39	31	21	13
15	8.1	9.4	10	9.0	10	10	35	63	36	29	22	13
16	8.1	9.7	12	9.0	10	12	*40	65	39	28	40	12
17	*8.1	9.4	8.1	8.7	*10	b12	66	67	45	27	29	12
18	8.4	12	8.7	b8.1	11	*b12	*81	73	*54	27	25	12
19	8.4	*14	12	b8.1	11	12	113	75	58	26	23	12
20	9.4	12	12	8.4	11	13	156	73	57	25	*20	12
21	10	10	12	b8.1	11	13	131	71	50	24	18	12
22	9.7	8.1	b11	b8.4	12	14	98	70	49	27	15	10
23	10	9.7	b9.0	8.4	12	13	64	*63	50	39	15	11
24	11	9.4	10	9.0	14	14	49	62	56	34	15	12
25	10	9.4	11	9.0	16	12	*44	60	50	28	15	12
26	9.7	9.4	10	9.4	12	12	43	60	44	26	15	12
27	10	8.7	9.0	9.0	11	12	44	60	42	25	15	12
28	9.4	9.0	9.4	9.4	b10	12	48	*60	43	25	16	12
29	9.0	6.8	9.0	9	-	12	49	60	42	*25	14	12
30	9.4	8.4	8.1	b8.7	-------	12	42	58	38	23	14	12
31	9.4	-------	7.8	b8.4	-------	12	-------	57	-------	23	14	-------
Total	242.3	296.3	292.5	264.1	289.1	347.8	1,365	2,407	1,345	935	618	377
Mean	7.82	9.88	9.44	8.52	10.3	11.2	45.5	77.6	44.8	30.2	19.9	12.6
Ac-ft	481	588	580	524	573	690	2,710	4,770	2,670	1,850	1,230	748

Calendar year 1957: Max 49 Min 3.4 Mean 13.0 Ac-ft 9,380
Water year 1957-58: Max 156 Min 5.1 Mean 24.1 Ac-ft 17,410

Peak discharge (base, 50 cfs).--Apr. 20 (6 p.m.) 375 cfs (5.61 ft); May 5 (7:30 p.m.) 287 cfs (5.43 ft); May 18 (9 p.m.) 87 cfs (4.30 ft); June 13 (2 p.m.) 61 cfs (4.08 ft); June 18 (4:30 p.m.) 61 cfs (4.12 ft); July 23 (6:30 p.m.) 61 cfs (4.08 ft); Aug. 16 (8:30 p.m.) 328 cfs (5.59 ft).

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

2895. Green Creek near Bridgeport, Calif.

Location.--Lat 38°11', long 119°14', in NE¼SE¼ sec. 29, T. 4 N., R. 25 E., on right bank 130 ft downstream from county bridge and 5½ miles south of Bridgeport.

Drainage area.--19.4 sq mi.

Records available.--October 1953 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 6,850 ft (from topographic map).

Average discharge.--5 years, 31.7 cfs (22,950 acre-ft per year).

Extremes.--Maximum discharge during year, 233 cfs June 24 (gage height, 3.13 ft); minimum not determined, occurred during period of ice effect.
1953-58: Maximum discharge, 307 cfs Dec. 23, 1955, from rating curve extended above 220 cfs on basis of slope-area measurement of peak flow and logarithmic plotting; maximum gage height, 3.46 ft Feb. 2, 1956 (backwater from ice); minimum discharge, 3.7 cfs Nov. 17, 1955, but may have been less during periods of ice effect.

Remarks.--Records good. Flow regulated by West, Green, East, Summit, and other lakes.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 12 to June 5)

1.6	5.0	2.2	41
1.7	8.0	2.4	64
1.8	12	2.7	117
2.0	23	3.1	224

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.2	7.7		b7.1	b7.7	b10	b8.0	36	119	113	66	41
2	6.2	7.7		7.7	8.0	b9.6	b8.0	42	105	107	70	37
3	6.2	7.7		7.4	8.4	b9.6	b8.4	50	95	107	73	33
4	5.9	8.4		b6.2	7.4	b9.2	b8.8	58	88	113	66	*29
5	5.9	8.0	b6.5	b6.2	8.0	b9.2	b9.2	*68	88	122	62	26
6	5.6	b8.4		b6.5	8.4	9.2	b9.6	78	86	126	59	24
7	5.6	b8.8		6.5	8.8	b8.8	9.6	78	90	135	60	24
8	5.6	8.8		*6.5	8.8	8.8	b10	74	90	*138	62	27
9	5.6	8.0		b6.2	8.8	b7.7	11	78	83	128	63	26
10	5.6	8.4		6.5	8.8	b7.4	11	76	79	124	60	23
11	5.9	7.7	b5.6	b6.5	b8.8	b8.0	12	79	81	119	58	21
12	6.8	8.0	b5.6	7.1	8.8	b8.0	12	67	78	119	58	20
13	7.1	8.4	b6.5	b6.5	b8.8	b8.0	13	*60	*74	119	57	19
14	8.4	6.8	6.5	b6.5	b8.8	8.0	14	63	74	109	54	18
15	7.4	b6.5	6.5	6.8	9.2	8.0	14	67	83	103	57	16
16	7.1	6.5	7.7	6.5	9.2	b8.0	*16	73	93	99	88	16
17	*7.1	7.1	6.2	6.5	*9.2	b9.2	18	79	109	90	93	16
18	7.1	8.4	5.6	b6.2	8.8	*b10	34	93	126	79	84	15
19	7.1	*10	b6.0	b5.6	8.4	b10	45	119	145	74	78	14
20	7.4	9.6	b6.5	b5.6	8.0	11	48	133	150	76	70	14
21	8.4	b8.0	b6.2	b6.2	8.0	10	49	126	161	78	67	14
22	8.0	b7.1	b5.9	b6.2	8.0	10	45	128	148	78	64	13
23	8.0	b7.1	b5.3	b6.2	8.0	b11	39	126	158	97	59	15
24	8.4	7.1	b6.0	6.2	8.8	11	31	122	*203	103	58	16
25	8.4	7.7	b8.4	b6.2	10	b11	29	117	166	84	57	15
26	8.8	b6.5	b9.2	6.8	b9.2	b10	29	115	138	74	52	14
27	9.6	b6.2	b8.6	b6.8	b9.6	b10	30	119	135	73	51	14
28	8.8	b6.5	8.8	7.1	b10	10	33	*115	138	73	58	13
29	8.0	b6.5	8.4	7.1	-	10	35	119	131	*72	56	12
30	8.0	b6.5	b7.7	b7.4	-------	9.6	33	119	126	68	51	12
31	7.7	-------	b6.5	b7.7	-------	b8.0	-------	119	-------	67	46	-------
Total	221.9	230.1	208.9	204.5	242.7	288.3	672.6	2,796	3,440	3,067	1,957	597
Mean	7.16	7.67	6.74	6.60	8.67	9.30	22.4	90.2	115	98.9	63.1	19.9
Ac-ft	440	456	414	406	481	572	1,330	5,550	6,820	6,080	3,880	1,180

Calendar year 1957 : Max 164 Min 5.3 Mean 26.4 Ac-ft 19,120
Water year 1957-58 : Max 203 Min 5.3 Mean 38.2 Ac-ft 27,610

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

2900. Summers Creek near Bridgeport, Calif.

Location.--Lat 38°09', long 119°15', in NW¼NE¼ sec. 6, T. 3 N., R. 25 E., 7½ miles southwest of Bridgeport.

Drainage area.--12.6 sq mi.

Records available.--October 1953 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 7,100 ft (from topographic map).

Average discharge.--5 years, 6.40 cfs (4,630 acre-ft per year).

Extremes.--Maximum discharge during year, 70 cfs May 6 (gage height, 3.38 ft); minimum, 1.2 cfs Mar. 16.

1953-58: Maximum discharge, 690 cfs Dec. 23, 1955 (gage height, 5.95 ft in gage well, 6.2 ft from floodmarks), from rating curve extended above 58 cfs on basis of slope-area measurement of peak flow; minimum, 0.6 cfs Sept. 6, 7, 1957.

Remarks.--Records good except those for periods of no gage-height record, which are fair. Flow partly regulated by Tamarack Lake, several smaller lakes, and a transarea diversion to Twin Lakes. Diversions for irrigation of about 160 acres above station.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to May 5				May 6 to Sept. 30			
2.3	1.0	2.7	14	2.5	3.0	2.9	22
2.4	3.2	2.9	27	2.6	5.7	3.2	50
2.5	6.0	3.1	43	2.7	9.7		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.2	2.8	2.8	3.0	3.0	3.8	3.2	20	17	a21	11	6.3
2	3.2	3.0	2.5	3.0	3.0	3.5	3.2	26	16	a19	11	5.1
3	3.2	3.2	2.5	3.0	3.2	3.8	2.8	30	15	a20	11	3.9
4	3.2	3.5	2.8	2.8	3.2	3.5	3.5	38	14	a20	11	*3.6
5	3.2	3.5	2.8	2.8	3.0	3.2	3.2	*42	14	a20	10	3.4
6	3.2	3.5	3.0	3.0	3.0	3.5	3.2	41	14	a21	9.7	3.6
7	3.2	4.0	3.0	2.8	3.0	3.2	3.2	37	14	a22	8.3	6.0
8	3.2	4.0	3.0	*2.8	3.0	3.0	3.2	a33	13	*23	6.0	6.0
9	3.0	3.8	3.0	2.8	3.0	3.0	3.2	a30	13	19	8.3	5.1
10	3.0	3.8	3.0	2.8	3.0	3.2	3.8	a28	13	17	8.7	4.8
11	3.8	3.5	3.0	2.8	3.0	3.2	4.6	a26	13	17	7.1	4.5
12	3.8	3.5	3.0	2.8	3.2	3.0	4.9	a25	13	17	7.1	4.5
13	4.0	4.9	3.0	2.8	3.2	3.2	5.4	*24	*16	17	8.3	4.8
14	4.0	3.8	3.2	2.8	3.2	3.2	6.4	21	14	17	12	4.8
15	a3.8	3.5	3.8	2.8	3.2	3.0	7.1	21	11	15	12	4.5
16	a3.8	3.5	4.9	2.8	3.2	3.0	*8.2	21	13	15	11	4.2
17	*4.0	3.5	3.5	2.8	*3.2	3.0	12	21	17	13	10	4.2
18	4.0	4.6	3.2	2.8	3.5	*3.0	16	22	19	12	9.2	4.2
19	4.0	*4.6	4.0	2.8	3.5	3.2	17	22	21	9.7	9.2	3.9
20	4.9	3.8	3.8	3.0	3.5	3.2	19	21	21	6.0	8.7	3.9
21	5.2	3.2	3.8	2.8	3.8	3.2	20	20	22	9.7	7.1	3.9
22	5.4	3.0	2.8	2.5	3.8	3.2	17	19	24	12	6.7	3.6
23	5.4	3.2	3.0	3.0	3.8	3.2	13	*19	26	12	6.3	4.2
24	4.3	3.2	3.5	3.0	8.5	3.2	12	18	27	12	6.3	4.5
25	3.2	3.2	3.5	3.0	8.2	3.2	12	19	a26	9.7	6.0	3.9
26	3.2	3.2	3.5	3.0	5.2	3.0	13	19	a25	7.5	6.0	3.6
27	3.0	3.2	3.5	3.0	4.9	3.2	14	18	a25	10	6.0	3.6
28	2.8	3.0	3.2	3.0	4.3	3.2	16	*17	a24	11	6.0	3.6
29	2.8	2.5	3.2	3.0	-	3.2	17	17	a23	*10	7.1	3.4
30	2.8	2.8	3.0	3.0	-------	3.2	16	17	a22	11	6.7	3.4
31	2.8	-------	3.0	3.0	-------	3.2	-------	17	-------	12	6.7	-------
Total	112.6	104.8	99.8	89.3	105.6	99.7	283.1	749	545	457.6	260.5	129.0
Mean	3.63	3.49	3.22	2.88	3.77	3.22	9.44	24.2	18.2	14.8	8.40	4.30
Ac-ft	223	208	198	177	209	198	562	1,490	1,080	908	517	256

Calendar year 1957: Max 21 Min 0.8 Mean 5.47 Ac-ft 3,960
Water year 1957-58: Max 42 Min 2.5 Mean 8.32 Ac-ft 6,030

Peak discharge (base, 20 cfs).--Feb. 24 (8 p.m.) 20 cfs (2.80 ft); Apr. 20 (6 p.m.) 27 cfs (2.91 ft); May 6 (5 p.m.) 70 cfs (3.38 ft); June 24 (6 a.m.) 29 cfs (2.97 ft); July 8 (2 p.m.) 25 cfs (2.92 ft); July 22 (9 p.m.) 20 cfs (2.89 ft); Aug. 14 (6:30 p.m.) 21 cfs (2.91 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby streams.

2905. Robinson Creek at Twin Lakes outlet, near Bridgeport, Calif.

Location.--Lat 38°10', long 119°19', in SE¼SE¼ sec. 28, T. 4 N., R. 24 E., on left bank a quarter of a mile downstream from Twin Lakes and 8 miles southwest of Bridgeport.

Drainage area.--34.7 sq mi.

Records available.--October 1953 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 7,050 ft (from topographic map).

Average discharge.--5 years, 61.0 cfs (44,160 acre-ft per year).

Extremes.--Maximum discharge during year, 383 cfs June 25 (gage height, 4.22 ft); no flow Jan. 28 to Feb. 23.
1953-58: Maximum discharge, 445 cfs June 29, 1956 (gage height, 4.35 ft); no flow for many days in 1954-55, 1958.
Maximum discharge known, 660 cfs June 21, 1911 (gage height, 5.2 ft), at site 2½ miles downstream.

Remarks.--Records good. Flow regulated by Twin Lakes.

Rating table, water year 1957-58, except for period of indefinite stage-discharge relation (gage height, in feet, and discharge, in cubic feet per second) (Stage-discharge relation affected by ice Mar. 15-17; shifting-control method used June 21-24)

1.0	0	1.6	19	3.0	141
1.1	1.2	2.0	41	3.5	225
1.2	3.9	2.5	83	4.1	371

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	8.2					23	115	233	246	157	74
2	22	3.7		e0.2			27	112	229	227	157	133
3	20	.8					39	110	219	192	155	*133
4	17	.8					38	108	202	176	152	115
5	15	.8					33	105	190	180	148	104
6	13	.6					33	104	180	185	144	110
7	12	.4		(*)			31	104	180	231	142	118
8	12	.4				e0.2	28	104	181	*264	145	116
9	12	.3					26	105	178	297	148	115
10	12						24	106	173	297	149	112
11	13						22	106	169	280	148	111
12	15				e0		22	108	171	270	142	74
13	15						20	110	171	264	140	55
14	16						20	*110	166	250	137	55
15	17					.6	20	110	163	238	142	42
16	17		e0.2	e.1		1.6	20	111	165	223	149	36
17	*17					5.7	*22	112	186	208	152	36
18	18				(*)	10	24	115	225	201	147	37
19	18	(*)				*11	26	118	270	190	138	37
20	20	e.2				13	30	121	307	183	128	37
21	21					23	36	131	325	178	118	37
22	20					25	42	161	343	178	109	37
23	20					24	44	192	*354	180	100	38
24	20					22	96	210	371	192	93	33
25	19					21	147	219	371	197	88	28
26	19				e.2	19	131	217	335	190	84	28
27	20					19	126	217	307	181	82	28
28	20					19	123	*216	290	*192	82	29
29	20			e0	-	19	121	217	282	195	80	29
30	12				-------	18	117	223	264	171	79	29
31	8.2	-------			-------	20	-------	227	-------	154	78	-------
Total	524.2	20.2	6.2	3.1	1.0	273.7	1,511	4,424	7,200	6,610	3,913	1,966
Mean	16.9	0.67	0.20	0.10	0.04	8.83	50.4	143	240	213	126	65.5
Ac-ft	1,040	40	12	6.1	2.0	543	3,000	8,770	14,280	13,110	7,760	3,900

Calendar year 1957: Max 268 Min 0.2 Mean 55.1 Ac-ft 39,900
Water year 1957-58: Max 371 Min 0 Mean 72.5 Ac-ft 52,460

* Discharge measurement made on this day.
e Stage-discharge relation indefinite; discharge estimated on basis of 3 discharge measurements and weather records.

2910. Buckeye Creek near Bridgeport, Calif.

Location.--Lat 38°14', long 119°19', in NE¼NE¼ sec. 4, T. 4 N., R. 24 E., on right bank at Buckeye Hot Springs, 0.6 mile downstream from Eagle Creek and 5½ miles southwest of Bridgeport.

Drainage area.--45 sq mi, approximately.

Records available.--November 1910 to September 1914 (fragmentary). October 1953 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 6,900 ft (from topographic map). November 1910 to September 1914 staff gage at site half a mile downstream at different datum.

Average discharge.--6 years (1911-12, 1953-58), 62.3 cfs (45,100 acre-ft per year).

Extremes.--Maximum discharge during year, 540 cfs June 23 (gage height, 3.69 ft), from rating curve extended above 360 cfs as explained below; minimum daily, 11 cfs Apr. 2.
1953-58: Maximum discharge, 700 cfs Dec. 23, 1955 (gage height, 4.00 ft), from rating curve extended above 360 cfs on basis of slope-area measurement of peak flow; minimum, 4.7 cfs Mar. 14, 1955, result of freezeup.
Flood of June 21, 1911, reached an observed stage of 4.8 ft (discharge not determined), site and datum then in use.

Remarks.--Records good except those for periods of ice effect, which are fair.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Feb. 28)

1.3	9.0	2.2	77
1.5	17	2.6	143
1.7	28	3.0	248
1.9	43	3.5	445

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	18	b18	b18	b16	b20	18	74	272	222	134	53
2	20	18	b18	b18	17	b19	b11	96	229	222	128	52
3	20	18	b18	18	b17	b18	b14	116	208	226	122	*51
4	20	19	b19	b17	b17	b18	b15	143	199	242	112	49
5	18	19	19	b18	b15	b18	b16	174	213	245	109	47
6	20	18	b18	b18	16	18	17	196	229	269	107	46
7	19	19	b18	*b18	17	19	18	188	226	*280	110	54
8	19	20	b18	17	17	18	b18	191	210	255	119	58
9	18	20	b17	17	17	b18	b19	202	188	245	126	48
10	18	20	b17	18	16	b18	20	216	205	235	109	44
11	20	20	b17	b17	16	18	22	226	216	229	105	43
12	20	20	17	b15	18	b17	23	166	186	232	101	41
13	23	20	18	b15	b15	b18	24	*154	176	208	99	41
14	22	20	18	b17	17	18	27	162	183	188	104	40
15	20	20	18	18	16	18	31	188	229	183	104	39
16	*20	19	20	17	17	19	35	222	269	176	105	38
17	19	19	18	16	17	18	*42	252	302	162	97	36
18	18	*22	18		*17	18	58	294	*336	156	88	35
19	18	22	20	b16	16	*18	65	328	372	158	80	34
20	20	21	b20		17	18	81	320	364	160	74	34
21	20	20	b18		17	18	99	320	360	156	69	34
22	20	18	b17		17	18	91	302	372	166	67	34
23	20	20	b17	b17	18	18	70	276	*422	222	63	40
24	20	20	b18		22	18	58	272	384	166	63	38
25	20	20	20	18	21	17	55	269	332	147	62	35
26	21	20	b20	17	b20	17	55	262	316	143	62	34
27	20	b18	23	16	b20	18	57	266	332	141	61	33
28	20	b20	23	17	20	18	61	*276	309	*139	60	32
29	20	b18	19	15	-	17	62	276	283	130	57	32
30	19	b19	b18	b16	-------	18	63	276	242	128	55	30
31	18	-------	b18	b16	-------	17	-------	298	-------	130	54	-------
Total	610	585	575	523	486	558	1,245	7,001	8,164	5,961	2,806	1,225
Mean	19.7	19.5	18.5	16.9	17.4	18.0	41.5	226	272	192	90.5	40.8
Ac-ft	1,210	1,160	1,140	1,040	964	1,110	2,470	13,890	16,190	11,820	5,570	2,430

Calendar year 1957: Max 320 Min 17 Mean 53.7 Ac-ft 38,870
Water year 1957-58: Max 422 Min 11 Mean 81.5 Ac-ft 58,990

Peak discharge (base, 100 cfs).--Apr. 21 (7 p.m.) 107 cfs (2.42 ft); May 10 (11:30 p.m.) 255 cfs (3.02 ft); May 19 (12:30 a.m.) 368 cfs (3.32 ft); June 23 (11 p.m.) 540 cfs (3.69 ft); July 6 (12 p.m.) 340 cfs (3.25 ft); July 23 (5:30 p.m.) 242 cfs (3.01 ft); July 31 (10:30 p.m.) 186 cfs (2.82 ft); Aug. 8 (11 p.m.) 191 cfs (2.84 ft); Aug. 14 (4 p.m.) 188 cfs (2.83 ft).

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

2920. Swager Creek near Bridgeport, Calif.

Location.--Lat 38°17', long 119°18', in SE¼NW¼ sec. 23, T. 5 N., R. 24 E., on right bank three-fourths of a mile downstream from Yaney Canyon and 4 miles northwest of Bridgeport.

Drainage area.--53 sq mi, approximately.

Records available.--June 1911 to September 1915 (fragmentary), October 1953 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 6,700 ft (from topographic map). June 1911 to September 1915 staff gages at approximately same site at different datums.

Average discharge.--5 years (1953-58), 13.8 cfs (9,990 acre-ft per year).

Extremes.--Maximum discharge during year, 361 cfs Aug. 14 (gage height, 5.20 ft), from rating curve extended above 175 cfs as explained below; minimum not determined, occurred during period of ice effect.
1911-15, 1953-58: Maximum discharge, 585 cfs Dec. 23, 1955 (gage height, 6.24 ft), from rating curve extended above 175 cfs on basis of slope-area measurement of peak flow; no flow Apr. 20, 1912.

Remarks.--Records good except those for periods of ice effect, which are fair. Diversions for irrigation of about 1,000 acres above station.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 20, May 10 to June 2)

Oct. 1 to Apr. 20				Apr. 21 to Sept. 30			
2.0	3.7	2.8	39	1.8	5.3	2.2	18
2.2	8.7	3.3	76	1.9	7.2	2.5	37
2.4	16	3.8	130	2.0	10	3.0	81
				2.1	13	3.6	146

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.7	6.5	6.5	7.0	b7.0	b8.7	9.0	87	83	22	12	11
2	5.0	6.7	6.2	7.3	7.9	b8.7	8.7	108	78	22	13	11
3	6.5	7.3	5.9	7.0	7.3	b8.4	b5.0	118	71	20	12	*11
4	6.2	7.0	6.5	6.5	8.7	b8.4	6.2	134	65	20	11	11
5	6.2	7.3	7.6	b5.9	8.4	b8.7	7.6	*134	61	18	9.4	11
6	5.9	b6.2	b6.5	b6.2	8.1	9.0	9.0	130	59	17	9.4	11
7	5.9	7.0	7.3	*7.3	8.1	8.4	10	124	58	*16	11	12
8	6.2	7.9	6.7	7.0	8.1	8.4	10	117	55	16	13	12
9	6.2	7.6	7.0	6.5	7.9	b7.6	11	117	52	18	12	11
10	6.2	7.6	7.0	7.3	8.1	8.1	14	137	49	16	9.4	9.7
11	7.0	7.9	7.0	6.7	7.9	8.4	19	124	49	14	8.9	7.5
12	8.1	8.4	7.0	6.5	8.4	8.1	23	105	*44	13	8.0	7.8
13	7.9	8.7	7.0	6.5	7.9	b7.6	*27	*104	54	13	9.4	7.8
14	7.3	8.1	7.3	6.5	8.7	8.4	33	106	47	11	*26	8.6
15	7.0	6.5	7.9	7.3	8.7	8.4	40	112	43	12	24	9.2
16	*6.7	7.6	9.0	7.3	8.7	9.0	*46	113	35	12	23	8.6
17	6.5	7.0	8.7	7.3	*8.7	8.7	76	118	31	11	22	8.6
18	6.7	*8.7	b6.2	6.5	8.4	*b9.0	*106	123	35	9.4	22	6.6
19	6.7	8.7	b6.2	b5.5	9.0	10	102	115	34	11	20	6.1
20	7.9	8.4	7.0	6.7	9.4	10	130	108	34	11	*16	6.6
21	8.1	7.3	6.7	b5.9	9.7	9.7	143	106	34	11	15	6.6
22	7.6	5.7	b6.5	b5.5	10	9.4	110	110	31	11	13	7.0
23	7.6	7.6	b5.2	7.3	11	9.0	84	*102	*33	16	12	7.8
24	7.6	7.6	b5.5	8.1	21	9.4	76	95	31	15	12	10
25	7.6	7.6	6.5	7.3	18	9.4	73	89	30	12	12	11
26	7.9	7.6	6.5	7.9	11	9.0	74	86	29	12	11	11
27	7.6	6.5	7.0	7.0	b8.7	9.7	76	89	25	11	11	11
28	7.3	7.3	7.9	7.3	b9.4	9.7	77	90	24	*11	11	11
29	7.0	b5.5	7.6	7.6	-	10	71	*93	24	7.8	11	11
30	6.5	6.7	b6.5	7.3	-------	10	75	92	22	8.6	11	10
31	5.9	-------	6.5	b6.5	-------	9.7	-------	90	-------	9.2	11	-------
Total	210.5	220.5	210.9	212.5	264.2	277.0	1,551.5	3,376	1,320	427.0	421.5	284.5
Mean	6.79	7.35	6.80	6.85	9.44	8.94	51.7	109	44.0	13.8	13.6	9.48
Ac-ft	418	437	418	421	524	549	3,080	6,700	2,620	847	836	564

Calendar year 1957: Max 31 Min 1.7 Mean 9.14 Ac-ft 6,620
Water year 1957-58: Max 143 Min 3.7 Mean 24.0 Ac-ft 17,410

Peak discharge (base, 25 cfs).--Feb. 24 (8 p.m.) 54 cfs (3.01 ft); Apr. 20 (6 p.m.) 265 cfs (4.70 ft); May 4 (7 p.m.) 181 cfs (3.92 ft); May 17 (8 p.m.) 145 cfs (3.47 ft); June 13 (3:30 p.m.) 66 cfs (2.78 ft); Aug. 14 (3 p.m.) 361 cfs (5.20 ft); Aug. 18 (7 p.m.) 31 cfs (2.39 ft).

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

2925. 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.--March 1926 to September 1958. Monthly discharge only for some periods, published in WSP 1314.

Gage.--Float gage read once daily. Datum of gage is at mean sea level.

Extremes.--Maximum contents during year, 44,580 acre-ft June 25, 26 (elevation, 6,460.7 ft); minimum, 11,030 acre-ft Oct. 1-4 (elevation, 6,444.7 ft).
1926-58: Maximum contents, 44,580 acre-ft June 12, 1938, June 25, 26, 1958 (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 6,415 (approximate elevation of bottom of reservoir) and 6,460 ft (crest of spillway). Elevation of sill of outlet gate, 6,412 ft. 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 1957-58 (elevation, in feet, and contents, in acre-feet)

6,444	10,200	6,456	31,570
6,448	15,470	6,461	45,490
6,452	22,580		

Contents, in acre-feet, at 8 a.m., water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,030	13,850	17,660	21,500	24,350	30,490	37,040	24,770	33,600	43,820	42,920	38,010
2	11,030	14,060	17,750	21,500	24,450	30,610	37,320	24,450	34,110	43,670	42,920	37,590
3	11,030	14,140	17,830	21,600	24,560	30,730	37,590	24,350	34,770	43,670	42,920	37,040
4	11,030	14,210	17,920	21,700	24,770	30,850	37,320	24,240	35,170	43,520	42,760	36,500
5	11,080	14,430	18,010	21,800	24,990	30,970	37,320	24,240	35,570	43,670	42,610	35,960
6	11,080	14,510	18,090	21,890	24,990	31,090	36,760	24,560	35,960	43,670	42,460	35,440
7	11,080	14,660	18,180	21,990	25,100	31,330	36,230	24,770	36,360	43,520	42,310	34,900
8	11,140	14,800	18,260	22,090	25,210	31,450	35,440	24,990	36,900	43,520	42,310	34,380
9	11,260	14,950	18,440	22,190	25,320	31,450	34,770	25,210	37,180	43,670	42,020	33,980
10	11,260	15,250	18,520	22,290	25,430	31,700	33,860	25,430	37,590	43,820	41,730	33,480
11	11,320	15,320	18,610	22,380	25,540	31,820	33,220	25,650	38,150	43,670	41,580	32,970
12	11,380	-	18,690	22,480	25,760	31,950	32,710	26,090	38,570	43,670	41,290	32,590
13	11,570	-	18,780	22,580	25,870	32,080	32,080	26,200	39,120	43,520	41,000	31,820
14	11,690	-	18,870	22,680	25,980	32,300	31,570	26,310	39,690	43,520	40,710	31,330
15	11,820	-	19,060	22,680	26,090	32,460	31,090	26,310	40,120	43,520	40,850	30,850
16	11,880	-	19,330	22,790	26,310	32,710	30,610	26,420	40,710	43,370	41,290	30,490
17	12,000	-	19,700	22,890	26,420	32,970	30,240	26,530	41,150	43,370	41,730	30,000
18	12,130	16,190	19,880	23,000	26,640	33,090	30,120	26,860	41,730	43,370	41,880	29,520
19	12,190	16,340	20,070	23,100	26,860	33,350	30,120	27,200	42,610	43,070	42,020	29,160
20	12,320	16,500	20,160	23,200	27,200	33,480	29,760	27,660	43,520	43,070	42,020	28,700
21	12,500	16,580	20,250	23,310	27,780	33,980	29,400	28,120	43,820	43,070	42,020	28,120
22	12,630	16,740	20,340	23,310	28,010	34,240	29,040	28,470	44,130	42,920	41,730	27,660
23	12,770	16,820	20,340	23,410	28,360	34,640	28,470	29,040	44,280	42,920	41,580	27,090
24	12,900	16,900	20,530	23,410	28,700	34,900	27,660	29,520	44,430	43,370	41,290	26,750
25	13,040	17,060	20,620	23,620	29,520	35,170	26,860	29,880	44,580	43,520	41,000	26,310
26	13,170	17,150	20,820	23,720	29,880	35,440	26,200	30,360	44,580	43,520	40,560	25,980
27	13,310	17,230	20,920	23,830	30,120	35,700	25,870	30,730	44,430	43,520	40,120	25,540
28	13,450	17,400	21,010	24,040	30,240	35,830	25,650	31,210	44,130	43,370	39,830	25,210
29	13,510	17,490	21,110	24,040	-	36,230	25,320	31,700	44,130	43,220	39,400	24,880
30	13,650	17,580	21,210	24,140	-------	36,500	24,990	32,330	43,980	43,070	38,980	24,560
31	13,720	-------	21,310	24,240	-------	36,760	-------	32,840	-------	43,070	38,570	-------
(†)	6,446.82	6,443.28	6,451.34	6,452.81	6,455.46	6,457.98	6,453.16	6,456.52	6,460.50	6,460.19	6,458.63	6,452.93
(‡)	+2,810	+3,860	+3,730	+2,930	+6,000	+6,520	-11,770	+7,850	+11,140	-910	-4,500	-14,010

Calendar year 1957..... ‡ -9,660
Water year 1957-58..... ‡ +13,650

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

2930. 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 of 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 1958.

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.--35 years (1922-24, 1925-58), 134 cfs (97,010 acre-ft per year).

Extremes.--Maximum discharge during year, 882 cfs June 26 (gage height, 3.51 ft); minimum daily, 17 cfs Feb. 12 to Mar. 31.
1921-58: Maximum discharge, 1,240 cfs Jan. 22, 1943 (gage height, 4.5 ft); minimum daily, 0.2 cfs Nov. 2-29, Dec. 1-22, 25-28, 1955, Jan. 17-25, 1956.

Remarks.--Records excellent. Diversion for irrigation of meadow pasture lands near Bridgeport. Flow regulated by Bridgeport Reservoir (see preceding page).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.4	15	1.0	96
.5	23	1.5	212
.6	33	2.0	360
.7	46	3.0	693
.8	61	3.4	840

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	21	21	21	18	17	36	391	298	598	360	385
2	50	20	21	21	18	17	48	391	298	523	369	397
3	50	20	21	21	18	17	95	394	301	468	366	417
4	50	20	21	22	18	17	171	394	301	452	363	*417
5	52	20	21	22	18	17	301	394	259	490	360	413
6	50	20	21	22	18	17	433	394	242	490	354	413
7	41	20	21	22	18	17	471	394	245	465	354	410
8	34	20	21	*21	18	17	530	394	245	487	351	410
9	34	20	21	22	18	17	581	394	245	497	348	410
10	34	20	21	22	18	17	578	394	245	513	348	410
11	34	20	21	22	18	17	571	394	245	500	344	407
12	34	20	21	22	17	17	571	394	*245	494	344	407
13	34	20	21	22	17	17	571	394	248	445	341	407
14	30	20	21	22	17	17	568	*391	248	442	320	407
15	27	21	21	22	17	17	564	391	251	420	310	391
16	*27	21	21	22	17	17	564	391	251	420	326	366
17	27	21	21	22	17	17	*564	391	251	417	357	363
18	27	*21	21	22	*17	*17	561	391	254	413	357	344
19	27	21	21	22	17	17	637	391	268	404	357	332
20	28	21	21	22	17	17	679	391	407	397	357	366
21	28	21	21	22	17	17	679	360	651	360	357	366
22	28	21	21	22	17	17	679	344	668	298	357	354
23	28	21	21	22	17	17	676	344	704	323	354	320
24	28	21	21	22	17	17	672	344	*765	354	354	314
25	28	21	21	22	17	17	581	348	815	376	354	310
26	28	21	21	22	17	17	461	351	784	366	357	307
27	28	21	21	20	17	17	391	317	690	348	354	304
28	28	21	21	18	17	17	388	298	668	338	354	304
29	28	21	21	18	-	17	391	298	644	*322	366	286
30	28	21	21	18	-------	17	391	298	640	329	385	254
31	28	-------	21	18	-------	17	-------	298	-------	341	385	-------
Total	1,048	617	651	660	487	527	14,403	11,453	12,374	13,100	10,963	10,991
Mean	33.8	20.6	21.0	21.3	17.4	17.0	480	369	412	423	354	366
Ac-ft	2,080	1,220	1,290	1,310	966	1,050	28,570	22,720	24,540	25,980	21,740	21,800

Calendar year 1957: Max 385 Min 20 Mean 134 Ac-ft 96,720
Water year 1957-58: Max 813 Min 17 Mean 212 Ac-ft 153,300

* Discharge measurement made on this day.

2935. 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 right bank 0.8 mile upstream from head of Strosnider ditch, 12 miles southeast of Mason, and 13⅛ miles southeast of Yerington. Prior to Oct. 24, 1957, at site 400 ft upstream on left bank.

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

Records available.--January 1947 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 4,574.10 ft above mean sea level, datum of 1929. Prior to Oct. 24, 1957, at site 400 ft upstream at datum 0.56 ft higher.

Average discharge.--11 years, 142 cfs (102,800 acre-ft per year).

Extremes.--Maximum discharge during year, 935 cfs Aug. 17 (gage height, 4.96 ft); minimum, 32 cfs Mar. 14, 15, but may have been less during periods of ice effect.
1947-58: Maximum discharge, 1,640 cfs Dec. 24, 1955 (gage height, 6.87 ft, site and datum then in use), 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. Diversions for irrigation above station. Flow regulated by Bridgeport Reservoir (see p.169).

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1-23		Oct. 24 to Sept. 30			
1.2	42	0.8	33	3.0	419
1.3	56	1.0	51	4.0	671
1.4	72	1.5	116	4.6	834
		2.0	202		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	52	b43	b39	35	36	34	381	347	681	280	340
2	69	52	b43	b39	35	35	35	379	345	629	303	340
3	66	51	b42	39	37	35	43	400	331	551	301	345
4	62	51	b42	39	37	35	58	402	327	908	299	356
5	59	50	44	39	37	34	106	419	325	494	294	358
6	59	50	45	b37	36	35	218	431	288	508	294	351
7	61	49	43	b38	35	35	354	429	271	508	294	356
8	59	49	42	b39	35	34	402	431	265	474	320	360
9	53	49	41	b39	35	33	465	426	261	486	334	358
10	52	48	41	39	35	33	521	*426	*246	494	320	354
11	49	48	42	39	35	33	*544	445	269	491	318	358
12	50	47	42	39	35	33	546	455	290	479	320	360
13	52	46	41	39	35	34	554	445	349	460	340	360
14	52	45	42	b38	35	33	567	438	342	424	*323	363
15	52	46	43	b37	35	33	572	436	303	404	345	365
16	49	46	43	39	35	35	585	426	288	381	331	349
17	48	46	50	39	35	35	601	429	278	*377	619	331
18	49	47	49	39	35	35	642	438	276	379	426	323
19	49	47	45	b37	34	35	674	453	299	365	564	297
20	55	46	44	b37	33	35	719	453	316	356	421	288
21	*59	46	44	b37	33	37	770	453	443	351	395	314
22	58	*45	43	b36	34	45	767	412	629	323	379	309
23	56	45	b40	b36	33	41	762	402	684	288	367	307
24	*55	45	b38	b42	33	38	732	400	*727	305	365	299
25	55	46	40	41	35	*37	708	393	767	314	358	284
26	55	46	41	39	42	36	616	395	803	320	*351	278
27	54	46	41	39	*38	36	498	393	814	301	336	271
28	54	44	39	39	36	35	*424	349	754	292	327	271
29	54	44	39	*37	-	35	414	338	727	284	329	*276
30	53	b43	*39	36	-------	34	402	340	700	278	338	257
31	53	-------	39	35	-------	33	-------	345	-------	269	334	-------
Total	1,723	1,415	1,310	1,187	988	1,093	14,333	12,762	13,064	12,774	10,925	9,778
Mean	55.6	47.2	42.3	38.3	35.3	35.3	478	412	435	412	352	326
Ac-ft	3,420	2,810	2,600	2,350	1,960	2,170	28,430	25,310	25,910	25,340	21,670	19,390

Calendar year 1957: Max 316 Min 38 Mean 124 Ac-ft 89,630
Water year 1957-58: Max 814 Min 33 Mean 223 Ac-ft 161,400

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

2952. West Walker River at Leavitt Meadows, near Coleville, Calif.

Location.--Lat 38°19'50", long 119°33'05", in NW¼NW¼ sec. 34, T. 6 N., R. 22 E., on left bank at Leavitt Meadows Lodge, 500 ft upstream from Brownie Creek, 0.9 mile downstream from Leavitt Creek, and 16½ miles south of Coleville.

Drainage area.--73 sq mi, approximately.

Records available.--October 1957 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 7,111.32 ft above mean sea level (levels by Bureau of Reclamation).

Extremes.--Maximum discharge during year, 1,440 cfs June 23 (gage height, 5.68 ft); minimum, 5.2 cfs Apr. 2, result of snowblock upstream.

Remarks.--Records good except those for period of no gage-height record, which are fair.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	13	2.3	78	3.5	375
1.5	20	2.7	134	4.5	830
1.9	42	3.1	222	5.5	1,340

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	*21	*b18	b18		b28	b28	*248	950	*672	384	63
2	16	18	b17	*19		b28	b20	322	780	672	339	62
3	15	19	17	19	a18	b28	b30	416	681	681	306	59
4	15	24	b18			b27	b30	514	627	735	258	55
5	14	23	18		*17	*b28	b32	645	722	776	238	*50
6	14	20	b17		b16	b28	32	712	*810	840	241	48
7	14	22	18		b18	b28	32	699	771	880	248	52
8	14	24	b16		18	b26	b31	681	663	795	254	75
9	14	22	16		b18	b26	b32	708	600	744	276	63
10	14	22	16		17	b28	b34	726	699	708	232	53
11	14	21	16		b18	26	b37	*740	726	672	222	47
12	16	22	b15		18	b25	b41	524	582	686	203	44
13	24	23	16		b17	b25	b47	474	519	618	193	41
14	28	22	16		18	b25	56	528	573	546	181	38
15	24	22	18		18	b25	b67	640	771	528	198	36
16	22	b25	24		18	b28	b82	795	920	492	222	34
17	20	23	19	a18	18	b28	106	910	1,020	438	177	32
18	19	26	b20		18	b28	152	1,080	*1,220	420	164	32
19	19	27	b20		18	b28	179	1,160	1,270	442	158	31
20	22	26	b20		19	28	222	*1,180	1,160	447	134	30
21	23	22	b20		b20	b30	*283	1,150	1,140	424	116	30
22	22	19	b20		22	31	290	1,050	1,200	452	102	29
23	23	22	b19		24	29	251	1,020	1,300	*622	93	44
24	24	22	b19		33	28	235	1,030	1,160	429	90	45
25	26	22	b19		37	28	198	995	950	384	89	38
26	30	22	b19		b34	27	181	995	915	380	90	37
27	30	21	b20		b32	27	184	1,000	990	384	88	34
28	28	21	20		b30	26	190	*1,010	940	370	84	32
29	26	17	20		-	26	198	1,000	835	339	79	30
30	24	20	b19		-------	26	214	990	730	310	72	29
31	22	-------	b19		-------	b28	-------	1,020	-------	322	67	-------
Total	633	660	569	560	588	847	3,514	24,962	26,224	17,208	5,598	1,293
Mean	20.4	22.0	18.4	18.1	21.0	27.3	117	805	874	555	181	43.1
Ac-ft	1,260	1,310	1,130	1,110	1,170	1,680	6,970	49,510	52,010	34,130	11,100	2,560

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 1,300 Min - Mean 226 Ac-ft 163,900

Peak discharge (base, 600 cfs).--May 10 (10:30 p.m.) 865 cfs (4.57 ft); May 20 (10:30 p.m.) 1,350 cfs (5.52 ft); June 23 (12 p.m.) 1,440 cfs (5.68 ft); July 6 (11 p.m.) 980 cfs (4.80 ft); July 23 (7 a.m.) 717 cfs (4.26 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.

2955. 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 1958.

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.--14 years (1944-58), 53.0 cfs (38,370 acre-ft per year).

Extremes.--Maximum discharge during year, 428 cfs June 23 (gage height, 2.15 ft); minimum, 13 cfs Apr. 3, result of freezeup, but may have been less during other periods of ice effect.

1910, 1944-58: Maximum discharge, 994 cfs Dec. 23, 1955 (gage height, 2.80 ft), from rating curve extended above 370 cfs on basis of slope-area measurements at gage heights 2.60 and 2.80 ft; maximum gage height recorded, 3.63 ft Jan. 3, 1945 (backwater from ice); minimum discharge recorded, 4.9 cfs Nov. 17, 1948, but may have been less during periods of ice effect.

Remarks.--Records good except those for periods of ice effect, which are fair. Small diversions for irrigation above station.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.6	15	1.5	145
.8	25	1.8	250
1.0	44	2.1	400
1.2	75		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	19		b16	b16	b25	19	111	230	200	106	40
2	18	17		b16	b16	b24	b18	134	206	192	106	37
3	17	b19	b16	16	*b16	b23	b19	154	182	196	95	35
4	17	21			b17	b21	b21	169	172	203	84	35
5	17	b20	17		b17	b21	b21	160	178	214	79	*35
6	17	b18		b16	b17	20	20	169	192	234	79	35
7	17	b19		(*)	b17	b20	20	172	189	*242	87	44
8	18	21			17	20	21	169	186	214	93	44
9	17	21			b16	b20	21	178	172	203	93	37
10	17	20	b17	17	16	b20	23	192	178	196	83	35
11	19	20			b17	b18	27	200	182	196	81	34
12	20	20			18	b17	29	148	*169	192	75	33
13	22	21			b17	*b18	31	140	178	178	73	33
14	20	19			17	b18	37	*142	166	172	83	32
15	20	b21	19		17	19	43	160	182	169	91	32
16	19	b20	b22		18	20	*57	182	206	166	85	31
17	*19	b20	b17	b17	18	20	83	206	254	163	79	31
18	19	21	b17		*18	b20	111	242	300	151	66	31
19	19	20	b17		19	b19	123	264	320	137	63	29
20	21	19	19		21	20	137	264	310	137	57	29
21	21	18			21	19	148	*268	315	129	54	28
22	20	*b17			22	20	129	246	340	129	52	28
23	20	b18			22	20	91	242	367	172	50	34
24	21	b19	b17	18	57	19	75	242	*340	145	50	31
25	22	b19		b17	33	b19	75	238	295	121	48	31
26	23	b18		16	b29	b19	81	234	277	111	50	30
27	22	b18		b16	b29	19	89	234	268	104	48	29
28	20	b18	18	16	26	19	97	238	264	104	47	28
29	19	b17	17	b16	-	19	100	238	242	*102	45	28
30	19	b17	b17	b16	-------	18	100	242	214	102	43	27
31	19	-------	b17	b16	-------	19	-------	242	-------	106	42	-------
Total	596	575	533	513	584	613	1,866	6,220	7,074	5,080	2,188	986
Mean	19.2	19.2	17.2	16.5	20.9	19.8	62.2	201	236	164	70.6	32.9
Ac-ft	1,180	1,140	1,060	1,020	1,160	1,220	3,700	12,340	14,030	10,080	4,340	1,960

Calendar year 1957: Max 273 Min - Mean 44.7 Ac-ft 32,400
Water year 1957-58: Max 367 Min - Mean 73.5 Ac-ft 53,230

Peak discharge (base, 200 cfs).--Apr. 20 (5 p.m.) 226 cfs (1.71 ft); May 10 (6:30 p.m.) 242 cfs (1.75 ft); May 19 (10 p.m.) 315 cfs (1.97 ft); June 23 (10 p.m.) 428 cfs (2.15 ft); July 6 (9:30 p.m.) 277 cfs (1.86 ft).

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

2960. 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 1958.

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.--20 years, 266 cfs (192,600 acre-ft per year).

Extremes.--Maximum discharge during year, 2,330 cfs June 24 (gage height, 5.23 ft); minimum, 18 cfs Jan. 29, result of freezeup, but may have been less Apr. 3 when flow was temporarily reduced by snowblock upstream.

1938-58: 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 measurement of peak flow; minimum, 4.0 cfs Nov. 18, 1948, result of freezeup.

Maximum discharge recorded prior to 1938, 5,800 cfs Dec. 11, 1937, by slope-area measurement.

Remarks.--Records good except those for periods of ice effect, which are fair. Station is above diversions except a few small ranch ditches. Flow very slightly regulated by Poor Lake Reservoir (capacity unknown), 7 miles upstream.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.7	30	1.6	157	3.0	648
1.0	56	2.0	257	4.0	1,260
1.3	98	2.5	430	5.0	2,100

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	*45	*b50	b45	b38	72	66	*495	*1,480	*952	560	126
2	42	44	b48	*44	b38	66	55	591	1,210	946	508	120
3	41	43	b45	43	*40	67	b50	693	1,050	977	470	116
4	40	50	b45	41	b41	63	b68	812	928	1,060	419	109
5	40	49	45	b44	41	63	B70	964	1,050	1,120	388	109
6	39	44	b45	b45	b43	66	71	1,060	1,190	1,200	385	114
7	39	48	b45	b44	b45	62	72	1,050	1,160	1,280	400	134
8	40	52	b45	44	44	61	69	1,010	1,030	1,160	430	161
9	39	49	b45	b44	46	58	71	1,070	904	1,070	438	140
10	39	49	b46	43	44	60	72	1,110	1,030	1,030	374	*124
11	41	48	b42	b43	44	60	81	1,160	1,090	952	355	116
12	45	49	*b45	b41	50	58	88	823	882	970	320	112
13	52	50	44	b40	b45	55	102	744	839	877	307	111
14	58	50	41	b42	47	56	126	791	855	775	307	107
15	52	45	48	b43	47	60	151	928	1,080	739	330	103
16	48	51	67	b40	48	61	193	*1,140	1,310	713	366	100
17	46	49	50	b43	50	62	269	1,350	1,480	658	304	95
18	45	54	47	b45	53	62	422	1,600	1,820	619	275	93
19	45	55	b55	b41	57	61	474	1,800	1,960	624	275	92
20	51	53	52	b44	61	69	551	1,780	1,820	634	237	90
21	51	49	57	b42	62	71	634	*1,820	1,790	600	213	88
22	48	39	b52	b42	63	71	596	1,690	1,860	614	196	85
23	50	48	b45	b45	69	69	483	1,580	2,080	850	179	107
24	51	46	b40	41	157	68	438	1,620	1,890	643	170	114
25	54	47	b40	b40	120	67	407	1,550	1,500	573	166	103
26	58	47	b40	42	88	66	400	1,530	1,400	551	166	98
27	58	44	b45	b43	84	66	415	1,530	1,470	546	164	93
28	55	45	b45	41	*76	64	419	1,540	1,400	538	157	88
29	50	b37	b47	b36	-	64	430	1,540	1,220	499	151	85
30	48	b47	b45	b37	-------	66	442	1,520	1,060	474	140	82
31	47	-------	b47	b38	-------	*66	-------	1,550	-------	*478	*132	-------
Total	1,455	1,426	1,453	1,306	1,641	1,980	7,785	38,441	39,838	24,722	9,282	3,215
Mean	46.9	47.5	46.9	42.1	58.6	63.9	260	1,240	1,328	797	299	107
Ac-ft	2,890	2,830	2,880	2,590	3,250	3,930	15,440	76,250	79,020	49,040	18,410	6,380

Calendar year 1957: Max 1,760 Min 37 Mean 222 Ac-ft 160,900
Water year 1957-58: Max 2,080 Min 36 Mean 363 Ac-ft 262,900

Peak discharge (base, 1,120 cfs).--May 11 (7 a.m.) 1,330 cfs (4.09 ft); May 21 (1 a.m.) 2,060 cfs (4.96 ft); June 24 (12:30 a.m.) 2,330 cfs (5.23 ft); July 7 (1 a.m.) 1,430 cfs (4.21 ft).

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

2965. West Walker River near Coleville, Calif.

Location.--Lat 38°31'00", long 119°27'20", in NE¼ sec. 28, T. 8 N., R. 23 E., on left bank a quarter of a mile downstream from Rock Creek and 5 miles southeast of Coleville.

Drainage area.--245 sq mi.

Records available.--October 1902 to July 1908 (published as "West Fork of Walker River" 1903, 1905-8; and as "Walker River (West Fork)" 1904), March 1909 to September 1910, June 1915, to March 1938, May 1957 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 5,520 ft (from topographic map). Prior to July 31, 1908, staff gage at site half a mile upstream at different datum. Mar. 1, 1909, to Aug. 31, 1910, staff gage and June 18, 1915, to Aug. 15, 1919, water-stage recorder at present site at different datums. Aug. 16, 1919, to Mar. 31, 1938, water-stage recorder at site 1,000 ft upstream at different datum.

Average discharge.--29 years (1902-7, 1909-10, 1915-37, 1957-58), 282 cfs (204,200 acre-ft per year).

Extremes.--Maximum discharge during year, 2,230 cfs June 24 (gage height, 4.21 ft); minimum, 22 cfs Jan. 14, result of freezeup, but may have been less during other ice-affected periods.
1915-38, 1957-58: Maximum discharge, 6,500 cfs Dec. 11, 1937, from slope-area measurement of peak flow; minimum, 5 cfs Dec. 3, 1924, Aug. 27, 1931.

Remarks.--Records good. Station is above diversions except for a few small ranch ditches. Flow very slightly regulated by Poor Lake Reservoir (capacity unknown) 17 miles upstream.

Revisions (water years).--WSP 880: 1917 (runoff in acre-feet). WSP 1514: 1918, 1923.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 15-17)

Oct. 1 to May 17				May 18 to Sept. 30			
0.8	39	2.5	690	1.1	87	3.0	1,020
1.1	87	3.0	1,130	1.5	185	4.0	1,990
1.5	185	3.5	1,630	2.0	370	4.1	2,100
2.0	370			2.5	650		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	*59	b51	b54	b48	b82	85	504	*1,470	948	548	142
2	52	60	b54	b55	b50	78	77	596	1,240	940	482	135
3	52	57	b46	b54	*52	82	b51	690	1,090	972	455	130
4	51	67	50	b50	56	78	b87	833	972	1,040	405	121
5	51	65	57	b50	56	73	95	1,010	1,080	1,100	370	121
6	51	59	b46	*b52	56	78	95	1,140	*1,220	1,170	366	128
7	50	62	52	52	57	73	95	1,130	1,190	1,250	385	140
8	52	70	48	52	57	75	91	1,100	1,080	1,160	400	176
9	50	65	51	b48	54	67	95	1,160	940	1,080	455	152
10	48	65	50	b50	56	72	102	1,190	1,060	1,030	375	*140
11	51	64	51	50	54	73	115	*1,300	1,140	948	362	135
12	59	65	*48	51	67	70	123	*905	948	972	334	130
13	60	*65	52	45	60	*67	140	797	892	892	319	128
14	75	70	52	b50	62	73	167	833	876	769	322	126
15	68	59	57	57	64	73	195	995	1,100	734	338	121
16	62	68	82	56	65	77	243	1,180	1,340	699	375	117
17	59	64	70	52	67	82	315	1,350	1,460	644	319	112
18	57	68	57	b48	68	77	444	1,570	1,780	596	307	110
19	57	72	64	b46	73	78	522	1,840	1,940	596	288	108
20	67	68	67	50	77	89	582	1,800	1,770	614	262	106
21	67	65	67	b48	80	95	698	1,840	1,750	578	232	106
22	62	51	b56	b50	82	91	682	*1,680	1,840	572	215	102
23	67	64	b50	b52	87	87	540	1,560	2,010	846	198	117
24	67	60	b54	56	146	85	486	1,620	*1,840	626	192	130
25	68	62	b54	50	161	84	*450	1,540	1,430	548	185	121
26	75	62	b55	54	110	82	432	1,530	1,350	524	185	115
27	75	57	b57	54	100	84	444	1,530	1,400	530	182	110
28	70	60	b60	54	98	82	462	1,540	1,350	518	176	104
29	65	50	62	50	--	82	462	1,530	1,210	476	167	100
30	62	54	b56	b51	-------	85	468	1,490	1,070	460	158	100
31	60	-------	b51	b50	-------	82	-------	1,530	-------	*445	150	-------
Total	1,862	1,877	1,727	1,591	2,063	2,456	8,843	39,313	39,838	24,277	9,507	3,683
Mean	60.1	62.6	55.7	51.3	73.7	79.2	295	1,268	1,328	783	307	123
Ac-ft	3,690	3,720	3,430	3,160	4,090	4,870	17,540	77,980	79,020	48,150	18,860	7,310

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 2,010 Min 45 Mean 375 Ac-ft 271,800

Peak discharge (base, 1,120 cfs).--May 11 (9 a.m.) 1,440 cfs (3.40 ft); May 19 (2 a.m.) 2,100 cfs (4.10 ft); June 24 (2 a.m.) 2,230 cfs (4.21 ft); July 7 (1:30 a.m.) 1,370 cfs (3.41 ft).

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

2970. 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 1958.

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, 59,780 acre-ft July 5-7, 13 (elevation, 5,005.15 ft); minimum, 9,220 acre-ft Oct. 14 (elevation, 4,978.19 ft).
1931-58: 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 (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 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.

