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SURFACE WATER SUPPLY
of the UNITED STATES

1945

PART 10

THE GREAT BASIN

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DIVISION OF SURFACE WATER

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CONTENTS

	Page
Scope of work.....	1
Definition of terms.....	1
Explanation of data.....	2
Time basis.....	4
Accuracy of field data and computed results.....	5
Publications.....	5
Records of discharge collected by agencies other than the Geological Survey.....	11
Cooperation.....	12
Division of work.....	12
Gaging-station records.....	14
Great Salt Lake Basin.....	14
Gages on Great Salt Lake, Utah.....	14
Bear River Basin.....	15
Bear River near Utah-Wyoming State line.....	15
Bear River at Millis, near Evanston, Wyo.....	16
Bear River near Evanston, Wyo.....	17
Bear River near Woodruff, Utah.....	18
Bear River near Randolph, Utah.....	19
Bear River at Border, Wyo.....	20
Bear River at Harer, Idaho.....	21
Bear River at Alexander, Idaho.....	22
Bear River near Preston, Idaho.....	23
Bear River near Collinston, Utah.....	24
Mill Creek near Evanston, Wyo.....	25
Sulphur Creek near Evanston, Wyo.....	26
Yellow Creek near Evanston, Wyo.....	27
Coyote Creek near Evanston, Wyo.....	28
Twin Creek at Sage, Wyo.....	30
Smiths Fork near Border, Wyo.....	31
Smiths Fork at Cokeville, Wyo.....	32
Hobble Creek near Geneva, Idaho.....	33
Pine Creek near Cokeville, Wyo.....	34
Thomas Fork near Geneva, Idaho.....	35
Thomas Fork near Raymond, Idaho.....	36
Salt Creek near Geneva, Idaho.....	37
Montpelier Creek near Montpelier, Idaho.....	37
Montpelier Creek at Irrigators weir, near Montpelier, Idaho.....	38
Bloomington Creek near Bloomington, Idaho.....	39
Paris Creek near Paris, Idaho.....	40
Paris power canal near Paris, Idaho.....	41
Slight Canyon Creek near Paris, Idaho.....	42
Mill Creek above West Fork, near Liberty, Idaho.....	43
Mill Creek near Liberty, Idaho.....	44
Georgetown Creek near Georgetown, Idaho.....	45
Stauffer Creek near Nounan, Idaho.....	46
Skinner Creek at Nounan, Idaho.....	47
Cottonwood Creek near Swan Lake, Idaho.....	48
Cottonwood Creek near Cleveland, Idaho.....	49
Treasureton Canal near Swan Lake, Idaho.....	50
Mink Creek near Mink Creek, Idaho.....	51
Twin Lakgs Canal near Mink Creek, Idaho.....	52
Preston-Riverdale & Mink Creek Canal near Mink Creek, Idaho.....	53
Cub River near Preston, Idaho.....	54
Cub River above Maple Creek, near Franklin, Idaho.....	55
Cub River-Worm Creek Canal near Preston, Idaho.....	56
Worm Creek near Preston, Idaho.....	57
Little Bear River near Paradise, Utah.....	58
Hyrum Reservoir near Hyrum, Utah.....	59
Little Bear River near Hyrum, Utah.....	60
East Fork Little Bear River near Avon, Utah.....	61
Logan River above State dam, near Logan, Utah.....	62
Utah Power & Light Co.'s tailrace near Logan, Utah.....	63
Logan, Hyde Park & Smithfield Canal near Logan, Utah.....	64
Blacksmith Fork at Hardware Ranch, near Hyrum, Utah.....	65
Blacksmith Fork above Utah Power & Light Co.'s dam, near Hyrum, Utah.....	66
Clarkston Creek near Newton, Utah.....	67
West Side Canal near Collinston, Utah.....	68
Hammond (East Side) Canal near Collinston, Utah.....	69
Malad River below Springs, near Malad, Idaho.....	70
Malad River near Samaria, Idaho.....	71
Malad River at Woodruff, Idaho.....	72
Warm Springs Canal near Samaria, Idaho.....	73
Little Malad River above Elkhorn Reservoir, near Malad, Idaho.....	74
Elkhorn Reservoir near Malad, Idaho.....	75
Little Malad River below Elkhorn Reservoir, near Malad, Idaho.....	76
Devil Creek above Campbell Creek, near Malad, Idaho.....	77
Deep Creek below First Creek, near Malad, Idaho.....	78
Weber River Basin.....	79
Weber River near Oakley, Utah.....	79
Weber River near Coalville, Utah.....	80

Gaging-station records--Continued.

Great Salt Lake Basin--Continued.

Weber River Basin--Continued.

	Page
Echo Reservoir at Echo, Utah.....	81
Weber River at Echo, Utah.....	82
Weber River at Devils Slide, Utah.....	83
Weber River at Gateway, Utah.....	84
Weber River near Plain City, Utah.....	85
Silver Creek near Wanship, Utah.....	86
Chalk Creek at Coalville, Utah.....	87
Lost Creek near Croydon, Utah.....	88
East Canyon Reservoir near Morgan, Utah.....	89
East Canyon Creek near Morgan, Utah.....	90
Hardscrabble Creek near Porterville, Utah.....	91
South Fork Ogden River near Huntsville, Utah.....	92
Pine View Reservoir near Ogden, Utah.....	93
Ogden River below Pine View Dam, near Ogden, Utah.....	94
Jordan River Basin.....	95
Jordan River at Narrows, near Lehi, Utah.....	95
Jordan River at Salt Lake City, Utah.....	96
Spanish Fork at Thistle, Utah.....	98
Spanish Fork at Castilla, Utah.....	99
Spanish Fork near Lake Shore, Utah.....	100
Diamond Fork near Thistle, Utah.....	101
Deer Creek Reservoir near Charleston, Utah.....	102
Provo River at Vivian Park, Utah.....	103
Provo River at Provo, Utah.....	104
Weber-Provo diversion canal near Woodland, Utah.....	105
South Fork Provo River at Vivian Park, Utah.....	106
Surplus Canal at Salt Lake City, Utah.....	107
Sevier Lake Basin.....	108
Sevier River at Hatch, Utah.....	108
Sevier River near Kingston, Utah.....	109
Piute Reservoir near Marysvale, Utah.....	110
Sevier River below Piute Dam, near Marysvale, Utah.....	111
Sevier River above Clear Creek, near Sevier, Utah.....	112
Sevier River near Sigurd, Utah.....	113
Sevier River below San Pitch River, near Gurnison, Utah.....	114
Sevier Bridge Reservoir near Juab, Utah.....	115
Sevier River near Juab, Utah.....	116
Sevier River near Lyndyl, Utah.....	117
East Fork Sevier River near Kingston, Utah.....	118
Clear Creek at Sevier, Utah.....	119
Salina Creek at Salina, Utah.....	120
Pavant Valley.....	121
Chalk Creek near Fillmore, Utah.....	121
Beaver River Basin.....	122
Beaver River near Beaver, Utah.....	122
Beaver River at Adamsville, Utah.....	123
Rockyford Reservoir near Minersville, Utah.....	124
Beaver River at Rockyford Dam, near Minersville, Utah.....	125
Parowan Valley.....	126
Center Creek near Parowan, Utah.....	126
Cedar City Valley.....	127
Coal Creek near Cedar City, Utah.....	127
Salton Sea Basin.....	127
Salton Sea, Calif.....	127
Mojave River Basin.....	128
Deep Creek near Hesperia, Calif.....	128
Mojave River at lower narrows, near Victorville, Calif.....	129
Mojave River at Barstow, Calif.....	130
West Fork Mojave River near Hesperia, Calif.....	131
Antelope Valley.....	132
Rock Creek near Valvermo, Calif.....	132
Little Rock Creek near Little Rock, Calif.....	133
Mono Lake Basin.....	134
Mono Lake near Mono Lake, Calif.....	134
Walker Lake Basin.....	134
Walker Lake near Hawthorne, Nev.....	134
Bridgeport Reservoir near Bridgeport, Calif.....	135
East Walker River near Bridgeport, Calif.....	136
West Walker River below East Fork, near Coleville, Calif.....	137
Topaz Reservoir near Topaz, Calif.....	138
Humboldt-Carson Sink Basin.....	139
Carson River Basin.....	139
East Fork Carson River near Gardnerville, Nev.....	139
Carson River near Carson City, Nev.....	140
Carson River near Fort Churchill, Nev.....	141
West Fork Carson River at Woodfords, Calif.....	142
Humboldt River Basin.....	143
Humboldt River near Elko, Nev.....	143
Humboldt River near Carlin, Nev.....	144
Humboldt River at Palisade, Nev.....	145
Rye Patch Reservoir near Rye Patch, Nev.....	146
Humboldt River near Rye Patch, Nev.....	147
Marys River below Hot Springs Creek, near Depth, Nev.....	149
Lamoille Creek near Lamoille, Nev.....	150
North Fork Humboldt River at Devils Gate, near Halleck, Nev.....	151
South Fork Humboldt River near Lee, Nev.....	152
South Fork Humboldt River near Elko, Nev.....	153

CONTENTS

Gaging-station records--Continued.	V
Humboldt-Carson Sink Basin--Continued.	
Humboldt River Basin--Continued.	
Little Humboldt River at Chimney dam site, near Paradise Valley, Nev.....	Page 154
Little Humboldt River near Paradise Valley, Nev.....	155
Martin Creek near Paradise Valley, Nev.....	156
Cottonwood Creek at Paradise Valley, Nev.....	157
Pyramid and Winnemucca Lakes Basin.....	157
Pyramid Lake near Nixon, Nev.....	157
Truckee River near Truckee, Calif.....	158
Warner Lakes Basin.....	159
Twentymile Creek near Adel, Oreg.....	159
Deep Creek above Adel, Oreg.....	160
Abert Lake Basin.....	161
Chewaucan River above Conn ditch, near Paisley, Oreg.....	161
Silver Lake Basin.....	162
Silver Creek near Silver Lake, Oreg.....	162
Malheur and Harney Lakes Basin.....	163
Silvies River near Burns, Oreg.....	163
Donner und Blitzen River near Frenchglen, Oreg.....	164
Donner und Blitzen River near Voitage, Oreg.....	165
Bridge Creek near Frenchglen, Oreg.....	166
Alvord Lake Basin.....	167
Trout Creek near Denio, Oreg.....	167
Miscellaneous discharge measurements.....	168
Index.....	171

ILLUSTRATIONS

Figure 1. Gaging-station structures: A, Donner und Blitzen River near Frenchglen, Oreg.; B, Sevier River near Juab, Utah; C, Beaver River near Beaver, Utah.....	Page 3
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SURFACE WATER SUPPLY OF THE GREAT BASIN, 1945

SCOPE OF WORK

This volume is one of a series of 14 reports presenting results of measurements of stage and flow made on streams, lakes, and reservoirs in the United States during the water year ending September 30, 1945. The work was begun in 1888 in connection with special studies relating to irrigation. Measurements of the flow of streams and of the stage and contents of lakes and reservoirs have been made at about 10,300 gaging stations in the 48 States and also at many in the Territories of Alaska and Hawaii. In July 1945, 5,600 gaging stations, including those in Hawaii, were being maintained by the Geological Survey and cooperating organizations. Miscellaneous discharge measurements were made during the water year at many other points.

In the execution of the work many State and private organizations have cooperated, either by furnishing data or by assisting in collecting data. Cooperation of the first kind is acknowledged in connection with the description of each station affected; cooperation of the second kind is acknowledged, under the heading "Cooperation," in the introductory matter that precedes the gaging-station records in each volume. In the present volume, the section on cooperation of the second kind appears on page 12.

DEFINITION OF TERMS

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

"Second-feet" is an abbreviation for "cubic feet per second." A second-foot 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.

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

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

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

"Second-foot-day" is the volume of water represented by a flow of 1 second-foot 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 from 1 square mile.

"Stage-discharge relation" is an abbreviation for the term "relation between gage height and discharge."

"Control" is a term used to designate a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural section, a reach of the channel, or an artificial structure.

"Contents" is a term applied to the volume of water in a reservoir. It is computed on the basis of a level pool and does not include bank storage unless otherwise indicated.

EXPLANATION OF DATA

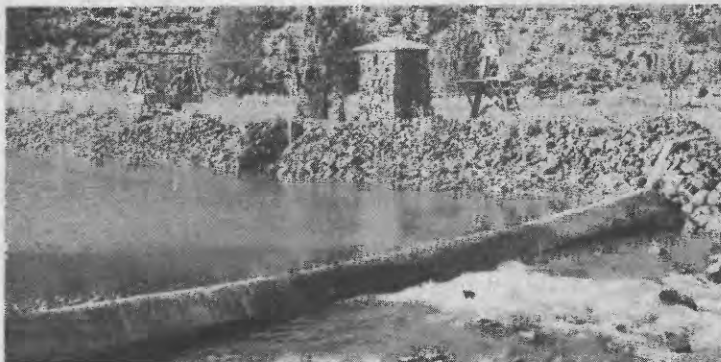
The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the records of stage and discharge measurements in determining the daily flow. The records of stage are obtained either from direct readings on a nonrecording gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter by the general methods outlined in standard textbooks on the measurement of river discharge. Typical structures in use at gaging stations are shown in figure 1.

Rating tables giving the discharge for any stage are prepared from the discharge measurements. 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. At times the stage-discharge relation for a station may be temporarily changed by the presence of aquatic growth or debris on the control. For such times the daily mean discharge is computed by what is essentially the "shifting-control" method, described above.

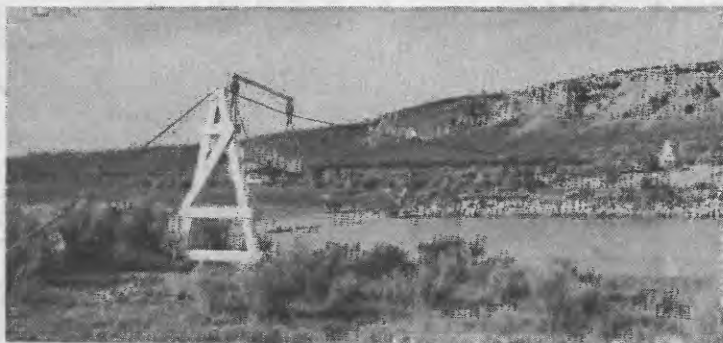
At some gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources, which necessitates the use of the "slope method," in which the slope or fall in a reach of the stream is a factor in the determination of discharge. Information requisite 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, and for them the rate of change of 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, which makes it 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 stations in the same or nearby basins. For those stations at which the stage-discharge relation is affected by ice, the days included in the periods of ice effect either are indicated in the table by symbols referring to a footnote that states this fact or are given in a general note following the table. The days on which discharge measurements were made during or between periods of ice effect, shortly before the first period, or shortly after the last period are similarly indicated by a footnote.

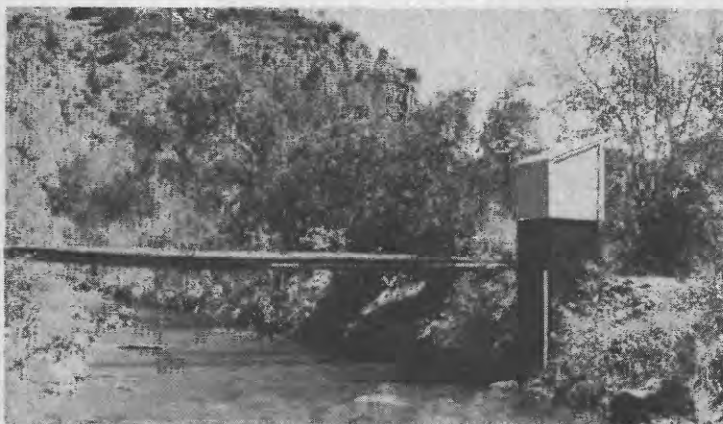
For most of the gaging stations on streams in the area covered by this report the data presented comprise a description of the station, a table showing the daily discharge of the stream, and a table of monthly and yearly discharge and runoff. Skeleton rating



A. DONNER UND BLITZEN RIVER NEAR FRENCHGLEN, OREG.



B. SEVIER RIVER NEAR JUAB, UTAH.



C. BEAVER RIVER NEAR BEAVER, UTAH.

FIGURE 1.—GAGING-STATION STRUCTURES.

tables are published for all stations except those at which the daily discharge for the greater part of the year was determined by the shifting-control method, the slope method, or other special methods.

The description of the station gives the type of gage, its latitude and longitude as determined from the best available maps, and information in regard to diversions that decrease the flow at the gage, artificial regulation from pondage or storage, and the accuracy of the records. Under "Average discharge" is given the average discharge for the number of years indicated. It is given only for stations for which there are 10 or more complete years of record. 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). Unless otherwise qualified, the maximum discharge corresponds to the crest stage, obtained by use of a water-stage recorder or a nonrecording gage read at the time of the crest. Likewise the minimum discharge represents the lowest stage, unless otherwise qualified. Selected peak discharges with the times of their occurrence are given, below the table of monthly discharge, for some stations. This supplementary information is generally omitted for a station at which the drainage area of the stream is less than 10 or more than 10,000 square miles or at which, on most days, the peak discharge exceeds the mean discharge by less than 10 percent.

For stations equipped with water-stage recorders, except those on streams subject to sudden or rapid fluctuation, the 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 in second-feet corresponding to once-daily readings of the gage or the mean of twice-daily readings. For periods of rapidly changing stage the daily mean discharge is determined from gage-height graphs based on gage readings made once or twice daily or oftener, as stated in the station description.

In the table of monthly discharge the column headed "Second-foot-days" gives the sum for each month of the figures given in the table of daily discharge. The column headed "Maximum" gives the maximum daily discharge, not the momentary discharge when the water surface was at crest stage. Likewise, in the column headed "Minimum" the quantity given is the minimum daily discharge. The column headed "Mean" gives the average flow in cubic feet per second during the month.

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 is given. A skeleton table of capacity at given stages is usually given in the first report in which data for a station are published but is omitted from succeeding reports.

TIME BASIS

At 2 a.m. on February 9, 1942, as an emergency measure, the Nation shifted from standard time to "war time," and clock time in the several zones of the country was moved ahead 1 hour, or to 3 a.m. At 2 a.m., war time, on September 30, 1945, a change was made

back to standard time and clock time was moved back 1 hour, or to 1 a.m. This made September 30 a 25-hour day. Time given herein for the water year 1945 prior to the change on September 30 refers to war time; time after the change refers to standard time. To convert war time to standard time, subtract 1 hour. Records of daily discharge prior to February 9, 1942, were computed, and those subsequent to September 30, 1945, will be computed on the basis of standard time; records between those dates were computed on the basis of war time. The discharge given for September 30, 1945, is the mean for 25 hours. The mean discharge and runoff for the month of September have been computed from the total second-foot-days for the month without adjustment for the fact that September 30 was a 25-hour day. The small error resulting from this procedure has been disregarded.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of stream-flow data depends primarily on (1) the permanency 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 flow, and interpretation of records.

The station description gives a statement in regard to the general 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 accurate than the daily records.

Yield at some stations as indicated by monthly means may vary widely from natural yield, owing to diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or other factors. For such stations figures of "second-feet per square mile" and "runoff in inches" are not published unless storage or diversion records are included indicating the extent of the regulation or diversion or unless satisfactory adjustments can be made for changes in contents or 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 its inclusion is indicated. Figures of second-feet per square mile and runoff in inches are also omitted if the drainage area includes large noncontributing areas or if the average annual rainfall over the drainage area is less than 20 inches.

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

The table of monthly discharge presents in summary the distribution of the flow past the station. The table of daily discharge affords opportunity for more detailed studies of the variation in flow. As further observations in each succeeding year may be expected to throw new light on data previously published, it should be borne in mind that such data are subject to revision in succeeding water-supply papers.

PUBLICATIONS

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

- Part 1. North Atlantic slope basins (St. John River to York River).
2. South Atlantic and eastern Gulf of Mexico basins (James River to Mississippi River).
3. Ohio River Basin.
4. St. Lawrence River Basin.
5. Hudson Bay and upper Mississippi River Basins.

- Part 6. Missouri River Basin.
 7. Lower Mississippi River Basin.
 8. Western Gulf of Mexico basins.
 9. Colorado River Basin.
 10. The Great Basin.
 11. Pacific slope basins in California.
 12. Pacific slope basins in Washington and upper Columbia River Basin.
 13. Snake River Basin.
 14. Pacific slope basins in Oregon and lower Columbia River Basin.

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

1. Copies may be purchased at nominal cost from the Superintendent of Documents, Government Printing Office, Washington, D. C., who will, on application, furnish lists giving prices.
2. Sets of the reports may be consulted in the libraries of the principal cities in the United States.
3. Sets are available for consultation in the offices of the water-resources branch of the Geological Survey as follows:

East of the Mississippi River:

Albany, N. Y., 528 Federal Building.
 Asheville, N. C., 220 Post Office Building.
 Atlanta, Ga., 410 Grand Theater Bldg.
 Augusta, Maine, Statehouse.
 Baton Rouge, La., 124 Geology Building, Louisiana State University.
 Boston, Mass., 939 Post Office Building.
 Charleston, W. Va., 408 Union Building.
 Charlottesville, Va., House G, Dawson Row, University of Virginia.
 Chattanooga, Tenn., 442 Post Office Building.
 College Park, Md., 105 Engineering Building, University of Maryland.
 Columbia, S. C., 207 Creason Building.
 Columbus, Ohio, 404 Engineering Experiment Station, Ohio State University.
 Harrisburg, Pa., 490 Education Building.
 Hartford, Conn., 203 Federal Building.
 Indianapolis, Ind., 205 Underwriters Building.
 Jackson, Miss., 208 Millsaps Building.
 Knoxville, Tenn., 337 Post Office Building.
 Louisville, Ky., 531 Federal Building.
 Madison, Wis., 666 State Office Building.
 Montgomery, Ala., 507 Post Office Building.
 Morgantown, W. Va., 406 Mineral Industries Building.
 New Philadelphia, Ohio, Muskingum Watershed Conservancy District Building.
 Ocala, Fla., 304 Post Office Building.
 Pittsburgh, Pa., 515 Plaza Building.
 Raleigh, N. C., 242 Education Building.
 St. Paul, Minn., 1427 New Post Office Building.
 Trenton, N. J., 228 Federal Building.
 Urbana, Ill., 14 Post Office Annex, Elm Street.
 Washington, D. C., Federal Works Agency Building.
 Williamsburg, Ky., Kentucky Highway Building.

West of the Mississippi River:

Albuquerque, N. Mex., 723 North Second Street.
 Austin, Tex., 302 West Fifteenth Street.
 Bismarck, N. Dak., 7 Eltinge Building.
 Boise, Idaho, 429 Federal Building.
 Denver, Colo., 310 Denham Building.
 Fort Smith, Ark., 6 Post Office Building.
 Helena, Mont., 408 Federal Building.
 Honolulu, Hawaii, 225 Federal Building.
 Idaho Falls, Idaho, 204 Federal Building.
 Iowa City, Iowa, 508 Hydraulic Laboratory, University of Iowa.
 Lincoln, Nebr., 619 Rudge-Guenzel Building.
 Los Angeles, Calif., 429-F United States Post Office and Courthouse.
 Oklahoma City, Okla., 535 State Capitol.
 Pierre, S. Dak., City Hall.
 Portland, Oreg., 606 Post Office Building.
 Rolla, Mo., Ramsey Building.
 St. Louis, Mo., 1004 New Federal Building.
 Salt Lake City, Utah, 303 Federal Building.
 San Francisco, Calif., 625 Market Street Building.
 Santa Fe, N. Mex., 204 United States Courthouse.
 Tacoma, Wash., 207 Federal Building.
 Topeka, Kans., 305 Federal Building.
 Tucson, Ariz., 210 Post Office Building.

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

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.

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

(A = Annual Report; B = Bulletin; W = Water-Supply Paper)

Report	Character of data	Year
10th A, pt. 2	Descriptive information only.	
11th A, pt. 2	Monthly discharge and descriptive information.....	1884 to 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.
W 11.....	Gage heights.....	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge...	1895-96.
W 15.....	Descriptions, measurements, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries above Kansas River.	1897.
W 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.
W 27.....	Measurements, ratings, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries.	1898.
W 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.
W 35 to 39...	Descriptions, measurements, gage heights, and ratings.....	1899.
21st A, pt. 4	Monthly discharge.....	1899.
W 47 to 52...	Descriptions, measurements, gage heights, and ratings.....	1900.
22d A, pt. 4	Monthly discharge.....	1900.
W 55, 66.....	Descriptions, measurements, gage heights, and ratings.....	1901.
W 75.....	Monthly discharge.....	1901.

Papers on surface water supply containing records from 1899 to date, grouped by years and drainage basins, are listed by number on page 8. The data for any particular gaging station will, in general, be found in the reports covering the years during which the station was maintained. For example, the data for 1910 to 1920 for any station in the area covered by part 3 are published in Water-Supply Papers 283, 303, 323, 353, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

The records at most of the stations discussed in these reports extend over a series of years. Miscellaneous measurements at many points other than regular gaging stations have been made each year and are published under "Miscellaneous discharge measurements" at the end of each report, the streams and points of measurement listed appearing in the same relative order as the streams and gaging stations in the body of the report. An index of the records obtained prior to 1904 has been published in Water-Supply Paper 119.

Each of the reports on surface water supply for the year 1939, issued as Water-Supply Papers 871 to 884 (see table on p. 8), contains, for the area covered by that report, a summary of yearly discharge at gaging stations at which 10 or more complete years of record have been collected. These summaries are available also as separate reprints.

Numbers of water-supply papers containing results of stream measurements, 1899-1944
(For basins included see pp. 5-6).

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1899 a...	35	355, 36	36	36	36	36	37	37	437, 59	58, 59	58, 59	38	38	38
1900 g...	47, 548	48	48	48	49	49	50	50	50	50	51	51	51	51
1901.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1903.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1904.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1905.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1906.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1907-8.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1908.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1909.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1910.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1911.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1912.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1913.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1914.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1915.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1916.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1917.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1918.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1919-20.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1921.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1922.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1923.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1924.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1925.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1926.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1927.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1928.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1929.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1930.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1931.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1932.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1933.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1934.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1935.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1936.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1937.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1938.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1939.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1940.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1941.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1942.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1943.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1944.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1945.....	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75

a Rating tables and index to Water-Supply Papers 35-39 contained in Water-Supply Paper 52. Monthly discharge for 1899 in First Annual Report, part 4.
b James River only.
c Galatin River.
d Green and Gunnison Rivers and Colorado River above Gunnison River.
e Hojave River only.
f Kings and Kern Rivers and south Pacific slope basins.
g Rating tables and index to Water-Supply Papers 47-52 contained in Water-Supply Paper 52. Monthly discharge for 1900 in 25d Annual Report, part 4.
h San Joaquin and Schuykill Rivers to James River.
i Salado River.
j Lower Platte, and Elk Horn Rivers and tributaries below Platte River.
k Upper Platte, and Elk Horn Rivers and tributaries below Platte River.
l Lake Ontario, and tributaries to St. Lawrence River proper.
m Hudson Bay only.
n Hudson River only.
o New England rivers only.
p Hudson River to Delaware River, inclusive.
q Susquehanna River to Yackin River, inclusive.
r Platte and Kansas Rivers.
s San Joaquin Basin in California, except Truckee and Carson River Basins.
t Sacramento River to the mouth of the river.
u Rogue, Umpqua, and Willamette Rivers only.

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

Reports containing compilations of records of discharge by States and drainage basins

Report	Period	Water-Supply Paper
STATE		
Alabama, Water powers of, with an appendix on stream measurements in Mississippi.	1895-1903	107
California, Water resources of, part 1, Stream measurements in Sacramento River Basin.	1897-1912	298
California, Water resources of, part 2, Stream measurements in San Joaquin River Basin.	1878-1912	299
California, Water resources of, part 3, Stream measurements in the Great Basin and Pacific Coast river basins.	1891-1912	300
California, southern, Surface water supply of Pacific slope of.....	1890-1918	447
California, Surface water supply of Sacramento River Basin.....	1895-1927	597-E
California, Surface water supply of San Joaquin River Basin.....	1895-1927	636-D
California, southern, Surface water supply of Pacific slope basins in.....	1894-1927	636-E
California, Surface water supply of minor San Francisco Bay, northern Pacific, and Great basins in.	1895-1927	637-A
Colorado, Water resources of.....	1884-1900	74
Georgia, Water resources of.....	1895-1905	197
Massachusetts, Surface waters of.....	1845-1915	415
Nebraska, Surface water supply of.....	1894-1906	230
Oregon, Summary of records of surface waters of.....	1878-1910	370
Texas, Summary of records of surface waters of.....	1898-1937	850
Vermont, Surface waters of.....	1875-1916	424
Washington, Summary of hydrometric data in.....	1878-1919	492
Washington, Summary of records of surface waters of.....	1919-35	870
Wisconsin, northern, Water power of.....	1895-1905	156
Wyoming, Surface waters of, and their utilization.....	1894-1921	469
DRAINAGE BASIN		
Colorado River (Ariz., Colo., N. Mex., Utah, Wyo.) and its utilization..	1888-1914	395
Colorado River, upper (Colo., Utah), and its utilization.....	1897-1927	617
Colorado River Basin (Ariz., Calif., Colo., Utah, Wyo.), Surface waters at base stations in.	1891-1938	918
Columbia River Basin, upper (Mont., Idaho), Surface waters of.....	1898-1938	916
Great Salt Lake Basin, Water powers of.....	1889-1920	517
Green River (Colo., Utah, Wyo.) and its utilization.....	1894-1926	618
Kennebec River Basin (Maine), Water resources of.....	1890-1906	198
Milk River. See St. Mary and Milk Rivers.....	1861-1938	917
Missouri and St. Mary River Basins (Mont.), Surface waters of.....	1895-1920	536
New-Kanawha River Basin (N. C., Va., W. Va.), Surface water supply of.....	1904-9	279
Penobscot River Basin (Maine), Water resources of.....	1895-1906	192
Potomac River Basin (D. C., Md., W. Va.).....	1888-1913	358
Rio Grande Basin (Colo., N. Mex., Tex.), Water resources of.....	1898-1917	491
St. Mary and Milk Rivers. (Mont., Canada), Water supply of.....		
St. Mary River. See St. Mary and Milk Rivers; Missouri and St. Mary River Basin.		
Susquehanna River Basin (Pa., Md.), Hydrography of.....	1890-1904	109

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

State reports containing compilations of records of discharge

State	Period	Report	Issued by
Alabama.....	1895-1915	Bull. 17, Water powers of Alabama.....	Geological Survey of Alabama.
Arkansas.....	1857-1928	Stream-gaging Rept. 1.....	Arkansas Geological Survey.
Colorado.....	1861-1935	Water resources of Colorado, Appendix 2, Data on stream-gaging stations of Colorado. ¹	State Planning Commission, Water Conservation Board, State engineer.
Do.....	1861-1938	Water resources of Colorado, Appendix 3, vols. 1 and 2, Stream-flow data of Colorado.	Do.
Connecticut...	1900-1927	Bull. 44, Water resources of Connecticut..	State Geological and Natural History Survey.
Do.....	1912-33	5th biennial report ²	State Water Commission.
Georgia.....	1895-1906	Bull. 16, Water powers of Georgia.....	Geological Survey of Georgia.
Do.....	1907-19	Bull. 38, Water powers of Georgia.....	Do.
Illinois.....	1908-11	Water resources of Illinois.....	Rivers and Lakes Commission.
Do.....	1900-1934	Stream-flow data of Illinois.....	Division of Waterways.
Indiana.....	1923-27	Pub. 72, Surface water supply of Indiana..	Department of Conservation.
Do.....	1927-30	Pub. 112, Surface water supply of Indiana..	Do.
Iowa.....	1873-1932	Stream-flow records of Iowa.....	State Planning Board.
Do.....	1873-1940	Water-Supply Bull. 1, Summaries of yearly and flood flow relating to Iowa streams.	Iowa Geological Survey.
Do.....	1941-42	Water-Supply Bull. 2, Surface water resources of Iowa.	Do.

¹ Contains records of yearly discharge only.

² Contains records of monthly discharge in second-feet per square mile.