Capacity table, water year 1957-58 (elevation, in feet, and usable contents, in acre-feet)

4,978	8,910	4,995	38,100
4,980	12,130	5,000	48,350
4,985	20,390	5,005	59,440
4,990	28,970	5,006	61,750

Usable contents, in acre-feet, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,630	10,630	15,550	19,920	23,890	30,020	37,880	37,340	54,020	59,550	57,200	46,350
2	9,550	10,730	15,630	20,060	24,040	30,270	38,190	37,240	54,490	-	56,980	45,590
3	9,500	10,850	15,740	20,170	24,330	30,460	38,560	37,170	54,730	59,510	56,750	44,800
4	9,440	10,950	15,860	20,310	24,570	30,680	38,920	37,170	54,950	59,620	56,440	44,050
5	9,390	11,160	15,960	20,460	24,760	30,910	39,230	37,320	55,270	59,780	56,100	43,270
6	9,330	11,300	16,090	20,590	24,930	31,150	39,570	37,670	55,690	59,780	55,760	42,530
7	9,300	11,450	16,190	20,730	25,110	31,370	39,830	38,130	56,050	59,780	55,400	41,820
8	9,260	11,600	16,310	20,830	25,290	31,580	40,030	38,560	56,460	59,740	55,070	41,030
9	9,230	11,840	16,400	20,980	25,470	31,760	39,910	38,980	56,750	59,740	54,640	40,380
10	9,230	12,000	16,520	21,140	25,600	31,940	39,750	39,470	57,050	59,620	54,460	39,770
11	9,230	12,160	16,620	21,240	25,760	32,140	39,610	40,010	57,340	59,720	54,200	39,210
12	9,230	12,310	16,740	21,370	25,930	32,350	39,470	40,670	57,660	59,720	53,910	38,680
13	9,230	12,470	16,850	21,470	26,100	32,530	39,370	40,970	57,790	59,780	53,530	38,100
14	9,220	12,650	16,950	21,560	26,240	32,710	39,230	41,170	58,000	59,760	53,150	37,610
15	9,230	12,800	17,080	21,660	26,410	32,960	39,110	41,390	58,110	59,690	52,950	37,150
16	9,250	12,960	17,250	21,780	26,570	33,380	38,960	41,780	58,340	59,620	52,620	36,710
17	9,260	13,150	17,550	21,900	26,730	33,690	38,880	42,350	58,680	59,480	52,400	36,310
18	9,260	13,350	17,880	22,000	26,880	34,010	38,920	43,100	58,980	59,320	52,180	35,800
19	9,280	13,550	18,010	22,100	27,000	34,290	38,920	44,240	59,390	59,210	52,010	35,320
20	9,390	13,730	18,230	22,180	27,180	34,510	38,840	45,380	59,600	59,030	52,010	34,840
21	9,520	13,920	18,480	22,270	27,320	35,060	38,780	46,330	59,440	58,960	51,810	34,400
22	9,600	14,100	18,580	22,390	27,470	35,560	38,840	47,180	59,670	58,870	51,480	33,960
23	9,650	14,270	18,750	22,470	27,650	35,880	38,720	48,000	59,620	58,820	51,220	33,450
24	9,760	14,430	18,900	22,610	27,820	36,140	38,500	48,710	59,620	58,980	50,850	33,090
25	9,860	14,610	19,030	22,800	28,450	36,400	38,290	49,530	59,510	59,000	50,500	32,730
26	10,000	14,770	19,170	23,000	29,060	36,630	38,100	50,240	59,440	58,910	50,070	32,420
27	10,110	14,940	19,300	23,140	29,430	36,840	37,900	50,870	59,550	58,710	49,570	32,160
28	10,240	15,100	19,440	23,310	29,760	37,030	37,710	51,480	59,440	58,520	49,030	31,890
29	10,340	15,250	19,590	23,480	-	37,240	37,510	52,180	59,510	58,300	48,450	31,640
30	10,440	15,400	19,720	23,620	------	37,420	37,480	52,800	59,480	57,980	47,810	31,390
31	10,530	------	19,820	23,750	------	37,670	------	53,420	------	57,610	47,070	------
(†)	4,979.01	4,982.00	4,984.66	4,986.98	4,990.45	4,994.78	4,994.68	5,002.33	5,005.02	5,004.20	4,999.40	4,991.37
(‡)	+830	+4,870	+4,420	+3,930	+6,010	+7,910	-910	+15,940	+6,060	-1,870	-10,540	-15,680

Calendar year 1957..... ‡ -23,650
Water year 1957-58..... ‡ +21,690

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

2975. West Walker River at Hoye Bridge, near Wellington, Nev.

Location.--Lat 38°44', long 119°26', in SE¼ sec. 17, T. 10 N., R. 23 E., on left bank 20 ft upstream from Hoye Bridge, 2 miles upstream from head of Saroni Canal, and 4 miles southwest of Wellington.

Drainage area.--504 sq mi.

Records available.--April to August 1910 (published as West Walker River near Wellington), July 1920 to September 1923, March 1924 to September 1932, October 1957 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 4,980 ft (from topographic map). April to August 1910, staff gage at same site at different datum. July 1, 1920, to Sept. 30, 1923, water-stage recorder at site 3 miles downstream (1 mile downstream from Saroni Canal) at different datum and supplemental staff gage on Saroni Canal 1 mile downstream from head. Mar. 1, 1924, to Sept. 30, 1932, water-stage recorder at same site at different datum.

Average discharge.--11 years (1920-23, 1925-32, 1957-58), 219 cfs (158,500 acre-ft per year).

Extremes.--Maximum discharge during year, 1,860 cfs June 24 (gage height, 7.62 ft); minimum not determined, occurred during period of ice effect.
1910, 1920-23, 1924-32, 1957-58: Maximum discharge, 2,180 cfs June 6, 1922; minimum, 6 cfs Dec. 19, 1925.

Remarks.--Records good prior to May 11, fair thereafter. Flow regulated by off-channel storage in Topaz Reservoir (see preceding page) since Jan. 30, 1922. Diversions for irrigation of about 10,500 acres above station. Records include releases from Topaz Reservoir and all return flow from Antelope Valley.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 7 to Nov. 19, May 16 to June 19, July 23-26)

0.9	16	2.0	134	6.0	1,230
1.1	25	3.0	334	8.0	2,010
1.4	51	4.0	586		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	32	24	18	20	24	24	414	1,080	908	558	428
2	*70	33	24	18	19	24	*23	455	999	817	569	433
3	70	32	24	18	22	24	32	541	856	784	522	447
4	68	33	22	18	23	22	40	597	715	826	494	435
5	68	35	22	b18	22	*22	36	682	667	964	475	430
6	65	33	22	*b18	*20	22	31	760	742	1,020	460	428
7	60	24	22	b18	19	22	44	*793	826	1,080	460	430
8	60	24	22	b17	19	22	120	769	823	1,080	468	435
9	60	24	22	b17	19	22	196	778	751	946	478	382
10	60	23	22	19	19	22	200	799	769	874	475	352
11	59	22	21	19	18	22	202	*877	805	796	450	356
12	55	22	*21	18	19	23	202	829	796	775	430	338
13	54	*22	20	18	21	22	210	712	787	760	416	330
14	54	22	19	b18	21	23	*228	682	781	694	409	327
15	52	23	19	19	21	24	259	724	820	659	430	321
16	47	24	21	19	21	28	257	778	946	642	440	312
17	47	24	22	19	21	33	257	841	1,110	622	512	314
18	47	24	22	19	22	36	301	932	*1,290	625	491	319
19	49	24	22	b19	26	29	438	1,110	1,610	608	433	314
20	53	24	22	b19	24	28	486	1,260	*1,810	569	*406	297
21	56	24	21	b18	24	41	*544	1,320	1,760	575	397	301
22	54	24	20	b19	19	39	564	*1,290	1,750	583	378	*294
23	*49	24	b19	b19	19	29	520	1,150	1,760	*659	368	279
24	34	24	b18	19	20	26	491	1,130	*1,820	670	349	277
25	32	24	19	19	53	24	460	1,100	1,690	606	352	257
26	32	24	19	19	46	24	402	1,060	1,370	578	387	248
27	31	24	19	19	31	23	404	1,060	1,300	558	399	226
28	31	24	19	19	27	22	*414	1,080	1,270	547	402	216
29	31	24	19	19	-	22	416	1,110	1,170	538	394	216
30	31	24	19	20	-------	22	416	1,080	1,050	527	421	208
31	31	-------	18	20	-------	*22	-------	1,080	-------	544	433	-------
Total	1,580	764	645	576	655	788	8,217	27,793	33,923	22,434	13,656	9,950
Mean	51.0	25.5	20.8	18.6	23.4	25.4	274	897	1,131	724	441	332
Ac-ft	3,130	1,520	1,280	1,140	1,300	1,560	16,300	55,130	67,290	44,500	27,090	19,740

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 1,820 Min 17 Mean 331 Ac-ft 240,000

Peak discharge (base, 700 cfs).--May 11 (9 p.m.) 946 cfs (5.19 ft); May 21 (9 p.m.) 1,360 cfs (6.61 ft); June 24 (11 p.m.) 1,860 cfs (7.62 ft); July 7 (7 p.m.) 1,160 cfs (5.77 ft); July 23 (9 p.m.) 712 cfs (4.34 ft).

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

3000. 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 1958. 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.--21 years (1914-24, 1947-58), 203 cfs (147,000 acre-ft per year).

Extremes.--Maximum discharge during year, 1,730 cfs June 20 (gage height, 5.36 ft); minimum, 37 cfs Dec. 24.
1914-25, 1947-58: Maximum discharge, 2,700 cfs Dec. 24, 1955 (gage height, 7.42 ft, from floodmarks), from rating curve extended above 1,700 cfs; minimum daily, 13 cfs Aug. 7 to Sept. 21, 1920.

Remarks.--Records good. Flow regulated by off-channel storage in Topaz Reservoir since Jan. 30, 1922 (see p. 176). Many diversions above station for irrigation. Station is below return flow from irrigated areas in Smith Valley.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.9	28	2.0	312
1.0	39	4.0	1,110
1.2	68	5.0	1,550
1.5	140	6.0	2,050

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	62	40	38	44	54	44	228	846	674	335	194
2	*46	63	40	39	43	52	43	225	822	568	358	191
3	48	65	40	40	47	49	54	257	734	502	354	208
4	55	66	40	40	48	47	63	305	594	490	350	208
5	63	70	43	b39	46	46	63	354	482	578	316	208
6	62	70	*42	b39	44	44	60	414	490	630	297	211
7	66	*66	42	b40	43	46	57	446	598	674	286	214
8	65	60	42	42	42	44	78	466	654	730	282	250
9	60	60	42	43	42	44	181	448	630	650	308	261
10	54	58	43	44	40	44	222	478	*650	558	327	236
11	52	55	42	43	39	47	225	526	722	506	301	228
12	52	55	43	43	40	46	218	574	814	458	279	222
13	55	51	47	42	39	46	218	478	902	450	264	211
14	58	49	43	42	39	47	228	430	898	430	*250	214
15	57	51	42	43	39	48	236	430	854	390	261	214
16	57	52	43	44	38	51	236	*482	918	378	261	222
17	57	52	44	43	38	55	222	558	1,040	*366	286	204
18	55	52	43	43	38	55	225	622	1,130	382	350	188
19	55	54	43	b42	38	55	279	726	1,320	398	466	188
20	72	52	43	b43	42	52	327	910	*1,600	398	386	181
21	88	52	42	b43	42	57	366	1,000	1,690	394	316	188
22	82	47	39	b42	40	62	*374	*1,050	1,600	430	275	*188
23	76	44	b39	b40	38	57	366	994	1,540	442	253	174
24	74	44	b38	46	38	51	339	890	1,520	458	228	194
25	62	44	39	47	44	*48	312	918	1,540	434	191	197
26	58	44	40	46	57	48	271	858	1,180	394	188	188
27	58	42	39	46	*62	48	228	850	970	370	188	191
28	57	42	40	44	57	47	228	846	926	374	188	178
29	58	42	40	*42	-	47	239	866	866	382	181	171
30	60	40	*39	44	-------	46	246	850	778	342	162	168
31	62	-------	39	44	-------	46	-------	850	-------	335	184	-------
Total	1,871	1,604	1,281	1,316	1,207	1,529	6,248	19,327	29,308	14,543	8,671	6,090
Mean	60.4	53.5	41.3	42.5	43.1	49.3	208	623	977	469	280	203
Ac-ft	3,710	3,180	2,540	2,610	2,390	3,030	12,390	38,330	58,130	28,850	17,200	12,080

Calendar year 1957: Max 882 Min - Mean 163 Ac-ft 118,300
Water year 1957-58: Max 1,690 Min 38 Mean 255 Ac-ft 184,400

Peak discharge (base, 500 cfs).--May 12 (3 a.m.) 598 cfs (2.68 ft); May 22 (7:30 a.m.) 1,070 cfs (3.89 ft); June 20 (9 p.m.) 1,730 cfs (5.36 ft); July 8 (6 a.m.) 738 cfs (3.08 ft); Aug. 19 (5 a.m.) 522 cfs (2.58 ft).

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

CARSON RIVER BASIN

3045. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 6,500 ft (from topographic map). Prior to Aug. 3, 1954, at site 180 ft upstream at datum 3.20 ft higher. Aug. 3, 1954, to Sept. 16, 1957, at site 30 ft upstream at datum 1.00 ft higher.

Average discharge.--11 years (1947-58), 47.3 cfs (34,240 acre-ft per year).

Extremes.--Maximum discharge during year, 490 cfs May 18 (gage height, 3.65 ft); minimum, 2.3 cfs Nov. 29.
1946-58: Maximum discharge, 1,520 cfs Dec. 23, 1955 (gage height, 6.09 ft, site and datum then in use), from rating curve extended above 450 cfs on basis of slope-area measurement of peak flow; minimum, 0.7 cfs Oct. 25, 27, 28, 1954.

Remarks.--Records good. Flow partly regulated by three small reservoirs (total capacity, about 1,700 acre-ft).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.0	3.2	2.0	44
1.1	4.3	2.3	73
1.2	6.3	2.6	115
1.4	12	3.0	210
1.7	25	3.5	415

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	4.2	4.6	5.3	4.1	12	8.7	100	228	122	28	28
2	3.3	3.3	4.2	5.1	4.2	12	7.6	122	210	115	27	27
3	3.4	3.9	4.2	*4.9	4.2	12	7.1	144	*183	114	24	26
4	3.4	*4.5	*4.3	4.9	4.3	11	7.4	185	172	114	21	30
5	3.4	4.3	4.7	4.7	4.3	11	7.6	*241	192	110	20	54
6	3.4	4.4	4.3	4.9	4.2	11	7.9	249	192	112	20	53
7	3.3	4.7	4.7	4.7	4.3	10	7.6	224	178	112	20	53
8	3.3	5.3	4.3	4.7	4.3	10	8.2	217	155	100	20	55
9	3.2	5.1	4.5	4.7	4.2	9.0	10	*231	158	96	18	38
10	3.3	5.1	4.7	4.9	4.2	9.3	14	265	178	86	17	32
11	3.6	4.9	4.5	4.7	4.3	9.0	18	217	175	83	15	51
12	3.7	5.1	4.3	4.5	6.6	8.7	20	155	144	76	14	48
13	8.0	7.6	4.2	4.5	5.3	8.5	27	151	*151	65	*13	47
14	5.1	5.1	4.0	4.5	5.1	8.2	34	175	168	64	13	45
15	4.0	5.5	7.0	4.5	5.3	8.7	42	204	201	60	14	43
16	3.8	5.5	12	4.5	5.7	8.5	50	245	224	*57	15	40
17	3.7	5.3	7.6	4.5	6.6	7.9	79	*281	220	51	13	38
18	3.7	7.6	6.1	4.5	6.8	7.9	100	338	228	45	24	28
19	3.7	8.2	7.1	4.5	7.9	8.5	103	352	231	45	18	*14
20	4.3	7.9	6.8	4.3	*9.7	11	115	289	224	43	14	17
21	4.9	5.9	6.6	4.3	11	9.7	120	261	234	42	12	38
22	5.7	5.1	5.9	4.2	13	9.0	*108	242	249	46	11	35
23	5.5	6.1	6.1	4.3	15	8.7	81	285	253	45	10	36
24	7.1	6.8	5.7	*4.3	28	8.5	66	269	214	38	9.7	14
25	8.7	7.1	5.9	4.3	24	8.5	62	257	192	38	9.0	7.1
26	8.2	6.3	5.9	4.5	16	8.2	66	*245	186	36	17	5.5
27	6.8	5.4	5.7	4.1	14	*8.2	72	242	195	35	32	5.1
28	5.3	5.5	5.7	4.0	14	8.2	74	249	170	34	32	4.7
29	4.7	4.3	5.5	4.0	-	8.2	77	253	144	33	30	4.5
30	4.3	5.1	5.1	4.2	-------	8.5	83	277	*128	29	30	4.5
31	4.2	-------	5.3	4.1	-------	8.2	-------	269	-------	28	29	-------
Total	142.4	165.1	171.5	140.1	240.6	288.1	1,483.1	7,234	5,777	2,074	589.7	921.4
Mean	4.59	5.50	5.53	4.52	8.59	9.29	49.4	233	193	66.9	19.0	30.7
Ac-ft	282	327	340	278	477	571	2,940	14,350	11,460	4,110	1,170	1,830

Calendar year 1957: Max 308 Min 1.9 Mean 40.2 Ac-ft 29,070
Water year 1957-58: Max 352 Min 3.2 Mean 52.8 Ac-ft 38,140

Peak discharge (base, 190 cfs).--May 10 (6 p.m.) 366 cfs (3.39 ft); May 18 (5 p.m.) 490 cfs (3.65 ft); June 22 (6 p.m.) 305 cfs (3.25 ft).

* Discharge measurement made on this day.

3090. 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.--January 1890 to December 1893, October 1900 to December 1906 (gage heights only August to December 1904 and July to December 1905), January 1908 to December 1910, June to October 1917, December 1924 to September 1928, June to September 1929, October 1935 to December 1937, May 1939 to September 1958. Monthly discharge only for some periods, published in WSP 1314.

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.--31 years (1890-93, 1901-3, 1908-10, 1925-28, 1935-37, 1939-58), 404 cfs (292,500 acre-ft per year).

Extremes.--Maximum discharge during year, 3,160 cfs May 19 (gage height, 5.01 ft); minimum, 48 cfs Jan. 5.
1890-93, 1900-1906, 1908-10, 1917, 1924-28, 1929, 1935-37, 1939-58: Maximum discharge, 17,600 cfs Dec. 23, 1955 (gage height, 11.88 ft), from rating curve extended above 6,000 cfs on basis of slope-area measurements at gage heights 9.66 and 11.88 ft; minimum observed, 8 cfs Dec. 4-10, 19-23, 1904.

Remarks.--Records excellent. 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). WSP 1514: 1909-10.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.8	48	3.0	1,080
1.1	102	4.0	1,940
1.5	222	5.0	3,080
2.0	430		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	76	72	85	77	215	233	993	1,860	888	315	171
2	62	79	70	85	94	190	198	1,140	1,630	853	319	165
3	60	74	67	83	104	187	184	1,300	1,520	825	270	168
4	62	83	*76	74	89	181	181	1,500	1,350	839	240	158
5	63	85	87	65	96	174	187	1,820	1,410	797	218	181
6	62	74	67	76	94	181	201	2,000	1,470	797	208	165
7	*62	*76	70	94	98	168	190	1,920	1,380	811	208	158
8	62	85	68	83	110	165	198	1,790	1,330	770	240	187
9	60	83	68	76	100	141	282	1,860	1,210	732	222	155
10	60	83	72	94	100	147	380	*1,980	1,320	699	201	*117
11	63	81	74	79	94	152	465	2,110	1,350	642	*194	133
12	68	79	68	83	187	138	504	1,470	1,170	618	190	141
13	72	81	72	74	177	135	570	1,380	1,170	588	181	152
14	100	122	74	72	141	138	686	1,440	1,190	*528	171	141
15	83	94	83	85	147	141	744	1,600	1,330	510	218	135
16	74	89	149	77	149	158	839	1,840	1,460	480	251	127
17	70	83	152	74	152	181	1,060	2,110	1,530	460	254	122
18	68	87	107	74	152	181	1,240	2,410	1,720	445	258	120
19	70	98	98	67	161	190	1,240	2,610	1,930	398	298	100
20	89	96	100	85	187	266	1,290	2,490	1,670	393	215	94
21	89	92	96	65	201	375	1,390	2,380	1,610	371	181	110
22	85	74	85	67	190	282	1,320	2,290	1,690	393	161	114
23	89	77	65	*79	201	258	1,040	2,280	*1,710	475	155	135
24	87	81	107	89	546	254	874	2,250	1,560	393	141	141
25	89	81	94	87	819	240	*811	2,170	1,300	349	144	112
26	96	83	96	89	*371	*229	811	2,070	1,250	340	155	102
27	94	77	85	83	274	226	853	*2,010	1,250	323	177	98
28	87	76	94	83	258	212	888	1,990	1,170	311	198	96
29	81	74	96	85	-	212	895	1,970	1,050	311	198	94
30	79	68	85	87	-------	240	881	2,000	958	282	190	89
31	76	-------	*85	74	-------	215	-------	2,000	-------	258	181	-------
Total	2,325	2,491	2,682	2,473	5,369	6,172	20,635	59,173	42,548	16,879	6,552	3,981
Mean	75.0	83.0	86.5	79.8	192	199	688	1,909	1,418	544	211	133
Ac-ft	4,610	4,940	5,320	4,910	10,650	12,240	40,930	117,400	84,390	33,480	13,000	7,900

Calendar year 1957: Max 1,880 Min 56 Mean 306 Ac-ft 221,700
Water year 1957-58: Max 2,610 Min 60 Mean 469 Ac-ft 339,800

Peak discharge (base, 1,300 cfs).--Feb. 24 (10:30 p.m.) 2,200 cfs (4.25 ft); Apr. 20 (10:30 p.m.) 1,660 cfs (3.71 ft); May 11 (1 a.m.) 2,470 cfs (4.43 ft); May 19 (2 a.m.) 3,160 cfs (5.01 ft); June 19 (2 a.m.) 2,550 cfs (4.50 ft).

* Discharge measurement made on this day.

3100. 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 1958. 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 diversion 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.--22 years (1901-3, 1905-6, 1939-58), 115 cfs (83,260 acre-ft per year).

Extremes.--Maximum discharge during year, 1,650 cfs May 18 (gage height, 5.64 ft); minimum, 9.5 cfs Dec. 6, result of freezeup.

1900-1907, 1910-11, 1938-58: Maximum discharge, 4,810 cfs Dec. 23, 1955 (gage height, 8.86 ft), from rating curve extended above 1,000 cfs on basis of slope-area measurements at gage heights 8.35 and 8.86 ft; minimum (1900-1907, 1938-58), 8.2 cfs 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 measurement).

Remarks.--Records good except those for period of indefinite stage-discharge relation, which are fair. One small diversion above station for irrigation. Flow slightly regulated by several small reservoirs (total capacity, about 1,500 acre-ft).

Rating tables, water year 1957-58, except periods of ice effect or indefinite stage-discharge relation (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 13 to Mar. 31)

Oct. 1 to May 22				May 23 to Sept. 30			
1.7	16	4.0	362	1.9	20	3.5	252
2.0	31	4.5	540	2.1	33	4.0	440
2.5	74	5.0	790	2.5	73	4.5	725
3.0	136	5.5	1,120	3.0	144	5.0	1,140
3.5	227						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	20	20	23	b21	b44	33	e369	552	198	70	23
2	18	20	19	23	21	b44	29	e451	510	192	65	21
3	19	22	19	22	20	b40	25	e512	*470	190	63	27
4	19	23	20	22	20	b38	32	e595	415	192	59	34
5	19	23	21	b20	20	37	32	e705	430	184	55	35
6	19	21	19	22	20	37	33	e715	425	172	52	28
7	19	22	20	22	20	*37	33	e690	395	180	51	24
8	19	24	19	22	21	34	34	e675	405	176	57	64
9	18	23	20	21	21	35	37	e670	368	162	52	71
10	18	23	20	21	21	34	40	e685	377	153	49	70
11	19	22	20	22	21	34	47	e754	377	139	*46	49
12	19	23	19	21	27	32	50	e630	332	130	41	44
13	22	25	20	b18	24	32	58	e615	*318	120	38	32
14	25	29	20	b20	24	32	65	e650	308	111	36	27
15	22	24	37	22	24	31	72	e715	339	104	49	26
16	20	25	55	22	26	32	85	e808	386	*104	56	25
17	20	24	31	22	26	32	121	e868	400	106	54	30
18	19	28	22	b21	27	30	158	e1,100	470	102	58	38
19	19	34	30	b23	28	31	173	*e1,050	505	94	60	*38
20	22	32	30	b20	*30	36	204	e1,020	440	95	46	36
21	24	*28	26	b20	31	31	250	e945	415	94	38	30
22	24	22	b20	b22	32	34	280	e931	440	118	33	28
23	24	24	b24	*20	34	33	248	*1,050	445	148	32	38
24	25	24	27	20	50	33	216	875	381	116	31	38
25	24	24	26	19	50	32	208	822	322	98	47	34
26	24	24	*25	20	48	31	221	770	305	92	64	32
27	22	22	24	20	b50	*32	248	*732	308	88	64	30
28	*22	22	26	20	47	32	260	686	286	86	61	30
29	21	19	26	20	-	33	*265	648	238	81	57	28
30	20	20	23	19	-------	29	305	624	*211	73	54	27
31	20	-------	24	b20	-------	33	-------	600	-------	70	38	-------
Total	644	716	752	649	804	1,055	3,862	22,960	11,573	3,968	1,576	1,057
Mean	20.8	23.9	24.3	20.9	28.7	34.0	129	741	386	128	50.8	35.2
Ac-ft	1,280	1,420	1,490	1,290	1,590	2,090	7,660	45,540	22,950	7,870	3,130	2,100

Calendar year 1957: Max 486 Min 15 Mean 91.0 Ac-ft 65,910
Water year 1957-58: Max 1,100 Min 18 Mean 136 Ac-ft 98,410

Peak discharge (base, 500 cfs).--May 5 (8 p.m.) 1,020 cfs (5.15 ft); May 18 (8 p.m.) 1,650 cfs (5.64 ft); May 23 (2 a.m.) 1,250 cfs (5.12 ft); June 19 (1:30 a.m.) 654 cfs (4.39 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
e Stage-discharge relation indefinite; discharge estimated on basis of partly estimated shift adjustments and records for nearby streams.

3105. 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 1958.

Gage.--Water-stage recorder and sharp-crested weir. Altitude of gage is 4,700 ft (from river-profile map).

Average discharge.--10 years, 6.30 cfs (4,560 acre-ft per year).

Extremes.--Maximum discharge during year, 59 cfs Feb. 24 (gage height, 1.57 ft); minimum, 2.2 cfs Aug. 22, 23, but may have been less during period of no gage-height record.
1948-58: Maximum discharge, 117 cfs Dec. 23, 1955 (gage height, 2.03 ft); minimum, 1.0 cfs Aug. 4, 5, 6, 20, 1949.

Remarks.--Records good except those for periods of no gage-height record, which are poor. Four small diversions for irrigation of about 150 acres of hay meadows and pasture above station.

Revisions (water years).--WSP 1444: 1950(M), 1951, 1952(P).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 10-14)

0.2	1.4
.3	2.9
.4	5.0
.6	11
.9	23

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.3	3.5	4.2	6.4	6.1	a10	6.6	14	a9.2	4.8	3.3	a2.8
2	2.3	3.5	4.2	6.4	6.4	a9.4	6.1	*16	a9.0	5.0	a3.2	a2.8
3	2.4	4.0	4.2	6.4	7.2	a9.0	6.4	17	a8.6	4.8	a3.2	a2.8
4	2.4	4.0	4.2	6.1	6.4	a8.5	6.4	17	a8.3	4.8	a3.1	a2.8
5	2.3	4.2	4.4	6.1	6.6	a8.0	5.8	19	a8.0	4.8	a3.1	a2.8
6	2.3	4.2	4.4	6.1	6.4	a7.6	6.1	19	a7.8	4.6	a3.1	a3.0
7	2.3	4.2	4.2	6.1	7.2	*7.4	6.1	18	a7.7	4.4	a3.0	4.4
8	2.3	4.2	4.2	6.1	7.4	6.9	7.2	17	a7.5	4.4	a3.1	a4.0
9	2.3	4.2	4.2	6.1	7.2	6.6	9.0	17	7.4	4.4	a3.0	a3.3
10	2.4	4.0	4.2	7.4	7.2	6.4	12	18	7.2	*4.2	a2.9	*3.1
11	2.6	4.2	4.4	6.4	6.9	6.6	*13	22	9.4	4.2	a2.9	3.1
12	2.8	4.2	4.2	6.1	13	6.6	13	a19	10	4.2	a2.8	3.1
13	3.3	4.6	4.4	5.8	*7.2	6.4	15	a17	10	4.2	*2.8	3.1
14	2.9	*6.6	4.4	*5.5	7.2	6.9	15	a16	8.4	4.2	2.9	3.1
15	2.8	5.0	6.4	5.5	8.4	6.9	15	a18	7.4	5.3	2.8	2.9
16	2.8	5.0	*7.5	*5.5	8.4	7.4	15	a19	6.6	a5.2	3.5	2.9
17	2.8	4.8	6.6	5.5	7.2	7.7	17	a20	6.6	a5.0	4.6	2.9
18	2.8	5.5	6.1	5.3	6.9	7.2	18	a21	6.4	a4.8	4.2	2.8
19	2.9	5.3	6.1	5.5	6.9	7.2	18	a18	5.8	a4.7	3.5	2.8
20	3.5	5.0	6.1	5.0	6.9	8.4	19	a16	5.3	a4.6	3.1	2.8
21	3.1	4.8	6.1	5.3	6.6	9.4	20	a15	5.0	a4.6	3.1	2.9
22	2.9	4.4	5.5	5.5	6.9	7.7	19	a16	a5.0	a4.6	3.1	2.8
23	3.1	4.6	6.1	5.5	6.6	7.2	15	a16	a5.0	a4.8	2.8	3.1
24	3.3	4.6	5.8	6.4	19	6.9	13	a14	a5.0	a4.2	a2.8	3.1
25	3.3	4.4	5.8	7.2	23	6.6	12	a12	5.0	a3.9	a2.8	3.1
26	3.3	4.6	5.8	6.6	16	6.4	12	a11	4.6	a3.7	a2.8	3.1
27	3.3	4.4	5.8	6.4	14	6.1	13	a9.6	4.6	a3.5	a2.8	3.1
28	*2.9	4.4	7.7	6.6	12	6.1	13	a9.2	4.6	a3.4	a2.8	2.9
29	3.1	4.2	7.2	6.6	-	5.8	13	*9.4	4.6	a3.4	a2.8	2.9
30	3.3	4.2	6.6	6.6	---	6.4	13	9.7	4.6	3.3	a2.8	2.9
31	3.3	-------	6.4	6.1	------	6.6	-------	a9.6	-------	a3.3	a2.8	-------
Total	87.4	134.8	167.4	188.1	251.2	226.3	372.7	489.5	204.6	135.3	95.5	91.2
Mean	2.82	4.49	5.40	6.07	8.97	7.30	12.4	15.8	6.82	4.36	3.08	3.04
Ac-ft	173	267	332	373	498	449	739	971	406	268	189	181

Calendar year 1957: Max 16 Min 1.7 Mean 4.70 Ac-ft 3,400
Water year 1957-58: Max 23 Min 2.3 Mean 6.70 Ac-ft 4,850

Peak discharge (base, 15 cfs).--Dec. 16 (7 p.m.) 15 cfs (0.64 ft); Feb. 12 (2 p.m.) 23 cfs (0.85 ft); Feb. 24 (9 p.m.) 59 cfs (1.57 ft); Apr. 21 (9:30 p.m.) 24 cfs (0.95 ft); May 11 (10 a.m.) 28 cfs (1.05 ft); July 15 (6 p.m.) 16 cfs (0.65 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for nearby streams.

3110. 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 left bank 2 miles downstream from Clear Creek, 2¼ 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 1958.

Gage.--Water-stage recorder. Datum of gage is 4,621.48 ft above mean sea level, datum of 1929. Prior to Dec. 23, 1955, water-stage recorder on right bank at same datum. Dec. 23, 1955, to Mar. 13, 1956, staff gage at same site and datum.

Average discharge.--19 years, 421 cfs (304,800 acre-ft per year).

Extremes.--Maximum discharge during year, 3,100 cfs May 21 (gage height, 5.01 ft); minimum, 26 cfs Oct. 1.

1939-58: Maximum discharge, 30,000 cfs Dec. 24, 1955 (gage height, 15.0 ft, from floodmarks), from rating curve extended above 6,000 cfs on basis of slope-area measurements at gage heights 8.40 and 15.0 ft, computation of flow over dam at gage height 11.40 ft, and float measurement at gage height 9.60 ft; minimum daily, 4 cfs Aug. 17, 1939.

Remarks.--Records good. Many diversions for irrigation above station. Flow slightly regulated by several small reservoirs on tributaries.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.2	24	1.0	100	3.0	1,000
.4	35	1.5	208	4.0	1,910
.7	60	2.0	410	6.0	4,220

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	98	114	144	200	430	365	812	2,240	782	110	55
2	30	98	117	149	186	375	410	916	*2,020	740	103	47
3	28	96	112	149	243	338	450	1,060	1,900	650	134	54
4	30	103	103	142	315	320	587	1,280	1,680	609	123	61
5	33	115	114	130	250	307	495	1,650	1,550	592	108	57
6	35	119	121	121	220	299	440	1,950	1,510	576	94	42
7	34	117	105	125	208	291	405	2,130	1,450	614	91	37
8	38	115	107	144	224	287	385	2,150	1,380	587	84	44
9	39	115	112	155	253	268	415	2,090	1,300	480	75	43
10	43	114	112	149	214	261	526	2,190	1,230	420	65	41
11	43	110	114	157	200	268	620	2,400	1,280	365	59	41
12	43	112	100	144	203	268	656	*2,530	1,240	395	56	53
13	42	112	103	144	*338	257	692	1,990	1,220	351	58	53
14	46	*121	115	*130	275	253	758	1,870	1,280	324	57	64
15	51	181	128	134	239	279	824	1,950	1,280	291	48	82
16	59	159	*176	142	233	311	916	2,180	1,430	268	49	82
17	57	153	311	138	233	375	1,030	2,370	1,590	315	44	81
18	58	140	275	132	230	395	1,330	2,580	1,700	375	81	70
19	56	128	236	123	230	351	1,430	2,800	1,910	430	92	65
20	62	128	211	123	243	342	1,440	3,000	1,920	395	*151	60
21	75	125	197	128	268	538	1,570	3,010	1,750	360	146	59
22	81	125	179	115	268	582	*1,580	2,850	1,710	279	123	58
23	80	115	155	117	264	435	1,280	2,790	1,750	271	117	59
24	82	110	136	153	283	390	1,030	2,840	1,750	333	98	55
25	94	115	159	194	*1,230	360	800	2,860	1,440	333	90	78
26	90	119	167	192	1,050	*338	710	2,710	1,220	287	85	82
27	90	114	159	203	592	333	740	2,530	*1,140	230	64	78
28	92	121	157	189	490	324	806	2,400	1,120	192	61	*82
29	*94	121	162	189	-	311	800	*2,350	965	*164	58	91
30	96	121	157	236	-------	324	764	2,280	909	157	53	98
31	97	-------	146	275	-------	375	-------	2,280	-------	144	55	-------
Total	1,825	3,620	4,660	4,766	9,182	10,585	24,254	68,798	44,864	12,309	2,612	1,872
Mean	58.9	121	150	154	328	341	808	2,219	1,495	397	84.3	62.4
Ac-ft	3,620	7,180	9,240	9,450	18,210	21,000	48,110	136,500	88,990	24,410	5,180	3,710

Calendar year 1957: Max 1,810 Min 12 Mean 317 Ac-ft 229,200
Water year 1957-58: Max 3,010 Min 27 Mean 519 Ac-ft 375,600

Peak discharge (base, 1,600 cfs).--Feb. 25 (3 p.m.) 1,710 cfs (3.74 ft); Apr. 21 (5 p.m.) 1,700 cfs (3.71 ft); May 12 (5 a.m.) 2,650 cfs (4.60 ft); May 21 (1 a.m.) 3,100 cfs (5.01 ft); June 19 (7 p.m.) 2,120 cfs (4.12 ft).

* Discharge measurement made on this day.

3120. Carson River near Fort Churchill, Nev.

Location.--Lat 39°17', long 119°18', in SE¼ sec. 32, T. 17 N., R. 24 E., on right bank 400 ft downstream from Buckland ditch, 2 miles west of Fort Churchill, and 3 miles upstream from Weeks bridge on U. S. Highway 95 alternate.

Drainage area.--1,450 sq mi, approximately.

Records available.--April 1911 to September 1958. Monthly discharge only for some periods, published in WSP 1314.

Gage.--Water-stage recorder. Datum of gage is 4,214.70 ft above mean sea level, datum of 1929, supplementary adjustment of 1956. Prior to Apr. 25, 1924, staff gage at site 7½ miles upstream at different datum. Apr. 25, 1924, to Dec. 31, 1933, water-stage recorder at site 8 miles upstream at different datum. Jan. 1, 1934, to Sept. 30, 1957, water-stage recorder at present site at datum 1.36 ft higher (levels by Truckee-Carson Irrigation District).

Average discharge.--47 years, 373 cfs (270,000 acre-ft per year).

Extremes.--Maximum discharge during year, 2,880 cfs May 21 (gage height, 5.65 ft); minimum daily, 0.3 cfs Oct. 1-17.
1911-58: Maximum daily discharge, 9,680 cfs Dec. 26, 1955; maximum gage height, about 11 ft in December 1955, present datum, from floodmarks; no flow during some periods in nearly every year since 1923.

Remarks.--Records excellent. Many diversions above station for irrigation, including diversions for irrigation of 720 acres between present site and sites used prior to Jan. 1, 1934. Buckland ditch diverts 400 ft upstream for irrigation below the station.

Revisions (water years).--WSP 1514: 1917.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.3	0.3	1.8	12	3.2	386
1.4	1.0	2.0	28	4.0	940
1.5	2.0	2.2	50	4.8	1,740
1.6	4.0	2.5	103	5.6	2,800
1.7	7.0	2.8	194		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	82	143	140	245	487	375	703	2,080	788	80	9.5
2	.3	77	131	137	190	427	381	773	1,960	710	68	9.5
3	.3	86	131	140	180	381	427	868	1,810	668	56	9.0
4	.3	88	137	140	245	359	512	1,040	1,660	605	*45	13
5	..3	92	128	134	297	337	557	1,280	1,440	557	38	13
6	.3	*101	131	126	254	322	493	*1,630	*1,390	531	37	12
7	.3	116	143	120	232	312	462	1,900	1,380	518	31	8.5
8	.3	118	131	120	215	297	427	2,080	1,330	518	28	*8.0
9	.3	116	128	131	223	287	398	2,000	1,300	474	26	6.7
10	.3	118	131	149	241	273	432	1,980	1,160	421	25	6.1
11	.3	116	134	146	194	264	524	*2,120	1,220	364	20	5.8
12	.3	113	134	149	183	268	598	2,330	1,270	327	15	5.8
13	.3	113	131	134	*194	268	626	2,090	1,230	307	13	5.8
14	.3	113	126	120	317	259	654	1,740	1,240	273	12	5.8
15	.3	126	131	120	264	254	724	1,700	1,210	250	12	5.5
16	.3	162	143	118	232	287	773	1,820	1,270	215	12	5.5
17	.3	155	194	120	223	322	860	2,030	1,400	187	11	6.4
18	.4	149	332	118	219	370	*1,040	2,240	1,510	*228	11	8.5
19	.5	143	287	120	211	381	1,270	2,410	1,630	277	12	7.5
20	.7	131	250	116	211	348	1,300	2,630	1,820	317	*16	6.1
21	1.7	128	219	108	223	364	1,320	*2,790	1,700	307	40	6.1
22	21	126	202	108	245	570	1,400	2,720	1,550	268	80	5.5
23	33	123	180	*101	241	518	1,350	2,620	1,550	228	54	5.5
24	43	116	169	103	241	432	*1,120	2,560	1,580	215	46	5.8
25	46	113	155	128	370	*586	892	2,670	1,450	232	45	5.8
26	56	*120	*162	176	*1,310	364	731	2,580	1,210	241	33	6.4
27	62	131	162	187	796	348	668	2,410	*1,060	215	26	11
28	65	131	162	194	544	345	696	2,260	1,020	183	17	12
29	64	140	155	176	-	327	752	2,180	958	139	12	*16
30	74	143	158	183	-------	322	717	2,130	860	120	10	19
31	77	-------	146	232	-------	348	-------	2,080	-------	92	10	-------
Total	549.4	3,586	5,066	4,294	8,540	10,825	22,479	62,364	42,248	10,785	921	251.1
Mean	17.7	120	163	139	305	349	749	2,012	1,408	348	29.7	8.37
Ac-ft	1,090	7,110	10,050	8,520	16,940	21,470	44,590	123,700	83,800	21,390	1,830	498

Calendar year 1957: Max 2,050 Min 0 Mean 297 Ac-ft 215,000
Water year 1957-58: Max 2,790 Min 0.3 Mean 471 Ac-ft 341,000

Peak discharge (base, 1,400 cfs).--Feb. 26 (10 a.m.) 1,450 cfs (4.54 ft); Apr. 22 (5 a.m.) 1,450 cfs (4.54 ft); May 12 (5 p.m.) 2,410 cfs (5.32 ft); May 21 (2 p.m.) 2,880 cfs (5.65 ft); June 20 (8 a.m.) 1,920 cfs (4.95 ft).

* Discharge measurement made on this day.

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3155. 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 1958. Prior to October 1950 published as "below Hot Springs Creek, near Deeth."

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.--15 years, 61.7 cfs (44,670 acre-ft per year).

Extremes.--Maximum discharge during year, 500 cfs May 23 (gage height, 4.14 ft); minimum, 0.6 cfs Aug. 23 to Sept. 13.
1943-58: 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, which are fair. Several diversions above station for irrigation.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	4.3	6.1	10	b12	49	85	157	302	37	5.3	0.6
2	.9	4.1	6.1	9.7	b13	49	83	182	261	35	4.5	*.6
3	1.0	4.3	*5.8	b9.0	b14	57	88	190	240	33	3.6	.6
4	1.0	5.5	6.1	b8.5	b15	47	87	218	222	30	2.8	.6
5	1.0	*4.5	6.1	b8.5	15	47	80	261	199	28	*1.9	.6
6	1.0	4.5	6.6	b8.0	17	49	73	307	175	25	1.2	.6
7	1.0	4.5	7.2	*b8.0	b17	43	71	361	145	22	1.0	.6
8	1.2	4.5	7.5	b8.0	17	40	71	382	145	19	1.0	.7
9	*1.2	4.5	b7.5	b8.0	b17	36	70	336	145	17	1.2	.6
10	1.3	4.5	b7.5	b8.2	18	33	74	311	135	14	1.3	.7
11	1.4	4.8	b7.5	b8.2	b18	35	82	336	132	*12	1.2	.6
12	1.3	4.8	b7.5	b8.2	18	36	91	400	129	10	1.4	.6
13	1.6	7.2	7.8	b8.2	17	38	97	427	131	8.2	1.4	.7
14	1.6	12	8.5	b8.0	b16	38	*116	425	135	6.9	1.3	.8
15	1.8	12	8.9	8.5	44	39	139	370	128	7.2	1.0	.8
16	1.9	11	9.7	b8.5	88	40	166	321	112	8.5	1.0	.8
17	2.3	7.8	12	b8.5	65	39	208	327	*100	8.2	1.3	.8
18	2.4	6.9	12	b8.5	59	39	233	340	96	8.2	1.2	.8
19	2.6	6.9	b12	b8.5	65	*39	278	*364	95	7.5	1.0	.8
20	2.8	6.6	12	b8.5	66	44	342	404	91	7.2	.9	.8
21	3.2	6.6	12	b8.5	66	59	349	441	86	6.9	.8	.8
22	3.0	6.3	b12	b8.0	66	91	376	483	81	6.3	.7	.8
23	2.8	6.3	b12	b8.5	85	100	400	496	76	6.1	.6	.8
24	3.0	6.3	12	8.5	101	103	386	485	76	6.1	.6	.9
25	3.2	6.3	11	b8.2	*102	98	325	476	74	5.5	.6	.9
26	3.4	6.3	b11	b8.5	91	88	249	*463	68	5.5	.6	1.0
27	3.6	6.3	b11	8.9	72	79	214	441	60	5.0	.6	.9
28	3.4	6.3	12	9.3	57	73	*194	404	49	4.5	.6	.9
29	3.4	6.3	12	12	-	74	183	372	44	4.5	.6	.9
30	3.9	6.1	b12	13	-------	85	173	355	40	5.3	.6	1.0
31	5.3	-------	b11	b13	-------	91	-------	344	-------	5.3	.6	-------
Total	68.3	188.3	292.4	275.9	1,251	1,778	5,383	11,179	3,772	404.9	42.4	22.6
Mean	2.20	6.28	9.43	8.90	44.7	57.4	179	361	126	13.1	1.37	0.75
Ac-ft	135	373	580	547	2,480	3,530	10,680	22,170	7,480	803	84	45

Calendar year 1957: Max 498 Min 0.6 Mean 64.3 Ac-ft 46,560
Water year 1957-58: Max 496 Min 0.6 Mean 67.6 Ac-ft 48,910

Peak discharge (base, 200 cfs).--Apr. 23 (6 p.m.) 416 cfs (3.71 ft); May 13 (9:30 p.m.) 448 cfs (3.87 ft); May 23 (10 p.m.) 500 cfs (4.14 ft).

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

3165. 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 1958.

Gage.--Water-stage recorder. Concrete control since Oct. 30, 1950. 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.--21 years (1915-16, 1917-22, 1943-58), 43.7 cfs (31,640 acre-ft per year).

Extremes.--Maximum discharge during year, 457 cfs May 24; minimum, 2.1 cfs Nov. 27, result of freezeup.
1915-23, 1943-58: Maximum discharge recorded, 794 cfs June 4, 1957, caused by failure of diversion dam 200 ft upstream but may have been exceeded by that in June 1917 when gage washed out; minimum, 1 cfs Jan. 24, 1918, Dec. 8, 1954.

Remarks.--Records good. 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.2	7.5	5.9	4.5	5.2	7.5	6.7	33	*269	110	28	10
2	7.2	7.1	5.9	5.0	5.6	7.5	7.1	37	243	107	28	9.9
3	8.0	7.9	5.9	5.9	5.6	7.1	7.5	45	220	103	27	8.9
4	8.0	7.9	5.9	5.6	5.6	*6.7	7.1	58	181	99	26	8.5
5	8.0	7.5	*5.9	5.6	5.6	6.7	7.5	*76	180	99	23	7.9
6	8.0	7.1	5.9	5.6	5.6	7.1	7.1	92	202	97	*22	7.8
7	8.0	6.3	5.9	5.6	5.6	6.7	7.5	94	208	99	20	7.7
8	8.0	6.3	5.9	*5.2	5.6	6.3	7.5	90	195	93	21	7.7
9	7.7	6.3	5.9	5.2	5.6	6.3	7.5	98	175	87	22	7.8
10	7.7	6.7	5.9	5.2	5.6	6.2	7.5	119	177	85	21	7.4
11	8.6	6.3	5.9	5.2	5.2	6.7	7.5	142	182	81	19	6.9
12	8.6	6.3	5.9	5.2	5.2	5.9	7.9	130	*168	78	19	6.5
13	8.3	7.1	5.9	5.6	5.2	5.9	8.3	117	148	74	19	6.9
14	9.4	*7.5	5.9	5.6	5.2	5.9	9.5	115	139	69	19	6.9
15	*10	8.7	6.3	5.6	5.9	5.9	*12	126	156	65	21	6.5
16	10	8.3	5.9	5.6	6.3	5.9	13	144	186	58	35	6.5
17	9.4	7.5	6.3	5.2	5.9	5.9	16	172	208	55	26	6.1
18	9.1	7.9	5.9	5.2	6.3	5.9	20	*217	231	*50	22	*5.8
19	9.1	8.3	6.3	5.2	5.9	5.9	22	273	251	46	19	5.4
20	10	8.3	6.3	5.6	5.9	5.9	27	320	239	46	*17	5.4
21	11	6.3	6.3	5.2	5.9	*6.3	33	348	235	44	16	5.4
22	10	6.0	5.9	5.6	6.3	5.9	36	383	229	43	15	5.0
23	9.8	7.9	5.5	5.6	7.5	5.9	34	414	229	39	14	5.8
24	9.5	7.5	5.8	5.6	7.1	6.3	32	*420	214	38	13	5.4
25	9.4	7.1	6.3	5.6	8.7	6.3	30	412	173	35	13	5.4
26	9.4	7.1	6.3	5.2	7.5	5.9	29	406	*161	34	12	5.0
27	9.8	4.0	6.3	5.2	7.9	6.3	29	396	171	35	12	5.0
28	*8.9	5.6	6.3	5.2	7.5	6.3	29	349	153	36	12	5.0
29	7.9	5.0	6.3	5.6	-	6.7	29	321	132	37	11	4.7
30	7.9	5.9	5.6	5.6	-------	6.7	30	312	117	36	11	4.7
31	7.9	-------	4.5	5.6	-------	6.7	-------	285	-------	30	11	-------
Total	271.8	209.2	184.7	167.4	171.0	197.2	527.2	6,544	5,772	2,008	594	197.9
Mean	8.77	6.97	5.96	5.40	6.11	6.36	17.6	211	192	64.8	19.2	6.60
Ac-ft	539	415	366	332	339	391	1,050	12,980	11,450	3,980	1,180	393

Calendar year 1957: Max 577 Min 3.3 Mean 52.8 Ac-ft 38,250
Water year 1957-58: Max 420 Min 4.0 Mean 46.1 Ac-ft 33,420

Peak discharge (base, 310 cfs).--May 24 (5 p.m.) 457 cfs; June 19 (7 p.m.) 309 cfs.

* Discharge measurements made on this day.

3175. 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 1958.

Gage.--Water-stage recorder. Datum of gage is 5,368 ft above mean sea level (Geological Survey planetable bench mark). November 1913 to September 1921 at site a quarter of a mile upstream at different datum.

Average discharge.--20 years (1914-19, 1943-58), 73.1 cfs (52,920 acre-ft per year).

Extremes.--Maximum discharge during year, 914 cfs Apr. 19 (gage height, 7.81 ft); minimum, 7.4 cfs Sept. 12.
1913-21, 1943-58: 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 27 to Mar. 20)

2.3	6.3	4.0	166
2.6	18	6.0	528
3.0	42	7.6	866
3.5	92		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.9	13			b16	92	198	251	353	68	28	8.9
2	8.9	14	b15	b16	b17	86	193	248	332	*85	24	8.5
3	9.6	14	(*)		18	80	193	249	301	63	20	*8.2
4	9.6	15	a15		19	68	161	256	301	58	19	8.5
5	9.6	*b15			20	*61	131	270	307	59	*18	8.5
6	9.3	15	b15		21	65	125	289	261	57	17	8.5
7	9.3	14		(*)	21	53	*136	317	200	54	16	8.2
8	9.3	15			22	48	134	*346	181	50	18	8.2
9	9.3	15		b15	21	46	142	341	192	48	20	8.9
10	*9.3	15			22	42	181	296	214	45	19	8.5
11	9.6	16	a15		a22	41	239	308	210	34	18	8.2
12	11	16			a22	41	273	344	236	27	17	7.8
13	11	18	b15		a21	41	314	401	244	27	16	8.2
14	11	23	b15		a20	41	397	*402	249	26	15	8.9
15	12	33			34	45	512	330	236	24	14	9.3
16	12	b28		a15	41	44	638	292	192	23	13	9.3
17	12	b22	b19		395	41	692	268	152	23	14	9.6
18	11	b19		b15	229	58	732	263	130	26	18	9.6
19	12	b16		a15	253	71	*851	268	118	27	14	9.6
20	12			a15	232	132	745	285	119	31	12	9.3
21	12		19	b15	195	239	636	317	132	33	12	9.6
22	12			b15	195	384	632	361	152	31	12	9.6
23	12		a19	a15	346	355	612	397	144	28	11	10
24	12			b15	393	312	548	412	132	27	11	11
25	13	b15		a15	*452	292	454	416	156	28	11	11
26	13				326	205	*379	416	145	27	10	11
27	13		b19	b15	168	164	330	401	130	26	10	11
28	13				108	155	299	362	112	23	10	11
29	13			b17	-	202	275	*352	86	21	9.3	11
30	13			b18	-------	229	260	352	71	23	8.9	11
31	13	-------		b18	-------	229	-------	350	-------	27	8.9	-------
Total	345.7	501	533	477	3,649	3,962	11,412	10,160	5,788	1,129	464.1	280.9
Mean	11.2	16.7	17.2	15.4	130	128	380	328	193	36.4	15.0	9.36
Ac-ft	686	994	1,060	946	7,240	7,860	22,640	20,150	11,480	2,240	921	557

Calendar year 1957: Max 765 Min 6.2 Mean 90.5 Ac-ft 65,520
Water year 1957-58: Max 851 Min 7.8 Mean 106 Ac-ft 76,770

Peak discharge (base, 170 cfs).--Feb. 17 (1 a.m.) 592 cfs (6.32 ft, from graph based on partial gage-height record); Feb. 25 (1 p.m.) 536 cfs (6.04 ft); Mar. 22 (6 to 7 a.m.) 414 cfs (5.41 ft); Mar. 30 (1 p.m.) 242 cfs (4.43 ft); Apr. 19 (10 a.m.) 914 cfs (7.81 ft); May 14 (2 a.m.) 435 cfs (5.52 ft); May 26 (12:30 p.m.) 420 cfs (5.44 ft); June 12 (8:30 p.m.) 254 cfs (4.52 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 1 discharge measurement, weather records, trend of flow, and records for Marys River near Deeth.
b Stage-discharge relation affected by ice.

3185. 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 1958.

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.--19 years (1897-1902, 1944-58), 232 cfs (168,000 acre-ft per year).

Extremes.--Maximum discharge during year, 1,620 cfs May 28 (gage height, 6.47 ft); minimum, 1.3 cfs Sept. 10-12.
1895-1902, 1944-58: 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, which are fair. Diversions above station for irrigation.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-10, Feb. 17 to Mar. 7, Mar. 21 to May 26, June 4 to July 11)

0.9	1.5	1.4	28	3.0	317
1.0	3.7	1.7	60	5.0	1,000
1.1	7.2	2.0	102	7.0	1,900
1.2	12	2.5	193		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	21	b33	b60	b103	387	453	628	1,400	*202	16	1.8
2	2.0	20	b36	b56	b107	345	450	579	*1,360	189	14	2.0
3	2.2	23	b35	b52	108	320	441	554	1,300	172	14	*1.6
4	2.2	25	b33	b48	108	*298	441	526	1,210	164	13	1.6
5	2.2	*26	*38	b44	110	280	408	*516	1,170	155	11	1.6
6	2.0	32	45	b40	112	277	384	509	1,070	140	*9.0	1.5
7	2.2	33	49	*b37	110	280	372	562	884	125	7.2	1.6
8	2.2	38	47	b35	123	274	363	635	721	112	6.8	2.0
9	2.2	38	46	b33	118	264	351	690	656	98	6.4	1.6
10	*3.4	42	b45	b31	133	239	345	676	635	86	6.0	1.5
11	4.3	43	b44	30	130	227	375	653	638	77	6.0	1.5
12	5.6	49	b43		140	227	414	672	*632	68	5.6	1.6
13	5.6	54	b43		146	222	435	738	647	56	5.3	1.6
14	6.4	58	51		128	217	*477	844	662	47	5.0	1.6
15	7.2	61	60		153	227	558	880	676	41	4.0	1.6
16	7.2	70	72		195	234	659	802	632	39	3.7	1.6
17	7.6	66	74	b29	366	246	784	746	554	47	4.0	1.8
18	7.6	63	73		465	249	892	696	483	44	4.6	1.8
19	8.1	69	b68		429	*259	952	*659	447	41	5.0	1.8
20	8.1	58	b62		453	269	1,100	638	444	37	4.6	1.8
21	8.5	51	b70		447	306	1,130	632	435	32	4.0	1.6
22	9.0	46	b75		411	369	1,080	690	429	29	3.4	1.8
23	14	46	b66		420	465	1,060	830	426	28	3.1	2.0
24	14	44	b58	b30	548	492	1,070	996	420	26	2.9	2.0
25	14	47	66	31	641	480	1,020	1,200	411	24	2.6	2.0
26	16	49	b62	36	659	474	932	*1,360	414	20	2.6	2.0
27	16	b46	b60	41	641	423	840	1,540	384	19	2.4	2.2
28	16	b41	64	51	459	384	*774	1,600	328	17	2.4	2.4
29	18	b36	76	68	-	381	728	1,540	269	16	2.0	2.4
30	19	b33	b71	88	-------	423	676	1,500	220	16	2.0	2.4
31	19	-------	b65	b98	-------	447	-------	1,460	-------	19	2.0	-------
Total	253.8	1,328	1,730	1,257	7,963	9,985	19,964	26,551	19,957	2,186	180.6	54.3
Mean	8.19	44.3	55.8	40.5	284	322	665	856	665	70.5	5.83	1.81
Ac-ft	503	2,630	3,430	2,490	15,790	19,800	39,600	52,660	39,580	4,340	358	108

Calendar year 1957: Max 2,180 Min 1.5 Mean 277 Ac-ft 200,400
Water year 1957-58: Max 1,600 Min 1.5 Mean 250 Ac-ft 181,300

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

3195. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 5,315 ft (from river-profile map).

Average discharge.--9 years (1949-58), 35.7 cfs (25,850 acre-ft per year).

Extremes.--Maximum discharge during year, 257 cfs May 26 (gage height, 3.29 ft); minimum, 1.3 cfs Aug. 7, 8; minimum gage height, 0.85 ft Sept. 2, 3.
1948-58: 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, 0.5 cfs Sept. 5, 1955.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are fair. Diversions above station for irrigation of 17,700 acres.