State reports containing compilations of records of discharge--Continued

State	Period	Report	Issued by
Kansas.....	1895-1919	Surface waters of Kansas.....	Kansas Water Commission.
Do.....	1919-24	.....do.....	Do.
Do.....	1924-28	Report of Division of Water Resources.....	State Board of Agriculture.
Do.....	1928-35	Stream-flow data of Kansas.....	Do.
Do.....	1935-39	.....do.....	Do.
Kentucky.....	1910-20	Surface waters of Kentucky.....	Kentucky Geological Survey.
Louisiana.....	1903-38	Geol. Bull. 16, Surface water supply of Louisiana.	Department of Conservation.
Maine.....	1887-1920	1st annual report ²	Maine Water Power Commission.
Maryland.....	1929-37	Flow data and draft storage curves for major streams in Maryland.	State Planning Commission and Water Resources Commission.
Do.....	1892-1943	Bull. 1, Summary of records of surface waters of Maryland and the Potomac River Basin.	Department of Geology, Mines, and Water Resources.
Minnesota....	1909-12	Water-resources investigation of Minnesota.	State Drainage Commission.
Missouri.....	1857-1926	Vol. 20, 2d series, Water resources of Missouri.	Missouri Bureau of Geology and Mines.
Do.....	1927-39	Vol. 26, 2d series, Surface waters of Missouri.	Missouri Geological Survey and Water Resources.
Montana.....	1889-1911	5th biennial report.....	Office of the State Engineer.
Do.....	1891-1939	Special Rept. 10, vols. 1-4, Water resources of Montana.	Montana Agricultural Experiment Station.
Nebraska.....	1894-1914	1st hydrographic report.....	Bureau of Water Power, Irrigation, and Drainage.
Do.....	1914-28	2d hydrographic report.....	Do.
New Hampshire	1889-1922	Annual and statistical report, vol. 12 ²	Public Service Commission.
New Jersey....	1892-1928	Bull. 33, Surface water supply of New Jersey.	Department of Conservation and Development.
Do.....	1928-34	Special Rept. 5, Surface water supply of New Jersey.	State Water Policy Commission.
Do.....	1934-40	Special Rept. 9, Surface water supply of New Jersey.	Do.
New Mexico....	1885-1925	Surface water supply of New Mexico.....	Office of the State Engineer.
New Carolina..	1889-1923	Bull. 34, Discharge records of North Carolina streams. ³	Department of Conservation and Development.
Do.....	1839-1936	Bull. 39, Discharge records of North Carolina streams. ⁴	Do.
North Dakota..	1919-21	Report to Governor of North Dakota on flood control.	State chief engineer.
Do.....	1882-1933	Surface water in North Dakota.....	State Planning Board.
Do.....	1882-1944	Supplement B, 4th biennial report.....	State Water Conservation Commission.
Ohio.....	1898-1921	Bull. 73, Ohio stream flow.....	Engineering Experiment Station, Ohio State University.
Do.....	1902-39	Bull. 200, Compilation of stream-flow records of Ohio.	Department of Agriculture, Division of Conservation and Natural Resources.
Do.....	1898-1939	Bull. 111, Ohio stream-drainage areas and flow-duration tables.	Engineering Experiment Station, Ohio State University.
Oregon.....	1878-1914	Bull. 4, Water resources of the State of Oregon.	Office of the State Engineer.
Do.....	1914-24	Bull. 7, Water resources of the State of Oregon.	Do.
Do.....	1924-30	Bull. 8, Water resources of the State of Oregon.	Do.
Do.....	1930-36	Bull. 9, Water resources of the State of Oregon.	Do.
Pennsylvania..	1890-1911	Report of the Water Supply Commission of Pennsylvania.	Water Supply Commission of Pennsylvania.
Do.....	1928-32	Stream-flow records of Pennsylvania.....	Department of Forests and Waters.
Rhode Island..	1929-41	7th annual report.....	Department of Public Works.
Tennessee....	1874-1924	Bull. 34, Water resources of Tennessee ⁵	Department of Education.
Do.....	1920-30	Bull. 40, Surface waters of Tennessee ⁶	Do.
Utah.....	1889-1905	5th biennial report.....	Office of the State Engineer.
Do.....	1906-10	7th biennial report.....	Do.
Do.....	1911-15	10th biennial report.....	Do.
Virginia.....	1895-1927	Bull. 31, Water resources of Virginia.	Virginia Geological Survey.
Do.....	1927-42	Bull. 41, Surface water supply of Virginia (Potomac, Rappahannock, and York River Basins).	Virginia Conservation Commission.
Do.....	1927-42	Bull. 5, Surface water supply of Virginia (James River Basin).	Do.
Do.....	1927-42	Bull. 6, Surface water supply of Virginia (Roanoke and Chowan River Basins).	Do.
Do.....	1927-42	Bull. 7, Surface water supply of Virginia (New, Tennessee, and Big Sandy River Basins).	Do.
Washington...	1878-1933	Bull. 5, Monthly and yearly summaries of hydrometric data.	Department of Conservation and Development.
Wisconsin....	1888-1914	1st report of Railroad Commission of Wisconsin to Legislature on water powers.	Railroad Commission of Wisconsin.
Do.....	1914-23	2d report of Railroad Commission of Wisconsin to Legislature on water powers.	Do.

² Contains records of monthly discharge in second-feet per square mile.

³ Contains records of weekly discharge.

⁴ Contains records of maximum and minimum daily, weekly, and monthly discharge and yearly mean discharge.

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

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. The more recent of these special reports also contain other pertinent hydrologic information and analyses and compilations of data relating to earlier noteworthy floods. The following list gives the numbers and titles of these reports:

Water-Supply Paper	Title
88	The Passaic flood of 1902.
92	The Passaic flood of 1903.
96	Destructive floods in the United States in 1903.
147	Destructive floods in the United States in 1904.
162	Destructive floods in the United States in 1905.
334	The Ohio Valley flood of March-April 1913.
426	Southern California floods of January 1916.
487	The Arkansas River flood of June 3-5, 1921.
488	The floods in central Texas in September 1921.
520-G	Some floods in the Rocky Mountain region.
636-C	The New England flood of November 1927.
771	Floods in the United States, magnitude and frequency.
773-E	The New York State flood of July 1935.
796-B	Flood on Republican and Kansas Rivers, May and June 1935.
796-C	Flood in La Canada Valley, Calif., January 1, 1934.
796-G	Major Texas floods of 1935.
798	The floods of March 1936, part 1, New England rivers.
799	The floods of March 1936, part 2, Hudson River to Susquehanna River region.
800	The floods of March 1936, part 3, Potomac, James, and upper Ohio Rivers.
816	Major Texas floods of 1936.
836-A	Stages and flood discharges of the Connecticut River at Hartford, Conn.
838	Floods of Ohio and Mississippi Rivers, January-February, 1937.
842	Floods in Canadian and Pecos River Basins of New Mexico, May and June 1937.
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.
867	Hurricane floods of September 1938.
869	Flood of August 1935 in Muskingum River Basin, Ohio.
914	Texas floods of 1938 and 1939.
967-A	Floods of September 1939 in Colorado River Basin below Boulder Dam.
967-B	Flood of July 5, 1939, in eastern Kentucky.
967-C	Flood of August 21, 1939, in town of Baldwin, Maine.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

The following table contains a list of gaging stations for the area covered by this report at which records of daily discharge were collected during the water year October 1943 to September 1944 by agencies other than the Geological Survey. The records for these stations are not contained in publications of the Geological Survey except as noted in footnotes to the table. Records for many canals and ditches and occasional records for several natural streams, none of which are here listed, have also been collected, and some of them have been published in the reports of irrigation projects or of the water commissioner of the drainage basin in which the streams are situated.

Records of discharge collected by agencies other than the Geological Survey

Stream	Location	Period	Collected by
Centerville Creek.	Centerville, Utah, near mouth of canyon.	1937-45	Intermountain Forest & Range Experiment Station.
City Creek.....	Salt Lake City, Utah, near mouth of canyon.	1898-1945a	Salt Lake City.
Cottonwood Creek..	Salt Lake City, Utah, near mouth of canyon.	1898-1945a	Do.
Deer Creek.....	Near Provo, Utah, in Provo Canyon.....	1938-45	Bureau of Reclamation.
Emigration Creek..	Salt Lake City, Utah, near mouth of canyon.	1898-1945a	Salt Lake City.
Ephraim Creek.....	Near Ephraim, Utah.....	1914-45	Intermountain Forest & Range Experiment Station.
Farmington Creek..	Near Farmington, Utah.....	1937-45	Do.
Honey Creek.....	Near Plush, Oreg.....	1909-15, 1921-22, 1930-45b	Oregon State engineer.
Little Cottonwood Creek.	Salt Lake City, Utah, near mouth of canyon.	1898-1945a	Salt Lake City.
Mill Creek.....	.....do.....	1898-1945a	Do.

a Records prior to 1913 are contained in water-supply papers published by the Geological Survey; those for 1913-30, in reports published by Salt Lake City.

b Records are published in bulletins of the Oregon State engineer (see page 10, "State reports containing compilation of records of discharge") except those subsequent to 1936, which have not been published. Records prior to 1922 are also contained in water-supply papers published by the Geological Survey.

SURFACE WATER SUPPLY, 1945, PART 10

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

Stream	Location	Period	Collected by
Otter Creek Reservoir outlet.	Antimony, Utah, at former Geological Survey gaging station published as Otter Creek near Coyoto.	1920-45c	Sevier River water commissioner.
Parish Creek.....	Centerville, Utah, near mouth of canyon.	1937-45	Intermountain Forest & Range Experiment Station.
Parleys Creek.....	Salt Lake City, Utah, near mouth of canyon.	1898-1945a	Salt Lake City.
Provo River.....	Below Deer Creek Dam, in Provo Canyon, Utah.	1938-45	Bureau of Reclamation.
Do.....	Near Hailstone, Utah.....	1940-45	Do.
Provo River and streams tributary to Deer Creek Reservoir area.	Near Charleston, Utah, above back-water of reservoir.	1938-45	Do.
Ross Creek.....	Near Hailstone, Utah.....	1940-45	Do.
Sevier River.....	Delta, Utah, at former Geological Survey gaging station.	1920-45c	Sevier River water commissioner.
Strawberry tunnel outlet.	At West Portal, Utah.....	1913-45d	Spanish Fork Water Users' Association.

a Records prior to 1913 are contained in water-supply papers published by the Geological Survey; those for 1913-30, in reports published by Salt Lake City.
 c Published in the annual reports of Sevier River water commissioner.
 d Published in reports of the Strawberry Valley project and of the Spanish Fork water Commissioner.
 Note.- Records here listed other than those cited in above notes have not been published.

COOPERATION

The work in the several States was done under cooperative agreements with the organizations listed below:

California: State Department of Public Works, C. H. Purcell, director, and Edward Hyatt, State engineer; San Bernardino and Los Angeles Counties.

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

Nevada: Office of State Engineer, A. M. Smith.

Oregon: Office of State Engineer, C. E. Stricklin.

Utah: Office of State Engineer, Ed. H. Watson.

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

Work in the Bear River Basin (exclusive of Malad Valley) was done under cooperative agreements with the State Department of Reclamation of Idaho, the Office of State Engineer of Utah, the Office of State Engineer of Wyoming, and the Bureau of Reclamation of the United States Department of the Interior.

Financial assistance was furnished by the Corps of Engineers, U. S. Army, for the operation of four gaging stations in Utah and one in California, and for obtaining high-water discharge measurements at stations in Utah and Nevada.

Assistance in collecting records was rendered by the following organizations:

California: Walker River Irrigation District.

Idaho: Bureau of Reclamation of the United States Department of the Interior.

Oregon: Fish and Wildlife Service of the United States Department of the Interior; Harney and Lake Counties.

Utah: Bureau of Reclamation of the United States Department of the Interior;

Utah Power & Light Co.

DIVISION OF WORK

The stream-gaging work was conducted by the water-resources branch of the Geological Survey, Glenn L. Parker, chief hydraulic engineer, Carl G. Paulsen, assistant chief hydraulic engineer, and Rudolph G. Kasel, chief of the division of surface waters (until June 14, 1945). The data for the stations in the several States were collected and prepared for publication under supervision of district engineers as follows: In California

(except for stations in Walker Lake, Carson River, and Truckee River Basins), H. D. McGlashan; in Idaho (except for Bear River at Harer and Alexander), T. R. Newell; in Oregon, G. H. Canfield, the work being done in collaboration with C. E. Stricklin, State engineer; in Utah and Nevada and for stations in Walker Lake, Carson River, and Truckee River Basins in California and for Bear River at Harer and Alexander, Idaho, M. T. Wilson; in Wyoming, Robert Follansbee.

The records were reviewed and the manuscript prepared for publication under the direction of B. J. Peterson, hydraulic engineer in charge, and F. J. Flynn, associate engineer, section of reports.

GREAT SALT LAKE BASIN

Gages on Great Salt Lake, Utah

Location.- Water-stage recorder, lat. 40°44'15", long. 112°12'30", in NW¼ sec. 17, T. 1 S., R. 3 W., at Salt Lake County Boat Harbor, on southeast shore of lake, 17 miles west of Salt Lake City; and staff gage, lat. 41°13', long. 112°36', at Midlake, on Lucin cut-off of Southern Pacific Railroad, 30 miles west of Ogden. Datum of Boat Harbor gage is 4,186.85 feet above mean sea level, that of Midlake gage, 4,198.0 feet above mean sea level, adjustment of 1912. To reduce elevations to datum of 1929, add 0.05 foot.

Records available.- September 1875 to December 1899, March to July 1904, and October 1912 to September 1945 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 Water-Supply Paper 880.

Extremes.- Maximum elevation during year, 4,196.35 feet June 15 and July 1 at each gage; minimum, 4,194.80 feet Oct. 15 and Nov. 1 at Boat Harbor gage.

1851-1945: Maximum elevation, 4,211.6 feet in 1873, computed from traditional data by E. C. La Rue (see Water-Supply Paper 880, p. 125); minimum, 4,193.65 feet Oct. 15 and Nov. 1, 1940, at Boat Harbor gage, and Oct. 15, 1940, at Midlake gage.

Remarks.- Apparent inconsistencies in readings are probably due largely to the effect of wind, as the two gages are about 40 miles apart. To compensate for wind effect, elevations given for Boat Harbor gage are taken from a mean slope line defined by several days' gage-height graph preceding and following 12:01 a.m. for the first and fifteenth of each month.

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

Gage height, in feet, of Great Salt Lake, Utah
water year 1944-45

Day	Boat Harbor	Midlake
Oct. 1	8.05	-3.1
15	7.95	-3.15
Nov. 1	7.95	-3.15
15	8.0	-3.1
Dec. 1	8.0	-3.1
15	8.05	-3.0
Jan. 1	8.15	-2.9
15	8.25	-2.85
Feb. 1	8.3	-2.75
15	8.55	-2.50
Mar. 1	8.75	-2.35
15	8.85	-2.25
Apr. 1	8.9	-2.15
15	8.95	-2.15
May 1	9.0	-2.1
15	9.1	-2.0
June 1	9.1	-2.0
15	9.5	-1.65
July 1	9.5	-1.65
15	9.3	-1.9
Aug. 1	9.0	-2.25
15	8.85	-2.5
Sept. 1	8.7	-2.75
15	8.5	-3.0

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Bear River near Utah-Wyoming State line

Location.- Water-stage recorder, lat. 40°58', long. 110°51', in SE $\frac{1}{4}$ sec. 30, T. 3 N., R. 10 E., just downstream from West Fork and 2.8 miles upstream from Utah-Wyoming State line.

Drainage area.- 176 square miles.

Records available.- July 1942 to September 1945.

Extremes.- Maximum discharge during year, 1,170 second-feet June 22 (gage height, 3.73 feet); minimum observed, 24 second-feet Dec. 12 (discharge measurement), but may have been less at other times during period of ice effect.
1942-45: Maximum discharge, 1,760 second-feet June 26, 1944; maximum gage height, 3.73 feet June 22, 1945; minimum discharge, 20 second-feet Apr. 2, 1944, but may have been less during period of ice effect.

Remarks.- Records good except those for periods of ice effect, which are poor. A few small diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	69	49					36	194	566	526	157	78
2	84	49					32	268	534	548	173	76
3	60	50					28	366	617	559	160	112
4	65	54					25	419	700	548	248	91
5	64	56	30				26	490	681	570	176	81
6	62	56					28	552	594	548	180	79
7	56	54					34	621	526	520	176	76
8	63	56		35			37	663	472	482	176	72
9	52	50					34	690	449	460	193	69
10	49	45					32	700	498	482	163	65
11	48	40				30	30	723	472	476	145	64
12	47	36	(*)				28	677	520	438	170	62
13	46	36					26	704	652	405	276	60
14	47	36					25	585	642	380	183	59
15	46	36	25		30		26	498	608	350	183	59
16	47	*36		*32			26	454	537	324	139	62
17	54						27	480	548	297	125	64
18	56						29	534	636	281	120	62
19	54						35	557	759	306	127	65
20	50				(*)		54	485	861	306	130	62
21	49					*34	61	445	975	285	114	60
22	49					35	112	392	999	293	100	72
23	47					31	104	379	999	310	91	85
24	46	25		25		106	106	427	981	314	91	79
25	46					32	92	544	945	248	120	74
26	44		30			31	*88	594	819	218	112	70
27	43					29	83	530	807	197	100	69
28	44					29	86	548	691	170	91	65
29	44					30	94	654	608	160	87	62
30	44					30	139	667	526	160	94	62
31	44					34		640		176	83	

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	1,589	69	43	51.3	3,150
November.....	1,089	56	-	36.3	2,160
December.....	670	-	-	28.1	1,730
Calendar year 1944.....	73,965	1,500	-	202	146,700
January.....	932	-	-	30.1	1,860
February.....	940	-	-	30.0	1,670
March.....	946	-	-	30.5	1,890
April.....	1,608	139	25	53.6	3,190
May.....	16,480	723	194	532	32,690
June.....	20,222	999	449	674	40,110
July.....	11,337	570	160	366	22,490
August.....	4,483	276	83	145	8,890
September.....	2,116	112	59	70.5	4,200
Water year 1944-45.....	62,512	999	-	171	124,000

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 9 to Mar. 20, Mar. 27-30, Apr. 2-5, 11-16 (no gage-height record Dec. 8 to Mar. 20; discharge computed on basis of 3 discharge measurements, weather records, and records for Bear River near Evanston, Wyo., and Rock Creek near Mountain Home, Utah).

Time basis. Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Bear River at Millis, near Evanston, Wyo.

Location.— Water stage recorder, lat. $41^{\circ}14'15''$, long. $110^{\circ}55'10''$, in NW $\frac{1}{4}$ sec. 35, T. 15 N., R. 120 W., 2.9 miles southeast of Evanston and 4.6 miles downstream from Stowe Creek.

Records available.— October 1942 to September 1945.

Extremes.— Maximum discharge during year, 1,210 second-feet June 23 (gage height, 3.82 feet); minimum daily, 6.0 second-feet Oct. 1, 2.

1942-45: Maximum discharge, 2,000 second-feet June 2, 1943 (gage height, 4.85 feet); no flow Sept. 23-26, 1943.

Remarks.— Records good except those for periods of ice effect, which are poor. Many diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a6.0	37	31	30	38	42	163	344	638	405	42	56
2	a6.0	44	32	42	45	45	87	396	567	392	41	55
3	a10	42	35	47	60	53	70	495	600	387	42	51
4	a12	41	31	50	54	50	56	578	861	340	102	73
5	a15	42	29	52	46	45	*68	633	1,010	364	124	60
6	a17	41	33	52	44	40	77	721	867	348	92	51
7	h21	51	33	54	42	42	148	801	650	320	98	44
8	a21	53	30	54	40	45	290	892	515	282	146	41
9	a21	42	26	52	44	45	271	937	441	257	132	33
10	a21	41	24	46	45	60	129	918	545	275	125	29
11	h22	36	20	47	45	80	94	1,040	606	387	98	28
12	24	39	22	45	36	110	85	957	520	316	200	25
13	21	41	*20	43	38	150	66	950	539	268	423	25
14	22	38	20	42	45	150	60	882	a710	239	278	22
15	24	36	20	41	45	110	68	668	a610	212	239	19
16	a26	34	20	42	40	90	77	562	a530	181	190	16
17	a28	*32	20	*39	33	73	79	550	a490	146	143	16
18	a30	33	19	32	37	*72	119	633	482	112	124	18
19	*33	30	20	32	45	72	344	677	530	132	158	24
20	33	27	24	32	45	72	660	606	672	200	337	26
21	36	24	26	32	*45	76	716	562	837	148	187	28
22	34	22	28	32	46	84	716	510	932	148	151	37
23	34	29	30	35	46	94	450	432	1,070	140	117	58
24	35	23	30	37	46	110	387	428	1,060	140	100	71
25	30	30	30	37	46	138	253	587	1,000	110	100	64
26	27	20	30	35	42	127	282	660	898	81	112	60
27	28	25	27	35	35	94	239	578	837	62	92	60
28	28	22	27	34	37	70	268	540	771	49	79	60
29	29	25	30	35	-	70	253	611	594	42	71	58
30	29	30	25	35	-	83	301	638	468	39	68	56
31	30	-	27	35	-	100	-	710	-	41	58	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	751.0	36	6.0	24.2	1,490
November.....	1,020	53	20	34.0	2,080
December.....	819	35	19	26.4	1,620
Calendar year 1944	81,404.2	1,740	0.1	222	161,400
January.....	1,258	54	30	40.6	2,500
February.....	1,208	60	33	43.1	2,400
March.....	2,472	180	40	79.7	4,900
April.....	6,374	716	56	229	13,630
May.....	20,486	1,040	344	661	40,630
June.....	20,950	1,070	441	698	41,560
July.....	6,563	405	39	212	13,020
August.....	4,259	423	41	137	8,450
September.....	1,264	73	16	42.1	2,510
Water year 1944-45	67,924	1,070	6.0	186	134,700

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for station near Evanston.

h Computed from staff-gage reading.

Note.— Stage-discharge relation affected by ice Nov. 17 to Mar. 24 (no gage-height record Nov. 25 to Mar. 17; discharge computed on basis of 4 discharge measurements, weather records, and records for station near Evanston).

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

17

Bear River near Evanston, Wyo.

Location.- Water-stage recorder, lat. 41°19', long. 111°01', in sec. 1, T. 15 N., R. 121 W., 300 feet upstream from highway bridge and 3½ miles northwest of Evanston.

Drainage area.- 645 square miles.

Records available.- October 1913 to September 1945.

Average discharge.- 32 years, 231 second-feet.

Extremes.- Maximum discharge during year, 1,560 second-feet Apr. 21 (gage height, 5.24 feet); minimum daily, 3.0 second feet Oct. 2.

1913-45: Maximum discharge, 3,690 second-feet June 14, 1921 (gage height, 6.35 feet), from rating curve extended above 2,700 second-feet; no flow during some periods in 1924, 1931, 1933, 1934, 1939, 1940, 1942.

Remarks.- Records good except those for period of ice effect, which are poor. Some diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.0	35	32	35	38	71	432	380	642	400	33	51
2	4.5	41	33	42	45	67	279	428	561	358	35	47
3	7.0	41	35	48	60	83	146	498	564	378	32	45
4	6.5	40	31	51	55	75	107	592	800	320	231	59
5	7.0	41	29	52	45	66	93	659	940	333	133	54
6	7.5	41	33	52	45	68	116	737	909	333	68	47
7	8.2	46	33	54	42	71	288	817	688	307	59	40
8	8.8	52	30	54	40	75	656	897	575	279	80	36
9	9.4	46	26	51	45	82	670	940	498	249	95	35
10	11	42	24	48	45	100	356	931	556	255	97	29
11	12	40	20	46	45	200	178	1,020	666	363	66	27
12	12	41	22	45	36	300	141	967	558	320	87	24
13	12	43	*20	43	39	500	105	954	589	276	456	21
14	11	41	22	42	46	450	87	931	652	240	313	22
15	11	40	20	41	46	343	85	729	614	213	258	20
16	13	38	20	42	39	149	95	610	550	178	207	15
17	16	*39	20	*41	33	112	91	578	484	149	151	15
18	24	36	19	32	37	82	149	645	488	114	123	12
19	27	35	20	39	46	87	491	673	505	114	144	16
20	27	30	24	38	52	78	1,040	628	614	193	414	23
21	29	24	26	34	*51	85	1,220	586	722	157	255	26
22	30	22	28	32	*60	*97	1,140	547	951	170	178	33
23	30	29	30	45	68	131	688	453	932	165	128	46
24	29	23	30	37	66	141	530	449	981	136	103	60
25	28	20	30	37	62	173	346	530	922	123	97	59
26	26	20	30	35	60	162	359	628	863	85	105	52
27	26	25	27	35	53	136	307	578	776	64	87	52
28	27	26	27	34	70	121	320	522	752	54	73	54
29	27	25	30	35	-	101	297	561	592	46	65	52
30	28	31	25	35	-	116	346	569	480	36	62	52
31	30	-	27	35	-	234	-	645	-	32	60	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	549.9	30	4.5	17.7	1,090
November.....	1,049	52	20	35.0	2,080
December.....	823	35	19	26.5	1,630
Calendar year 1944.....	88,568.2	1,750	.5	242	175,700
January.....	1,280	54	32	41.3	2,540
February.....	1,374	70	33	49.1	2,750
March.....	4,576	500	66	145	9,080
April.....	11,158	1,220	85	372	22,130
May.....	20,712	1,020	380	668	41,080
June.....	20,356	981	480	679	40,380
July.....	6,487	400	32	209	12,830
August.....	4,289	456	32	138	5,510
September.....	1,122	60	12	37.4	2,230
Water year 1944-45.....	73,755.9	1,220	4.5	202	146,300

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 18 to Mar. 14 (no gage-height record Feb. 7-10).

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Bear River near Woodruff, Utah

Location.— Water-stage recorder, lat. $41^{\circ}31'25''$, long. $111^{\circ}01'00''$, in SW $\frac{1}{4}$ sec. 20, T. 18 N., R. 120 W., in Wyoming, 2.8 miles upstream from Wyoming-Utah State line and 7.6 miles east of Woodruff.

Records available.— April 1942 to September 1945.

Extremes.— Maximum discharge during year, 1,350 second-feet Apr. 22 (gage height, 3.69 feet); no flow Oct. 1-3.

1942-45: Maximum discharge, 1,860 second-feet May 18, 1944 (gage height, 4.26 feet); no flow at times in each year.

Remarks.— Records good except those for periods of ice effect or no gage-height record, which are poor. Many diversions above station for irrigation, including Chapman Canal which carries some water over a low divide for storage in Neponset Reservoir for irrigation in Saleratus Basin.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	11	25	28	45	46	340	345	633	359	27	63
2	0	13	30	35	55	47	331	374	531	318	27	56
3	0	18	35	40	70	59	190	419	490	297	35	51
4	a.5	17	33	47	65	58	59	519	626	275	57	49
5	a.5	15	30	52	*56	51	71	594	515	244	177	57
6	a.5	19	29	54	50	45	99	666	1,010	222	101	57
7	a.5	20	32	56	48	44	171	770	822	208	71	47
8	a.5	20	33	56	45	52	393	862	633	187	60	41
9	a2.0	24	30	56	55	*42	594	926	513	168	69	36
10	a2.2	26	27	54	55	40	755	958	456	158	74	34
11	a2.4	23	24	53	54	54	333	974	513	204	78	30
12	a2.6	23	20	52	56	200	*152	1,050	543	262	85	27
13	a2.8	24	*23	50	49	300	125	910	468	247	212	27
14	a3.0	25	*20	48	54	500	103	950	490	204	350	23
15	a3.5	24	20	47	55	400	89	785	513	187	251	23
16	a4.0	23	20	46	51	350	93	607	a450	168	415	18
17	a4.5	22	20	*44	50	150	93	525	a400	153	161	15
18	a4.5	*20	20	40	40	100	101	543	a350	110	333	13
19	a5.5	18	20	38	*48	*91	229	562	a370	87	144	14
20	7.8	16	20	38	49	90	706	581	a400	91	204	15
21	11	14	24	38	52	90	1,150	525	531	127	336	18
22	11	12	28	37	*53	90	1,210	490	685	110	198	21
23	12	10	26	38	52	90	966	414	848	138	149	24
24	12	15	30	42	52	110	359	942	122	144	34	34
25	12	15	30	42	56	130	451	359	910	117	155	54
26	11	20	30	40	51	160	350	456	878	108	103	56
27	11	20	28	40	52	130	323	501	755	81	108	51
28	11	20	28	40	41	110	306	430	734	58	91	52
29	11	20	31	40	-	100	310	404	600	47	78	57
30	11	20	27	40	-	110	301	451	475	41	69	57
31	11	-	26	40	-	150	-	581	-	33	66	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	171.3	12	0	5.53	340
November.....	565	25	10	18.8	1,120
December.....	819	35	20	26.4	1,520
Calendar year 1944.....	89,750.8	1,800	0	245	178,000
January.....	1,371	56	28	44.2	2,720
February.....	1,459	70	40	52.1	2,690
March.....	3,989	500	40	129	7,610
April.....	10,838	1,210	71	365	21,700
May.....	18,890	1,050	345	609	37,470
June.....	18,390	1,010	360	615	36,480
July.....	5,114	359	33	165	10,140
August.....	4,008	350	27	129	7,950
September.....	1,120	63	13	37.3	2,220
Water year 1944-45.....	66,834.3	1,210	0	183	132,600

* Winter discharge measurement made on this day.

a No gage-height record; discharge for Oct. 4-19 computed on basis of partial gage-height record, discharge measurement on Oct. 18, and records for station near Evanston; discharge for June 16-20 computed on basis of records for station near Evanston.

Note. Stage-discharge relation affected by ice Nov. 15 to Mar. 31 (no gage-height record Dec. 13 to Mar. 19; discharge computed on basis of 11 discharge measurements, weather records, records for auxiliary winter gage 6 miles downstream during period Feb. 5 to Mar. 12, and for station near Evanston).

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Bear River near Randolph, Utah

Location.- Water-stage recorder, lat. 41°48', long. 111°06', in SE¼ sec. 7, T. 12 N., R. 8 E., 4.2 miles upstream from Twin Creek, 5.5 miles upstream from Utah-Wyoming State line, and 11 miles northeast of Randolph.

Records available.- December 1943 to September 1945.

Extremes.- Maximum discharge during year, 771 second-feet June 8 (gage height, 5.50 feet); minimum daily, 23 second-feet Oct. 21, 25, 27-29.

1943-45: Maximum discharge, 1,360 second-feet Apr. 8, 1944 (gage height, 7.00 feet); minimum daily, that for Oct. 21, 25, 27-29, 1944.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	30		30	50		200	209	176	376	73	116
2	30	32		30	65		216	205	216	332	72	109
3	30	33		35	80		277	212	225	271	77	103
4	29	34		40	70		230	192	239	214	82	96
5	27	35	35	45	60	60	202	198	336	185	57	92
6	26	37			55		166	198	510	160	62	93
7	26	42			55		143	195	633	142	66	90
8	26	38			50		168	177	752	128	76	89
9	27	35	30		55		212	211	697	119	81	87
10	27	35			55		324	254	599	114	74	82
11	27	35			60	80	374	273	518	114	70	76
12	27	37		50	60	100	300	294	468	108	76	69
13	27	38				150	225	326	467	108	86	64
14	27	35	(*)			200	130	338	400	113	116	61
15	27	32	27			250	154	336	340	124	164	58
16												
17	27	30				250	130	344	326	115	204	55
18	26	28				250	113	a310	277	110	200	54
19	*24	*26		49	65	220	108	a280	214	102	192	54
20	24			*47		200	115	a250	190	97	184	54
21	24		28			200	119	a250	176	91	172	52
22	23		29			210	198	a250	158	84	185	51
23	24		32		(*)	*250	441	a250	122	76	243	52
24	25		35			243	591	a210	168	76	251	50
25	23	25	35	45		245	641	202	254	108	212	49
26	24				60	283	557	192	363	95	190	49
27	23					289	434	154	468	101	197	49
28	23		30			252	316	119	467	93	177	52
29	23					225	277	111	488	88	168	54
30	24					225	241	119	462	87	154	54
31	24					202	250	119	425	82	138	54
						182		142		78	128	

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	797	30	23	25.7	1,580
November.....	912	42	-	30.4	1,810
December.....	949	-	-	30.6	1,880
Calendar year 1944.....	81,146	1,320	23	222	160,900
January.....	1,416	-	-	45.7	2,610
February.....	1,720	-	-	61.4	3,410
March.....	5,084	289	-	164	10,080
April.....	7,882	641	108	263	15,630
May.....	6,880	344	111	222	13,650
June.....	11,164	752	122	372	22,140
July.....	4,091	376	76	132	8,110
August.....	4,217	251	57	136	8,360
September.....	2,068	116	49	68.9	4,100
Water year 1944-45.....	47,180	752	23	129	93,560

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for stations near Woodruff, Utah, and at Border, Wyo.

Note.- Stage-discharge relation affected by ice Nov. 14 to Mar. 22 (no gage-height record Dec. 14 to Mar. 21; discharge computed on basis of 5 discharge measurements, weather records, and records for stations near Woodruff, Utah, and at Border, Wyo.).

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Bear River at Border, Wyo.

Location.— Water-stage recorder, lat. 42°11', long. 111°03', in NE¼ sec. 15, T. 14 S., R. 46 E., in Idaho, a quarter of a mile west of Wyoming State line and half a mile west of Border. Datum of gage is 6,051.63 feet above mean sea level, unadjusted.