Revisions (water years).--WSP 1244: 1949(M). WSP 1344: 1953.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Nov. 3, Nov. 13-16, 18, 19, Feb. 19 to Mar. 4)

0.9	1.3	1.3	12	2.5	121
1.0	2.8	1.6	30	3.0	198
1.1	5.1	2.0	64	3.5	294

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.0	6.4			b21	42	50	96	167	7.7	2.1	1.7
2	4.0	5.7	b9.0		b22	39	51	97	153	7.3	2.1	1.6
3	4.9	7.0			24	39	62	94	*147	7.3	2.0	1.6
4	5.4	a12	(*)		31	37	62	96	171	6.7	1.8	1.6
5	4.6	a12	b10		38	35	56	96	121	6.1	1.8	*1.8
6	4.4	a12	b11		40	38	56	*112	92	7.0	1.6	2.5
7	4.4	a13	12		35	38	52	132	69	7.3	1.4	2.6
8	4.4	a13	b12	(*)	37	38	48	141	71	5.1	1.6	2.6
9	4.6	a12	b11		37	34	46	124	75	4.6	*2.3	2.6
10	4.6	a12	b10		36	32	44	111	68	4.6	2.1	2.6
11	4.9	a12	b10		33	33	46	107	58	4.6	2.5	3.0
12	4.9	a13	b10	b8.0	32	33	46	131	53	4.4	2.8	2.5
13	6.1	*14	b10		34	32	47	170	56	4.6	2.3	2.6
14	6.7	16	b12		33	31	49	140	60	4.6	2.5	2.8
15	*6.1	15	13		49	34	*55	112	50	4.6	2.8	3.3
16	5.4	12	16		56	38	65	103	39	4.9	2.1	3.3
17	5.4	b10	18		50	42	80	96	29	*4.0	2.0	3.3
18	5.4	11	16		48	46	92	96	18	3.5	2.8	3.5
19	5.1	11	b13		48	40	112	111	19	3.5	4.2	3.5
20	5.4	b11	16		50	*37	131	*135	20	3.7	3.3	3.3
21	5.7	b10	18		49	38	138	167	18	4.4	2.5	3.5
22	7.0	b8.0	18		48	42	160	193	17	3.7	2.1	3.7
23	8.0	b8.5	b13		59	45	176	209	16	4.4	2.0	3.7
24	7.3	b8.7	b11	b9.0	77	44	162	227	*17	4.2	1.8	4.0
25	6.4	b8.7	b13	b11	67	45	144	240	15	3.7	1.8	3.7
26	5.7	b9.1	b11	b13	*62	42	125	251	14	3.5	1.8	3.7
27	6.1		b10	b16	55	40	111	234	13	3.0	1.8	3.7
28	6.4	b9.0	b12	19	48	39	103	218	11	3.0	1.8	3.7
29	6.4		b11	22	-	43	98	209	9.5	3.0	1.7	3.7
30	6.7		b10	24	-------	48	93	202	8.3	3.3	1.7	3.7
31	6.4	-------	b9.0	b23	-------	47	-------	183	-------	2.6	1.7	-------
Total	172.8	319.1	372.0	321.0	1,219	1,211	2,560	4,633	1,674.8	144.9	66.8	89.4
Mean	5.57	10.6	12.0	10.4	43.5	39.1	85.3	149	55.8	4.67	2.15	2.98
Ac-ft	343	633	738	637	2,420	2,400	5,080	9,190	3,320	287	132	177

Calendar year 1957: Max 371 Min 1.3 Mean 31.3 Ac-ft 22,680
Water year 1957-58: Max 251 Min 1.4 Mean 35.0 Ac-ft 25,360

Peak discharge (base, 200 cfs).--May 26 (7 a.m.) 257 cfs (3.29 ft).

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

3200. 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., on left bank 1½ miles upstream from Dixie Creek and 10½ miles south of Elko.

Records available.--December 1948 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 5,140 ft (from topographic map).

Average discharge.--9 years (1949-58), 114 cfs (82,530 acre-ft per year).

Extremes.--Maximum discharge during year, 1,160 cfs May 25 (gage height, 4.98 ft); minimum, 4.0 cfs Sept. 11, 12 (gage height, 1.95 ft).
1948-58: Maximum discharge, 1,700 cfs Apr. 29, 1952, June 6, 1957; maximum gage height, 5.58 ft June 6, 1957; minimum discharge, 0.6 cfs Sept. 11, 1954, Sept. 15, 1955.

Remarks.--Records good except those for periods of ice effect, which are fair. Diversions above station for irrigation of 32,900 acres.

Revisions (water years).--WSP 1284: 1952(M).

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used July 5-25)

2.0	4.3	2.6	45	3.6	280
2.1	7.5	2.8	73	4.0	456
2.2	12	3.0	111	4.5	766
2.4	25	3.3	184	5.0	1,180

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.3	25			b28	77	99	207	766	179	27	6.4
2	8.8	25	b21		b33	72	105	223	738	145	23	5.4
3	11	26			b40	77	120	235	*724	133	20	4.8
4	15	32	(*)		b45	68	133	266	656	122	19	4.6
5	14	32	b22		57	67	124	299	533	115	16	*4.3
6	13	32	b23		66	72	126	*352	467	111	14	4.3
7	14	33	b25		b61	72	122	388	461	111	13	4.8
8	14	33	b25	(*)	60	68	109	369	488	103	12	5.4
9	14	32	b24		60	64	105	339	456	97	*14	5.4
10	14	32	b23		62	b52	103	331	416	91	13	4.8
11	15	33	b23		54	60	107	369	416	93	13	4.3
12	15	33	b23	b17	53	60	111	421	406	87	16	4.6
13	16	*35	b23		53	61	120	441	392	78	15	4.3
14	19	44	b25		53	57	135	388	365	*73	16	4.8
15	*21	43	b26		77	64	*160	347	326	70	20	5.1
16	20	37	b28		111	68	198	343	326	70	18	5.1
17	19	b29	b30		99	77	226	352	343	58	17	5.1
18	19	31	b28		91	82	288	401	378	55	20	5.4
19	19	36	b25		95	78	322	505	416	53	29	5.4
20	19	b36	b28		97	*75	335	*637	*431	54	19	5.1
21	19	b33	b30		95	78	352	738	397	49	16	5.1
22	21	b30	b30		91	86	374	848	388	45	13	5.1
23	24	b32	b25		124	89	374	967	388	42	12	6.4
24	26	b34	b23	b19	145	91	339	1,040	378	42	11	7.1
25	26	b34	b25	b21	147	93	295	1,100	339	36	10	8.0
26	25	b31	b23	b23	*133	84	262	1,100	288	30	9.3	8.0
27	25	b26	b22	b25	107	82	229	1,050	252	25	8.0	8.0
28	26	b22	b24	b27	89	80	213	1,010	242	23	8.0	8.0
29	26	b21	b22	b30	-	86	201	934	216	21	8.0	8.0
30	25	b21	b20	b33	-------	95	201	879	193	26	7.1	8.0
31	25	-------	b18	b31	-------	99	-------	840	-------	29	6.8	-------
Total	577.1	943	747	600	2,226	2,334	5,988	17,719	12,585	2,266	463.2	171.1
Mean	18.6	31.4	24.1	19.4	79.5	75.3	200	572	420	73.1	14.9	5.70
Ac-ft	1,140	1,870	1,480	1,190	4,420	4,630	11,880	35,150	24,960	4,490	919	339

Calendar year 1957: Max 1,520 Min 4.3 Mean 124 Ac-ft 89,850
Water year 1957-58: Max 1,100 Min 4.3 Mean 128 Ac-ft 92,470

Peak discharge (base, 400 cfs).--May 13 (10 a.m.) 451 cfs (3.95 ft); May 25 (2 p.m.) 1,160 cfs (4.98 ft); June 20 (9 a.m.) 467 cfs (4.00 ft).

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

3205. South Fork Humboldt River near Elko, Nev.

Location.--Lat 40°43'25", long 115°49'45", in NE¼NW¼ sec. 30, T. 33 N., R. 55 E., on right bank 0.1 mile upstream from head of canyon, 1.7 miles downstream from highway bridge, 8.8 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 1958.

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. October 1932 to Oct. 12, 1955, water-stage recorder at site 900 ft upstream at datum 1.97 ft higher.

Average discharge.--50 years (1896-1903, 1904-9, 1910-18, 1923-26, 1927-32, 1936-58), 128 cfs (92,670 acre-ft per year).

Extremes.--Maximum discharge during year, 1,110 cfs May 25 (gage height, 5.15 ft); minimum, 1.8 cfs Sept. 12.
1896-1922, 1923-32, 1936-58: Maximum daily discharge, 2,400 cfs Jan. 26, 1914; maximum gage height observed, 12.0 ft Jan. 26, 1914 (ice jam); no flow Aug. 10 to Oct. 24, 1954.

Remarks.--Records good except those for periods of ice effect, 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. WSP 1514: 1906, 1927-29.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.5	2.0	2.0	25	3.5	300
1.6	4.2	2.3	51	4.0	476
1.7	7.9	2.6	92	5.0	990
1.8	13	3.0	169	5.5	1,330

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.9	20			23	82	113	229	766	194	27	4.2
2	3.9	20	(*)		28	76	122	244	*739	154	23	3.2
3	4.2	21	17		34	81	132	255	728	140	20	2.5
4	8.3	24			39	71	140	285	662	128	17	*2.3
5	8.8	26			50	69	130	317	517	118	15	2.1
6	7.9	*25	18		58	73	136	369	449	113	13	2.0
7	8.3	25	20		55	72	130	*404	445	109	10	2.1
8	*8.3	27	20		54	71	118	382	472	98	8.8	2.5
9	7.9	25	19	(*)	54	64	113	348	445	90	*9.7	3.2
10	7.9	25	18		56	56	113	332	404	85	10	2.5
11	8.3	25	18		50	58	122	368	396	*85	9.2	2.1
12	9.7	26	18	12	49	58	132	426	386	81	12	2.0
13	10	27	18		47	59	144	445	376	73	13	2.0
14	12	33	20		46	58	171	390	345	68	13	2.3
15	14	34	21		65	64	202	348	313	67	16	2.7
16	14	30	23		118	67	*245	335	306	71	15	2.7
17	13	24	25		106	75	276	339	322	56	13	2.7
18	13	26	22		93	*84	342	382	352	56	19	3.0
19	13	27	20		109	84	358	476	393	54	35	2.7
20	13	27	23		117	84	368	610	411	55	17	2.7
21	14	24	25		109	97	379	728	379	50	13	2.7
22	15	22	25		102	97	396	840	372	47	11	2.7
23	17	24	20		154	97	393	*948	*379	43	9.7	3.4
24	19	26	18	14	*171	102	368	1,010	382	43	8.3	4.5
25	19	26	20	16	206	104	319	1,050	345	39	7.5	4.5
26	18	24	18	18	150	95	285	1,030	300	31	6.7	5.2
27	18	21	16	21	118	95	253	978	264	27	5.5	4.8
28	19	19	18	22	97	92	238	948	245	24	5.5	4.8
29	20	17	16	25	-	100	225	894	224	22	5.2	4.8
30	20	17	14	28	-------	113	224	846	204	27	4.5	4.8
31	20	-------	13	26	-------	118	-------	834	-------	30	4.2	-------
Total	388.4	737	591	446	2,358	2,516	6,687	17,390	12,321	2,278	396.8	93.7
Mean	12.5	24.6	19.1	14.4	84.2	81.2	223	561	411	73.5	12.8	3.12
Ac-ft	770	1,460	1,170	885	4,680	4,990	13,260	34,490	24,440	4,520	787	186

Calendar year 1957: Max 1,480 Min 0.5 Mean 122 Ac-ft 88,250
Water year 1957-58: Max 1,050 Min 2.0 Mean 127 Ac-ft 91,640

Peak discharge (base, 410 cfs).--Apr. 22 (4:30 p.m.) 411 cfs (3.85 ft); May 13 (11 a.m. to 12 m.) 460 cfs (3.97 ft); May 25 (3 p.m.) 1,110 cfs (5.15 ft); June 20 (10 a.m.) 452 cfs (3.97 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 16-18, Nov. 20 to Feb. 11.

3210. 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 1958.

Gage.--Water-stage recorder. Datum of gage is 4,931.91 ft above mean sea level (levels by Nevada State Highway Department).

Average discharge.--15 years, 349 cfs (252,700 acre-ft per year).

Extremes.--Maximum discharge during year, 2,260 cfs May 30 (gage height, 5.98 ft); minimum, 4.8 cfs Sept. 6, 7.
1943-58: Maximum discharge, 5,220 cfs May 1, 1952 (gage height, 9.35 ft); minimum, 0.3 cfs Sept. 10, Oct. 11, 1954.
High water in February 1943 reached a stage of 9.8 ft (discharge, 5,900 cfs, by slope-area measurement 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.6	4.0	1.6	110	3.5	760
.7	8.0	2.0	198	4.0	1,000
.8	13	2.5	351	5.0	1,600
1.0	28	3.0	545	6.0	2,320
1.3	62				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	39	b55	b75	129	a700	565	945	2,120	457	54	17
2	16	40	b61	b88	131	a600	597	905	2,020	402	50	17
3	17	41	b59	b93	152	*521	609	855	1,980	351	48	12
4	19	49	b55	b85	164	473	625	828	1,940	320	45	*7.6
5	17	49	68	b82	166	437	617	828	1,810	291	41	6.4
6	17	53	70	b77	186	417	605	832	1,640	273	*39	5.2
7	17	57	72	b77	190	410	573	860	1,520	254	34	6.8
8	17	57	73	b75	186	398	541	875	1,490	240	32	9.5
9	17	63	75	*b71	190	391	517	890	*1,430	212	31	10
10	16	59	73	72	196	358	505	*910	1,220	193	30	11
11	16	62	72	72	203	341	501	965	1,100	178	30	12
12	16	62	b69	b70	203	324	517	1,040	1,070	168	29	12
13	16	68	*b69	68	217	320	549	1,070	1,040	152	30	11
14	18	73	b74	b66	217	317	597	1,060	1,040	142	29	12
15	18	81	79	68	234	320	652	1,040	995	131	29	12
16	18	78	86	73	285	334	724	1,090	960	125	33	12
17	22	69	96	73	311	348	814	1,120	970	116	32	12
18	25	78	101	69	351	362	935	1,100	970	106	29	12
19	25	84	97	b67	395	365	*1,090	1,110	940	101	41	12
20	26	87	89	b64	a500	369	1,220	1,150	885	97	38	12
21	26	92	96	b58	a520	*383	1,330	1,240	841	96	31	12
22	26	*b78	103	51	a540	410	1,450	1,310	800	89	27	12
23	28	b75	b90	b60	a600	441	1,470	1,400	800	84	26	14
24	28	73	b83	81	a650	513	1,430	1,490	805	79	23	14
25	29	73	b91	82	a700	581	1,390	1,610	*774	76	22	13
26	30	76	97	84	a720	605	1,360	1,770	728	70	21	14
27	30	72	92	82	a710	605	1,250	1,920	679	63	20	14
28	31	b66	90	90	a700	601	1,150	*2,060	630	58	19	14
29	34	b59	99	103	-	565	1,070	2,180	593	56	19	15
30	*33	b55	101	123	-------	541	1,000	2,240	517	54	19	15
31	34	-------	b92	131	-------	545	-------	2,190	-------	56	19	-------
Total	697	1,968	2,527	2,430	9,746	13,895	26,253	38,883	34,307	5,090	970	358.5
Mean	22.5	65.6	81.5	78.4	348	448	875	1,254	1,144	164	31.3	12.0
Ac-ft	1,380	3,900	5,010	4,820	19,330	27,560	52,070	77,120	68,050	10,100	1,920	711

Calendar year 1957: Max 3,290 Min 6.0 Mean 393 Ac-ft 284,200
Water year 1957-58: Max 2,240 Min 5.2 Mean 376 Ac-ft 272,000

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, trend of flow, and records for stations near Elko and at Palisade.
b Stage-discharge relation affected by ice.

3215. Susie Creek near Carlin, Nev.

Location.--Lat 40°56', long 115°58', in SW¼ sec. 12, T. 35 N., R. 53 E., on left bank half a mile upstream from Adobe Creek, 16 miles upstream from mouth, and 17 miles northeast of Carlin.

Records available.--October 1955 to September 1958 (discontinued).

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during year, 89 cfs Apr. 17 (gage height, 2.82 ft); no flow Aug. 30.
1955-58: Maximum discharge, 184 cfs Jan. 15, 1956 (gage height, 3.49 ft); no flow Aug. 30, 1958.

Remarks.--Records good except those for periods of ice effect or doubtful or no gage-height record, which are fair. Diversions above station for irrigation of about 159 acres.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 16, June 27 to Aug. 11)

1.1	0	1.6	5.4
1.2	.3	1.8	9.8
1.3	1.2	2.1	23
1.4	2.4	2.6	59

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	0.9	0.9	0.8	3.0	29	16	16	2.7	0.4	0.4	0.1
2	.6	.8	.9	.8	3.2	26	14	16	2.7	.4	.4	.1
3	.9	.9	1.0	.8	2.7	22	18	16	3.5	.4	.4	.1
4	.9	.9	.9	.7	2.5	16	11	17	2.7	.4	.4	.1
5	.6	1.2	1.1	.6	2.3	13	9.6	18	2.0	.3	.3	.1
6	.6	1.0	1.1		2.1	11	a17	19	1.8	.2	.3	.2
7	.5	.9	1.2		2.1	7.3	a16	19	1.7	.2	.3	.2
8	.6	1.0	1.2		2.3	3.2	a18	17	1.9	.2	.3	.2
9	.5	1.5	b1.1		2.3	2.1	a20	16	1.9	.2	.4	.2
10	.5	1.3	b1.0	(*)	2.1	2.0	*22	16	1.9	.2	.3	.2
11	.8	1.4	b.9		2.3	a2.4	21	16	2.7	.1	*.3	.1
12	.8	1.5	b.9		2.3	a2.7	25	20	3.5	.1	.2	.2
13	.8	2.0	b.9		2.1	*a3.0	*32	*16	3.5	.1	.2	.2
14	.9	2.4	1.0		2.0	3.1	37	15	4.0	.1	.2	.3
15	.8	1.3	1.3	a.6	2.0	3.6	40	13	2.3	.1	.2	.3
16	.7	1.1	*1.4		4.1	3.4	*52	9.3	1.8	.1	.2	*.2
17	.5	b1.0	1.4		8.0	6.1	58	8.6	1.5	.1	.2	.2
18	.6	1.2	b1.2		9.8	7.7	*54	8.0	1.5	.1	.7	.3
19	.4	1.1	b1.1		14	11	42	7.6	1.4	.1	1.7	.2
20	.6	b1.1	1.7		22	24	*40	7.6	1.3	.1	.4	.2
21	.7	b.9	b1.5		32	45	38	7.1	1.0	.2	*.2	.3
22	.8	b.8	b1.3		37	29	35	6.5	.7	.1	.2	.3
23	.8	*.9	b1.1		38	24	29	6.2	.5	.1	.1	.5
24	.9	1.2	1.3	a2.6	40	26	23	6.0	.6	.2	.1	.4
25	.9	1.2	1.3	a6.0	39	18	*19	5.6	.7	.4	.1	.4
26	.8	b1.1	1.2	a5.5	34	9.9	18	4.6	.7	.4	.1	.4
27	.8	b.9	1.1	a7.0	34	13	16	4.3	*.5	.4	.1	.4
28	.6	b.9	1.1	a6.0	31	16	16	*4.1	.5	.3	.1	.4
29	.6	b.9	1.3	a3.9	-	21	16	3.7	.5	.4	.1	.4
30	*.8	b.9	b1.2	2.8	-------	22	*16	3.1	.5	.5	0	.4
31	.9	-------	b1.0	2.5	-------	13	-------	3.2	-------	.5	.1	-------
Total	21.7	34.2	35.6	50.8	378.2	435.5	788.6	345.5	52.5	7.4	9.0	7.6
Mean	0.70	1.14	1.15	1.64	13.5	14.0	26.3	11.1	1.75	0.24	0.29	0.25
Ac-ft	43	68	71	101	750	864	1,560	685	104	15	18	15

Calendar year 1957: Max 91 Min 0.1 Mean 5.96 Ac-ft 4,310
Water year 1957-58: Max 58 Min 0 Mean 5.94 Ac-ft 4,290

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of 2 discharge measurements, weather records, and records for Pine Creek near Palisade.
b Stage-discharge relation affected by ice.
Note.--Doubtful gage-height record Jan. 30 to Mar. 10; discharge computed from gage-height graph partially reconstructed on basis of engineers' notes, weather records, and records for Pine Creek near Palisade.

3225. 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 1958.

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.--50 years (1903-6, 1911-58), 365 cfs (264,200 acre-ft per year).

Extremes.--Maximum discharge during year, 2,300 cfs May 30 (gage height, 6.07 ft); minimum, 20 cfs Sept. 7.
1902-6, 1911-58: 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.

Revisions (water years).--WSP 1514: 1903-4, 1912, 1914.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 26 to June 5)

1.5	14	2.1	110	4.0	800
1.6	24	2.5	205	5.0	1,480
1.8	53	3.0	355	6.0	2,380

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	55	85	b95	158	*800	680	1,070	2,170	501	74	*33
2	30	58	91	b108	158	685	715	1,030	2,060	445	68	32
3	32	60	89	114	182	596	740	999	2,020	394	65	32
4	33	68	83	106	200	537	750	975	1,980	362	62	29
5	33	70	95	104	208	501	740	963	1,860	334	62	24
6	33	72	93	*93	220	488	725	963	1,690	311	60	22
7	33	74	95	93	228	474	695	1,010	1,570	293	56	22
8	32	83	100	91	225	461	660	1,030	1,530	275	53	22
9	32	85	100	b83	222	449	640	1,040	*1,510	251	53	24
10	32	87	97	89	233	422	635	*1,040	1,280	230	50	25
11	*34	87	93	89	233	404	645	1,090	1,140	215	48	24
12	33	93	89	87	242	386	660	1,200	1,110	200	48	24
13	33	102	89	89	245	380	705	1,250	1,070	188	48	24
14	33	110	97	81	248	376	770	1,230	1,070	172	47	25
15	33	117	106	89	275	383	844	1,200	1,040	162	45	28
16	33	119	110	91	362	390	921	1,210	981	155	47	28
17	34	110	123	91	411	400	999	1,230	975	148	53	28
18	40	108	130	91	394	411	1,140	1,230	987	134	48	28
19	42	121	128	89	514	418	1,300	1,210	969	128	47	28
20	43	121	123	87	605	429	1,420	1,230	909	123	60	28
21	43	128	123	b79	615	492	1,540	1,320	867	121	51	29
22	42	114	130	b70	630	542	1,700	1,390	838	117	47	29
23	43	106	121	b80	715	550	1,730	1,460	828	110	45	32
24	45	106	110	102	735	605	1,690	1,550	833	104	42	33
25	47	106	119	106	806	690	*1,610	1,680	800	102	39	32
26	48	108	128	110	811	700	1,510	1,800	760	95	a37	32
27	48	106	110	*110	795	695	1,410	1,910	715	*87	a35	33
28	48	97	128	112	800	700	1,290	*2,060	665	81	a34	33
29	50	87	130	125	-	685	1,190	2,190	625	78	a33	33
30	53	*85	130	155	-------	675	1,120	2,270	*564	76	a33	32
31	*53	-------	b117	170	-------	*670	-------	2,240	-------	74	a33	-------
Total	1,198	2,843	3,362	3,079	11,470	16,394	31,174	42,070	35,416	6,066	1,523	848
Mean	38.6	94.8	108	99.3	410	529	1,039	1,357	1,181	196	49.1	28.3
Ac-ft	2,380	5,640	6,670	6,110	22,750	32,520	61,830	83,440	70,250	12,030	3,020	1,680

Calendar year 1957: Max 3,340 Min 22 Mean 442 Ac-ft 319,900
Water year 1957-58: Max 2,270 Min 22 Mean 426 Ac-ft 308,300

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of trend of flow and records for Humboldt River near Carlin.
b Stage-discharge relation affected by ice.

3230. 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 1958 (discontinued).

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.--14 years (1912-14, 1946-58), 13.3 cfs (9,630 acre-ft per year).

Extremes.--Maximum discharge during year, 67 cfs Jan. 25 (gage height, 2.92 ft); maximum gage height, 3.02 ft Nov. 29 (backwater from ice); no flow Aug. 19, 20.
1912-14, 1946-58: 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 measurement of peak flow; no flow for several days in 1951, 1953-55, 1957-58.

Remarks.--Records fair. Diversions above station for irrigation.

Revisions (water years).--WSP 1120: 1946 (calendar year mean). WSP 1514: 1914.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.6	8.9	7.4	7.5	10	*19	26	a0.2	0.1	0.1	0.1	*0.2
2	3.9	8.9	7.8	8.2	9.7	17	27	a.2	.1	.1	.1	.2
3	3.9	9.3	7.4	7.8	9.7	18	31	a.2	.2	.1	.1	.3
4	4.3	10	7.1	7.5	12	15	31	a.2	.1	.1	.1	.2
5	3.9	10	6.2	8.2	12	15	30	a.2	.1	.1	.1	.2
6	5.0	11	8.2	*7.4	11	18	30	a.2	.1	.1	.1	.1
7	5.4	10	9.3	7.8	10	19	24	a.2	.1	.1	.1	.1
8	5.4	10	9.7	7.4	10	19	22	a.2	.2	.1	**.1	.1
9	5.0	10	9.3	7.1	9.7	17	20	a.2	*.1	.1	.1	.1
10	5.0	10	9.0	7.8	11	15	21	*.2	.2	.1	.1	.1
11	*5.7	10	8.5	9.3	10	15	23	.2	.2	.1	.1	.1
12	5.7	10	8.5	9.1	10	15	24	.2	.3	.1	.1	.1
13	5.7	12	8.8	8.9	12	14	29	.2	.2	.1	.1	.1
14	6.4	14	9.7	6.5	12	15	37	.2	.2	.1	.1	.1
15	6.0	12	11	8.0	35	20	45	.2	.3	.2	.1	.1
16	6.8	11	12	9.3	32	20	49	.2	.3	.2	.1	.1
17	6.8	10	14	9.7	22	21	54	.2	.3	.2	1.6	.1
18	6.8	10	12	9.7	17	18	61	.1	.3	.1	.1	.1
19	7.1	11	12	9.0	19	17	62	.2	.3	.3	0	.2
20	7.8	11	12	7.5	19	20	54	.2	.2	.3	0	.2
21	8.2	11	12	6.0	17	23	47	.2	.2	.2	.1	.2
22	7.8	9.3	12	5.0	15	27	46	.1	.2	.2	.1	.1
23	7.1	9.3	8.0	6.0	27	29	40	.1	.1	.2	.1	.1
24	7.8	10	9.0	7.4	29	28	35	.2	.1	.2	.1	.1
25	9.7	10	11	28	27	26	*27	.2	.1	.2	.1	.1
26	9.7	10	11	27	29	23	23	.2	.1	.1	.1	.1
27	9.7	8.5	8.0	*32	27	20	16	.1	.1	*.1	.1	.1
28	9.3	7.4	10	30	23	19	14	.1	.1	.1	.1	.1
29	9.3	7.0	12	17	-	20	a4.8	.1	.1	.1	.1	.1
30	8.9	*7.4	12	12	-------	21	.2	.1	*.1	.1	.2	.1
31	*8.9	-------	9.5	10	-------	*24	-------	.1	-------	.1	.2	-------
Total	206.6	299.0	306.4	344.1	487.1	607	953.0	5.4	5.1	4.3	4.6	3.9
Mean	6.66	9.97	9.88	11.1	17.4	19.6	31.8	0.17	0.17	0.14	0.15	0.13
Ac-ft	410	593	608	683	966	1,200	1,890	11	10	8.5	9.1	7.7

Calendar year 1957: Max 27 Min 0 Mean 6.17 Ac-ft 4,460
Water year 1957-58: Max 62 Min 0 Mean 8.84 Ac-ft 6,400

Peak discharge (base, 50 cfs).--Jan. 25 (3:30 p.m.) 67 cfs (2.92 ft); Feb. 15 (3:30 p.m.) 61 cfs (2.73 ft); Apr. 18 (3 to 7 a.m.) 65 cfs (2.34 ft).

* Discharge measurement made on this day.
** Field estimate made on this day.
a No gage-height record; discharge estimated on basis of 1 discharge measurement, trend of flow, and records for Susie Creek near Carlin.

3235. 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 1958.

Gage.--Water-stage recorder.

Average discharge.--12 years, 310 cfs (224,400 acre-ft per year).

Extremes.--Maximum discharge during year, 1,810 cfs June 3 (gage height, 7.80 ft); minimum, 1.9 cfs Sept. 24, 25.
1946-58: Maximum daily discharge, 5,700 cfs May 2, 1952 (includes flow bypassing gage outside of main channel); minimum daily, 0.2 cfs Sept. 15 to Oct. 17, 1955.

Remarks.--Records good except those for periods of ice effect, which are fair. Many diversions above station for irrigation. Records do not include flow in secondary channels or ditches, much of which is used for irrigation.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 17 to May 2, May 26 to June 10, Aug. 5 to Sept. 30)

Oct. 1 to June 27				June 28 to Sept. 30			
1.7	1.2	3.5	182	1.8	1.5	2.7	53
1.8	2.9	4.0	286	1.9	3.1	3.0	89
1.9	5.6	4.5	411	2.0	5.6	3.5	168
2.1	14	5.0	561	2.1	9.3	4.0	268
2.4	36	6.0	930	2.2	14	5.0	543
2.7	64	8.0	1,820	2.4	26	6.0	882
3.0	102						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1	41	b77	b92	150	717	632	978	1,740	533	48	6.3
2	2.5	42	b78	b97	149	721	*638	934	1,780	480	42	5.4
3	2.9	44	b76	b94	145	652	663	886	1,780	436	38	4.5
4	4.1	48	b76	b90	157	591	685	846	1,760	393	36	4.2
5	7.0	52	88	b94	171	539	695	818	*1,740	363	32	4.0
6	8.2	55	b89	b96	182	501	688	795	1,680	338	32	3.8
7	9.5	56	87	b92	190	*486	677	791	1,560	*305	31	3.8
8	12	58	b87	b94	201	474	628	826	1,450	277	*30	3.3
9	16	61	87	b96	201	462	587	*842	1,370	255	29	3.1
10	17	64	b86	99	201	448	568	838	1,320	227	29	*2.9
11	19	68	b85	103	209	428	571	850	1,200	207	29	2.7
12	20	74	*b84	b104	217	408	574	902	1,080	190	27	2.7
13	21	76	b82	b97	223	395	591	982	1,040	168	27	2.5
14	23	82	87	b95	229	384	621	1,020	1,010	154	26	2.5
15	23	87	90	b90	238	381	685	998	1,000	144	24	2.5
16	21	90	93	b96	266	384	750	966	958	134	23	2.5
17	23	91	97	b97	331	387	814	962	910	120	24	2.5
18	25	90	105	95	366	392	902	970	*914	110	24	2.7
19	26	88	110	b90	368	400	982	958	914	103	25	2.9
20	30	94	110	b92	456	411	1,070	938	898	96	22	3.1
21	33	95	109	b88	520	425	1,150	950	862	90	21	3.1
22	36	*b97	108	b85	542	468	1,230	1,000	814	84	21	3.3
23	34	b98	b94	b92	561	507	1,320	1,060	783	76	18	3.5
24	32	b98	b94	*b100	632	523	*1,420	1,110	772	72	17	2.5
25	35	94	b103	113	656	561	1,420	1,170	761	70	16	3.3
26	36	93	b105	122	703	614	1,370	1,250	739	65	14	6.0
27	36	b89	b103	120	713	632	1,310	*1,320	703	63	12	7.7
28	37	b81	b111	120	706	635	1,250	1,410	672	62	11	8.9
29	*38	b76	b114	124	-	642	1,150	1,520	624	56	9.3	8.0
30	38	b76	b116	131	-------	635	1,060	1,590	582	54	8.0	5.6
31	40	-------	b104	139	-------	632	-------	1,670	-------	51	7.0	-------
Total	780.3	2,258	2,935	3,137	9,683	15,835	26,701	32,150	33,416	5,776	752.3	119.8
Mean	25.2	75.3	94.7	101	346	511	890	1,037	1,114	186	24.3	3.99
Ac-ft	1,550	4,480	5,820	6,220	19,210	31,410	52,960	63,770	66,280	11,460	1,490	238

Calendar year 1957: Max 2,610 Min 1.8 Mean 382 Ac-ft 276,400
Water year 1957-58: Max 1,780 Min 2.5 Mean 366 Ac-ft 264,900

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

3245. Rock Creek near Battle Mountain, Nev.

Location.--Lat 40°49', long 116°35' (revised), 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 4,600 ft (estimated from nearby Coast and Geodetic Survey bench mark). Prior to Mar. 26, 1918, staff gage at site about 11 miles upstream at different datum. Mar. 26, 1918, to Jan. 3, 1946, water-stage recorder at present site at different datum.

Average discharge.--17 years (1918-23, 1946-58), 33.6 cfs (24,330 acre-ft per year).

Extremes.--Maximum discharge during year, 445 cfs Apr. 23 (gage height, 2.88 ft); no flow Aug. 30 to Sept. 6.
1918-25, 1927-29, 1946-58: Maximum discharge, 3,000 cfs Apr. 7, 1952 (gage height, 5.60 ft); no flow at times in July, August, September, and October nearly every year.

Remarks.--Records good except those for periods of ice effect, which are fair. Several diversions for irrigation 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.0	0	1.0	23
.1	.4	1.2	36
.2	1.0	1.4	55
.3	2.0	1.7	97
.4	3.5	2.0	163
.6	7.7	2.5	317
.8	14	3.0	510

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	2.1	b1.6	3.0	23	a62	185	148	40	14	0.7	0
2	.6	2.1	b1.7	2.5	24	a53	*196	127	38	13	.7	0
3	.7	2.4	b1.6	2.8	16	a47	210	134	38	12	.6	0
4	.7	3.2	b1.5	2.7	14	a42	213	146	43	11	.4	0
5	.7	3.2	2.5	b2.4	18	a38	190	160	53	10	.2	0
6	.7	3.0	3.5	2.5	26	a35	202	174	44	9.4	.2	0
7	.6	2.8	3.9	2.5	19	*34	207	187	34	8.5	.1	.1
8	.6	2.8	3.3	2.7	14	28	204	190	33	7.2	*.1	.2
9	.6	2.7	2.0	2.5	13	30	174	*171	39	4.8	.4	.2
10	.6	2.7	2.1	3.3	13	26	156	160	59	4.0	.6	*.2
11	.7	2.8	2.1	3.5	11	23	168	163	47	3.2	.4	.2
12	.9	2.8	*2.2	3.9	12	23	176	190	46	2.4	.4	.1
13	1.1	3.7	2.5	4.0	15	22	182	207	80	1.9	.6	.1
14	1.1	5.2	3.5	3.2	17	22	228	174	94	1.6	.4	.2
15	1.1	6.3	3.9	3.9	18	24	286	153	66	1.6	.2	.2
16	1.5	5.2	4.4	4.0	52	27	348	103	49	1.7	.2	.4
17	1.4	3.5	5.0	3.7	96	27	363	84	39	1.7	3.9	.4
18	1.3	3.5	4.2	4.2	54	28	384	73	34	1.8	2.2	.4
19	1.4	3.5	4.4	3.2	94	27	363	71	32	1.7	1.4	.4
20	2.7	3.0	5.9	3.3	108	37	384	75	31	1.6	.8	.3
21	3.2	b1.7	4.4	4.4	97	140	388	77	28	1.6	.5	.3
22	2.8	*2.0	b2.7	2.7	*92	241	418	80	24	1.5	.4	.4
23	2.4	2.0	2.5	3.3	145	182	425	77	20	1.5	.3	.4
24	2.2	2.1	2.8	*4.2	174	163	*366	77	18	1.9	.2	.7
25	2.2	2.7	4.0	5.0	179	171	324	74	*20	1.9	.2	1.1
26	2.2	b2.0	3.3	6.1	247	146	280	68	20	1.4	.1	1.1
27	2.5	b1.5	2.4	7.2	120	112	244	*57	18	1.2	.1	.8
28	2.2	b1.9	4.4	7.2	a80	110	213	52	16	1.1	.1	.7
29	*2.1	b1.2	4.4	7.7	-	125	187	40	16	1.1	.1	1.3
30	2.0	b1.6	3.7	9.7	-------	148	160	37	16	1.2	0	1.9
31	2.1	-------	2.8	20	-------	171	-------	41	-------	.9	0	-------
Total	45.4	85.2	99.2	141.3	1,791	2,364	7,824	3,570	1,135	128.4	16.5	12.1
Mean	1.46	2.84	3.20	4.65	64.0	76.3	26.1	115	37.8	4.14	0.53	0.40
Ac-ft	90	169	197	280	3,550	4,690	15,520	7,080	2,250	255	33	24

Calendar year 1957: Max 671 Min 0 Mean 47.6 Ac-ft 34,460
Water year 1957-58: Max 425 Min 0 Mean 47.2 Ac-ft 34,140

Peak discharge (base, 75 cfs).--Feb. 17 (8:30 a.m.) 146 cfs (1.93 ft); Feb. 20 (10 a.m.) 148 cfs (1.94 ft); Feb. 26 (1 to 3 a.m.) 297 cfs (2.49 ft); Mar. 22 (6 p.m.) 257 cfs (2.37 ft); Apr. 4 (3 to 8 a.m.) 225 cfs (2.28 ft); Apr. 23 (1 to 6 a.m.) 445 cfs (2.88 ft); May 13 (2 to 11 a.m.) 213 cfs (2.22 ft); June 13 (11:30 p.m.) 116 cfs (1.83 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records, trend of flow, and records for Martin Creek and Little Humboldt River near Paradise Valley.
b Stage-discharge relation affected by ice.

3250. 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 1958.

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, to Apr. 19, 1924, staff gage at site 900 ft downstream at different datum.

Average discharge.--13 years (1921-22, 1946-58), 305 cfs (220,800 acre-ft per year).

Extremes.--Maximum discharge during year, 1,440 cfs June 7 (gage height, 8.89 ft); minimum daily, 2.2 cfs Sept. 24.
1921-24, 1946-58: Maximum daily discharge, 5,800 cfs May 3, 4, 1952 (includes flow bypassing gage outside of main channel); no flow Sept. 8 to Oct. 22, 1948, Sept. 21-26, 1949.

Remarks.--Records good except those for periods of ice effect or backwater from beaver dam, which are fair. Records do not include flow in secondary channels or ditches, much of which is used for irrigation. Many diversions above station for irrigation.

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water years 1897-98 and 1923, superseding those published in 19th Ann. Rpt. and WSP 570, are given herewith.

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1897		1897-Con.		1897-Con.		1897-Con.		1897-Con.	
Jan. 1	144	July 14	371	Aug. 27	10	Oct. 10	38	Nov. 23	98
2	144	15	330	28	10	11	24	24	98
3	151	16	371	29	8.8	12	18	25	104
4	158	17	251	30	8.8	13	18	26	104
5	158	18	270	31	7.3	14	18	27	110
6	144	19	242	Sept. 1	7.3	15	21	28	116
7	144	20	224	2	6.2	16	21	29	110
8	137	21	206	3	5.0	17	24	30	116
9	137	22	182	4	5.0	18	24	Dec. 1	123
10	151	23	166	5	5.0	19	31	2	123
11	151	24	151	6	5.0	20	31	3	123
12	151	25	137	7	5.0	21	34	4	130
13	151	26	123	8	5.0	22	38	5	130
14	151	27	123	9	5.0	23	42	6	130
15	151	28	110	10	5.0	24	46	7	123
16	151	29	104	11	5.0	25	46	8	137
17	137	30	92	12	5.0	26	50	9	137
18	137	31	86	13	5.0	27	55	10	137
19	151	Aug. 1	75	14	5.0	28	55	11	151
20	144	2	65	15	5.0	29	60	12	174
21	144	3	60	16	5.0	30	65	13	182
22	137	4	55	17	5.0	31	65	14	182
23	123	5	46	18	4.1	Nov. 1	70	15	198
24	123	6	42	19	4.1	2	70	16	251
25	137	7	38	20	4.1	3	75	17	233
26	137	8	38	21	4.1	4	75	18	233
27	144	9	34	22	4.1	5	75	19	233
28	144	10	34	23	4.1	6	80	20	198
29	151	11	31	24	4.1	7	80	21	206
30	151	12	31	25	4.1	8	80	22	233
31	151	13	28	26	4.1	9	80	23	233
July 1	821	14	28	27	5.0	10	80	24	233
2	777	15	28	28	5.0	11	86	25	242
3	749	16	24	29	5.0	12	86	26	242
4	722	17	24	30	5.0	13	86	27	242
5	695	18	21	Oct. 1	6.2	14	86	28	242
6	669	19	18	2	6.2	15	86	29	251
7	643	20	18	3	6.2	16	86	30	251
8	618	21	16	4	7.3	17	86	31	251
9	593	22	16	5	7.3	18	92		
10	545	23	14	6	8.8	19	92	1923	
11	499	24	14	7	8.8	20	92	Apr. 27	376
12	466	25	12	8	12	21	92	28	350
13	444	26	12	9	38	22	98	29	350

Month	Maximum	Minimum	Mean	Runoff in acre-feet
January 1897	158	123	145	8,896
July	821	86	380	23,365
August	75	7	28	1,719
September	7	4	5	288
Water year 1896-97	3,131	4	705	510,741
October 1897	65	6	30	1,834
November	116	70	90	5,334
December	251	123	192	11,810
Calendar year 1897	3,131	4	712	515,801
April 1923	791	315	511	30,400
Water year 1922-23	1,070	-	248	179,000
Calendar year 1923	1,070	-	256	186,000

3250. Humboldt River at Battle Mountain, Nev.--Continued

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.3	41	b74	b97	147	766	699	*1,120	1,330	556	66	5.1
2	5.1	42	b75	b98	152	751	746	1,040	1,380	504	58	4.8
3	6.0	46	b73	b100	152	711	796	961	1,390	462	51	4.6
4	6.6	46	b70	b99	152	637	816	918	*1,380	418	45	4.3
5	7.3	51	b87	b102	166	577	844	851	1,420	376	41	4.0
6	8.0	54	b91	b104	179	540	851	856	1,430	346	39	3.8
7	11	56	95	b100	185	*517	841	841	1,430	*319	37	3.8
8	12	58	90	b103	195	497	818	844	1,420	298	36	3.6
9	16	61	b90	b107	202	484	774	866	1,380	276	36	3.3
10	18	65	*b90	108	202	473	741	881	1,350	250	*34	*3.3
11	18	68	b90	111	206	451	716	871	1,320	233	35	3.1
12	19	70	b92	112	212	432	707	876	1,260	216	32	3.1
13	21	78	b95	110	218	416	719	911	1,180	199	31	3.1
14	26	82	b97	b107	226	398	741	961	1,140	184	29	2.9
15	22	86	96	b108	234	396	778	*1,010	1,090	174	25	2.9
16	22	90	93	b110	242	394	816	1,000	1,060	164	24	2.9
17	21	93	100	b110	293	400	878	984	1,000	150	24	2.7
18	23	90	102	b108	350	402	924	974	*961	139	25	2.7
19	25	88	108	b100	340	412	1,010	966	941	130	25	2.5
20	30	88	112	b103	384	418	1,080	961	931	122	25	2.5
21	30	*95	112	*b91	468	430	*1,150	954	908	114	20	2.3
22	34	97	110	b82	520	464	1,220	946	866	109	18	2.3
23	36	b97	b108	b86	549	549	1,270	976	814	101	18	2.3
24	35	b96	b105	95	613	623	1,320	1,010	788	95	15	2.2
25	34	94	108	109	673	654	1,370	1,070	764	90	13	2.5
26	34	93	116	123	724	702	1,360	1,110	751	88	11	2.7
27	27	93	b90	127	768	*738	1,300	1,140	719	84	8.4	3.1
28	36	90	119	124	788	728	1,330	1,180	683	80	6.6	3.8
29	*36	b72	120	127	-	716	1,290	1,200	644	76	6.3	4.6
30	37	b73	b117	128	-------	709	1,210	1,230	599	72	5.4	4.0
31	39	-------	b113	135	-------	716	-------	1,280	-------	69	5.4	-------
Total	707.3	2,253	3,038	3,324	9,540	17,101	29,115	30,788	32,329	6,494	845.1	98.8
Mean	22.8	75.1	98.0	107	341	552	970	993	1,078	209	27.3	3.29
Ac-ft	1,400	4,470	6,030	6,590	18,920	33,920	57,750	61,070	64,120	12,880	1,680	196

Calendar year 1957: Max 1,570 Min 2.3 Mean 339 Ac-ft 245,600
Water year 1957-58: Max 1,430 Min 2.2 Mean 372 Ac-ft 269,000

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Backwater from beaver dam Aug. 31 to Sept. 30.

3255. 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.

Drainage area.--44 sq mi, approximately.

Records available.--August 1951 to September 1958.

Gage.--Water-stage recorder and, since Oct. 3, 1956, concrete control. Altitude of gage is 7,350 ft (from topographic map). Prior to Sept. 9, 1955, water-stage recorder at site 200 ft upstream at datum 2.85 ft higher.

Average discharge.--7 years, 12.8 cfs (9,270 acre-ft per year).

Extremes.--Maximum discharge during year, 274 cfs Apr. 20 (gage height, 2.29 ft); no flow for part of Nov. 22, result of freezeup.
1951-58: Maximum discharge, 512 cfs July 27, 1956 (gage height, 4.86 ft), from rating curve extended above 45 cfs on basis of slope-area measurement of peak flow; no flow part of each day Nov. 2, Dec. 7, 1956, Nov. 22, 1957, result of freezeup.

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

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.4	0.3	0.7	9.5	1.2	53
.5	2.0	.8	16	1.4	82
.6	5.0	1.0	32	2.0	205

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	5.0	2.6	3.5	3.5	5.1	12	82	111	23	6.8	4.4
2	3.5	4.4	1.8	3.5	4.1	6.1	12	100	100	23	6.4	4.1
3	3.5	4.4	b1.6	b3.8	4.1	6.0	9.0	117	93	22	5.9	4.4
4	3.5	4.7	3.2	b2.7	4.4	6.2	12	131	80	21	5.4	4.4
5	3.2	5.0	3.2	2.6	4.4	6.1	10	150	76	19	5.4	4.1
6	3.2	5.0	b2.5	3.2	4.1	5.9	10	*154	72	17	5.0	4.1
7	3.5	3.8	2.6	*3.5	4.4	5.1	12	156	69	16	5.4	4.7
8	3.5	5.0	2.0	3.2	4.1	5.1	12	158	61	15	8.2	5.9
9	3.5	4.7	2.3	2.3	4.1	5.1	18	162	54	14	9.5	4.7
10	3.5	5.0	2.0	3.8	4.1	4.3	32	169	52	12	6.4	4.4
11	3.8	5.0	2.6	2.6	b3.7	5.1	37	196	52	12	5.9	4.1
12	4.1	5.0	2.6	2.6	4.7	4.7	44	180	48	12	5.4	3.8
13	4.1	5.0	2.9	2.9	3.8	5.6	61	143	49	11	5.4	4.1
14	4.4	5.0	3.5	2.6	b3.8	5.2	*73	123	43	11	5.4	4.4
15	4.1	*3.5	3.5	4.1	b4.4	4.4	*92	115	39	11	6.4	4.1
16	4.1	3.8	4.1	4.1	b4.7	4.7	113	119	39	11	10	4.1
17	3.8	2.6	b2.4	2.9	5.4	*6.8	152	131	39	11	6.8	3.8
18	3.8	4.7	b2.5	2.9	6.4	8.0	171	147	39	10	5.9	4.1
19	3.8	4.1	b3.3	2.3	6.4	13	162	189	39	9.5	5.4	3.8
20	3.8	3.2	b4.0	3.2	6.8	14	173	198	38	9.0	4.7	3.5
21	4.1	b1.6	b2.9	3.5	8.2	12	184	*198	37	8.6	4.4	3.5
22	4.7	b.7	b1.4	3.2	11	15	154	191	37	8.6	*5.0	3.5
23	5.9	b2.1	b2.1	3.5	11	15	102	205	34	8.2	5.4	4.1
24	5.4	3.2	3.8	3.5	11	16	89	203	32	8.2	5.0	4.1
25	5.4	3.2	4.7	3.5	9.5	16	86	191	31	8.6	5.0	3.8
26	7.2	2.9	4.1	3.5	7.2	14	*82	173	*29	8.6	4.7	3.8
27	7.2	1.6	3.2	3.5	4.5	14	86	164	28	7.7	4.7	3.5
28	5.9	b2.2	4.4	3.2	5.0	12	80	150	27	7.2	4.7	3.5
29	5.9	b1.5	4.1	3.2	~	15	77	135	26	7.2	4.7	3.5
30	5.4	b2.6	2.9	b2.0	-------	18	76	127	25	7.2	4.4	3.5
31	5.0	-------	b2.0	b2.6	-------	16	-------	117	-------	7.2	4.4	-------
Total	136.3	110.5	90.8	97.5	158.8	289.5	2,233	4,774	1,499	376.8	178.1	121.8
Mean	4.40	3.68	2.93	3.15	5.67	9.34	74.4	154	50.0	12.2	5.75	4.06
Ac-ft	270	219	180	193	315	574	4,430	9,470	2,970	747	353	242

Calendar year 1957: Max 77 Min 0.7 Mean 10.1 Ac-ft 7,290
Water year 1957-58: Max 205 Min 0.7 Mean 27.6 Ac-ft 19,960

Peak discharge (base, 130 cfs).--Apr. 20 (7 p.m.) 274 cfs (2.29 ft); May 11 (6:30 p.m.) 210 cfs (2.02 ft); May 24 (11 p.m.) 223 cfs (2.08 ft).

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

3270. 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 1958 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 4,440 ft (from topographic map).

Average discharge.--8 years, 302 cfs (218,600 acre-ft per year).

Extremes.--Maximum discharge during year, 1,190 cfs June 9 (gage height, 7.51 ft); minimum daily, 0.8 cfs Oct. 1-9, Sept. 21, 22.
1950-58: Maximum daily discharge, 5,800 cfs May 5, 6, 1952 (includes flow bypassing gage outside of main channel); no flow at times in most years.

Remarks.--Records good except those for periods of ice effect, which are fair. Diversions above station for irrigation. Flow bypassing station at high stages not included in this report.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 3-17, Nov. 9-19, Feb. 22, Mar. 12-23, June 16-18, July 5-10, Sept. 6-13)

0.9	0.5	1.5	15	3.0	262
1.0	1.5	1.7	27	5.0	643
1.1	2.8	2.0	62	7.0	1,060
1.2	4.5	2.4	135	8.0	1,300
1.3	7.0				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.8	36	b71	b92	133	649	653	*1,050	978	616	71	7.0
2	.8	39	b72	b95	144	655	651	982	1,010	575	68	5.6
3	.8	42	b70	b92	146	659	663	940	1,060	529	62	5.2
4	.8	46	b68	b90	144	641	686	904	*1,110	486	56	3.9
5	.8	48	86	100	146	599	695	854	1,120	443	51	3.4
6	.8	49	89	102	157	554	711	814	1,140	400	46	3.0
7	.8	53	93	b94	166	519	727	790	1,150	*369	41	3.1
8	.8	56	b91	b97	175	498	732	780	1,180	343	38	2.8
9	.8	56	b88	b104	183	477	727	770	1,180	322	38	2.2
10	1.6	59	*b82	108	187	461	711	770	1,170	297	*36	2.1
11	3.0	59	b85	110	187	449	693	782	1,150	272	36	1.7
12	6.7	62	b88	110	192	428	680	802	1,150	252	35	1.7
13	9.4	66	b91	b108	198	407	671	802	1,130	232	33	*2.0
14	11	68	94	b100	202	392	674	802	1,090	210	31	1.6
15	14	69	104	106	208	381	684	*814	1,050	194	29	1.5
16	16	74	104	b106	219	376	693	838	996	181	26	1.4
17	*16	77	98	b106	227	374	717	856	958	170	26	1.1
18	17	80	98	b104	270	374	742	860	*930	155	24	1.1
19	17	*84	102	b104	307	378	764	854	896	a145	24	1.0
20	19	84	108	b106	310	385	790	846	854	a137	21	.9
21	22	84	112	*b100	343	392	*816	838	830	a128	22	.8
22	29	b86	114	b90	*402	402	842	832	816	a122	20	.8
23	26	b87	b108	b92	455	434	860	828	800	a114	18	.9
24	30	b87	b104	94	477	501	887	826	776	a107	17	1.0
25	31	b86	b110	104	513	556	910	832	754	a101	16	1.0
26	30	b83	114	116	561	585	934	848	732	a96	14	1.0
27	31	b78	b102	129	597	*620	980	875	717	a92	13	1.0
28	33	b71	110	131	628	645	1,020	898	697	a86	11	.9
29	35	b69	b112	127	-	655	1,040	920	672	84	10	.9
30	35	b70	b114	129	-------	653	1,040	942	645	80	8.8	.9
31	36	-------	b102	131	-------	653	-------	960	-------	77	8.0	-------
Total	475.9	2,008	2,984	3,277	7,877	15,752	23,393	26,509	28,741	7,415	949.8	61.5
Mean	15.4	66.9	96.3	106	281	508	780	855	958	239	30.6	2.05
Ac-ft	944	3,980	5,920	6,500	15,620	31,240	46,400	52,580	57,010	14,710	1,880	122

Calendar year 1957: Max 1,320 Min 0.8 Mean 305 Ac-ft 220,600
Water year 1957-58: Max 1,180 Min 0.8 Mean 327 Ac-ft 236,900

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of trend of flow and records for other Humboldt River stations.
b Stage-discharge relation affected by ice.

3275. 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 siding of Southern Pacific Railroad (revised), 9 miles northeast 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 1958.

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.--17 years (1917-22, 1946-58), 266 cfs (192,600 acre-ft per year).

Extremes.--Maximum discharge recorded during year, 1,270 cfs June 12 (gage height, 8.39 ft); minimum, 0.2 cfs Oct. 11.
1917-23, 1925-26, 1946-58: Maximum discharge, 5,860 cfs May 6, 1952 (gage height, 11.52 ft); no flow for periods in 1918-20, 1954-56.

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

Revisions (water years).--WSP 1514: 1921-22, 1926.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 25 to Mar. 13, Mar. 24 to May 2, June 10-17, July 18 to Sept. 30)

1.7	0.2	2.0	6.0	3.0	123
1.8	1.2	2.1	11	6.0	712
1.9	3.0	2.3	29	9.0	1,450

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.0	21	b68	85	126	586	628	*955	878	635	75	4.2
2	1.8	23	b68	86	131	607	628	952	905	601	71	3.0
3	1.2	24	b66	b84	141	618	633	948	935	563	65	2.6
4	.6	28	b65	b82	144	618	642	928	*970	520	61	2.0
5	.5	29	73	86	142	605	659	895	992	480	55	a1.7
6	.4	32	78	b90	144	572	675	835	1,020	442	51	a1.5
7	.4	34	86	b87	150	538	694	788	1,050	408	46	a1.2
8	.4	38	87	b89	160	508	705	756	1,120	376	42	a1.0
9	.4	40	82	93	170	488	705	683	1,180	*350	40	a.7
10	.4	42	*b76	100	177	472	699	595	1,190	320	*39	a.6
11	.3	44	b78	104	182	460	692	614	1,240	296	36	a.5
12	.3	46	b80	98	189	446	670	633	1,260	273	33	a.4
13	.3	51	b83	b92	193	434	657	666	a1,260	251	31	*.4
14	.4	60	86	b90	198	414	644	795	1,250	232	30	.4
15	.5	58	92	98	218	400	646	*786	1,220	212	27	.4
16	.4	60	100	99	223	386	653	818	1,160	200	25	.4
17	*.3	64	108	100	218	380	668	811	1,080	186	24	.4
18	.3	71	94	b96	223	376	688	821	*1,030	175	24	.4
19	1.1	*73	98	b92	256	376	705	826	978	158	21	.4
20	6.5	75	94	b99	283	380	730	821	925	149	19	.4
21	8.0	76	100	*b88	294	388	*753	811	a890	139	18	.4
22	8.5	72	102	b83	*328	400	783	804	a866	129	17	.4
23	9.5	75	b84	b86	386	406	814	795	a840	123	15	.4
24	13	b77	b86	90	426	438	823	788	a811	116	13	.4
25	14	b77	87	98	456	484	850	779	a784	110	11	.4
26	16	b74	b104	105	484	528	869	783	a757	104	10	.4
27	18	b70	b96	118	520	*561	895	797	737	96	8.5	.4
28	17	b67	105	134	546	586	945	804	746	89	7.5	.4
29	18	b66	110	141	-	609	970	826	697	86	6.0	.4
30	20	b66	111	137	-------	618	985	840	666	85	5.4	.4
31	21	-------	93	128	-------	622	-------	862	-------	80	4.8	-------
Total	182.5	1,633	2,740	3,058	7,108	15,304	22,108	24,815	29,437	7,984	931.2	26.6
Mean	5.89	54.4	88.4	98.6	254	494	737	800	981	258	30.0	0.89
Ac-ft	362	3,240	5,430	6,070	14,100	30,360	43,850	49,220	58,390	15,840	1,850	53

Calendar year 1957: Max 1,530 Min 0.3 Mean 303 Ac-ft 219,400
Water year 1957-58: Max 1,260 Min 0.3 Mean 316 Ac-ft 228,800

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of trend of flow, recorded range in stage, and records for other Humboldt River station.
b Stage-discharge relation affected by ice.

3290. 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 1958.

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.--15 years (1943-58), 26.4 cfs (19,110 acre-ft per year).

Extremes.--Maximum discharge during year, 482 cfs Apr. 19 (gage height, 5.49 ft); minimum, 5.9 cfs Oct. 10.
1921-28, 1943-58: Maximum discharge, 1,100 cfs Feb. 2, 1952 (gage height, 7.71 ft); minimum, 4.5 cfs Aug. 12, 1954.

Remarks.--Records good. Bullshead Ranch diverts water for irrigation above station. Station is above all diversions in Paradise Valley.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Feb. 15		Feb. 16 to Sept. 30			
1.4	4.4	1.4	4.6	2.8	179
1.5	8.4	1.6	16	2.9	187
1.6	13	1.8	30	3.4	227
1.9	36	2.0	47	4.0	287
		2.3	85	5.3	454

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.7	6.7	6.7	7.5	13	115	104	139	65	18	7.8	7.3
2	6.7	6.7	6.7	7.5	13	84	82	139	60	17	7.3	7.3
3	6.7	6.7	6.7	7.5	15	70	100	*141	60	17	7.3	7.3
4	6.7	6.7	6.7	7.5	14	60	118	147	65	16	7.3	7.3
5	7.1	6.7	6.7	7.5	15	52	113	157	65	17	7.8	7.3
6	6.7	6.7	6.7	7.5	16	49	102	167	60	17	7.8	7.3
7	6.7	6.7	6.7	7.5	18	46	106	179	50	15	7.3	7.3
8	6.7	6.7	6.7	7.1	19	41	109	185	56	*15	7.8	7.3
9	6.3	6.7	6.7	7.1	19	39	130	181	64	14	7.8	7.3
10	6.3	6.7	6.7	7.1	19	36	155	163	*72	11	7.8	7.3
11	6.3	6.7	6.7	7.1	19	33	195	157	73	11	7.3	7.3
12	6.3	6.7	*6.7	7.1	20	31	232	171	72	11	7.3	*7.3
13	6.7	7.1	6.7	7.1	20	30	216	177	73	10	*7.3	7.3
14	6.7	8.0	6.7	7.1	25	29	200	186	87	10	7.3	7.3
15	6.7	7.1	6.7	7.1	35	31	212	179	78	9.5	6.8	7.3
16	6.7	6.7	7.1	7.1	70	32	263	151	61	9.5	7.3	7.3
17	6.7	6.7	8.0	7.5	68	33	329	*135	50	9.5	7.3	6.8
18	6.7	7.5	8.4	7.5	152	31	362	128	44	10	7.3	6.8
19	*6.7	8.0	8.4	7.1	182	28	412	124	39	11	7.3	6.8
20	6.7	8.0	8.4	7.1	*181	28	451	122	36	11	7.3	6.8
21	6.7	*7.1	8.4	7.5	177	34	380	122	33	10	7.3	6.8
22	6.7	7.1	8.0	7.5	171	66	387	126	31	10	7.3	6.8
23	6.7	7.1	8.0	*7.1	167	135	*396	131	28	9.5	7.3	6.8
24	6.3	7.1	7.1	7.5	165	157	359	126	28	9.5	7.3	6.8
25	6.3	6.7	7.1	8.0	187	143	268	122	26	8.9	7.3	6.8
26	6.7	7.1	7.5	8.0	*187	135	225	115	25	8.9	7.3	7.3
27	6.7	6.7	7.5	8.4	250	109	199	102	23	8.9	6.8	7.3
28	6.7	6.7	7.1	9.3	181	79	185	90	23	8.9	7.3	7.3
29	6.3	6.7	7.1	10	---	*74	159	82	22	8.9	7.3	7.3
30	6.7	6.7	7.5	16	---	87	147	76	19	7.8	7.3	7.8
31	6.7	---	7.5	12	---	104	---	72	---	7.8	7.3	---
Total	205.3	208.5	223.6	246.9	2,418	2,021	6,696	4,292	1,488	358.6	228.3	215.0
Mean	6.62	6.95	7.21	7.96	86.4	65.2	223	138	49.6	11.6	7.36	7.17
Ac-ft	407	414	444	490	4,800	4,010	13,280	8,510	2,950	711	453	426

Calendar year 1957: Max 178 Min 5.9 Mean 33.5 Ac-ft 24,250
Water year 1957-58: Max 451 Min 6.3 Mean 51.0 Ac-ft 36,900

Peak discharge (base, 35 cfs).--Feb. 27 (5:30 p.m.) 279 cfs (3.93 ft); Mar. 24 (1 a.m.) 161 cfs (2.72 ft); Apr. 19 (11:30 p.m.) 482 cfs (5.49 ft); May 8 (6 p.m.) 188 cfs (2.95 ft); June 14 (12 m.) 94 cfs (2.40 ft).

* Discharge measurement made on this day.

3295. 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.--172 sq mi.

Records available.--October 1921 to November 1926, March 1927 to September 1958.

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.--36 years, 30.6 cfs (22,150 acre-ft per year).

Extremes.--Maximum discharge during year, 1,940 cfs Feb. 25 (gage height, 7.30 ft), from rating curve extended above 1,100 cfs on basis of slope-area measurement of peak flow; minimum, 4.7 cfs Nov. 21, result of freezeup.
1921-58: Maximum discharge, 9,000 cfs Jan. 21, 1943 (gage height, 11.1 ft, site and datum then in use), by slope-area measurement of peak flow; minimum, 1.8 cfs Feb. 6, 1945.

Remarks.--Records good. No diversion above station.

Revisions (water years).--WSP 1514: 1925-27(M), 1930(M), 1933(M), 1938(M), 1940, 1945.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Aug. 17 to Sept. 30)

Oct. 1 to Feb. 25, May 21 to Sept. 30						Feb. 26 to May 20			
1.1	3.0	1.4	14	2.5	148	1.6	15	2.5	131
1.2	5.6	1.6	29	3.0	262	1.8	30	3.0	257
1.3	9.4	2.0	71	5.0	1,000	2.1	63	4.0	601

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.0	8.6	9.4	7.7	13	55	63	149	95	29	7.0	6.3
2	6.6	8.6	10	9.8	14	47	62	180	90	27	7.0	6.3
3	6.6	8.3	9.0	12	18	42	67	*207	95	25	7.0	6.3
4	6.6	8.3	8.6	9.4	19	33	66	232	85	24	6.6	6.3
5	7.0	8.6	11	8.6	28	32	61	260	75	22	6.6	6.6
6	6.6	8.6	11	9.0	20	32	70	269	71	20	6.6	6.3
7	6.6	8.6	12	9.0	19	27	94	218	71	19	6.3	6.3
8	6.6	8.3	10	9.4	23	30	165	200	97	*18	6.3	6.3
9	6.6	8.6	9.4	9.4	21	23	270	221	76	16	6.6	6.3
10	6.6	8.6	8.8	9.8	16	22	273	257	*70	15	7.0	6.6
11	6.6	8.6	9.0	11	13	23	210	292	85	14	7.0	6.3
12	7.4	8.6	*9.5	11	22	23	175	277	91	13	6.6	*6.6
13	7.0	11	10	11	32	21	192	226	88	12	*5.9	6.6
14	7.4	53	11	9.0	18	20	254	202	84	11	5.3	6.6
15	7.4	21	12	12	165	24	327	194	83	11	5.3	6.6
16	7.0	14	12	11	534	22	339	*213	71	11	5.6	6.6
17	7.0	13	17	9.8	185	24	420	226	66	13	19	6.6
18	7.0	13	13	11	162	23	494	237	65	11	10	6.6
19	*7.0	12	12	7.7	144	26	382	260	61	11	8.6	6.6
20	8.6	10	12	8.6	*171	47	416	274	59	11	8.1	6.3
21	8.1	*8.7	12	12	166	197	420	265	55	10	7.4	7.0
22	8.1	8.3	9.4	7.4	163	133	406	246	49	9.8	7.4	7.0
23	8.1	10	6.3	*8.1	181	115	*251	236	47	9.4	7.4	7.0
24	8.6	11	8.6	11	219	106	194	212	47	9.4	7.0	7.0
25	9.0	11	13	12	*624	80	158	187	42	10	7.0	7.0
26	9.8	11	12	11	*160	59	142	168	39	9.0	7.0	7.0
27	9.8	8.5	11	11	93	61	117	152	34	8.1	6.6	7.0
28	9.4	11	14	20	64	79	111	139	32	7.4	6.6	7.0
29	9.0	7.0	12	84	-	*82	117	123	30	7.4	6.6	7.0
30	9.0	9.4	9.2	60	-------	82	127	113	30	7.0	6.3	7.0
31	8.6	-------	6.3	18	-------	61	-------	104	-------	7.0	6.6	-------
Total	236.7	345.2	330.5	450.7	3,307	1,651	6,443	6,539	1,983	427.5	224.3	199.0
Mean	7.64	11.5	10.7	14.5	118	53.3	215	211	66.1	13.8	7.24	6.63
Ac-ft	469	685	656	894	6,560	3,270	12,780	12,970	3,930	848	445	395

Calendar year 1957: Max 302 Min 4.7 Mean 41.3 Ac-ft 29,860
Water year 1957-58: Max 624 Min 5.3 Mean 60.6 Ac-ft 43,900

Peak discharge (base, 100 cfs).--Nov. 14 (5:30 a.m.) 116 cfs (2.30 ft); Jan. 29 (11:30 p.m.) 249 cfs (2.93 ft); Feb. 16 (4:30 p.m.) 1,080 cfs (5.21 ft); Feb. 25 (12:30 a.m.) 1,940 cfs (7.30 ft); Mar. 21 (8:30 p.m.) 302 cfs (3.19 ft); Apr. 9 (6 p.m.) 601 cfs (4.04 ft); Apr. 17 (11 p.m.) 756 cfs (4.43 ft); May 12 (1 to 5 a.m.) 308 cfs (3.15 ft); June 14 (10 to 11 p.m.) 116 cfs (2.24 ft).

* Discharge measurement made on this day.

3315. 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 1958.

Gage.--Water-stage recorder.

Average discharge.--10 years, 252 cfs (182,400 acre-ft per year).

Extremes.--Maximum discharge during year, 1,170 cfs May 2 (gage height, 5.59 ft); minimum, 40 cfs Oct. 18, 19.
1948-58: Maximum discharge, 5,810 cfs May 8, 1952 (gage height, 11.41 ft); minimum, 5.8 cfs Dec. 4, 1955, result of freezeup.

Remarks.--Records good except those for periods of ice effect, which are fair. Many diversions above station for irrigation.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Nov. 21, Nov. 24-26, Dec. 6-8, Feb. 24-28)

Oct. 1 to June 10				June 11 to Sept. 30			
1.4	37	3.0	315	1.8	31	4.5	744
1.7	70	4.0	600	2.0	70	5.7	1,160
2.0	112	5.6	1,170	3.0	301		
2.5	202						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	51	b82	b110	156	424	537	1,130	712	680	139	56
2	46	52	b82	b107	156	438	537	*1,160	748	656	135	54
3	47	52	b81	b106	156	453	534	1,150	793	638	128	54
4	47	55	b80	b103	158	465	519	1,110	776	617	124	52
5	46	55	b84	b102	158	483	528	1,060	*782	580	117	52
6	46	57	90	b100	161	*498	549	1,060	782	542	115	50
7	46	58	93	b101	165	513	573	1,050	786	530	111	50
8	46	58	91	b104	169	504	618	1,020	828	510	111	50
9	44	59	b90	b107	171	486	648	964	891	484	106	48
10	43	64	b89	110	174	471	674	933	880	*455	102	48
11	43	65	*b88	117	182	456	716	894	951	424	100	46
12	43	66	b87	117	190	444	734	874	972	382	95	*46
13	45	69	86	117	194	433	744	852	979	356	*91	46
14	45	73	91	b113	202	424	751	846	1,000	344	87	46
15	44	74	103	118	208	418	754	*856	1,020	326	85	46
16	42	75	108	122	234	410	734	810	1,040	308	83	44
17	42	76	110	b119	232	396	716	838	1,050	294	85	44
18	41	80	110	115	247	388	737	852	1,050	281	87	44
19	*41	*82	114	b114	254	382	734	824	*1,040	268	85	42
20	43	84	117	b112	254	393	762	842	1,040	249	80	46
21	44	87	115	108	263	385	782	870	1,030	225	76	54
22	44	b90	115	b104	280	382	821	874	1,020	217	74	48
23	44	b90	b110	*b107	293	385	*852	869	1,000	210	72	46
24	44	89	b105	110	305	388	877	854	950	203	68	44
25	44	86	110	120	335	399	912	832	920	192	66	42
26	47	89	115	131	361	410	947	780	884	175	64	42
27	48	b91	b117	128	390	430	972	754	847	168	64	42
28	49	b93	112	126	*407	456	1,020	748	794	159	62	42
29	48	b87	117	133	-	*483	1,070	639	755	157	60	42
30	49	b84	b115	142	-------	498	1,100	627	717	150	58	42
31	49	-------	b113	150	-------	516	-------	684	-------	146	56	-------
Total	1,396	2,191	3,120	3,573	6,455	13,611	22,452	27,656	27,037	10,926	2,786	1,410
Mean	45.0	73.0	101	115	231	439	748	892	901	352	89.9	47.0
Ac-ft	2,770	4,350	6,190	7,090	12,800	27,000	44,530	54,850	53,630	21,670	5,530	2,800

Calendar year 1957: Max 1,130 Min 41 Mean 258 Ac-ft 186,800
Water year 1957-58: Max 1,160 Min 41 Mean 336 Ac-ft 243,200

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record May 23-26, June 20 to July 9; discharge estimated on basis of trend of flow and records for station near Imlay.

3325. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 4,170 ft (from topographic map).

Extremes.--Maximum daily discharge during year, 153 cfs May 3 (gage height, 4.22 ft); no flow Oct. 1 to Apr. 19, June 21 to Sept. 30.
1946-58: Maximum daily discharge, that of May 3, 1958; no flow for long periods.

Remarks.--Records good. 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. During irrigation season water is released 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.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	144	111			
2							0	151	113			
3							0	153	114			
4							0	152	90			
5						(*)	0	148	87		(*)	
6		(*)					0	142	87			
7							0	140	87			
8							0	*140	89			
9							0	139	96			(*)
10							0	131	104			
11							0	126	107			
12							0	120	116			
13			(*)				0	117	119			
14							0	115	122			
15							*0	114	125			
16							0	115	*129			
17							0	111	122			
18							0	117	25			
19							0	138	1.9			
20				(*)			18	132	.2			
21							52	133	0			
22							51	140	0			
23							55	139	0			
24						(*)	60	140	0			
25							*65	135	*0			(*)
26							69	128	0			
27							73	124	0			
28					(*)		82	*123	0			
29					-		122	122	0			
30					-------		136	104	0			
31		-------			-------		------	101	-------			-------
Total	0	0	0	0	0	0	783	4,034	1,845.1	0	0	0
Mean	0	0	0	0	0	0	26.1	130	61.5	0	0	0
Ac-ft	0	0	0	0	0	0	1,550	8,000	3,660	0	0	0

Calendar year 1957: Max 0 Min 0 Mean 0 Ac-ft 0
Water year 1957-58: Max 153 Min 0 Mean 18.3 Ac-ft 13,210

* Discharge measurement or observation of no flow made on this day.

3330. 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 1958.

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. Apr. 28, 1945, to Aug. 20, 1947, at present site at datum 1 ft higher.

Average discharge.--19 years, 174 cfs (126,000 acre-ft per year).

Extremes.--Maximum discharge during year, 1,060 cfs June 20, 22, 23; maximum gage height, 7.09 ft June 23; minimum discharge, 40 cfs Oct. 19, 22, 23, Sept. 29, 30.
1935-41, 1945-58: Maximum discharge, 6,080 cfs May 9, 1952 (gage height, 12.15 ft); no flow at times many years.

Remarks.--Records good 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 (see preceding page). This water is ordinarily released during irrigation season through Rye Patch Reservoir to Humboldt River for irrigation in Lovelock district. Flow affected by many other diversions above station for irrigation.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-31, Dec. 18-22, 29, Jan. 26 to Mar. 1)

1.6	40	3.0	208
2.0	75	5.0	580
2.5	134	7.1	1,060

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	48	74	101	137	383	512	897	598	748	145	56
2	44	47	74	98	142	400	536	923	614	722	140	55
3	45	48	73	97	144	415	554	950	646	702	133	54
4	45	50	72	94	142	423	538	960	668	679	126	53
5	46	51	75	93	141	*434	520	945	660	640	*120	52
6	45	*52	81	91	141	461	530	918	662	600	113	52
7	45	52	84	92	144	474	554	909	666	586	109	52
8	45	52	82	95	152	494	574	*913	683	564	107	52
9	44	52	81	98	152	484	606	901	717	536	104	*51
10	44	53	80	101	155	474	634	856	767	504	102	50
11	45	56	79	108	159	461	660	820	780	474	97	49
12	45	60	78	108	168	448	687	794	839	446	94	48
13	45	61	*77	108	172	442	704	769	863	404	88	47
14	46	64	84	104	180	432	715	746	873	377	84	48
15	45	65	96	109	188	427	722	735	885	360	81	47
16	44	68	103	113	192	421	726	737	*894	343	80	46
17	43	70	107	110	211	412	711	713	906	326	81	45
18	42	72	108	106	210	400	700	728	978	310	79	45
19	42	74	109	105	222	387	700	744	1,050	296	79	44
20	44	75	111	*103	230	383	644	728	1,060	279	79	43
21	45	77	114	99	230	396	658	733	1,050	262	76	45
22	44	79	109	95	237	385	662	748	1,050	237	72	52
23	43	81	104	96	250	385	685	748	1,050	227	69	48
24	45	80	98	97	267	*389	713	739	1,030	219	66	47
25	45	78	103	105	285	393	*737	722	*1,000	211	64	*45
26	45	81	107	113	312	400	764	675	962	198	62	45
27	46	80	109	120	345	410	794	658	923	178	61	43
28	45	78	103	118	*370	429	822	*650	868	170	61	42
29	47	76	108	116	-	453	825	644	827	162	59	42
30	48	75	106	120	-------	480	856	560	787	159	59	42
31	48	-------	104	126	-------	498	-------	560	-------	152	58	-------
Total	1,390	1,955	2,893	3,239	5,678	13,273	20,043	24,123	25,356	12,071	2,748	1,440
Mean	44.8	65.2	93.3	104	203	428	668	778	845	389	88.6	48.0
Ac-ft	2,760	3,880	5,740	6,420	11,260	26,330	39,750	47,850	50,290	23,940	5,450	2,860

Calendar year 1957: Max 1,030 Min 42 Mean 252 Ac-ft 182,600
Water year 1957-58: Max 1,060 Min 42 Mean 313 Ac-ft 226,500

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 22-25, Nov. 27 to Dec. 17, Dec. 23-28, Dec. 30 to Jan. 25.

3345. 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, 2 miles northwest of Rye Patch.

Drainage area.--13,700 sq mi, approximately.

Records available.--February 1936 to September 1958.

Gage.--Mercury-indicating gage. Datum of gage is at mean sea level (Southern Pacific Railroad datum).

Extremes.--Maximum contents during year, 149,500 acre-ft June 28 (elevation, 4,130.15 ft); minimum, 52,760 acre-ft Oct. 1, 2 (elevation, 4,117.87 ft).
1936-58: Maximum contents, 196,900 acre-ft Apr. 9, 1946 (elevation, 4134.62 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 (sill of trashrack structure) and 4,133.0 ft (top of spillway gates). Dead storage negligible. Elevation of spillway (gage 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.

Capacity table, water year 1957-58 (elevation, in feet, and usable contents, in acre-feet)

4,117	48,200
4,120	65,420
4,125	102,300
4,130	147,900
4,135	201,200

Usable contents, in acre-feet, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52,760	55,170	58,340	63,560	70,070	81,090	100,300	110,400	120,000	149,000	141,300	130,100
2	52,760	55,170	58,340	63,560	70,400	81,310	100,700	110,400	120,000	149,000	141,300	128,300
3	52,920	55,460	58,340	63,870	70,540	82,420	101,100	110,800	120,000	149,000	141,100	127,800
4	52,920	55,460	58,340	64,060	71,070	82,790	101,900	110,800	120,500	149,000	141,100	127,400
5	52,920	55,460	58,340	64,180	71,400	83,530	102,300	111,200	121,100	149,000	141,100	126,900
6	53,180	55,460	58,630	64,180	71,930	84,640	103,700	111,700	122,000	148,500	140,600	126,400
7	53,180	55,570	58,630	64,370	72,280	85,750	104,000	112,100	122,300	148,500	140,300	125,500
8	53,180	55,570	58,630	64,490	72,420	86,270	104,900	112,600	122,800	147,900	140,100	124,200
9	53,180	55,570	58,630	64,930	72,420	86,880	105,700	112,000	123,700	147,900	139,700	122,800
10	53,780	55,570	58,910	64,930	72,770	87,650	106,600	113,400	125,100	147,500	139,200	121,600
11	53,280	55,570	59,203	65,110	73,120	88,430	107,000	113,400	126,200	147,500	138,700	121,000
12	53,280	55,750	59,510	65,110	73,260	89,200	107,400	113,400	127,400	147,000	138,700	120,300
13	53,440	55,750	59,510	65,240	73,470	89,980	107,400	114,300	128,500	147,000	138,700	119,300
14	53,440	55,750	59,830	65,560	73,610	90,750	107,800	114,800	129,900	147,500	138,200	118,900
15	53,440	55,750	60,140	66,090	73,960	91,920	108,300	115,200	131,100	147,900	137,700	117,800
16	53,730	56,030	60,140	66,420	74,530	92,300	108,700	115,600	133,500	147,000	137,200	116,500
17	53,730	56,030	60,140	66,750	75,230	93,080	109,100	116,100	135,300	147,000	136,800	116,100
18	53,730	56,320	60,450	66,890	75,580	93,460	109,500	116,500	136,800	146,500	136,300	115,600
19	53,730	56,320	60,450	67,080	76,630	94,240	110,000	117,000	138,200	146,500	136,100	114,800
20	54,020	56,610	60,760	67,280	76,780	94,650	110,400	117,400	139,600	146,500	135,800	113,900
21	54,300	56,900	60,760	67,420	76,990	95,460	110,400	117,800	141,600	146,500	135,600	113,000
22	54,300	57,190	61,070	67,750	77,340	95,860	110,400	118,300	143,600	145,000	135,300	112,100
23	54,300	57,190	61,380	67,950	77,690	96,270	110,000	118,400	144,500	144,500	135,300	111,200
24	54,300	57,470	61,690	67,950	78,040	96,670	109,500	118,700	146,000	144,000	135,200	110,400
25	54,300	57,470	62,000	68,080	78,390	97,080	109,500	118,900	147,500	143,600	134,900	110,100
26	54,590	57,470	62,310	68,410	79,460	97,480	109,500	119,200	147,900	143,100	133,900	110,000
27	54,590	57,760	62,620	68,740	80,280	98,290	109,500	119,300	148,700	142,700	133,000	109,500
28	54,590	57,760	62,620	69,080	80,800	98,700	110,000	119,300	149,500	142,300	132,500	109,300
29	54,590	58,050	62,940	69,610	-	99,100	110,000	119,600	149,000	141,900	132,000	109,100
30	54,880	58,340	63,250	69,740	------	99,910	110,400	119,600	148,500	141,600	131,600	108,900
31	54,880	------	63,430	69,740	------	100,300	------	119,800	------	141,300	131,100	------
(†)	4,118.25	4,118.85	4,119.68	4,120.65	4,122.23	4,124.75	4,125.95	4,127.02	4,130.05	4,129.32	4,128.25	4,125.78
(‡)	+2,120	+3,460	+5,090	+6,310	+11,060	+19,500	+10,100	+9,400	+28,700	-7,200	-10,200	-22,200

Calendar year 1957..... ‡ +29,140
Water year 1957-58..... ‡ +56,140

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

3350. 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 1958. 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.--44 years (1899-1909, 1910-16, 1917-22, 1930-32, 1935-41, 1943-58), 203 cfs (147,000 acre-ft per year).

Extremes.--Maximum discharge during year, 824 cfs July 9 (gage height, 4.08 ft); minimum not determined, occurred during period of no gage-height record.
1896-1922, 1924-32, 1935-41, 1943-58: Maximum discharge, 4,720 cfs May 11, 12, 1952 (gage height, 10.26 ft); no flow at times in some years.

Remarks.--Records good except those for periods of no gage-height record (seepage only), which are poor. 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 1958 are given in WSP 1574.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							184	686	286	615	159	299
2							200	681	269	588	159	328
3							186	611	262	489	159	374
4							144	577	232	483	161	396
5						(**)	151	580	200	569	*172	404
6		(*)				0.1	164	596	140	647	164	419
7							164	623	140	731	153	419
8							186	699	140	813	172	399
9							216	686	153	786	155	*371
10							299	639	170	736	132	325
11						34	357	607	72	781	140	307
12						71	357	506	1.6	776	159	320
13			(**)			25	379	458		722	159	352
14							404	461		690	149	352
15							*424	464	1.0	656	170	347
16	0.1	0.1	0.1	0.1	0.1	1.0	413	461	(*)	651	181	322
17						15	427	458	16	596	159	294
18						66	436	442	84	562	134	315
19						67	436	427	69	533	107	360
20					(*)	67	502	470	48	493	123	393
21						79	558	483	67	464	123	360
22						123	607	496	81	442	113	333
23						123	631	516	197	445	138	320
24						*121	656	526	272	439	155	259
25						132	*695	516	*349	376	179	*244
26						161	718	493	419	355	211	227
27						159	686	509	473	320	252	252
28						153	660	496	547	294	272	237
29					-	136	635	*422	599	279	286	190
30					-------	136	660	357	599	249	294	112
31		-------			-------	153	-------	307	-------	193	302	-------
Total	3.1	3.0	3.1	3.1	2.8	1,825.0	12,535	16,253	5,889.6	16,773	5,392	9,630
Mean	0.1	0.1	0.1	0.1	0.1	58.9	418	524	196	541	174	321
Ac-ft	6.1	6.0	6.1	6.1	5.6	3,620	24,860	32,240	11,680	33,270	10,690	19,100

Calendar year 1957: Max 781 Min - Mean 166 Ac-ft 120,300
Water year 1957-58: Max 813 Min - Mean 187 Ac-ft 135,200

* Discharge measurement made on this day.
** Field estimate made on this day.
Note.--No gage-height record Oct. 1 to Mar. 10, Mar. 14-16, June 13-16; discharge estimated on basis of 1 field estimate and engineers' notes.

3360. 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 1958.

Gage.--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 different datums. June 14, 1950, to Nov. 13, 1951, water-stage recorder at site 300 ft upstream at same datum.

Average discharge.--17 years (1913-16, 1918-22, 1924, 1927, 1950-58), 86.5 cfs (62,620 acre-ft per year).

Extremes.--Maximum discharge during year, 119 cfs July 9 (gage height, 3.78 ft); minimum, 0.2 cfs Sept. 13, 19, 20.
1912-27, 1950-58: Maximum discharge, 3,540 cfs May 19, 1952 (gage height, 9.36 ft); no flow for several months in many years prior to construction of Rye Patch Dam.

Remarks.--Records fair. Flow regulated by Rye Patch Reservoir (since Feb. 20, 1936) and affected by irrigation in Lovelock Valley.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	9.2	b3.8	b8.5	10	8.2	1.6	1.4	1.3	5.1	44	6.9
2	16	9.2	b3.3	b9.0	9.6	8.2	1.6	6.0	1.3	24	41	5.5
3	14	8.9	b3.3	b9.0	10	8.2	8.2	7.9	1.6	16	31	4.7
4	11	8.9	b4.0	b8.1	10	7.9	1.9	6.6	1.3	7.3	17	5.0
5	8.2	*9.2	b4.7	b7.6	10	*8.2	2.0	5.5	1.3	5.1	*12	3.5
6	6.9	9.6	b6.0	b7.3	10	8.9	2.4	8.5	1.3	11	9.7	2.4
7	5.8	9.2	b7.0	b7.3	10	8.5	4.5	10	3.7	12	2.6	6.2
8	4.2	8.9	7.5	b7.8	10	8.5	5.0	*13	25	12	2.3	11
9	3.3	9.6	b8.2	b8.2	10	8.2	2.6	14	23	87	2.2	*11
10	2.6	9.6	b8.0	b9.0	10	8.2	1.5	10	17	33	6.9	11
11	15	8.5	b7.8	b9.5	10	7.9	1.5	13	29	17	11	7.9
12	8.9	8.2	b8.4	8.9	10	8.2	1.6	13	50	15	13	1.0
13	5.5	8.2	*b9.2	b8.9	10	8.2	3.4	23	57	14	13	.6
14	8.0	8.5	9.6	8.9	10	11	2.5	17	30	10	7.8	.5
15	45	7.2	10	9.2	10	15	1.5	6.3	30	13	2.4	.4
16	49	6.6	10	8.9	9.6	15	1.6	3.8	*39	16	2.2	.3
17	37	6.0	11	8.9	9.6	9.6	2.8	2.4	4.4	13	3.6	.3
18	34	6.6	11	8.9	15	6.0	2.8	1.9	2.3	13	5.2	.4
19	27	7.9	10	b8.5	10	4.7	1.5	3.0	12	16	5.2	.3
20	29	7.2	10	*b8.4	9.6	2.6	1.4	6.9	16	9.4	2.6	.3
21	23	6.6	10	b8.2	9.2	2.3	1.3	4.2	15	6.8	3.0	.5
22	14	6.6	b8.0	b7.5	8.9	2.4	9.6	2.4	8.9	16	3.3	.6
23	9.2	6.3	b6.5	b9.0	8.9	2.6	14	1.9	3.1	15	3.8	.7
24	7.5	6.3	b7.1	12	8.5	*2.4	4.4	1.6	1.4	15	7.5	.7
25	8.2	6.6	b8.0	12	9.6	2.3	2.8	1.5	*1.9	15	6.4	*1.5
26	18	6.9	b7.5	11	8.5	3.1	4.0	1.8	1.5	15	8.9	.8
27	14	6.0	b8.1	11	8.2	2.3	5.2	2.6	2.0	15	8.5	12
28	12	b4.2	b8.7	11	8.5	2.0	4.2	2.2	4.0	18	8.2	15
29	12	3.7	9.2	10	-	2.2	1.6	*2.6	3.1	13	8.5	4.6
30	10	b3.4	b8.5	11	-------	2.0	1.3	1.5	2.8	15	10	3.6
31	10	-------	b8.0	10	-------	1.6	-------	1.4	-------	16	9.2	-------
Total	489.3	223.8	242.4	283.5	273.7	196.4	100.3	196.9	390.2	508.7	312.0	119.2
Mean	15.8	7.46	7.82	9.15	9.78	6.34	3.34	6.35	13.0	16.4	10.1	3.97
Ac-ft	971	444	481	562	543	390	199	391	774	1,010	619	236

Calendar year 1957: Max 68 Min 0 Mean 6.86 Ac-ft 4,970
Water year 1957-58: Max 87 Min 0.3 Mean 9.14 Ac-ft 6,620

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

3365. 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.--1867-1925 (occasional elevation in some years), June 1926 to September 1958 (occasional elevations in each year).

Gage.--Bench mark N-21 of U. S. Coast and Geodetic Survey at elevation of 3,940.29 ft above mean sea level, datum of 1929, supplementary adjustment of 1956. From January 1934 to September 1955, elevations were determined from bench mark N-21 using elevation of 3,940.04 ft, datum of 1929 (to convert these records to supplementary adjustment of 1956, add 0.25 ft). Prior to January 1934, elevations were determined from bench mark No. 1 of General Land Office using elevation of 3,882.26 ft, adjustment of 1912 (to convert these records to supplementary adjustment of 1956, add 0.81 ft).

Extremes.--1926-58: Maximum elevation observed, 3,848.75 ft June 1926; minimum observed, 3,800.94 ft Feb. 11, 1958.

Revisions (water years).--WSP 880: 1934-38 (bench mark). WSP 1090: 1926(M).

Elevation, in feet, October 1957 to September 1958

Oct. 10	3,801.65	May 27	3,803.97
Nov. 26	3,801.26	June 10	3,804.42
Feb. 11	3,800.94	Aug. 4	3,804.19
Apr. 7	3,800.95	Sept. 8	3,803.75

3370. Lake Tahoe at Tahoe, Calif.

Location.--Lat 39°10'04", long 120°08'23", in NE¼ sec. 7, T. 15 N., R. 17 E., on pier 1,000 ft east of dam at lake outlet. Prior to May 8, 1958, on left wingwall of dam at outlet of lake.

Drainage area.--519 sq mi at lake outlet.

Records available.--April 1900 to September 1943 and October 1957 to September 1958 in reports of Geological Survey. October 1943 to September 1957 in files of Truckee-Carson Irrigation District.

Gage.--Water-stage recorder. Datum of gage is 6,220.00 ft above mean sea level, datum of Bureau of Reclamation (6,219.01 ft, datum of 1929). Prior to Oct. 1, 1957, staff gages at several sites near outlet of lake at same datum.

Extremes.--Maximum elevation during year, 6,229.05 ft July 24, 26-28; minimum, 6,227.03 ft Dec. 13.
1900-43, 1957-58: Maximum elevation, 6,231.26 ft July 14, 15, 17, 18, 1907; minimum, 6,221.74 ft Dec. 26, 1934.

Remarks.--Lake levels regulated by 17-gate concrete dam at outlet of lake; storage began about 1874. Figures given herein represent usable contents. Usable capacity, 744,600 acre-ft between elevations 6,223 (natural rim of lake) and 6,229.1 ft (maximum permissible elevation by Federal Court decree). Water is used for domestic and recreational purposes in Lake Tahoe area and for irrigation and power in downstream areas. Lake elevations are referred to Bureau of Reclamation datum because that datum is used as the official reference point by all local, state, and federal agencies. Records of chemical analyses for the water year 1958 are given in WSP 1574.

Capacity table, water year 1957-58 (elevation, in feet, and contents, in acre-feet)

6,227	486,800
6,228	609,300
6,229	732,300
6,229.1	744,600

Elevation, in feet, at 12 p.m., water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	g7.75	7.37	7.12	7.18	g7.37	7.88	8.32	g8.07	8.35	8.85	9.04	8.83
2	g7.73	7.33	7.12	7.21	7.40	7.87	8.47	g8.05	8.36	8.89	9.03	8.83
3	g7.70	7.29	7.11	7.19	7.45	7.87	8.53	g8.03	8.36	8.89	9.02	8.79
4	g7.68	7.32	7.10	7.18	7.45	7.86	g8.59	g8.05	8.37	8.90	9.01	8.75
5	g7.64	7.26	7.10	7.17	7.47	7.87	g8.56	g8.07	8.36	8.91	9.00	8.76
6	g7.61	7.27	7.09	7.17	7.45	7.87	g8.52	g8.07	8.37	8.91	9.00	8.74
7	g7.59	7.24	7.08	7.17	7.48	7.85	g8.50	g8.08	8.41	8.92	8.99	8.76
8	g7.57	g7.24	7.08	7.16	7.50	7.86	g8.49	8.07	8.42	8.93	8.99	8.76
9	g7.54	g7.23	7.07	7.20	7.52	7.86	g8.46	8.08	8.45	8.94	8.99	8.70
10	g7.51	g7.24	7.06	7.21	7.50	7.87	g8.44	8.09	8.47	8.95	8.99	8.68
11	7.48	g7.25	7.06	7.21	7.51	7.87	g8.40	8.12	8.50	8.95	8.98	8.65
12	7.45	7.19	7.05	g7.20	7.62	7.88	g8.38	8.12	8.53	8.95	8.96	8.62
13	7.50	7.20	7.03	g7.19	7.60	7.89	g8.35	8.13	8.55	8.95	8.95	8.55
14	7.47	7.29	7.04	g7.18	7.62	7.95	g8.32	8.12	8.57	8.94	8.95	8.57
15	7.47	7.28	7.10	g7.18	7.62	7.98	g8.29	8.12	8.58	8.95	8.95	8.52
16	7.44	7.27	7.22	g7.19	7.62	8.00	g8.27	8.13	8.63	8.92	8.94	8.51
17	7.44	7.27	7.25	g7.18	7.62	8.00	g8.25	8.14	8.64	8.97	8.94	8.50
18	7.42	7.25	7.28	g7.18	7.62	8.00	g8.26	8.15	8.70	8.96	8.94	8.48
19	7.45	7.24	7.26	g7.16	7.62	8.01	g8.27	8.19	8.72	8.97	8.97	8.46
20	7.46	7.23	7.26	g7.15	7.62	8.06	g8.25	8.20	8.75	8.98	8.98	8.46
21	7.43	7.23	7.25	g7.14	7.62	8.10	g8.23	8.22	8.77	8.98	8.95	8.43
22	7.40	7.20	7.27	g7.13	7.62	8.11	g8.21	8.25	8.80	9.03	8.96	8.41
23	7.44	7.20	7.25	g7.15	7.62	8.11	g8.18	8.27	8.81	9.03	8.95	8.38
24	7.41	7.20	7.25	g7.17	g7.75	8.12	g8.17	8.31	8.83	9.05	8.93	8.37
25	7.41	8.19	7.24	g7.22	g7.76	8.12	g8.15	8.32	8.85	9.04	8.93	8.33
26	7.40	7.20	7.22	g7.25	g7.83	8.12	g8.13	8.33	8.86	9.05	8.91	8.32
27	7.38	7.17	7.23	g7.28	7.88	8.13	g8.12	8.33	8.90	9.05	8.90	8.29
28	7.38	7.16	7.23	g7.32	7.92	8.13	g8.12	8.36	8.87	9.05	8.89	8.28
29	7.36	7.14	7.22	g7.37	-	8.15	g8.10	8.37	8.88	9.04	8.87	8.28
30	7.35	7.14	7.20	g7.38	-------	8.24	g8.08	8.36	8.88	9.04	8.87	8.25
31	7.34	-------	7.20	g7.37	-------	8.25	-------	8.35	-------	9.03	8.86	-------
(†)	528,500	503,900	511,300	532,100	599,500	640,000	619,100	652,400	717,500	736,000	715,100	640,000
(‡)	-51,400	-24,600	+7,400	+20,800	+67,400	+40,500	-20,900	+33,300	+65,100	+18,500	-20,900	-75,100

Calendar year 1957..... ‡ -
Water year 1957-58..... ‡ +60,100

† Contents, in acre-feet, at end of month.
‡ Change in contents, in acre-feet.
g Computed from once-daily staff-gage readings.
Note.--Add 6,220 ft to obtain elevation above Bureau of Reclamation datum.

3375. Truckee River at Tahoe, Calif.

Location.--Lat 39°09'55", long 120°08'45", in NW¼ sec. 7, T. 15 N., R. 17 E., on left bank 200 ft downstream from dam at outlet of Lake Tahoe.

Drainage area.--519 sq mi.

Records available.--July 1895 to February 1896, June 1900 to December 1943, August 1957 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 6,219.17 ft above mean sea level, datum of 1929. Prior to Nov. 12, 1912, staff gage at site 100 ft upstream at different datum. Nov. 12, 1912, to Sept. 30, 1937, staff gage and Oct. 1, 1937, to Dec. 31, 1943, water-stage recorder, at same site at datum 0.16 ft lower.

Average discharge.--44 years (1900-43, 1957-58), 252 cfs (182,400 acre-ft per year).

Extremes.--1957: Maximum discharge during period August to September, 540 cfs Aug. 24 (gage height, 4.45 ft); minimum daily, 42 cfs Aug. 22.
1957-58: Maximum discharge during water year, 1,870 cfs Apr. 5, 6 (gage height, 7.30 ft); maximum gage height, 7.34 ft Apr. 5 (backwater from snow in channel); minimum daily, 3.2 cfs Aug. 30 to Sept. 2.
1895-96, 1900-43, 1957-58: Maximum discharge, that of Apr. 5, 6, 1958; maximum gage height, that of Apr. 5, 1958; no flow parts of 1900, 1901, 1914, 1918-43.

Remarks.--Records good. Flow regulated by Lake Tahoe (see preceding page).

Discharge, in cubic feet per second, 1957

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1	-	499	7	-	503	13	-	496	19	-	441	25	528	412
2	-	496	8	-	503	14	-	492	20	-	*405	26	499	412
3	-	496	9	-	503	15	-	492	21	-	405	27	482	412
4	-	496	10	-	499	16	-	492	22	*42	402	28	489	408
5	-	503	11	-	499	17	-	489	23	355	402	29	492	408
6	-	503	12	-	496	18	-	489	24	532	402	30	496	308
												31	499	-
Total													-	13,763
Mean													-	459
Runoff in acre-feet													-	27,300

* Discharge measurement made on this day.
Note.--Result of discharge measurement, 47 cfs July 29.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	296	*293	299	223	157		24	1,700	1,700		(*)	3.2
2	299	293	*299	*182	*157		b24	1,700	1,640			3.2
3	*299	296	296	148	157		b467	1,700	1,170	11		37
4	296	299	296	148	157		*b1,080	1,700	777			96
5	296	299	296	148	157		*b1,770	1,700	*448			173
											5.0	
6	293	299	296	148	159		1,860	1,700	73			173
7	296	299	296	148	159		1,850	1,700	49			175
8	299	299	296	148	161		*1,840	1,700	48	10		241
9	299	299	296	148	161		1,820	1,710	48			*331
10	299	296	296	150	161		1,820	1,720	48			421
11	299	296	288	150	161		1,800	1,720	48			454
12	299	296	285	150	164		1,800	1,720	*48			468
13	299	299	296	150	166		1,790	1,730	48	9.0		471
14	299	302	308	150	164		1,780	1,730	47			471
15	296	302	310	155	166		1,780	1,730	47			475
						24						
16	296	302	316	157	166		1,770	1,740	31		4.0	482
17	296	302	319	157	98		*1,760	1,740	17			482
18	296	302	322	157	58		1,760	1,740	17	8.0		485
19	296	260	322	157	38		1,760	1,760	17			482
20	296	231	319	157	24		1,760	1,760	*14			482
21	293	210	319	157	24		1,750	1,770	14			489
22	293	193	319	155	24		1,740	1,780	14			489
23	293	193	313	189	24		1,740	1,780	14	7.0		489
24	293	193	305	215	25		1,730	1,800	13			482
25	293	244	302	215	29		1,720	1,800				482
											3.4	
26	293	282	305	215	25		1,720	1,800				485
27	293	279	254	180	*24		1,710	1,800	12			485
28	290	279	210	157	24		1,700	1,810				485
29	290	293	208	155	-		1,700	1,810		6.0		431
30	290	299	218	155	-------		*1,700	1,810			*3.2	374
31	290	-------	223	157	-------		-------	*1,760	-------		3.2	-------
Total	9,155	8,329	9,027	5,081	2,990	744	47,525	54,120	6,462	261.0	127.6	11,096.4
Mean	295	278	291	164	107	24.0	1,584	1,746	215	8.42	4.12	370
Ac-ft	18,160	16,520	17,900	10,080	5,930	1,480	94,260	107,300	12,820	518	253	22,010

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 1,860 Min 3.2 Mean 424 Ac-ft 307,200

* Discharge measurement made on this day.
b Stage-discharge relation affected by snow in channel.
Note.--Doubtful gage-height record Feb. 17 to Apr. 2, June 16 to Sept. 3; discharge estimated on basis of 4 discharge measurements and records for dam at outlet of Lake Tahoe.

3380. 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.

Records available.--December 1944 to September 1958.

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

Average discharge.--13 years (1945-58), 372 cfs (269,300 acre-ft per year).

Extremes.--Maximum discharge during year, 2,920 cfs May 18 (gage height, 5.31 ft, backwater from debris); maximum gage height, 9.69 ft Apr. 3 (backwater from snow in channel); minimum discharge, 18 cfs Sept. 3.
1944-58: Maximum discharge, 7,760 cfs Dec. 23, 1955 (gage height, 7.92 ft), from rating curve extended above 2,400 cfs on basis of slope-area measurements at gage heights 7.62 and 7.92 ft; maximum gage height, that of Apr. 3, 1958; minimum discharge, 11 cfs Jan. 27, 1948.

Remarks.--Records good. Flow regulated by Lake Tahoe (operating capacity about 737,000 acre-ft). Records of chemical analyses for the water year 1958 are given in WSP 1574.

Revisions.--WSP 1394: Drainage area.

Rating tables, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by snow in channel Mar. 30, Apr. 2-4; shifting-control method used June 1-4; backwater from debris May 18, 19)

Oct. 1 to June 4				June 5 to Sept. 30			
1.0	54	3.0	990	0.9	12	2.0	275
1.5	164	4.0	1,820	1.0	20	3.0	870
2.0	338	5.0	2,820	1.2	48	4.0	1,620
				1.6	140		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	295	*295	308	247	175	126	78	2,050	2,140	181	*46	19
2	295	299	*304	*230	*178	114	78	2,100	2,070	178	48	19
3	*299	299	304	175	184	107	270	2,160	1,670	184	45	30
4	295	308	304	172	178	99	1,210	2,210	1,130	184	42	94
5	295	308	308	172	178	94	*1,770	2,320	*944	181	37	197
6	295	304	308	172	178	92	1,850	2,360	479	178	35	200
7	299	304	308	172	178	90	1,850	2,320	408	169	35	204
8	299	304	308	170	181	86	1,840	2,340	398	154	34	239
9	299	304	312	172	178	82	1,830	2,400	398	146	34	*325
10	295	304	312	178	178	80	1,830	2,460	392	137	32	403
11	295	308	299	172	178	78	1,830	2,470	376	129	31	449
12	295	304	295	170	211	76	1,840	2,280	355	126	30	461
13	312	321	299	172	201	74	1,860	2,210	340	121	28	467
14	308	348	312	170	198	74	1,890	2,220	370	111	28	461
15	299	316	353	172	208	76	1,920	*2,270	398	*108	27	467
16	295	316	426	175	223	76	1,930	2,370	420	94	28	473
17	295	312	382	175	189	70	1,980	2,490	437	94	28	473
18	295	316	362	175	136	68	2,020	2,610	455	94	28	473
19	299	299	358	175	156	70	2,030	2,680	420	96	34	473
20	304	257	348	175	124	82	2,070	2,560	*376	91	37	467
21	299	247	348	175	119	96	*2,120	2,540	386	87	30	473
22	299	220	343	175	119	88	2,130	2,540	403	89	27	485
23	304	220	334	189	116	82	2,030	2,730	386	85	26	485
24	308	220	325	226	297	80	1,960	2,620	311	74	25	479
25	304	243	321	226	444	78	1,940	2,600	275	71	22	479
26	299	291	316	230	223	78	1,940	2,570	280	71	21	485
27	299	295	299	204	*172	76	1,960	2,500	267	67	21	479
28	299	291	243	172	143	74	1,970	2,440	232	65	20	485
29	295	299	240	178	-	76	1,980	2,390	207	61	20	437
30	295	308	243	178	-------	80	2,000	2,370	191	52	*20	370
31	295	-------	250	175	-------	80	-------	2,320	-------	50	20	-------
Total	9,259	8,760	9,772	5,719	5,243	2,602	52,006	74,500	16,914	3,528	939	11,051
Mean	299	292	315	184	187	83.9	1,730	2,400	564	114	30.3	368
Ac-ft	18,360	17,380	19,380	11,340	10,400	5,160	103,200	147,800	33,550	7,000	1,860	21,920

Calendar year 1957: Max 1,670 Min 58 Mean 337 Ac-ft 243,900
Water year 1957-58: Max 2,730 Min 19 Mean 549 Ac-ft 397,400

* Discharge measurement made on this day.

3405. 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.--53.5 sq mi (revised).

Records available.--April 1889 to November 1890 and October 1902 to June 1903 (gage heights only), June 1951 to September 1958. Records of discharge for April 1889 to November 1890 previously published have been found to be unreliable and should not be used.

Gage.--Water-stage recorder. Datum of gage is 5,572.66 ft above mean sea level (levels by Bureau of Reclamation). June 1951 to September 1956 at datum 2.00 ft higher. April 1889 to November 1890 and October 1902 to June 1903, staff gages at same site at different datums.

Average discharge.--7 years, 102 cfs (73,840 acre-ft per year).

Extremes.--Maximum discharge during year, 980 cfs May 18 (gage height, 4.74 ft); maximum gage height, 4.88 ft Feb. 17 (backwater from ice); minimum discharge, 11 cfs Oct. 2, Sept. 21, 22, but may have been less during periods of ice effect.

1951-58: Maximum discharge, 4,560 cfs Dec. 23, 1955 (gage height, 10.13 ft, present datum), from rating curve extended above 910 cfs on basis of slope-area measurement of peak flow; minimum, 4.0 cfs Sept. 7, 1955.

Flood of Nov. 20, 1950, reached a stage of 11.0 ft (present datum), from flood-marks (discharge, 4,320 cfs by slope-area measurement).

Remarks.--Records good except those for periods of ice effect, which are poor.

Revisions.--See Records available.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

1.3	11	3.0	247
1.6	29	3.5	395
2.0	69	4.0	610
2.5	144	4.5	860

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	17		32		99	55	462	423	*144	45	14
2	11	17		30		85	41	*530	462	146	43	14
3	13	17	18	28		*82	42	555	378	144	42	14
4	14	18		27		73	57	595	312	144	39	13
5	16	17		26	28	69	57	645	327	146	35	13
6	17	17				68	52	685	333	142	34	13
7	14	17				59	49	640	303	141	33	14
8	13	17		25		59	49	625	300	130	32	16
9	13	16	15		27	55	54	650	283	119	31	14
10	13	16			26	55	*63	690	280	113	30	13
11	13	18		30	26	54	83	725	272	*108	29	12
12	14	20		30	32	50	99	530	270	105	28	12
13	37	23	19	29	37	49	122	478	247	98	26	12
14	48	79	25	27	45	49	164	482	264	92	23	13
15	*27	40	50	*26	50	46	203	530	275	90	23	12
16	21	31	100	25	55	49	237	585	300	85	28	12
17	19	26	*55	24	70	48	275	645	*306	81	28	12
18	17	*26	32		86	46	333	725	330	76	*27	12
19	17	28	50		*98	46	348	*805	321	70	26	12
20	21	29	47		108	58	392	730	280	72	31	12
21	21	26	43	23	96	69	470	695	275	70	26	11
22	20	21	40		95	65	490	685	306	76	22	12
23	20	21	38		98	64	370	770	303	74	21	16
24	29	20	37		171	62	321	725	252	67	20	16
25	28	21	37	25	345	61	315	675	219	69	18	14
26	27	21	36	26	216	59	339	*645	219	63	18	*13
27	23	18	35	27	164	58	357	595	214	59	17	12
28	21	18	37		125	56	367	530	181	58	17	12
29	19	18	40	28	-	57	378	482	164	54	16	12
30	18	18	38	-------	-------	44	409	470	148	49	16	12
31	17	-------	35		-------	65	-------	462	-------	45	15	-------
Total	613	691	989	810	2,194	1,859	6,591	19,046	8,547	2,930	839	389
Mean	19.8	23.0	31.9	26.1	78.4	60.0	220	614	285	94.5	27.1	13.0
Ac-ft	1,220	1,370	1,960	1,610	4,350	3,690	13,070	37,780	16,950	5,810	1,660	772

Calendar year 1957: Max 530 Min 6.6 Mean 72.9 Ac-ft 52,780
Water year 1957-58: Max 805 Min 11 Mean 125 Ac-ft 90,240

Peak discharge (base, 300 cfs).--Feb. 25 (2 a.m.) 515 cfs (3.86 ft); Apr. 21 (9 p.m.) 580 cfs (3.94 ft); May 10 (10 p.m.) 850 cfs (4.48 ft); May 18 (9:30 p.m.) 980 cfs (4.74 ft); June 19 (1 a.m.) 420 cfs (3.57 ft).

* Discharge measurement made on this day.
Note.--Stage-discharge relation affected by ice Nov. 22 to Dec. 16, Dec. 21 to Feb. 18.

3420. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 6,330 ft (from topographic map).

Average discharge.--11 years (1947-58), 96.5 cfs (69,860 acre-ft per year).

Extremes.--Maximum discharge during year, 1,100 cfs May 23 (gage height, 4.78 ft); minimum, 3.1 cfs Sept. 11, but may have been less during periods of ice effect.

1946-58: 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 measurement 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 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 18 to June 2, Aug. 23 to Sept. 30)

0.6	2.0	1.3	28	3.0	320
.7	3.6	1.6	53	3.5	480
.8	5.8	2.0	100	4.0	700
1.0	12.5	2.5	196	5.0	1,350

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.7	11	b14	22	b23	b100	42	276	625	201	*16	3.8
2	6.8	11	b14	21	22	b93	35	320	670	187	15	3.6
3	8.7	11	b14	21	22	b86	38	358	592	180	15	*3.6
4	8.7	11	b14	b20	23	b79	34	402	448	182	15	4.3
5	10	11	12	b20	22	b74	37	492	472	196	14	4.3
6	10	11	b13	b20	22	70	41	584	492	184	13	3.8
7	9.7	11	b9.7	b20	22	b66	40	560	430	175	11	4.0
8	9.0	11	b8.0	20	21	60	b37	564	430	154	7.7	4.3
9	8.7	11	b8.7	b20	20	b58	b36	*620	412	139	7.7	3.6
10	8.7	11	b8.0	18	20	b56	b37	715	412	126	7.4	3.3
11	8.7	11	b8.0	22	b20	b54	b40	760	381	*119	7.7	3.3
12	8.7	12	b8.0	22	24	54	b44	552	399	108	7.1	3.8
13	23	14	b9.7	b20	24	52	b52	460	399	97	6.4	3.8
14	*20	44	b9.7	b22	*26	51	b62	500	422	90	6.1	3.8
15	13	25	26	*b20	28	46	b75	568	472	85	6.8	3.6
16	11	22	65	b19	34	52	b89	665	520	68	7.4	3.4
17	11	20	*42	b18	37	*b46	116	755	*540	59	8.0	3.3
18	10	*22	32	b18	41	b41	148	*868	560	49	8.4	3.3
19	10	27	40	b18	50	b41	173	991	520	47	8.0	3.4
20	12	24	35	b19	58	45	213	916	448	47	8.4	3.4
21	12	20	29	b18	57	46	*261	856	444	45	7.4	3.4
22	13	17	28	b18	53	51	278	835	496	46	6.8	3.4
23	15	18	b28	b18	53	48	237	*952	484	46	5.4	4.7
24	18	17	28	18	81	45	198	958	396	41	5.1	4.3
25	17	17	26	20	152	39	180	910	336	37	4.9	3.8
26	17	17	24	22	144	b37	184	886	339	33	4.9	*3.6
27	15	16	23	22	119	b37	198	845	317	30	4.7	3.4
28	14	16	24	23	108	39	208	790	273	29	4.5	3.4
29	13	b13	26	22	-	37	220	715	242	26	4.3	3.6
30	12	b15	24	23	-------	29	244	655	215	22	4.0	3.8
31	12	-------	23	b21	-------	41	-------	660	-------	19	4.0	-------
Total	373.4	497	673.8	625	1,326	1,673	3,597	20,988	13,186	2,867	252.1	111.1
Mean	12.0	16.6	21.7	20.2	47.4	54.0	120	677	440	92.5	8.13	3.70
Ac-ft	741	986	1,340	1,240	2,630	3,320	7,130	41,630	26,150	5,690	500	220

Calendar year 1957: Max 970 Min 3.0 Mean 79.0 Ac-ft 57,170
Water year 1957-58: Max 991 Min 3.3 Mean 126 Ac-ft 91,580

Peak discharge (base, 500 cfs).--May 10 (11 p.m.) 830 cfs (4.33 ft); May 23 (10 p.m.) 1,100 cfs (4.78 ft); June 18 (11 p.m.) 645 cfs (3.89 ft).

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

3435. 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.--10.9 sq mi (revised).

Records available.--October 1953 to September 1958.

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.

Average discharge.--5 years, 12.5 cfs (9,050 acre-ft per year).

Extremes.--Maximum discharge during year, 212 cfs May 18 (gage height, 3.66 ft), from rating curve extended above 70 cfs as explained below; minimum, 1.6 cfs Oct. 9.
1953-58: Maximum discharge, 495 cfs Dec. 23, 1955 (gage height, 4.28 ft), from rating curve extended above 70 cfs on basis of slope-area measurement of peak flow; minimum, 1.3 cfs Aug. 24, 1954.