Drainage area.— 2,490 square miles.

Records available.— October 1937 to September 1945.

Extremes.— Maximum discharge during year, 1,400 second-feet June 10 (gage height, 5.63 feet); minimum daily, 100 second-feet Dec. 10-19.

1943-45: Maximum discharge, 2,040 second-feet Apr. 8, 1942 (gage height, 6.89 feet); minimum daily, 30 second-feet Aug. 18-22, 1940.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	131	162	135	120	110	140	335	414	562	866	255	293
2	129	163	135	125	115	150	340	426	553	907	240	275
3	129	162	140	130	160	160	328	450	562	737	231	277
4	140	162	140	130	170	160	349	492	604	658	229	282
5	152	163	140	130	120	150	349	535	658	622	233	255
6	150	169	140	130	120	135	330	574	748	556	227	269
7	148	171	130	135	120	140	311	619	878	565	222	311
8	147	169	120	140	125	135	306	607	1,040	508	229	313
9	147	169	110	135	130	135	342	538	1,180	475	227	306
10	145	165	100	135	135	140	366	518	1,340	480	229	293
11	144	169	100	135	140	150	397	515	1,370	490	238	291
12	145	172	100	135	145	175	395	502	1,270	470	253	290
13	147	174	100	135	150	225	385	522	1,190	452	260	271
14	156	*169	100	135	155	260	332	525	1,150	428	262	262
15	158	158	100	135	155	280	291	510	1,120	431	280	255
16	158	155	100	135	160	320	275	550	1,070	415	306	247
17	163	150	100	135	160	350	266	628	994	409	332	249
18	165	150	*100	130	160	345	256	730	922	383	357	242
19	163	150	100	130	160	340	242	765	824	366	373	235
20	162	145	105	125	160	a330	255	709	712	342	397	209
21	163	140	110	120	155	a320	280	688	694	325	402	214
22	163	140	110	120	150	a350	297	654	694	306	388	218
23	162	140	115	*115	*150	a350	392	604	703	293	383	216
24	162	140	120	115	150	a380	508	562	718	304	426	209
25	159	140	115	115	150	a410	628	538	703	304	416	205
26	156	140	115	115	140	*a440	670	542	718	302	392	200
27	156	140	110	115	140	440	580	540	810	297	368	196
28	160	130	110	110	140	428	488	540	863	293	371	200
29	158	130	110	105	-	390	456	502	918	277	352	207
30	156	130	115	105	-	373	416	480	930	271	330	205
31	158	-	120	105	-	340	-	502	-	264	313	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,731	165	129	153	9,380
November	4,617	174	130	154	9,160
December	3,545	140	100	114	7,030
Calendar year 1944	156,700	1,850	100	428	310,800
January	3,980	140	105	125	7,700
February	4,025	170	110	144	7,980
March	8,441	440	135	272	16,740
April	11,125	670	236	371	22,070
May	17,281	765	414	568	34,300
June	26,498	1,370	553	835	52,560
July	13,697	866	264	442	27,170
August	9,501	426	222	306	18,840
September	7,483	313	196	249	14,840
Water year 1944-45	114,834	1,370	100	315	227,800

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for station at Harer.

Note.— Stage-discharge relation affected by ice Nov. 16 to Mar. 19.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Bear River at Harer, Idaho

Location.- Water-stage recorder, lat. 42°11'50", long. 111°10'05", in NW 1/4 sec. 23, T. 14 S., R. 45 E., 400 feet downstream from Sheep Creek, three-quarters of a mile north of Harer siding on Oregon Short Line Railroad, and 5 miles east of Dingle.

Drainage area.- 2,780 square miles.

Records available.- June 1913 to September 1916, January 1919 to September 1945.

Average discharge.- 29 years, 498 second-feet.

Extremes.- Maximum daily discharge during year, 1,680 second-feet June 11; minimum daily, 115 second-feet Dec. 11-20.
1913-16, 1919-45: Maximum discharge, 3,860 second-feet June 2, 1920 (gage height, 10.51 feet); minimum daily, 26 second-feet Aug. 21-27, 1954.

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

Cooperation.- Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project. Thirteen discharge measurements made by Geological Survey and one by watermaster, District No. 5, in addition to those made by power company.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	153	194	150	140	150	170	388	480	733	1,160	325	354
2	155	194	155	140	130	170	352	484	728	1,090	312	338
3	159	194	160	145	135	185	355	504	724	1,020	303	325
4	161	194	160	150	145	200	371	543	767	941	303	325
5	172	194	160	145	145	200	396	604	846	870	294	313
6	180	196	160	145	145	170	385	659	930	809	297	315
7	182	198	160	150	145	170	375	715	1,040	750	291	338
8	180	203	155	150	145	170	364	767	1,200	724	294	364
9	180	203	140	155	150	160	375	697	1,350	654	294	351
10	180	201	125	155	*161	170	410	650	1,540	612	291	344
11	180	203	115	150	165	180	443	646	1,680	637	294	354
12	178	206	115	150	175	200	465	621	1,610	629	306	325
13	178	208	115	150	175	235	469	625	1,520	604	322	315
14	178	210	115	150	175	290	424	646	1,440	588	322	303
15	185	210	*115	150	190	330	371	635	1,400	579	318	297
16	189	200	115	165	200	360	347	642	1,360	575	344	291
17	187	195	115	170	200	410	a340	728	1,250	559	364	255
18	187	190	115	165	210	450	a355	826	1,200	531	388	282
19	192	190	*115	160	210	450	a350	922	1,110	500	413	279
20	194	185	115	160	210	445	a340	915	988	469	450	274
21	196	180	120	150	200	440	a345	373	896	446	458	268
22	196	175	125	145	195	445	a355	854	900	420	461	262
23	194	170	130	*135	190	450	a405	809	900	392	445	257
24	194	170	135	130	*189	485	a510	741	915	392	458	251
25	194	170	140	130	185	520	a520	706	918	392	494	251
26	192	165	140	135	175	560	a740	689	924	396	461	249
27	189	*165	140	135	165	580	a720	680	1,020	385	439	249
28	187	160	130	135	165	580	a640	642	1,090	382	424	246
29	189	150	125	130	-	*519	a540	650	1,130	364	417	245
30	192	150	130	130	-	480	498	608	1,180	351	392	249
31	189	-	135	130	-	406	-	629	-	338	375	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	5,662	196	153	183	11,230
November.....	5,623	210	160	187	11,150
December.....	4,125	160	115	153	8,180
Calendar year 1944.....	174,039	2,180	115	476	345,200
January.....	4,530	170	130	146	8,990
February.....	4,805	210	150	172	9,550
March.....	10,590	580	160	342	21,000
April.....	13,058	740	330	435	25,900
May.....	21,188	922	480	683	42,030
June.....	33,321	1,680	724	1,111	66,090
July.....	18,559	1,160	338	599	36,810
August.....	11,337	484	291	366	22,490
September.....	8,885	364	246	296	17,260
Water year 1944-45.....	141,683	1,680	115	388	281,000

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of unpublished records at Stewart Dam near Montpelier (including Rainbow Trestle Canal near Dingle).

Notes.- Stage-discharge relation affected by ice Nov. 14 to Mar. 30 (no gage-height record at times).

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Bear River at Alexander, Idaho

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

Drainage area.- 3,840 square miles.

Records available.- March 1911 to September 1916, April 1919 to September 1945.

Average discharge.- 30 years (1911-16, 1919-20, 1921-45), 732 second-feet.

Extremes (regulated).- Maximum daily discharge during year, 1,250 second-feet July 20; minimum daily, 68 second-feet Mar. 4, 1911-16, 1919-45; Maximum discharge, 4,590 second-feet May 9, 1922; maximum gage height, 15.95 feet Dec. 11, 1919; minimum discharge, 28 second-feet at times when reservoir gates are closed.

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

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	199	184	207	90	420	236	388	460	591	542	1,000	815
2	291	172	143	240	285	234	520	389	525	555	846	528
3	208	213	78	265	380	232	336	265	424	564	841	504
4	212	200	171	240	275	68	190	371	993	453	864	920
5	213	168	145	175	325	256	305	346	528	682	683	865
6	121	260	163	155	225	305	460	201	770	768	942	696
7	158	230	250	115	260	349	444	417	919	720	879	660
8	145	289	280	130	165	385	141	431	958	538	945	478
9	240	181	195	130	203	364	478	473	1,040	818	822	380
10	195	235	110	205	246	356	610	476	1,080	868	811	510
11	121	211	215	280	158	156	710	444	1,130	877	697	422
12	124	238	325	200	279	374	729	562	1,220	846	409	435
13	162	222	300	155	346	426	541	162	825	996	745	420
14	118	267	370	90	227	484	568	299	670	795	759	628
15	118	259	330	200	174	428	315	283	897	516	536	404
16	121	246	105	160	242	479	522	207	786	918	588	330
17	121	170	73	240	405	487	555	302	699	924	754	495
18	310	210	195	205	87	131	621	575	581	1,100	510	535
19	244	125	195	175	266	491	619	877	698	1,210	415	368
20	159	331	200	175	271	585	810	223	509	1,250	796	288
21	153	209	280	110	297	416	712	358	546	1,010	793	436
22	118	180	365	325	244	352	771	621	575	800	700	319
23	205	200	250	230	251	366	726	661	499	1,160	862	197
24	121	150	280	175	190	334	842	574	493	1,040	839	413
25	153	125	180	225	59	129	882	534	536	1,180	750	352
26	169	96	195	180	194	430	784	620	556	1,150	453	408
27	130	248	195	160	275	315	170	390	577	1,030	724	488
28	138	261	280	100	212	319	184	587	595	965	801	352
29	159	270	235	310	-	277	175	593	544	760	745	295
30	191	192	200	330	-	330	508	379	532	1,010	970	131
31	127	-	160	175	-	510	-	712	-	1,010	971	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	5,244	510	118	169	10,400
November	6,346	331	98	212	12,580
December	6,610	370	75	213	13,110
Calendar year 1944	166,073	1,330	49	454	329,400
January	5,905	330	90	190	11,710
February	6,961	420	87	249	13,610
March	10,624	586	66	343	21,070
April	15,419	882	141	514	30,560
May	15,585	877	162	436	26,950
June	22,066	1,220	424	735	43,760
July	27,055	1,250	453	873	53,660
August	23,753	1,000	409	766	47,110
September	14,063	920	131	469	27,890
Water year 1944-45	167,620	1,250	68	432	312,600

Note.- No gage-height record Nov. 17-19, Dec. 8 to Feb. 7, July 22-31; discharge computed on basis of output of hydroelectric plant 600 feet above station.
Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Bear River near Preston, Idaho

Location.- Water-stage recorder, lat. $42^{\circ}10'$, long. $111^{\circ}51'$, in NW $\frac{1}{4}$ sec. 36, T. 14 S., R. 39 E., 600 feet downstream from head gates of West Cache Canal, 5 miles downstream from Mink Creek, 5 miles north of Preston, and 5 $\frac{1}{2}$ miles upstream from Battle Creek.

Drainage area.- 4,600 square miles.

Records available.- January 1944 to September 1945. October 1889 to September 1917 (gage heights only January to September 1917) at site 5 miles downstream; records comparable.

Extremes.- Maximum discharge during year, 3,800 second-feet June 11 (gage height, 5.38 feet); minimum daily, 14 second-feet July 4; minimum, 0.8 second-foot July 5 (gage height, 0.88 feet).

1889-1916, 1944-45: Maximum discharge, about 8,500 second-feet June 9, 10, 1907, estimated on basis of records for station near Collinston, Utah; maximum gage height observed, 9.04 feet Jan. 17, 18, 1917 (affected by ice), site and datum then in use; minimum daily, 14 second-feet July 4, 1944, July 4, 1945; minimum, that of July 5, 1945.

Remarks.- Records good. Station is below all irrigation diversions from Bear River in Idaho except Cub River pumps in SE $\frac{1}{4}$ sec. 20, T. 16 S., R. 39 E. Flow regulated by storage in Bear Lake Reservoir and by power plants above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	102	251	354	454	733	591	738	934	699	202	618	446
2	206	318	500	442	430	474	521	818	847	315	726	120
3	253	573	442	347	855	354	497	1,400	743	286	558	108
4	160	262	408	388	424	164	452	1,030	1,130	14	606	428
5	161	182	360	475	567	572	456	784	1,760	272	456	616
6	203	484	408	366	442	564	498	667	1,210	426	507	718
7	246	482	579	250	784	773	704	1,200	1,330	838	722	343
8	308	276	964	258	577	426	558	1,140	1,370	138	740	567
9	646	422	522	478	634	404	665	1,220	1,850	726	470	186
10	91	546	134	481	378	499	794	1,140	1,170	722	496	294
11	188	416	568	406	164	278	1,060	953	2,250	546	594	414
12	292	148	228	432	548	794	1,090	964	1,570	596	560	522
13	228	728	379	470	670	1,120	1,090	746	1,840	933	614	526
14	410	560	333	185	970	945	992	561	1,980	280	590	500
15	150	448	368	430	762	808	653	515	1,480	197	458	342
16	375	556	996	338	586	910	704	706	1,250	366	629	306
17	307	804	177	434	460	822	813	1,210	998	548	474	442
18	128	659	448	405	144	165	552	795	972	296	464	526
19	438	364	360	461	576	708	771	1,170	1,120	510	502	476
20	495	518	498	382	443	656	1,450	1,210	594	923	429	444
21	282	356	358	271	352	946	1,780	855	650	678	696	319
22	185	355	650	530	552	720	1,090	690	564	1,170	694	348
23	418	290	642	378	474	463	1,370	1,180	364	680	665	397
24	284	200	574	360	438	578	1,160	1,020	133	562	408	444
25	525	216	232	354	190	309	1,310	1,010	570	600	556	462
26	366	208	230	460	348	916	1,010	1,020	399	584	194	691
27	334	396	456	306	488	719	748	891	413	556	714	402
28	128	503	695	344	353	496	486	899	545	390	919	744
29	160	650	310	470	-	582	335	979	370	671	992	357
30	160	342	427	427	-	645	698	730	356	810	741	285
31	240	-	409	306	-	690	-	979	-	667	436	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	8,469	646	91	273	16,800
November.....	12,463	857	148	415	24,720
December.....	13,879	996	134	448	27,530
Calendar year	-	-	-	-	-
January.....	12,118	530	185	391	24,040
February.....	14,642	970	144	523	29,040
March.....	19,071	1,120	164	615	37,530
April.....	25,025	1,780	335	834	49,640
May.....	29,098	1,490	615	939	57,720
June.....	30,916	2,250	133	1,031	61,320
July.....	16,506	1,170	14	532	32,740
August.....	18,638	992	194	601	36,970
September.....	13,073	867	108	436	25,930
Water year 1944-45	213,898	2,250	14	586	424,300

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Bear River near Collinston, Utah

Location.— Water-stage recorder, lat. 41°50', long. 112°03', in NW 1/4 sec. 27, T. 13 N., R. 2 W., 800 feet downstream from Cutler plant of Utah Power & Light Co., 2,000 feet downstream from Cutler Dam, and 5 1/2 miles north of Collinston.

Drainage area.— 6,000 square miles.

Records available.— July 1889 to September 1945.

Extremes.— Maximum discharge during year, 6,210 second-feet (regulated) June 10 (gage height, 6.47 feet); minimum daily, 22 second-feet (regulated) Aug. 4, Sept. 18, 1889-1945; Maximum discharge observed, 11,800 second-feet June 7-10, 1909 (gage height, 7.70 feet, site and datum then in use); practically no flow (result of regulation) at 12 p.m. Aug. 5, 1920.

Remarks.— Records good. Many canals divert above station. Flow regulated by reservoirs and power plants above station.

Cooperation.— Six discharge measurements furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	588	443	438	496	870	936	1,220	1,510	1,790	27	23	510
2	1,140	766	518	1,450	1,080	1,100	910	1,280	1,980	1,020	25	252
3	700	1,060	454	1,060	2,310	998	a840	2,140	1,110	1,020	74	24
4	838	825	a1,030	970	2,050	204	a680	2,210	2,390	28	22	24
5	351	506	a1,170	953	3,000	1,020	1,720	2,560	2,320	30	23	59
6	353	384	a900	612	2,700	1,130	1,310	1,910	2,920	52	23	23
7	129	832	a430	431	2,040	1,010	1,470	2,250	3,620	38	26	949
8	963	882	a1,730	814	1,640	1,410	650	2,490	4,180	24	25	791
9	.996	748	a1,510	560	2,120	1,400	1,210	2,250	4,550	24	25	496
10	150	1,360	350	1,270	1,820	1,260	1,500	2,430	5,030	56	252	1,260
11	175	381	1,150	1,100	953	392	1,660	2,640	4,910	25	224	496
12	78	872	435	782	2,050	1,730	1,270	2,930	a4,720	48	182	543
13	324	1,336	204	824	1,840	1,790	1,770	1,880	a4,440	23	1,780	884
14	52	1,460	171	411	1,960	2,340	1,580	2,350	4,480	34	975	485
15	50	1,200	157	1,230	2,100	2,370	1,500	2,360	4,480	25	130	716
16	24	1,590	146	1,240	2,320	2,430	1,570	1,970	4,370	26	504	22
17	228	1,590	124	432	2,410	2,440	881	2,540	4,100	27	417	464
18	498	1,510	757	1,090	1,190	1,490	1,220	2,520	3,260	32	256	324
19	472	a960	817	494	1,860	2,330	1,290	1,620	3,070	28	654	920
20	258	1,330	936	486	1,440	1,550	1,220	1,180	2,190	24	774	1,770
21	152	1,560	1,550	30	1,540	1,610	1,670	2,570	1,770	26	974	1,500
22	280	1,090	1,450	1,330	950	1,240	1,430	2,840	1,610	24	1,123	780
23	508	816	804	1,240	976	1,750	2,480	2,910	1,190	23	26	154
24	1,010	878	538	1,010	974	1,730	2,810	2,780	622	23	1,530	1,000
25	845	646	272	287	131	878	2,630	2,200	1,770	23	23	1,370
26	123	956	1,230	687	1,360	1,740	2,440	2,360	1,330	23	24	1,450
27	290	402	1,380	664	1,280	1,530	2,270	1,050	952	36	455	980
28	316	428	1,110	135	1,390	1,350	2,160	3,040	841	23	47	963
29	485	614	1,420	820	-	1,370	1,550	2,210	1,120	28	670	1,130
30	681	722	272	760	-	2,210	1,400	2,170	872	23	24	110
31	808	-	196	1,090	-	1,930	-	2,240	-	23	22	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	13,875	1,140	24	448	27,520
November.....	26,767	1,590	272	592	53,090
December.....	23,649	1,730	124	763	46,810
Calendar year 1944	318,844	2,990	19	871	632,400
January.....	24,958	1,450	30	805	49,500
February.....	46,404	3,000	181	1,657	92,040
March.....	46,568	2,440	204	1,502	92,370
April.....	46,321	2,210	650	1,544	91,880
May.....	69,350	3,040	1,050	2,238	137,600
June.....	81,987	5,030	622	2,733	162,600
July.....	2,886	1,020	23	93.1	5,720
August.....	11,332	1,780	22	366	22,480
September.....	20,449	1,770	22	682	40,560
Water year 1944-45	414,556	5,030	22	1,136	822,300

a No gage-height record; discharge computed on basis of output of power plant.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Mill Creek near Evanston, Wyo.

Location.- Water-stage recorder, lat. $41^{\circ}00'$, long. $110^{\circ}52'$, in NW $\frac{1}{4}$ sec. 20, T. 12 N., R. 119 W., 1.8 miles downstream from Utah-Wyoming State line and 18.8 miles south of Evanston.

Records available.- July 1942 to September 1945.

Extremes.- Maximum discharge during year, 205 second-feet June 4 (gage height, 2.15 feet), from rating curve extended above 175 second-feet; minimum daily not determined (occurred during period of ice effect).

1942-45: Maximum discharge, 286 second-feet May 16, 1944 (gage height, 2.61 feet), from rating curve extended above 190 second-feet; minimum daily, 3.3 second-feet Sept. 14, 15, 1944.

Remarks.- Records good except those during periods of ice effect or no gage-height record, which are poor. Four canals in Wyoming and four in Utah divert water above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	16	13	8	9	9	9	12	86	94	42	15	12	
2	16	13						107	96	43	16	11	
3	16	13						129	119	42	16	12	
4	17	13						123	159	40	27	12	
5	15	13						119	151	37	19	11	
6	13	13	6	9	9	9	12	131	121	31	19	11	
7	12	16						131	94	29	22	11	
8	11	13						139	79	30	22	8.5	
9	11	12						135	78	35	22	7.6	
10	11	12						127	102	48	21	7.6	
11	11	14	6	9	9	9	12	149	105	a61	18	8.0	
12	11	13						129	117	43	27	7.6	
13	11	12						143	129	31	50	8.0	
14	11	10						103	100	26	33	7.6	
15	7.6	9						81	96	28	47	7.6	
16	8.0	a8	6	9	9	9	12	68	84	25	32	8.0	
17	11	7						79	75	23	27	8.5	
18	12	6						96	86	24	27	8.5	
19	12							30	115	102	27	30	8.0
20	11							(*)	44	87	111	26	33	7.6
21	11	6	6	9	9	9	12	51	76	127	24	28	7.2
22	11							51	68	125	26	22	15
23	11							37	67	117	23	21	21
24	a9.9							30	74	111	21	19	20
25	9.2							32	113	98	20	21	19
26	9.9	6	6	9	9	9	12	a32	125	81	18	21	17
27	9.2							29	107	62	17	18	17
28	9.2							32	121	67	15	16	16
29	9.9							35	129	54	15	15	15
30	9.9							62	113	46	15	16	15
31	9.9	-	-	-	-	-	-	103	-	18	14	-	

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	553.7	17	7.6	11.4	702
November.....	282	14	-	9.4	555
December.....	224	-	-	7.2	444
Calendar year 1944.....	12,078.2	238	3.3	33.0	23,960
January.....	234	-	-	7.6	464
February.....	252	-	-	9	500
March.....	279	-	-	9	553
April.....	689	62	-	23.0	1,370
May.....	3,373	149	67	109	6,690
June.....	3,009	159	46	100	5,970
July.....	903	61	15	29.1	1,790
August.....	734	50	14	23.7	1,460
September.....	345.3	21	7.2	11.5	685
Water year 1944-45.....	10,678.0	159	-	29.3	21,190

* Winter discharge measurement made on this day.

a No gage-height record discharge interpolated.

Note.- Stage-discharge relation affected by ice Nov. 13 to Apr. 19 (no gage-height record Nov. 21 to Mar. 21, Mar. 27 to Apr. 19; discharge computed on basis of 4 discharge measurements, weather records, and records for Bear River near Utah-Wyoming State line and Rock Creek near Mountain Home, Utah).

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Sulphur Creek near Evanston, Wyo.

Location.- Water-stage recorder, lat. 41°10', long. 110°52', in SE¼ sec. 29, T. 14 N., R. 119 W., 4.8 miles upstream from mouth and 9 miles southeast of Evanston.

Records available.- April 1942 to September 1945.

Extremes.- Maximum discharge during year, 740 second-foot Apr. 20 (gage height, 3.50 feet); minimum not determined (occurred during period of ice effect).

1942-45: Maximum discharge, that of Apr. 20, 1945; minimum daily, 0.2 second-foot Sept. 14-17, 19, 20, 1943.

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

Water-Supply Paper	Water Year	Date	Gage height (feet)	Discharge (second-feet)
980	1942-43	Apr. 3	3.42	618
1010	1943-44	Apr. 29	3.03	404

Remarks.- Records good except those above 150 second-feet and those for periods of ice effect or no gage-height record, which are poor. Several diversions above station for irrigation.

Revisions.- Revised figures of discharge, in second-feet, for the high-water periods in the water year 1943, superseding those published in Water-Supply Paper 980 are given herewith:

Apr. 2...186 Apr. 3...236 Apr. 4...221 Apr. 5...178 June 1...206 June 2...246

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
April.....	2,551	236	39	85.0	5,060
June.....	1,640	246	8.8	54.7	3,250
Water year 1942-43....	6,789.5	246	.2	18.6	13,460
Calendar year 1943....	6,878.5	246	.2	18.8	13,640

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.3	1.7					49	59	49	18	17	2.0
2	1.3	2.5					a35	57	39	16	14	2.0
3	1.4	2.0					22	64	55	12	16	2.0
4	1.1	1.8					a13	68	92	6.5	78	2.2
5	.8	1.7					*11	61	107	7.2	44	2.5
6	.7	1.5					10	64	82	6.5	32	2.2
7	.6	1.8					35	72	54	5.3	32	2.4
8	.6	1.8					91	72	39	4.2	42	2.5
9	.5	1.5					88	77	35	3.7	21	2.7
10	.5	1.4					b5.0	37	62	91	13	2.7
11	.5	1.5					b10	a27	86	75	30	2.5
12	.5	1.5	(*)				b20	a20	63	39	22	2.2
13	.5	1.3					b50	16	61	26	16	1.5
14	.5	1.1					b40	1.2	62	22	16	2.4
15	.5	1.1					b30	a3.0	49	16	14	1.7
16	.5	*1.3					b20	a6.0	33	14	12	1.5
17	.7	1.3					b10	11	27	12	9.6	1.3
18	.5	1.3					b5.0	38	33	9.2	8.5	1.5
19	.5	1.4					b5.0	229	27	6.5	31	a1.5
20	.5	1.3					*b10	310	24	4.5	56	2.9
21	.5	1.1					b50	299	35	4.2	35	2.7
22	.5	1.0					107	179	36	14	37	3.7
23	.5	1.0					119	82	24	69	26	5.5
24	.5	1.0					75	54	19	53	27	6.1
25	.6	1.0					64	55	15	58	21	4.8
26	.6	1.0					40	59	15	45	15	4.8
27	.7						22	53	13	57	12	3.5
28	.7						14	58	11	47	11	2.4
29	.6	b1.0					11	54	11	28	9.2	2.2
30	.7						18	61	13	26	10	2.5
31	.8						34		36		19	2.4

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	20.7	1.4		0.5	0.67
November.....	40.9	2.5		1.36	81
December.....	31	-		1	61
Calendar year 1944.....	8,383.0	219	-	22.9	16,640
January.....	46.5	-	-	1.5	92
February.....	84	-	-	3	167
March.....	738.0	119	-	25.4	1,580
April.....	2,008.2	310	1.2	66.9	3,930
May.....	1,349	86	11	43.5	2,630
June.....	1,268.4	107	4.2	48.3	2,520
July.....	525.6	56	3.7	17.0	1,040
August.....	678.3	85	2.2	21.9	1,350
September.....	83.1	6.8	1.3	2.77	165
Water year 1944-45.....	6,919.7	310	-	19.0	13,740

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Bear River at Mills, near Evanston.

b Stage-discharge relation affected by ice (no gage-height record Dec. 6 to Mar. 19; discharge computed on basis of 3 discharge measurements, weather records, and records for Bear River at Mills, near Evanston).

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Yellow Creek near Evanston, Wyo.

Location.- Water-stage recorder, lat. $41^{\circ}08'$, long. $111^{\circ}03'$, in NW $\frac{1}{4}$ sec. 28, T. 4 N., R. 8 E., Utah, 100 feet downstream from Sage Creek, $1\frac{1}{2}$ miles upstream from Coyote Creek, and $9\frac{1}{2}$ miles southwest of Evanston. Prior to Oct. 1, staff gage at site $1\frac{1}{2}$ miles downstream.

Records available.- February 1943 to September 1945.

Extremes.- Maximum discharge during year, 303 second-feet Apr. 20 (gage height, 7.52 feet); no flow at times.

1943-45: Maximum discharge, that of Apr. 20, 1945, from rating curve extended above 230 second-feet; no flow at times.

Remarks.- Records fair. One diversion above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						0	86	30	8.0	2.9	0	
2						0	39	26	8.5	2.9	0	
3						0	20	25	8.3	2.3	0	
4						0	*b7	28	9.0	1.7	0	
5						0	b7	32	12	1.5	0	
6						0	33	35	16	1.1	0	
7						0	83	38	14	.8	0	
8						0	a150	39	11	.6	0	
9						0	a100	37	10	.5	0	
10						0	a30	34	11	.4	0	
11						26	*14	36	14	.6	0	
12						52	9.8	40	14	.9	0	
13						79	8.0	30	12	.9	5.4	
14						98	6.6	32	9.8	.6	6.6	
15						16	7.5	24	8.8	.6	2.3	
16						b1	4.4	19	8.0	.4	.9	
17						b1	7.3	17	7.5	.4	.2	
18						b2	44	19	7.1	.2	0	
19						b3	189	18	6.8	.3	0	
20						*b3	270	16	6.2	.1	13	
21						b5	206	14	5.9	.1	8.0	
22						74	132	14	5.7	.4	2.0	
23						95	56	14	6.6	.6	.8	
24						56	40	12	7.3	.4	.4	
25						21	23	11	5.5	.3	.3	
26						22	20	10	4.6	0	.1	
27						14	16	9.6	4.4	0	0	
28						6.2	17	8.8	4.0	0	0	
29						6.8	16	8.0	3.6	0	0	
30						20	28	7.8	3.1	0	0	
31						58	-	7.8	-	0	0	

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	0	0	0	0	0
November.....	0	0	0	0	0
December.....	0	0	0	0	0
Calendar year 1944.....	4,272.3	172	0	11.7	8,480
January.....	0	0	0	0	0
February.....	0	0	0	0	0
March.....	659.0	98	0	21.3	1,310
April.....	1,671.6	270	4.4	55.7	3,320
May.....	692.0	40	7.8	22.3	1,370
June.....	252.7	16	3.1	8.42	501
July.....	21.5	2.9	0	.69	43
August.....	40.0	13	0	1.29	79
September.....	0	0	0	0	0
Water year 1944-45.....	3,336.8	270	0	9.14	6,620

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for stations on Sulphur Creek near Evanston and Bear River near Evanston.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

Coyote Creek near Evanston, Wyo.

Location.- Staff gage, lat. 41°10', long. 111°02', in NW¼ sec. 26, T. 14 N., R. 121 W., 800 feet upstream from mouth and 8 miles southwest of Evanston.

Records available.- April 1943 to September 1945 (discontinued).

Extremes.- 1943: Maximum daily discharge during period April to September, 31 second-feet Apr. 4; no flow July 11 to Sept. 30.

1943-44: Maximum daily discharge during water year, 60 second-feet Apr. 5, 10; no flow Oct. 1 to Mar. 31, July 11 to Sept. 30.

1944-45: Maximum daily discharge during water year, 59 second-feet Apr. 8; no flow Oct. 1 to Mar. 11, June 18, 20-26, June 28 to Sept. 30.

Remarks.- Records poor. Diversions for irrigation of meadow lands above station. Small reservoir on headwaters.

Discharge, in second-feet, 1943-45

1943

Day	Apr.	May	June	July	Day	Apr.	May	June	July
1	*b11	0.7	1.0	0.1	16	5.3	0.5	0.2	0
2	b20	.6	.8	.1	17	4.0	.4	.2	0
3	b25	.6	1.7	.1	18	a3.5	.4	.2	0
4	31	1.0	.9	.1	19	a3.0	.5	.2	0
5	10	.8	1.0	.1	20	a2.5	.3	.1	0
6	7.7	1.1	.8	.1	21	a2.2	.4	.1	0
7	7.9	.9	.6	.1	22	a1.9	.3	.1	0
8	7.1	1.0	.6	0	23	1.6	.3	.1	0
9	7.5	1.8	.5	0	24	a1.3	.3	.1	0
10	4.8	1.0	.4	0	25	1.0	.2	.1	0
11	5.0	.6	.2	0	26	1.0	.2	.1	0
12	5.2	.6	.2	0	27	.9	.2	.1	0
13	5.9	.6	.2	0	28	.8	.2	.1	0
14	5.0	.6	.2	0	29	1.0	.2	.3	0
15	5.5	.5	.2	0	30	1.0	.2	.2	0
					31	-	.4	-	0

* Winter discharge measurement made on this day.

a No gage-height record; discharge interpolated.

b Stage-discharge relation affected by ice.

1943-44

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							b2	10	1.0	0.2		
2							b5	6.3	1.1	.2		
3							b20	4.5	1.6	.2		
4							b30	3.5	2.4	.1		
5							b60	3.0	1.2	.1		
6							b35	2.4	.9	.1		
7							b20	2.2	1.6	.1		
8							b30	2.3	1.6	.1		
9							b35	1.8	1.0	.1		
10							b60	1.6	1.0	.1		
11							b40	1.3	.6	0		
12							b20	.9	.4	0		
13							b10	.6	.6	0		
14							b7	.5	.2	0		
15							*b4	.6	.4	0		
16							b3	.5	.4	0		
17							b4	.7	.2	0		
18							b4	1.0	.2	0		
19							b4	1.0	.2	0		
20							b10	.7	.2	0		
21							8.4	.8	.2	0		
22							7.7	.6	.2	0		
23							8.4	.5	.2	0		
24							23	.4	.2	0		
25							16	.4	.3	C		
26							15	.4	.6	0		
27							18	.4	20	0		
28							12	.4	9.5	0		
29							15	.3	.8	0		
30							12	.2	.5	0		
31							-	.8	-	0		

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Discharge, in second-feet, of Coyote Creek near Evanston, Wyo., 1943-45--Continued.