Remarks.--Records good. No storage or diversion above station.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 23)

1.4	1.3	1.7	4.5	2.5	41
1.5	2.0	1.9	9.5	2.9	76
1.6	2.9	2.1	17	3.4	153

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	2.5	2.5	3.3	3.0	9.8	4.5	50	65	22	*5.6	2.9
2	2.0	2.5	2.4	3.3	3.2	8.7	3.8	56	75	20	5.4	2.9
3	2.4	2.6	2.5	3.2	3.2	7.8	5.8	61	61	19	4.9	2.8
4	2.3	2.7	2.5	3.0	3.2	7.6	5.1	74	54	18	4.7	2.8
5	2.9	2.7	2.6	3.0	3.2	7.1	4.3	89	54	17	4.5	2.8
6	2.4	2.6	2.6	3.2	3.0	6.6	4.1	95	51	16	4.3	2.8
7	2.3	2.6	2.6	3.0	3.2	6.3	4.1	94	50	14	4.1	3.3
8	2.0	2.8	2.5	3.0	3.2	*6.1	4.3	100	47	13	4.1	3.3
9	1.8	2.7	2.6	3.0	3.2	5.8	4.7	116	46	13	3.9	*2.9
10	1.9	2.7	2.6	3.2	3.2	5.6	5.8	124	44	12	3.9	2.9
11	2.1	2.8	2.6	3.0	3.2	5.4	7.3	116	43	12	3.8	2.9
12	2.1	3.0	2.5	3.0	7.6	5.1	8.9	91	44	11	3.8	2.9
13	5.4	4.2	2.6	3.2	7.1	4.9	11	87	42	11	3.6	2.9
14	3.0	11	2.7	3.0	5.6	4.9	14	91	40	10	3.4	2.9
15	2.3	4.5	7.6	*3.0	6.3	4.7	18	102	39	10	3.6	2.9
16	2.2	3.6	15	3.0	8.1	4.7	22	115	*38	9.5	4.7	2.8
17	2.1	3.0	6.8	3.0	8.1	4.7	27	126	37	20	4.5	2.8
18	2.0	3.4	4.7	2.9	7.8	4.5	31	146	46	14	3.9	2.7
19	2.2	4.1	5.1	2.9	12	4.7	33	149	42	12	4.7	2.7
20	2.6	3.8	4.3	2.9	9.8	6.1	38	129	38	10	4.3	2.7
21	3.2	3.3	3.9	2.9	8.9	6.6	44	127	36	9.5	3.8	2.7
22	3.2	2.9	3.9	2.9	8.7	5.6	43	117	36	9.2	3.6	2.7
23	4.7	3.0	3.4	2.9	8.7	5.4	*33	129	35	9.5	3.4	3.9
24	*4.3	2.9	3.3	3.0	24	5.1	30	120	33	11	3.3	3.3
25	3.4	*3.0	3.3	3.0	41	4.9	30	114	32	9.8	3.2	3.0
26	3.0	3.0	3.4	3.2	24	4.0	33	105	31	8.1	3.2	2.9
27	2.8	2.7	3.3	3.0	16	4.0	36	98	28	7.3	3.2	2.9
28	2.7	2.7	3.6	3.0	11	4.7	37	86	26	7.1	3.2	2.8
29	2.6	2.5	3.8	3.0	-	4.5	38	74	24	6.8	3.0	2.8
30	2.5	2.6	3.4	3.0	-------	4.5	42	69	22	6.1	3.0	2.8
31	2.5	-------	3.4	3.0	-------	4.5	-------	67	-------	5.8	2.9	-------
Total	82.8	98.4	118.0	94.0	249.5	176.7	622.7	3,117	1,259	373.7	121.5	87.4
Mean	2.67	3.28	3.81	3.03	8.91	5.70	20.8	101	42.0	12.1	3.92	2.91
Ac-ft	164	195	234	186	495	350	1,240	6,180	2,500	741	241	173

Calendar year 1957: Max 97 Min 1.8 Mean 9.69 Ac-ft 7,010
Water year 1957-58: Max 149 Min 1.8 Mean 17.5 Ac-ft 12,700

Peak discharge (base, 50 cfs).--Apr. 21 (7 p.m.) 55 cfs (2.72 ft); May 9 (6 p.m.) 178 cfs (3.53 ft); May 18 (5 p.m.) 212 cfs (3.66 ft); June 18 (5 p.m.) 76 cfs (2.92 ft); July 17 (6:30 p.m.) 61 cfs (2.76 ft).

* Discharge measurement made on this day.

3444. Little Truckee River above Boca Reservoir, near Boca, Calif.
(Formerly published as Little Truckee River at Pine Station and as Little Truckee River at Starr)

Location.--Lat 39°26', long 120°05', in SW¼ sec. 3, T. 18 N., R. 17 E., on left bank 1 mile upstream from Boca Reservoir, 1½ miles upstream from Dry Creek, and 3½ miles north of Boca.

Drainage area.--146 sq mi. 142 sq mi (revised) at site used 1903-7.

Records available.--June 1903 to October 1910, October 1957 to September 1958. Published as "at Pine Station" June 1903 to December 1907 and as "at Starr" January 1908 to October 1910. Monthly discharge only for some periods, published in WSP 1314.

Gage.--Water-stage recorder. Datum of gage is 5,618.67 ft above mean sea level (Bureau of Reclamation bench mark). June 1903 to October 1910, staff gages at different sites and datums.

Average discharge.--8 years, 274 cfs (198,400 acre-ft per year).

Extremes.--Maximum discharge during year, 1,650 cfs May 5 (gage height, 3.19 ft); minimum, 13 cfs Sept. 11, but may have been less during period of ice effect.
1903-10, 1958: Maximum daily discharge, 1,920 cfs Jan. 15, 16, 1909; minimum daily, 11 cfs Aug. 23-29, Sept. 1, 2, 7, 11, 1910.
Maximum discharge for flood of Dec. 23, 1955, about 9,500 cfs (computed from change in contents of Boca Reservoir).

Remarks.--Records good except those for periods of ice effect, which are fair. Flow slightly regulated by Independence Lake (capacity, about 17,500 acre-ft) and one trans-mountain diversion to Sierra Valley.

Revisions.--Revised figures of discharge for water years 1903-4, 1906-7, and 1910, superseding those published in WSP 300, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1903		1903-Con.		1904-Con.		1904-Con.		1904-Con.	
June 25	268	Nov. 12	86	Jan. 4	65	Jan. 28	80	Feb. 21	322
26	268	13	322	5	82	29	79	22	592
27	309	14	592	6	79	30	82	23	892
28	288	15	352	7	82	31	79		
29	288	16	186	8	102	Feb. 1	90	1905	
30	288	17	148	9	92	2	82	Dec. 1-31	†45
July 1	309	18	116	10	48	3	82		
2	309	19	102	11	62	4	92	1906	
3	288	20	199	12	65	5	77	Jan. 1-31	†90
4	288	21	485	13	58	6	86	Feb. 1-28	†100
5	288	22	504	14	68	7	92	Dec. 1-31	†90
6	288	23	442	15	98	8	109		
7	248	24	352	16	86	9	125	1907	
8	125	25	244	17	86	10	125	Jan. 1-31	†100
9	123	26	186	18	75	11	125		
10	114	27	146	19	82	12	102	1909	
11	98	28	135	20	107	13	82	Dec. 4-6	†150
12	86	29	116	21	98	14	111		
13	92	30	107	22	116	15	212	1910	
14	86			23	98	16	427	Jan. 6-8	†240
15	84	1904		24	98	17	504	16-31	†250
16	79	Jan. 1	40	25	86	18	485	Feb. 1-28	†200
17	58	2	40	26	80	19	494		
18	58	3	58	27	82	20	364		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
July 1903	309	31	112	6,890
October	-	-	25.7	1,580
November	592	25	171	10,180
January 1904	116	40	79.1	4,865
February	1,295	77	393	22,610
Water year 1903-4	1,809	-	370	268,000
Calendar year 1904	1,809	-	368	270,000
December 1905	-	-	45	2,770
Calendar year 1905	760	-	153	111,000
January 1906	-	-	90	5,530
February	-	-	100	5,550
Water year 1905-6	1,350	-	315	228,000
December 1906	-	-	90	5,530
Calendar year 1906	1,350	-	322	233,000
January 1907	-	-	100	6,150
Water year 1906-7	1,560	50	360	261,000
Calendar year 1907	1,560	-	367	266,000
December 1909	302	74	161	9,900
Calendar year 1909	1,920	15	348	252,000
January 1910	-	-	254	15,600
February	-	-	200	11,100
Water year 1909-10	1,240	11	243	176,000

† Average for period indicated.

3444. Little Truckee River above Boca Reservoir, near Boca, Calif.--Continued

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.5	12	1.0	70	2.0	460
.6	18	1.2	112	2.5	840
.8	39	1.5	209	3.1	1,530

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	120	b26	b52	45	198	112	1,010	930	305	43	14
2	107	120	b22	49	49	179	87	1,120	973	295	42	14
3	117	120	b58	b39	50	*171	81	1,160	910	286	39	15
4	117	120	b68	b34	55	145	105	1,240	742	276	37	15
5	123	123	76	33	53	134	110	1,340	*718	291	35	15
6	123	120	72		49	126	112	*1,410	710	286	32	15
7	117	120	b74		50	112	107	1,330	646	281	31	16
8	115	123	b68	b33	52	110	*107	1,260	654	258	27	21
9	115	120	b68		49	100	126	1,270	606	231	25	17
10	115	117	b72		43	94	155	1,340	622	218	24	16
11	115	120	b72		42	91	205	1,490	590	198	23	14
12	117	123	b72		63	87	262	1,150	590	182	22	15
13	128	128	b74	b37	62	83	330	1,010	598	171	22	16
14	*142	218	74		63	81	442	984	598	158	21	17
15	63	158	94		74	76	534	1,020	614	149	20	16
16	105	142	205	37	89	81	590	1,080	662	134	27	16
17	117	131	155	34	98	81	768	1,160	678	120	33	16
18	117	*134	110	29	110	76	880	1,290	759	128	*31	15
19	120	149	126	28	142	76	930	1,450	742	103	28	15
20	134	149	120	b28	161	94	1,050	*1,390	670	103	32	15
21	128	139	110	b28	161	115	1,210	1,260	646	94	27	15
22	128	60	89	27	158	110	1,170	1,240	694	*91	23	15
23	136	43	89	b27	175	112	*890	1,290	686	96	22	16
24	142	39	105	b32	286	115	750	1,400	622	96	19	20
25	134	37	105	39	472	110	734	1,320	*541	91	18	18
26	131	35	98	40	385	110	777	*1,280	508	80	18	17
27	126	33	b89	40	300	112	822	1,240	496	68	18	17
28	126	b29	91	43	244	107	850	1,180	430	65	17	*94
29	123	b28	96	38	-	110	880	1,090	380	67	17	103
30	120	b26	83	40	-------	98	951	1,010	335	56	17	105
31	120	-------	*81	*42	-------	107	-------	995	-------	49	16	-------
Total	3,721	3,124	2,742	1,109	3,580	3,401	16,127	37,809	19,350	5,026	806	733
Mean	120	104	88.5	35.8	128	110	538	1,220	645	162	26.0	24.4
Ac-ft	7,380	6,200	5,440	2,200	7,100	6,750	31,990	74,990	38,380	9,970	1,600	1,450

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 1,490 Min 14 Mean 267 Ac-ft 193,400

Peak discharge (base, 500 cfs).--Feb. 24 (10:30 p.m.) 569 cfs (2.17 ft); Apr. 21 (8 p.m.) 1,540 cfs (3.11 ft); May 5 (10 p.m.) 1,650 cfs (3.19 ft); May 19 (3 a.m.) 1,610 cfs (3.16 ft); June 19 (2 a.m.) 860 cfs (2.52 ft).

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

3444.9 Boca Reservoir at Boca, Calif.

Location.--Lat 39°23'20", long 120°05'40", in S½ sec. 21, T. 18 N., R. 17 E., 1,800 ft upstream from mouth of Little Truckee River and half a mile northwest of Boca.

Drainage area.--171 sq mi.

Records available.--October 1957 to September 1958.

Gage.--Pressure gage with mercury column read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

Extremes.--Maximum contents during year, 41,150 acre-ft June 22 (elevation, 5,605.25 ft); minimum, 2,150 acre-ft Feb. 14 (elevation, 5,539.05 ft).
Maximum contents known, 41,440 acre-ft Dec. 23, 1955 (elevation, 5,605.55 ft).

Remarks.--Reservoir is formed by earth-fill, rock-faced dam. Storage began Dec. 8, 1938. Usable capacity, 40,900 acre-ft between elevations 5,521 ft (outlet sill) and 5,605 ft. Dead storage, 240 acre-ft below elevation 5,521 ft. Records given herein represent usable contents above elevation 5,521 ft. Water is used for irrigation in the State of Nevada and for power development.

Cooperation.--Daily elevations furnished by Washoe County Conservation District. Capacity table and maximum elevation for Dec. 23, 1955, furnished by Bureau of Reclamation.

Capacity table, water year 1957-58 (elevation, in feet, and contents, in acre-feet)

5,539	2,140	5,560	8,790	5,590	27,510
5,542	2,770	5,570	13,760	5,600	36,150
5,545	3,510	5,580	20,020	5,605.3	41,200
5,550	4,970				

Contents, in acre-feet, at 8 a.m., water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,410	8,060	9,460	10,640	4,130	9,570	7,440	23,280	35,820	41,000	35,000	10,740
2	4,530	8,140	9,450	10,540	3,950	10,040	6,940	24,220	36,750	41,000	34,490	9,830
3	4,630	8,230	9,480	10,380	3,800	10,520	6,450	25,220	37,590	41,000	33,840	8,920
4	4,740	8,310	9,570	10,160	3,590	10,930	5,940	26,160	38,540	41,000	33,220	7,970
5	4,860	8,400	9,710	9,950	3,420	11,180	5,780	27,350	38,450	41,000	32,560	7,040
6	4,970	8,500	9,820	9,690	3,240	11,320	5,630	28,740	38,710	41,000	31,930	6,260
7	5,100	8,570	9,930	9,400	3,060	11,330	5,520	29,650	39,290	41,050	31,280	5,480
8	5,220	8,750	10,020	9,160	2,900	11,380	5,350	30,240	39,780	41,000	30,570	4,720
9	5,330	8,860	10,000	8,940	2,740	11,330	5,220	30,490	40,220	41,050	29,840	4,280
10	5,430	8,940	9,970	8,770	2,580	11,180	4,970	30,700	41,000	41,000	29,120	4,040
11	5,560	9,080	9,970	8,550	2,400	11,060	4,820	31,090	41,000	41,000	28,380	3,920
12	5,640	9,120	9,950	8,340	2,250	10,900	4,870	31,320	41,000	41,000	27,590	3,880
13	5,750	9,260	9,950	8,120	2,200	10,740	5,060	30,930	41,050	41,000	26,810	3,890
14	5,870	9,460	9,960	7,870	2,150	10,560	5,500	30,400	41,050	41,000	26,060	3,890
15	5,990	9,690	10,000	7,660	2,200	10,410	6,210	29,650	41,050	40,800	25,220	3,880
16	6,060	9,930	10,180	7,470	2,310	10,240	7,140	29,150	41,100	40,560	24,450	3,880
17	6,160	10,040	10,510	7,240	2,450	10,070	8,230	28,880	41,100	40,410	23,710	3,860
18	6,280	10,180	10,690	7,030	2,620	9,860	9,720	28,860	41,100	40,240	22,920	3,860
19	6,380	10,240	10,760	6,750	2,860	9,670	11,380	29,070	41,100	39,980	22,170	3,860
20	6,540	10,240	10,900	6,540	3,140	9,520	12,960	29,400	41,050	39,730	21,210	3,860
21	6,660	10,260	10,980	6,320	3,470	9,480	14,860	29,370	41,050	39,440	20,370	3,860
22	6,850	10,210	11,030	6,080	3,890	9,440	17,040	29,280	41,150	39,160	19,600	3,860
23	6,960	10,040	11,060	5,780	4,300	9,380	18,230	29,070	41,100	38,870	18,820	3,840
24	7,120	9,860	10,840	5,500	4,780	9,350	18,930	30,070	41,050	38,520	17,940	3,860
25	7,300	9,620	10,740	5,280	6,120	9,300	19,520	30,790	41,050	38,170	17,080	3,870
26	7,440	9,570	10,640	5,080	7,320	9,220	20,020	31,310	41,050	37,820	16,180	3,890
27	7,580	9,560	10,660	4,920	8,250	9,160	20,640	31,910	41,100	37,450	15,330	3,920
28	7,710	9,540	10,790	4,810	9,000	9,090	21,420	32,950	41,050	37,020	14,390	3,980
29	7,810	9,520	10,880	4,660	-	8,710	22,180	33,670	41,000	36,610	13,510	4,180
30	7,910	9,460	10,820	4,610	-------	8,310	22,580	34,510	40,950	36,060	12,570	4,400
31	7,970	-------	10,760	4,300	-------	7,890	-------	35,280	-------	35,530	11,660	-------
(†)	5,558.10	5,561.50	5,564.25	5,547.85	5,560.47	5,557.90	5,583.60	5,599.05	5,605.05	5,599.32	5,566.05	5,548.15
(‡)	+3,610	+1,490	+1,300	-6,460	+4,700	-1,110	+14,690	+12,700	+5,670	-5,420	-23,870	-7,260

Calendar year 1957..... ‡ -
Water year 1957-58..... ‡ +40

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

3445. Little Truckee River at Boca, Calif.

Location.--Lat 39°23'10", long 120°05'40", in N½ sec. 28, T. 18 N., R. 17 E., on right bank 1,000 ft downstream from Boca Dam and 800 ft upstream from mouth.

Drainage area.--172 sq mi (revised).

Records available.--April to October 1890 (monthly discharge only), January 1911 to September 1915, October 1957 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 5,500 ft (from topographic map). Jan. 1, 1911, to Sept. 30, 1915, staff gage at site 650 ft downstream at different datum.

Average discharge.--5 years (1911-15, 1957-58), 215 cfs (155,700 acre-ft per year).

Extremes.--Maximum discharge during year, 1,590 cfs May 14 (gage height, 5.15 ft); maximum gage height, 5.30 ft May 14 (momentary surge caused by change in gates of Boca Dam); minimum daily discharge, 3.8 cfs Sept. 26-28.
1890, 1911-15, 1957-58: Maximum discharge observed, 2,870 cfs May 6, 1890; no flow Sept. 26 to Oct. 5, Oct. 10, 1911, Sept. 6, 7, Oct. 6-13, 1913.
Maximum discharge during flood in December 1955 was 8,800 cfs, from records of Washoe County Water Conservation District.

Remarks.--Records good. Flow regulated by Boca Reservoir (see preceding page), Independence Lake (capacity, about 17,500 acre-ft), and one transmountain diversion to Sierra Valley.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.5	3.2	1.4	60	3.5	537
.6	5.6	2.0	147	4.0	775
.7	9.0	2.5	247	5.1	1,550
.9	20	3.0	372		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	66	37	114	122	24	383	934	558	272	327	467
2	54	62	26	114	127	24	383	940	529	272	329	456
3	60	62	18	128	132	24	380	954	550	261	332	456
4	54	62	18	137	130	58	268	960	567	249	348	460
5	51	62	18	154	130	114	219	974	*576	265	356	415
6	52	62	18	176	128	138	219	1,130	442	254	356	394
7	52	62	18	158	127	160	217	*1,250	378	249	380	400
8	52	62	59	147	125	171	217	1,370	386	234	389	277
9	52	62	84	147	124	188	272	1,420	268	212	386	154
10	52	62	73	147	122	210	*292	1,450	444	206	386	88
11	58	64	68	145	122	210	292	1,470	558	176	400	38
12	61	64	68	145	120	210	294	1,480	571	168	406	16
13	61	62	64	145	102	210	296	1,450	584	162	403	15
14	52	60	61	144	68	210	304	1,500	567	203	415	16
15	48	60	61	147	56	210	312	1,490	594	*247	418	16
16	52	61	61	147	57	208	353	*1,430	638	208	415	16
17	55	61	61	147	57	*208	380	1,400	661	202	415	16
18	56	105	61	147	58	208	392	1,400	748	234	*409	14
19	56	133	61	147	59	208	456	1,450	764	234	463	13
20	56	133	61	145	60	208	499	1,490	666	234	481	13
21	46	135	61	144	38	208	584	1,490	616	232	412	13
22	47	*135	61	160	23	208	705	1,470	661	254	409	13
23	52	135	*146	186	24	208	710	1,110	675	263	430	13
24	*52	135	174	160	24	208	*710	1,100	602	263	437	13
25	52	115	160	147	*26	208	715	1,180	518	263	443	6.2
26	53	37	95	127	26	208	720	1,070	470	263	450	3.8
27	53	37	59	100	25	208	720	823	467	284	446	3.8
28	64	38	59	*106	24	302	726	805	400	296	456	*3.8
29	72	37	83	119	-	361	865	715	350	296	456	4.0
30	71	38	114	124	-------	361	928	638	302	294	446	37
31	72	-------	114	122	-------	*372	-------	643	-------	306	463	-------
Total	1,702	2,269	2,122	4,376	2,236	6,053	13,811	36,986	16,110	7,556	12,662	3,850.6
Mean	54.9	75.6	68.5	141	79.9	195	460	1,193	537	244	408	128
Ac-ft	3,380	4,500	4,210	8,680	4,440	12,010	27,390	73,360	31,950	14,990	25,110	7,640

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 1,500 Min 3.8 Mean 301 Ac-ft 217,700

* Discharge measurement made on this day.

3460. Truckee River at Farad, Calif.

Location.--Lat 39°25'41", long 120°01'59", in NE¼ sec. 12, T. 18 N., R. 17 E., on left bank 0.7 mile downstream from Farad powerplant, 3.4 miles downstream from Bronco Creek, 3.5 miles upstream from California-Nevada State line and 2.5 miles north of Floriston.
Drainage area.--940 sq mi.
Records available.--March to October 1890 (monthly discharge only), September 1899 to December 1943, August 1957 to September 1958. Published as "near Boca" March to October 1890; "at or near Nevaca-California State line" September 1899 to August 1912; "at Iceland" August 1912 to December 1937. Monthly discharge only for some periods, published in WSP 1314.
Gage.--Water-stage recorder. Datum of gage is 5,153.21 ft above mean sea level (Bureau of Reclamation bench mark). March to October 1890, staff gage at site about 7 miles upstream at different datum. Sept. 7, 1899, to May 31, 1909, staff gage at approximately same location at different datum. June 1, 1909, to July 31, 1912, staff gage at site about 2½ miles downstream at different datum. Aug. 1, 1912, to Dec. 31, 1937, water-stage recorder at site 4.1 miles upstream at different datum. Jan. 1, 1938, to Dec. 31, 1943, water-stage recorder at approximately same location at different datum.
Average discharge.--45 years (1899-1943, 1957-58), 813 cfs (588,600 acre-ft per year).
Extremes.--1957: Maximum discharge during period August to September, 623 cfs Sept. 18 (gage height, 3.03 ft); minimum daily, 503 cfs Sept. 30.
1957-58: Maximum discharge during water year, 6,360 cfs May 19 (gage height, 8.41 ft); minimum daily, 361 cfs Jan. 28.
1899-1943, 1957-58: Maximum daily discharge, 15,300 cfs Mar. 18, 1907 (gage height, 11.5 ft, datum then in use); minimum, 28 cfs Dec. 18, 1930.
Maximum discharge known, 17,500 cfs Nov. 21, 1950 (gage height, 14.5 ft, present datum, from floodmarks), from slope-area measurement of peak flow.
Remarks.--Records excellent. Flow regulated by Lake Tahoe (see p. 212), Boca Reservoir (see p. 220), Donner and Independence Lakes, and by several powerplants. Record of chemical analyses for the water year 1958 published in WSP 1574.

Discharge, in cubic feet per second, 1957

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1	-	526	7	-	526	13	-	526	19	-	594	25	-	534
2	-	526	8	-	526	14	-	526	20	-	539	26	-	530
3	-	512	9	-	526	15	-	526	21	-	534	27	-	516
4	-	516	10	-	526	16	-	526	22	-	508	28	-	516
5	-	521	11	-	526	17	-	548	23	-	*512	29	*526	526
6	-	526	12	-	530	18	-	613	24	-	526	30	521	503
												31	526	
Total													-	15,890
Mean													-	530
Runoff in acre-feet													-	31,520

* Discharge measurement made on this day.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	394	437	420	446	373	548	730	*4,170	4,050	878	*548	567
2	446	437	403	450	386	490	700	4,360	3,950	873	557	557
3	468	437	390	386	416	468	632	4,500	3,590	*851	544	*553
4	450	446	390	382	394	463	1,490	4,630	2,770	846	553	599
5	454	446	399	386	394	498	2,140	4,870	2,720	856	553	661
6	454	441	390	420	386	521	*2,310	5,080	2,010	834	539	670
7	459	437	390	411	386	508	2,320	5,120	1,700	824	553	680
8	450	441	424	394	399	521	2,330	5,160	1,710	785	562	608
9	446	441	459	390	390	512	2,390	*5,300	1,540	710	557	539
10	441	437	454	416	386	539	2,480	5,500	1,650	685	548	548
11	446	446	446	394	382	530	2,530	5,670	1,820	632	553	557
12	450	446	433	394	450	521	2,600	5,160	*1,760	623	557	548
13	472	454	433	386	468	508	2,690	4,950	1,670	590	548	544
14	516	613	450	386	428	508	2,830	4,970	1,650	618	553	548
15	454	508	516	390	424	498	2,960	5,060	1,720	661	548	548
16	446	476	785	399	476	508	3,110	5,190	1,930	599	580	553
17	441	454	642	394	530	490	3,320	5,360	2,070	553	585	553
18	441	498	539	390	424	481	3,520	5,610	2,200	599	562	553
19	446	544	539	386	494	481	3,650	5,920	2,180	562	585	548
20	463	494	526	394	485	516	3,830	5,840	1,950	576	690	544
21	441	472	521	390	437	*618	*4,120	5,710	1,870	553	553	548
22	433	*424	490	394	399	580	4,230	5,680	2,030	585	534	562
23	441	433	553	441	399	571	3,900	*5,680	1,990	599	539	571
24	*459	428	604	485	734	567	3,720	5,500	1,730	576	548	562
25	450	428	580	468	*1,670	553	3,650	5,440	1,520	553	548	553
26	446	411	530	468	986	544	3,710	5,300	11,420	557	553	548
27	437	407	468	416	741	544	3,780	5,010	*1,380	562	548	553
28	441	403	390	*361	632	618	3,830	4,760	1,230	571	557	590
29	446	394	416	378	-	700	3,900	4,570	1,080	562	557	580
30	446	420	*437	390	-------	700	4,020	4,420	980	544	548	516
31	446	-------	446	378	-------	*725	-------	*4,380	-------	539	557	-------
Total	13,923	13,553	14,863	12,563	14,469	16,829	87,422	158,870	59,870	20,356	17,317	17,061
Mean	449	452	479	405	517	543	2,914	5,125	1,996	657	559	569
Ac-ft	27,620	26,880	29,480	24,920	28,700	33,380	173,400	315,100	118,800	40,380	34,350	33,840

Calendar year 1957 : Max - Min - Mean - Ac-ft -
Water year 1957-58 : Max 5,920 Min 361 Mean 1,225 Ac-ft 886,800

Peak discharge (base, 1,600 cfs).--Feb. 25 (4 a.m.) 2,200 cfs (5.22 ft); May 19 (11:30 p.m.) 6,360 cfs (8.41 ft); June 19 (1 a.m.) 2,460 cfs (5.44 ft).

* Discharge measurement made on this day.

3473. Dog Creek near Verdi, Nev.

Location.--Lat 39°33'55", long 120°01'25", in SW¼SW¼ sec. 30, T. 20 N., R. 18 E., on left bank 3½ miles upstream from mouth and 4 miles northwest of Verdi.

Drainage area.--16.2 sq mi.

Records available.--October 1956 to September 1958.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5,660 ft (from topographic map).

Extremes.--Maximum discharge during year, 550 cfs Feb. 24 (gage height, 2.75 ft), from rating curve extended above 250 cfs; minimum daily, 0.2 cfs Oct. 1-12, July 31, Aug. 3-15, Aug. 21 to Sept. 30.

1956-58: Maximum discharge, that of Feb. 24, 1958; minimum daily, 0.2 cfs many days during July to October.

Maximum discharge known, 880 cfs Dec. 23, 1955, from slope-area measurement of peak flow.

Remarks.--Records good.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.1	0.1	0.5	5.4	1.0	47
.2	.3	.6	11	1.3	95
.3	.8	.8	25	1.7	190
.4	2.0				

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	0.4	0.4	0.7	0.9	16	16	*58	8.0	0.6	0.3	0.2
2	.2	.4	.3	.7	.9	15	11	63	8.0	.6	.3	.2
3	.2	.5	.3	.7	1.0	14	12	63	7.4	.6	.2	.2
4	.2	.5	.4	.6	1.0	12	15	63	6.4	.5	.2	.2
5	.2	.5	.5	.6	.9	13	14	67	5.4	.5	.2	.2
6	.2	.4	.4	.6	.9	12	14	63	5.0	.4	.2	.2
7	.2	.4	.5	.6	.9	*10	13	54	4.6	.4	.2	.2
8	.2	.4	.4	.6	1.1	9.2	14	48	4.6	.4	.2	.2
9	.2	.4	.4	.6	1.0	8.0	19	45	3.8	.3	.2	.2
10	.2	.4	.4	.7	1.0	8.0	32	45	4.6	.3	.2	.2
11	.2	.4	.4	.7	1.1	7.4	*50	53	5.0	.3	.2	.2
12	.2	.4	.4	.7	3.5	6.4	61	37	5.4	.3	.2	.2
13	.3	.5	.4	.7	8.0	5.9	93	33	4.2	.3	*.2	.2
14	.3	2.9	.5	.6	5.9	5.9	114	29	2.6	.3	.2	.2
15	*.3	.7	.9	.6	9.8	5.9	114	27	2.3	.3	.2	*.2
16	.3	.7	9.1	.6	21	6.4	*136	25	1.8	.4	.4	.2
17	.3	.5	1.4	.6	20	7.4	177	*24	1.6	.6	.3	.2
18	.3	1.0	.6	.6	20	8.0	*144	24	1.8	.5	.3	.2
19	.3	.9	.9	.6	26	10	126	24	1.8	.4	.3	.2
20	.6	.7	1.0	.6	23	19	136	23	1.4	.4	.3	.2
21	.6	*.5	1.0	.6	20	21	136	21	1.2	.3	.2	.2
22	.6	.4	.8	.5	21	19	99	20	1.1	.3	.2	.2
23	.7	.4	.8	.6	26	23	69	19	1.0	.5	.2	.2
24	.5	.5	.7	.6	190	23	60	16	.9	.4	.2	.2
25	.5	.5	.8	.7	92	21	57	15	*.9	.4	.2	.2
26	.4	.5	.9	.7	43	19	57	14	.8	.3	.2	.2
27	.4	.4	.8	.7	29	17	57	13	.7	.3	.2	.2
28	.4	.4	1.0	.7	22	19	57	12	.7	.3	.2	.2
29	.3	.3	1.4	.8	-	22	55	10	.6	.3	.2	.2
30	.4	.4	1.0	.9	-------	16	54	9.2	.7	.3	.2	.2
31	.4	-------	.8	.9	-------	20	-------	8.6	-------	.2	.2	-------
Total	10.3	17.3	29.6	20.4	590.9	419.5	2,012	1,025.8	94.3	12.0	7.0	6.0
Mean	0.33	0.58	0.95	0.66	21.1	13.5	67.1	33.1	3.14	0.39	0.23	0.20
Ac-ft	20	34	59	40	1,170	832	3,990	2,030	187	24	14	12

Calendar year 1957: Max 67 Min 0.2 Mean 2.90 Ac-ft 2,100
Water year 1957-58: Max 190 Min 0.2 Mean 11.6 Ac-ft 8,410

Peak discharge (base, 40 cfs).--Feb. 24 (8 p.m.) 550 cfs (2.75 ft); Apr. 17 (3 p.m.) 322 cfs (2.13 ft); May 5 (7 p.m.) 81 cfs (1.22 ft).

* Discharge measurement made on this day.

3480. Truckee River at Reno, Nev.

Location.--Lat 39°32', long 119°47', in sec. 12, T. 19 N., R. 19 E., on left bank 400 ft downstream from Kietzke Lane bridge, 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 1958.

Gage.--Water-stage recorder. Datum of gage is 4,431.97 ft above mean sea level (levels by Corps of Engineers). July 1906 to September 1919 staff gage at site 1 mile upstream at different datum.

Average discharge.--24 years, 826 cfs (598,000 acre-ft per year).

Extremes.--Maximum discharge during year, 6,090 cfs May 20 (gage height, 8.10 ft); minimum, 103 cfs July 30.
1906-19, 1947-58: Maximum discharge, 20,800 cfs Dec. 23, 1955, 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 good. Flow regulated by Lake Tahoe (see p. 212), Boca Reservoir (see p. 220), Donner and Independence Lakes, and by several powerplants. Many diversions above station.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 4 to Sept. 30)

2.2	145	5.0	1,780
3.0	450	7.0	4,010
4.0	1,010	9.0	7,180

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*242	428	405	455	410	605	796	3,870	3,760	545	178	201
2	242	423	418	460	410	550	760	4,020	*3,610	510	172	191
3	320	423	410	423	485	530	700	4,190	3,310	475	169	194
4	320	*436	405	405	436	500	1,340	4,310	2,440	465	160	210
5	316	450	405	400	*432	525	2,140	4,680	2,340	475	160	280
6	320	436	*382	428	428	570	*2,390	4,840	*1,740	441	160	296
7	328	441	387	436	423	530	2,440	4,850	1,440	436	151	324
8	340	432	387	*418	436	565	2,400	4,810	1,440	414	175	364
9	328	436	446	414	410	530	2,470	*5,040	1,280	344	178	238
10	316	428	450	436	405	565	2,600	5,200	1,310	320	175	228
11	324	432	436	414	414	560	2,660	5,510	1,550	276	163	242
12	332	436	428	410	540	555	2,700	4,750	1,500	328	163	242
13	348	436	432	410	575	535	2,870	4,470	1,490	296	163	242
14	414	610	441	396	490	545	3,070	4,370	1,400	265	157	246
15	387	530	480	410	470	535	3,180	4,540	1,420	276	*163	246
16	348	510	727	405	520	535	3,300	4,640	1,550	276	201	250
17	328	470	749	410	585	530	3,610	4,840	1,660	214	292	250
18	336	470	600	414	520	510	3,750	5,120	1,780	253	276	242
19	352	540	545	410	525	505	3,820	5,570	1,860	210	378	238
20	428	525	550	423	575	545	3,950	5,750	1,640	224	441	235
21	405	500	535	418	525	744	*4,230	5,620	1,510	201	316	235
22	414	455	520	400	460	656	4,430	*5,640	1,640	*204	292	246
23	418	436	485	446	465	630	3,930	5,560	1,630	265	246	288
24	436	436	625	500	918	*645	3,640	5,380	1,470	238	214	312
25	432	432	580	505	2,220	615	3,520	5,260	1,240	197	197	320
26	432	418	565	490	*1,210	590	3,510	5,160	1,110	185	197	*312
27	436	410	485	455	868	585	3,520	4,790	*1,070	166	188	300
28	436	387	441	410	722	600	3,600	4,460	868	178	191	320
29	436	382	414	405	-	716	3,690	4,300	727	185	204	328
30	432	396	441	470	-------	754	3,730	4,090	645	169	185	280
31	432	-------	441	414	-------	732	-------	4,020	-------	151	197	-------
Total	11,378	13,540	15,015	13,290	16,877	18,092	88,746	149,650	50,430	9,182	6,502	7,900
Mean	367	451	484	429	603	584	2,958	4,827	1,681	296	210	263
Ac-ft	22,570	26,860	29,780	26,360	33,480	35,880	176,000	296,800	100,000	18,210	12,900	15,670

Calendar year 1957: Max 3,000 Min 95 Mean 547 Ac-ft 396,200
Water year 1957-58: Max 5,750 Min 151 Mean 1,098 Ac-ft 794,500

Peak discharge (base, 1,600 cfs).--Feb. 25 (4:30 a.m.) 2,830 cfs (5.94 ft); May 20 (2 a.m.) 6,090 cfs (8.10 ft); June 19 (6 a.m.) 2,060 cfs (5.00 ft).

* Discharge measurement made on this day.

3517. Truckee River near Nixon, Nev.

Location.--Lat 39°46'40", long 119°20'10", in SW¼NW¼ sec. 18, T. 22 N., R. 24 E., on right bank 1 mile upstream from Pyramid Indian Reservation diversion dam, 4 miles south of Nixon, and 13 miles upstream from mouth.

Drainage area.--1,880 sq mi, approximately.

Records available.--October 1957 to September 1958.

Gage.--Water-stage recorder. Altitude of gage is 3,940 ft (from topographic map).

Extremes.--Maximum discharge during year, 5,160 cfs May 21 (gage height, 8.77 ft); minimum, 20 cfs Sept. 4, 9, 19, 20.
Flood of December 24, 1955, reached a stage of 14.1 ft, from floodmarks (discharge, 14,000 cfs, by flow-over-dam measurement of peak flow).

Remarks.--Records good. Flow regulated by Lake Tahoe (see p. 212), Boca Reservoir (see p. 220), Donner Lake, and Independence Lake. Truckee-Carson Canal often diverts practically all flow about 25 miles upstream out of basin to Lahontan Reservoir. Several diversions for irrigation between station and Truckee-Carson Canal. One irrigation canal diverts between station and mouth of river.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

2.4	20	3.5	189	6.0	1,530
2.7	45	4.0	348	7.0	2,600
3.0	85	5.0	830	9.0	5,500

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	37	34	35	31	*248	194	3,440	3,520	103	21	25
2	33	37	35	35	31	116	452	3,480	3,280	85	22	22
3	34	37	*34	35	32	84	600	3,520	3,050	*84	25	24
4	34	37	34	35	32	65	926	3,480	2,590	73	*30	22
5	33	37	34	34	31	57	*1,450	3,560	1,950	69	34	24
6	33	37	34	*34	31	53	1,990	*3,740	1,680	65	35	24
7	33	38	33	34	31	51	*2,220	3,960	1,150	61	32	29
8	33	37	33	34	31	50	2,180	4,120	938	61	29	*26
9	33	37	33	34	31	46	2,180	4,160	860	55	31	26
10	33	37	33	34	*31	45	2,240	4,260	*650	55	34	29
11	33	36	33	33	31	44	2,340	4,480	780	50	37	26
12	34	36	33	33	31	43	2,380	4,820	902	51	35	26
13	37	36	33	34	31	42	2,420	4,810	962	51	35	27
14	38	35	33	31	31	41	2,520	4,460	866	43	35	27
15	35	43	34	30	33	40	2,660	4,270	786	37	36	27
16	41	76	34	30	32	40	2,830	4,210	797	39	49	28
17	38	50	126	33	31	40	2,940	4,260	890	44	327	27
18	35	41	228	33	32	39	*3,170	4,380	980	45	444	24
19	33	38	148	33	31	38	3,370	4,540	1,080	39	498	21
20	36	37	103	33	30	38	3,440	4,860	1,110	36	405	23
21	37	44	74	33	28	39	3,550	*5,100	932	35	388	27
22	50	41	50	33	29	143	3,730	5,020	836	33	213	30
23	39	37	42	33	29	148	*3,980	4,990	908	36	172	29
24	36	36	40	33	28	105	3,880	4,940	920	35	105	33
25	35	35	41	33	378	99	3,640	4,820	748	31	82	37
26	35	35	45	34	*1,390	84	3,400	4,690	575	29	53	43
27	36	35	39	34	645	66	3,350	4,600	493	26	49	32
28	*36	35	38	33	352	61	3,340	4,390	396	24	45	30
29	36	35	38	32	-	57	3,420	4,100	267	23	40	29
30	37	34	37	32	-------	114	3,350	3,860	155	24	35	29
31	37	-------	35	31	-------	179	-------	3,640	-------	22	31	-------
Total	1,107	1,166	1,621	1,028	3,504	2,315	78,142	132,960	35,051	1,464	3,407	826
Mean	35.7	38.9	52.3	33.2	125	74.7	2,605	4,289	1,168	47.2	110	27.5
Ac-ft	2,200	2,310	3,220	2,040	6,950	4,590	155,000	263,700	69,520	2,900	6,760	1,640

Calendar year 1957: Max - Min - Mean - Ac-ft -
Water year 1957-58: Max 5,100 Min 21 Mean 719 Ac-ft 520,800

* Discharge measurement made on this day.

3525. 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 1958.

Gage.--Water-stage recorder and concrete control.

Average discharge.--10 years, 34.6 cfs (25,050 acre-ft per year).

Extremes.--Maximum discharge during year, 1,920 cfs Feb. 25 (gage height, 8.27 ft), from rating curve extended above 460 cfs as explained below; minimum, 0.4 cfs Sept. 2, 3, 10. 1948-58: Maximum discharge, 2,100 cfs Jan. 15, 1956 (gage height, 8.60 ft, from floodmark), from rating curve extended above 460 cfs on basis of slope-area measurements at gage heights 7.74 and 8.60 ft; no flow part of Aug. 12, 1954, Sept. 8-15, 1955 (result of temporary dams upstream); 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 tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 25)

Oct. 1 to Feb. 25				Feb. 26 to Sept. 30			
1.7	1.9	2.5	66	1.4	0.5	2.1	30
1.8	3.4	3.0	153	1.5	1.3	2.4	66
1.9	6.4	4.0	396	1.6	2.6	2.7	121
2.0	11	5.0	690	1.7	4.5	3.0	198
2.2	26	6.0	1,010	1.8	7.7	4.0	472
				1.9	14		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.2	5.6	5.0	8.0	22	110	86	123	63	33	7.7	0.6
2	2.8	5.6	5.0	7.5	21	95	86	*143	62	28	7.7	.5
3	3.0	5.6	4.5	6.0	20	86	95	148	84	27	7.7	.5
4	3.0	5.6	3.5	4.0	17	71	86	150	82	23	7.3	.6
5	5.3	5.6	7.0	6.5	25	68	79	158	62	20	6.5	.7
6	6.0	5.3	7.5	6.0	25	*62	89	161	55	18	5.8	.7
7	5.3	5.3	8.0	6.0	23	51	108	148	71	16	5.2	.7
8	4.4	5.6	6.0	6.0	24	53	119	135	89	13	4.7	.6
9	4.4	5.3	4.5	8.5	25	41	128	133	95	*12	3.1	.6
10	4.1	5.6	4.0	12	21	38	161	140	71	12	2.8	.5
11	4.1	6.0	*4.5	12	18	39	228	158	*71	12	2.3	*.5
12	4.1	6.0	5.5	11	26	37	238	161	77	11	*1.9	.6
13	4.1	9.8	6.5	10	27	36	284	126	69	10	1.5	.7
14	4.6	59	8.0	8.0	25	33	408	110	65	9.2	1.1	.9
15	5.0	28	9.4	10	66	34	436	104	60	9.2	1.0	1.0
16	4.6	16	9.8	8.5	244	30	450	*106	55	10	.9	1.0
17	4.4	11	10	8.0	221	36	461	106	55	13	1.3	1.0
18	*4.6	13	10	8.0	171	30	436	108	52	21	1.3	1.1
19	4.6	11	7.6	6.0	186	31	344	115	45	18	1.1	3.0
20	5.6	*9.0	10	8.0	179	38	346	121	45	15	1.1	3.5
21	6.0	7.0	9.0	7.0	*249	123	363	121	41	15	1.1	3.3
22	5.6	5.0	7.0	*5.0	253	131	*336	113	38	14	1.2	3.0
23	6.0	5.5	4.0	7.5	288	133	230	115	36	15	1.1	3.9
24	6.0	6.0	6.0	11	300	128	179	104	36	16	.9	4.1
25	6.0	6.5	8.0	11	882	104	153	96	34	15	.8	4.3
26	6.4	7.0	7.5	11	320	86	135	89	32	12	.8	4.5
27	6.8	4.0	6.0	11	*209	86	117	86	29	11	.8	4.3
28	6.4	5.0	9.0	13	145	*108	117	79	27	10	.8	4.3
29	5.6	3.0	7.0	35	-	121	106	74	27	9.2	.6	4.3
30	5.6	4.7	4.5	34	-------	113	108	69	29	9.2	.7	4.3
31	5.6	-------	6.0	23	-------	87	-------	68	-------	8.2	.7	-------
Total	153.2	277.6	210.3	328.5	4,032	2,239	6,512	3,668	1,657	465.0	81.5	59.6
Mean	4.94	9.25	6.78	10.6	144	72.2	217	118	55.2	15.0	2.63	1.99
Ac-ft	304	551	417	652	8,000	4,440	12,920	7,280	3,290	922	162	118

Calendar year 1957: Max 589 Min 1.4 Mean 37.2 Ac-ft 26,890
Water year 1957-58: Max 882 Min 0.5 Mean 53.9 Ac-ft 39,060

Peak discharge (base, 150 cfs).--Feb. 16 (8:30 p.m.) 464 cfs (4.28 ft); Feb. 25 (2:30 a.m.) 1,920 cfs (8.27 ft); Mar. 21 (11 p.m.) 193 cfs (2.97 ft); Mar. 29 (2 a.m.) 158 cfs (2.85 ft); Apr. 17 (10 p.m.) 639 cfs (4.57 ft); May 5 (3 a.m.) 179 cfs (2.93 ft).

* Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Nov. 16, 17, Nov. 20 to Dec. 14, Dec. 21 to Jan. 9, Jan. 13-23.

3530. 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 1958.

Gage.--Water-stage recorder.

Average discharge.--10 years, 29.7 cfs (21,500 acre-ft per year).

Extremes.--Maximum discharge during year, 727 cfs Apr. 17 (gage height, 7.34 ft); minimum, 2.0 cfs Oct. 1.
1948-58: Maximum discharge, 1,270 cfs Jan. 15, 1956 (gage height, 8.52 ft); minimum, 0.1 cfs Sept. 6, 7, 1955.

Remarks.--Records good except those for periods of no gage-height record or indefinite stage-discharge relation, and those for period when part of flow was bypassing gage, all of which are fair. No diversion above station.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.3	4.5	7.1	6.9	15	81	60	e174	38	13	3.6	2.6
2	2.3	4.3	7.1	7.4	14	72	66	*178	36	12	3.6	2.6
3	2.7	4.3	6.4	7.4	14	64	80	174	48	12	3.6	2.6
4	2.6	4.7	6.4	6.4	14	55	75	168	41	11	3.6	3.0
5	3.0	4.9	6.9	5.9	17	49	75	158	34	10	3.6	3.2
6	3.3	4.9	6.6	5.7	18	*46	77	144	31	9.7	3.6	3.0
7	3.3	4.9	6.9	5.7	17	39	87	129	30	9.0	3.6	2.8
8	3.3	5.1	6.9	5.7	20	40	91	120	39	8.4	3.6	2.8
9	3.3	5.1	5.7	5.6	19	38	104	114	37	*8.1	3.6	2.8
10	3.2	5.1	5.7	6.1	17	33	139	116	32	8.1	3.6	2.8
11	3.2	5.3	*5.5	6.1	16	32	168	120	*40	8.1	3.6	*2.8
12	3.0	5.3	5.5	6.1	28	32	170	129	48	7.6	*3.6	2.8
13	3.2	14	5.7	6.4	27	30	198	101	41	6.8	3.2	3.0
14	3.2	37	5.7	5.3	22	28	261	94	38	6.0	3.0	3.2
15	3.3	23	6.1	6.4	203	29	331	90	33	6.0	3.0	3.2
16	3.3	17	6.1	5.9	263	27	379	*88	29	6.5	2.8	3.0
17	3.3	14	7.1	5.9	183	28	471	86	27	7.5	3.0	3.0
18	*3.2	14	6.6	6.4	139	26	520	84	25	9.0	3.4	3.0
19	3.3	13	5.3	4.7	144	26	402	84	24	7.5	4.4	3.0
20	3.6	*11	7.1	5.5	150	28	432	82	23	5.0	4.5	3.0
21	3.6	9.6	7.1	6.1	*196	38	402	74	21	5.0	3.8	3.0
22	3.6	9.3	6.1	*4.7	215	51	*343	71	20	4.0	3.4	3.0
23	3.6	9.6	5.1	5.9	217	60	e229	69	19	5.0	3.2	3.4
24	3.6	9.6	6.6	6.6	196	62	e178	64	19	6.5	3.0	3.4
25	3.8	9.6	6.9	6.6	389	56	e153	60	18	6.0	3.0	3.4
26	4.5	9.3	7.4	6.6	210	52	e135	56	16	5.4	2.8	3.6
27	4.7	7.4	6.1	6.6	*136	52	e117	52	15	4.6	2.6	3.4
28	4.5	8.4	8.1	11	97	*56	e124	49	14	4.2	2.6	3.4
29	4.5	6.1	9.3	37	-	60	e134	47	14	3.9	2.6	3.4
30	4.5	7.1	7.4	32	-------	60	e147	43	14	3.6	2.8	3.4
31	4.7	-------	6.4	19	-------	56	-------	41	-------	3.6	2.6	-------
Total	107.5	287.4	202.9	263.6	2,996	1,406	6,148	3,059	864	223.1	102.9	91.6
Mean	3.47	9.58	6.55	8.50	107	45.4	205	98.7	28.8	7.20	3.32	3.05
Ac-ft	213	570	402	523	5,940	2,790	12,190	6,070	1,710	443	204	182

Calendar year 1957: Max 361 Min - Mean 35.0 Ac-ft 25,370
Water year 1957-58: Max 520 Min 2.3 Mean 43.2 Ac-ft 31,240

Peak discharge (base, 100 cfs).--Feb. 15 (4:30 p.m.) 414 cfs (5.63 ft); Feb. 25 (6 a.m.) 466 cfs* (6.02 ft); Apr. 17 (7:30 p.m.) 727 cfs (7.34 ft); May 2 (6:30 p.m.) 269 cfs (5.33 ft); May 12 (1 a.m.) 206 cfs (4.98 ft).

* Discharge measurement made on this day.
e Stage-discharge relation indefinite; discharge estimated by shifting-control method on basis of gage heights, 2 discharge measurements, weather records, and records for McDermitt Creek near McDermitt.

Note.--No gage-height record July 10 to Aug. 11; discharge estimated on basis of recorded range in stage, trend of flow, and records for McDermitt Creek near McDermitt. Beaver dam upstream caused part of flow to bypass gage Sept. 26-30; discharge estimated on basis of gage heights, trend of flow, and records for McDermitt Creek near McDermitt.

3535. Quinn River near McDermitt, Nev.

Location.--Lat 41°47', 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 4,240 ft (from river-profile map).

Average discharge.--10 years, 41.4 cfs (29,970 acre-ft per year).

Extremes.--Maximum discharge during year, 898 cfs Apr. 19 (gage height, 5.72 ft); minimum daily, 0.8 cfs Oct. 7, 15-19.
1948-58: 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. Several diversions above station for irrigation.

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

0.3	0.4	0.9	14	3.0	262
.4	1.0	1.2	29	4.0	462
.5	2.6	1.6	62	5.0	706
.6	4.8	2.0	109	5.7	892

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	0.9	0.9	1.3	2.6	315	160	293	75	12	1.7	1.2
2	.9	.9	.9	1.3	2.8	278	162	*284	68	11	1.7	1.2
3	.9	.9	.9	1.3	3.2	242	240	294	75	9.9	1.7	1.2
4	.9	.9	1.0	1.2	3.4	204	264	289	87	9.0	1.5	1.3
5	.9	.9	1.0	1.2	4.1	178	233	300	90	8.3	1.4	1.3
6	.9	.9	1.0	1.2	4.6	162	209	309	87	7.4	1.3	1.2
7	.8	.9	1.0	1.2	4.8	142	235	328	82	6.6	1.3	1.2
8	.9	.9	1.0	1.2	5.6	137	269	321	94	6.1	1.3	1.2
9	.9	.9	1.0	1.0	5.8	125	269	293	121	*5.6	1.3	1.2
10	.9	.9	1.0	1.2	6.4	112	275	282	132	5.1	1.2	1.0
11	.9	.9	*.9	1.2	6.1	98	308	276	*144	4.6	1.2	*1.0
12	.9	.9	.9	1.2	9.9	84	360	313	165	4.4	*1.3	1.2
13	.9	1.5	.9	1.3	11	76	405	308	158	3.9	1.3	1.2
14	.9	1.2	.9	1.2	13	71	429	275	144	3.6	1.3	1.2
15	.8	1.0	1.0	1.3	24	78	518	248	126	3.2	1.3	1.2
16	.8	1.0	1.0	1.3	38	78	645	*230	106	3.2	1.4	1.2
17	.8	1.0	1.0	1.4	126	73	737	214	90	3.2	1.3	1.3
18	*.8	1.0	1.0	1.4	154	64	833	201	76	3.0	1.4	1.3
19	.8	1.0	1.0	1.3	178	58	873	191	67	2.8	1.5	1.3
20	.9	*.9	1.0	1.3	215	55	819	185	60	2.6	1.4	1.3
21	.9	.9	1.2	1.4	*247	66	787	176	51	2.6	1.4	1.3
22	.9	.9	1.3	*1.3	284	72	*833	171	45	2.4	1.4	1.3
23	.9	.9	1.3	1.4	317	113	795	166	38	2.2	1.4	1.4
24	.9	.9	1.4	1.5	344	147	638	160	32	2.2	1.4	1.3
25	.9	.9	1.4	1.7	476	156	520	150	29	2.2	1.4	1.3
26	.9	.9	1.5	1.7	602	147	444	142	25	2.0	1.3	1.3
27	.9	.9	1.4	1.8	582	136	386	128	21	2.0	1.3	1.3
28	.9	.9	1.7	2.0	*422	*130	340	113	17	2.0	1.3	1.3
29	.9	.9	1.7	2.4	-	130	313	96	15	1.8	1.3	1.3
30	.9	.9	1.5	2.8	-------	154	298	89	13	1.8	1.3	1.2
31	.9	-------	1.4	2.6	-------	171	-------	82	-------	1.7	1.3	-------
Total	27.4	28.4	35.1	45.6	4,092.3	4,052	13,597	6,907	2,333	138.4	42.6	37.2
Mean	0.88	0.95	1.13	1.47	146	131	453	223	77.8	4.46	1.37	1.24
Ac-ft	54	56	70	90	8,120	8,040	26,970	13,700	4,630	275	84	74

Calendar year 1957: Max 485 Min 0.5 Mean 54.4 Ac-ft 39,400
Water year 1957-58: Max 873 Min 0.8 Mean 85.9 Ac-ft 61,400

* Discharge measurement made on this day.

3565. 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 August 1901 to January 1903), March to May 1913 (gage height only), February 1917 to June 1921, October 1950 to September 1958. Records for August to December 1901 and January 1903, published in WSP 300 have been found to be unreliable and should not be used.

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 powerplant about 0.9 mile upstream at various datums.

Average discharge.--14 years (1900-1901, 1903-5, 1917-20, 1950-58), 106 cfs (76,740 acre-ft per year).

Extremes.--1900: Maximum daily discharge determined during period June to September, 45 cfs June 1; minimum observed, 3.5 cfs Aug. 5, 6, 25, Sept. 13-24 (gage height, 2.35 ft).

1900-1901: Maximum discharge observed during water year, 1,050 cfs Feb. 23 (gage height, 6.30 ft); minimum observed, 3.0 cfs July 31 (gage height, 2.30 ft).

1902-3: Maximum discharge observed during water year, 2,280 cfs Mar. 30 (gage height, 8.00 ft); minimum observed, 3.3 cfs July 30 to Aug. 5 (gage height, 1.60 ft).

1903-4: Maximum discharge observed during water year, 2,190 cfs Feb. 22 (gage height, 9.9 ft); minimum observed, 6.8 cfs Oct. 1, 2 (gage height, 1.85 ft).

1957-58: Maximum discharge during year, 3,300 cfs Feb. 24 (gage height, 6.46 ft), from rating curve extended above 840 cfs as explained below; minimum, 7.2 cfs Sept. 21.

1900-1905, 1913, 1917-21, 1950-58: Maximum discharge, 3,540 cfs Dec. 23, 1955 (gage height, 6.62 ft), from rating curve extended above 840 cfs on basis of slope-area measurement of peak flow; minimum, 0.8 cfs Aug. 10, 1918 (site and datum then in use).

Revisions.--The figures of maximum discharge 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)
300	1901	Feb. 23, 1901	1,050	*6.30
300	1903	Mar. 30, 1903	2,280	*8.00
300	1904	Feb. 22, 1904	2,190	*9.9
300	1905	Dec. 30, 1904	725	7.6
510	1920	Apr. 15, 1920	570	-

* Observed.

Remarks.--Records good except those for periods of ice effect, which are fair, and those for period of no gage-height record, which are poor. 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. Records of chemical analyses for the water year 1957 are given in WSP 1574.

Revisions (water years).--WSP 1444: 1951, 1953-54(P). Revised figures of discharge for the water years 1900-1901 and 1903-4, superseding those published in WSP 300 and for high-water period in the water year 1920, superseding those published in WSP 510 are given herewith. See also Records available.