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						0	b43	0.3	0.1			
2						0	b21	.2	.1			
3						0	b10	.2	.1			
4						0	*b4	.2	.2			
5						0	b6	.2	.2			
6						0	b10	.2	.2			
7						0	b40	.1	.2			
8						0	59	.1	.2			
9						0	23	.1	.2			
10						0	4.3	.1	.2			
11						0	*2.3	.1	.2			
12						a5	1.6	.1	.2			
13						a10	2.3	.1	.2			
14						a20	.6	.1	.1			
15						a5	.5	.1	.1			
16						a1	.5	.1	.1			
17						a1	5.0	.1	.1			
18						a1	37	.1	0			
19						a1	55	.1	.1			
20						*b1	28	.1	0			
21						b1	4.5	.1	0			
22						b15	2.2	.1	0			
23						b20	2.3	.1	0			
24						b10	2.2	.1	0			
25						b5	1.3	.1	0			
26						b2	1.6	.1	0			
27						b1	1.0	.1	.1			
28						b1	.8	.1	0			
29						b1	.6	.1	0			
30						b10	.4	.1	0			
31						b20	-	.2	-			

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Yellow Creek near Evanston.

b Stage-discharge relation affected by ice.

Monthly discharge, in second-feet, 1943-45

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
April 1943.....	189.6	31	0.8	6.32	376
May.....	17.4	1.8	.2	.56	35
June.....	11.5	1.0	.1	.38	23
July.....	.7	.1	0	.23	1.4
August.....	0	0	0	0	0
September.....	0	0	0	0	0
The period.....	-	-	-	-	435
October 1943.....	0	0	0	0	0
November.....	0	0	0	0	0
December.....	0	0	0	0	0
Calendar year.....	-	-	-	-	-
January 1944.....	0	0	0	0	0
February.....	0	0	0	0	0
March.....	0	0	0	0	0
April.....	538.5	60	7.7	18.0	1,070
May.....	50.6	10	.2	1.63	100
June.....	49.3	20	.2	1.64	98
July.....	1.3	.2	0	.04	2.6
August.....	0	0	0	0	0
September.....	0	0	0	0	0
Water year 1943-44.....	639.7	60	0	1.75	1,270
October 1944.....	0	0	0	0	0
November.....	0	0	0	0	0
December.....	0	0	0	0	0
Calendar year 1944.....	639.7	60	0	1.75	1,270
January 1945.....	0	0	0	0	0
February.....	0	0	0	0	0
March.....	131	20	0	4.2	260
April.....	370.0	59	.4	12.3	734
May.....	3.9	.3	.1	.13	7.7
June.....	2.9	.2	0	.10	5.8
July.....	0	0	0	0	0
August.....	0	0	0	0	0
September.....	0	0	0	0	0
Water year 1944-45.....	507.8	59	0	1.39	1,010

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

Twin Creek at Sage, Wyo.

Location.- Staff gage, lat. 41°49', long. 110°58', in SW $\frac{1}{4}$ sec. 8, T. 21 N., R. 119 W., at Sage, 6 miles upstream from mouth.

Records available.- April 1943 to September 1945.

Extremes.- Maximum discharge observed during year, 204 second-feet Aug. 14 (gage height, 6.88 feet); minimum not determined (occurred during winter period).
1943-45: Maximum discharge observed, 610 second-feet Apr. 5, 1944; maximum gage height, 8.38 feet Apr. 5, June 10, 1944; minimum daily discharge, 2.2 second-feet Aug. 5, 1943.

Remarks.- Records poor. Many diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	7.8					76	17	19	6.4	3.8	5.1
2	10	9.9					88	17	24	6.5	3.8	5.3
3	10	10		b5.5	b5		47	17	28	7.3	3.8	5.3
4	9.2	11					55	15	26	8.3	3.8	5.3
5	9.5	11				b7	26	15	28	8.2	3.8	5.2
6	7.8	11					19	12	28	7.0	3.8	6.9
7	6.6	10					17	7.4	26	6.5	3.8	7.2
8	6.6	10					70	6.2	25	6.0	3.8	5.8
9	6.6	8.1					*61	6.2	22	5.5	4.2	5.0
10	6.6	b7.0		b5.0			36	5.7	27	5.2	4.7	4.8
11	6.6	b6.5	(*)			b10	9.1	6.0	16	5.0	6.0	4.8
12	6.6	b6.0				b30	b8.0	6.9	16	5.0	7.5	4.8
13	6.6	b5.5				b70	b7.0	7.3	12	5.2	7.0	4.8
14	7.7	b5.0		(*)		100	b6.0	6.1	11	5.1	204	4.7
15	7.9	b4.5				123	6.5	6.4	11	5.0	87	4.5
16	8.2	b4.0	b3.5			86	12	6.6	11	4.7	9.4	4.7
17	7.9	b4.0			b7	b40	*12	7.2	10	4.2	6.5	4.7
18	*7.8	*b5.9				b10	19	9.0	9.7	4.2	5.3	4.6
19	7.5	b3.7			(*)	b10	34	11	8.6	4.1	46	4.2
20	6.8					b20	46	11	7.9	4.1	146	3.9
21	6.8			3.5		103	38	11	7.5	4.1	13	4.8
22	6.8					*104	49	10	7.2	4.2	7.5	4.6
23	6.8					98	19	9.2	6.6	4.1	6.1	4.6
24	6.8					70	18	8.8	6.2	4.0	5.7	4.7
25	6.8	b3.5				b40	18	8.7	6.5	3.8	5.3	4.8
26	6.5					b25	18	8.6	6.6	3.9	5.6	4.7
27	6.5					b15	18	9.0	7.3	3.9	5.1	5.1
28	6.5					b10	18	9.9	7.5	4.0	5.6	4.6
29	6.5					b15	19	8.3	6.5	4.0	5.6	4.4
30	6.5					b30	17	6.2	6.4	4.0	5.8	4.4
31	6.5	-				-	-	12	-	3.8	5.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	230.2	11 ^a	6.5	7.43	457
November.....	177.4	11	-	5.91	362
December.....	108.5	-	-	3.50	215
Calendar year 1944.....	10,376.2	610	-	28.4	20,580
January.....	123.5	-	-	3.98	245
February.....	136	-	-	8.6	369
March.....	1,139	123	-	36.7	2,260
April.....	886.6	98	6.0	29.6	1,760
May.....	297.7	17	5.7	9.60	590
June.....	434.5	28	6.2	14.5	862
July.....	157.3	8.3	3.8	5.07	312
August.....	697.6	204	3.8	22.5	1,380
September.....	146.0	7.2	3.9	4.93	294
Water year 1944-45.....	4,586.3	204	-	12.6	9,100

* Winter discharge measurement made on this day.

^a Stage-discharge relation affected by ice (no gage-height record Dec. 10 to Mar. 10; discharge computed on basis of 3 discharge measurements and weather records).

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

31

Smiths Fork near Border, Wyo.

Location.- Water-stage recorder, lat. 42°17', long. 110°52', in SW 1/4 sec. 33, T. 27 N., R. 118 W., 3 1/2 miles upstream from Howland Creek, 7 miles downstream from Hobbie Creek, and 11 miles northeast of Border.

Records available.- May 1942 to September 1945.

Extremes.- Maximum discharge during year, 666 second-feet June 23 (gage height, 3.37 feet); minimum daily, 49 second-feet Mar. 30, Apr. 4, 5, but may have been less during period of ice effect.

1942-45: Maximum discharge, 935 second-feet May 30, 1943 (gage height, 4.29 feet); minimum daily, that of Mar. 30, Apr. 4, 5, 1945.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	97	78	70				52	165	575	440	204	130
2	92	73					52	222	579	421	204	130
3	90	72					52	284	587	425	204	130
4	88	72					49	358	591	428	202	128
5	85	78					49	395	591	421	193	126
6	85	78					51	451	619	406	187	146
7	85	78					52	503	619	395	193	153
8	85	78					55	495	619	387	190	133
9	80	68		64	58	52	56	499	619	375	187	126
10	81	68					55	499	644	370	179	122
11	80	72					56	459	619	359	171	119
12	80	70					54	440	611	348	171	117
13	78	72	68				55	455	636	328	176	117
14	78	68					52	417	632	317	163	117
15	78	70					54	398	607	310	163	115
16	78	70					56	380	575	303	158	117
17	80	70					55	410	547	297	151	119
18	80	70					56	428	547	290	151	119
19	78	70					64	428	587	284	165	117
20	76	70					80	406	591	277	188	115
21	75	70	66	60	54		95	395	623	271	160	119
22	75	*70					99	380	644	265	148	119
23	73	70					105	366	657	255	144	117
24	73	70					101	380	632	265	142	113
25	72	70					93	395	607	246	142	109
26	72	70					90	425	595	234	139	109
27	72	70					92	444	595	231	137	111
28	72	70					97	440	561	222	135	111
29	70	70	64			52	105	451	515	215	138	107
30	70	70					49	133	479	475	210	130
31	72	-					52	-	569	-	207	130

Month	Second-foot-days	* Maximum	Minimum	Mean	Runoff in acre-feet
October.....	2,448	97	70	79.0	4,860
November.....	2,138	78	68	71.3	4,240
December.....	2,076	-	-	67.0	4,120
Calendar year 1944	56,431	783	54	154	111,930
January.....	1,906	-	-	81.5	3,780
February.....	1,566	-	-	58.9	3,110
March.....	1,581	-	49	51.0	3,140
April.....	8,115	133	49	70.5	4,200
May.....	12,786	559	165	412	25,380
June.....	17,869	587	475	596	35,440
July.....	9,798	440	207	316	19,430
August.....	5,118	204	130	165	10,160
September.....	3,616	183	106	121	7,170
Water year 1944-45	63,017	567	49	175	125,000

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 16 to Mar. 29 (no gage-height record Nov. 20 to Mar. 29; discharge computed on basis of 4 discharge measurements, weather records, and records for Hobbie Creek near Geneva.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Smiths Fork at Cokeville, Wyo.

Location.— Water-stage recorder, lat. 42°06', long. 110°57', in NW $\frac{1}{4}$ sec. 4, T. 24 N., R. 19 W., 1 mile northeast of Cokeville and 2 miles upstream from mouth.

Records available.— April 1942 to September 1945.

Extremes.— Maximum discharge during year, 600 second-feet June 10 (gage height, 4.48 feet); minimum daily, 42 second-feet Oct. 2, 9.

1942-45: Maximum daily discharge, 1,050 second-feet May 4, 1943 (corrected), computed from records for station near Border; minimum daily, 32 second-feet Aug. 18, 24, 25, Sept. 2, 3, 1942.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	90					78	175	496	380	104	70
2	42	87					72	224	475	351	98	82
3	46	83					68	270	475	343	91	92
4	46	83	86				66	318	490	346	91	92
5	46	87					71	383	499	333	82	90
6	45	91				57	77	a410	523	306	78	116
7	44	91			63		*82	a460	536	296	50	197
8	44	91					86	464	539	265	53	144
9	42	91		70			94	481	542	297	73	141
10	a44	91					86	487	580	248	80	132
11	a44	91	80				82	441	567	250	73	127
12	a54	91					77	413	536	248	73	122
13	a72	(*)					74	444	548	230	77	118
14	72						66	406	570	239	82	118
15	73	91				68	70	369	548	219	94	116
16	73						72	348	517	198	88	118
17	74						73	383	487	191	70	123
18	77		(*)				76	427	461	183	78	118
19	78						82	418	461	175	106	a120
20	84			65		60	100	399	484	168	134	a120
21	84		74		60		126	391	511	155	125	123
22	84						127	a320	542	146	104	123
23	83						132	a300	558	a140	107	120
24	83	86					143	a310	561	a140	113	116
25	83					76	132	320	529	139	115	115
26	82			63		(*)	123	338	514	130	112	112
27	82			(*)	57		120	359	520	123	110	108
28	82		70			72	126	387	464	118	107	108
29	82					70	132	354	438	112	95	107
30	83					68	146	369	413	112	84	107
31	83					73	-	455	-	112	77	-
Month							Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet	
October.....							2,057	84	42	66.4	4,080	
November.....							2,640	91	-	88.0	5,240	
December.....							2,402	-	-	77.5	4,760	
Calendar year 1944.....							49,529	695	42	135	98,230	
January.....							2,077	-	-	87.0	4,120	
February.....							1,718	-	-	61.3	3,400	
March.....							2,033	-	-	65.8	4,030	
April.....							2,866	146	70	95.2	5,660	
May.....							11,580	487	175	373	22,930	
June.....							15,384	580	413	513	30,510	
July.....							6,843	380	112	214	13,180	
August.....							2,831	134	70	92.9	5,710	
September.....							3,455	187	70	115	6,860	
Water year 1944-45.....							55,704	580	42	153	110,500	

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for Smiths Fork near Cokeville, Bear River near Border, and unpublished records of canals diverting from Smiths Fork.

Note. — No gage-height record during period when stage-discharge relation was affected by ice, Nov. 13 to Mar. 27; discharge computed on basis of 6 discharge measurements, weather records, and records for Smiths Fork near Border.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Hobble Creek near Geneva, Idaho

Location.- Water-stage recorder, lat. 42°22', long. 110°51', in NW¼ sec. 34, T. 28 N., R. 118 W., in Wyoming, 0.3 mile upstream from mouth and 10.4 miles east of Geneva.

Records available.- March 1943 to September 1945.

Extremes.- Maximum discharge during year, 325 second-feet June 27 (gage height, 1.79 feet); minimum daily, 36 second-feet Mar. 25, 28, 29.
1943-45: Maximum discharge, 532 second-feet June 1, 1943 (gage height, 2.17 feet); minimum daily, 35 second-feet Mar. 19, 1943.

Remarks.- Records good. No diversions above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	67	53	49	45	44	b39	38	86	278	254	138	94
2	65	52	49	45	43	39	38	111	281	248	140	94
3	63	50	49	45	43	39	b38	133	287	243	142	94
4	63	53	49	b45	43	37	b38	150	290	243	140	92
5	62	56	49	45	43	37	b38	165	287	240	135	92
6	60	54	47	45	43	b37	38	178	290	238	135	104
7	60	53	47	46	b40	39	38	190	290	232	135	100
8	60	52	49	46	42	40	40	193	290	227	135	92
9	57	50	b48	b45	40	39	42	198	287	224	133	88
10	57	50	b48	45	40	38	40	206	292	219	131	86
11	56	54	b48	45	42	38	40	198	287	216	128	86
12	56	53	b48	44	42	*38	39	193	284	211	131	86
13	57	56	b47	45	42	37	39	200	286	206	128	85
14	56	53	b47	45	40	37	40	188	298	200	122	85
15	56	52	*b47	46	40	37	38	180	292	198	122	85
16	*56	53	b45	46	39	38	39	175	278	193	117	85
17	54	52	b45	b44	b39	37	39	185	287	185	117	85
18	54	52	b45	b44	39	37	42	188	287	182	117	85
19	53	50	44	b44	39	b37	44	188	273	178	119	83
20	53	b49	45	b44	39	b37	53	188	284	175	122	81
21	52	b49	44	b44	b39	37	60	185	304	170	115	83
22	50	*50	44	b44	b39	37	60	185	319	165	111	83
23	50	52	45	b44	39	37	62	182	322	160	109	81
24	50	52	45	b44	b39	37	62	190	316	162	106	79
25	49	b50	44	b44	b39	36	57	200	307	158	106	77
26	50	b50	b44	b44	b39	37	56	211	313	152	104	77
27	50	b50	b44	b44	b39	37	56	221	310	150	102	77
28	49	b49	b45	b44	b39	36	59	227	292	148	100	77
29	49	b49	46	b44	-	36	63	230	284	148	98	77
30	50	50	46	*b44	-	38	74	240	267	142	96	75
31	52	-	45	b44	-	38	-	270	-	140	96	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	1,716	67	49	55.4	3,400
November.....	1,548	56	49	51.6	3,070
December.....	1,437	49	44	46.4	2,850
Calendar year 1944	55,053	414	40	95.7	69,480
January.....	1,383	46	44	44.6	2,740
February.....	1,134	44	39	40.5	2,250
March.....	1,163	40	36	37.5	2,310
April.....	1,410	74	38	47.0	2,800
May.....	5,834	270	86	188	11,570
June.....	8,729	322	267	291	17,510
July.....	6,007	254	140	194	11,510
August.....	3,730	142	98	120	7,400
September.....	2,570	104	75	85.7	5,100
Water year 1944-45	36,661	322	36	100	72,710

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

Pine Creek near Cokeville, Wyo.

Location.- Staff gage, lat. 42°06', long. 110°50', in SW $\frac{1}{4}$ sec. 35, T. 25 N., R. 118 W., 200 feet downstream from unnamed tributary and $7\frac{1}{2}$ miles east of Cokeville.

Drainage area.- 7.9 square miles.

Records available.- July 1944 to September 1945.

Extremes.- 1944: Maximum discharge observed during period July to September, 22 second-feet Aug. 6 (gage height, 0.60 foot); minimum daily, 14 second-feet Sept. 3, 6-14, 17-29.

1944-45: Maximum discharge observed during water year, 26 second-feet July 22 (gage height, 0.58 foot); minimum daily, 13 second-feet Oct. 5-11, Mar. 8, June 16, Sept. 18-21.

Remarks.- Records good. One power diversion upstream which returns to stream just above station. Discharge is mostly flow from springs at head of unnamed tributary. Staff gage read twice daily.

Cooperation.- Gage-height record furnished by Western States Utilities Co.

Discharge, in second-feet, 1944-45
1944

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

1944-45

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

Monthly discharge, in second-feet, 1944-45

Month.	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
July 20-31, 1944.....	237	20	19	19.8	470
August.....	518	22	15	16.7	1,030
September.....	430	17	14	14.3	853
The period.....	-	-	-	-	2,350
October 1944.....	430	15	13	13.9	853
November.....	439	16	14	14.6	871
December.....	467	16	14	15.1	926
Calendar year.....	-	-	-	-	-
January 1945.....	463	17	14	14.9	918
February.....	398	16	14	14.2	799
March.....	445	15	13	14.4	883
April.....	437	15	14	14.6	867
May.....	438	15	14	14.1	869
June.....	433	16	13	14.4	859
July.....	577	22	16	18.6	1,140
August.....	471	17	14	15.2	934
September.....	426	16	13	14.2	845
Water year 1944-45.....	5,424	22	13	14.9	10,750

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.
To convert war time to standard time, subtract 1 hour.

Thomas Fork near Geneva, Idaho

Location.- Water-stage recorder, lat. 42°23'30", long. 110°59'00", in NE¼ sec. 28, T. 28 N., R. 119 W., 0.8 mile upstream from Salt Creek, 3.7 miles east of Idaho-Wyoming State line, and 5.4 miles northeast of Geneva post office.

Records available.- October 1939 to September 1945.

Extremes.- Maximum discharge during year, 73 second-feet June 10 (gage height, 2.92 feet); minimum daily not determined (occurred during period of ice effect).

1939-45: Maximum discharge, 172 second-feet Apr. 24, 1943 (gage height, 3.95 feet); minimum daily, 1.3 second-feet Nov. 13, 23, 1940.

Remarks.- Records good except those for period of ice effect, which are fair. Practically no diversion above station. Many diversions below station for irrigation. No regulation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.0	4.0					3.1	37	52	32	10	5.7
2	3.6	3.4					2.9	44	44	29	10	5.4
3	3.4	3.3					3.1	46	43	26	10	5.7
4	3.3	3.3					3.1	52	48	27	10	5.7
5	3.3	3.2					3.3	54	55	26	9.6	5.7
6	3.1	4.0					3.1	56	64	25	9.2	9.2
7	3.1	4.0					3.4	57	61	24	10	9.2
8	2.9	3.6					4.4	56	63	22	12	6.5
9	3.1	3.3					4.7	54	64	22	11	6.0
10	2.9	3.3					4.7	52	71	21	10	5.7
11	3.1	3.4					4.4	48	68	21	9.2	5.4
12	3.1	3.6					3.3	45	65	22	8.9	5.2
13	3.1	3.6					3.6	46	64	21	9.2	5.2
14	3.1	3.3				2.0	3.4	41	61	19	8.3	5.2
15	3.1	2.7					3.4	38	59	18	8.5	5.2
16												
17	3.3	2.5	2	2	2		4.0	38	58	18	6.5	5.2
18	3.3	2.3					4.2	45	56	17	7.4	5.2
19	3.3	2.1					5.2	53	52	16	7.4	5.4
20	3.1	(*)					7.7	52	50	15	8.6	5.4
21	3.1						15	52	47	14	10	5.4
22	3.1											
23	2.9						14	53	46	14	8.5	6.2
24	2.9						17	52	44	14	7.4	6.3
25	3.1	2.0					17	48	42	14	7.0	5.7
26							14	46	41	16	6.7	5.4
27	3.1						11	45	39	14	6.5	5.4
28	2.9											
29	3.1						11	45	39	13	6.2	5.4
30	3.1						15	42	42	12	6.2	5.4
31	3.3						20	41	36	12	6.2	5.7
							2.7	22	40	34	11	6.0
							2.7	32	40	33	11	6.0
							3.1	-	52	-	11	6.0

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	98.2	4.0	2.9	3.17	195
November.....	83.5	4.0	-	2.78	166
December.....	62	-	-	2	123
Calendar year 1944.....	3,436.6	72	-	9.39	6,820
January.....	62	-	-	2	123
February.....	56	-	-	2	111
March.....	65.5	3.1	-	2.11	130
April.....	265.5	32	2.9	8.78	523
May.....	1,471	57	37	47.5	2,920
June.....	1,541	71	33	51.4	3,060
July.....	579	32	11	18.7	1,150
August.....	261.1	12	6.0	8.42	518
September.....	175.6	9.2	5.2	5.79	344
Water year 1944-45.....	4,716.4	71	-	12.9	9,360

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 16 to Mar. 27 (no gage-height record Nov. 20 to Mar. 26; discharge computed on basis of 4 discharge measurements, weather records, and records for Salt Creek near Geneva and Montpelier Creek at irrigators weir, near Montpelier.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

Thomas Fork near Raymond, Idaho

Location.- Water-stage recorder, lat. $42^{\circ}16'$, long. $111^{\circ}05'$, in SE $\frac{1}{4}$ sec. 28, T. 13 S., R. 46 E., at J. W. Mumford Ranch, $1\frac{1}{2}$ miles southwest of Raymond.

Records available.- May 1942 to September 1945.

Extremes.- Maximum discharge during year, 201 second-feet June 11-13 (gage height, 5.48 feet); minimum daily not determined (occurred during period of ice effect).
1942-45: Maximum discharge, 359 second-feet Apr. 25, 1943 (gage height, 7.66 feet); minimum daily, 1.6 second-feet Oct. 1, 1942.

Remarks.- Records fair. Many diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.1	8.5					8.8	33	123	111	43	20
2	7.1	8.8					9.0	34	126	107	42	20
3	7.1	8.8					8.8	41	119	91	44	20
4	7.1	8.8					8.0	49	123	92	44	21
5	6.5	8.5		8	9		7.8	65	146	87	43	22
6	6.5	8.5					8.2	85	168	31	41	22
7	6.5	8.8				6.0	9.5	98	169	73	41	19
8	6.9	8.2			7		9.5	112	179	73	39	19
9	7.5	8.2		7			12	120	180	62	35	20
10	7.5	8.2					15	113	188	58	37	18
11	7.5	9.0					14	113	196	58	37	17
12	7.3	9.0			8		13	115	201	57	35	16
13	7.3	9.0					13	117	200	58	35	16
14	7.8	8.8					12	118	198	59	34	16
15	8.0	8.5					12	117	193	59	33	15
16	8.2	8.8					12	107	190	58	32	14
17	8.5	8.7		6			13	91	177	57	30	14
18	9.0	8.6					15	105	165	54	30	15
19	9.0	8.6					18	116	156	53	30	15
20	8.8	8.5				6.5	24	118	145	51	33	15
21	8.5	8.4					29	122	142	48	35	15
22	7.8	8.4				6	42	121	137	46	35	16
23	6.1	8.3		7			39	124	130	45	32	15
24	8.0	8.3					37	119	130	46	31	14
25	8.0						32	116	127	50	30	14
26	8.0				(*)		28	114	125	49	28	15
27	7.8	8.0					24	114	130	48	27	14
28	8.0					*6.5	24	114	128	45	25	14
29	8.2		(*)	(*)		6.7	27	109	122	44	24	13
30	8.2					7.1	30	107	117	44	24	13
31	8.0					7.8	-	115	-	43	22	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	237.8	9.0	6.1	7.67	472
November.....	254.2	9.0	-	8.47	504
December.....	221	-	-	7.1	438
Calendar year 1944.....	7,511.2	98	-	20.5	14,900
January.....	240	-	-	7.7	476
February.....	183	-	-	6.5	363
March.....	197.6	7.8	-	6.37	392
April.....	553.6	42	7.8	18.5	1,100
May.....	3,142	124	33	101	6,330
June.....	4,630	201	117	154	9,180
July.....	1,907	111	43	61.5	3,780
August.....	1,051	43	22	33.9	2,080
September.....	497	22	13	16.6	986
Water year 1944-45.....	13,114.2	201	-	35.9	26,000

* Winter discharge measurement made on this day.
 a No gage-height record; discharge computed on basis of discharge measurement made Nov. 24, weather records, and records for Thomas Fork near Geneva and Salt Creek near Geneva.
 Note.- Stage-discharge relation affected by ice Nov. 24 to Mar. 27 (no gage-height record Jan. 2-28; discharge computed on basis of weather records and records for Thomas Fork near Geneva and Salt Creek near Geneva).
 Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Salt Creek near Geneva, Idaho

Location.- Water-stage recorder, lat. 42°24'00", long. 110°59'30", in NW¼ sec. 21, T. 28 N., R. 119 W., in Wyoming, 800 feet upstream from bridge on U. S. Highway 89, 1,000 feet upstream from mouth, 3.0 miles east of Idaho-Wyoming State line, and 4½ miles northeast of Geneva post office.

Records available.- October 1939 to September 1945.

Extremes.- Maximum discharge during year, 159 second-feet May 7 (gage height, 3.65 feet); minimum not determined (occurred during period of ice effect).

1939-45: Maximum discharge, 292 second-feet Apr. 24, 1943 (gage height, 4.43 feet), from rating curve extended above 120 second-feet; minimum, 0.5 second-foot Aug. 18, 1940 (gage height, 1.05 feet).

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.5	4.5	3.5	3.3	3.1		3.6	34	76	a43	a12	6.4
2	4.2	4.5	3.5	3.1	3.1		3.6	45	66	a40	a12	6.4
3	4.0	4.0	3.5	3.0	4.3		3.6	44	65	a38	a12	6.4
4	3.6	4.0	3.5	2.8	3.8		4.2	78	68	a37	a12	6.6
5	3.5	4.2	3.3	3.0	3.3		3.8	100	76	a35	a12	6.6
6	3.5	4.5	3.5	2.8	3.5		4.0	109	90	a34	12	11
7	3.3	4.5	3.3	2.8	2.7	b2.5	4.5	125	90	a32	12	11
8	3.3	4.2	3.3	2.8	2.8		5.6	122	92	a31	13	8.3
9	3.3	3.6	3.1	2.7	2.6		6.2	122	96	a29	13	7.2
10	3.5	3.6	2.7	2.7	2.7		5.8	118	110	a27	13	6.9
11	3.5	4.0		2.7	2.7		5.6	100	108	a27	11	6.3
12	3.5	4.2		2.6	2.8		5.1	94	105	a28	12	6.6
13	3.5	4.2		2.7	2.8		4.7	92	104	a27	12	6.6
14	3.6	3.8		2.7	3.6		4.3	83	100	a25	11	6.4
15	3.6	b3.6		2.7	3.1		4.5	76	95	a24	11	6.4
16	3.6	b3.6		2.8	2.6		4.9	73	89	a23	11	6.2
17	a3.6	b3.6		2.7	2.8		5.3	62	84	a22	9.9	6.6
18	3.6	b3.4		2.3	3.0		6.4	59	a78	h21	9.5	6.6
19	3.5	a3.3		2.8	2.7		7.5	88	a75	a19	a10	6.4
20	3.5	a3.3	b2.7	2.4	2.7	b3.0	12	86	a70	a17	a11	6.4
21	3.5	b3.3		2.4	2.4		17	88	a66	a17	a10	7.2
22	3.5	b3.3		2.4			18	85	a63	a17	a9.6	7.5
23	3.5	3.3					18	82	a58	a17	a8.6	6.9
24	3.5	3.5					17	81	a55	a19	a7.8	6.6
25	3.5	3.5			b2.4		14	79	a50	a18	a7.4	6.4
26	3.5	3.3		b2.4	(*)		14	76	a50	a17	a7.0	6.6
27	3.5	b3.3		(*)			16	75	b52	a16	a7.0	6.9
28	3.5	b3.3	b3.0			a3.1	17	72	a50	a15	a7.0	7.2
29	3.5	3.3	b4.0			3.5	21	66	a47	a15	6.9	6.6
30	3.6	3.6	3.8			3.6	26	65	a45	a15	6.9	6.6
31	3.6	-	3.5			3.6	-	72	-	h14	6.9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	110.9	4.5	3.3	3.58	220
November.....	112.2	4.5	3.3	3.74	223
December.....	93.4	4.0	-	3.01	185
Calendar year 1944.....	3,969.5	56	-	10.8	7,860
January.....	81.8	3.3	-	2.64	162
February.....	80.3	4.3	-	2.87	159
March.....	88.8	3.6	-	2.86	176
April.....	283.4	26	3.6	9.44	562
May.....	2,603	125	34	84.0	5,160
June.....	2,273	110	45	75.8	4,510
July.....	759	43	14	24.5	1,510
August.....	316.5	13	6.9	10.2	628
September.....	210.1	11	6.2	7.00	417
Water year 1944-45.....	7,012.2	125	-	19.2	13,910

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for Thomas Fork near Geneva and Montpelier Creek at irrigators weir, near Montpelier.

b Stage-discharge relation affected by ice (no gage-height record Dec. 16-29, Jan. 26, 27, Mar. 23-27).

c Discharge computed from staff-gage reading.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Montpelier Creek near Montpelier, Idaho

Location.- Water-stage recorder, lat. 42°21', long. 111°11', in NE¼ sec. 34, T. 12 S., R. 45 E., 150 feet upstream from bridge on U. S. Highway 89, 275 feet upstream from South Fork, and 6.8 miles northeast of Montpelier. Datum of gage is 6,427.46 feet above mean sea level, adjustment of 1912.

Drainage area.- 28.2 square miles.

Records available.- November 1939 to December 1944 (discontinued).

Extremes.- Maximum discharge during period October to December 1944, 9.2 second-feet Nov. 6 (gage height, 1.26 feet); minimum daily, 3.0 second-feet Dec. 10-18, 27, 28.

1939-44: Maximum discharge, 136 second-feet Apr. 24, 1943 (gage height, 3.35 feet); minimum recorded, 1.5 second-feet Mar. 28, 29, 1942, but may have been less during periods of ice effect.

Remarks.- Records good except those for periods of ice effect, which are fair. One diversion from tributary about 2 miles above station for irrigation. Many diversions below station for irrigation.

BEAR RIVER BASIN

Discharge, in second-feet, of Montpelier Creek near Montpelier, Idaho, October to December 1944

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1	6.2	6.4	4.0	9	5.3	5.4	4.0	17	5.6	4.0	3.0	25	5.1	4.3	3.5
2	5.6	5.6	4.0	10	5.3	5.6	3.0	18	5.6	3.5	3.0	26	4.9	4.0	3.3
3	5.4	5.4	4.0	11	5.3	6.0	3.0	19	5.4	3.5	3.2	27	4.7	6.0	3.0
4	5.4	5.4	3.7	12	5.1	6.2	3.0	20	5.3	4.5	3.5	28	4.7	4.0	3.0
5	5.3	5.8	3.8	13	5.3	6.4	3.0	21	5.3	4.2	4.0	29	4.9	3.5	4.0
6	5.3	6.8	4.0	14	5.3	5.6	3.0	22	5.3	4.2	4.0	30	4.9	4.0	3.7
7	5.3	6.2	4.0	15	5.4	6.7	3.0	23	5.1	4.4	4.0	31	5.1	-	3.4
8	5.1	5.8	4.0	16	5.6	4.5	3.0	24	5.1	4.5	3.8				

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	163.2	6.2	4.7	5.26	324
November.....	149.4	6.8	3.5	4.98	296
December.....	108.6	4.0	3.0	3.50	215
Calendar year 1944.....	3,851.9	41	3.0	10.5	7,640

Note.- Stage-discharge relation affected by ice Nov. 15-20, Nov. 25 to Dec. 31 (no gage-height record Nov. 25 to Dec. 31; discharge computed on basis of 2 discharge measurements, weather records, and records for station at irrigators weir, near Montpelier).

Montpelier Creek at irrigators weir, near Montpelier, Idaho

Location.- Water-stage recorder and concrete rectangular weir lat. 42°20', long. 111°14', in SE 1/4 sec. 31, T. 12 S., R. 45 E., 3 1/2 miles downstream from South Fork and 3 miles east of Montpelier.

Records available.- December 1942 to September 1945.

Extremes.- Maximum discharge during year, 88 second-feet June 10 (gage height 1.57 feet); minimum, 1.8 second-feet Nov. 18.

1942-45: Maximum discharge, 134 second-feet Apr. 24, 1943 (gage height, 5.43 feet, site and datum then in use); minimum recorded, 1.5 second-feet Jan. 20, 1944, but may have been less during periods of ice effect.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.8	8.6	6.0	6.0	6.8	6.0	7.8	36	48	41	18	12
2	7.5	8.2	6.0	6.4	6.8	6.2	7.2	44	42	40	18	12
3	7.2	7.5	6.4	6.1	6.8	6.4	7.2	51	43	38	18	12
4	7.2	7.5	6.6	6.1	6.8	6.2	6.8	50	48	37	18	12
5	7.2	7.5	5.3	6.2	6.4	6.5	6.8	51	58	36	17	13
6	7.2	8.6	6.5	6.1	6.2	6.0	7.2	52	76	35	17	18
7	7.2	8.2	6.2	6.1	6.2	6.5	7.8	53	72	34	18	18
8	7.2	7.8	6.2	6.2	6.2	6.8	9.6	49	72	32	18	14
9	7.5	7.2	5.3	6.0	6.2	6.0	11	48	76	32	17	14
10	7.5	7.2	4.9	6.0	6.2	6.2	11	48	85	31	17	15
11	7.8	7.8	5.0	6.0	6.2	6.4	10	48	80	31	17	13
12	7.5	7.8	4.9	6.1	6.2	6.5	9.6	46	78	30	17	12
13	6.8	7.5	5.2	6.2	6.5	6.6	8.9	46	77	30	18	12
14	6.8	6.8	5.2	6.5	6.8	6.7	8.6	43	73	29	16	11
15	7.2	5.8	5.5	6.5	6.6	6.5	8.9	41	72	28	15	11
16	6.8	4.8	5.7	6.6	6.4	6.4	9.3	41	69	27	15	11
17	7.5	4.5	5.2	5.8	6.2	6.6	9.6	49	67	26	14	11
18	7.5	3.8	5.1	5.5	6.2	6.5	11	50	64	26	14	12
19	7.5	4.2	5.5	6.5	6.2	6.1	13	46	62	25	18	12
20	7.5	5.4	5.8	5.4	6.1	6.2	17	45	59	24	19	12
21	7.5	6.4	6.0	5.3	5.9	6.7	20	48	58	24	17	13
22	8.2	6.8	6.0	5.7	6.0	6.9	21	46	56	23	18	13
23	8.2	6.8	6.0	5.8	6.2	7.0	21	44	54	22	15	12
24	7.8	7.0	5.8	6.6	5.5	6.4	20	43	54	24	14	12
25	7.8	5.9	5.7	6.4	5.0	6.1	19	42	51	22	14	12
28	7.8	5.4	5.4	6.0	6.5	6.4	19	42	51	20	14	12
27	7.8	6.9	5.1	5.8	6.5	6.8	20	41	56	20	13	12
26	7.5	6.4	6.0	6.5	6.8	6.8	20	41	48	20	13	12
29	7.5	4.1	6.0	6.8	-	6.8	22	41	45	19	12	11
30	7.2	6.4	6.8	6.8	-	7.2	22	41	44	17	12	11
31	7.2	-	6.4	6.4	-	7.5	-	50	-	18	12	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	230.9	8.2	6.8	7.45	458
November.....	196.6	8.6	3.8	6.55	390
December.....	173.8	6.4	4.9	5.61	345
Calendar year 1944.....	4,791.5	49	3.8	13.1	9,500
January.....	186.4	6.6	5.3	6.01	370
February.....	172.6	6.8	5.0	6.16	342
March.....	197.9	7.5	5.0	6.38	393
April.....	398.3	28	6.8	13.3	790
May.....	1,416	53	36	45.7	2,810
June.....	1,838	85	42	61.3	3,650
July.....	962	41	18	27.8	1,710
August.....	491	19	12	15.8	974
September.....	375	18	11	12.5	744
Water year 1944-45.....	6,538.5	85	3.8	17.9	12,980

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of recorded range in stage and weather records.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Bloomington Creek near Bloomington, Idaho

Location.- Water-stage recorder, lat. $42^{\circ}11'$, long. $111^{\circ}27'$, in SE $\frac{1}{4}$ sec. 20, T. 14 S., R. 43 E., 2.1 miles west of Bloomington.

Records available.- April 1943 to September 1945.

Extremes.- Maximum discharge during year, 111 second-feet May 31 (gage height, 2.07 feet); minimum daily, 12 second-feet many days in February and March.

1943-45: Maximum discharge, 184 second-feet June 2, 1943 (gage height, 2.67 feet); minimum daily, that of February and March 1945.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	16	15	15	13	12	14	23	82	48	26	21
2	18	16	15	15	13	12	13	24	72	46	26	20
3	18	16	15	15	13	12	13	26	68	45	26	20
4	17	16	15	15	13	12	13	28	70	41	26	20
5	17	16	15	15	13	*12	14	30	66	39	26	21
6	17	16	15	15	13	12	14	35	66	37	26	21
7	17	15	15	15	13	12	16	39	62	36	26	21
8	17	15	15	15	13	12	17	42	64	34	27	21
9	17	15	15	15	13	12	15	56	64	33	26	21
10	17	15	15	15	13	12	14	64	66	35	26	20
11	17	16	15	15	13	12	14	66	62	33	25	20
12	17	16	15	15	13	12	14	66	57	32	27	20
13	17	16	15	15	13	12	14	71	61	32	26	20
14	17	16	15	15	13	12	14	59	58	32	25	20
15	17	16	15	15	13	12	15	49	55	31	24	20
16	17	16	14	15	12	12	16	47	53	30	24	20
17	16	14	14	14	12	12	16	58	52	30	23	20
18	16	14	14	14	12	12	16	55	52	30	23	*20
19	16	16	*14	14	12	12	18	51	53	30	23	20
20	16	16	14	14	12	12	20	42	53	29	23	20
21	16	16	15	14	12	12	21	38	53	29	23	20
22	17	16	15	14	12	12	20	38	53	29	23	20
23	17	16	15	14	12	12	20	39	53	28	23	19
24	16	16	15	14	12	12	20	42	53	29	23	19
25	16	16	15	*14	12	12	19	46	53	28	23	19
26	16	*15	15	14	12	13	18	53	54	26	23	19
27	16	15	15	13	12	12	16	55	54	26	23	19
28	16	15	15	13	12	12	19	53	52	26	23	19
29	16	15	15	13	-	12	20	58	50	26	22	19
30	16	15	15	13	-	14	21	61	51	26	21	19
31	16	-	15	13	-	14	-	79	-	24	21	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	517	18	16	16.7	1,030
November.....	471	16	15	15.7	934
December.....	460	15	14	14.8	912
Calendar year 1944.....	8,409	72	14	23.0	16,680
January.....	445	15	13	14.4	935
February.....	351	13	12	12.5	696
March.....	377	14	12	12.2	748
April.....	496	21	13	16.5	984
May.....	1,492	79	23	48.1	2,960
June.....	1,762	82	50	58.7	3,490
July.....	996	48	24	32.1	1,990
August.....	751	27	21	24.2	1,490
September.....	598	21	19	19.9	1,190
Water year 1944-45.....	8,716	82	12	23.9	17,300

* Winter discharge measurement made on this day.

Note.- No gage-height record Oct. 29 to Nov. 3, Nov. 12 to Mar. 17, June 3-12, June 24 to July 9, Sept. 17, 19, 22, 23; discharge computed on basis of 5 discharge measurements, occasional staff-gage readings, weather records, and records for Mill Creek near Liberty.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Paris Creek near Paris, Idaho

Location.— Water-stage recorder, lat. 42°13', long. 111°27', in NE $\frac{1}{4}$ sec. 17, T. 14 S., R. 43 E., half a mile upstream from Utah Power & Light Co. power plant and 3 miles southwest of Paris.

Records available.— October 1943 to September 1945.

Extremes.— Maximum discharge during year, 78 second-feet June 1 (gage height, 2.05 feet); minimum daily not determined.

1944-45: Maximum discharge, 78 second-feet May 17, 1944, June 1, 1945 (gage height, 2.05 feet); minimum not determined.

Remarks.— Records good. Two small diversions for irrigation above station. Paris power canal diverts water from right bank of creek in NE $\frac{1}{4}$ sec. 13, T. 14 S., R. 42 E. Water returned to creek in NW $\frac{1}{4}$ sec. 9, T. 14 S., R. 43 E., except for one small canal, which diverts water for irrigation from power-plant forebay.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	2.5						6.1	67	all	2.3	3.2
2	13	2.5						5.6	58	9.9	2.2	2.5
3	14	2.4					1.5	5.4	50	9.6	2.4	2.5
4	15	2.4						5.6	52	9.0	2.2	3.2
5	15	2.4				*1.1	*1.6	6.1	49	7.6	2.2	2.7
6	17	2.4					2.2	6.7	49	7.0	2.2	3.6
7	19	2.5					2.8	7.4	44	7.0	2.4	2.8
8	18	2.4		1.5	1.5		3.7	10	49	6.5	2.3	2.7
9	21	2.4					3.5	17	49	6.0	2.4	2.7
10	20	2.4					3.0	30	53	7.0	2.5	2.5
11	20	2.6					2.9	32	47	6.0	2.5	2.5
12	20	2.6					2.5	37	39	5.5	3.0	2.3
13	20	2.5					2.4	43	42	5.0	4.5	2.3
14	20	2.3					2.6	34	41	4.7	4.5	2.3
15	20	2.2	1.5				2.4	24	36	4.5	3.8	2.3
16	20	2.0					2.6	18	32	4.5	3.6	2.2
17	20	1.9					2.9	26	28	4.3	2.5	2.7
18	19	1.7					3.3	30	28	4.1	3.2	3.9
19	19	1.6	(*)				5.6	27	24	3.9	3.6	2.3
20	19					1.5	6.9	21	24	3.6	3.6	2.2
21	*19						6.9	15	24	3.6	3.6	2.4
22	19				1.1		5.9	12	23	3.4	3.6	2.3
23	18						4.9	12	23	3.6	3.5	2.3
24	18			1.2			4.7	19	22	3.9	2.8	2.2
25	18	*1.5		(*)			4.3	27	20	4.3	3.0	2.2
26	18						4.1	37	21	4.3	2.5	2.2
27	18						4.3	42	21	4.1	2.5	2.3
28	18						4.9	41	15	4.3	2.8	2.2
29	18						5.4	49	all	4.3	2.8	2.2
30	11						6.1	52	all	4.1	2.9	2.2
31	2.6	-					-	46	-	3.2	3.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	539.6	21	2.6	17.4	1,070
November.....	60.4	2.8	-	2.01	120
December.....	46.5	-	-	1.50	92
Calendar year 1944.....	2,537.7	70	1.2	6.93	5,040
January.....	41.7	-	-	1.35	83
February.....	36.8	-	-	1.31	73
March.....	43.3	-	-	1.40	96
April.....	108.2	6.9	-	3.61	215
May.....	743.9	52	5.4	24.0	1,480
June.....	1,053	67	12	35.1	2,090
July.....	169.8	11	3.2	5.48	337
August.....	92.1	4.5	2.2	2.97	183
September.....	75.9	3.9	2.2	2.55	151
Water year 1944-45.....	3,011.2	67	-	8.25	5,990

* Winter discharge measurement made on this day.

a No gage-height record; discharge interpolated.

Note. Stage-discharge relation affected by ice Nov. 14 to Apr. 4 (no gage-height record Nov. 15-24, Dec. 17 to Apr. 4; discharge computed on basis of discharge measurements and weather records).

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Paris power canal near Paris, Idaho

Location.— Water-stage recorder, lat. 42°12', long. 111°29', in SE¼ sec. 13, T. 14 S., R. 42 E., half a mile downstream from head gates and 4.4 miles southwest of Paris.

Records available.— October 1943 to September 1945.

Extremes.— Maximum daily discharge during year, 40 second-feet May 8, 9; minimum daily, 0.3 second-foot Oct. 8.

1943-45: Maximum daily discharge, 50 second-feet June 1, 1944 (gage height, 2.45 feet); minimum daily, that of Oct. 8, 1944.

Remarks.— Records good. One small canal diverts water for irrigation from power-plant forebay below station.

Cooperation.— Results of five discharge measurements furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.1	15	15	15	12	a12	a11	13	35	39	30	24
2	5.1	15	15	15	12	a12	a11	14	34	39	30	25
3	4.9	15	15	15	12	a12	a11	16	33	39	30	25
4	4.7	15	15	15	12	a12	a11	18	33	39	29	23
5	4.2	15	15	15	13	12	11	22	33	38	29	24
6	1.6	15	15	14	13	11	11	26	33	37	29	24
7	.4	15	15	14	13	11	11	33	33	37	29	24
8	.3	15	15	14	13	11	11	40	36	37	29	24
9	.4	15	15	14	13	11	11	40	36	37	29	24
10	.4	15	15	14	13	11	11	38	36	36	27	24
11	.4	15	15	14	12	11	11	35	35	36	27	23
12	.5	15	15	14	12	11	11	36	36	36	27	23
13	.6	15	15	14	12	11	11	36	38	36	26	23
14	.6	15	15	14	12	11	11	35	38	36	26	23
15	.7	15	15	14	12	11	11	35	38	36	26	23
16	.7	15	14	14	12	11	11	35	38	36	26	23
17	.8	15	14	14	12	11	11	35	37	35	26	22
18	.8	15	14	14	12	11	11	35	36	35	25	22
19	1.1	15	14	14	12	11	11	34	36	35	25	22
20	1.4	15	14	14	12	11	11	33	36	34	25	22
21	1.2	15	14	a14	12	11	12	33	36	34	25	22
22	1.1	15	14	a14	12	11	12	34	36	33	25	22
23	1.5	15	14	a14	12	11	12	35	36	33	25	22
24	2.2	15	14	a13	12	11	12	37	37	33	26	22
25	1.4	15	14	13	12	11	12	39	38	32	26	22
26	.9	15	14	13	a12	11	12	39	38	32	25	22
27	.8	15	14	13	a12	11	12	36	38	31	25	22
28	.7	15	14	12	a12	11	12	36	36	31	25	22
29	.7	15	14	12	-	11	12	36	36	31	25	22
30	4.5	15	14	12	-	11	12	36	38	30	24	22
31	15	-	15	12	-	11	-	34	-	30	-	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	64.7	15	0.3	2.09	128
November.....	450	15	15	15.0	893
December.....	450	15	14	14.5	893
Calendar year 1944.....	7,407.7	50	.3	20.2	14,700
January.....	427	15	12	13.8	847
February.....	342	13	12	12.2	678
March.....	346	12	11	11.2	686
April.....	340	12	11	11.3	674
May.....	1,003	40	13	32.4	1,990
June.....	1,079	39	33	36.0	2,140
July.....	1,081	39	30	34.9	2,140
August.....	824	30	24	26.6	1,630
September.....	687	25	22	22.9	1,360
Water year 1944-45.....	7,093.7	40	.3	19.4	14,060

a No gage-height record; discharge interpolated.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

Slight Canyon Creek near Paris, Idaho

Location.- Water-stage recorder, lat. 42°14', long. 111°27', in SE¼ sec. 5, T. 14 S., R. 43 E., 2½ miles west of Paris.

Records available.- April 1943 to September 1945.

Extremes.- Maximum discharge during year, 19 second-feet May 1 (gage height, 1.64 feet); no flow Oct. 1 to Apr. 7, July 25 to Sept. 30.
1943-45: Maximum discharge, 48 second-feet Apr. 16, 1944 (gage height, 2.06 feet); no flow during a large part of each year.

Remarks.- Records good. No diversions above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	11	3.6	0.8		
2							0	11	2.4	.7		
3							0	11	2.6	.7		
4							0	11	2.8	.6		
5							0	11	3.6	.6		
6							0	9.3	5.6	.6		
7							a.5	7.3	3.4	.5		
8							a1.2	6.5	3.0	.5		
9							a1.2	5.6	3.0	.5		
10							a1.1	6.0	3.6	.5		
11							a1.0	6.0	2.7	.5		
12							a1.0	5.0	2.4	.5		
13							b1.0	5.4	2.8	.4		
14							b1.2	4.4	2.2	.4		
15							b1.5	4.0	1.9	a.4		
16							b1.5	4.0	1.8	a.4		
17							b1.6	5.8	1.5	a.3		
18							1.9	5.6	1.4	a.3		
19							3.8	4.4	1.3	a.2		
20							7.6	4.0	1.2	a.2		
21							10	3.6	1.2	a.2		
22							10	3.0	1.1	a.1		
23							7.3	2.7	1.2	a.1		
24							6.0	2.4	1.2	a.1		
25							6.2	2.2	1.2	0		
26												
27							5.4	1.9	1.2	0		
28							6.5	1.8	1.5	0		
29							6.8	1.7	1.1	0		
30							7.0	1.7	1.0	0		
31							9.6	1.4	.9	0		
							-	3.9	-	0		

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	0	0	0	0	0
November.....	0	0	0	0	0
December.....	0	0	0	0	0
Calendar year 1944	219.4	7.3	0	.60	435
January.....	0	0	0	0	0
February.....	0	0	0	0	0
March.....	0	0	0	0	0
April.....	99.7	10	0	3.32	198
May.....	165.2	11	1.4	5.33	328
June.....	64.6	5.6	.9	2.16	129
July.....	10.1	.8	0	.33	20
August.....	0	0	0	0	0
September.....	0	0	0	0	0
Water year 1944-45	359.8	11	0	.93	675

a No gage-height record; discharge computed on basis of weather records and records for Mill Creek near Liberty.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Mill Creek above West Fork, near Liberty, Idaho

Location.- Water-stage recorder, lat. 42°19'2", long. 111°30'5", in about SE¼ sec. 2, T. 13 S., R. 42 E. (unsurveyed), a third of a mile upstream from West Fork and 3 miles west of Liberty.

Records available.- October 1944 to September 1945.

Extremes.- Maximum discharge during year, 56 second-feet May 31 (gage height, 2.03 feet); No flow Oct. 1 to Apr. 6, July 22 to Sept. 30.

Remarks.- Records good. No diversions above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	b10	25	a0.6		
2							0	18	19	a.6		
3							0	19	20	a.5		
4							0	22	17	a.5		
5							0	24	19	a.4		
6							0	19	16	a.4		
7							a.5	14	12	a.4		
8							a1.0	11	11	a.3		
9							a1.0	9.2	13	a.3		
10							a.9	11	14	a.3		
11							a.8	11	11	a.2		
12							a.7	6.8	11	a.2		
13							a.6	9.6	12	.2		
14							a.5	6.8	7.8	.2		
15							a.7	5.0	6.0	.2		
16							a.9	4.6	4.8	.1		
17							a1.1	13	3.8	.1		
18							a1.3	9.9	3.5	.1		
19							a1.5	8.2	3.5	.1		
20							a1.7	7.2	3.7	.1		
21							1.7	5.4	3.3	.1		
22							2.0	4.2	3.0	0		
23							2.1	4.0	3.8	0		
24							4.0	4.4	2.5	0		
25							2.8	3.8	1.8	0		
26							2.1	6.5	2.0	0		
27							2.0	8.2	2.5	0		
28							2.5	11	1.3	0		
29							b4.0	15	.6	0		
30							b7.0	14	a.6	0		
31							-	26	-	0		
Month							Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet	
October.....							0	0	0	0	0	
November.....							0	0	0	0	0	
December.....							0	0	0	0	0	
Calendar year.....							-	-	-	-	-	
January.....							0	0	0	0	0	
February.....							0	0	0	0	0	
March.....							0	0	0	0	0	
April.....							43.4	7.0	0	1.46	86	
May.....							341.8	26	3.8	11.0	878	
June.....							254.5	25	.6	8.48	505	
July.....							5.9	0	0	0.19	12	
August.....							0	0	0	0	0	
September.....							0	0	0	0	0	
Water year 1944-45.....							645.6	26	0	1.77	1,880	

a No gage-height record; discharge computed on basis of 1 discharge measurement, weather records, and records for Mill Creek near Liberty.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

Mill Creek near Liberty, Idaho

Location.- Water-stage recorder, lat. 42°20', long. 111°29', in SE $\frac{1}{4}$ sec. 36, T. 12 S., R. 42 E., 2 miles northwest of Liberty and $3\frac{1}{4}$ miles upstream from North Creek.

Records available.- April 1943 to September 1945.

Extremes.- Maximum discharge during year, 150 second-feet May 31 (gage height, 2.63 feet), from rating curve extended above 80 second-feet; minimum daily not determined (occurred during period of ice effect).
1943-45: Maximum discharge, that of May 31, 1945; minimum daily not determined (occurred during period of ice effect).

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.6	3.6	3.0	3.0	3.0	3.0	4.4	29.	120	20	9.2	6.4
2	3.6	3.0				2.8	4.1	35	98	20	8.6	6.7
3	3.6	3.3				2.8	4.4	41	94	18	9.2	6.7
4	3.6	3.6				3.0	3.8	51	89	18	9.2	7.0
5	3.8	3.8				2.8	3.8	57	90	18	9.2	7.3
6	3.3	3.6	3.0	3.0	3.0	2.8	4.1	55	80	17	9.2	9.8
7	3.3	3.8				3.0	4.7	55	71	16	10	9.8
8	3.3	3.6				2.8	5.8	50	68	13	9.2	9.8
9	3.3	3.6				2.8	5.8	48	72	12	8.6	9.8
10	3.3	3.6				2.8	5.8	49	75	12	9.2	9.8
11	3.3	4.1	2.5	3.0	3.0	3.0	5.5	51	71	11	9.2	9.8
12	3.3	4.1				3.3	5.0	48	75	11	9.2	9.8
13	3.3	3.8				3.6	4.7	51	79	11	9.8	10
14	3.3	4.1				3.6	4.4	49	68	11	12	10
15	3.3	3.8				3.0	4.7	41	57	10	9.8	9.8
16	3.3	4.1	3.0	3.0	3.0	3.0	4.7	39	51	9.8	9.2	8.0
17	3.3	4.1				3.0	5.0	49	49	9.8	9.2	7.3
18	3.3					3.0	5.8	50	48	9.8	9.2	6.4
19	3.3					3.0	7.7	49	51	9.2	8.0	6.4
20	3.3					3.3	11	49	80	8.6	6.7	6.4
21	*3.3		3.0	2.5	2.5	3.3	13	43	52	8.6	6.4	6.7
22	2.8					3.6	14	41	43	8.0	6.4	7.0
23	2.8					3.8	13	39	40	8.6	6.4	6.7
24	2.6					3.6	14	39	38	9.8	6.4	6.7
25	2.6	(*)				3.6	12	38	33	12	6.4	6.7
26	2.6		3.0	3.0	3.0	3.6	11	43	32	11	6.4	6.7
27	2.6					3.6	10	50	36	9.8	6.0	7.0
28	2.8					3.6	11	57	26	9.2	6.0	7.0
29	2.8					3.8	13	67	24	9.2	6.0	7.3
30	2.8					3.8	18	67	22	9.8	6.4	7.3
31	3.0					4.1	-	90	-	9.8	7.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	97.9	3.6	2.6	3.16	194
November.....	102.6	4.1	-	3.42	204
December.....	87.0	-	-	2.81	173
Calendar year 1944.....	3,095.5	56	-	8.46	6,140
January.....	85.0	-	-	2.74	169
February.....	77.8	-	-	2.77	154
March.....	100.8	4.1	2.8	3.25	200
April.....	233.9	18	3.8	7.80	464
May.....	1,520	90	29	49.0	3,010
June.....	1,803	120	22	60.1	3,580
July.....	371.0	20	8.0	12.0	736
August.....	254.0	12	6.0	8.19	504
September.....	236.1	10	6.4	7.87	468
Water year 1944-45.....	4,968.8	120	-	13.6	9,860

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 18 to Feb. 28, Mar. 6.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Georgetown Creek near Georgetown, Idaho

Location.- Water-stage recorder, lat. 42°30', long. 111°19', in NE¼ sec. 4, T. 11 S., R. 44 E., 150 feet downstream from Little Right Hand Fork and 3 miles northeast of Georgetown.

Drainage area.- 22.2 square miles.

Records available.- November 1939 to September 1945. October 1911 to September 1914, fragmentary records collected at site 0.7 mile downstream just below power plant (now inoperative).

Extremes.- Maximum discharge during year, 51 second-feet June 15 (gage height, 1.55 feet); minimum daily, 21 second-feet Apr. 5-10.
1939-45: Maximum discharge, 51 second-feet June 15, 1943, June 15, 1945; minimum daily, 18 second-feet many days February to May 1941.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	26	25	28	24	24	24	23	39	42	36	34
2	31	26	25	28	24	24	23	40	42	36	34	
3	31	25	24	27	24	24	22	23	42	40	36	34
4	30	25	24	27	24	24	22	24	44	40	36	34
5	30	26	24	27	24	24	21	24	a44	40	36	34
6	30	26	24	27	24	23	21	a24	a44	40	36	35
7	30	24	24	27	24	23	21	a24	a45	40	37	35
8	30	24	24	26	24	23	21	a23	a45	40	36	34
9	29	24	24	26	24	23	21	a23	46	40	37	34
10	29	25	25	25	24	23	21	22	47	39	36	34
11	28	25	25	25	24	24	22	23	45	39	36	34
12	28	29	25	25	24	24	22	23	48	38	36	33
13	28	27	25	25	24	24	22	24	47	38	36	33
14	28	26	25	a25	24	24	22	25	50	38	36	32
15	27	25	25	a25	24	24	22	25	51	38	36	32
16	27	25	25	a25	24	24	22	26	50	38	36	32
17	27	25	25	a25	24	24	22	27	48	38	36	33
18	27	25	25	a25	24	24	22	28	47	38	36	32
19	27	25	25	a25	24	24	22	28	48	36	36	32
20	27	25	25	25	24	24	22	30	46	36	36	32
21	26	25	24	25	24	23	22	31	46	37	36	32
22	26	25	24	25	23	23	a22	31	47	37	36	32
23	26	25	25	25	23	23	a22	32	48	36	36	32
24	26	25	25	25	23	23	a22	32	47	36	36	32
25	27	24	25	25	23	24	22	33	46	36	36	32
26	27	25	25	25	23	24	22	34	46	36	36	32
27	26	25	26	25	24	24	22	35	44	36	36	32
28	26	25	26	25	24	24	22	36	43	36	34	32
29	26	25	28	25	-	24	23	38	42	36	36	32
30	26	25	28	24	-	24	23	38	42	36	34	32
31	25	-	28	24	-	24	-	40	-	36	35	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	862	31	25	27.8	1,710
November.....	760	29	24	25.3	1,510
December.....	777	28	24	25.1	1,540
Calendar year 1944.....	10,301	40	22	28.1	20,430
January.....	791	28	24	25.5	1,570
February.....	667	24	23	23.9	1,320
March.....	735	24	23	23.7	1,460
April.....	659	24	21	22.0	1,310
May.....	872	40	22	28.1	1,730
June.....	1,370	51	39	45.7	2,720
July.....	1,178	42	36	38.0	2,540
August.....	1,111	37	34	35.8	2,200
September.....	987	35	32	32.9	1,960
Water year 1944-45.....	10,769	51	21	29.5	21,370

a No gage-height record; discharge interpolated.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

Stauffer Creek near Nounan, Idaho

Location.— Water-stage recorder, lat. 42°28', long. 111°25', in N $\frac{1}{4}$ sec. 15, T. 11 S., R. 43 E., 0.5 mile downstream from check dam, 0.6 mile upstream from mouth, 2 miles east of Nounan post office, and 2 $\frac{1}{2}$ miles west of Georgetown.

Records available.— November 1939 to December 1944 (discontinued).

Extremes.— Maximum discharge during period October to December 1944, 5.2 second-feet Nov. 11 (gage height, 0.45 feet); minimum not determined (occurred during period of ice effect).

1939-44: Maximum discharge, 186 second-feet May 28, 1941, from rating curve extended above 50 second-feet; no flow July 13, 1941.

Remarks.— Records fair. Many diversions above station for irrigation. No diversions below station. A substantial check dam 0.5 mile above station is used to irrigate meadows above station by flooding. Operation of dam has a pronounced effect on flow at station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	2.9	3.0									
2	2.2	2.9										
3	2.2	2.9										
4	2.2	2.9										
5	2.2	3.3										
6	2.2	3.5	2.0									
7	2.2	3.3										
8	2.2	3.5										
9	2.2	2.7										
10	2.2	2.7										
11	2.2	3.1	2.2									
12	2.4											
13	2.4											
14	2.4											
15	2.7											
16	2.9	3.0	2.5									
17	3.1											
18	3.1											
19	2.9											
20	2.7											
21	2.7	2.7	2.7									
22	2.9											
23	2.7											
24	2.7											
25	2.7											
26	2.7											
27	2.7											
28	2.7											
29	2.7											
30	2.7											
31	2.7	-										

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	78.9	3.1	2.2	2.55	156
November.....	90.5	3.5	2.7	3.02	180
December.....	78.2	-	-	2.52	165
Calendar year 1944	3,764.9	78	1.5	10.3	7,450
January.....					
February.....					
March.....					
April.....					
May.....					
June.....					
July.....					
August.....					
September.....					
Water year					

Note.— Stage-discharge relation affected by ice Nov. 12 to Dec. 31 (no gage-height record Nov. 14 to Dec. 31; discharge computed on basis of 2 discharge measurements, weather records, and records for Skinner Creek near Nounan and Montpellier Creek at irrigators weir, near Montpellier).

Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Skinner Creek at Nounan, Idaho

Location.- Staff gage, lat. 42°29', long. 111°28', in SW $\frac{1}{4}$ sec. 8, T. 11 S., R. 43 E., 330 feet downstream from point where flow through Minnig Mill is returned to creek and three-quarters of a mile west of Nounan post office.

Drainage area.- 5.1 square miles.

Records available.- October 1939 to December 1944 (discontinued).

Extremes.- Maximum discharge observed during period October to December 1944, 1.9 second-feet Oct. 31, (gage height, 0.82 foot); minimum not determined (occurred during period of ice effect).

1939-44: Maximum discharge observed, 60 second-feet June 8, 1944; no flow July 19, 20, 1942.

Remarks.- Records fair. Gage read twice daily. One small irrigation diversion about half a mile above station; many below. Water which operates Minnig Mill is diverted a third of a mile above station and returned to creek above. Possibly some regulation at low flow, but observations are made when none is effective. There are facilities to permit a small diversion from Coop Creek to Skinner Creek about 2 $\frac{1}{2}$ miles above station to augment low-water supply for Minnig Mill. None was so diverted during the period.

Discharge, in second-feet, water year October 1944 to September 1945

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

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	45.2	1.7	1.3	1.46	90
November.....	45.1	1.8	-	1.50	89
December.....	59.3	1.4	-	1.27	78
Calendar year 1944	1,220.0	.25	.2	5.33	2,420
January.....					
February.....					
March.....					
April.....					
May.....					
June.....					
July.....					
August.....					
September.....					
Water year					

* Winter discharge measurement made on this day.

a No gage-height record; discharge interpolated.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

Cottonwood Creek near Swan Lake, Idaho

Location.— Water-stage recorder, lat. $42^{\circ}23'$, long. $111^{\circ}55'$, in SW $\frac{1}{4}$ sec. 16, T. 12 S., R. 39 E., 1 mile downstream from Treasureton Canal head gate, $6\frac{1}{2}$ miles northeast of Swan Lake, and $11\frac{1}{2}$ miles upstream from mouth.

Records available.— March 1939 to September 1945.

Extremes.— Maximum discharge during year, 363 second-feet Apr. 20 (gage height, 3.10 feet), from rating curve extended above 200 second-feet; minimum daily, 1.0 second-foot several days in October and November.

1939-45: Maximum discharge, 379 second-feet Apr. 6, 1943 (gage height, 3.15 feet), from rating curve extended above 200 second-feet; no flow Aug. 17, 18, 1940.