Apr. 15, 1920..... 350
Apr. 16, 1920..... 158

Month	Maximum	Minimum	Mean	Runoff in acre-feet
April 1920	350	-	99.7	5,930
Water year 1919-20	350	-	26.2	18,990
Calendar year 1920	350	-	30.3	21,990

Discharge, in cubic feet per second, 1900

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	45	11	5.0	4.0	11	23	5.0	4.0	4.0	21	26	4.0	4.0	3.5
2	40	9.5	4.0	4.0	12	20	4.0	4.0	4.0	22	23	4.0	4.0	3.5
3	40	9.5	4.0	4.0	13	29	4.0	4.0	3.5	23	23	4.0	4.0	3.5
4	37	8.0	4.0	4.0	14	29	4.0	4.0	3.5	24	23	5.0	4.0	3.5
5	33	8.0	3.5	4.0	15	29	4.0	4.0	3.5	25	20	5.0	3.5	4.0
6	29	8.0	3.5	4.0	16	33	4.0	4.0	3.5	26	18	5.0	4.0	4.0
7	29	7.0	4.0	4.0	17	29	4.0	5.0	3.5	27	12	5.0	4.0	4.0
8	26	7.0	5.0	4.0	18	26	4.0	5.0	3.5	28	14	5.0	5.0	4.0
9	23	7.0	4.0	4.0	19	26	4.0	5.0	3.5	29	11	5.0	4.0	4.0
10	23	6.0	4.0	4.0	20	26	4.0	4.0	3.5	30	8	5.0	4.0	4.0
										31		5.0	4.0	4.0
Total											773	174.0	128.5	114.0
Mean											15.8	5.61	4.15	3.80
Runoff in acre-feet											1,530	345	255	226

3565. Susan River near Susanville, Calif.--Continued

Discharge, in cubic feet per second, water year October 1900 to September 1901

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.0	9.5	23	37	29	700	208	464	152	9.5		
2	4.0	9.5	23	37	29	660	224	458	146	12		
3	11	9.5	23	37	29	513	198	454	133	14		
4	8.0	9.5	20	37	29	480	176	448	120	12		
5	8.0	9.5	20	37	29	464	176	448	104	11		
6	8.0	8.0	18	46	29	464	176	474	92	11		
7	8.0	11	18	46	29	496	146	480	89	8.0		
8	9.5	11	18	46	29	416	153	496	76	6.0		
9	9.5	11	18	42	29	416	120	496	68	7.0		
10	6.0	11	18	42	29	352	120	513	56	15		
11	6.0	11	18	42	29	336	146	523	46	16		
12	6.0	11	18	42	29	320	218	520	42	16		
13	6.0	11	18	37	29	240	288	530	37	15		
14	7.0	11	18	37	37	256	368	530	33	14		
15	8.0	11	18	37	46	272	416	496	33	14		
16	8.0	18	18	37	100	240	400	480	29	14		
17	8.0	18	23	37	448	240	416	464	29	14		
18	8.0	18	23	37	224	224	432	442	29	14		
19	18	18	29	37	192	224	486	406	26	13		
20	29	18	432	37	890	224	513	362	23	12		
21	18	368	304	37	530	246	513	320	20	11		
22	14	120	120	33	432	272	513	240	18	11		
23	14	68	68	33	1,050	250	480	256	16	11		
24	14	46	56	29	825	256	464	240	14	11		
25	12	120	46	29	740	352	496	256	14	10		
26	8.0	56	37	29	565	336	480	218	12	8.9		
27	8.0	46	37	29	720	320	454	208	11	6.6		
28	9.5	46	37	29	760	304	426	192	11	4.6		
29	9.5	37	29	29	-	256	660	192	9.5	4.0		
30	11	29	29	29	-------	234	486	176	8.0	3.5		
31	9.5	-------	29	29	-------	192	-------	161	-------	3.0		-------
Total	307.5	1,180.5	1,606	1,122	7,936	10,555	10,332	11,943	1,498.5	332.1	-	-
Mean	9.92	39.4	51.8	36.2	283	340	344	385	49.9	10.7	-	-
Ac-ft	610	2,340	3,190	2,230	15,740	20,940	20,490	23,690	2,970	659	-	-

Calendar year : Max - Min - Mean - Ac-ft -
Water year 1900-1901: Max 1,050 Min - Mean 129 Ac-ft 93,250

Note.--Yearly figure partly estimated; some monthly figures not available.

Discharge, in cubic feet per second, March to September 1903

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						23	600	416	90	12	3.3	4.5
2						23	416	416	90	11	3.3	4.5
3						23	336	416	84	11	3.3	4.5
4						23	321	416	84	9.7	3.3	5.2
5						23	280	390	77	9.7	3.3	5.2
6						23	245	384	77	8.6	3.9	5.2
7						23	245	352	72	8.6	3.9	5.2
8						23	280	327	72	7.6	3.9	5.2
9						26	321	214	66	7.6	3.9	5.9
10						26	368	249	66	6.8	3.9	5.9
11						34	321	293	62	6.8	3.9	5.9
12						66	293	280	62	6.8	3.9	5.9
13						84	293	273	54	6.8	3.9	6.8
14						96	268	256	48	5.2	3.9	6.8
15						90	261	238	42	5.2	3.9	6.8
16						84	256	230	35	5.2	3.9	6.8
17						74	256	208	29	5.2	3.9	6.8
18						59	256	198	27	5.2	3.9	6.8
19						54	256	189	26	5.2	3.9	6.8
20						57	280	171	24	4.5	3.9	6.8
21						77	285	176	23	4.5	3.9	6.8
22						90	336	152	21	3.9	3.9	6.8
23						145	374	140	19	3.9	3.9	6.8
24						130	406	133	17	3.9	3.9	6.8
25						214	432	123	17	3.9	4.5	6.8
26						252	480	116	15	3.9	4.5	6.8
27						234	422	110	14	3.9	4.5	6.8
28						448	400	106	14	3.9	4.5	6.8
29						496	390	103	14	3.9	4.5	6.8
30					-------	2,280	390	96	12	3.3	4.5	6.8
31		-------			-------	900	-------	96	-------	3.3	4.5	-------
Total						6,200	10,067	7,267	1,353	191.0	122.1	185.5
Mean						200	336	234	45.1	6.16	3.94	6.18
Ac-ft						12,300	19,970	14,410	2,680	379	242	368

Calendar year : Max Min Mean Ac-ft
Water year : Max Min Mean Ac-ft

3565. Susan River near Susanville, Calif.--Continued

Discharge, in cubic feet per second, water year October 1903 to September 1904

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.8	11	68	19	15	256	475	312	262	80	20	13
2	6.8	11	59	17	15	432	490	288	250	116	20	12
3	7.6	11	50	17	15	496	490	288	240	116	18	10
4	7.6	23	42	17	15	700	535	300	230	116	24	10
5	7.6	23	35	15	17	565	520	325	230	104	42	10
6	7.6	15	28	15	17	660	568	475	210	110	42	10
7	8.6	12	26	15	17	800	568	620	210	104	42	10
8	8.6	12	26	15	17	1,290	620	638	200	55	42	10
9	9.7	12	24	15	17	780	672	690	190	42	42	10
10	11	12	23	17	17	680	800	708	190	42	42	10
11	11	12	22	19	17	496	900	800	172	36	36	13
12	11	138	20	19	19	400	980	860	156	36	36	14
13	11	77	21	19	19	321	1,120	940	156	33	36	14
14	11	720	21	19	19	352	1,200	960	156	30	36	14
15	11	103	21	17	145	400	1,275	920	149	30	36	14
16	11	57	34	17	1,490	293	1,080	900	156	30	36	14
17	11	33	37	17	400	825	980	840	156	30	36	14
18	11	31	31	17	256	1,350	980	820	142	30	36	14
19	11	28	28	17	152	1,490	1,000	708	142	30	36	16
20	11	234	26	19	110	1,140	780	655	135	30	36	16
21	11	480	26	19	185	800	672	655	128	27	36	16
22	11	293	26	19	2,190	680	602	620	128	24	36	16
23	11	268	23	19	825	555	535	620	128	24	36	24
24	11	204	23	19	1,970	456	490	620	128	30	36	36
25	11	168	21	19	1,000	426	475	585	116	50	36	30
26	11	138	21	19	680	412	460	535	104	46	27	24
27	11	110	21	17	480	426	445	460	92	42	16	20
28	11	103	21	15	306	840	415	430	92	39	16	20
29	11	93	19	15	256	720	415	375	80	39	14	18
30	11	80	19	15	-------	625	312	350	80	36	13	18
31	11	-------	19	15	-------	504	-------	312	-------	27	13	-------
Total	312.9	3,512	881	533	10,681	20,170	20,854	18,609	4,808	1,584	973	470
Mean	10.1	117	28.4	17.2	368	651	695	600	160	51	31	16
Ac-ft	621	6,970	1,750	1,060	21,190	40,000	41,355	36,893	9,521	3,136	1,906	952

Calendar year 1903: Max - Min - Mean - Ac-ft -
Water year 1903-4: Max 2,190 Min 6.8 Mean 228 Ac-ft 165,400

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	12	b15	34	54	224	178	609	244	43	130	8.2
2	9.0	13	b14	31	52	190	158	700	248	42	131	8.1
3	9.2	12	*b14	b25	67	172	150	756	255	39	135	7.9
4	9.6	13	b15	26	62	149	136	825	224	36	136	8.2
5	20	13	17	b23	66	136	128	879	208	34	136	8.4
6	19	12	16	24	64	*131	128	825	178	35	135	8.2
7	19	13	16	22	79	112	138	807	161	36	135	8.4
8	15	15	15	23	120	110	165	807	130	34	136	8.6
9	13	15	b15	b19	a100	95	198	816	123	32	135	9.0
10	12	15	b15	28	a90	93	237	843	123	*30	133	8.6
11	11	16	b15	26	a80	89	273	978	145	28	130	8.4
12	9.8	16	b15	26	a110	83	299	960	416	26	131	8.6
13	19	25	b15	b21	a120	80	352	852	440	25	126	8.8
14	21	92	16	b21	a100	77	420	780	344	24	115	9.0
15	15	37	20	24	a85	77	470	724	268	24	100	8.6
16	13	28	119	26	a80	75	500	693	147	26	38	8.5
17	12	24	71	25	a70	74	609	623	122	34	22	7.8
18	11	23	42	b18	a80	78	574	630	109	28	16	8.6
19	11	23	38	b22	a110	89	581	*609	109	128	13	8.8
20	14	22	40	b22	a110	135	616	352	106	152	14	8.2
21	15	21	55	b18	a90	229	672	290	90	136	*13	7.4
22	13	18	b45	b22	a80	198	686	271	83	140	12	7.8
23	13	b17	b37	26	a75	204	490	266	75	145	10	11
24	*16	b17	38	24	a300	198	392	262	70	140	9.8	9.7
25	15	b17	31	24	1,360	186	368	278	66	136	9.4	9.4
26	15	18	33	26	586	163	360	311	60	135	9.0	9.4
27	14	b15	30	25	377	152	360	308	56	135	8.6	9.0
28	11	b15	49	34	281	150	376	299	51	136	8.5	8.8
29	10	b15	54	120	-	158	420	320	49	136	8.2	8.6
30	12	b15	b35	124	-------	206	542	296	48	133	8.2	8.4
31	12	-------	b35	69	-------	178	-------	266	-------	131	8.4	-------
Total	419.6	607	985	998	4,848	4,291	10,976	18,235	4,748	2,359	2,152.1	258.4
Mean	13.5	20.2	31.8	32.2	173	138	366	588	158	76.1	69.4	8.61
Ac-ft	832	1,200	1,950	1,980	9,620	8,510	21,770	36,170	9,420	4,680	4,270	513

Calendar year 1957: Max 1,150 Min 5.6 Mean 72.3 Ac-ft 52,320
Water year 1957-58: Max 1,360 Min 7.4 Mean 139 Ac-ft 100,900

Peak discharge (base, 300 cfs).--Dec. 16 (3 p.m.) 356 cfs (3.59 ft); Feb. 24 (time unknown) 3,300 cfs (6.46 ft); Apr. 21 (12 p.m.) 861 cfs (4.39 ft); May 11 (7 p.m.) 1,070 cfs (4.62 ft); June 12 (7 p.m.) 530 cfs (3.95 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage, weather records, and records for Willow Creek near Susanville.
b Stage-discharge relation affected by ice.

3585. 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 1958.

Gage.--Water-stage recorder. Datum of gage is 4,836.27 ft above mean sea level, unadjusted.

Average discharge.--8 years, 33.2 cfs (24,040 acre-ft per year).

Extremes.--Maximum discharge during year, 398 cfs Feb. 25 (gage height, 4.55 ft); minimum, 13 cfs Sept. 1.
1950-58: Maximum discharge, 712 cfs Dec. 23, 1955 (gage height, 5.36 ft), from rating curve extended above 420 cfs on basis of logarithmic plotting; 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.

Revisions (water years).--WSP 1445: 1952(M).

Rating tables, water year 1957-58 (gage height, in feet and discharge, in cubic feet per second)

Oct. 1 to Feb. 25				Feb. 26 to Sept. 30			
2.3	15	3.2	100	2.2	12	3.0	70
2.4	20	3.6	162	2.3	15	3.5	139
2.6	33	4.0	245	2.5	26	4.0	240
2.8	52	4.5	380	2.7	41	4.5	380

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	22	21	38	90	122	214	56	17	23	22	14
2	16	31	21	38	72	114	203	53	18	31	21	14
3	16	30	23	38	93	112	196	50	18	33	21	14
4	16	30	*30	35	114	99	198	48	18	33	20	14
5	16	30	32	33	108	93	157	47	17	32	25	14
6	16	30	32	31	94	*86	134	46	17	30	20	14
7	18	21	33	32	89	80	116	44	17	28	17	14
8	18	21	32	33	122	78	106	42	16	27	16	14
9	18	26	32	33	115	73	92	44	16	26	16	15
10	18	29	31	35	90	74	86	44	18	*25	18	16
11	20	33	31	38	75	70	81	55	20	24	18	16
12	24	32	30	39	125	66	72	66	44	24	18	16
13	25	33	30	38	138	66	64	67	50	20	19	18
14	26	40	30	36	96	66	59	57	45	16	19	18
15	26	41	34	35	84	70	58	54	38	15	22	18
16	27	39	64	34	94	85	59	51	33	15	22	18
17	30	36	81	38	92	104	62	47	31	17	21	19
18	30	34	74	38	84	125	66	45	30	20	20	20
19	23	36	64	35	117	114	68	*39	28	20	18	20
20	20	35	74	33	113	108	71	35	28	20	18	26
21	23	32	86	33	90	172	73	28	26	20	18	26
22	27	32	70	31	78	186	*74	28	23	20	*18	26
23	*29	32	58	32	74	144	76	25	23	20	16	26
24	29	37	53	34	177	110	74	23	22	21	15	26
25	29	36	57	38	371	91	72	23	21	20	15	26
26	30	36	60	44	332	78	69	23	20	20	16	27
27	30	36	57	52	220	68	66	22	20	20	16	27
28	29	35	62	58	152	67	64	20	20	20	14	26
29	29	32	62	98	-	63	63	19	20	21	14	25
30	28	21	51	133	-------	95	59	18	21	21	14	24
31	21	-------	42	128	-------	172	-------	18	-------	22	14	-------
Total	724	958	1,457	1,391	3,499	3,051	2,852	1,237	735	704	561	591
Mean	23.4	31.9	47.0	44.9	125	98.4	95.1	39.9	24.5	22.7	18.1	19.7
Ac-ft	1,440	1,900	2,890	2,760	6,940	6,050	5,660	2,450	1,460	1,400	1,110	1,170

Calendar year 1957: Max 528 Min 12 Mean 34.3 Ac-ft 24,840
Water year 1957-58: Max 371 Min 14 Mean 48.7 Ac-ft 35,230

Peak discharge (base, 200 cfs).--Feb. 25 (6 p.m.) 398 cfs (4.55 ft); Apr. 1 (7 p.m.) 299 cfs (3.95 ft).

* Discharge measurement made on this day.

3595. 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 1958.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5,700 ft (from topographic map).

Average discharge.--8 years, 8.54 cfs (6,180 acre-ft per year).

Extremes.--Maximum discharge during year, 153 cfs Feb. 25, May 21 (gage height, 3.92 ft), from rating curve extended above 100 cfs by logarithmic plotting; minimum daily, 0.5 cfs Dec. 11.

1950-58: Maximum discharge, 174 cfs Dec. 23, 1955 (gage height, 3.95 ft), from rating curve extended above 90 cfs by logarithmic plotting; no flow Sept. 1, 2, 6-9, 11-13, 1955.

Remarks.--Records good except those for periods of ice effect, which are poor. No regulation or diversion above station.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.6	0.6	3.0	11	3.4	48
2.7	1.6	3.1	16	3.6	87
2.8	3.4	3.2	23	3.8	135
2.9	6.6	3.3	33		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1	1.9	b1.5	1.4	1.8	3.9	2.0	13	55	11	4.2	2.4
2	2.4	b1.6	b1.3	1.4	1.7	4.6	1.8	17	59	10	4.8	2.4
3	2.8	b1.4	b1.2	1.4	1.6	4.6	2.0	19	49	9.3	4.6	2.4
4	2.2	b1.4	*b1.0	1.4	1.6	3.9	1.9	21	41	8.9	4.2	2.4
5	2.8	b1.4	1.0	1.6	1.3	3.9	1.9	26	40	8.5	3.9	2.2
6	3.4	b1.6	1.0	1.6	1.3	3.6	1.9	32	37	8.1	3.9	2.2
7	3.4	b1.7	1.0	1.4	1.3	*3.4	1.9	33	33	7.7	3.6	*2.4
8	4.6	b1.9	b.7	1.6	1.3	3.4	1.9	35	32	7.7	3.9	2.4
9	5.5	b2.0	b.7	1.4	1.3	2.8	2.0	43	31	7.3	3.9	2.4
10	3.9	b2.4	b.7	1.4	1.2	3.4	2.4	46	28	*7.3	3.6	2.2
11	3.4	b2.8	b.5	1.3	1.2	2.8	2.8	60	26	6.6	3.4	2.0
12	2.8	2.6	b.6	1.3	1.4	2.8	3.4	59	61	6.6	3.4	2.0
13	4.8	6.4	b.7	1.3	1.6	2.8	3.6	62	41	6.6	3.4	2.0
14	3.4	13	1.2	1.3	1.4	2.6	4.8	76	28	6.6	3.4	1.9
15	2.2	b4.2	1.2	1.2	1.6	2.6	5.2	76	24	6.6	3.1	1.9
16	1.9	b3.9	5.7	1.2	2.2	2.6	5.8	81	21	6.6	3.4	1.9
17	1.8	b3.1	5.9	1.2	2.8	2.4	6.6	85	20	6.6	3.9	1.9
18	1.6	b3.4	1.3	1.2	3.4	2.4	6.6	103	20	6.6	3.9	1.9
19	1.6	4.6	1.3	1.2	3.6	2.4	6.9	103	29	6.3	3.4	1.8
20	1.9	4.6	2.2	1.2	3.9	2.6	7.7	*110	17	5.8	3.6	1.8
21	2.4	3.6	1.8	1.2	3.9	2.4	8.9	122	15	5.5	3.4	1.9
22	2.0	b4.0	1.3	1.1	3.6	2.4	9.3	115	14	6.3	3.1	1.9
23	*3.4	b4.0	1.8	1.2	3.6	2.2	*8.1	108	14	6.6	3.1	2.8
24	4.6	b3.8	1.7	1.2	4.6	2.2	7.7	108	13	6.6	3.1	2.4
25	2.6	b3.6	1.6	1.2	49	2.2	7.7	103	12	6.6	2.8	2.2
26	2.2	b3.3	1.4	1.2	26	2.0	8.1	94	11	5.5	2.6	2.2
27	2.0	b3.2	1.3	1.2	5.2	2.0	8.9	87	10	4.8	2.6	2.2
28	1.9	b2.7	1.3	1.2	4.6	2.0	9.3	76	10	4.8	2.6	2.2
29	1.8	b2.1	1.3	1.8	-	1.9	9.8	72	12	5.8	2.6	2.0
30	1.8	b2.1	1.3	2.0	-------	1.9	11	66	12	4.8	2.4	2.0
31	1.9	-------	1.3	2.2	-------	2.0	-------	62	-------	4.6	2.2	-------
Total	86.1	98.3	46.8	42.5	138.0	86.7	161.9	2,113	806	212.6	106.0	64.3
Mean	2.78	3.28	1.51	1.37	4.93	2.80	5.40	68.2	26.9	6.86	3.42	2.14
Ac-ft	171	195	93	84	274	172	321	4,190	1,600	422	210	128

Calendar year 1957: Max 87 Min 0.5 Mean 3.88 Ac-ft 2,810
Water year 1957-58: Max 122 Min 0.5 Mean 10.9 Ac-ft 7,860

Peak discharge (base, 35 cfs).--Feb. 25 (10 p.m.) 153 cfs (3.92 ft); May 21 (6 p.m.) 153 cfs (3.92 ft); June 12 (5 p.m.) 74 cfs (3.59 ft).

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

3660. 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 8 miles downstream from confluence of Twelvemile and Fifteenmile Creeks (revised) 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, and March 1921 to June 1922 (published as "near Warner Lake"), September 1940 to November 1944, March 1945 to September 1958.

Gage.--Water-stage recorder and concrete control. Datum of gage is 4,560.83 ft above mean sea level, datum of 1929, supplementary adjustment of 1947. Prior to Sept. 21, 1940, staff gage or water-stage recorder at sites within 1 mile downstream at various datums. Sept. 21, 1940, to Nov. 30, 1944, water-stage recorder at site 1¼ miles upstream at different datums. Mar. 12, 1945, to June 28, 1952, water-stage recorder at site 70 ft upstream at datum 0.88 ft higher.

Average discharge.--23 years (1910-15, 1918-19, 1940-44, 1945-58), 51.6 cfs (37,360 acre-ft per year).

Extremes.--Maximum discharge during year, 2,340 cfs Feb. 24 (gage height, 12.01 ft), from rating curve extended above 630 cfs as explained below; minimum, 1.0 cfs Nov. 28 (gage height, 2.02 ft).
1910-19, 1921-22, 1940-58: Maximum discharge, 3,260 cfs Dec. 23, 1955 (gage height, 14.80 ft), from rating curve extended above 630 cfs on basis of contracted-opening measurement of peak flow; no flow for part of Sept. 7, 1955.

Remarks.--Records good except those for periods of ice effect or drawdown from diversion, which are poor. No regulation. Diversions for irrigation of 240 acres above station.

Revisions (water years).--WSP 1090: 1945. WSP 1514: 1951-53, 1954(M).

Rating table, water year 1957-58, except periods of ice effect or drawdown from diversion (gage height, in feet, and discharge, in cubic feet per second)

2.1	1.9	3.0	100	6.0	710
2.2	3.5	3.5	190	7.0	935
2.3	7.0	4.0	290	9.0	1,430
2.5	25	5.0	500		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.9	4.6	4.9	b8	66	143	184	102	127	34	4.2	3.5
2	4.6	4.6	4.2	b10	48	129	110	112	115	48	3.5	3.5
3	4.9	4.2	4.2	7.0	40	125	159	129	136	38	5.6	3.5
4	4.9	4.2	4.9	6.3	43	106	130	129	112	31	4.2	3.5
5	5.6	4.6	5.6	4.9	42	80	108	143	106	30	3.3	3.5
6	6.0	b4.5	5.2	*b8.5	67	76	117	164	110	25	3.2	3.5
7	5.6	4.6	6.0	7.8	100	44	104	148	104	23	3.0	3.8
8	5.2	4.6	5.2	6.3	109	40	106	170	98	22	3.0	3.5
9	4.9	4.6	b4.5	6.6	112	42	150	176	102	21	4.6	3.5
10	4.6	4.2	b4	6.6	92	32	270	202	90	15	3.5	3.5
11	4.6	4.6	4.6	6.3	*58	30	359	290	82	7.8	3.0	3.8
12	4.6	4.2	*b5	6.6	510	28	391	260	94	6.6	2.6	3.8
13	5.6	8.6	5.2	5.6	303	31	468	174	82	7.8	2.4	4.2
14	5.6	72	5.6	b5.5	115	28	504	164	78	6.6	2.3	4.6
15	5.2	18	6.3	b5.5	618	30	471	*178	68	6.6	2.9	4.9
16	5.2	9.4	13	b5.5	1,200	37	464	188	58	8.6	4.2	*4.2
17	4.9	6.0	32	b5.5	*741	85	582	204	66	11	4.2	3.5
18	4.6	6.3	17	b5.2	584	143	441	224	68	19	4.6	3.8
19	4.6	5.6	8.6	4.9	774	127	319	272	76	15	*5.2	3.8
20	4.9	5.2	8.6	b5	586	318	324	240	78	16	6.3	3.8
21	4.9	4.6	b8	b5	542	376	274	228	61	*13	6.6	3.8
22	4.6	3.8	b7.5	4.9	485	192	240	232	58	11	6.3	4.2
23	*4.6	4.9	b7	b5.5	483	176	*166	246	55	10	5.6	5.6
24	6.6	4.9	b7.5	6.3	1,160	192	156	232	*61	11	4.9	5.2
25	5.2	4.9	7.8	6.6	881	136	145	208	46	9.4	4.2	4.9
26	4.9	5.2	b7	6.6	315	249	127	206	42	7.0	3.8	4.6
27	4.9	4.9	b8	6.3	240	208	104	204	37	4.9	3.8	4.2
28	4.6	4.2	b8	8.6	182	146	100	186	36	5.6	3.5	3.8
29	4.6	3.8	b7	120	-	124	98	160	31	4.2	3.5	3.5
30	4.6	4.6	b6	143	-------	120	91	141	34	3.3	3.8	3.5
31	4.6	-------	b7	92	-------	144	-------	141	-------	3.2	3.8	-------
Total	155.1	230.4	235.4	532.4	10,496	3,737	7,262	5,853	2,311	474.6	126.2	119.0
Mean	5.00	7.68	7.59	17.2	375	121	242	189	77.0	15.3	4.07	3.97
Ac-ft	308	457	467	1,060	20,820	7,410	14,400	11,610	4,580	941	250	236

Calendar year 1957: Max 1,260 Min 2.4 Mean 53.3 Ac-ft 38,610
Water year 1957-58: Max 1,200 Min 2.4 Mean 86.4 Ac-ft 62,540

Peak discharge (base, 400 cfs).--Feb. 12 (2 p.m.) 966 cfs (7.13 ft); Feb. 16 (7 p.m.) 1,350 cfs (8.69 ft); Feb. 24 (9 p.m.) 2,340 cfs (12.01 ft); Mar. 20 (9:30 p.m.) 800 cfs (6.41 ft); Mar. 26 (7 p.m.) 594 cfs (5.45 ft); Apr. 17 (7 p.m.) 1,090 cfs (7.65 ft).

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--Drawdown from diversion Aug. 12 to Sept. 30.

3700. 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 November 1914, March to May 1915, December 1949 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 5,472.41 ft above mean sea level (Oregon State Highway Department bench mark). Sept. 11, 1912, to May 9, 1915, water-stage recorder or staff gage at site 500 ft upstream at different datum.

Average discharge.--10 years (1912-14, 1950-58), 52.9 cfs (38,300 acre-ft per year).

Extremes.--Maximum discharge during year, 590 cfs Apr. 21, May 12 (gage height, 3.80 ft); minimum, 4.8 cfs Sept. 10, 11 (gage height, 0.49 ft).
1912-15, 1949-58: Maximum discharge, 1,630 cfs Dec. 22, 1955 (gage height, 5.15 ft), from rating curve extended above 340 cfs on basis of slope-area measurement of peak flow; minimum, 1.5 cfs Aug. 4, 1955.

Remarks.--Records fair except those for periods of ice effect or no gage-height record, which are poor. No regulation. Diversions for irrigation of 1,200 acres above station.

Revisions.--WSP 410: Drainage area.

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

0.5	5.0	1.5	66	3.0	325
.7	12	2.0	127	3.5	475
1.0	28	2.5	215	3.7	550

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.8	8.4	b8	b18	47	95	43	280	93	26	7.7	5.3
2	9.2	8.0	b8	19	36	84	37	322	91	33	8.0	5.3
3	12	8.4	b8	18	29	76	40	348	140	27	8.4	5.3
4	14	10	b8.5	16	27	a60	35	371	118	23	8.0	5.3
5	14	10	b9	b15	22	a50	35	395	89	21	7.4	5.3
6	16	10	9.2	b14	20	a45	37	410	88	19	7.1	5.3
7	18	9.6	10	b13	22	a40	37	383	77	18	6.8	5.3
8	18	9.6	b10	b13	23	a35	40	410	72	16	6.5	5.3
9	16	9.6	b10	*b13	24	a30	55	407	69	16	7.1	5.3
10	16	9.6	b10	b14	28	a28	98	404	62	14	6.8	5.3
11	14	9.6	b10	b15	34	a26	116	506	59	14	6.5	5.0
12	13	10	b11	b16	37	a25	130	472	77	13	6.2	5.3
13	12	37	*b12	b17	40	a25	164	371	65	12	5.9	6.5
14	14	b50	b14	18	39	a25	239	345	57	12	5.9	6.8
15	14	b35	16	18	68	a26	298	*325	51	11	5.9	6.8
16	14	b30	23	18	197	a28	330	308	45	12	6.5	*6.8
17	12	b25	34	16	187	a30	440	295	41	14	7.1	5.9
18	10	b22	27	16	148	35	489	280	39	24	8.4	5.6
19	10	b20	24	b15	168	37	492	269	*39	19	*8.0	5.6
20	8.8	b18	20	b14	174	41	510	247	38	16	7.7	5.3
21	8.8	b16	18	b14	*176	47	526	221	35	*13	7.7	5.0
22	8.4	b15	b16	15	162	51	489	201	32	12	7.4	5.9
23	*8.0	b14	b15	b14	184	56	377	184	33	14	7.1	8.0
24	8.4	b13	b16	b14	290	60	318	173	39	12	6.5	10
25	9.2	b12	b18	b14	330	55	253	149	36	11	6.2	7.4
26	9.6	b11	b19	b15	221	52	219	132	32	10	6.2	6.8
27	10	b10	20	b16	164	52	199	118	28	10	5.9	6.5
28	9.6	b9.5	20	18	122	55	201	106	25	9.2	5.9	6.5
29	9.2	b9	20	26	-	53	215	99	25	8.8	5.6	6.2
30	9.2	b8	b18	38	-------	47	235	91	25	8.4	5.6	6.2
31	8.8	-------	b15	35	-------	40	-------	95	-------	8.0	5.6	-------
Total	363.0	467.3	476.7	535	3,019	1,409	6,697	8,717	1,720	476.4	211.6	181.1
Mean	11.7	15.6	15.4	17.3	108	45.5	223	281	57.3	15.4	6.83	6.04
Ac-ft	720	927	946	1,060	5,990	2,790	13,280	17,290	3,410	945	420	359

Calendar year 1957: Max 382 Min 4.0 Mean 48.5 Ac-ft 35,120
Water year 1957-58: Max 526 Min 5.0 Mean 66.5 Ac-ft 48,140

Peak discharge (base, 200 cfs).--Feb. 16 (6 to 9 p.m.) 217 cfs (2.51 ft); Feb. 24 (10 p.m.) 447 cfs (3.42 ft); Apr. 21 (2 a.m.) 590 cfs (3.80 ft); May 12 (2 a.m.) 590 cfs (3.80 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Deep Creek above Adel and Drake Creek near Adel.
b Stage-discharge relation affected by ice.

3710. 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 1958.

Gage.--Water-stage recorder. Datum of gage is 5,076.42 ft above mean sea level (Oregon State Highway Department construction survey bench mark). Mar. 18 to May 10, 1915, and Dec. 21, 1922, to May 9, 1923, staff gage at site 400 ft upstream at different datums. Dec. 16, 1949, to June 21, 1951, water-stage recorder at site 900 ft upstream at different datum.

Average discharge.--8 years (1950-58), 16.0 cfs (11,580 acre-ft per year).

Extremes.--1922-23: Maximum discharge observed during period December to May, 70 cfs Mar. 3 (gage height, 1.70 ft), from rating curve extended above 11 cfs; minimum daily, 3.2 cfs Feb. 10-14.
1957-58: Maximum discharge during year, 542 cfs Apr. 9 (gage height, 2.98 ft), from rating curve extended above 100 cfs by logarithmic plotting; minimum, 3.8 cfs Dec. 22 (gage height, 0.57 ft).
1915,1922-23, 1949-58: Maximum discharge, 1,100 cfs Dec. 23, 1955 (gage height, 3.93 ft), from rating curve extended above 300 cfs by logarithmic plotting; minimum, 1.9 cfs Mar. 1, 1955 (gage height, 0.44 ft).

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. Diversions for irrigation of about 620 acres above station.

Revisions.--Revised figures of discharge for the period December 1922 to May 1923, superseding those published in WSP 570, are given herein.

Discharge, in cubic feet per second, December 1922 to May 1923

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			-	6.0	3.5	55	a21	4.8				
2			-	6.0	3.5	64	26	5.4				
3			-	7.2	3.5	70	31	6.0				
4			-	7.2	3.5	a40	35	5.4				
5			-	6.0	3.5	18	37	6.0				
6			-	6.0	3.5	12	37	5.4				
7			-	a6.4	3.5	12	35	5.4				
8			-	7.2	3.4	11	37	a5.0				
9			-	7.2	3.3	*11	35	*4.8				
10			-	8.4	3.2	9.6	52	-				
11			-	9.6	3.2	a7.0	33	-				
12			-	8.4	3.2	6.0	35	-				
13			-	9.6	3.2	5.4	34	-				
14			-	5.4	3.2	5.4	31	-				
15			-	5.0	5.0	4.8	24	-				
16			-	4.8	8.0	7.2	28	-				
17			-	4.6	12	11	23	-				
18			-	4.5	13	a18	16	-				
19			-	4.5	13	30	13	-				
20			-	4.5	16	17	11	-				
21			3.6	a4.5	18	17	9.6	-				
22			a3.5	4.5	20	13	11	-				
23			a3.5	4.5	24	18	8.4	-				
24			a3.5	4.5	35	30	6.0	-				
25			5.1	4.5	a27	a25	7.2	-				
26			5.4	4.0	18	21	7.2	-				
27			5.4	3.7	21	31	6.0	-				
28			5.4	a3.5	57	37	5.4	-				
29			6.0	3.5	-	35	4.8	-				
30			a6.0	3.5	-------	19	5.4	-				
31		-------	a6.0	3.5	-------	18	-------	-	-------			-------
Total			-	172.7	334.2	678.4	665.0	-				
Mean			-	5.57	11.9	21.9	22.2	-				
Ac-ft			-	342	661	1,350	1,320	-				

Calendar year	: Max	Min	Mean	Ac-ft
Water year	: Max	Min	Mean	Ac-ft

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of weather records and records for nearby stations.
Note.--Stage-discharge relation affected by ice Dec. 21, Jan. 15 to Feb. 16.

3710. Drake Creek near Adel, Oreg.--Continued

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Feb. 16				Feb. 17 to Sept. 30			
0.6	4.5	1.2	51	0.6	6.0	1.3	60
.7	8.0	1.5	96	.7	9.5	1.5	89
.8	14	2.0	215	.9	21	2.0	195
1.0	29	2.5	375	1.1	38	2.5	350

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.3	7.0	7.3	7.0	15	18	27	16	11	12	8.8	8.1
2	7.3	6.8	7.0	6.2	10	15	24	17	11	13	9.5	8.4
3	7.6	8.0	b7	6.2	9.8	14	24	19	17	10	9.2	8.4
4	7.3	8.0	b7	b6.5	8.6	13	25	21	13	8.8	8.8	8.4
5	7.6	8.0	6.2	b6.5	9.2	13	25	23	12	8.4	9.5	8.4
6	8.0	7.6	6.2	6.6	13	12	28	24	13	8.1	9.2	8.4
7	7.6	7.0	6.6	6.6	19	13	24	26	12	8.8	9.2	8.4
8	7.3	7.3	6.2	6.6	23	12	68	25	13	8.8	9.5	8.8
9	7.0	7.0	6.6	6.6	23	11	232	25	12	8.8	10	8.8
10	7.0	7.3	7.3	7.0	a22	10	301	27	13	8.4	8.8	8.4
11	7.0	7.0	7.3	6.2	a20	9.5	152	47	13	8.4	9.5	8.4
12	7.0	7.0	7.0	7.0	a22	9.5	74	58	15	8.8	8.8	8.8
13	7.0	11	6.2	7.0	a25	10	68	39	a16	8.8	9.2	9.2
14	7.0	9.8	6.6	b7	a40	9.5	76	30	a15	8.8	9.2	8.8
15	6.2	7.0	6.2	7.0	a100	9.5	88	*24	a15	8.8	8.8	8.4
16	6.2	b7	8.0	7.0	a250	9.5	103	21	a15	8.8	8.8	*8.1
17	6.2	b7	7.3	7.0	158	a10	155	19	a14	12	9.2	8.1
18	6.2	7.0	6.6	6.6	*127	11	113	18	a14	12	9.5	8.1
19	6.2	7.0	6.6	8.0	178	14	78	17	14	10	8.8	8.4
20	6.2	7.3	7.0	7.3	185	28	73	17	13	10	8.8	8.1
21	6.2	b7	7.0	7.0	168	49	64	17	12	*9.2	9.2	8.4
22	6.2	b7	6.2	b7	131	41	54	17	10	8.8	8.8	9.2
23	*6.6	b7	b6.5	7.0	115	37	36	16	12	9.2	8.8	10
24	6.6	7.0	b7	6.6	178	38	33	16	13	9.2	8.4	8.4
25	6.6	6.6	7.0	6.6	158	28	26	14	12	8.8	8.4	8.8
26	6.6	6.6	7.0	6.6	48	32	22	13	10	8.8	8.4	8.4
27	6.6	b6.5	7.3	7.0	32	39	15	12	9.5	8.8	8.8	8.4
28	6.6	6.6	7.3	9.8	22	27	15	11	9.2	8.4	8.8	8.8
29	6.6	b7	7.0	57	-	23	14	10	9.5	8.8	8.8	8.8
30	6.6	7.0	b7	39	-------	22	14	10	9.5	8.8	8.8	8.8
31	6.6	-------	7.0	20	-------	22	-------	10	-------	8.8	8.4	-------
Total	211.0	219.2	212.5	309.5	2,109.6	609.5	2,051	659	377.7	289.1	278.7	256.9
Mean	6.81	7.31	6.85	9.98	75.3	19.7	68.4	21.3	12.6	9.33	8.99	8.56
Ac-ft	419	435	421	614	4,180	1,210	4,070	1,310	749	573	553	510

Calendar year 1957: Max 338 Min 4.5 Mean 15.3 Ac-ft 11,050
Water year 1957-58: Max 301 Min 6.2 Mean 20.8 Ac-ft 15,040

Peak discharge (base, 150 cfs).--Feb. 16 (time unknown) 455 cfs (2.70 ft); Feb. 20 (9 p.m.) 330 cfs (2.45 ft); Feb. 24 (12 p.m.) 350 cfs (2.50 ft); Apr. 9 (7:30 p.m.) 542 cfs (2.98 ft); Apr. 17 (10 to 11 p.m.) 215 cfs (2.08 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Camas Creek near Lakeview and Deep Creek above Adel.
b Stage-discharge relation affected by ice.

3715. 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 1958 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 bench mark). Prior to Dec. 21, 1922, staff gage and Dec. 21, 1922, to Sept. 30, 1923, water-stage recorder, at same site at higher datum.

Average discharge.--30 years (1922-23, 1929-58), 122 cfs (88,320 acre-ft per year).

Extremes.--Maximum discharge during year, 1,520 cfs Apr. 17, 18 (gage height, 4.72 ft); minimum, 14 cfs Nov. 25 (gage height, 0.61 ft).
1922-23, 1929-58: 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 and verified by slope-area measurement at gage height 7.3 ft for peak of Dec. 23, 1955; 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. No regulation. Diversions for irrigation of 5,500 acres above station.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 13		Nov. 14 to Sept. 30			
0.8	22	0.7	18	2.5	320
1.0	37	.9	31	3.0	500
1.2	56	1.2	58	4.0	1,010
1.5	95	1.5	95	5.0	1,760
		2.0	188		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	28	b26	40	a150	a180	167	655	428	a105	25	22
2	34	26	b28	39	a80	a150	136	765	424	a110	26	22
3	43	26	b25	37	a60	a140	132	836	528	a90	29	22
4	37	26	b28	34	a50	a120	139	908	480	a70	28	23
5	41	28	b30	b32	a55	a100	136	980	388	a60	26	23
6	44	28	31	b30	a70	a90	145	*1,040	399	a55	25	23
7	45	28	37	b30	a100	a80	124	950	368	a50	24	23
8	41	31	37	b30	a120	a75	194	998	341	46	23	23
9	40	28	b35	*b32	a150	a70	454	1,030	344	44	23	23
10	38	31	b32	35	a120	a65	649	1,060	311	42	23	23
11	36	32	b30	33	a100	a60	488	1,300	299	41	22	23
12	36	32	b30	33	a250	a55	392	1,310	360	39	21	25
13	39	90	*b30	34	a400	a52	448	992	308	38	20	32
14	50	197	b32	b34	a300	a50	576	908	263	37	20	34
15	43	94	37	33	a500	a50	715	*890	230	37	20	30
16	35	59	53	34	a1,000	a55	810	878	218	37	20	*28
17	33	60	59	34	810	a70	1,140	890	215	45	22	26
18	31	55	37	33	*568	87	1,250	896	228	85	25	25
19	29	44	35	31	675	108	1,080	968	*222	77	*25	25
20	29	41	30	a34	665	143	1,140	926	a200	83	23	25
21	30	33	39	a35	615	195	1,210	854	a180	*60	24	25
22	30	37	34	a35	a600	178	1,150	820	a150	47	23	27
23	*28	36	b30	a35	a800	175	848	830	a180	58	23	33
24	31	33	b35	a35	a1,000	182	735	790	a200	72	26	a35
25	33	31	39	a40	a1,200	161	600	715	a160	50	25	a32
26	36	31	39	a45	a600	159	520	670	a130	44	25	a30
27	35	28	43	a70	a300	184	472	645	a110	39	25	a30
28	32	b30	35	a200	a200	173	484	580	a100	36	23	a29
29	31	b28	35	a800	-	161	520	528	a100	32	23	28
30	30	b25	b30	a600	-------	145	552	472	a100	28	24	28
31	29	-------	b35	a350	-------	141	-------	468	-------	27	23	-------
Total	1,101	1,296	1,076	2,917	11,538	3,654	17,406	26,552	7,964	1,684	734	797
Mean	35.5	43.2	34.7	94.1	412	118	580	857	265	54.3	23.7	26.6
Ac-ft	2,180	2,570	2,130	5,790	22,890	7,250	34,520	52,670	15,800	3,340	1,460	1,580

Calendar year 1957: Max 1,120 Min 13 Mean 157 Ac-ft 113,300
Water year 1957-58: Max 1,310 Min 20 Mean 210 Ac-ft 152,200

Peak discharge (base, 600 cfs).--Jan. 29 (time and discharge unknown); Feb. 16 (time and discharge unknown); Feb. 25 (time and discharge unknown); Apr. 10 (7 p.m.) 1,050 cfs (4.06 ft); Apr. 17 (9 p.m.) to Apr. 18 (2 a.m.) 1,520 cfs (4.72 ft); May 12 (5:30 a.m.) 1,500 cfs (4.70 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Camas Creek near Lakeview, Twentymile Creek near Adel, and Chewaucan River near Paisley.
b Stage-discharge relation affected by ice.

3785. 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 1909 to September 1914 (prior to January 1910, gage heights only), March to May 1915, March to September 1921, March to June 1922, and October 1949 to September 1958 in reports of Geological Survey. May 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. 24, 1910, staff gage at site half a mile downstream 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 Sept. 30, 1921, water-stage recorder, and Mar. 19 to June 30, 1922, staff gage, all at site half a mile upstream from present site at different datums.
Average discharge.--28 years (1910-14, 1930-41, 1945-58), 27.2 cfs (19,690 acre-ft per year).
Extremes.--1910-11: Maximum discharge observed during water year, 1,460 cfs Mar. 21, 22 (gage height, 5.35 ft); minimum daily, 1.5 cfs Sept. 1-4, 9-11.
1957-58: Maximum discharge during year, 460 cfs May 11 (gage height, 4.15 ft); minimum, 0.9 cfs Dec. 3, Sept. 12, 13, 20, 21.
1910-15, 1921-22, 1930-58: Maximum discharge, 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 good except those for periods of ice effect or no gage-height record, which are poor. No regulation. Diversions for irrigation of about 2,300 acres above station.
Revisions (water years).--WSP 410: Drainage area. Revised figures of discharge, in cubic feet per second, for the water years 1911-12, superseding those published in WSP 330, are given herein. Complete table of daily discharge is given for water year 1911, but only revised discharges for water year 1912.

1912
May 10..... 224
11..... 202
12..... 200
13..... 216
14..... 238

1912-Con.
May 15..... 244
16..... 250
17..... 222
18..... 209
30 274

Month	Maximum	Minimum	Mean	Runoff in acre-feet
May 1912	274	59	148	9,100
Water year 1911-12	274	-	25.9	18,800
Calendar year 1912	274	-	27.7	20,100

Discharge, in cubic feet per second, water year October 1910 to September 1911

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8						234	136	352	23	3.0	1.5
2	2.4						222	109	234	21	3.0	1.5
3	2.4						272	156	210	18	3.0	1.5
4	2.4						101	234	234	16	3.0	1.5
5	2.4						98	298	222	15	3.0	2
6	2.4						75	166	210	14	3.0	2
7	2.4					25	98	198	234	12	3.0	2
8	2.4						104	222	222	12	3.0	2
9	2.4						98	*136	222	10	3.0	1.5
10	2.4						56	109	222	10	2.8	1.5
11	2.4						65	136	210	10	2.7	1.5
12	2.4						75	210	198	9	2.5	2
13	2.4					54	48	146	187	8	2.4	2
14	2.4					89	35	117	156	7	2.3	2
15	3.0					187	52	109	146	7	2.2	2
16	3.0	30	80	7	4	386	56	156	126	8	2.1	2.5
17	3.0					450	87	109	126	9	*2.0	2.5
18	3.0					386	52	109	87	6	2.0	2.5
19	3.0					552	42	101	75	5.8	2.0	2.5
20	3.0					625	40	101	65	5.6	2.0	2.5
21	3.0					822	52	136	42	5.4	2.0	2.5
22	3.0					907	*210	176	37	5.2	2.0	2
23	3.0					990	176	222	37	5.0	2.0	2
24	3.0					*600	246	222	33	5.0	2	2
25	3.0					380	298	136	27	5.0	2	2
26	3.0					272	352	117	24	5.0	2	2
27	2.7					176	246	126	22	*5.0	2	2
28	2.4					*380	259	136	21	4.5	2.0	2
29	2.4				-	*156	136	146	20	4.0	2.0	2
30	2.4				-------	285	117	166	18	3.5	2.0	2
31	2.4	-------		-------	-------	298	-------	176	-------	3.0	2.0	-------
Total	81.3	900	2,480	217	112	8,295	4,002	4,817	4,019	277.0	74.0	59.5
Mean	2.62	30	80	7	4	268	133	155	134	8.94	2.39	1.98
Ac-ft	161	1,790	4,920	430	222	16,500	7,910	9,530	7,970	550	147	118

Calendar year 1910: Max 1,540 Min 1.5 Mean 74.8 Ac-ft 54,100
Water year 1910-11: Max 990 Min 1.5 Mean 69.4 Ac-ft 50,200

* Discharge measurement made on this day.
Note.--Doubtful or no gage-height record Nov. 1 to Mar. 12, July 18 to Aug. 31; discharge estimated on basis of 2 discharge measurements and records for nearby stations.

3785. Honey Creek near Plush, Oreg.--Continued

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 14-26, Apr. 8, 9)

Oct. 1 to Apr. 9				Apr. 10 to Sept. 30			
-0.2	1.1	1.0	41	-0.3	0.7	1.0	54
-.1	2.0	1.5	78	-.2	1.6	1.5	96
0.0	3.3	2.0	125	-.1	3.0	2.0	148
.2	7.0	2.5	182	0.0	5.0	3.0	280
.5	17			.2	10	4.0	430
				.5	23		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	3.0	4.3	6.0	11	35	43	127	87	24	5.4	1.1
2	a1.8	3.0	4.2	6.6	11	30	36	*158	83	37	5.0	1.1
3	a1.9	3.0	3.2	5.6	10	34	39	182	122	31	4.8	1.0
4	a2.0	2.9	3.8	4.5	9.7	26	39	196	112	26	4.4	1.0
5	a2.1	2.9	4.5	3.8	10	32	35	211	*79	22	4.2	1.1
6	a2.2	3.5	4.8	*5.4	9.4	26	36	231	70	22	4.0	1.1
7	a2.1	3.3	5.6	b5	9.7	22	30	198	68	a22	3.4	1.1
8	a2.0	4.3	4.7	b5	12	27	42	205	60	a20	2.9	1.1
9	a1.8	4.5	3.3	b5	12	23	120	204	60	a20	2.9	1.0
10	a1.8	4.5	3.8	b5	9.4	23	173	206	57	a18	2.7	1.1
11	a1.8	4.7	4.0	5.6	8.8	23	139	316	60	a16	2.4	1.1
12	a2.0	4.8	*4.2	6.0	34	21	123	352	75	a14	2.3	1.0
13	a2.0	5.0	b4.5	5.0	32	21	136	258	76	a12	2.2	1.0
14	1.9	8.2	b5.5	b5	18	18	153	207	56	11	1.9	1.1
15	1.8	5.8	6.2	b5	51	20	215	*184	47	10	1.6	1.0
16	1.6	4.2	6.8	b5	180	17	*255	171	39	9.7	1.5	*1.1
17	1.6	3.2	6.8	b5	140	22	289	168	32	12	2.3	1.1
18	1.7	4.5	5.6	b5	68	21	316	164	29	18	2.7	1.0
19	1.9	4.8	5.2	4.7	68	22	264	168	27	17	2.6	1.0
20	2.1	4.3	5.2	6.8	53	28	258	166	25	12	*2.3	1.0
21	2.4	2.6	b5	5.6	*47	45	288	158	25	10	2.0	.9
22	2.5	3.0	4.2	4.3	46	46	280	154	23	8.6	2.0	1.1
23	*2.3	4.2	4.3	b5	51	40	194	152	26	*8.6	2.0	2.2
24	2.5	4.7	5.8	6.0	65	39	164	149	*38	8.6	1.9	2.6
25	2.8	4.7	6.4	6.2	144	34	148	134	32	8.0	1.7	2.2
26	2.6	4.7	6.6	6.2	76	32	148	123	26	7.2	1.4	2.0
27	3.3	3.1	6.0	6.0	58	32	117	113	20	6.8	1.3	2.0
28	3.2	b3	6.4	5.6	45	30	106	106	19	6.5	1.2	2.2
29	3.2	2.5	6.4	10	-	32	102	100	21	6.1	1.2	2.0
30	3.2	3.5	3.7	34	-------	36	107	91	22	5.7	1.2	1.9
31	3.2	-------	4.0	16	-------	35	-------	85	-------	5.4	1.1	-------
Total	69.3	120.4	155.0	213.9	1,289.0	892	4,395	5,437	1,516	455.2	78.5	40.2
Mean	2.24	4.01	5.00	6.90	46.0	28.8	146	175	50.5	14.7	2.53	1.34
Ac-ft	137	239	307	424	2,560	1,770	8,720	10,780	3,010	903	156	80

Calendar year 1957: Max 399 Min 0.5 Mean 34.2 Ac-ft 24,750
Water year 1957-58: Max 352 Min 0.9 Mean 40.2 Ac-ft 29,090

Peak discharge (base, 200 cfs).--Feb. 16 (11 p.m.) 294 cfs (3.34 ft); Apr. 9 (12 p.m.) 253 cfs (2.85 ft); Apr. 18 (3:30 a.m.) 368 cfs (3.59 ft); May 11 (7:30 p.m.) 460 cfs (4.15 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of records for Deep Creek above Adel and Twentymile Creek near Adel.
b Stage-discharge relation affected by ice.

3840. Chewaucan River near Paisley, Oreg.

Location.--Lat 42°42', long 120°35', in SW¼NW¼ sec. 26, T. 33 S., R. 18 E., on left bank 1½ miles downstream from Mill Creek and 1½ miles southwest of Paisley.

Drainage area.--275 sq mi.

Records available.--April 1912 to September 1921, May 1924 to September 1958. Published as "above Conn ditch, near Paisley" April to September 1912 and May 1924 to September 1955, as "above Mill Creek, near Paisley" October 1912 to December 1913, as as "at Chewaucan Land & Cattle Co.'s gage, near Paisley" January to September 1914.

Gage.--Water-stage recorder. Datum of gage is 4,430 ft above mean sea level (river-profile survey). Prior to July 14, 1912, reference point at site 1¼ miles upstream at different datum. Nov. 6, 1912, to Jan. 19, 1914, staff gage and Jan. 20, 1914, to Sept. 30, 1921, water-stage recorder, at various sites within half a mile upstream from Mill Creek at various datums. May 1, 1924, to Jan. 26, 1956, water-stage recorder at sites about 1½ miles upstream at different datums. Jan. 27 to Oct. 6, 1956, staff gage at sites about 1 mile downstream at different datums.

Average discharge.--43 years, 137 cfs (99,180 acre-ft per year).

Extremes.--Maximum discharge during year, 2,320 cfs May 12 (gage height, 5.22 ft); minimum, 34 cfs Nov. 22 (gage height, 2.05 ft).

1912-21, 1924-58: Maximum discharge, 3,260 cfs Dec. 22, 1955 (gage height, 7.8 ft, from floodmarks); no flow part of each day Dec. 7, 1927, Dec. 12, 1932 (result of freezeup).

Maximum discharge known, 4,000 cfs Nov. 23, 1909, from records at site 1 mile 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. No regulation. Diversions for irrigation of about 2,500 acres above station.

Revisions.--WSP 860: Drainage area.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 13		Nov. 14 to Sept. 30			
2.1	37	2.0	29	4.0	650
2.3	67	2.2	52	4.5	1,060
2.5	105	2.5	105	5.0	1,780
3.0	225	3.0	225	5.1	2,000
		3.5	400		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	81	50	101	111	a80	258	182	555	608	152	55	42
2	103	48	89	111	a60	243	170	632	575	170	54	42
3	81	44	93	95	a50	252	182	713	614	145	55	42
4	69	45	93	81	a50	212	175	783	530	128	52	42
5	67	51	107	b70	a60	225	162	*897	463	119	*52	42
6	69	51	91	b65	a80	202	172	970	481	113	51	42
7	72	54	78	b60	a100	155	135	933	440	107	50	42
8	65	61	71	b60	a110	182	160	1,030	414	95	51	42
9	67	50	56	b65	a100	160	155	1,150	427	91	51	*45
10	67	56	b55	b65	a80	158	195	1,370	404	85	50	44
11	62	57	*b50	b70	a80	158	228	1,910	388	83	48	42
12	59	54	b50	67	a250	145	255	1,780	360	80	48	42
13	74	120	b55	67	218	142	322	1,300	336	76	47	44
14	95	190	b55	72	168	115	418	1,180	314	72	46	47
15	67	93	61	69	420	148	510	1,140	286	*71	46	46
16	59	74	80	71	806	117	570	*1,150	*280	69	46	42
17	51	61	85	64	620	135	713	1,220	272	76	51	*42
18	51	81	64	66	555	121	862	1,270	276	107	62	41
19	50	76	64	51	*575	121	762	1,360	255	95	61	40
20	50	69	64	61	481	135	814	1,330	243	87	55	40
21	*50	54	b60	b55	454	182	942	*1,270	228	72	54	39
22	48	55	b55	a50	436	170	1,000	1,190	215	71	52	44
23	51	72	51	a60	445	170	769	1,120	246	81	52	64
24	65	64	80	a65	626	182	664	1,070	308	95	48	50
25	61	64	91	a70	776	168	585	960	231	80	46	46
26	72	62	87	a70	481	150	520	906	202	66	46	45
27	62	72	74	a70	388	158	472	854	175	62	45	44
28	56	80	80	a150	336	162	468	769	165	60	44	44
29	53	91	76	a400	-	170	472	692	160	58	44	44
30	50	95	58	a250	-------	182	*500	626	155	58	44	42
31	51	-------	83	a120	-------	172	-------	632	-------	56	44	-------
Total	1,978	2,094	2,257	2,801	8,885	5,250	13,534	32,762	10,051	2,780	1,550	1,313
Mean	63.8	69.8	72.8	90.4	317	169	451	1,057	335	89.7	50.0	43.8
Ac-ft	3,920	4,150	4,480	5,560	17,620	10,410	26,840	64,980	19,940	5,510	3,070	2,600

Calendar year 1957: Max 1,070 Min 30 Mean 179 Ac-ft 129,700
Water year 1957-58: Max 1,910 Min 39 Mean 234 Ac-ft 169,100

Peak discharge (base, 500 cfs).--Jan. 29 (time unknown) 565 cfs (3.85 ft); Feb. 16 (3 a.m.) 933 cfs (4.37 ft); Feb. 25 (1 a.m.) 1,040 cfs (4.48 ft); Apr. 22 (7 a.m.) 1,140 cfs (4.57 ft); May 12 (1:30 a.m.) 2,320 cfs (5.22 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of records for Deep Creek above Adel and Silver Creek near Silver Lake.

b Stage-discharge relation affected by ice.