Remarks.— Records good except those for periods of no gage-height record, which are fair, and those for period of ice effect, which are poor. Treasureton Canal is the only diversion above station except some small diversions on meadow land in Cottonwood Valley.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.		
1	1.1	1.4	(*)	7	}	}	19	196	114	18	6.6	a9.0		
2	1.1	1.2					18	231	99	17	7.1	a9.0		
3	1.0	1.2					16	235	122	16	9.8	a9.0		
4	1.0	1.4					17	237	114	15	8.2	13		
5	1.0	3.0					16	244	169	14	6.8	13		
6	3.2	1.9	6	}	10	7	20	226	169	a9.0	6.5	18		
7	5.8	1.6					30	220	170	a9.5	11	13		
8	5.8	1.2					45	186	158	a8.0	12	11		
9	5.8	1.0					42	180	184	a8.0	14	9.8		
10	5.8	1.0					34	178	194	a8.0	14	10		
11	5.4	2.7	5	8	}	}	32	167	151	a8.0	14	9.8		
12	1.0	1.4					28	144	132	a8.0	14	9.2		
13	1.0	3.1					25	165	119	a8.0	16	9.5		
14	1.0	7.6					22	139	176	a7.7	16	9.5		
15	1.0						24	130	95	a7.4	14	9.8		
16	1.0	7.0	}	}	7	}	10	30	124	85	a7.1	a14	9.8	
17	1.1							40	152	77	a6.7	a12	9.8	
18	1.1							65	151	71	a6.4	a12	10	
19	1.1							117	134	64	a6.1	a17	11	
20	1.0							192	147	60	a5.8	a17	11	
21	1.1	}	}	}	7	}	*16	215	165	52	a5.6	a13	13	
22	1.1							198	149	46	a5.4	a12	20	
23	1.2							20	151	142	44	a5.2	a11	16
24	1.2							17	137	127	39	a5.0	a10	14
25	1.2							15	102	106	32	a4.6	a10	14
26	1.1	}	7	}	}	}	15	92	92	26	a4.6	a10	13	
27	1.1						14	90	81	25	4.4	a10	13	
28	1.1						13	95	66	21	5.5	a10	12	
29	1.1						13	124	59	21	5.0	a9.0	12	
30	*1.1						17	163	50	20	6.6	a9.0	12	
31	1.3	-	-	-	-	20	-	105	-	6.0	a9.0	-		

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	58.9	5.8	1.0	1.90	117
November.....	141.7	-	1.0	4.72	281
December.....	194	-	-	6.3	385
Calendar year 1944.....	4,974.2	107	7	13.6	9,870
January.....	212	-	-	6.8	420
February.....	241	-	-	8.6	478
March.....	337	20	-	10.9	668
April.....	2,199	215	16	73.3	4,360
May.....	4,738	244	50	153	9,400
June.....	2,777	194	20	92.6	5,510
July.....	250.8	18	4.4	8.09	497
August.....	354.8	17	6.3	11.4	704
September.....	353.2	20	9.0	11.8	701
Water year 1944-45.....	11,857.4	244	1.0	32.5	23,520

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of record for Cottonwood Creek near Cleveland and Treasureton Canal near Swan Lake.

Note.— Stage-discharge relation affected by ice Nov. 15 to Mar. 21 (no gage-height record Nov. 26 to Mar. 21; discharge computed on basis of 2 discharge measurements, weather records, and records for station near Cleveland).

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Cottonwood Creek near Cleveland, Idaho

Location.— Water-stage recorder, lat. 42°20', long. 111°46', in SW $\frac{1}{4}$ sec. 34, T. 12 S., R. 40 E., 500 feet upstream from Cleveland irrigation canal, 2 $\frac{1}{2}$ miles west of Cleveland, and 4 miles downstream from proposed Cottonwood Dam. Prior to Dec. 29, staff gage at same site and datum.

Records available.— November 1938 to September 1945.

Extremes.— Maximum discharge during year, 486 second-feet Apr. 20 (gage height, 3.29 feet), from rating curve extended above 280 second-feet; minimum not determined.
1938-45: Maximum discharge, that of Apr. 20, 1945; minimum observed, 0.5 second-foot Aug. 17, 1940 (gage height, 0.46 foot).

Remarks.— Records good except those for periods of ice effect or no gage-height record, which are fair. Several diversions for irrigation in upper valley above proposed Cottonwood Dam.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				b8	a10	*12	35	280	153	35	10	11
2				b9	12	12	31	310	111	29	12	11
3		a4	a4	b9	*13	10	a25	317	124	28	15	11
4			a5	a8	13	b8.0	a25	301	131	26	16	14
5			a13	a8	14	b8.5	a25	301	200	25	12	15
6		a5	a9	a9	12	b8.0	*30	259	232	23	12	20
7			a7	10	a12	b8.5	50	256	228	13	18	17
8			a5	(*)	11	a12	b8.5	80	215	205	16	26
9		a9	a4	a6	12	a12	9.2	78	192	222	15	23
10			a4	11	*11	11	61	185	256	15	20	12
11			a6	*11	11	13	56	185	225	15	18	12
12			a6	10	11	14	49	155	198	16	19	12
13			a7	10	12	18	46	169	171	16	21	11
14			a13	10	15	21	37	149	151	15	19	11
15			a11	12	15	16	43	129	131	14	16	11
16			a10	b12	14	15	53	129	116	13	16	11
17				a10	10	16	70	159	106	13	14	11
18					12	16	102	163	98	12	14	12
19			7.8	12	13	180	147	81	12	19	12	12
20			8.5	12	17	-	265	169	84	11	20	13
21		a4	9.2		7.5	18	317	198	76	12	16	13
22			9.2		b8.8	22	283	171	68	10	14	21
23			10		a9.0	29	220	159	64	9.2	13	20
24		a9	9.6	a8	a8.5	26	210	143	58	10	12	17
25			9.6		a8.0	23	143	118	53	8.8	12	16
26			9.6		a8.5	23	124	103	46	8.5	12	16
27			9.2		a9.0	22	122	91	46	8.2	12	16
28			9.6		a10	21	127	80	39	8.5	12	16
29			*8.8		-	21	151	71	38	8.5	11	15
30	(*)		8.8		-	26	220	68	37	9.2	11	15
31		-	b8.0	a9	-	35	-	118	-	9.6	12	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	150	-	-	4.8	288
November.....	239	-	-	8.0	474
December.....	280.9	-	-	6.42	517
Calendar year 1944	6,456.5	120	1.8	17.6	12,810
January.....	283	-	-	9.1	561
February.....	314.3	15	7.5	11.2	623
March.....	521.7	35	6.0	16.8	1,030
April.....	3,258	317	25	109	6,460
May.....	5,480	317	68	177	10,370
June.....	3,758	256	37	125	7,450
July.....	469.5	35	8.2	15.1	931
August.....	477	26	10	15.4	946
September.....	419	21	11	14.0	831
Water year 1944-45	15,630.4	317	-	42.8	30,990

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of 2 discharge measurements, weather records, and records for station near Swan Lake.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

Treasureton Canal near Swan Lake, Idaho

Location.- Water-stage recorder and Parshall flume, lat. 42°23', long. 111°55', in SE $\frac{1}{4}$ sec. 8, T. 12 S., R. 39 E., 1,000 feet downstream from head gates and 6.8 miles northeast of Swan Lake.

Records available.- April 1939 to September 1945.

Extremes.- Maximum daily discharge during year, 31 second-feet May 31; no flow on many days.

1939-45: Maximum daily discharge observed, 35 second-feet May 26, 1941; no flow at times in most years.

Remarks.- Records good. Canal diverts from Cottonwood Creek for irrigation in Battle Creek Basin in vicinity of Treasureton.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		a4.3	5.9				0	a3.9	18	a17	7.3	
2		a4.3	5.7				0	3.9	0	17	7.8	
3		4.5	5.7				0	4.1	0	17	9.7	
4		4.5	7.3				0	2.5	0	15	9.2	
5		4.3	13				0	1.2	0	14	8.7	
6		2.1	10				0	1.2	0	19	8.7	
7		0	9.0				0	1.2	0	20	13	
8		0	8.0				0	1.2	0	19	11	
9		0	7.1				0	1.2	0	18	4.0	
10		0	6.8				0	1.2	0	17	0	
11		.3	8.0				0	1.2	0	17	0	
12		2.6	9.2				0	1.2	0	16	0	
13		2.8	6.2				0	1.3	0	15	0	
14		2.8	0				0	1.2	2.2	14	0	
15		3.0	0				0	1.1	2.5	15	0	
16												
17		3.0	0				0	1.1	0	13	0	
18		3.6	0				0	1.1	0	12	0	
19		3.7	0				0	1.1	0	12	0	
20		3.6	0				a2	1.0	2.9	11	0	
21		3.7	0					1.1	2.5	11	0	
22		3.9	0					1.2	5.6	a11	0	
23		3.9	0					1.1	5.6	a10	0	
24		4.3	0					1.1	20	a10	0	
25		4.5	0					4.6	20	a10	0	
26		4.5	0				a3	13	18	a10	0	
27		4.8	0					18	a18	a9.5	0	
28		4.8	0					18	a18	9.0	0	
29		a4.8	0					21	a18	8.3	0	
30		a4.8	0					23	a17	7.8	0	
31		4.8	0					27	a17	7.3	0	
32		5.2	-				-	31	-	6.8	0	

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	103.4	5.2	0	3.34	205
November.....	101.9	13	0	6.40	208
December.....	0	0	0	0	0
Calendar year 1944.....	1,561.4	30	0	4.27	3,090
January.....	0	0	0	0	0
February.....	0	0	0	0	0
March.....	0	0	0	0	0
April.....	36	-	0	1.2	69
May.....	192.1	31	1.0	6.20	381
June.....	185.6	20	0	6.22	370
July.....	408.7	20	8.8	15.2	811
August.....	78.4	13	0	2.56	157
September.....	0	0	0	0	0
Water year 1944-45.....	1,107.1	31	0	3.03	2,200

a No gage-height record; discharge computed on basis of records for Cottonwood Creek near Swan Lake.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Mink Creek near Mink Creek, Idaho

Location.- Water-stage recorder, lat. 42°13', long. 111°44', in SE $\frac{1}{4}$ sec. 11, T. 14 S., R. 40 E., $\frac{1}{2}$ miles southwest of Mink Creek post office and $\frac{2}{3}$ miles upstream from mouth.

Records available.- April 1943 to September 1945.

Extremes.- Maximum daily discharge during year, 393 second-feet June 10; minimum daily, 1.3 second-feet Sept. 1, 2.

1943-45: Maximum daily discharge, 413 second-feet June 2, 1943 (gage height, 2.74 feet); minimum daily, 0.7 second-foot many days in August and September 1944.

Remarks.- Records good. Twin Lakes Canal and Preston-Riverdale & Mink Creek Canal divert water from creek above station in SE $\frac{1}{4}$ sec. 1, T. 14 S., R. 40 E., for irrigation below station. Many other small diversions above station for irrigation.

Discharges, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.5	9.4	40	a37	36	8.8	7.0	26	257	67	1.6	1.3
2	9.4	a5.4	38	40	42	8.8	3.8	43	288	48	1.6	1.3
3	10	a3.5	38	40	43	8.8	3.2	60	283	41	3.1	1.6
4	6.6	a4.0	38	b38	42	8.8	3.0	75	299	33	3.1	11
5	4.8	a4.6	41	b38	38	8.8	3.4	98	307	24	1.8	24
6	5.2	5.9	*40	42	36	8.8	4.1	123	346	11	1.8	33
7	5.6	5.6	40	38	34	8.8	6.3	140	333	4.6	4.6	21
8	5.6	18	40	36	*34	8.8	12	142	330	2.4	7.1	21
9	5.9	41	38	a36	35	8.8	8.8	147	348	2.4	6.5	20
10	5.6	38	b38	36	37	9.4	3.8	163	393	2.2	3.7	18
11	6.3	45	b38	*36	37	9.4	3.2	150	387	2.1	2.6	4.8
12	5.9	41	b38	34	30	12	3.0	147	343	2.1	7.1	4.4
13	5.9	38	b38	36	32	14	3.4	174	354	1.9	7.1	4.4
14	6.3	37	b38	41	38	10	2.8	163	364	2.1	6.7	4.4
15	6.3	36	b38	37	30	6.6	3.2	150	309	2.4	6.3	4.4
16	6.3	36	b38	36	29	5.9	4.8	105	276	2.4	6.3	4.4
17	6.6	36	b38	36	29	5.2	4.1	120	250	2.4	5.9	4.4
18	7.0	37	b38	35	22	3.8	4.5	127	237	2.4	5.9	4.4
19	7.0	38	b39	35	19	3.0	7.0	127	234	2.1	7.1	4.6
20	7.0	38	b40	b55	18	3.4	19	140	239	1.9	6.3	3.9
21	7.0	38	40	35	15	4.5	37	144	221	1.8	3.9	6.5
22	7.0	38	45	b56	17	7.6	3.6	127	211	1.8	3.5	15
23	7.0	40	43	36	17	7.6	26	116	200	1.6	2.8	13
24	6.6	40	40	36	12	5.6	26	116	178	1.8	2.8	13
25	a7.0	41	37	35	6.3	4.5	18	116	156	1.6	2.6	13
26	a7.4	41	37	36	5.2	5.2	10	127	151	1.8	2.4	13
27	a7.9	41	a37	b56	6.3	4.8	8.8	157	159	1.6	2.1	13
28	a8.4	41	37	b56	8.2	5.2	8.8	171	122	1.6	1.8	13
29	a8.9	40	a40	36	-	5.9	10	175	113	1.6	1.4	19
30	9.4	40	a37	36	-	6.3	15	213	96	1.8	1.4	29
31	9.4	-	a37	36	-	10	-	244	-	1.8	1.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	215.8	10	4.8	6.96	428
November.....	917.3	45	3.5	30.6	1,880
December.....	1,204	45	37	38.8	2,390
Calendar year 1944	10,536.9	340	7	28.8	20,910
January.....	1,135	42	34	36.6	2,250
February.....	748	43	5.2	26.7	1,480
March.....	229.1	14	3.0	7.39	454
April.....	306.0	37	2.8	10.2	607
May.....	4,106	244	26	132	8,140
June.....	7,744	393	96	258	15,360
July.....	276.2	67	1.6	8.81	548
August.....	122.1	7.1	1.4	3.94	242
September.....	343.4	33	1.3	11.4	681
Water year 1944-45	17,346.9	593	1.3	47.5	34,400

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Twin Lakes Canal near Mink Creek, Preston-Riverdale & Mink Creek Canal near Mink Creek.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Twin Lakes Canal near Mink Creek, Idaho

Location.— Water-stage recorder and concrete Parshall flume, lat. 42°14', long. 111°44', in SE¼ sec. 1, T. 14 S., R. 40 E., 200 feet below head gates on Mink Creek and 1 mile west of Mink Creek post office.

Records available.— April 1943 to September 1945.

Extremes.— Maximum daily discharge during year, 138 second-feet May 16; no flow Nov. 14 to Feb. 11.

1943-45: Maximum daily discharge, 151 second-feet May 31, 1943 (gage height, 2.32 feet); no flow at times in each year.

Remarks.— Records excellent except those for periods of no gage-height record, which are fair. Canal diverts from west side of Mink Creek, 200 feet above station, for storage in Twin Lakes Reservoir and irrigation on west side of Bear River in vicinity of Preston.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a20	32			0	28	68	120	128	127	45	27
2	24	31			0	26	61	122	128	128	44	27
3	a28	31			0	27	57	119	125	125	47	26
4	a28	32			0	27	54	119	113	122	44	30
5	a29	33			0	26	56	123	113	122	43	34
6		33			0	29	59	118	115	123	41	38
7	29	33			0	26	65	122	113	118	43	35
8	30	22			0	26	73	128	99	114	42	35
9	31	3.3			0	28	75	131	85	106	40	34
10	31	3.3			0	29	68	135	76	102	39	32
11	31	3.3			0	34	64	134	67	97	39	28
12	30	3.3			a5.0	40	a64	134	87	92	41	27
13	32	2.5			a10	47	a65	134	92	84	41	26
14	31	0			a10	59	a64	133	88	81	39	27
15	32	0			a10	49	a65	134	106	79	39	26
16	32	0			a10	47	a67	138	108	75	37	26
17	33	0			a10	47	a70	137	113	76	35	26
18	33	0			a14	46	a73	134	117	71	35	27
19	33	0			a19	47	76	135	116	68	38	28
20	32	0			a19	52	95	137	116	66	39	27
21	32	0			a19	63	102	137	129	63	39	31
22	32	0			a19	67	102	135	131	66	38	34
23	32	0			a19	66	106	134	129	73	37	34
24	32	0			a24	a64	110	133	126	70	37	34
25	32	0			a28	63	102	133	124	59	36	33
26	31	0			a28	63	97	135	123	52	34	33
27	30	0			a28	58	95	130	121	49	32	33
28	30	0			a28	59	95	127	123	48	30	32
29	30	0			-	61	99	127	122	47	29	29
30	31	0			-	65	112	130	118	45	30	19
31	31	-			-	71	-	130	-	44	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	938	33	20	30.3	1,860
November.....	262.7	33	0	8.76	521
December.....	0	0	0	0	0
Calendar year 1944	13,863.7	138	0	37.9	27,540
January.....	0	0	0	0	0
February.....	300	28	0	10.7	595
March.....	1,440	71	26	46.5	2,862
April.....	2,359	112	54	76.6	4,680
May.....	4,038	138	118	130	8,010
June.....	3,351	131	67	112	6,650
July.....	2,592	128	44	83.6	5,140
August.....	1,181	47	28	38.1	2,340
September.....	898	38	19	29.9	1,780
Water year 1944-45	17,359.7	138	0	47.6	34,440

a No gage-height record; discharge computed on basis of records for Mink Creek near Mink Creek and Preston-Riverdale & Mink Creek Canal near Mink Creek.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Preston-Riverdale & Mink Creek Canal near Mink Creek, Idaho

Location.— Water-stage recorder, lat. 42°12', long. 111°44', in NW¼ sec. 12 T. 14 S., R. 40 E., half a mile downstream from headgates and 1 mile southwest of Mink Creek post office.

Records available.— April 1943 to September 1945.

Extremes.— Maximum daily discharge during year, 42 second-feet July 4, 6; no flow on many days.

1943-45: Maximum daily discharge, 46 second-feet June 28-30, July 2, 1943; no flow at times in each year.

Remarks.— Records good. Canal diverts from east side of Mink Creek for irrigation in vicinity of Mink Creek, Riverdale, and Preston.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	3.4						0.3	2.2	33	40	31
2	6.5	7.5						.8	1.3	38	40	32
3	5.2	9.5						.9	1.3	40	41	30
4	4.4	9.5						1.0	.6	42	39	17
5	4.4	9.5						.9	.6	41	40	5.2
6	4.8	9.3						.6	1.2	42	40	4.9
7	5.2	9.3						.6	.7	40	38	3.0
8	5.1	8.0						.6	0	41	35	2.9
9	5.2	8.8						.4	.6	39	34	3.2
10	5.2	6.0						.2	2.3	39	37	9.0
11	5.2	7.5						0	1.2	39	38	27
12	6.4	7.1						1.8	.5	40	37	27
13	6.2	6.7						1.0	0	40	36	27
14	6.2	8.4						.7	0	40	34	27
15	5.8	8.4						.6	0	41	32	26
16	6.2	8.2						.4	0	40	33	27
17	5.4	8.0						.6	0	40	33	27
18	4.1	7.7						2.9	0	40	32	27
19	3.7	3.9						6.0	0	40	34	27
20	3.7	0						7.5	0	40	32	28
21	3.7	0						6.4	0	39	31	23
22	3.7	0						10	0	33	30	18
23	3.7	0						13	0	27	30	17
24	3.5	0						12	a17	26	30	17
25	3.7	0						16	a40	34	30	17
26	3.7	0						20	a25	40	31	17
27	3.7	0						23	31	40	32	17
28	3.7	0						24	32	40	30	15
29	3.7	0						29	32	40	32	11
30	3.7	0						8.2	30	41	32	11
31	3.5	-						2.3	-	40	31	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	153.2	14	3.5	4.94	304
November	143.7	9.5	0	4.79	285
December	0	0	0	0	0
Calendar year 1944	3,963.9	41	0	10.8	7,860
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	191.7	29	0	6.18	360
June	219.5	40	0	7.32	435
July	1,195	42	26	38.5	2,370
August	1,064	41	30	34.3	2,110
September	571.2	32	2.9	19.0	1,130
Water year 1944-45	3,538.3	42	0	9.69	7,010

a No gage-height record; discharge computed on basis of head-gate changes and record for Mink Creek near Mink Creek.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Cub River near Preston, Idaho

Location.- Water-stage recorder, lat. 42°08', long. 111°41', in SW $\frac{1}{4}$ sec. 5, T. 14 S., R. 41 E., 0.2 mile upstream from head gates of Cub River-Worm Creek Canal, 0.7 mile upstream from forest boundary, and 10 miles east of Preston.

Records available.- March 1940 to September 1945.

Extremes.- Maximum discharge during year, 474 second-feet June 4 (gage height, 3.19 feet); minimum, 18 second-feet many times in January, February, and March.

1940-45: Maximum discharge, 705 second-feet June 2, 1943 (gage height, 3.83 feet); minimum, 14 second-feet Dec. 20, 1940.

Remarks.- Records good. No diversions above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	26	22	19	18	18	25	86	434	212	60	38
2	29	25	22	19	18	18	26	96	391	204	59	38
3	29	25	22	19	19	18	23	119	395	196	62	38
4	28	25	21	19	18	b18	21	163	438	189	58	40
5	28	26	21	a19	19	18	21	206	422	182	57	39
6	28	25	21	a19	*19	b18	24	233	410	170	57	42
7	27	26	21	a19	18	18	32	277	368	159	57	39
8	27	25	b20	a19	18	*18	43	293	357	152	54	38
9	27	24	b19	*19	18	18	40	299	346	146	52	38
10	27	24	b19	19	18	19	33	357	361	144	53	37
11	27	26	b19	19	18	20	31	326	343	138	52	36
12	27	25	b19	19	18	24	27	322	332	128	55	35
13	27	25	b19	19	20	31	25	356	372	119	51	35
14	27	24	b19	19	24	31	24	280	372	114	50	34
15	27	24	b19	19	20	26	24	236	326	107	48	34
16	27	24	b19	20	19	24	25	199	290	104	47	35
17	27	23	b19	19	19	24	27	214	286	99	46	35
18	27	23	b19	19	19	22	34	222	296	95	46	34
19	27	23	b19	19	19	21	45	225	319	90	47	35
20	26	23	b19	19	19	21	68	214	343	86	47	35
21	26	22	19	b18	b19	21	78	199	372	82	44	37
22	26	22	21	b18	18	27	77	191	350	80	42	37
23	26	22	20	b18	18	32	74	189	356	75	43	36
24	26	22	20	18	18	29	77	209	326	74	42	35
25	26	22	19	18	18	25	66	236	296	72	42	36
26	26	22	19	18	b18	24	60	274	293	70	42	35
27	26	22	19	b18	b18	23	58	309	286	69	41	33
28	26	22	20	b18	18	21	60	315	271	68	40	32
29	26	22	20	b18	-	22	63	376	250	66	41	32
30	25	*22	19	18	-	25	74	414	222	65	40	31
31	26	-	19	18	-	27	-	422	-	64	39	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	834	30	25	26.9	1,650
November.....	711	26	22	23.7	1,410
December.....	613	22	19	19.8	1,220
Calendar year 1944	26,743	482	19	73.1	53,050
January.....	579	20	18	18.7	1,150
February.....	523	24	18	18.7	1,040
March.....	701	32	18	22.6	1,590
April.....	1,308	78	21	45.6	2,590
May.....	7,837	422	36	253	15,540
June.....	10,203	438	222	340	20,940
July.....	3,619	212	64	117	7,180
August.....	1,512	62	39	48.8	3,000
September.....	1,079	42	31	36.0	2,140
Water year 1944-45	29,519	438	18	80.9	58,550

* Winter discharge measurement made on this day.

a No gage-height record; discharge interpolated.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Cub River above Maple Creek, near Franklin, Idaho

Location.- Water-stage recorder, lat. $42^{\circ}03'$, long. $111^{\circ}47'$, in SW $\frac{1}{4}$ sec. 9, T. 16 S., R. 40 E., $\frac{1}{2}$ miles upstream from Maple Creek and $2\frac{1}{2}$ miles north of Franklin.

Records available.- March 1940 to September 1945.

Extremes.- Maximum discharge during year, 505 second-feet June 6 (gage height, 3.80 feet); minimum daily, 2.4 second-feet Oct. 1, 2.

1940-45: Maximum discharge, 617 second-feet June 2, 1943 (gage height, 4.34 feet); minimum observed, 0.9 second-foot Aug. 11-13, 1940.

Remarks.- Records good except those for periods of no gage-height record, which are fair. Station is below all diversions from Cub River except Franklin-Cub River pumping station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.3	3.3	8.9	22	14	14	43	156	461	65	2.7	2.9
2	2.3	3.1	8.9	21	18	14	37	166	406	41	2.7	2.7
3	5.3	2.9	8.9	22	35	14	31	188	409	28	2.9	2.7
4	21	3.1	8.9	21	34	15	28	222	440	23	4.1	3.1
5	2.7	3.3	8.9	a21	29	14	29	249	455	17	2.9	3.1
6	2.5	3.1	8.4	a21	29	11	36	271	487	12	2.9	3.7
7	2.5	3.1	8.9	a21	27	14	46	316	a480	10	3.1	3.5
8	2.7	2.9	8.9	a21	27	13	69	328	a440	9.8	2.9	3.5
9	2.5	2.7	8.0	21	30	14	68	323	a420	8.9	2.7	14
10	2.5	2.7	8.0	22	31	14	50	357	a400	8.4	2.7	3.5
11	2.5	3.9	8.0	21	30	18	44	331	a390	8.0	2.4	3.3
12	2.5	3.5	8.4	19	30	23	41	323	a380	7.0	4.3	2.9
13	2.5	3.9	8.4	16	36	31	36	352	399	7.0	18	2.9
14	2.7	3.3	8.9	16	53	37	35	303	392	6.6	12	2.9
15	2.9	3.1	8.4	16	39	32	36	249	343	6.2	12	2.9
16	2.7	3.1	8.0	16	26	24	40	207	310	5.6	7.0	2.9
17	2.7	2.9	8.4	16	24	23	42	213	271	4.1	2.9	3.1
18	2.7	2.7	8.4	14	23	21	48	230	247	3.7	2.7	3.1
19	2.7	5.4	8.9	16	23	19	66	238	228	3.7	11	3.1
20	2.7	21	11	11	22	29	131	251	238	3.5	22	3.1
21	2.7	a8.9	21	11	19	23	180	600	249	3.3	11	3.9
22	2.7	a8.9	23	11	21	32	150	264	232	3.1	3.3	11
23	2.5	a8.9	23	11	20	43	129	249	207	2.9	3.1	15
24	2.5	a8.9	21	11	21	41	140	253	182	2.7	2.7	19
25	2.7	a8.9	21	11	19	34	109	213	166	2.7	2.9	30
26	2.7	a8.9	21	11	18	34	89	230	146	2.5	2.7	28
27	2.7	a8.9	21	11	14	35	82	260	192	2.5	2.7	11
28	2.5	8.9	22	11	15	33	67	255	169	2.5	2.7	3.9
29	2.5	8.0	23	11	-	34	106	277	122	2.5	2.7	3.7
30	2.7	8.9	21	11	-	37	133	305	67	2.5	2.5	3.7
31	3.3	-	21	12	-	42	-	328	-	2.7	2.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	102.4	21	2.3	3.50	203
November.....	171.1	21	2.7	5.70	339
December.....	411.5	23	8.0	13.3	816
Calendar year 1944.....	19,943.7	543	1.4	54.5	39,570
January.....	495	22	11	16.0	982
February.....	727	53	14	26.0	1,440
March.....	773	43	11	24.9	1,530
April.....	2,161	180	28	72.0	4,290
May.....	8,207	357	156	265	16,280
June.....	9,509	487	87	310	18,460
July.....	308.4	65	2.5	9.95	612
August.....	162.9	22	2.4	5.25	323
September.....	202.1	30	2.7	6.74	401
Water year 1944-45.....	25,030.4	487	2.3	63.1	45,680

a No gage-height record; discharge computed on basis of records for Cub River near Preston, Cub River-Worm Creek Canal near Preston, and unpublished records of Cub River Canal near Preston.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Cub River-Worm Creek Canal near Preston, Idaho

Location.- Water-stage recorder, lat. 42°08', long. 111°45', in NW¼ sec. 14, T. 15 S., R. 40 E., a quarter of a mile upstream from divide between Cub River and Worm Creek Basins, 5 miles downstream from head gates, and 7 miles northeast of Preston.

Records available.- April 1943 to September 1945.

Extremes.- Maximum daily discharge during year, 60 second-feet June 24-26, June 28 to July 6; no flow Oct. 1-9.

1943-45: Maximum daily discharge, 82 second-feet May 24, 1943; no flow at times each year.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Several diversions between gage and head of canal for irrigation in Cub River Basin. Records show diversion to Worm Creek Basin from Cub River except for one small diversion below gage. Canal diverts from Cub River in NW¼ sec. 8, T. 15 S., R. 41 E.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	5.3	20	b8.7	13	*17	28	19	26	a60	15	2.5
2	0	4.9	20	b8.7	a9.0	18	25	19	5.7	a60	15	2.5
3	0	4.9	20	8.5	a.6	18	24	19	4.3	a60	13	2.3
4	0	4.8	20	8.5	a.6	18	23	22	3.7	60	8.0	2.0
5	0	4.8	*19	7.0	a.6	18	23	29	3.4	60	7.7	1.6
6	0	4.8	b19	7.2	a.6	18	25	29	13	60	7.5	1.8
7	0	4.6	b19	*7.2	a.6	17	28	28	a2.0	56	8.2	1.3
8	0	4.3	19	7.2	b.6	17	28	27	a.7	54	8.2	1.3
9	0	4.3	b17	7.2	b.6	17	25	30	a.7	53	8.0	1.3
10	.4	4.3	b17	7.2	b.6	17	23	36	a.7	51	8.8	1.2
11	3.0	4.8	b17	6.8	b.6	18	22	37	a.7	48	13	1.2
12	2.5	4.6	b17	9.3	b.6	20	21	37	a.7	42	17	1.2
13	1.6	4.6	b17	b11	b2.0	25	20	36	a.7	40	15	1.2
14	1.2	4.3	b17	b11	4.6	24	19	30	7.6	41	15	1.2
15	4.5	b4.1	b17	b11	7.2	22	19	29	18	42	15	1.1
16	4.8	b4.0	b17	b11	13	21	20	21	18	40	14	1.1
17	4.8	b4.0	b17	b11	12	20	19	32	26	38	13	1.2
18	4.8	3.8	b17	b11	12	20	20	42	34	37	11	1.3
19	4.6	3.0	b17	b11	12	20	22	38	46	32	12	1.3
20	4.6	3.4	b8.7	b15	12	20	23	24	48	28	12	1.4
21	3.4	b20	b8.7	b15	b12	22	23	9.3	48	29	12	1.5
22	3.1	b20	b8.7	b15	b11	25	22	3.2	51	30	12	1.6
23	3.0	20	b8.7	b15	12	28	21	1.0	52	27	12	1.3
24	2.2	20	b8.7	b15	b11	27	21	.4	60	24	11	1.2
25	2.1	b20	b8.7	b15	b12	25	20	37	60	24	8.0	1.5
26	5.1	b20	b8.7	b15	b13	24	20	39	60	24	6.0	2.2
27	5.1	20	b8.7	b15	b12	24	18	39	48	22	5.0	12
28	*5.5	b20	b8.7	b15	17	22	18	40	a60	20	6.9	12
29	5.5	b20	b8.7	b15	-	24	18	48	a60	20	4.6	12
30	5.3	20	*b8.7	b15	-	25	18	50	a60	20	3.4	12
31	5.3	-	b8.7	b13	-	28	-	50	-	20	2.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	82.4	5.5	0	2.66	163
November.....	287.6	20	3.0	9.59	570
December.....	447.4	20	6.7	14.4	687
Calendar year 1944.....	4,793.6	60	0	13.1	9,510
January.....	348.5	15	6.8	11.2	691
February.....	202.8	17	.6	7.24	402
March.....	657	28	17	21.2	1,500
April.....	656	28	18	21.9	1,500
May.....	902.9	50	.4	29.1	1,790
June.....	518.9	60	.7	27.3	1,620
July.....	1,222	60	20	36.4	2,420
August.....	324.9	17	2.7	10.5	644
September.....	87.4	12	1.1	2.91	173
Water year 1944-45.....	6,037.8	60	0	16.5	11,960

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Worm Creek near Preston.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Worm Creek near Preston, Idaho

Location.— Water-stage recorder, lat. 42°08', long. 111°46', in NW¹ sec. 10, T. 15 S., R. 40 E., 0.3 mile upstream from backwater of Preston-Whitney Reservoir and 6 miles northeast of Preston.

Records available.— March 1943 to September 1945.

Extremes.— Maximum discharge during year, 82 second-feet June 26 (gage height, 2.73 feet); minimum daily, 0.2 second-foot Oct. 1 to 7.
1943-45: Maximum discharge, that of June 26, 1945; minimum daily, 0.1 second-foot Oct. 10, 1943.

Remarks.— Records good except those for periods of ice effect or no gage-height record, which are fair. Several small diversions above station for irrigation. Cub River-Worm Creek Canal, which discharges into Worm Creek 1 mile above station, diverts from Cub River for storage and irrigation in Worm Creek Basin.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	5.2	a20	b9.2	a13	a18	32	34	44	68	13	a2.5
2	.2	5.2	a20	b9.2	a9.5	20	29	35	25	69	13	a2.5
3	.2	5.0	a20	b9.0	a1.4	21	24	36	24	68	13	a2.0
4	.2	5.0	a20	b8.8	a1.4	21	a23	38	25	66	9.2	1.6
5	.2	5.2	a19	b7.5	a1.4	21	a23	47	30	66	9.2	1.6
6	.2	4.7	19	b7.5	a1.4	18	a25	48	45	64	9.2	1.3
7	.2	4.5	20	b7.5	a1.4	20	a28	44	28	60	8.5	1.5
8	1.4	4.1	20	b7.5	2.3	20	a28	39	22	57	7.6	1.5
9	1.3	4.3	b19	b7.5	2.4	20	a25	56	26	54	7.2	1.4
10	.5	4.1	b18	a7.5	2.4	21	a23	44	42	53	7.8	1.4
11	1.0	5.4	b18	a7.0	2.3	23	19	43	28	50	10	1.3
12	.7	5.2	b18	a9.5	2.0	27	18	40	21	41	14	1.1
13	a1.8	5.0	b18	a11	4.1	35	17	42	18	38	13	1.2
14	a1.4	4.5	18	a11	9.4	36	16	40	19	40	12	1.3
15	a4.7	a4.3	18	a11	6.3	33	16	37	32	43	10	1.3
16	a5.0	a4.2	17	a11	13	29	17	36	29	39	11	1.3
17	a5.0	a4.2	18	a11	13	28	16	49	32	37	11	1.3
18	a5.0	a4.0	19	a11	13	27	17	51	42	35	9.7	1.1
19	a4.8	a3.2	17	a11	13	26	22	50	52	29	11	1.1
20	a4.8	a3.6	b9.2	a15	13	25	39	50	54	24	11	1.2
21	a3.6	a20	b9.2	a15	a13	29	51	30	52	26	11	.8
22	a3.3	a20	b9.2	a16	a12	36	43	17	53	29	10	.7
23	a3.2	a20	b9.2	a15	a13	39	34	13	55	24	10	1.2
24	a2.4	a20	b9.2	a15	a12	36	31	12	61	22	9.2	1.2
25	a2.3	a20	b9.2	a15	a13	33	26	39	62	21	7.2	1.3
26	a5.3	a20	b9.2	a15	a14	33	22	39	68	21	6.7	1.2
27	a5.3	a20	b9.2	a15	a13	32	20	37	60	20	6.7	1.1
28	a5.7	a20	b9.2	a15	a18	29	20	38	67	18	6.1	1.2
29	5.0	a20	a9.2	a15	-	30	23	46	69	17	3.9	1.1
30	5.0	a20	a9.2	a15	-	31	27	48	68	17	3.6	1.2
31	5.2	-	b9.2	a13	-	34	-	57	-	16	3.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	85.1	5.7	0.2	2.75	169
November.....	290.9	20	3.2	9.70	577
December.....	466.4	20	9.2	15.0	925
Calendar year 1944 ..?	4,893.3	58	.2	13.4	9,710
January.....	352.7	15	7.0	11.4	700
February.....	233.7	18	1.4	8.35	464
March.....	851	39	18	27.5	1,690
April.....	754	51	16	25.1	1,500
May.....	1,215	57	12	39.1	2,410
June.....	1,250	69	18	41.7	2,480
July.....	1,232	69	18	39.7	2,440
August.....	288.0	14	3.4	9.29	571
September.....	81.9	12	.7	2.73	162
Water year 1944-45	7,098.7	69	.2	19.4	14,090

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of 1 discharge measurement, weather records, and records for Cub River-Worm Creek Canal near Preston.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Little Bear River near Paradise, Utah

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

Drainage area.— 203 square miles.

Records available.— October 1938 to September 1945 in reports of Geological Survey. January 1936 to October 1939 (fragmentary) in reports of Little Bear River water commissioner.

Extremes.— Maximum discharge during year, 852 second-feet June 6 (gage height, 4.86 feet), from rating curve extended above 450 second-feet; minimum, 9.5 second-feet Sept. 1, 1938-45: Maximum discharge, that of June 6, 1945; minimum, 4 second-feet Aug. 14, 1940.

Remarks.— Records good except those for periods of ice effect, no gage-height record, or those for Apr. 20 to June 28, which are fair. Several diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	34	*40	40	45	48	132	512	170	a51	28	13
2	21	34	39	37	74	48	90	504	161	a45	28	15
3	24	*39	39	*40	83	48	78	477	132	39	33	15
4	24	39	37	*39	69	48	72	522	206	35	32	20
5	23	44	37	41	60	46	78	584	332	30	29	15
6	23	44	39	42	56	b43	102	550	650	29	29	28
7	17	44	40	41	52	49	148	522	597	28	28	40
8	16	41	*39	46	50	*49	199	532	497	25	26	34
9	15	40	34	44	55	48	181	444	417	24	23	23
10	15	41	b33	42	*54	49	120	412	542	33	23	23
11	13	45	b33	42	55	60	104	420	420	41	23	22
12	17	44	b33	41	56	78	96	383	395	40	23	21
13	20	45	b32	42	122	92	89	368	354	39	24	18
14	20	41	b32	42	165	112	81	330	308	39	24	20
15	30	40	b32	42	78	81	79	284	267	40	24	17
16	20	36	b31	44	58	66	83	263	231	32	22	18
17	25	37	b33	40	54	62	94	263	194	25	20	19
18	27	b36	b35	37	54	60	122	291	155	28	20	21
19	28	b35	*36	b35	52	56	183	272	138	29	24	28
20	28	b35	37	b34	50	64	296	284	122	28	28	29
21	29	*39	36	*b33	49	85	400	320	112	28	25	42
22	29	39	42	b32	49	130	387	284	106	29	21	67
23	29	39	42	b33	*50	132	332	253	98	33	20	61
24	30	41	42	b34	49	96	344	239	92	28	20	56
25	30	40	41	b36	49	83	248	224	81	26	20	56
26	30	36	41	b35	45	94	197	231	78	26	21	55
27	29	b35	39	b34	46	97	201	227	76	25	23	54
28	30	b35	41	b34	*48	79	238	192	69	24	21	52
29	30	37	44	b36	-	85	306	174	a33	25	20	50
30	30	39	42	39	-	96	420	168	a57	23	15	50
31	32	-	37	*37	-	128	-	172	-	26	13	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	744	32	13	24.0	1,480
November.....	1,174	45	34	39.1	2,330
December.....	1,168	44	31	37.4	2,300
Calendar year 1944.....	23,475.5	361	9	64.1	46,560
January.....	1,194	46	32	38.5	2,370
February.....	1,727	165	45	61.7	3,430
March.....	2,302	132	43	74.3	4,570
April.....	5,498	420	72	183	10,910
May.....	10,671	584	168	344	21,170
June.....	7,120	650	57	237	14,120
July.....	971	51	23	31.3	1,830
August.....	730	33	13	23.5	1,450
September.....	977	67	13	32.6	1,940
Water year 1944-45.....	34,286	650	13	93.9	68,000

* Winter discharge measurement made on this day.

a No gage-height record; discharge interpolated.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Hyrum Reservoir near Hyrum, Utah

Location.- Mercury indicating gage, lat. 41°37'30", long. 111°52'30", in SE 1/4 sec. 7, T. 10 N., R. 1 E., at Hyrum Dam on Little Bear River 1 mile southwest of Hyrum. Datum of gage is at mean sea level.

Drainage area.- 220 square miles.

Records available.- October 1938 to September 1945.

Extremes.- Maximum contents during year, 18,680 acre-feet most of period Apr. 24 to June 28 (elevation, 4,672.0 feet); minimum, 6,500 acre-feet Oct. 31 to Nov. 3 (elevation, 4,641.9 feet).

1938-44: Maximum contents, 18,680 acre-feet for periods in each year (elevation, 4,672.0 feet); minimum, 4,250 acre-feet Oct. 5, 1940 (elevation, 4,634.7 feet).

Remarks.- Reservoir is formed by earth-fill dam; storage began in 1935. Capacity, 18,680 acre-feet between elevations 4,590 feet (bottom of reservoir) and 4,672 feet (top of spillway gates). Dead storage, 3,370 acre-feet (below elevation 4,629.6 feet, sill of outlet canal). Figures given herein represent total contents. Elevation of spillway crest, 4,660 feet. Water used for irrigation on Hyrum project.

Contents, in acre-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,910	6,500	8,380	10,750	13,290	13,810	14,070	18,680	18,300	18,590	14,690	12,080
2	-	6,500	8,480	10,870	-	13,810	-	18,680	-	18,540	-	-
3	6,840	6,500	8,620	-	-	-	14,160	18,680	18,540	-	-	-
4	-	-	8,700	-	-	-	-	18,680	-	-	-	11,630
5	-	-	8,800	11,110	-	-	14,200	-	18,680	18,150	14,330	-
6	-	-	-	11,190	13,680	13,810	-	18,680	18,690	18,010	-	11,670
7	-	6,750	-	-	-	-	14,240	-	-	17,860	-	-
8	-	6,810	-	-	-	-	-	-	-	17,530	14,110	-
9	6,680	-	-	11,470	13,900	13,810	-	-	-	17,340	-	11,630
10	6,680	-	9,090	11,550	13,900	-	14,640	18,680	18,680	-	-	-
11	-	-	-	11,630	13,900	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	18,680	-	-	-	-
13	-	-	9,270	11,790	-	13,810	-	-	18,680	16,780	-	11,550
14	-	7,130	-	-	-	-	-	18,680	-	16,690	13,460	11,550
15	-	-	-	11,950	14,160	-	-	-	18,680	-	-	-
16	6,600	-	-	12,080	-	13,900	-	18,680	-	-	13,290	-
17	6,600	-	9,570	-	-	-	-	-	18,680	-	-	-
18	-	-	-	-	-	-	18,040	-	-	-	-	-
19	-	-	-	-	-	-	-	-	18,680	-	13,040	-
20	-	7,560	-	12,410	13,980	13,980	-	-	-	16,130	-	-
21	-	-	-	-	-	-	-	-	18,680	-	-	-
22	-	-	-	-	13,900	-	-	18,680	-	15,810	12,910	11,310
23	-	-	10,060	-	-	-	18,540	-	-	15,070	-	11,310
24	6,570	-	-	-	-	-	18,680	18,680	-	-	-	-
25	-	-	10,210	12,780	-	-	18,680	18,680	-	-	-	11,390
26	-	-	-	-	-	14,030	-	-	18,680	-	12,610	-
27	-	8,070	10,330	12,950	13,810	-	-	-	-	-	12,490	11,510
28	-	-	-	-	13,810	-	-	-	18,680	15,270	-	11,550
29	-	-	10,480	-	-	-	18,680	-	-	15,040	12,360	-
30	6,530	8,310	10,600	-	-	14,070	18,680	-	18,640	-	-	11,630
31	6,500	-	10,670	13,210	-	14,070	-	18,440	-	14,820	12,160	-

Monthly elevation and contents, water year October 1944 to September 1945

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30.....	45.3	6,940	-
Oct. 31.....	41.9	6,500	-440
Nov. 30.....	47.4	8,310	+1,810
Dec. 31.....	53.5	10,670	+2,360
Calendar year 1944.....	-	-	-1,530
Jan. 31.....	60.0	13,210	+2,540
Feb. 28.....	61.4	13,810	+600
Mar. 31.....	62.0	14,070	+260
Apr. 30.....	72.0	18,680	+4,610
May 31.....	71.5	18,440	-240
June 30.....	71.9	18,640	+200
July 31.....	63.7	14,820	-3,820
Aug. 31.....	57.5	12,160	-2,660
Sept. 30.....	56.2	11,630	-530
Water year 1944-45.....	-	-	+4,690

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Little Bear River near Hyrum, Utah

Location.- Water-stage recorder, lat. 41°38'00", long. 111°53'15", in NW 1/4 sec. 6, T. 10 N., R. 1 E., 800 feet upstream from road bridge, 1 1/2 miles downstream from Hyrum Dam, and 2 miles west of Hyrum.

Drainage area.- 222 square miles.

Records available.- October 1938 to September 1945.

Extremes (regulated).- Maximum discharge during year, 642 second-feet June 7 (gage height, 3.98 feet); minimum daily, 2.1 second-feet Oct. 3.
1938-45: Maximum discharge, that of June 7, 1945; minimum daily, 0.6 second-foot Nov. 23-25, 1944.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.8	16	3.9	3.3	3.9	48	119	391	45	4.8	4.1	3.2
2	4.7	15	3.9	3.3	5.0	48	116	474	5.5	4.6	3.4	2.8
3	2.1	14	3.6	3.3	5.0	49	105	528	19	5.0	3.6	3.2
4	5.3	14	3.6	3.0	4.4	51	95	545	98	5.0	4.1	4.1
5	11	14	3.9	2.8	26	51	86	553	150	4.6	3.8	3.0
6	11	14	3.9	3.0	76	49	96	570	372	4.3	4.6	7.3
7	11	14	3.9	3.6	68	49	99	577	632	4.3	3.6	17
8	11	14	3.6	3.9	62	48	125	546	595	5.3	3.8	22
9	8.9	12	3.3	3.9	58	48	111	521	493	4.1	3.6	23
10	7.4	11	2.8	3.9	57	46	5.5	469	527	3.6	3.2	a23
11	10	11	2.5	3.9	55	50	7.4	425	496	3.6	3.2	a23
12	10	11	2.5	3.9	53	55	6.8	390	411	4.5	3.2	a32
13	11	11	2.5	4.2	64	69	6.0	347	358	3.9	3.0	a40
14	11	11	2.5	4.2	106	85	5.9	345	318	3.8	3.2	a40
15	11	4.4	2.8	4.2	124	98	5.6	328	275	4.1	3.0	a32
16	12	4.4	3.6	4.2	106	92	5.6	306	243	4.3	2.8	a23
17	12	4.7	3.3	3.9	93	86	5.6	303	213	4.8	3.0	a23
18	12	4.4	3.3	3.9	82	79	5.3	284	176	3.4	2.5	a23
19	11	4.4	3.3	3.9	77	74	5.3	264	148	3.0	2.3	a23
20	11	4.4	3.0	4.2	70	72	30	252	128	3.2	2.6	a23
21	14	4.2	3.0	4.2	64	76	85	243	106	3.6	2.5	a23
22	18	4.2	3.3	3.9	59	86	92	245	91	3.4	2.5	a25
23	18	3.9	3.6	3.6	56	110	102	245	42	3.6	2.8	a19
24	18	3.9	3.6	3.6	54	116	164	243	19	3.8	2.6	14
25	18	3.6	3.6	3.6	52	108	252	243	9.2	4.6	2.8	12
26	18	3.9	3.6	3.9	49	105	267	217	9.2	3.6	3.8	8.6
27	18	3.9	3.3	3.9	46	106	245	195	9.2	3.8	4.3	7.6
28	18	3.6	3.3	3.9	46	99	233	193	5.5	4.3	4.6	6.6
29	16	3.6	3.3	3.9	-	96	231	193	4.8	5.3	5.3	6.6
30	16	3.3	3.3	3.9	-	96	267	191	4.6	4.8	5.0	6.0
31	16	-	3.3	3.9	-	102	-	165	-	4.1	4.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	378.2	18	2.1	12.1	750
November.....	246.8	16	3.3	8.23	490
December.....	102.9	3.9	2.5	3.32	204
Calendar year 1944	16,733.0	425	1.5	47.7	35,200
January.....	116.8	4.2	2.8	3.77	233
February.....	1,622.3	124	3.9	5.79	3,220
March.....	2,349	116	48	75.8	4,680
April.....	2,872.5	267	5.3	99.1	5,900
May.....	10,901	577	185	345	21,420
June.....	6,001.0	632	4.6	200	11,900
July.....	128.6	5.3	3.0	4.15	255
August.....	107.2	5.3	2.3	3.46	213
September.....	517.0	40	2.8	17.2	1,030
Water year 1944-45	25,343.5	632	2.1	69.4	50,280

a No gage-height record; discharge computed on basis of recorded range in stage and records of gate changes at Hyrum Dam.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

East Fork Little Bear River near Avon, Utah

Location.— Water-stage recorder, lat. $41^{\circ}30'$, long. $111^{\circ}45'$, in NE $\frac{1}{4}$ sec. 17, T. 9 N., R. 2 E., 500 feet upstream from Pole Creek, half a mile downstream from Porcupine Creek, and $\frac{3}{4}$ miles east of Avon.

Records available.— January 1938 to September 1945. April 1927 to September 1930 at site $\frac{1}{2}$ miles downstream, records equivalent.

Extremes.— Maximum discharge during year, 364 second-feet May 4 (gage height, 3.40 feet); minimum daily, 8.8 second-feet Oct. 12, 13.

1927-30, 1938-45: Maximum discharge, about 800 second-feet Apr. 27, 1929 (site and datum then in use), from rating curve extended above 300 second-feet; minimum recorded, 5.1 second-feet Dec. 5, 8, 11, 12, 16, 1940.

Remarks.— Records good except those for periods of ice effect and those for May 1 to June 11, which are fair.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	12	*10	12	10	11	22	230	110	52	25	17
2	12	11	9.5	12	12	11	21	203	93	50	24	17
3	12	11	10	12	13	11	20	222	102	48	26	17
4	12	11	10	*11	12	11	19	248	130	46	25	17
5	12	12	10	11	12	11	19	254	164	45	24	17
6	12	12	10	11	12	b11	21	231	244	43	23	17
7	11	13	10	11	12	11	21	218	230	41	23	17
8	10	12	11	12	12	11	28	197	213	40	23	17
9	11	12	10	12	12	11	30	179	200	39	22	16
10	10	12	10	12	11	12	28	169	206	42	21	15
11	9.5	12	10	12	11	14	27	167	187	41	21	15
12	8.8	12	9.5	12	11	16	25	147	178	38	21	15
13	8.8	12	9.5	12	17	17	23	140	166	37	21	15
14	9.2	12	9.5	12	22	18	21	123	154	36	21	15
15	9.5	12	11	12	15	17	21	107	144	36	20	14
16	10	11	10	12	13	16	21	100	130	34	20	14
17	11	11	10	12	12	14	21	99	123	33	19	15
18	11	11	11	11	12	13	22	100	114	32	20	15
19	11	11	11	11	11	13	28	97	107	32	23	15
20	11	11	11	11	11	14	58	103	100	31	21	15
21	11	11	11	b11	11	17	113	118	94	31	20	15
22	11	10	12	b11	11	21	140	115	88	30	19	17
23	11	10	12	11	11	21	122	105	81	29	18	16
24	11	11	12	10	11	21	111	100	79	26	18	15
25	11	11	12	10	11	19	80	100	73	28	18	14
26	11	10	12	10	b10	20	72	99	69	28	18	15
27	11	10	12	10	9.5	19	76	97	67	27	18	15
28	11	10	12	b10	*10	18	103	92	62	26	18	15
29	11	10	13	b10	-	18	149	91	58	26	17	15
30	11	10	13	10	-	19	205	91	56	26	17	15
31	11	-	12	*9.5	-	21	-	115	-	25	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	534.8	12	6.8	10.8	664
November.....	336	13	10	11.2	666
December.....	336	13	9.5	10.8	666
Calendar year 1944.....	10,327.8	216	6.8	28.2	20,480
January.....	345.5	12	9.5	11.1	685
February.....	337.5	22	9.5	12.1	669
March.....	477	21	11	15.4	946
April.....	1,667	205	19	55.6	3,310
May.....	4,457	254	91	144	8,840
June.....	3,822	244	58	127	7,580
July.....	1,100	52	25	36.5	2,180
August.....	641	26	17	20.7	1,270
September.....	467	17	14	15.6	926
Water year 1944-45.....	14,320.8	254	8.8	39.2	28,400

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

Logan River above State dam, near Logan, Utah

Location.— Water-stage recorder and concrete control, lat. 41°44'40", long. 111°47'00", in NE¼ sec. 36, T. 12 N., R. 1 E., at Logan plant of Utah Power & Light Co., 125 feet upstream from tailrace, half a mile upstream from State dam, and 2½ miles east of Logan.

Drainage area.— 218 square miles.

Records available.— May 1913 to September 1945. June 1896 to December 1912 at site a quarter of a mile downstream; flow at present site plus that of tailrace equivalent to flow at former site.

Average discharge.— 32 years (1913-45), 108 second-feet.

Extremes.— Maximum discharge during year, 655 second-feet June 6 (gage height, 3.07 feet); minimum daily, 11 second-feet Dec. 14.

1913-45: Maximum discharge, 2,000 second-feet Mar. 21, 1916 (gage height, 5.6 feet, datum then in use), from rating curve extended above 1,000 second-feet; minimum daily, 6 second-feet Nov. 7, 1940.

Remarks.— Records excellent above 100 second-feet and fair below. Water diverted from river and springs above station for power, irrigation, and municipal supply. Flow regulated by power plants above station.

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

Rating tables, water year 1944-45 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used Jan. 1-28)

Oct. 1 to Dec. 31

Jan. 1 to Sept. 30

0.90	10	0.90	12	1.30	66	2.30	342
1.00	20	1.00	23	1.50	106	2.70	500
1.10	32	1.10	35	1.70	164	3.00	624
1.20	47	1.20	49	2.00	240		
1.30	65						

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	17	15	12	14	14	18	48	408	210	27	19
2	15	17	15	12	14	15	18	72	584	198	25	19
3	15	16	13	12	16	15	15	111	420	196	22	19
4	14	15	13	13	18	15	12	162	504	190	33	20
5	14	14	13	14	15	15	13	207	520	184	29	22
6	15	15	13	14	15	15	13	210	569	170	25	24
7	15	17	13	14	15	14	13	270	540	159	25	20
8	14	15	12	14	14	14	14	275	512	152	23	19
9	14	15	13	14	15	14	16	268	484	146	21	20
10	15	15	13	14	15	15	16	350	504	139	19	20
11	14	15	14	13	15	15	14	376	450	124	19	20
12	14	15	14	14	15	15	14	292	452	118	19	20
13	16	15	12	14	20	18	14	338	484	108	20	19
14	16	15	11	14	52	18	14	256	464	98	68	34
15	16	15	12	14	23	18	14	193	428	93	24	16
16	16	14	12	14	14	16	18	213	396	85	16	20
17	16	15	12	14	14	16	16	320	380	77	16	20
18	17	15	13	14	14	15	12	436	369	70	16	20
19	18	15	12	14	14	14	13	364	357	63	19	20
20	17	16	12	14	14	14	51	246	369	61	23	19
21	17	15	12	14	14	14	74	225	372	56	19	16
22	17	15	13	14	14	16	41	198	46	18	18	16
23	16	14	13	14	14	16	28	164	384	48	18	16
24	17	14	13	14	14	15	27	176	372	46	16	14
25	16	14	13	14	14	14	15	193	350	41	19	16
26	18	14	13	14	27	14	15	231	338	34	20	16
27	16	14	13	14	15	14	13	253	346	35	20	14
28	17	15	12	14	15	15	15	237	506	35	19	14
29	17	15	13	14	-	19	16	306	275	35	20	14
30	17	15	13	14	-	18	36	324	240	38	19	14
31	17	-	12	14	-	18	-	353	-	31	19	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	496	19	14	16.0	984
November.....	451	17	14	15.0	695
December.....	397	15	11	12.8	757
Calendar year 1944.....	21,565	609	11	58.9	42,780
January.....	426	14	12	13.7	945
February.....	473	52	14	16.7	888
March.....	478	19	14	15.4	948
April.....	608	74	12	20.3	1,210
May.....	7,705	436	46	24.9	15,280
June.....	12,371	569	240	41.2	24,540
July.....	3,086	210	31	99.5	6,120
August.....	706	68	16	22.8	1,400
September.....	570	34	14	19.0	1,130
Water year 1944-45.....	27,767	569	11	76.1	55,080

a No gage-height record; discharge computed on basis of records for Utah Power & Light Co.'s power plant near Logan.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter; To convert war time to standard time, subtract 1 hour.

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

Location.-- Water-stage recorder and wooden control, lat. 41°44'40", long. 111°47'00", in NE 1/4 sec. 36, T. 12 N., R. 1 E., 100 feet downstream from powerhouse of Utah Power & Light Co. and 2 1/2 miles east of Logan.

Records available.-- May 1913 to September 1945.

Average discharge.-- 32 years, 104 second-feet.

Extremes.-- Maximum daily discharge during year, 184 second-feet July 26, 27, Aug. 3; minimum daily, 2 second-feet May 18.

1914-45: Maximum daily discharge, 196 second-feet May 23, 1942 (gage height, 2.64 feet); no flow for periods during several years.

Remarks.-- Records excellent. Flow regulated by power plant above gage. Power canal diverts water from right bank of Logan River in SE 1/4 sec. 29, T. 12 N., R. 2 E. Water returned to river 125 feet below gaging station on Logan River above State dam.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	90	94	79	85	73	70	82	178	181	179	181	136
2	90	95	82	77	74	68	81	182	181	179	179	137
3	93	91	82	79	82	68	78	182	181	179	184	135
4	93	89	85	75	84	69	74	182	181	179	181	141
5	91	96	82	75	75	66	75	181	181	179	181	134
6	90	95	78	79	72	60	75	181	181	179	181	144
7	90	97	83	85	70	65	77	181	181	179	181	145
8	91	94	82	83	67	68	79	181	181	179	181	136
9	94	96	78	78	74	67	83	179	181	179	181	134
10	93	96	73	75	74	70	84	113	181	179	179	128
11	94	94	70	75	72	70	83	109	181	179	178	131
12	91	96	65	76	72	77	83	181	181	179	176	127
13	91	99	64	76	73	79	82	182	181	176	170	128
14	89	96	70	82	85	82	76	182	181	179	111	90
15	91	94	75	75	82	79	77	182	181	179	168	123
16	91	89	75	73	74	74	78	115	179	179	166	120
17	91	89	69	72	74	73	77	77	179	179	164	123
18	91	90	73	68	74	75	77	2	179	179	156	122
19	90	91	75	74	75	79	48	179	179	182	122	
20	90	89	79	77	75	67	83	181	179	178	168	130
21	87	84	78	72	68	72	87	182	178	178	158	144
22	85	84	78	63	66	82	135	182	178	179	156	149
23	87	82	82	62	69	81	143	182	178	181	154	154
24	84	88	79	74	70	82	165	182	178	181	146	153
25	84	89	76	75	70	81	144	182	178	182	149	148
26	90	83	73	70	46	77	131	181	179	184	145	149
27	88	83	68	68	64	77	143	181	178	184	146	146
28	90	84	72	64	74	77	132	181	178	182	143	148
29	93	81	81	67	-	77	145	181	178	181	141	144
30	90	76	82	68	-	74	170	181	178	181	141	143
31	91	-	79	75	-	76	-	181	-	181	140	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	2,793	94	84	90.1	5,540
November.....	2,705	99	76	90.2	5,670
December.....	2,565	93	64	76.3	4,890
Calendar year 1944.....	39,416	181	1	108	78,130
January.....	2,297	85	62	74.1	4,560
February.....	2,028	85	46	72.4	4,020
March.....	2,271	82	80	73.3	4,800
April.....	2,978	170	74	89.3	5,210
May.....	4,995	182	2	161	9,910
June.....	5,391	181	178	180	10,690
July.....	5,570	184	176	180	11,050
August.....	5,045	184	111	163	10,010
September.....	4,070	154	90	136	8,070
Water year 1944-45.....	42,508	184	2	116	84,320

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.
To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

Logan, Hyde Park & Smithfield Canal near Logan, Utah

Location.- Water-stage recorder and concrete flume, lat. 41°44'45", long. 111°47'05", in SE $\frac{1}{4}$ sec. 25, T. 12 N., R. 1 E., 1 $\frac{1}{2}$ miles downstream from head of canal and 2 $\frac{1}{2}$ miles east of Logan.

Records available.- June 1904 to December 1907, January 1909 to September 1945.

Average discharge.- 22 years (1923-45), 28.3 second-feet.

Extremes.- Maximum daily discharge during year, 125 second-feet July 5; no flow at times. 1906, 1924-45: Maximum daily discharge, 136 second-feet May 30, 31, 1930; no flow at times most years.

Remarks.- Records excellent. No diversions above station. Flow regulated by head gates at diversion works. Canal diverts from Logan River in NE $\frac{1}{4}$ sec. 31, T. 12 N., R. 2 E., for irrigation and domestic supply north of Logan.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	10	3.3	a3.6	3.3	2.5	0	3.7	65	119	65	40
2	23	10	3.3	a3.5	3.3	2.2	0	0	67	122	60	40
3	21	9.2	3.3	a3.4	4.9	2.2	0	2.5	63	122	62	40
4	19	6.1	3.3	a3.4	5.7	2.0	0	9.4	49	124	55	41
5	17	6.1	3.3	3.3	4.1	a2.0	0	30	59	125	48	40
6	16	6.1	3.3	3.7	3.3	2.0	0	45	17	123	48	36
7	16	6.1	3.3	3.7	2.9	2.0	0	53	10.6	122	54	41
8	16	5.7	3.3	3.7	2.5	2.2	1.4	67	1.6	121	49	39
9	17	4.5	3.7	3.7	2.5	2.2	3.7	94	1.3	a120	48	39
10	16	4.1	3.7	3.3	2.5	2.2	3.7	104	1.1	120	45	38
11	16	4.1	4.9	2.9	2.5	2.2	2.9	100	9.7	119	47	39
12	15	4.5	4.5	2.9	2.5	2.4	2.7	94	7.9	115	47	38
13	15	3.7	4.5	2.9	3.3	4.5	2.2	68	1.4	112	55	38
14	15	3.3	4.5	2.9	8.2	4.9	2.2	73	11	112	48	48.
15	14	3.3	4.5	2.9	6.1	3.7	2.2	73	16	112	35	39
16	14	2.9	4.5	2.5	4.1	2.5	1.0	66	28	111	44	41
17	15	2.9	4.5	2.5	3.3	2.4	.4	38	34	109	44	41
18	15	2.9	4.5	2.4	2.5	2.2	2.4	17	56	103	42	40
19	15	2.5	4.5	2.4	2.0	2.9	2.9	.5	86	108	46	35
20	14	2.5	4.9	2.9	2.2	1.9	4.9	0	103	98	47	31
21	14	2.5	5.3	2.5	2.0	1.9	5.7	0	114	97	43	25
22	14	2.5	5.3	2.5	1.9	2.0	4.9	0	119	93	42	16
23	15	2.5	4.9	2.5	1.9	2.9	4.9	12	120	92	42	8.9
24	15	2.9	4.9	3.3	1.9	2.9	4.2	45	122	89	42	8.4
25	15	2.9	4.1	3.3	1.9	2.5	4.0	52	122	87	42	8.4
26	12	2.5	3.7	3.3	5.7	2.4	3.7	55	122	83	43	8.4
27	9.8	2.5	3.3	2.9	2.5	2.2	3.7	60	115	78	44	8.4
28	9.8	3.3	3.7	2.5	2.9	1.5	3.2	64	120	72	42	8.0
29	9.8	3.3	3.7	2.5	-	0	3.5	29	118	68	41	8.0
30	9.8	3.3	a3.7	2.9	-	0	4.0	43	118	66	41	8.0
31	9.8	-	a3.6	3.3	-	0	-	80	-	60	41	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	466	23	9.8	15.0	924
November.....	128.7	10	2.5	4.29	255
December.....	125.8	5.3	3.3	4.06	250
Calendar year 1944	6,827.6	113	0	18.7	13,540
January.....	94.1	3.7	2.4	3.04	187
February.....	92.8	8.2	1.9	3.31	184
March.....	68.5	4.9	0	2.21	136
April.....	74.4	5.7	0	2.48	148
May.....	1,379.1	104	0	44.5	2,740
June.....	1,859	122	6.1	52.0	3,680
July.....	3,210	125	60	104	6,370
August.....	1,452	65	35	46.8	2,680
September.....	891.5	48	6.0	29.7	1,770
Water year 1944-45	9,841.9	125	0	27.0	19,530

a No gage-height record; discharge interpolated.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

65

Blacksmith Fork at Hardware Ranch, near Hyrum, Utah

Location.- Water-stage recorder, lat. 41°37', long. 111°37', in NE¼ sec. 17, T. 10 N., R. 3 E., 0.6 mile upstream from South Cottonwood Canyon, 2.1 miles downstream from Rock Creek, and 12½ miles east of Hyrum. Prior to Apr. 24 at site 0.9 mile upstream.