3880. 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 1958 in reports of Geological Survey. October 1929 to September 1939 (river only), May to September 1928 and 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.--10 years (1930-32, 1935-36, 1951-58), 91.5 cfs (66,240 acre-ft per year).

Extremes.--Maximum discharge during year, 118 cfs Dec. 7, Mar. 21, 22; minimum daily, 42 cfs May 9.
1929-39, 1951-58: 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. Records 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, 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 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	91	94	93	107	104	106	104	100	84	82	90	94
2	106	94	93	106	104	106	104	100	85	86	89	97
3	104	94	92	105	104	106	104	100	87	87	87	95
4	108	94	92	104	104	106	104	86	86	90	86	98
5	108	94	92	104	107	106	104	46	85	90	83	97
6	110	94	92	104	108	106	104	51	85	91	84	95
7	110	94	111	102	107	106	104	54	85	89	90	97
8	110	94	116	102	107	105	104	57	84	91	87	89
9	108	94	113	102	107	105	102	42	83	89	86	87
10	75	94	107	104	107	105	102	44	83	*91	84	93
11	100	94	105	104	107	105	104	68	84	92	87	94
12	104	94	104	104	106	105	104	77	83	91	*75	94
13	102	94	99	104	106	105	104	76	83	92	91	94
14	102	94	89	104	106	105	104	85	86	93	94	93
15	102	94	92	104	106	105	104	86	87	92	96	95
16	102	94	93	104	107	105	104	*85	88	92	93	95
17	101	94	93	102	107	105	*104	85	88	92	93	*99
18	100	94	98	102	108	102	104	84	88	92	94	101
19	99	94	101	101	108	101	104	77	84	91	94	101
20	96	94	101	102	108	87	100	78	86	91	93	101
21	95	94	102	102	108	99	100	80	75	91	92	99
22	*94	94	102	102	108	118	100	83	95	91	92	96
23	94	94	102	102	108	113	100	83	88	91	92	95
24	94	94	102	102	108	111	100	82	86	92	92	94
25	94	93	101	102	108	107	100	81	86	93	92	94
26	94	93	*99	102	107	106	100	81	88	98	92	95
27	94	93	99	102	107	105	100	81	84	94	90	95
28	94	93	102	104	106	105	100	83	82	92	88	95
29	94	93	104	104	-	104	100	84	83	91	89	96
30	94	93	104	104	-------	104	100	84	86	91	88	95
31	94	-------	105	104	-------	104	-------	84	-------	92	89	-------
Total	3,075	2,814	3,098	3,201	2,988	3,258	3,072	2,387	2,557	2,820	2,772	2,863
Mean	99.1	93.8	99.9	103	107	105	102	77.0	85.2	91.0	89.4	95.4
Ac-ft	6,100	5,580	6,140	6,350	5,930	6,460	6,090	4,730	5,070	5,590	5,500	5,680

Calendar year 1957: Max 116 Min 23 Mean 90.4 Ac-ft 65,440
Water year 1957-58: Max 118 Min 42 Mean 95.6 Ac-ft 69,220

* Discharge measurement made on this day.

3900. 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 1927, February to December 1928, February 1929 to September 1958.

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 gage or water-stage recorder at practically same location at datum 1.00 ft higher, or staff gage at diversion dam outlet 1½ miles upstream at different datum.

Average discharge.--46 years (1905-6, 1909-27, 1929-41, 1943-58), including diversion by Silver Lake Irrigation District Canal, 28.8 cfs (20,850 acre-ft per year).

Extremes.--Maximum discharge during year, 520 cfs Apr. 22 (gage height, 5.45 ft); minimum, 5.9 cfs Jan. 22 (gage height, 1.73 ft).

1905-7, 1909-58: 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 1931-32, 1934, 1937.

Revisions.--The maximum discharge for the water year 1921 has been revised to 345 cfs Apr. 11, 1921 (gage height, 4.2 ft), superseding figure published in WSP 530.

Remarks.--Records good. 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. Silver Lake Irrigation District Canal diverted 1½ miles above station, 1923-43.

Revisions.--Revised figures of discharge, in cubic feet per second, for the water years 1906 and 1910, superseding those published in WSP 370, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1905		1905-Con.		1909-Con.		1909-Con.	
Dec. 10	14	Dec. 24	12	Dec. 11	34	Dec. 25	15
11	13	25	12	12	33	26	15
12	12	26	15	13	31	27	15
13	12	27	15	14	30	29	15
14	12	28	15	15	29	30	15
15	12	29	15	16	28	31	15
16	12			17	26		
17	12	1909		18	25	1910	
18	12	Dec. 5	42	19	22	Jan. 1	15
19	12	6	40	20	20	3	15
20	12	7	38	21	18	4	15
21	12	8	37	22	17	5	15
22	12	9	36	23	16	6	15
23	12	10	35	24	16	7	15

Month	Maximum	Minimum	Mean	Runoff in acre-feet
December 1905	36	12	14.2	873
Calendar year 1905	203	12	34.9	25,200
Water year 1905-6	530	7	55.5	40,100
December 1909	80	15	30.3	1,860
Calendar year 1909	865	11	63.8	46,100
January 1910	194	15	39.9	2,450
Water year 1909-10	865	11	71.4	51,700
Calendar year 1910	473	11	62.0	44,900

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	7.1	7.7	8	18	251	94	215	85	51	25	19
2	20	6.8	7.7	8.4	16	212	94	233	85	52	25	19
3	20	6.8	8.0	8.4	14	179	91	258	131	49	25	19
4	18	6.2	8.0	8.4	14	149	88	276	184	47	25	19
5	16	6.2	8.4	7.5	13	131	85	294	170	46	24	19
6	16	6.5	8.4	7	13	109	77	306	168	44	24	19
7	15	6.5	9.2	7	16	91	72	306	168	44	24	19
8	14	7.1	9.2	7	20	83	66	296	161	43	23	19
9	14	7.1	8.4	7.4	21	73	64	300	*153	42	23	19
10	14	7.4	8	7.7	23	67	67	308	147	*42	23	19
11	14	7.4	7.5	8.0	20	62	84	346	151	41	23	19
12	14	7.4	7.7	8.4	32	58	113	476	135	41	*22	19
13	14	9.2	7.7	8.4	38	56	154	426	118	40	22	19
14	14	12	8.4	8.0	29	52	202	340	102	40	22	20
15	14	12	8.8	8.0	31	51	252	284	90	40	22	20
16	13	9.6	9.6	8.0	72	48	302	256	80	40	22	20
17	13	8.4	11	8.0	91	48	*368	238	73	41	22	*19
18	12	8.4	10	8	96	44	466	221	67	44	22	19
19	10	9.6	10	7.5	86	43	478	208	64	44	23	19
20	8.4	9.2	10	7.1	81	43	476	194	60	43	23	19
21	7.7	8.8	12	7	72	49	488	177	56	40	22	20
22	*7.7	8.0	12	6.5	75	61	510	161	56	40	22	20
23	7.4	8.0	12	6.8	72	68	468	143	59	40	22	21
24	7.4	8.4	11	7.5	98	81	400	136	64	39	21	21
25	7.4	8.8	11	7.7	302	89	328	126	66	38	21	20
26	7.4	8.8	11	7.7	492	89	269	118	63	37	20	20
27	7.4	7.7	11	7.7	410	84	239	109	58	33	20	20
28	7.4	8.0	11	8.8	312	83	220	98	55	29	20	19
29	7.4	8	11	31	-	86	209	88	52	26	20	19
30	7.1	7.4	9.5	32	-------	91	208	78	51	25	20	19
31	7.1	-------	8	20	-------	93	-------	80	-------	25	19	-------
Total	374.8	242.8	293.2	298.9	2,577	2,724	7,032	7,095	2,972	1,246	691	582
Mean	12.1	8.09	9.46	9.64	92.0	87.9	234	229	99.1	40.2	22.3	19.4
Ac-ft	743	482	582	593	5,110	5,400	13,950	14,070	5,890	2,470	1,370	1,150

Calendar year 1957: Max 265 Min 3 Mean 43.1 Ac-ft 31,220
Water year 1957-58: Max 510 Min 6.2 Mean 71.6 Ac-ft 51,810

* Discharge measurement made on this day.

3935. 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 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 December 1912, March 1913 to September 1917 (irrigation seasons only), March 1918 to October 1920, March 1921 to July 1922 (irrigation seasons only), October 1922 to September 1958.

Gage.--Water-stage recorder. Datum of gage is 4,195 ft above mean sea level, datum of 1929, supplementary adjustment of 1947 (from river-profile survey). 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 1¾ 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 same datum.

Average discharge.--45 years (1903-5, 1909-12, 1917-21, 1922-58), 165 cfs (119,500 acre-ft per year).

Extremes.--Maximum discharge during year, 2,530 cfs Apr. 21 (gage height, 13.57 ft); minimum, 17 cfs Nov. 6.

1903-6, 1908-58: Maximum discharge, 4,960 cfs about Apr. 6, 1952 (gage height, 15.2 ft); no flow July 19 to Sept. 22, 1934.

Revisions.--Figures of maximum discharge for the water years 1938 and 1940 have been revised to 2,510 cfs Apr. 20, 1938 (gage height, 13.61 ft), and 1,690 cfs Feb. 29, 1940 (gage height, 12.49 ft), superseding those published in WSP 860 and 900, respectively.

Remarks.--Records good except those for periods of ice effect, which are poor. No regulation. Diversions for irrigation above station primarily by flooding during high flow.

Revisions (water years).--WSP 860: Drainage area. Revised figures of discharge, in cubic feet per second, for the water years 1909, 1911-12, 1929, and 1938, superseding those published in WSP 310, 330, 370, 690, and 860 are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1909		1911-Con.		1911-Con.		1912-Con.		1938-Con.	
Jan. 2	9	Dec. 2	20	Dec. 21	20	Jan. 7	20	Apr. 14	1,360
3	10	3	18	22	23	8	20	15	1,330
4	10	4	19	23	25	9	20	16	1,330
5	11	5	20	24	24	10	20	17	1,490
6	12	6	22	25	24	11	20	18	1,940
7	12	7	23	26	29	12	20	19	2,420
8	12	8	24	27	30	13	22	20	2,420
9	10	9	25	28	32	14	23	21	2,420
10	8	10	27	29	33	15	26	22	2,330
11	6	11	28	30	35	16	35	23	2,240
12	6	12	29	31	38	17	45	24	2,160
13	6	13	24					25	2,160
14	6	14	20	1912		1929		26	2,080
15	8	15	26	Jan. 1	20	Jan. 1-31	†25	27	2,010
		16	23	2	20	Feb. 1-28	†20	28	1,810
1911		17	33	3	20			29	1,630
Jan. 1-31	†20	18	26	4	20	1938		30	1,530
Feb. 1-28	†20	19	28	5	20	Apr. 12	1,300		
Dec. 1	22	20	26	6	20	13	1,360		

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
January 1909	-	980	6	161	11,100
Calendar year 1909	-	980	6	135	97,600
January 1911	-	-	-	20.0	1,230
February	-	-	-	20.0	1,110
Water year 1910-11	-	914	4	99.2	71,700
December	-	38	18	25.7	1,580
Calendar year 1911	-	914	4	98.3	71,000
January 1912	-	104	20	45.3	2,790
Water year 1911-12	-	1,550	-	237	172,000
Calendar year 1912	-	1,550	-	240	174,000
January 1929	-	-	-	25.0	1,540
February	-	-	-	20.0	1,110
Water year 1928-29	-	442	4	68.1	49,300
Calendar year 1929	-	442	4	69.7	50,500
April 1938	42,367	2,420	305	1,412	84,030
Water year 1937-38	90,083	2,420	4	247	178,700
Calendar year 1938	87,925	2,420	7	241	174,400

† Average for period indicated.

Note.--Stage-discharge relation affected by ice Jan. 2-15, 1909, Jan. 1 to Feb. 28, 1911, Jan. 1-17, 1912, Jan. 1 to Feb. 28, 1929.

3935. Silvies River near Burns, Oreg.--Continued

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Feb. 25				Feb. 26 to Sept. 30			
1.2	18	6.0	586	1.2	15	9.0	1,100
1.5	37	9.0	1,030	1.5	33	11.0	1,500
2.0	80	11.0	1,460	2.0	80	13.0	2,130
3.0	188	13.0	2,130	3.0	192	14.0	2,920
				6.0	605		

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	35	37	b45	b100	800	755	1,270	316	101	34	20
2	*24	33	39	b45	b80	552	738	1,340	310	100	32	20
3	34	31	37	*b48	b75	474	682	1,410	297	98	32	19
4	31	30	34	b45	b70	407	647	1,460	287	90	*32	19
5	31	31	29	b45	b70	391	614	1,500	282	91	32	19
6	33	32	36	b42	b75	335	552	1,550	264	81	31	19
7	34	32	36	b40	b80	287	574	*1,570	250	58	29	19
8	35	33	49	b40	b75	284	677	1,560	241	56	28	19
9	34	30	50	b45	b70	258	730	1,540	309	60	29	19
10	32	32	b45	b50	b70	248	836	1,510	328	61	29	18
11	31	32	b42	b55	*b73	249	1,040	1,460	*300	89	37	18
12	31	34	b40	b60	b75	234	1,230	1,540	318	72	30	19
13	31	38	b40	b55	b80	223	1,440	1,500	318	59	27	21
14	31	46	b40	b60	b100	222	1,650	1,400	280	54	25	24
15	32	43	42	b65	182	222	1,810	1,330	253	50	24	25
16	31	34	45	b60	315	212	*1,880	1,170	221	48	24	24
17	31	b35	58	b55	564	210	1,990	1,010	206	48	24	23
18	31	b40	60	b50	758	202	2,090	881	192	59	23	22
19	30	b40	57	b60	840	214	2,080	797	*166	61	24	24
20	30	b38	54	b50	888	262	2,150	736	124	82	*23	24
21	31	b35	70	b45	932	443	2,310	684	114	73	24	24
22	30	36	b80	b55	942	720	2,390	647	119	66	25	24
23	30	b35	b70	b50	966	796	2,180	608	114	58	24	27
24	31	35	b60	b45	1,170	868	2,020	566	131	50	22	30
25	33	38	b70	b55	1,760	887	1,820	520	144	46	21	28
26	38	39	b65	b70	1,670	*794	1,640	457	156	41	21	29
27	41	b35	b60	b60	1,520	756	1,460	428	145	42	21	29
28	38	b35	68	b65	1,210	713	1,330	*399	125	41	20	27
29	*37	b35	b60	b70	-	710	1,270	347	114	39	20	27
30	34	33	b55	b80	-------	761	1,240	349	108	*36	20	26
31	36	-------	b50	b90	-------	774	-------	326	-------	36	20	-------
Total	1,000	1,055	1,578	1,700	14,810	14,508	41,825	31,865	6,532	1,946	807	686
Mean	32.3	35.2	50.9	54.8	529	468	1,394	1,028	218	62.8	26.0	22.9
Ac-ft	1,980	2,090	3,130	3,370	29,380	28,780	82,960	63,200	12,960	3,860	1,600	1,360

Calendar year 1957: Max 2,680 Min 9.7 Mean 258 Ac-ft 187,000
Water year 1957-58: Max 2,390 Min 18 Mean 324 Ac-ft 234,700

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

3960. 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.--March 1911 to September 1913, March 1914 to September 1916, April 1917 to September 1921, and December 1937 to September 1958 in reports of Geological Survey. August to November 1929 and April to September 1930 in reports of State engineer. Published as "near Diamond" 1911-21, and as "at P ranch, near Diamond" 1929-30. Records of discharge for January 1909 to September 1910 (published in WSP 370 as "at mouth of canyon, near Diamond") and February 1909 to July 1910 (published in WSP 270, 290, and 370, for a non-equivalent site as "near Diamond") have been found to be unreliable and should not be used.

Gage.--Water-stage recorder. Concrete control since Nov. 27, 1937. Datum of gage is 4,254 ft above mean sea level (levels by Fish and Wildlife Service). Prior to December 1937, staff gages at several sites within 2 miles downstream at different datums.

Average discharge.--28 years (1911-13, 1914-16, 1917-21, 1938-58), 128 cfs (92,670 acre-ft per year).

Extremes.--Maximum discharge during year, 1,420 cfs Feb. 15 (gage height, 4.92 ft); minimum, 23 cfs Nov. 29, Dec. 31 (gage height, 1.88 ft).
1911-21, 1929-30, 1937-58: Maximum discharge, 2,750 cfs (revised) May 19, 1953 (gage height, 6.29 ft); minimum, 8 cfs Jan. 14, 1940 (result of ice jam upstream).
Revisions.--The figures of maximum discharge 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)
860	1938	Dec. 11, 1937	†1,080	4.6
880	1939	Mar. 24, 1939	1,580	5.12
960	1942	May 5, 1942	2,270	5.85
980	1943	Jan. 21, 1943	1,230	4.69
1120	1948	May 19, 1948	1,700	5.26
1214	1951	Feb. 7, 1951	2,000	5.58
1244	1952	Apr. 6, 1952	2,260	5.84
1284	1953	May 19, 1953	2,750	6.29

† Maximum observed.

Remarks.--Records excellent except those for periods of ice effect, which are good. No regulation or diversion above station.

Revisions (water years).--WSP 330: Drainage area (former site). WSP 860: Drainage area (present site). See also Records available. Revised figures of discharge, in cubic feet per second, for high-water periods in the water years 1952-53 and supplemental peak discharges for water years 1951-53, superseding those published in WSP 1214, 1244, and 1284, are given herewith:

Apr. 5, 1952..... 1,240
Apr. 6, 1952..... 1,230
May 19, 1953..... 1,440
June 7, 1953..... 1,430

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
April 1952	19,990	1,240	405	666	39,650
Water year 1951-52	-	1,240	21	201	145,700
Calendar year 1952	-	1,240	21	202	146,300
May 1953	8,812	1,440	123	284	17,480
June	15,046	1,430	290	502	29,840
Water year 1952-53	-	1,440	27	125	90,500
Calendar year 1953	-	1,440	36	126	91,070

Revised peak discharge.--1950-51: Feb. 7 (7 p.m.) 2,000 cfs (5.58 ft); Mar. 20 (7 p.m.) 1,720 cfs (5.28 ft).
1951-52: Apr. 6 (12:30 a.m.) 2,260 cfs (5.84 ft); Apr. 13 (9:30 p.m.) 1,650 cfs (5.20 ft).
1952-53: May 19 (8 a.m.) 2,750 cfs (6.29 ft); June 7 (1:30 p.m.) 1,970 cfs (5.55 ft).

3960. Donner und Blitzen River near Frenchglen, Oreg.--Continued

Rating table, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

2.0	30	3.1	253
2.2	48	3.5	430
2.5	88	4.0	750
2.8	154	4.5	1,100

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	58	55	55	b38	76	115	84	284	353	133	65	47
2	61	53	50	b42	76	108	80	335	326	175	68	46
3	64	53	50	b38	85	102	86	376	335	138	73	46
4	60	54	52	*b36	94	93	88	420	322	136	66	46
5	60	50	52	b38	100	93	86	430	344	131	63	46
6	58	52	50	b40	106	88	82	425	353	131	60	46
7	58	52	52	b38	149	80	76	390	331	128	*56	45
8	58	53	52	b44	177	84	78	*400	301	128	56	45
9	58	49	48	54	120	78	80	458	284	119	58	45
10	60	53	46	59	88	73	95	521	261	117	60	45
11	60	52	45	54	86	73	121	590	246	108	58	45
12	56	52	48	54	*582	72	131	564	358	106	55	45
13	63	60	56	49	178	70	166	446	296	104	53	47
14	76	61	52	b44	104	68	204	425	284	101	52	54
15	64	*53	53	b55	704	72	235	436	265	93	50	50
16	60	45	63	55	617	65	265	468	269	90	50	48
17	59	54	58	56	468	69	322	527	280	92	52	47
18	58	58	53	55	480	66	344	680	280	115	52	46
19	56	53	52	b36	397	69	331	792	280	99	52	46
20	56	48	53	b42	394	84	335	792	*280	93	53	45
21	59	39	54	b38	452	95	452	785	265	86	56	46
22	58	50	45	b34	422	106	452	827	253	82	*54	46
23	58	55	41	b50	*415	104	340	813	261	82	52	50
24	58	53	61	56	529	106	288	792	246	86	49	49
25	58	53	56	55	532	88	249	750	217	79	48	48
26	63	53	54	54	207	84	239	666	191	74	48	48
27	61	43	52	54	160	*84	210	597	191	73	47	48
28	59	55	61	143	131	84	207	497	172	72	46	47
29	56	40	56	255	-	86	217	430	160	69	46	46
30	56	54	45	146	-------	85	228	385	141	69	47	46
31	56	-------	32	85	-------	85	-------	385	-------	66	47	-------
Total	1,845	1,555	1,597	1,897	7,929	2,629	6,171	16,686	8,145	3,175	1,692	1,404
Mean	59.5	51.8	51.5	61.2	283	84.8	206	538	272	102	54.6	46.8
Ac-ft	3,660	3,080	3,170	3,760	15,730	5,210	12,240	33,100	16,160	6,300	3,360	2,780

Calendar year 1957: Max 1,370 Min 26 Mean 169 Ac-ft 122,700
Water year 1957-58: Max 827 Min 32 Mean 150 Ac-ft 108,600

Peak discharge (base, 650 cfs).--Feb. 12 (8:30 a.m.) 806 cfs (4.08 ft); Feb. 15 (5 p.m.) 1,420 cfs (4.92 ft); Feb. 24 (11 p.m.) 1,200 cfs (4.64 ft); May 11 (11 p.m.) 708 cfs (3.94 ft); May 22 (11 p.m.) 974 cfs (4.32 ft).

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

3970. 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 and 3½ miles northeast of Frenchglen.

Drainage area.--30 sq mi, approximately.

Records available.--March to August 1911, January 1912 to September 1916, and December 1937 to September 1958 in reports of Geological Survey. April to June 1930 in reports of State engineer. Published as "near Diamond" 1911-16, 1930.

Gage.--Water-stage recorder. Concrete control since Oct. 31, 1939. Datum of gage is 4,184.93 ft above mean sea level (levels by Fish and Wildlife Service). Prior to Dec. 21, 1937, staff gage at sites within 1 mile upstream at different datums. 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.--24 years (1912-16, 1938-58), 14.3 cfs (10,350 acre-ft per year).

Extremes.--Maximum discharge during year, 160 cfs Feb. 12 (gage height, 2.41 ft), from rating curve extended above 72 cfs by logarithmic plotting; minimum, 11 cfs Mar. 9, 1911-16, 1930, 1937-58: Maximum discharge, 301 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 good. No regulation or diversion above station. Low flow is sustained by large springs.

Revisions (water years).--WSP 1514: 1941-43(M), 1953(M), 1955(M).

Rating table, water year 1957-58 (gage height, in feet, and discharge, in cubic feet per second)

1.0	10
1.1	15
1.2	22
1.6	55

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	12	14	13	14	14	16	24	15	13	13	13
2	13	12	14	13	14	14	16	24	15	13	13	13
3	13	12	14	13	14	13	17	24	15	13	13	13
4	13	12	14	*13	14	13	16	24	16	13	13	13
5	13	12	14	13	15	13	15	24	14	13	13	13
6	13	12	14	13	16	13	15	25	14	13	*13	13
7	13	12	14	13	16	13	14	*24	14	13	13	13
8	13	12	14	13	16	12	15	25	14	13	13	13
9	13	12	14	13	16	12	14	26	15	13	13	13
10	13	12	14	13	15	12	17	27	14	14	13	13
11	13	12	13	13	22	12	19	31	14	14	13	13
12	13	13	13	13	*50	12	20	31	20	14	13	13
13	13	13	13	13	18	12	23	27	18	13	13	13
14	13	13	13	13	14	12	25	24	20	13	13	13
15	13	13	14	18	44	12	24	24	14	13	13	13
16	13	13	14	14	22	12	24	23	14	13	13	13
17	13	13	14	14	22	12	34	22	13	13	13	13
18	13	13	14	14	23	12	33	22	13	13	13	13
19	13	13	14	14	22	12	31	22	13	13	13	13
20	13	13	14	14	22	12	31	21	*13	13	12	13
21	13	13	14	14	21	13	35	20	13	13	12	13
22	13	13	13	14	21	13	32	19	13	13	12	13
23	13	13	13	14	22	13	27	19	13	13	*12	13
24	13	13	14	14	26	13	26	18	13	13	12	13
25	13	13	14	14	24	13	24	17	13	13	12	13
26	12	13	14	14	19	13	24	16	13	13	12	13
27	12	13	14	14	16	*13	23	16	13	13	12	13
28	12	14	14	15	15	13	22	16	13	13	12	13
29	12	14	14	15	-	14	22	15	13	13	12	13
30	12	14	13	15	-------	14	22	15	13	13	12	13
31	12	-------	13	15	-------	14	-------	15	-------	13	12	-------
Total	397	382	426	428	574	395	676	680	428	406	391	390
Mean	12.8	12.7	13.7	13.8	20.5	12.7	22.5	21.9	14.3	13.1	12.6	13.0
Ac-ft	787	758	845	849	1,140	783	1,340	1,350	849	805	776	774

Calendar year 1957: Max 118 Min 12 Mean 18.5 Ac-ft 13,420
Water year 1957-58: Max 50 Min 12 Mean 15.3 Ac-ft 11,060

Peak discharge (base, 30 cfs).--Feb. 12 (about 7 a.m.) 160 cfs (2.41 ft); Feb. 15 (10 a.m.) 114 cfs (2.11 ft); Apr. 17 (4 p.m.) 52 cfs (1.57 ft); May 11 (11 a.m. to 3 p.m.) 36 cfs (1.39 ft); June 14 (8:30 a.m.) 36 cfs (1.39 ft).

* Discharge measurement made on this day.
Note.--No gage-height record Dec. 6 to Jan. 3, Jan. 18 to Feb. 12; discharge estimated on basis of 1 discharge measurement, recorded range in stage, weather records, and records for Donner und Blitzen River near Frenchglen.

4030. 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 1958.

Gage.--Water-stage recorder. Altitude of gage is 4,450 ft (by barometer).

Average discharge.--7 years, 55.8 cfs (40,400 acre-ft per year).

Extremes.--Maximum discharge during year, 878 cfs Apr. 18 (gage height, 5.67 ft); no flow Dec. 3 (result of freezeup).
1951-58: Maximum discharge, 1,300 cfs Apr. 6, 1952 (gage height, 6.65 ft); minimum, that of Dec. 3, 1957.

Remarks.--Records good except those for periods of ice effect, which are fair. Diversions above station for irrigation of 500 acres.

Rating tables, water year 1957-58, except periods of ice effect (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Jan. 28		Jan. 29 to Sept. 30					
1.3	3.2	1.2	2.0	1.7	14	3.0	155
1.4	5.8	1.3	3.0	2.0	30	4.0	365
1.5	9.1	1.4	4.6	2.3	56	5.0	640
1.6	13	1.5	7.0	2.6	95	6.0	1,010
1.9	30						

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*6.7	4.6	b4.4	b7.5	42	171	161	255	36	18	5.5	3.1
2	12	4.4	b5.0	7.4	20	144	150	265	34	22	5.5	2.9
3	11	4.6	b4.8	*b7.5	13	131	143	261	39	20	6.0	2.9
4	8.8	4.9	b4.6	b8.0	b12	106	130	251	38	18	5.2	3.0
5	8.4	5.2	5.8	b7.5	b15	102	122	243	32	16	5.0	3.0
6	7.7	5.5	6.1	b8.0	20	80	118	241	30	16	4.8	3.0
7	8.4	5.8	6.1	b7.5	78	70	119	*213	29	14	4.6	2.9
8	7.4	5.5	b7.0	b7.0	84	70	143	191	28	14	4.6	2.9
9	6.4	5.2	b7.5	b9.0	64	63	175	173	35	13	4.6	2.9
10	5.5	5.2	b7.0	b10	49	59	255	154	34	12	5.0	2.8
11	5.2	4.9	6.1	b10	*35	54	390	197	30	11	5.5	2.8
12	4.9	6.4	5.5	b11	146	45	493	205	28	11	4.0	2.9
13	6.1	8.4	5.2	b9.5	88	44	637	148	26	10	3.7	3.5
14	7.0	9.4	5.5	b9.0	34	43	744	131	25	9.6	3.4	4.2
15	6.1	*b6.5	11	10	234	43	789	114	23	9.3	3.2	4.0
16	5.5	b6.0	16	11	336	35	722	102	21	8.6	3.2	3.7
17	5.2	b5.5	10	11	257	42	778	92	20	8.6	3.5	3.5
18	4.9	6.7	11	b10	243	34	782	83	19	10	3.7	3.4
19	4.9	b7.0	9.1	b9.0	175	36	667	77	*19	12	3.7	3.4
20	5.2	b6.0	9.1	b9.0	201	44	688	70	23	11	*3.5	3.2
21	5.2	b5.5	17	b8.0	209	70	694	64	22	9.3	4.8	3.4
22	4.9	b4.6	29	b7.5	*237	102	622	57	20	8.0	4.6	3.5
23	5.2	b4.8	25	8.8	273	118	478	55	20	7.5	3.7	4.4
24	5.8	b5.0	19	9.8	405	154	395	50	27	7.0	3.4	4.2
25	6.4	b5.5	11	9.1	586	167	332	46	32	6.5	3.1	3.8
26	8.8	b5.5	8.8	8.4	390	*149	289	43	25	6.2	3.0	3.5
27	7.4	b5.0	b8.0	8.0	279	148	255	40	21	6.0	3.0	3.4
28	6.1	3.9	b12	8.4	213	159	231	36	19	5.8	3.0	3.2
29	5.5	b3.8	b10	185	-	173	229	34	18	5.5	3.1	3.2
30	5.2	b4.0	b9.0	152	-------	183	235	33	18	5.2	3.2	3.2
31	5.2	-------	b8.0	67	-------	167	-------	34	-------	*5.5	3.1	-------
Total	203.0	165.3	303.6	650.9	4,738	3,006	11,966	3,958	791	336.6	126.2	99.8
Mean	6.55	5.51	9.79	21.0	169	97.0	399	128	26.4	10.9	4.07	3.33
Ac-ft	403	328	602	1,290	9,400	5,960	23,730	7,850	1,570	668	250	198

Calendar year 1957: Max 646 Min 1.7 Mean 64.9 Ac-ft 46,960
Water year 1957-58: Max 789 Min 2.8 Mean 72.2 Ac-ft 52,250

Peak discharge (base, 350 cfs).--Feb. 12 (4 p.m.) 360 cfs (3.98 ft); Feb. 15 (7:30 p.m.) 514 cfs (4.58 ft); Feb. 25 (3:30 a.m.) 730 cfs (5.27 ft); Apr. 18 (5 a.m.) 878 cfs (5.67 ft).

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

4065. 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, March 1925 to September 1931 (irrigation seasons only), April 1932 to September 1958.

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.--27 years (1922-23, 1932-58), 15.3 cfs (11,080 acre-ft per year).

Extremes.--Maximum discharge during year, 141 cfs May 12 (gage height, 3.52 ft); minimum, 1.7 cfs Jan. 19.

1911-12, 1922-23, 1925-58: Maximum discharge, 470 cfs (revised) Aug. 1, 1933 (gage height, 5.26 ft), from rating curve extended above 230 cfs by logarithmic plotting; minimum observed, 0.1 cfs Aug. 4, 1930, Aug. 1, Sept. 12, 28, 1934. Probably no flow at times Sept. 1-19, 1931.

Maximum stage known, 6.0 ft (caused by cloudburst), probably occurred in 1924 or 1925.

Revisions.--The figures of maximum discharge 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)
735	1932	May 14, 1932	256	3.8
750	1933	Aug. 1, 1933	470	5.26
765	1934	*Oct. 30, 1933	31	2.36
860	1938	May 16, 1938	305	4.55

* Revised.

Remarks.--Records good except those for periods of ice effect or no gage-height record, which are poor. No regulation. Diversions for irrigation of 800 acres above station.

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1932, superseding those published in WSP 735, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1932		1932-Con.		1932-Con.		1932-Con.		1932-Con.	
May 1	71	May 8	77	May 13	237	May 18	159	May 23	92
2	79	9	97	14	256	19	172	24-29	†78
3	82	10	123	15	219	20	172		
4	78	11	141	16	159	21	145		
7	77	12	166	17	159	22	117		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
May 1932	256	59	116	7,130

† Average for period indicated.

Discharge, in cubic feet per second, water year October 1957 to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.3	6.7	b5.5	b4.5	6.7	26	18	45	53	23	7.2	4.3
2	4.5	6.4	a5.5	b4.5	7.8	23	18	52	52	23	7.0	4.3
3	4.8	6.2	a5	b4.5	7.8	21	18	60	74	22	7.8	4.5
4	5.2	6.6	a5	b4.5	7.5	18	19	73	60	22	7.5	4.6
5	6.4	6.6	a5	b4.5	7.5	18	18	84	58	23	*7.0	4.7
6	6.0	6.2	a5.5	b4	7.5	18	18	97	54	22	*6.7	4.7
7	6.1	6.4	a6	b4	7.5	14	18	88	66	22	5.6	4.7
8	6.0	6.4	a7	b4.5	8.0	17	18	92	68	21	5.1	4.6
9	5.8	6.2	a5.5	b4.5	8.0	14	18	100	61	18	5.2	4.7
10	5.8	6.4	a5	b5	7.8	12	19	112	*61	16	5.2	4.6
11	5.8	6.6	a5	b5.5	7.2	13	21	126	72	16	5.5	4.6
12	5.8	6.6	a5.5	5.8	20	13	24	126	75	14	5.5	4.7
13	6.0	7.8	a5.5	5.8	*14	12	27	106	74	14	5.5	4.8
14	6.6	12	a6	5.2	13	12	34	96	71	14	5.5	5.0
15	6.2	8.8	6.1	6.4	44	12	*45	94	66	14	5.4	5.0
16	6.1	6.7	6.2	6.2	37	10	55	99	62	12	5.4	5.0
17	6.0	b6	6.7	6.0	32	12	68	106	55	13	5.6	4.8
18	5.8	b5.5	6.1	5.8	31	11	86	109	53	15	5.8	4.8
19	5.8	a5	5.8	3.8	30	11	88	125	47	13	5.8	4.7
20	7.0	a5	6.2	b4.5	29	12	88	117	*47	13	6.0	4.7
21	7.2	a5	6	b4	28	14	92	112	44	12	5.6	4.8
22	6.7	a5.5	4.2	b4	27	14	94	109	41	12	*5.2	4.8
23	6.6	a6	4.6	b4.5	27	14	81	111	39	11	5.0	5.2
24	6.6	a6.5	6.8	b5	29	15	72	101	41	11	5.0	5.2
25	6.8	a6.5	7.2	b6	41	16	64	99	37	10	4.8	5.4
26	8.0	a6	6.6	6.0	40	16	56	90	34	9.8	4.8	5.5
27	7.5	a5.5	6.0	5.8	34	16	46	87	29	9.5	4.7	5.6
28	6.8	a5	b6	6.6	31	16	41	79	27	9.0	4.7	5.6
29	6.7	a4.5	b5.5	8.8	-	16	38	71	26	8.8	4.6	5.5
30	*6.7	a5	b5	7.2	-------	17	38	60	25	8.2	4.6	5.8
31	6.7	-------	b4.5	6.7	-------	17	-------	57	-------	7.8	4.6	-------
Total	192.3	189.6	176.5	164.1	590.3	470	1,340	2,883	1,572	459.1	173.9	147.2
Mean	6.20	6.32	5.69	5.29	21.1	15.2	44.7	93.0	52.4	14.8	5.61	4.91
Ac-ft	381	376	350	325	1,170	932	2,660	5,720	3,120	911	345	292

Calendar year 1957: Max 158 Min 3 Mean 23.2 Ac-ft 16,800
Water year 1957-58: Max 126 Min 3.8 Mean 22.9 Ac-ft 16,580

Peak discharge (base, 50 cfs).--Feb. 15 (5 p.m.) 83 cfs (3.03 ft); Apr. 22 (7 a.m.) 100 cfs (3.19 ft); May 12 (5 a.m.) 141 cfs (3.52 ft); May 19 (5 a.m.) 138 cfs (3.50 ft); June 3 (8 a.m.) 87 cfs (3.07 ft); June 11 (3:30 p.m.) 86 cfs (3.06 ft).

* Discharge measurement made on this day.

a No gage-height record; discharge estimated on basis of weather records at Burns and records for Malheur River near Drewsey and Twentymile Creek near Adel.

b Stage-discharge relation affected by ice.

1515. Spanish Fork near Spanish Fork, Utah

Location.--Lat 40°04', long 111°34', in middle half of S½ sec. 2, T. 9 S., R. 3 E., half a mile downstream from U. S. Reclamation Service Power Canal, half a mile upstream from intake of East Bench canal, and 5 miles southeast of Spanish Fork.

Drainage area.--670 sq mi, approximately.

Records available.--January 1909 to November 1917 (discontinued).

Gage.--Staff gage at described site since Jan. 1, 1913. Prior to July 31, 1912, at site half a mile below described site and 600 ft above East Bench canal diversion at different datum. Aug. 1 to Dec. 31, 1912, at site a quarter of a mile below described site at different datum.

Average discharge.--8 years (1909-17), 106 cfs.

Extremes.--1909-17: Maximum discharge observed, 1,550 cfs May 11, 1909 (gage height, 5.6 ft, site and datum then in use); no flow for at least a few days nearly every year because of diversion by power canal.

Remarks.--Diversion above station by U. S. Reclamation Service Power Canal half a mile upstream. Part or all of water thus diverted may have been returned to river below this station depending upon irrigation requirements. After June 1915, flow is regulated also by transmountain diversion from Strawberry Reservoir.

Cooperation.--Records Jan. 1, 1911, to Sept. 30, 1917, furnished by Bureau of Reclamation.

Revisions.--Revised figures of discharge, in cubic feet per second, for the water years 1911, 1914-15, and 1917, superseding those published in WSP 310, 390, 410, and 460, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1911		1911-Con.		1916		1917-Con.	
Mar. 6	77.3	Mar. 27	31.6	Dec. 26	44	Jan. 9	33
8	41.4	28	30.5	27	42	16	38
9	90.9	29	33.9	28	40	17	46
10	140.9	30	36.3	29	32	18	42
11	132.7	31	40.1	30	22	19	43
19	38.8			31	4	20	46
20	41.4	1913				29	88
21	41.4	Oct. 10-31	†60	1917		Feb. 1	30
22	42.8	Nov. 1-18	†60	Jan. 1	25	2	44
23	46.6			2	27		
24	50.8	1915		5	42		
25	40.1	Jan. 1-31	†25	7	38		
26	40.1	Mar. 12	42	8	30		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
March 1911	141	5.8	46.7	2,870
Water year 1910-11	694	0	42.5	30,800
Calendar year 1911	694	0	40.3	29,200
October 1913	-	-	53.3	3,280
November	-	-	47.6	2,830
Calendar year 1913	459	0	81.8	59,200
Water year 1913-14	1,200	0	179	129,000
January 1915		-	35	1,540
March	112.4	30.2	57.7	3,550
Water year 1914-15	283	16.0	76.0	55,000
Calendar year 1915	283	0	68.1	49,400
December 1916	88	4	55.4	3,410
Calendar year 1916	879	0	154	112,000
January 1917	88	25	46.3	2,850
February	84	19	59.8	3,320
Water year 1916-17	1,020	4	163	118,000

† Average for period indicated.

2680. Owens River at Pleasant Valley, near Bishop, Calif.

Location.--Lat 37°25'00", long 118°31'40", in NW¼ sec. 24, T. 6 S., R. 31 E., 1,000 ft upstream from Owens River canal intake, 2.2 miles downstream from Rock Creek, and 8 miles northwest of Bishop.

Drainage area.--596 sq mi.

Records available.--March 1918 to September 1940 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 4,350 ft (from topographic map).

Average discharge.--22 years, 245 cfs (177,400 acre-ft per year).

Extremes.--Maximum discharge, 1,780 cfs (revised), Dec. 11, 1937 (gage height, 8.12 ft); minimum, 53 cfs (regulated) Aug. 25, 1931.

Revisions.--Figures of maximum discharge for the water years 1921 and 1938 have been revised to 1,100 cfs June 13, 1921 (gage height, 6.15 ft), and 1,780 cfs Dec. 11, 1937 (gage height, 8.12 ft), superseding those published in WSP 630 and 860, respectively.

Remarks.--Diversions for irrigation above station, and slight regulation by powerplant since 1936.

Revisions.--Revised figures of discharge, in cubic feet per second, for the water years 1921, 1929, and 1934, superseding those published in WSP 630, 690, and 765, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1921		1921-Con.		1929		1929-Con.		1929 Con.	
June 1	292	June 16	650	July 6	290	July 21	139	Aug. 5	138
2	290	17	580	7	282	22	150	6	131
3	288	18	512	8	260	23	154	7	123
4	290	19	488	9	231	24	143	8	118
5	323	20	466	10	211	25	130		
6	411	21	471	11	199	26	135	1934	
7	531	22	528	12	191	27	144	July 1	172
8	616	23	585	13	170	28	170	2	175
9	684	24	577	14	167	29	184	3	175
10	749	25	598	15	168	30	185	4	170
11	777	26	596	16	157	31	179	5	165
12	825	27	603	17	154	Aug. 1	174	6	155
13	828	28	601	18	154	2	158	7	152
14	780	29	588	19	147	3	140	8	148
15	732	30	572	20	140	4	140		

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
June 1921	-	828	288	561	33,400
Water year 1920-21	-	828	124	251	182,000
Calendar year 1921	-	828	98	248	180,000
July 1929	-	307	130	197	12,100
August	-	174	113	135	8,310
Water year 1928-29	-	307	113	175	127,000
Calendar year 1929	-	307	113	171	124,000
July 1934	3,968	175	105	128	7,870
Water year 1933-34	61,600	344	92	169	122,000
Calendar year 1934	60,492	338	92	166	120,000

Big Pine Creek above Little Pine Creek, near Big Pine, Calif.

Location.--Lat 37°08'15", long 118°19'45", in E½ sec. 26, T. 9 S., R. 33 E., 0.8 mile upstream from Little Pine Creek and 3 miles southwest of Big Pine.

Drainage area.--31.7 sq mi.

Records available.--October 1903 to October 1907 (discontinued). Previously published as Big Pine Creek near Big Pine.

Gage.--Staff gage. Altitude of gage is 4,850 ft (from topographic map).

Extremes.--1903-4: Maximum discharge observed during year, about 700 cfs Aug. 8 (gage height, 5.0 ft); minimum observed, 11 cfs for several days January to March.
1904-5: Maximum discharge observed during year, 268 cfs July 10-12 (gage height, 3.5 ft); minimum observed, 15 cfs for several days March to May.
1904-7: Maximum discharge observed, about 700 cfs Aug. 8, 1904 (gage height, 5.0 ft); minimum observed, 11 cfs for several days January to March 1904.

Remarks.--Diversions above station for irrigation. Records collected at site about 1 mile downstream below Little Pine Creek, are not equivalent to those for this station (see following station).
Revisions.--Revised figures of discharge for the water years 1904-5, superseding those published in WSP 300, are given herein.

Discharge, in cubic feet per second, water year October 1903 to September 1904

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	†11			11	11	16	16	16	100	130	114	62
2				11	11	16	16	16	114	130	86	71
3				11	11	16	16	16	130	114	86	71
4				11	11	16	16	22	*114	114	86	62
5			†8.5	11	11	16	16	22	114	114	86	53
6				11	11	16	16	29	147	114	114	53
7				11	13	16	16	57	130	147	114	62
8				11	11	16	19	81	114	147	330	71
9				11	11	16	19	81	114	114	206	62
10				11	*11	11	19	81	130	100	147	*62
11				11	11	16	22	81	147	100	114	62
12	†16			11	11	19	22	90	206	100	100	62
13				11	11	16	25	90	206	100	100	62
14				11	11	16	29	90	206	100	100	62
15				11	11	16	22	90	277	86	100	53
16				11	22	16	25	100	277	86	100	53
17				11	13	16	22	90	252	86	147	53
18				11	11	16	22	100	206	86	114	53
19				11	11	16	22	90	206	130	114	45
20				11	11	13	22	81	206	165	90	36
21				11	11	16	22	71	130	147	90	36
22				11	13	16	*22	71	114	185	90	36
23				11	13	13	22	81	130	206	81	29
24				11	13	19	22	100	147	206	81	45
25				11	13	22	22	109	130	147	81	36
26				11	13	16	22	109	130	330	71	22
27				11	13	22	22	90	130	206	71	22
28				*11	13	22	22	90	130	130	71	22
29				11	11	22	16	100	130	114	71	22
30				11	-------	22	22	100	130	114	71	22
31		-------		11	-------	16	-------	100	-------	114	62	-------
Total	-	-	-	341	348	521	616	2,344	4,697	4,162	3,288	1,462
Mean	-	-	-	11	12	16.8	20.5	75.6	157	134	106	49
Ac-ft	-	-	-	676	690	1,033	1,220	4,650	9,340	8,240	6,520	2,916

Calendar year 1903: Max - Min - Mean - Ac-ft -
Water year 1903-4 : Max 330 Min - Mean a51.7 Ac-ft a37,500

* Discharge measurement made on this day.
† Result of discharge measurement.
a Partly estimated on basis of 3 discharge measurements and records for nearby streams; some monthly figures not available.

Big Pine Creek above Little Pine Creek, near Big Pine, Calif.--Continued

Discharge, in cubic feet per second, water year October 1904 to September 1905

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	30	27	22	24	22	15	66	52	144	134	97
2	22	30	22	22	24	22	18	66	52	154	134	81
3	27	30	22	22	24	22	15	66	52	154	134	66
4	24	30	22	22	30	22	18	66	52	154	134	52
5	30	30	22	22	30	22	18	52	52	154	134	52
6	37	30	27	22	30	22	15	52	59	154	134	46
7	34	30	24	22	27	22	15	52	59	154	115	35
8	34	30	24	22	27	22	18	40	66	154	115	35
9	*34	30	*22	24	24	22	18	15	*66	197	134	30
10	30	30	22	24	24	19	18	15	66	268	154	40
11	30	24	22	22	24	19	18	15	97	268	154	52
12	30	27	22	19	24	22	18	15	115	268	154	52
13	30	27	19	19	24	22	18	21	134	220	134	*59
14	30	27	19	19	24	22	18	30	134	220	134	59
15	30	27	19	19	22	22	18	40	134	220	134	59
16	30	27	19	22	22	22	18	40	134	*164	134	59
17	24	27	19	22	22	22	18	40	144	197	*134	46
18	24	*22	19	*22	*22	22	18	52	154	175	115	52
19	30	22	19	22	22	22	18	52	154	154	115	59
20	30	27	19	22	22	22	18	52	154	154	134	59
21	30	27	19	22	22	21	18	66	197	154	115	52
22	30	22	19	22	22	21	18	66	220	154	115	52
23	37	27	19	22	22	21	18	52	244	175	97	52
24	37	27	19	22	22	21	18	*52	197	197	97	46
25	30	27	19	22	22	21	18	52	115	220	97	40
26	30	27	19	22	22	21	*30	52	115	244	97	40
27	30	27	19	22	22	21	40	52	115	220	97	40
28	30	27	19	22	22	15	40	52	134	197	97	40
29	37	27	19	22	-	15	52	52	134	175	97	40
30	30	27	22	22	-------	15	66	52	134	175	97	40
31	30	-------	24	22	-------	15	-------	52	-------	154	97	-------
Total	933	822	647	674	668	641	666	1,447	3,535	5,792	3,767	1,532
Mean	30.1	27.4	20.9	21.7	23.9	20.7	22.2	46.7	118	187	122	51.1
Ac-ft	1,851	1,630	1,285	1,334	1,327	1,273	1,321	2,872	7,021	11,500	7,501	3,041

Calendar year 1904: Max 330 Min 11 Mean 55.1 Ac-ft 40,050
Water year 1904-5 : Max 268 Min 15 Mean 57.9 Ac-ft 41,960

* Discharge measurement made on this day.

2860. Cottonwood Creek near Olancha, Calif.

Location.--Lat 36°26'20", long 118°04'30", in NW¼SE¼ sec. 21, T. 17 N., R. 36 E., just downstream from intake to Cottonwood powerhouse and 11.2 miles north of Olancha.

Drainage area.--39.9 sq mi; at site used 1906-8, 44.4 sq mi.

Records available.--January 1906 to March 1911. January 1914 to September 1950 (monthly discharge only, published in WSP 1314).

Gage.--Water-stage recorder and artificial control. Altitude of gage is 5,100 ft (from topographic map). Prior to Sept. 9, 1908, staff gage at site about 2 miles downstream at different datum. Sept. 9, 1908, to Mar. 31, 1911, and Jan. 1, 1914, to Mar. 6, 1921, staff gage and Mar. 7, 1921, to Oct. 31, 1938, water-stage recorder, at site just upstream from intake to Cottonwood powerhouse at different datum.

Average discharge.--40 years (1906-10, 1914-50), 23.2 cfs.

Extremes.--1908-9: Maximum daily discharge during year, 366 cfs June 3, 1909 (at site below Cottonwood powerhouse intake); minimum observed (revised), 6.5 cfs Nov. 17-19.
1906-11, 1914-38: Maximum discharge observed, 434 cfs June 13, 1906 (discharge measurement); minimum, 1.2 cfs Aug. 8, 1924.
1938-50: Maximum daily discharge, 315 cfs June 6, 1941; no flow past station at times.
Revisions.--The minimum discharge observed for the water year 1909 has been revised to 6.5 cfs Nov. 17-19, 1908, superseding figure published in WSP 300.

Remarks.--Cottonwood powerhouse (maximum capacity, 22 cfs) has diverted since Nov. 13, 1908. Records after Oct. 31, 1938, computed as sum of powerhouse diversion and flow past station; extremes since that date show only flow past station.
Revisions.--Revised figures of discharge, in cubic feet per second, for the water year 1909, superseding those published in WSP 300, are given herein.

Discharge, in cubic feet per second, water year October 1908 to September 1909

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		24	13	8.3	20	15	16	117	302	159	42	29
2		20	13	8.3	16	15	16	130	326	159	42	24
3		20	13	8.3	15	15	18	144	366	159	42	24
4		20	13	8.3	13	15	20	159	358	159	42	24
5	a15	18	13	8.3	13	*16	20	174	334	152	38	24
6		18	13	8.3	13	16	20	*174	294	144	35	24
7		20	13	8.3	13	16	20	182	262	137	35	24
8		24	13	9.4	13	16	20	159	238	117	35	24
9		24	13	9.4	13	16	20	159	214	*117	35	24
10		24	12	8.3	16	15	20	159	214	104	35	24
11	15	24	10	8.3	16	15	20	159	214	104	35	20
12	15	20	10	10	16	15	20	159	214	104	29	20
13	15	18	10	12	16	15	24	144	214	104	29	20
14	13	20	10	24	16	15	30	130	214	104	29	20
15	15	8.3	10	13	*16	15	36	144	206	104	29	*18
16	20	8.3	10	13	16	15	*43	144	206	92	29	17
17	20	6.5	10	13	15	15	51	144	206	92	24	17
18	24	6.5	10	13	15	15	60	144	*190	92	65	17
19	*40	6.5	8.3	13	15	15	65	144	182	82	*42	17
20	36	*8.3	8.3	24	15	15	51	144	174	82	29	17
21	56	8.3	8.3	24	15	15	51	159	174	82	29	17
22	43	10	8.3	24	15	15	51	159	174	73	29	17
23	30	10	8.3	20	15	16	43	152	174	73	29	17
24	27	10	8.3	20	15	16	43	152	174	73	29	16
25	24	8.3	8.3	20	15	*16	51	152	174	73	24	16
26	20	13	8.3	20	15	16	60	*166	174	65	24	14
27	20	13	8.3	20	15	15	70	190	174	61	24	14
28	20	10	8.3	*18	15	15	92	190	166	57	24	24
29	*20	13	8.3	18	-	15	92	159	166	57	29	18
30	20	13	8.3	20	-------	16	92	166	166	49	73	17
31	24	-------	8.3	20	-------	16	-------	246	-------	*46	35	-------
Total	667	447.0	316.9	452.5	421	476	1,235	4,904	6,644	3,076	1,070	598
Mean	21.5	14.9	10.2	14.6	15.0	15.4	41.2	158	221	99.2	34.5	19.9
Ac-ft	1,320	887	627	898	833	947	2,450	9,720	13,200	6,100	2,120	1,180

Calendar year 1908: Max 108 Min - Mean 27.5 Ac-ft 20,000
Water year 1908-9 : Max 366 Min 6.5 Mean 55.6 Ac-ft 40,300

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

2875. Rush Creek near Mono Lake, Calif.

Location.--Lat 38°56'55", long 119°03'30", in NE¼ sec. 13, T. 1 N., R. 26 E., at highway bridge, 0.25 mile upstream from mouth, 3 miles downstream from Walker Creek, and 8 miles southeast of Mono Lake Post Office.

Drainage area.--132 sq mi.

Records available.--December 1910 to September 1913 (discontinued).

Gage.--Staff gage. Altitude of gage is 6,420 ft (from topographic map). Prior to July 6, 1911, at different datum.

Extremes.--1911-12: Maximum discharge observed during year, 585 cfs June 5 (gage height, 5.3 ft); minimum not determined.
1910-13: Maximum discharge observed, 1,280 cfs June 18, 1911 (gage height, 8.45 ft, datum then in use); minimum observed, 11 cfs Sept. 27-30, Oct. 27 to Nov. 7, 1912.

Remarks.--No regulation. Diversions for irrigation above station.

Revisions.--Revised figures of discharge, in cubic feet per second, for the water years 1912-13, superseding those published in WSP 360, are given herein. Complete table of daily discharge for the water year 1912 is given, but only revised figures are given for the water year 1913.

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1912		1912-Con.		1912-Con.		1912-Con.		1912-Con.	
Oct. 1	33	Oct. 15	42	Oct. 29	35	Nov. 12	38	Nov. 26	43
2	35	16	41	30	35	13	39	27	43
3	37	17	40	31	35	14	40	28	43
4	39	18	40	Nov. 1	35	15	40	29	43
5	41	19	40	2	35	16	41	30	43
6	44	20	40	3	35	17	41	Dec. 1	42
7	46	21	39	4	35	18	41	2	42
8	46	22	39	5	35	19	41	3	42
9	46	23	38	6	35	20	42	4	41
10	45	24	38	7	35	21	42	5	41
11	45	25	37	8	36	22	42	6	41
12	45	26	36	9	36	23	42		
13	44	27	36	10	37	24	42		
14	43	28	35	11	38	25	43		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
October 1912	46	33	39.8	2,450
November	43	35	39.4	2,340

Discharge, in cubic feet per second, water year October 1911 to September 1912

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	32	24	22	16	18				132	104	57
2	41	32	24	22	16	19				118	101	56
3	40	32	23	22	16	19			a550	122	98	55
4	38	32	23	22	16	19				118	96	55
5	37	32	23	22	16	19			585	113	94	54
6	36	32	22	22	16	20			545	108	91	53
7	36	33	22	22	17	20			505	120	88	53
8	36	33	21	22	17	20			465	132	86	52
9	36	34	21	22	17	20			425	*144	84	52
10	35	34	20	22	17	-			391	150	82	51
11	35	34	20	22	17	-			374	155	82	50
12	35	34	20	22	17	-			357	165	82	48
13	34	33	20	22	17	-			340	175	82	47
14	33	32	20	22	18	-			*323	180	81	46
15	32	31	20	22	18	-			314	190	80	45
16	32	30	20	21	18	-			305	195	79	44
17	32	29	20	21	18	-			296	200	78	43
18	32	28	20	20	17	-			287	203	76	43
19	32	28	21	20	16	-			279	190	73	42
20	32	28	21	20	15	-			260	180	70	40
21	32	27	22	20	15	-			240	170	67	39
22	32	27	22	19	14	-			220	155	64	38
23	32	27	22	18	13	-			200	140	62	38
24	32	26	22	18	12	-			180	130	61	37
25	32	26	22	17	13	-			160	122	61	37
26	32	26	22	16	14	-			136	120	60	36
27	32	25	22	16	15	-			136	118	60	36
28	32	25	22	16	16	-			136	115	59	35
29	32	25	22	16	17	-			136	112	59	35
30	32	24	22	16	-------	-			136	110	58	35
31	32	-------	22	16	-------	-	-------		-------	107	57	-------
Total	1,058	891	667	620	464	-	-	-	9,931	4,489	2,375	1,352
Mean	34.1	29.7	21.5	20.0	16.0	-	-	-	331	145	76.6	45.1
Ac-ft	2,100	1,770	1,320	1,230	920	-	-	-	19,700	8,900	4,710	2,680

Calendar year	: Max	Min	Mean	Ac-ft
Water year	: Max	Min	Mean	Ac-ft

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

3010. Walker River at Mason, Nev.

Location.--Lat 38°56'55", long 119°11'10", in NE¼ sec. 33, T. 13 N., R. 25 E., on left bank 600 ft upstream from highway bridge at Mason.

Records available.--November 1910 to September 1912, July 1913 to September 1916, May 1921 to September 1922, October 1922 to September 1923 (gage heights and discharge measurements only), discontinued.

Gage.--Water-stage recorder. Altitude of gage is 4,400 ft (from topographic map). Prior to May 15, 1921, staff gage on bridge pier 600 ft downstream at different datum.

Average discharge.--5 years (1911-12, 1913-16, 1921-22), 444 cfs (321,400 acre-ft per year).

Extremes.--1910-16, 1921-22: Maximum discharge observed, 4,710 cfs June 20, 1911 (gage height, 9.70 ft, site and datum then in use); minimum, 17 cfs Sept. 17, 19, 20, 1921.
Revisions.--The maximum discharge for the water year 1921 has been revised to 1,300 cfs June 14, 1921 (gage height, 4.38 ft), superseding figure published in WSP 530.

Remarks.--Flow regulated by off-channel storage in Topaz Reservoir since January 1922. Slight regulation by storage in Poor Lake and Twin Lakes Reservoirs. Diversions above station for irrigation above and below station.

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1914, superseding those published in WSP 390, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1914		1914-Con.		1914-Con.		1914-Con.		1914-Con.	
Aug. 23	265	Aug. 31	190	Sept. 8	102	Sept.16	82	Sept.24	88
24	250	Sept. 1	178	9	88	17	95	25	88
25	240	2	166	10	88	18	95	26	88
26	220	3	155	11	82	19	88	27	95
27	215	4	144	12	82	20	82	28	95
28	215	5	134	13	82	21	82	29	102
29	202	6	117	14	82	22	88	30	102
30	190	7	109	15	82	23	88		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
August 1914	800	190	463	28,500
September	178	82	102	6,050
Water year 1913-14	3,360	27	778	564,000
Calendar year 1914	3,360	82	788	571,000

3075. Pleasant Valley Creek near Markleeville, Calif.

Location.--Lat 38°41', long 119°47', in NW¼ sec. 28, T. 10 N., R. 20 E., 600 ft upstream from mouth and three-quarters of a mile southwest of Markleeville.

Drainage area.--25.4 sq mi.

Records available.--November 1910 to November 1911 (discontinued).

Gage.--Staff gage. Altitude of gage is 5,550 ft (from topographic map).

Extremes.--1911-12: Maximum discharge observed, 550 cfs June 16, 1911; minimum observed, 0.5 cfs Jan. 12, 1911.

Remarks.--Three irrigation ditches above station; several small reservoirs on headwaters of stream.

Revisions.--Revised figures of discharge, in cubic feet per second, for the water years 1911 (complete daily table) and 1912, superseding those published in WSP 310, are given herein.

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1911		1911-Con.		1911-Con.		1911-Con.		1911-Con.	
Oct. 1	3.1	Oct. 10	1.9	Oct. 19	3.8	Oct. 28	2.4	Nov. 6	3.8
2	2.3	11	2.2	20	3.3	29	2.2	7	5.0
3	1.5	12	2.5	21	2.7	30	2.2	8	5.2
4	.7	13	2.9	22	2.7	31	2.2	9	5.4
5	.7	14	3.2	23	2.7	Nov. 1	2.0	10	5.6
6	.8	15	3.5	24	2.6	2	1.8	11	5.8
7	.8	16	3.8	25	2.6	3	1.6		
8	1.3	17	4.1	26	2.4	4	1.2		
9	1.6	18	4.4	27	2.4	5	2.6		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
October 1911	4.4	0.7	2.44	150

Discharge, in cubic feet per second, water year October 1910 to September 1911

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			8.8	11	126	29	126	164	195	128	37	3.1
2			8.8	4.4	103	29	145	164	255	146	35	2.7
3			16	7.7	102	29	164	174	315	164	33	2.5
4			11	7.3	82	29	144	306	375	162	31	2.4
5			6.7	8.4	74	29	144	435	435	159	29	2.2
		4										
6			9.9	10	63	29	110	206	450	156	27	6.0
7			11	9.2	63	29	113	184	435	154	25	9.0
8			12	38	67	29	110	184	420	147	23	13
9			8.8	38	63	29	126	195	450	140	22	16
10		(*)	15	11	52	29	96	184	480	133	20	13
11		4.7	22	9.9	52	29	96	206	487	126	18	10
12		4.7	18	.5	52	29	*90	260	495	128	16	7.0
13		5.0	16	1.2	52	29	84	206	502	130	12	4.0
14		5.3	11	1.8	47	29	84	206	518	132	7.3	3.6
15		5.3	12	8.0	41	27	84	164	534	135	7.3	22
16		5.3	12	15	52	28	90	126	550	126	7.3	22
17		5.0	11	22	42	30	90	135	525	116	7.3	22
18		5.6	10	7.3	40	34	96	126	502	106	7.3	22
19		5.0	11	16	38	36	141	188	480	96	7.3	21
20		4.4	11	19	36	38	96	206	458	74	7.3	19
21		4.4	12	22	38	38	103	326	413	52	7.3	16
22		4.7	11	21	38	41	103	480	*368	30	7.3	14
23		5.0	9.9	20	34	57	154	458	322	51	7.1	12
24		7.3	11	32	29	67	195	502	276	72	7.0	9.0
25		6.4	10	22	29	69	260	322	230	50	6.9	7.3
26		5.3	9.2	19	57	69	322	306	184	48	6.7	6.1
27		4.7	10	16	43	69	232	333	165	46	6.1	5.0
28		8.8	8.0	86	29	76	184	360	147	44	5.5	4.9
29		8.8	7.7	154	-	82	126	306	128	43	4.8	4.7
30		8.8	7.7	220	-------	98	126	262	110	*42	4.2	3.9
31		-------	7.7	173	-------	113	-------	219	-------	40	3.6	-------
Total	-	154.5	346.2	1,030.7	1,544	1,378	4,034	7,893	11,204	3,176	445.6	305.4
Mean	-	5.2	11.2	33.2	55.1	44.5	134	255	373	102	14.4	10.2
Ac-ft	-	309	689	2,040	3,060	2,740	7,970	15,700	22,200	6,270	885	607

Calendar year 1910: Max - Min - Mean - Ac-ft -
Water year 1910-11: Max 550 Min 0.5 Mean †86.7 Ac-ft †62,700

* Discharge measurement made on this day.
† Yearly figure partly estimated; monthly figure for October not available.
Note.--No gage-height record Nov. 1-10; discharge estimated on basis of records for nearby stream.

3115. Carson River near Empire, Nev.

Location.--Lat 39°10', long 119°41', in sec. 12, T. 15 N , R. 20 E., on left bank just below tailrace of Brunswick mill power canal, a quarter of a mile downstream from highway bridge and 2 miles east of Empire.

Drainage area.--988 sq mi.

Records available.--June to December 1895, October 1900 to January 1923 (discontinued).

Gage.--Staff gage. Altitude of gage is 4,560 ft (from river-profile map). Prior to Feb. 24, 1911, at several sites within three-quarters of a mile of described site at different datums.

Average discharge.--22 years (1900-22), 516 cfs (373,600 acre-ft per year).

Extremes.--1900-23: Maximum discharge observed, 5,160 cfs Jan. 23, 1914 (gage height, 8.0 ft); no flow Aug. 31, Sept. 4, 5, 14, 1905.
Revisions.--The maximum discharge observed for the water year 1901 has been revised to 3,300 cfs May 18, 1901 (gage height, 5.25 ft), superseding figure published in WSP 75.

Remarks.--Several diversions for irrigation above station.

Cooperation.--Records for 1915-23 furnished by Bureau of Reclamation.

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1917, superseding those published in WSP 460, are given herewith:

1917		1917-Con.		1917-Con.	
Jan. 13	200	Jan. 18	110	Jan. 23	180
14	175	19	130	24	190
15	150	20	150	25	200
16	130	21	160	26	200
17	120	22	175	27	200

Month	Maximum	Minimum	Mean	Runoff in acre-feet
January 1917	1,370	110	266	16,300
Water year 1916-17	3,250	13	592	428,000
Calendar year 1917	3,250	13	561	406,000

3140. Hanks Creek near Deeth, Nev.

Location.--Lat 41°28', long 115°16', in NW¼ sec. 6 (revised), T. 41 N., R. 60 E. (revised), on left bank 600 ft above mouth, 4 miles above Buena Vista ranch, and 32 miles north of Deeth.

Records available.--March 1913 to September 1914 (discontinued).

Gage.--Water-stage recorder. Altitude of gage is 5,760 ft (from river-profile map). Prior to July 16, 1913, at site 300 ft upstream at different datum.

Extremes.--1913: Maximum discharge during period March to September, 44 cfs Aug. 29 (gage height, 3.02 ft); minimum daily, 1.0 cfs several days in September.
1913-14: Maximum discharge during years, 101 cfs Apr. 16 (gage height, 4.74 ft); minimum not determined.

Cooperation.--Gage-height record furnished by Carey Act Reclamation Association, 1913.

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1913, superseding those published in WSP 360, are given herewith:

1913		1913-Con.		1913-Con.	
July 21	3.4	July 26	3.6	July 31	8.0
22	4.4	27	8.0	Aug. 1	8.0
23	9.0	28	8.0	2	7.0
24	10	29	8.0	3	4.5
25	4.6	30	8.0	29	6.0

Month	Maximum	Minimum	Mean	Runoff in acre-feet
July 1913	10	1.8	3.66	225
August	8	2.0	2.92	179

3170. Lamoille Creek near Halleck, Nev.

Location (revised).--Lat 40°55'40", long 115°26'20", in SW¼ sec. 9, T. 35 N., R. 58 E., on left bank 1½ miles southeast of Halleck and 2 miles upstream from mouth.
Drainage area.--245 sq mi.
Records available.--May 1913 to September 1919 (discontinued).
Gage.--Staff gage. Altitude of gage is 5,240 ft (from topographic map). Prior to Aug. 19, 1915, to Sept. 20, 1917, at datum 2.5 ft lower.
Average discharge.--6 years, 46.4 cfs (33,590 acre-ft per year).
Extremes.--1913-19: Maximum discharge observed, 556 cfs June 5, 1914 (gage height, 6.7 ft, datum then in use); no flow at times 1915-19.
Revisions.--Figures of maximum discharge observed for the water years 1917 and 1919 have been revised to 420 cfs June 21-23, 1917 (gage height, 7.1 ft), and 204 cfs May 31, 1919 (gage height, 3.40 ft), superseding those published in WSP 460 and 510, respectively.
Remarks.--Diversions for irrigation above station.
Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water years 1917 and 1919, superseding those published in WSP 460 and 510, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1917		1917-Con.		1917-Con.		1917-Con.		1917-Con.	
May 19	134	June 7	134	June 22	420	July 6	240	July 21	140
24	134	9	140	23	420	7	225		
25	178	10	204	24	373	8	211	1919	
26	291	11	197	25	351	9	204	May 22	87
27	351	12	330	26	351	10	190	23	112
28	351	13	256	27	330	11	178	24	136
29	291	14	197	28	330	12	152	25	160
30	256	15	178	29	291	13	152	26	190
31	225	16	204	30	291	14	140	27	194
June 1	178	17	291	July 1	256	15	140	28	198
3	140	18	373	2	240	16	134	29	200
4	152	19	373	3	240	18	140	30	202
5	152	20	373	4	240	19	152	31	204
6	140	21	420	5	240	20	140		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
May 1917	351	66	137	8,440
June	420	123	261	15,500
July	256	82	160	9,810
Water year 1916-17	420	0	64.2	46,500
Calendar year 1917	420	1	65.9	47,700
May 1919	204	36	85.3	5,240
Water year 1918-19	204	0	22.0	15,900

3180. North Fork Humboldt River near Halleck, Nev.

Location.--Lat 40°56', long 115°33', in SE¼ sec. 9, T. 35 N., R. 57 E., on left bank 150 ft downstream from Southern Pacific Railroad Co. bridge, a quarter of a mile upstream from mouth, and 6 miles west of Halleck.
Drainage area.--1,020 sq mi, approximately.
Records available.--April 1898 to December 1899, January to March 1900 (gage heights only), October 1902 to January 1904 (gage heights and discharge measurements only), March 1904 to December 1909, September 1910 to March 1911, June 1911 to December 1913. Published as "at Peko" 1898-1900 and as "near Elburz" 1903-6.
Gage.--Staff gage. Altitude of gage is 5,170 ft (from river-profile map). Prior to Oct. 10, 1902, at site 150 ft upstream at different datum.
Average discharge.--8 years (1898-99, 1904-9, 1911-13), 93.1 cfs (67,400 acre-ft per year).
Extremes.--1898-99, 1904-9, 1911-13: Maximum discharge observed, 1,580 cfs Apr. 16, 1899 (gage height, 6.80 ft, site and datum then in use); no flow for many days in late summer 1905, 1906.
Remarks.--Many diversions for irrigation above station.
Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1904, superseding those published in WSP 133, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1904		1904-Con.		1904-Con.		1904-Con.		1904-Con.	
May 19	188	May 28	412	June 6	200	June 15	132	June 24	34
20	216	29	384	7	174	16	105	25	27
21	216	30	355	8	188	17	81	26	18
22	356	31	328	9	216	18	59	27	18
23	342	June 1	286	10	188	19	70	28	19
24	314	2	258	11	160	20	70	29	22
25	328	3	258	12	160	21	50		
26	384	4	258	13	160	22	40		
27	412	5	230	14	132	23	40		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
May 1904	412	40	215	13,220
June	286	18	123	7,320

3275. Humboldt River near Golconda (at Comus), Nev.

Location.--Lat 40°58'40", long 117°29'20", in SW¼ sec. 21, T. 36 N., R. 40 E., at highway bridge 1½ miles north of Golconda, Humboldt County, and 12 miles upstream from mouth of Little Humboldt River.
Drainage area.--10,800 sq mi, approximately.
Records available.--October 1894 to December 1909, September 1910 to September 1917 (discontinued).
Gage.--Chain gage. Altitude of gage is 4,300 ft (from topographic map). Prior to Nov. 5, 1910, staff gages near described site at various datums.
Average discharge.--22 years, 319 cfs (230,900 acre-ft per year).
1910-11: Maximum discharge observed, 799 cfs Apr. 1, 2 (gage height, 7.2 ft); no flow Aug. 23-28, Sept. 7, 14, 18, 21, 25-28.
Extremes.--1894-1909, 1910-17: Maximum discharge observed, 3,160 cfs Apr. 3, 5, 6, 8, 10, 13, 15, 17, 20, 22, 24, 27, 29, May 1, 1907 (gage height, 16.6 ft, site and datum then in use); no flow at times.
Revisions.--The maximum discharge observed for the water year 1911 has been revised to 799 cfs Apr. 1, 2, 1911 (gage height, 7.2 ft), superseding figure published in WSP 330.
Remarks.--Many diversions for irrigation above station.
Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water years 1904, 1907-8, 1911-13, and 1916-17, superseding those published in WSP 133, 250, 310, 330, 360, 440, and 360 are given herein. Complete table of daily discharge is given for water year 1911, but only revised figures are given for other water years.

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1904		1907-Con.		1907-Con.		1908-Con.		1911-Con.	
Sept. 1	44	Oct. 9	163	Dec. 18	437	Feb. 24	257	Dec. 6	12
2	38	10	163	19	437	25	257	7	12
3	32	11	168	20	437	26	257	8	9.8
4	26	12	177	21	457	27	257	9	9.8
5	22	13	177	22	477	28	257	10	9.8
6	18	14	177	23	477	29	271	11	9.8
7	18	15	177	24	477			12	9.8
8	12	16	177	25	477	1911		13	9.8
9	12	17	177	26	477	Oct. 1	0	14	9.8
10	9	18	177	27	477	2	.3	15	9.8
11	9	19	177	28	477	3	0	16	9.8
12	9	20	187	29	457	4	.3	17	9.8
13	9	21	202	30	477	5	1.0	18	9.8
14	9	22	202	31	477	6	1.0	19	9.8
15	9	23	212			7	2.2	20	9.8
16	7	24	212	1908		8	1.0	21	16
17	4	25	212	Jan. 1	549	9	1.4	22	16
18	4	26	222	2	549	10	1.4	23	16
19	4	27	244	3	467	11	.5	24	16
20	4	28	244	4	467	12	1.4	25	16
21	4	29	244	5	467	13	.5	26	16
22	4	30	256	6	428	14	1.4	27	16
23	3	31	256	7	373	15	.5	28	14
24	3	Nov. 1	256	8	323	16	.1	29	14
25	6	2	268	9	278	17	.5	30	14
26	10	3	281	10	236	18	.1	31	14
27	14	4	281	11	204	19	.5		
28	20	5	281	12	204	20	.5	1912	
29	24	6	288	13	216	21	.1	Jan. 1	14
30	24	7	288	14	216	22	.5	2	14
		8	288	15	216	23	.1	3	14
1907		9	288	16	216	24	.5	4	14
Sept. 1	274	10	288	17	230	25	.5	5	16
2	262	11	288	18	230	26	0	6	16
3	250	12	288	19	230	27	0.1	7	16
4	238	13	301	20	233	28	.1	8	16
5	238	14	301	21	236	39	0	9	16
6	233	15	301	22	236	30	.3	10	14
7	222	16	308	23	236	31	.3	11	12
8	217	17	308	24	243	Nov. 1	.3	12	12
9	212	18	323	25	250	2	.3	13	12
10	207	19	323	26	250	6	1.4	14	14
11	202	20	323	27	264	7	1.4	15	14
12	202	21	323	28	264	8	1.4	16	14
13	192	22	323	29	250	9	1.4	17	12
14	182	23	323	30	250	10	2.9	18	9.8
15	172	24	338	31	236	11	2.9	19	9.8
16	168	25	338	Feb. 1	243	12	4.0	20	8.0
17	158	26	346	2	243	13	4.0	21	9.8
18	150	27	346	3	230	14	4.0	22	9.8
19	150	28	346	4	230	15	4.0	23	12
20	150	29	346	5	230	16	4.0	24	12
21	150	30	362	6	230	17	2.2	25	14
22	150	Dec. 1	362	7	230	18	1.4	26	14
23	150	2	362	8	243	19	1.4	27	14
24	150	3	362	9	243	20	2.9	28	16
25	150	4	362	10	243	21	5.1	29	20
26	150	5	362	11	264	22	8.0	30	23
27	150	6	370	12	264	23	8.0	31	23
28	150	7	389	13	264	25	14	Feb. 1	28
29	150	8	389	14	264	26	14	2	23
30	150	9	389	15	264	27	14	3	20
Oct. 1	154	10	389	16	264	28	14	4	23
2	154	11	389	17	278	29	9.8	5	31
3	154	12	389	18	278	30	9.8	6	40
4	154	13	389	19	264	Dec. 1	12	7	47
5	154	14	408	20	264	2	12	8	47
6	154	15	427	21	271	3	12	9	50
7	154	16	437	22	271	4	12	10	50
8	154	17	437	23	271	5	12	11	50

3275. Humboldt River near Golconda (at Comus), Nev.--Continued

Revised figures of discharge, in cubic feet per second, 1904, 1907-8, 1911-13, and 1916-17--Continued

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1912-Con.		1913-Con.		1913-Con.		1913-Con.		1915-Con.	
Feb. 12	50	Feb. 19	161	Mar. 29	258	May 6	212	Nov. 27	1.0
13	50	20	185	30	242	7	185	28	2.0
14	49	21	212	31	242	8	161	29	2.0
15	49	22	242	Apr. 1	258	9	150	30	4.0
16	49	23	242	2	258	10	139	Dec. 1	4.0
17	49	24	212	3	274	11	139	2	4.0
18	49	25	212	4	274	12	139	3	4.0
19	52	26	198	5	274	13	139	4	4.0
20	54	27	198	6	274	14	139	5	4.0
21	57	28	185	7	292	15	139	6	4.0
22	64	Mar. 1	185	8	310	16	139	7	4.0
23	67	2	173	9	328	17	139	8	2
24	70	3	161	10	346	18	139	9	2
25	70	4	161	11	366	19	150	10	2
26	70	5	161	12	386	20	165	11	2
27	74	6	150	13	366	21	198	12	2
28	78	7	150	14	346	22	198	13	2
29	78	8	139	15	346	23	198	14	2
		9	161	16	366	24	198	15	2
1913		10	185	17	386	25	198	16	2
Feb. 1	81	11	198	18	386	26	185	17-31	†3
2	81	12	212	19	386	27	185		
3	81	13	226	20	366	28	226	1916	
4	81	14	242	21	366	29	173	Jan.1-3	†5
5	78	15	274	22	346	30	150	4	7
6	78	16	274	23	328	31	212	5	9
7	74	17	274	24	310			6	12
8	74	18	274	25	310	1915		7	21
9	78	19	274	26	292	Nov. 17	1.0	8	25
10	78	20	292	27	258	18	1.0	10-31	†50
11	84	21	292	28	242	19	1.0	Nov.25-28	†60
12	84	22	292	29	212	20	1.0		†66
13	88	23	292	30	185	21	1.0	1917	
14	88	24	274	May 1	346	22	1.0	Jan.1-31	†55
15	92	25	274	2	292	23	1.0	Aug. 5	257
16	95	26	274	3	258	24	1.0		
17	120	27	274	4	258	25	1.0		
18	129	28	258	5	242	26	1.0		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
September 1904	44	3	13.7	815
Water year 1903-4	1,060	-	328	238,100
Calendar year 1904	1,060	-	359	260,900
September 1907	274	150	186	11,070
Water year 1906-7	3,160	10	950	688,100
October 1907	256	154	188	11,570
November	362	256	309	18,370
December	477	362	424	26,040
Calendar year 1907	3,160	120	1,020	737,900
January 1908	549	204	292	17,940
February	278	230	255	14,680
Water year 1907-8	880	2.5	297	215,800
October 1911	2.2	0	0.55	34
November	14	0.3	5.05	301
December	16	9.8	12.2	753
Calendar year 1911	799	0	203	146,800
January 1912	23	8.0	14.0	863
February	78	20	51.3	2,950
Water year 1911-12	1,240	0	195	141,800
Calendar year 1912	-	-	-	-
February 1913	242	74	129	7,160
March	292	139	230	14,160
April	386	185	315	18,720
May	346	139	187	11,530
Water year 1912-13	680	26	187	135,100
Calendar year 1913	680	26	183	132,900
November 1915	4	0.7	1.01	60
December	-	-	2.94	180
Calendar year 1915	352	0.2	50.4	36,550
January 1916	-	-	39.4	2,420
Water year 1915-16	1,320	0.4	225	163,100
November 1916	64	2.5	29.7	1,770
Calendar year 1916	1,320	2.5	232	168,700
January 1917	-	-	55	3,380
August	377	38	172	10,570
Water year 1916-17	1,950	2.5	460	333,000
Calendar year 1917	1,950	-	464	336,100

† Average for period indicated.

3275. Humboldt River near Golconda (at Comus), Nev.--Continued

Discharge, in cubic feet per second, water year October 1910 to September 1911

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		1.4	1.4	34	276	361	799	428	197	553	50	1.0
2		1.4	1.4	34	284	326	799	448	197	531	50	2.2
3		1.4	1.4	37	292	326	772	408	197	510	44	2.2
4		1.4	1.4	40	300	292	772	389	197	468	44	.3
5		1.4	1.4	40	334	292	719	370	224	468	44	.3
6		1.0	1.4	40	334	308	719	370	224	448	37	.3
7		1.0	1.4	40	317	308	694	300	224	408	37	0
8		1.0	1.4	47	326	308	694	284	238	224	31	.1
9		1.0	1.4	47	334	343	694	300	253	210	31	.1
10		1.0	1.4	54	370	343	669	284	253	184	26	.1
	1.4											
11		1.0	1.4	54	408	352	669	284	284	184	26	.1
12		1.0	1.4	61	408	361	645	284	300	174	26	.1
13		1.4	1.4	61	428	398	645	268	300	160	20	.1
14		1.4	1.4	61	458	418	645	238	317	160	16	0
15		1.4	2.9	73	458	438	645	238	334	149	16	.1
16		1.4	4.0	73	500	458	669	238	352	149	12	.1
17		1.4	4.0	73	478	458	621	224	370	138	6.6	.1
18		1.4	6.6	82	478	489	598	224	370	138	6.6	0
19		1.4	9.8	82	478	510	575	224	408	128	4.0	.1
20		1.4	9.8	90	478	510	575	224	428	108	1.0	.1
21	1.4	1.4	9.8	108	458	510	575	224	448	108	1.0	0
22	1.4	1.4	14	160	458	531	575	224	448	82	.3	.1
23	1.4	1.4	18	160	448	553	553	210	468	82	0	.1
24	1.4	1.4	23	172	438	575	553	210	468	82	0	.1
25	1.4	1.4	28	172	418	621	531	197	468	73	0	0
26	1.4	1.4	34	210	398	645	510	197	468	73	0	0
27	1.4	1.4	34	224	398	669	500	197	489	82	0	0
28	1.4	1.4	34	238	361	694	489	197	510	76	0	0
29	1.4	1.4	34	238	-	719	448	197	510	68	1.0	.3
30	1.4	1.4	34	253	-------	719	448	197	531	62	2.2	.3
31	1.4	-------	40	253	-------	745	-------	197	-------	58	2.2	-------
Total	43.4	39.2	359.5	3,311	11,116	14,580	18,800	8,274	10,475	6,336	534.9	8.3
Mean	1.40	1.31	11.6	107	397	470	627	267	349	204	17.3	0.28
Ac-ft	86	78	713	6,570	22,050	28,920	37,290	16,410	20,780	12,570	1,060	16

Calendar year 1910: Max - Min - Mean - Ac-ft -
Water year 1910-11: Max 799 Min 0 Mean 202 Ac-ft 146,500

3340. Humboldt-Lovelock Irrigation, Light and Power Co.'s outlet canal near Humboldt, Nev.

Location.--Lat 40°36'25", long 118°18'20", in SE¼ sec. 30, T. 32 N., R. 33 E., at outlet of lower Humboldt (Taylor-Pitt) Reservoir and 2½ miles west of Humboldt.
Records available.--February 1914 to September 1920, October 1921 to September 1941.
Gage.--Water-stage recorder and Cippoletti weir. Altitude of gage is 4,140 ft (from topographic map). Oct. 1, 1924, to April 1936, staff gage and Cippoletti weir.
Average discharge.--26 years, 14.0 cfs (10,140 acre-ft per year).
Extremes.--1914-20, 1921-41: Maximum discharge, 296 cfs (revised) Apr. 30, 1915 (maximum daily discharge as published in WSP 880, 900, 930 is in error); practically no flow at times each year.
Remarks.--Flow regulated by reservoir outlet gates a few hundred feet upstream. Canal conducts stored water released from Humboldt (Taylor-Pitt) Reservoirs to Rye Patch Reservoir, from which it is later released and carried in natural river channel to Lovelock district for use in irrigation.
Cooperation.--Records for 1934-36 furnished by Humboldt River water commissioner and for 1937-41 by Bureau of Reclamation.
Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1914, superseding those published in WSP 390, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1914		1914-Con.		1914-Con.		1914-Con.		1914-Con.	
Feb. 15	1.6	Mar. 5	1.0	Mar. 21	.8	July 28	1.6	Sept.14	1.0
16	1.6	6	1.3	22	.8	29	1.6	15	1.0
17	1.6	7	1.3	23	.8	30	1.9	16	1.0
18	1.6	8	.9	24	.8	31	1.9	17	1.0
19	1.6	9	.9	Apr. 1	1.6	Apr. 24	1.3	18	1.0
20	1.6	10	.9	July 17	2.5	Sept. 3	1.0	19	1.0
21	1.6	11	.9	18	1.9	4	1.0	20	1.0
22	1.6	12	.9	19	1.9	5	1.0	21	1.0
23	1.6	13	.9	20	1.9	6	1.0	22	1.0
24	1.3	14	.8	21	1.9	7	1.0	23	1.0
25	1.0	15	.8	22	1.6	8	1.0	24	1.0
26	1.0	16	.8	23	1.6	9	1.0	25	1.0
27	.9	17	.8	24	1.6	10	1.0	26	1.0
Mar. 2	1.9	18	.8	25	1.6	11	1.0	27	1.0
3	1.6	19	.8	26	1.6	12	1.0	28	1.0
4	1.3	20	.8	27	1.6	13	1.0	29	1.0
								30	1.0

Month	Maximum	Minimum	Mean	Runoff in acre-feet
February 1914	64	0.9	-	164
March	85	0.8	16.3	1,000
April	148	1.6	47.3	2,810
July	52	1.6	21.0	1,290
August	92	1.3	70.7	4,340
September	77	1.0	5.23	311

3390. Donner Creek near Truckee, Calif.

Location.--Lat 39°19'15", long 120°12'10", in SE¼ sec. 16, T. 17 N., R. 16 E., 1 mile downstream from Cold Creek, 1.5 miles southwest of Truckee, and 2 miles downstream from Donner Lake.
Drainage area.--30 sq mi (approximately).
Records available.--October 1902 to September 1915. March 1928 to December 1943 (discontinued).
Gage.--Water-stage recorder. Altitude of gage is 5,850 ft (from topographic map). Prior to Sept. 12, 1909, staff gage 40 ft upstream at different datum. Sept. 12, 1909, to Sept. 30, 1915, staff gage at described site and datum.
Average discharge.--26 years (1902-13, 1928-43), 76.7 cfs.
Extremes.--1902-15, 1928-43: Maximum discharge, 1,800 cfs Dec. 11, 1937 (gage height, 6.2 ft on outside gage); no flow on several days in 1906, 1907, and 1913.
Revisions.--The maximum daily discharge for the water year 1903 has been revised to 478 cfs May 13, 1903, superseding figure published in WSP 300.
Remarks.--Flow regulated by Donner Lake. No diversion.
Revisions (water years).--Revised figures of discharge in cubic feet per second, for the water years 1903-4 and 1909, superseding those published in WSP 300, are given herein. Complete table of daily discharge is given for the water year 1903, but only revised figures are given for other water years.

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1904		1909-Con.		1909-Con.		1909-Con.		1909-Con.	
Jan. 1	5	May 7	456	May 21	315	June 4	525	June 18	375
2	5	8	472	22	285	5	525	19	255
3	11	9	525	23	270	6	480	20	255
4	25	10	480	24	270	7	480	21	255
5	14	11	420	25	270	8	465	22	285
6-31	†15	12	375	26	315	9	465	23	300
		13	330	27	360	10	480	24	270
1909		14	285	28	330	11	480	25	255
May 1	300	15	315	29	285	12	480	26	242
2	300	16	285	30	300	13	480	27	230
3	354	17	285	31	360	14	480	28	218
4	368	18	285	June 1	495	15	450	29	205
5	396	19	300	2	495	16	435	30	192
6	440	20	315	3	495	17	405		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
January 1904	25	-	14.5	893
Water year 1903-4	709	1	156	113,500
Calendar year 1904	709	-	153	111,300
May 1909	525	270	343	21,100
June	525	192	382	22,700
Water year 1908-9	812	1	108	78,000
Calendar year 1909	862	1	135	97,800

† Average for period indicated.

Discharge, in cubic feet per second, water year October 1902 to September 1903

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	1	3	22	36	28	209	280	374	56	6	2
2	-	1	3	25	36	28	198	305	*318	56	6	2
3	-	1	5	22	36	28	157	318	292	56	5	1
4	-	1	5	22	36	28	157	388	267	56	5	1
5	-	1	5	22	36	28	167	374	243	56	4	1
6	-	1	7	22	36	28	138	418	243	46	4	1
7	-	1	5	22	36	28	148	388	243	46	5	1
8	-	1	5	22	36	28	157	388	220	46	5	1
9	-	1	7	22	36	28	198	433	220	32	5	1
10	-	9	7	28	36	28	198	433	209	28	5	1
11	-	9	7	28	28	28	177	418	209	28	3	1
12	-	4	6	25	28	28	148	463	198	16	16	1
13	-	4	3	25	28	28	138	478	198	16	11	1
14	-	16	5	22	28	28	157	360	157	16	11	1
15	-	4	5	19	28	28	138	267	130	16	1	1
16	-	7	5	19	28	28	121	403	167	16	1	1
17	-	5	6	16	28	28	121	360	121	16	1	1
18	-	16	5	16	28	28	121	318	138	14	1	1
19	-	5	3	14	28	28	121	220	114	11	1	1
20	-	3	3	16	28	28	121	209	121	*11	1	1
21	-	5	3	19	28	36	138	220	121	11	1	1
22	-	5	3	16	28	67	167	292	106	11	1	1
23	*3	5	3	22	28	67	177	232	92	11	1	1
24	3	5	4	56	28	67	209	243	99	7	1	1
25	1	5	5	67	28	62	267	243	130	7	1	1
26	1	5	3	36	28	62	267	243	99	6	1	1
27	1	5	3	36	28	28	243	232	79	6	1	1
28	1	5	2	56	28	92	243	232	62	6	1	1
29	1	5	4	56	-	92	267	280	62	6	1	1
30	1	3	19	46	-------	360	267	332	56	6	1	1
31	1	-------	25	36	-------	255	-------	388	-------	*7	*1	-------
Total	-	139	174	875	864	1,748	5,335	10,158	5,088	722	108	32
Mean	-	5	6	28	31	56	178	328	170	23	3	1
Ac-ft	-	276	345	1,740	1,710	3,470	10,600	20,100	10,100	*1,414	*184	*60

Calendar year 1902: Max - Min - Mean - Ac-ft -
Water year 1902-3 : Max 478 Min - Mean a69.3 Ac-ft a50,100

* Discharge measurement made on this day.
a Yearly figure only partly estimated on basis of records for nearby streams; one monthly figure not available.

3400. Prosser Creek near Truckee, Calif.

Location.--Lat 39°22'45", long 120°09'00", in SW¼ sec. 25, T. 18 N., R. 16 E. (revised), at highway bridge, 200 ft downstream from Alder Creek, 2 miles upstream from mouth and 4 miles north of Truckee.

Drainage area.--48 sq mi, approximately.

Records available.--June 1903 to October 1904, September 1907 to June 1912. Published as Prosser Creek near Hobart Mills prior to 1911.

Gage.--Staff gage. Altitude of gage is 5,650 ft (from topographic map). Prior to June 1, 1911, several staff gages in vicinity of described site at different datums.

Average discharge.--5 years (1903-4, 1907-11), 140 cfs.

Extremes.--1903-4, 1907-12: Maximum discharge observed, 1,360 cfs Jan. 16, 1909 (gage height, 5.8 ft, site and datum then in use); minimum daily, 4 cfs Aug. 12, 1908.

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water years 1903-4 and 1910, superseding those published in WSP 300, are given herein. Complete table of daily discharge for water years 1903-4 is given, but only revised figures are given for the water year 1910.

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1909		1909-Con.		1909-Con.		1909-Con.		1910-Con.	
Dec. 3	250	Dec. 7	150	Dec. 19	130	Dec. 23	130	Jan.16-31	†90
4	150	16	130	20	130			Feb.1-28	†110
5	150	17	130	21	130	1910			
6	150	18	130	22	130	Jan. 2-15	†110		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
December 1909	480	-	170	10,500
Calendar year 1909	1,290	7	187	135,200
January 1910	277	-	105	6,460
February	-	-	110	6,110
Water year 1909-10	900	7	129	93,200
Calendar year 1910	440	7	103	74,500

† Average for period indicated.

Discharge, in cubic feet per second, June to September 1903

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1									-	92	26	14
2									-	85	26	12
3									-	85	23	12
4									-	63	23	12
5									-	70	23	12
6									-	50	*23	12
7									-	50	23	12
8									-	50	21	12
9									-	42	20	12
10									-	40	20	12
11									-	42	20	12
12									-	50	18	12
13									-	40	18	12
14									-	36	*18	12
15									-	40	18	12
16									-	40	18	12
17									-	42	16	12
18									-	*40	16	12
19									-	32	16	12
20									-	36	16	16
21									-	36	16	16
22									-	32	16	16
23									-	30	16	16
24									-	29	17	16
25									-	29	16	16
26									-	26	16	16
27									92	26	*16	12
28									92	26	16	12
29					-				130	24	16	12
30					-------				98	24	16	12
31		-------			-------		-------		-------	*26	16	-------
Total									-	1,333	579	390
Mean									-	43.0	18.7	13.0
Ac-ft									-	2,640	1,150	774

Calendar year	: Max	Min	Mean	Ac-ft
Water year	: Max	Min	Mean	Ac-ft

* Discharge measurement made on this day.

3400. Prosser Creek near Truckee, Calif.--Continued

Discharge, in cubic feet per second, water year October 1903 to September 1904

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14		70			238	274	256	390	*205	69	26
2	14		70			293	312	238	390	205	91	26
3	16		50			312	331	238	410	205	69	26
4	16		b40			274	293	293	390	175	69	26
5	16					238	256	293	370	175	69	26
		a15										
6	14					274	293	312	390	175	69	26
7	14					390	331	350	390	175	69	26
8	14				b40	470	410	430	350	175	69	26
9	16					390	450	470	312	145	59	26
10	23					470	490	532	312	145	50	26
11		880				390	511	532	*312	145	50	26
12		293				274	553	532	312	145	50	26
13		390				256	638	*532	293	*145	*50	23
14		410				238	660	511	312	130	50	23
15		312				221	616	532	312	116	50	23
				b40								
16		221				221	553	511	*312	116	50	26
17		59				274	490	511	274	103	50	26
18		42	b30		b250	350	470	511	274	103	35	23
19		50				726	430	490	238	103	35	23
20		145			116	616	430	490	238	103	35	23
21	a15	470			238	410	350	490	238	103	35	23
22		390			532	312	331	470	238	103	26	30
23		256			880	293	256	470	238	*103	26	35
24		130			924	238	256	470	238	92	30	35
25		92			880	221	256	450	238	92	26	30
26		80			682	221	238	*430	221	92	26	30
27		59			595	238	238	430	205	92	26	26
28		70			274	331	*238	430	221	80	30	26
29		70			80	430	238	430	238	80	*30	26
30		80			-------	312	221	390	238	80	26	30
31		-------			-------	274	-------	390	-------	69	26	-------
Total	472	3,849	1,040	1,240	6,801	10,195	11,413	13,414	8,894	3,975	1,445	793
Mean	15.2	128	33.5	50	235	329	380	433	296	128	45.8	26.4
Ac-ft	936	7,630	2,060	2,460	13,490	20,230	22,610	26,620	17,610	7,870	2,816	1,571

Calendar year 1903: Max - Min - Mean - Ac-ft -
Water year 1903-4 : Max 924 Min - Mean 174 Ac-ft 125,900

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

3620. Fifteenmile Creek near Warner Lake, Oreg.

Location.--Lat 42°01', long 120°01', in sec. 21, T. 41 S., R. 23 E., half a mile (revised) north of California-Oregon State line, 6 miles south of former town of Warner Lake, and 13 miles southwest of Adel.

Drainage area.--15 sq mi, approximately.

Records available.--March to May 1913 (published as "near Fort Bidwell"), December 1917 to September 1919, April to June 1922 (discontinued).

Gage.--Staff gage. Altitude of gage is 5,400 ft (from topographic map).

Extremes.--1913, 1917-19, 1922: Maximum discharge observed, 88 cfs (revised) Apr. 4, 1919 (gage height, 2.9 ft); minimum observed, 0.5 cfs Aug. 18 to Sept. 8, 1918.
Revisions.--The maximum discharge observed for the water year 1919 has been revised to 88 cfs Apr. 4, 1919 (gage height, 2.9 ft), superseding figure published in WSP 510.

Remarks.--No regulation. A few small diversions for irrigation above station.

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1918, superseding those published in WSP 480, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1918		1918-Con.		1918-Con.		1918-Con.		1918-Con.	
May 1	2.5	May 7	3.2	May 13	2.6	May 19	2.3	May 25	1.9
2	3.0	8	3.0	14	2.7	20	2.7	26	1.8
3	3.5	9	2.9	15	2.8	21	2.4	27	1.7
4	4.0	10	2.8	16	3.0	22	2.3		
5	6.0	11	2.5	17	3.4	23	2.1		
6	4.0	12	2.5	18	2.7	24	2.0		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
May 1918	6.0	1.7	2.69	165
Calendar year 1918	23	.5	1.56	1,130

3745. Deep Creek at Adel, Oreg.

Location.--Lat 42°10', long 119°54', near center of sec. 21, T. 39 S., R. 24 E., at south edge of Adel, an eighth of a mile upstream from highway bridge.
Drainage area.--274 sq mi (revised).
Records available.--May 1909 to May 1916, December 1917 to September 1919, January 1921 to December 1922 (discontinued).
Gage.--Staff gage. Altitude of gage is 4,500 ft (from topographic map). Mar. 10, 1914, to May 31, 1916, and Jan. 30, 1921, to Aug. 22, 1922, water-stage recorder or staff gage at same site and datum.
Average discharge.--8 years (1909-15, 1918-19, 1921-22), 142 cfs (103,000 acre-ft per year).
Extremes.--1909-16, 1917-19, 1921-22: Maximum discharge observed, 4,950 cfs Mar. 2, 1910 (gage height, 9.0 ft); minimum observed, 1.4 cfs July 18-21, 1919 (gage height, 2.4 ft).
Remarks.--No regulation. Diversions above station for irrigation by several small ditches, flooding of lowlands during high flow season, and by five canals within 2 miles upstream from station. Return flow from canals enters Deep Creek mostly below station.
Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1912, superseding those published in WSP 330, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1912		1912-Con.		1912-Con.		1912-Con.	
Feb. 19	130	Feb. 22	50	Feb. 25	30	Feb. 28	25
20	100	23	40	26	28	29	25
21	70	24	35	27	26		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
February 1912	139	24	61.8	3,550
Water year 1911-12	1,260	4	170	123,000
Calendar year 1912	1,260	4	173	126,000

3841. Chewaucan River at Paisley, Oreg.

Location.--Lat 42°42', long 120°33', in SE¼ sec. 23, T. 33 S., R. 18 E., half a mile west of Paisley and 2½ miles downstream from Mill Creek.
Drainage area.--278 sq mi (revised).
Records available.--January 1905 to December 1907, January 1909 to April 1912, April to June 1913 (fragmentary), discontinued.
Gage.--Staff gage. Altitude of gage is 4,390 ft (from river-profile map).
Extremes.--1905-7, 1909-13: Maximum discharge observed, 4,000 cfs Nov. 23, 1909 (gage height, 9.4 ft), from rating curve extended above 850 cfs; minimum observed, 19 cfs July 30, 31, Aug. 3-27, Aug. 30 to Sept. 4, 1905, Aug. 17-24, 1907 (gage height, 3.4 ft).
Remarks.--No regulation. Diversion by Conn ditch 2 miles upstream.
Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1905-6, superseding those published in WSP 370, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1905		1905-Con.		1905-Con.		1905-Con.		1905-Con.	
July 1	62	July 30	19	Oct. 2	33	Oct. 31	33	Nov. 29	33
2	52	31	19	3	33	Nov. 1	25	30	33
3	42	Sept. 5	25	4	33	2	25	Dec. 1	33
4	38	6	25	5	33	3	33	2	42
5	33	7	25	6	33	4	25	3	42
6	33	8	25	7	42	5	25	4	42
7	33	9	25	8	42	6	33	5	25
8	33	10	25	9	33	7	33	6	33
9	25	11	25	10	33	8	33	7	33
10	25	12	25	11	33	9	33	8	30
11	25	13	25	12	33	10	33	9	32
12	25	14	25	13	33	11	25	10	35
13	25	15	25	14	33	12	25	11	40
14	25	16	25	15	33	13	33	12	40
15	25	17	25	16	33	14	42	13	40
16	25	18	25	17	33	15	33	14	40
17	25	19	25	18	33	16	42	15	40
18	25	20	25	19	25	17	42	16	40
19	25	21	25	20	25	18	42	17	40
20	33	22	25	21	25	19	42	18	40
21	33	23	25	22	25	20	33	20	36
22	33	24	25	23	25	21	33	21	36
23	25	25	25	24	33	22	33	22	36
24	25	26	25	25	33	23	42	23	36
25	25	27	33	26	33	24	33	24	40
26	33	28	42	27	33	25	33	25	60
27	25	29	33	28	33	26	42		
28	25	30	33	29	33	27	33		
29	25	Oct. 1	33	30	33	28	42		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
July 1905	62	19	29.7	1,830
September	42	19	25.6	1,520
October	42	25	32.3	1,990
November	42	25	33.8	2,010
December	77	25	43.4	2,670
Calendar year 1905	332	19	91.7	66,400
Water year 1905-6	1,000	25	186	134,000

3890. West Fork Silver Creek near Silver Lake, Oreg.

Location.--Lat 43°05', long 121°05', in NW¼ sec. 8, T. 29 S., R. 14 E., three-quarters of a mile (revised) upstream from mouth and 4 miles (revised) southwest of town of Silver Lake.

Drainage area.--27 sq mi, approximately.

Records available.--March 1919 to August 1923 (irrigation seasons only), March 1925 to September 1926, March 1927 to September 1932 (irrigation seasons only), discontinued. Monthly discharge only May 1929 to September 1932, published in WSP 1314.

Gage.--Water-stage recorder. Altitude of gage is 4,570 ft (from levels to former gage). Prior to Oct. 18, 1921, water-stage recorder half a mile downstream at different datum. Oct. 18, 1921, to Aug. 31, 1923, and Mar. 11, 1925, to Mar. 16, 1928, water-stage recorder; Mar. 17, 1928, to Apr. 22, 1932, staff gage, at described site and datum.

Extremes.--1919-23, 1925-32: Maximum discharge, 138 cfs Apr. 11, 1921 (gage height, 2.24 ft, site and datum then in use), from rating curve extended above 20 cfs; no flow Aug. 17-19, 21, 22, 1932.

Revisions.--Figures of maximum discharge for the water years 1925-26 have been revised to 130 cfs May 22, 1925 (gage height, 2.1 ft), and 16 cfs Dec. 8, 1925 (gage height, 0.75 ft), superseding those published in WSP 610 and 630, respectively.

Remarks.--No regulation or diversion above station.

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1928, superseding those published in WSP 670, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1928		1928-Con.		1928-Con.		1928-Con.		1928-Con.	
Apr. 1	15	Apr. 27	19	May 1	25	May 21	15	May 25	13
2	15	28	20	2-18	†20	22	14		
3	15	29	21	19	15	23	14		
4-26	†16	30	24	20	15	24	12		

Month	Mean	Runoff in acre-feet
April 1928	16.6	988
May	16.8	1,030

† Average for period indicated.

3925. Silvies River near Silvies, Oreg.

Location (revised).--Lat 43°55', long 118°58', in SE¼ sec. 14, T. 19 S., R. 31 E., three-quarters of a mile downstream from Trout Creek and 8 miles south of Silvies.

Drainage area.--510 sq mi, approximately.

Records available.--May 1903 to December 1904, January 1909 to June 1911, April to June 1912, April to June 1916, March to June 1921, April to June 1922, April to June 1923 (discontinued). Monthly discharge only April 1912, published in WSP 1314.

Gage.--Staff gage. Altitude of gage is 4,500 ft (from topographic map). May 9 to June 26, 1903, at site half a mile upstream at different datum.

Extremes.--1903-4, 1909-12, 1916, 1921-23: Maximum discharge observed, 2,320 cfs Apr. 16, 1904 (gage height, 12.15 ft); no flow Aug. 22 to Sept. 12, 1910.

Remarks.--No regulation. Diversions above station primarily by flooding during high flow.

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1910, superseding those published in WSP 370, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1909		1910-Con.		1910-Con.		1910-Con.	
Dec.1-31	†15	Feb.1-28	†30	Mar. 23	1,380	Mar. 27	688
		Mar. 1	200	24	1,380	28	563
1910		2	500	25	944	29	465
Jan.1-31	†20	22	1,430	26	730		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
December 1909	-	-	15	922
Calendar year 1909	882	1.2	81.7	59,100
January 1910	-	-	20	1,230
February	-	-	30	1,670
March	1,650	200	627	38,600
Water year 1909-10	1,650	0	96.7	70,100
Calendar year 1910	1,650	0	95.8	69,400

† Average for period indicated.

3945. Prater Creek near Burns, Oreg.
(Formerly published as Prather Creek near Burns)

Location (revised).--Lat 43°37', long 118°57', in S½ sec. 25, T. 22 S., R. 31 E., 1 mile upstream from highway bridge and 6 miles northeast of Burns.

Drainage area.--20 sq mi, approximately.

Records available.--March to June 1921, March to June 1922, March to June 1923 (discontinued). Monthly discharge only for some periods, published in WSP 1314. Formerly published as Prather Creek near Burns.

Gage.--Staff gage. Altitude of gage is 4,150 ft (from topographic map).

Extremes.--1921-23: Maximum discharge observed, 115 cfs Apr. 6, 1922 (gage height, 3.8 ft), from rating curve extended above 20 cfs; no flow June 24-30, 1923.
Revisions.--The maximum discharge observed during the period March to June 1921 has been revised to 46 cfs Mar. 17-19, 1921 (gage height, 3.3 ft), superseding figure published in WSP 530.

Remarks.--No regulation or diversion above station.

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1921, superseding those published in WSP 530, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1921		1921-Con.		1921-Con.		1921-Con.		1921-Con.	
Mar. 9	23	Mar. 14	20	Mar. 19	46	Apr. 2	25	Apr. 11	25
10	22	15	20	20	25	3	25	12	25
11	21	16	21	21	25	4	17	13	21
12	20	17	30	22	17	5	16		
13	20	18	46	Apr. 1	17	10	16		

Month	Maximum	Minimum	Mean	Runoff in acre-feet
March 1921	46	7.4	†19.3	1,190
April	25	7.4	13.7	815

† Partly estimated.

3975. Krumbo Creek near Diamond, Oreg.

Location.--Lat 42°57', long 118°48', in NW¼ sec. 19, T. 30 S., R. 32 E., 4 miles upstream from mouth and 7 miles southwest of Diamond.

Drainage area.--37 sq mi (revised), approximately.

Records available.--March to June 1911, April to September 1913 (fragmentary gage heights and discharge measurements only), April to June 1930 (monthly discharge only, published in WSP 1314). Records for July 1911, published in WSP 310, have been found to be unreliable and should not be used.

Gage.--Staff gage. Altitude of gage is 4,200 ft (from topographic map). Mar. 17 to June 30, 1911, at same site at different datum.

Extremes.--1911, 1930: Maximum discharge observed, 68 cfs Mar. 22, 1911 (gage height, 4.7 ft, datum then in use), from rating curve extended above 19 cfs; minimum daily, 1.5 cfs June 26, 27, 1930.

Remarks.--No regulation or diversion above station.

Revisions (water years).--See Records available. Revised figures of discharge, in cubic feet per second, for the water year 1911, superseding those published in WSP 310, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1911		1911-Con.		1911-Con.		1911-Con.		1911-Con.	
Apr. 1	10	Apr. 19	5.0	May 7	3.9	May 25	4.0	June 12	3.8
2	9.5	20	4.8	8	3.9	26	4.0	13	3.7
3	9.0	21	4.6	9	3.9	27	4.0	14	3.7
4	8.5	22	4.3	10	3.9	28	4.1	15	3.6
5	8.0	23	4.1	11	3.9	29	4.0	16	3.5
6	7.4	24	4.6	12	3.9	30	3.9	17	3.4
7	8.3	25	5.0	13	3.9	31	3.9	18	3.3
8	9.2	26	5.5	14	3.8	June 1	4.0	19	3.3
9	10	27	6.0	15	3.8	2	4.0	20	3.2
10	8.0	28	5.4	16	3.8	3	4.0	21	3.2
11	6.0	29	4.8	17	3.9	4	4.0	22	3.2
12	5.8	30	4.3	18	3.9	5	4.1	23	3.2
13	5.6	May 1	4.2	19	3.9	6	4.1	24	3.2
14	5.3	2	4.0	20	3.9	7	4.1	25	3.2
15	5.6	3	3.9	21	3.9	8	4.1	26	3.3
16	6.0	4	3.9	22	3.9	9	4.0	27	3.4
17	5.7	5	3.9	23	3.9	10	4.0	28	3.4
18	5.3	6	3.9	24	3.9	11	3.9	29	3.4
								30	3.5

Month	Maximum	Minimum	Mean	Runoff in acre-feet
April 1911	10	4.1	6.39	380
May	4.2	3.8	3.92	241
June	4.1	3.2	3.63	216

4060. Silver Creek near Narrows, Oreg.

Location.--Lat 43°23', long 119°22', in NW¼ sec. 21, T. 25 S., R. 28 E., 14 miles southeast of Riley and 22 miles (revised) northwest of town of Narrows.

Drainage area.--630 sq mi, approximately.

Records available.--April to June 1917, March 1919 to May 1923 (spring flood seasons only), discontinued.

Gage.--Staff gage. Altitude of gage is 4,200 ft (from topographic map).

Extremes.--1917, 1919-23: Maximum discharge observed, 563 cfs (revised) Apr. 29, 1922 (gage height, 5.3 ft); no flow at times each year.

Revisions.--The maximum discharge observed for the water year 1922 has been revised to 563 cfs Apr. 29, 1922 (gage height, 5.3 ft), superseding figure published in WSP 550.

Remarks.--Some regulation by irrigation dams upstream. Many diversions for irrigation above station. Records for high-water seasons only. Records herein include flow in Dunn Field ditch, which diverted a short distance upstream.

Revisions (water years).--Revised figures of discharge, in cubic feet per second, for the water year 1922, superseding those published in WSP 550, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge
1922		1922-Con.		1922-Con.	
Apr. 28	516	May 2	506	May 19	127
29	553	3	480	20	127
30	554	4	474	21	121
May 1	540	18	163	22	109
				23	109

Month	Maximum	Minimum	Mean	Runoff in acre-feet
April 1922.....	554	0	†217	12,900
May.....	540	28	229	14,100

† Partly estimated.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

No records were collected at partial-record stations during the 1958 water year. A table of measurements at miscellaneous sites for both low-flow and high-flow follows. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

Discharge measurements made at miscellaneous sites during water year 1958

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge
Bear River basin						
Sulphur Creek	Bear River...	NE¼SE¼ sec.7, T.14 N., R.119 W., at mouth, 6½ miles southeast of Evanston, Wyo.	85		7-10-58	*50.7
Bear River...	Great Salt Lake.	SE¼ sec.6, T.11 N., R.8 E., below Beckwith Quinn Dam, 7 miles northeast of Randolph, Utah.	-		6-18-58 7-21-58	*11.5 *5.57
Cub River....	Bear River...	Lat 42°08'10", long 111°39'00", 0.9 mile below Hillyards Canyon and 12 miles east of Preston, Idaho.	8.6	1957	12- 5-57	*10.3
Logan River..	Little Bear River.	SW¼NW¼ sec.36, T.12 N., R.1 E., 100 ft above Logan Northern Canal, 300 ft below State dam, and 2½ miles east of Logan, Utah.	219	1913-14, 1956-57	6-28-58 7-19-58 8-29-58	*307 *201 *142
Malad River..	Bear River...	Sec. 10, T.14 S., R.35 E., at springs 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	1948-57	10- 1-57 11- 5-57 12-16-57 1-27-58 2-22-58 4- 2-58 5-10-58 6-13-58 7-15-58 8-17-58 9-23-58	*8.56 *8.05 *8.02 *9.14 9.98 10.7 9.29 *7.43 *8.41 *7.67 *8.99
Malheur and Harney Lakes basin, Oreg.						
Krumbo Creek.	Donner und Blitzen River.	Sec.19, T.30 S., R.32 E., 10 miles northeast of Frenchglen.	b30	1955	8- 7-58	*6.38
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, 1955	8- 7-58	*16.1
McCoy Creek..	Kiger Creek..	Sec.2, T.30 S., R.32 E., 4 miles southwest of Diamond.	b45	1907, 1909-21, 1930,1941, 1955	8- 7-58	*5.71
Donner und Blitzen River.	Malheur Lake.	At former gaging station near Voltage.	b760	1916-19‡, 1921-22‡, 1938-46‡, 1947-49, 1951-55, 1957	8- 8-58	62.3
Malheur Lake Outlet.	Harney Lake..	Sec.26, T.26 S., R.31 E., at highway bridge 21 miles south of Burns.	-	1943, 1952-53, 1955-57	10- 2-57	28.8

* Base flow.
‡ Operated as regular gaging station.
a Flow derived largely from springs.
b Approximately.

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