Records available.- June 1943 to September 1945.

Extremes.- Maximum discharge during year, 249 second-feet June 6 (gage height, 2.96 feet); minimum daily, 51 second-feet Jan. 28, 30, Mar. 6.

1943-45: Maximum discharge, that of June 6, 1945; minimum daily, 50 second-feet Feb. 21, Mar. 8, 9, 1944.

Remarks.- Records good. Some diversions above station for irrigation of meadow lands.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64	61	59	57	54	53	71	99	95	77	68	64
2	63	61	58	57	75	53	62	107	85	77	74	63
3	63	61	58	57	69	53	59	110	100	76	67	62
4	63	60	58	55	59	53	58	111	120	74	65	63
5	63	61	58	56	57	53	60	116	123	74	67	62
6	62	61	58	57	55	51	65	116	204	72	68	62
7	59	62	57	59	53	54	71	122	183	72	70	64
8	58	60	56	65	53	54	76	120	164	72	68	63
9	58	60	54	59	54	56	73	114	158	71	68	62
10	58	60	54	58	55	66	65	113	162	75	67	62
11	58	61	53	58	55	79	65	116	146	74	66	62
12	58	61	55	58	54	101	64	108	136	72	71	62
13	58	61	55	58	85	37	62	108	129	74	74	60
14	59	61	55	60	146	85	61	103	122	74	68	60
15	59	61	53	58	73	64	61	95	117	74	68	60
16	60	61	52	58	59	59	62	92	113	72	68	59
17	60	61	52	57	58	58	63	97	104	72	67	60
18	59	62	52	56	58	56	69	99	99	72	68	60
19	59	61	54	57	58	56	86	96	96	71	77	59
20	60	61	56	56	57	60	95	97	93	71	72	59
21	61	62	57	56	56	78	94	100	92	70	68	60
22	60	62	58	55	57	98	95	93	88	70	68	62
23	60	62	61	55	56	90	98	89	104	68	68	60
24	61	62	58	55	56	65	a100	88	86	71	67	59
25	61	58	58	54	56	67	a78	86	85	70	67	59
26	61	58	58	54	55	70	a73	80	85	68	67	58
27	61	60	58	52	53	65	79	79	84	68	66	58
28	61	59	58	51	54	61	80	80	80	68	64	57
29	61	60	58	52	-	62	84	80	80	68	64	57
30	62	58	57	51	-	65	86	81	81	71	64	57
31	62	-	56	54	-	73	-	95	-	68	64	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	1,972	64	58	60.4	3,710
November.....	1,819	62	58	60.6	3,610
December.....	1,744	61	52	56.3	3,460
Calendar year 1944.....	23,613	108	50	64.5	46,850
January.....	1,745	65	51	56.3	3,460
February.....	1,730	146	53	61.8	3,430
March.....	2,035	101	51	55.6	4,040
April.....	2,203	100	58	73.4	4,370
May.....	3,090	122	79	99.7	6,130
June.....	3,414	204	80	114	6,770
July.....	2,226	77	68	71.8	4,420
August.....	2,109	77	64	68.0	4,180
September.....	1,815	64	57	60.5	3,600
Water year 1944-45.....	25,802	204	51	70.7	51,180

a No gage-height record; discharge computed on basis of record for station above Utah Power & Light Co.'s dam near Hyrum.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

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

Location.- Water-stage recorder, lat. 41°37'20", long. 111°44'25", in NE¼ sec. 8, T. 10 N., R. 2 E., three-quarters of a mile upstream from diversion dam, ¾ miles upstream from power plant of Utah Power & Light Co., and 6 miles east of Hyrum.

Drainage area.- 260 square miles.

Records available.- July 1900 to December 1902, November 1913 to September 1945.

Average discharge.- 31 years (1914-1945), 118 second-feet.

Extremes.- Maximum discharge during year, 417 second-feet June 6 (gage height, 3.31 feet); minimum daily, 53 second-feet Jan. 22, Mar. 6.

1913-45: Maximum discharge, 1,620 second-feet May 15, 1917 (gage height, 6.5 feet, site and datum then in use), from rating curve extended above 600 second-feet; minimum daily, 29 second-feet Jan. 3, 1935.

Remarks.- Records good. Several small diversions above station for irrigation. Low-water flow may be regulated by power plant above station.

Cooperation.- Water-stage recorder graph furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	71	64	59	56	56	57	217	161	136	102	95
2	70	71	64	58	66	56	74	249	145	132	102	95
3	69	71	64	58	90	56	67	262	168	131	106	94
4	67	71	64	58	68	56	64	264	192	126	101	95
5	67	71	64	58	63	55	66	276	242	124	101	92
6	68	72	64	59	62	53	68	256	345	123	102	98
7	68	74	64	59	59	54	79	262	344	121	102	97
8	68	74	64	57	54	58	88	252	332	121	101	94
9	68	71	63	63	57	55	88	236	300	119	101	94
10	68	71	60	60	57	57	78	222	322	123	101	92
11	68	71	59	60	57	70	76	232	282	123	100	92
12	68	72	58	61	56	91	72	210	260	119	101	91
13	69	72	58	60	76	102	71	204	242	119	107	91
14	69	71	58	60	170	95	69	192	228	116	102	91
15	69	70	57	61	100	85	68	174	213	118	102	90
16	67	70	56	61	68	69	68	165	204	115	101	90
17	70	69	55	60	64	66	68	168	192	113	100	90
18	69	69	56	59	62	62	74	185	179	102	98	90
19	69	69	56	59	61	60	88	168	172	110	106	90
20	69	68	56	59	69	60	116	168	167	110	107	90
21	69	68	59	56	59	74	138	174	161	107	102	84
22	70	67	61	63	57	102	138	161	160	107	100	87
23	70	67	64	55	58	102	126	154	160	106	98	87
24	70	67	62	55	57	81	138	149	163	106	98	a84
25	70	67	61	56	57	71	116	146	153	104	97	a83
28	70	64	59	56	56	80	110	139	149	104	97	a82
27	70	64	59	56	56	74	113	132	151	104	97	a82
28	70	64	59	55	56	69	113	134	144	102	95	a80
29	70	63	60	55	-	68	131	131	141	102	95	a80
30	70	63	60	55	-	69	154	131	141	102	97	a80
31	71	-	59	56	-	80	-	148	-	104	95	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	2,140	71	67	69.0	4,240
November.....	2,072	74	63	69.1	4,110
December.....	1,869	64	55	60.3	3,710
Calendar year 1944	29,637	194	55	81.0	58,780
January.....	1,804	64	53	58.2	3,580
February.....	1,863	170	55	66.5	3,700
March.....	2,182	102	53	70.4	4,330
April.....	2,806	154	64	95.5	5,570
May.....	5,956	276	131	192	11,810
June.....	6,207	348	141	207	12,310
July.....	3,569	156	102	115	7,060
August.....	3,114	107	95	100	6,190
September.....	2,680	98	80	89.3	5,320
Water year 1944-45	56,252	348	53	99.3	71,920

a No gage-height record; discharge computed on basis of weather records and records for station at Hardware Ranch, near Hyrum.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Clarkston Creek near Newton, Utah

Location.- Staff gage, lat. 41°54', long. 111°58', in SE $\frac{1}{4}$ sec. 5, T. 13 N., R. 1 W., 500 feet downstream from Newton Dam and 2 $\frac{1}{2}$ miles north of Newton. Prior to Mar. 30 at different datum.

Records available.- March 1939 to September 1945.

Extremes (regulated).- Maximum discharge observed during year, 76 second-feet Mar. 18-22, (gage height, 1.90 feet, datum then in use); no flow Dec. 4-7, Dec. 22 to Mar. 9, Mar. 31 to Apr. 30.

1939-45: Maximum discharge observed, 261 second-feet Feb. 23, 1943 (gage height, 3.10 feet, site and datum then in use); no flow at times.

Remarks.- Records good. Gage read twice daily. Diversions above and below station for irrigation. Flow regulated by Newton Dam.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	2.2	1.4			0		2.5	9.7	15	20	13
2	1.2	2.0	1.4			0		5.0	9.7	15	20	13
3	1.2	2.0	1.4			0		5.0	9.7	15	20	13
4	1.2	2.0	0			0		5.0	9.7	20	20	13
5	1.2	2.0	0			0		5.0	9.7	29	7.4	13
6	1.3	2.1	0			0		5.0	9.7	29		8.2
7	1.3	.4	0			0		5.0	9.7	29	2.1	8.2
8	1.1	.4	1.3			0		5.0	15	29	2.1	8.2
9	1.1	.4	1.3			0		5.0	23	29	2.1	8.2
10	1.6	.4	1.3			e2.5		5.0	29	29	2.1	5.8
11	1.6	.4	1.3			e6.8		5.0	36	29	4.3	4.0
12	1.6	.4	1.3			e6.8		5.0	36	29	2.5	4.0
13	2.0	.2	1.3			e6.8		5.0	36	29	.2	4.0
14	2.1	.2	1.3			e6.8		5.0	29	23	.2	4.0
15	2.1	.2	1.3			e11		5.0	18	20	5.0	4.0
16	2.1	.2	1.3			e19		5.0	6.6	16	5.0	4.0
17	2.1	.8	1.3			e45		5.0	2.9	16	8.2	8.9
18	2.1	1.1	1.3			e74		5.0	2.9	16	6.3	12
19	2.1	1.1	1.3			e76		5.0	12	15	5.0	12
20	2.1	1.1	1.3			e76		5.0	14	15	1.8	10
21	1.0	1.4	1.3			e76		5.0	17	13	1.8	8.9
22	.8	1.4	0			e57		5.0	20	12	1.8	6.1
23	.8	1.4	0			e38		7.4	20	13	1.8	4.0
24	1.2	1.4	0			e38		9.7	24	14	1.8	.6
25	1.4	1.2	0			e38		9.7	23	14	6.8	.6
26	1.6	1.2	0			e38		9.7	20	14	6.5	.6
27	1.4	1.2	0			e38		9.7	20	18	10	.6
28	1.4	1.2	0			e28		9.7	20	20	10	.6
29	1.2	1.4	0			e17		9.7	20	20	10	.6
30	1.5	1.4	0			e12		9.7	20	20	10	.6
31	1.6	-	0			0		9.7	-	20	13	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	45.6	2.1	0.5	1.48	91
November.....	32.8	2.2	.2	1.09	65
December.....	22.4	1.4	0	.72	44
Calendar year 1944.....	1,655.8	23	0	5.07	3,680
January.....	0	0	0	0	0
February.....	0	0	0	0	0
March.....	710.7	76	0	22.9	1,410
April.....	0	0	0	0	0
May.....	192.5	9.7	2.5	6.21	382
June.....	532.3	36	2.9	17.7	1,060
July.....	623	29	12	20.1	1,240
August.....	209.8	20	.2	6.77	418
September.....	193.7	13	.6	6.46	384
Water year 1944-45.....	2,563.1	76	0	7.02	5,090

e Discharge computed on basis of records of gate changes at Newton Dam and 6 discharge measurements made at various gate openings.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

West Side Canal near Collinston, Utah

Location.- Water-stage recorder, lat. 49°50', long. 112°04', in SW $\frac{1}{4}$ sec. 27, T. 13 N., R. 2 W., 4,200 feet downstream from Cutler Dam and 4 miles north of Collinston.

Records available.- June 1912 to September 1945.

Average discharge.- 33 years, 224 second-feet.

Extremes.- Maximum daily discharge during year, 688 second-feet July 6-8; no flow Feb. 4 to May 2.

1912-45: Maximum daily discharge, 710 second-feet July 10, 11, 1944; no flow during periods in every year except 1914.

Remarks.- Records excellent except those for periods of no gage-height record, which are fair. Canal diverts from west side of Bear River in NW $\frac{1}{4}$ sec. 26, T. 13 N., R. 2 W., at dam at which Hammond (East Side) Canal and intake of Cutler power plant also divert. Water used for irrigation in eastern Box Elder County.

Cooperation.- Water-stage recorder graph and five discharge measurements furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	217	164	a80	a27	a27			0	498	626	516	592
2	260	h144	a80	a27	a27			0	615	680	582	588
3	351	a144	a80	a27	a11			6.7	490	598	526	585
4	342	a144	a80	a27				106	510	696	514	586
5	328	a144	a68	a27	0			154	373	686	496	571
6		314	a144	a52	h27	0		204	295	688	497	582
7		306	a144	a52	a27	0		275	197	688	505	535
8		297	a144	a52	a27	0		312	131	688	494	535
9		290	a144	a52	a27	0		353	130	684	487	535
10		290	a144	a52	a27	0		397	129	684	465	535
11	293	a144	a52	a27	0			394	128	682	461	574
12	293	a112	a52	a27	0			401	129	680	465	574
13	262	a80	a51	a27	0			430	129	682	418	571
14	232	a80	a51	a27	0			387	88	680	420	429
15	237	a80	a50	a27	0			368	65	682	418	454
16		238	a80	a50	a27	0		401	96	684	420	451
17		240	a80	a50	a27	0		352	124	686	476	a451
18		240	a80	a49	a27	0		330	280	688	474	a451
19		238	a80	a49	a27	0		158	384	618	474	a451
20		221	a80	a49	a27	0		a23	401	600	368	a451
21		207	a80	h49	a27	0		44	505	606	382	411
22		206	a80	a54	a27	0		94	644	614	382	278
23		197	a80	a27	a27	0		93	658	610	382	a205
24		180	a80	a27	a27	0		138	658	612	465	a205
25		184	a80	a27	a27	0		215	648	592	465	a205
26		190	a80	a27	a27	0		538	648	573	469	205
27		190	a80	a27	a27	0		425	594	571	495	280
28		191	a80	a27	a27	0		425	594	569	537	308
29		192	a80	a27	a27	-		447	592	566	566	302
30		191	a80	a27	a27	-		527	600	543	586	a502
31		189	-	a27	a27	-		567	-	514	592	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	7,608	351	180	245	16,090
November.....	5,156	164	80	106	6,280
December.....	1,477	80	27	47.6	2,930
Calendar year 1944.....	33,695	710	0	229	166,000
January.....	837	27	27	27.0	1,660
February.....	65	27	0	2.3	129
March.....	0	0	0	0	0
April.....	0	0	0	0	0
May.....	8,536.7	567	0	269	16,540
June.....	11,309	658	65	377	22,430
July.....	19,628	688	514	640	39,530
August.....	14,715	592	369	475	29,190
September.....	11,470	592	205	382	22,750
Water year 1944-45.....	78,801.7	688	0	216	156,300

a No gage-height record; discharge computed on basis of 3 discharge measurements and observer's notes, or interpolated.

h Computed from staff-gage reading.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Hammond (East Side) Canal near Collinston, Utah

Location.- Water-stage recorder, lat. 41°50', long. 112°03', in SE¼ sec. 27, T. 13 N., R. 2 W., 3,600 feet downstream from Cutler Dam and 4 miles north of Collinston.

Records available.- June 1912 to September 1945.

Average discharge.- 28 years (1917-44), 50.7 second-feet.

Extremes.- Maximum daily discharge during year, 166 second-feet July 11, 12; no flow

Nov. 13 to May 7.

1912-45: Maximum daily discharge, 182 second-feet June 28, July 1, 1932, June 27, 28, 1933, no flow for periods during each year.

Remarks.- Records excellent. 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 power plant also divert. Water used for irrigation in eastern Box Elder County.

Cooperation.- Water-stage recorder graph and four discharge measurements furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	62	25						0	76	149	141	140
2	58	12						0	104	145	134	136
3	42	11						0	85	145	127	138
4	62	14						0	76	150	128	121
5	66	16						0	41	148	126	122
6	68	13						0	55	155	126	76
7	61	14						0	53	159	123	63
8	58	12						a3.3	33	164	127	68
9	56	10						106	33	164	126	68
10	55	9.5						114	38	164	125	68
11	56	11						114	39	166	126	79
12	56	7.0						115	38	166	126	93
13	56	0						112	38	161	112	104
14	16	0						84	38	160	112	96
15	31	0						62	38	160	113	96
16												
18	43	0						62	38	159	117	95
17	43	0						61	49	159	141	96
18	43	0						60	65	159	141	95
19	40	0						a36	65	159	119	95
20	33	0						a2.7	67	162	92	92
21	29	0						b2.7	112	152	85	86
22	29	0						b2.7	147	152	86	51
23	29	0						b4.5	146	154	104	31
24	29	0						b34	146	148	130	32
25	34	0						b64	144	150	130	31
26	39	0						78	145	142	132	40
27	39	0						51	145	144	127	40
28	39	0						71	147	145	138	56
29	39	0						64	145	145	138	58
30	39	0						67	147	144	138	58
31	39	-						86	-	143	139	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	1,348	68	16	43.5	2,670
November.....	154.5	25	0	5.2	306
December.....	0	0	0	0	0
Calendar year 1944.....	17,614.0	160	0	43.2	34,930
January.....	0	0	0	0	0
February.....	0	0	0	0	0
March.....	0	0	0	0	0
April.....	0	0	0	0	0
May.....	1,486.9	115	0	47.9	2,950
June.....	2,468	147	35	82.3	4,900
July.....	4,765	166	142	164	9,460
August.....	3,844	141	85	124	7,620
September.....	2,431	140	31	81.1	4,820
Water year 1944-45.....	16,495.4	166	0	45.2	32,720

a No gage-height record; discharge computed on basis of observer's notes.

b Computed from staff-gage readings.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Malad River below springs, near Malad, Idaho

Location.— Water-stage recorder, lat. 42°13', long. 112°22', in sec. 10, T. 14 S., R. 35 E., half a mile downstream from springs which form river, 1 3/8 miles upstream from Samaria Dam, 5 1/2 miles northwest of Malad, and 8 1/4 miles upstream from Little Malad River.

Records available.— November 1940 to September 1945. November 1931 to September 1932 at site 1 1/4 miles downstream.

Extremes.— Maximum discharge during year, 18 second-feet July 19 (gage height, 1.81 feet); minimum, 7.3 second-feet Sept. 22 (gage height, 0.86 foot).
1931-32, 1940-45: Maximum discharge, 19 second-feet Aug. 18, 1941 (gage height, 1.84 feet); minimum observed, 4.4 second-feet Nov. 3, 1931 (discharge measurement).

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.4	8.2	8.1	a9.0	11	13	13	14	16	12	9.5	9.4
2	8.4	8.1	8.1		12	13	13	14	16	11	9.5	9.4
3	8.6	8.2	8.0		12	13	13	14	16	11	9.4	9.4
4	8.6	8.2	8.0		11	13	13	14	16	11	9.4	9.4
5	8.6	8.2	8.0		11	13	13	14	16	11	9.4	9.4
6	8.4	8.2	8.1	a9.0	11	13	13	14	16	11	9.4	9.3
7	8.6	8.1	8.1		11	a13	13	14	15	10	9.4	9.4
8	8.4	8.1	8.1		12	a13	13	14	15	10	9.5	9.4
9	8.4	8.2	8.0		12	13	13	14	15	10	9.5	9.3
10	8.4	8.2	8.0		12	13	13	15	15	10	9.5	9.3
11	8.6	8.3	8.1	9.3	12	13	13	15	15	9.9	9.4	9.3
12	8.6	8.1	8.1	9.3	12	13	13	15	15	9.9	9.5	9.2
13	8.6	8.0	8.1	9.4	13	14	13	15	15	9.7	9.4	9.3
14	8.4	7.9	8.1	9.5	12	13	13	15	15	9.7	9.4	9.3
15	8.4	7.9	8.1	9.7	12	13	13	15	14	9.5	9.4	9.3
16	8.4	8.0	8.1	9.5	12	13	13	15	14	9.5	9.4	9.2
17	8.3	8.0	8.2	9.5	12	13	13	16	14	9.4	9.4	9.2
18	8.3	8.0	8.1	9.6	12	13	13	16	14	9.4	9.5	9.3
19	8.3	7.9	8.1	9.9	12	13	13	16	14	10	9.5	9.3
20	8.3	7.9	8.3	9.9	12	13	13	16	14	11	9.5	9.3
21	8.3	7.9	8.3	a10	12	13	13	16	13	10	9.5	9.4
22	8.3	8.0	8.6		12	13	13	16	13	10	9.5	9.3
23	8.2	8.1	8.6		12	13	13	16	13	10	9.5	9.5
24	8.2	8.1	8.6		13	13	13	16	12	9.9	9.5	9.7
25	8.2	8.0	8.6		12	13	13	16	12	9.8	9.5	9.7
26	8.2	8.0	8.7	a11	12	13	13	16	12	9.7	9.5	9.8
27	8.2	8.1	8.7		13	13	13	16	12	9.7	9.4	9.7
28	8.2	7.9	8.9		13	13	13	16	12	9.5	9.5	9.9
29	8.2	8.0	8.9		11	13	14	16	12	9.5	9.5	9.7
30	8.2	8.0	8.9		11	13	14	16	12	9.7	9.5	9.5
31	8.2	-	a9.0	11	-	13	-	16	-	9.5	9.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	259.4	8.5	8.2	8.37	515
November.....	241.6	8.3	7.9	8.06	480
December.....	257.6	-	8.0	8.31	511
Calendar year 1944.....	4,142.7	15	7.9	11.3	6,220
January.....	302.8	-	-	9.77	800
February.....	355	15	11	12.0	864
March.....	404	14	13	13.0	801
April.....	392	14	13	13.1	778
May.....	471	16	14	15.2	954
June.....	423	12	12	14.1	839
July.....	312.3	16	9.4	10.1	619
August.....	295.2	9.5	9.4	9.46	582
September.....	282.6	9.9	9.2	9.42	561
Water year 1944-45.....	3,974.7	16	7.9	10.9	7,980

a No gage-height record; discharge computed on basis of records for Little Malad River above Mikhorn Reservoir.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

71

Malad River near Samaria, Idaho

Location.- Water-stage recorder, lat. 42°08', long. 112°20', in sec. 11, T. 15 S., R. 35 E., at Lewis Waldron Ranch, a quarter of a mile upstream from bridge on Malad-Samaria highway, three-eighths of a mile downstream from Gwenford Mill ditch, and 1½ miles north of Samaria.

Records available.- December 1940 to October 1945 (discontinued).

Extremes.- Maximum discharge during period October 1944 to October 1945, 49 second-foot Feb. 2 (gage height, 2.06 feet), from rating curve extended above 20 second-foot; minimum, 0.2 second-foot May 9, 14, 15, 24-30, June 1-3, 18-20; minimum daily, 0.2 second-foot May 24, 25, 28-30, June 2, 19.

1940-45: Maximum discharge, 147 second-foot Jan. 23, 1943 (gage height, 3.46 feet), based on extension of previous and subsequent ratings above 15 second-foot; minimum, 0.2 second-foot several days during 1941, 1943-45; minimum gage height, 0.36 foot May 10, 1941, Sept. 8, 9, 1942; minimum daily discharge, that of May 24, 25, 28-30, June 2, 19, 1945.

Remarks.- Records good except those above 20 second-foot and those below 3 second-foot, which are poor. Flow regulated by Samaria Reservoir and augmented by waste from Malad River bypass channel and from Warm Springs Canal. Many diversions above and below station for irrigation.

Discharge, in second-foot, 1944-45 1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	3.6	11	11	7.6	11	7.8	7.0	0.3	1.4	0.5	0.6
2	1.4	3.7	11	11	19	10	7.6	5.9	.2	1.9	.8	1.1
3	1.3	3.9	11	11	24	10	8.2	5.3	.5	2.9	2.1	1.6
4	1.6	3.9	11	a10	16	10	8.0	.7	.4	2.9	2.7	1.7
5	1.6	5.2	11	a10	11	10	8.2	.4	1.4	2.3	.9	2.1
6	1.9	4.4	11	9.6	10	8.3	8.5	.3	.9	2.6	.7	2.2
7	2.1	4.1	11	10	a10	9.6	8.5	.3	.6	1.6	1.1	1.7
8	1.9	4.0	12	11	10	10	8.5	.3	1.4	2.3	1.6	1.8
9	1.8	3.9	9.9	11	13	11	10	.3	.6	2.6	1.9	1.7
10	1.8	5.0	9.9	10	11	13	12	.3	.7	2.3	1.9	1.3
11	1.4	11	9.6	11	10	18	12	.3	.5	1.2	1.3	.9
12	1.6	11	9.6	10	10	23	12	.3	.5	1.3	2.8	1.3
13	1.6	10	9.6	10	23	20	12	.3	.6	1.2	1.8	1.2
14	1.7	9.3	9.6	11	28	19	11	.3	.7	.9	1.3	1.1
15	2.5	9.6	9.3	9.3	17	20	11	.3	.6	1.0	.6	1.3
16	2.0	9.0	9.0	9.3	14	20	11	.3	.7	1.9	.6	1.6
17	2.2	9.3	9.3	8.5	13	17	11	.3	.6	1.2	.6	1.6
18	2.7	9.3	9.3	8.5	12	16	11	.3	.6	.9	.6	1.7
19	3.2	9.6	a9.4	6.8	12	13	11	.3	.2	1.4	1.6	1.8
20	3.4	9.6	a9.5	6.5	12	13	11	.3	.3	2.1	1.7	2.1
21	3.3	9.9	a9.6	8.0	10	12	9.6	.3	.4	2.5	1.4	3.7
22	3.1	9.9	a9.7	8.0	10	12	10	.3	.6	2.6	1.1	3.3
23	3.0	9.9	a9.6	8.0	11	12	9.9	.3	.9	2.6	1.3	2.2
24	3.2	11	a9.9	8.0	11	11	9.6	.3	.3	3.1	1.6	2.1
25	3.2	11	10	8.0	10	11	9.3	.2	.5	3.2	1.1	2.1
26	3.3	11	11	7.6	9.6	11	9.0	.3	.6	2.9	.9	3.1
27	3.3	11	10	7.6	10	11	8.5	.3	.6	1.4	.9	3.7
28	3.3	11	11	7.4	11	11	7.8	.2	.5	1.3	.8	3.9
29	3.3	11	11	7.2	-	11	8.0	.2	1.3	.7	1.4	4.1
30	3.4	11	11	7.2	-	12	7.8	.2	1.4	.6	1.9	4.4
31	3.6	-	11	7.6	-	8.2	-	.4	-	.6	1.2	-

a No gage-height record; discharge computed on basis of weather records and records for Warm Springs Canal near Samaria and Malad River near Woodruff.

1945

Day	Discharge	Day	Discharge	Day	Discharge
Oct. 1	4.6	Oct. 5	4.8	Oct. 9	4.7
2	4.6	6	5.0	10	4.6
3	4.6	7	5.0	11	h5.3
4	4.6	8	4.3		

h Computed from staff-gage reading.

Monthly discharge, in second-foot, 1944-45

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1944	76.4	3.9	1.3	2.46	152
November	246.4	11	3.6	8.21	489
December	317.0	12	9.0	10.2	629
Calendar year 1944	2,183.4	16	.3	5.97	4,330
January 1945	264.5	11	7.2	9.16	564
February	367.4	28	7.8	13.1	729
March	404.6	23	8.2	13.1	803
April	290.0	12	7.3	9.67	575
May	24.7	7.0	.2	.60	49
June	19.6	1.4	.2	.65	39
July	57.7	3.2	.6	1.86	114
August	40.9	2.8	.5	1.32	61
September	63.2	4.4	.8	2.11	125
Water year 1944-45	2,192.4	28	.2	6.01	4,350
October 1-11, 1945	52.3	5.3	4.3	4.75	104

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

Malad River at Woodruff, Idaho

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

Records available.- November 1938 to September 1945.

Extremes.- Maximum discharge observed during year, 348 second-feet Feb. 15 (gage height, 6.58 feet); minimum observed, 20 second-feet Oct. 1-3, 6; minimum gage height observed, 2.06 feet Oct. 1, 2.

1938-45: Maximum discharge, 500 second-feet Jan. 22 or 23, 1943 (gage height, 8 feet, from information by observer), from rating curve extended above 250 second-feet by logarithmic plotting; minimum observed, 15 second-feet July 15, 16, 1940; minimum gage height observed, 1.98 feet May 20, 1939, July 16, 1940, and several days in 1944.

Remarks.- Records good except those during periods of rapidly changing stage and those below 30 second-feet, which are fair. Gage read once daily. Flow regulated by several small reservoirs above station. Many diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	33	52	58	56	105	99	73	48	36	26	26
2	20	34	54	61	115	109	98	68	57	36	25	23
3	20	34	55	59	221	110	97	67	58	35	25	26
4	21	35	58	46	330	110	92	64	78	33	25	25
5	21	43	56	63	294	112	91	62	80	32	25	26
6	20	48	59	62	183	88	86	59	128	32	24	29
7	21	50	56	62	172	90	85	56	185	31	26	30
8	24	52	50	69	140	96	85	54	215	30	26	29
9	24	48	43	85	146	109	86	48	219	30	26	28
10	24	46	52	86	189	117	110	48	205	28	26	27
11	24	70	52	81	223	121	106	50	197	27	26	26
12	24	72	50	79	223	126	106	54	186	28	26	24
13	24	117	50	80	245	132	120	54	153	28	26	25
14	24	198	50	88	300	136	114	55	109	27	28	23
15	24	100	49	104	348	152	103	59	87	26	31	23
16	25	78	49	106	258	142	98	58	70	26	30	23
17	27	68	48	98	226	125	94	58	64	25	29	23
18	27	69	48	85	186	132	88	64	52	25	29	22
19	28	69	48	82	160	125	85	69	52	24	31	23
20	28	54	48	56	149	115	90	67	46	24	34	22
21	28	53	48	48	126	109	91	64	44	24	37	26
22	28	54	54	62	115	108	86	58	42	25	36	27
23	29	54	61	61	114	103	88	53	40	25	31	36
24	30	58	70	61	114	102	94	50	38	25	32	37
25	30	52	73	58	108	104	102	48	38	25	29	36
26	30	50	70	56	104	105	104	42	35	25	29	34
27	31	54	64	56	98	111	103	39	36	26	26	35
28	32	48	56	54	102	111	85	38	42	26	27	36
29	32	42	56	56	-	112	80	37	37	26	26	36
30	32	52	57	56	-	104	74	38	36	25	26	37
31	32	-	44	56	-	102	-	38	-	26	26	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	804	32	20	25.9	1,590
November.....	1,765	128	33	58.8	3,500
December.....	1,680	73	43	54.2	3,330
Calendar year 1944	21,363	223	17	58.4	42,370
January.....	2,104	106	46	67.9	4,170
February.....	5,045	348	56	180	10,010
March.....	3,523	152	88	114	6,990
April.....	2,840	120	74	94.7	5,630
May.....	1,692	73	37	54.6	3,260
June.....	2,677	219	35	89.2	5,310
July.....	851	36	24	27.8	1,710
August.....	869	37	24	28.0	1,720
September.....	640	37	22	28.0	1,670
Water year 1944-45	24,700	348	20	67.7	48,990

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

73

Warm Springs Canal near Samaria, Idaho

Location.— Water-stage recorder, lat. 42°09', long. 112°21', in sec. 3, T. 15 S., R. 35 E., at Elmer Price Ranch, 50 feet downstream from Malad River bypass channel crossing, a quarter of a mile south of Malad-Pleasantview highway, 0.6 mile southwest of Pleasantview school, and 2½ miles northwest of Samaria.

Records available.— December 1940 to October 1945 (discontinued).

Extremes.— Maximum discharge during period October 1944 to October 1945, 19 second-feet Sept. 26; maximum gage height, 1.12 feet June 28; minimum discharge, 4.4 second-feet Mar. 12; minimum daily discharge, 5.3 second-feet July 28, 29.

1940-45: Maximum discharge recorded, 28 second-feet Jan. 22, 1943, from rating curve extended above 15 second-feet, but may have been greater Jan. 23, 1943; maximum gage height recorded, 1.64 feet, May 16, 1944, affected by backwater from aquatic vegetation; minimum discharge, 2.7 second-feet June 18, 1943; minimum daily discharge, 2.9 second-feet Apr. 7, 1940.

Remarks.— Records fair except those for June 21 to July 10, July 20-22, which are poor. Warm Springs Canal diverts water from springs in NE¼ sec. 3, T. 15 S., R. 35 E., for irrigation in east half of T. 15 S., R. 35 E., above and below Samaria. Diversion may be made to or from Malad River bypass channel, which crosses canal above station.

Discharge, in second-feet, 1944-45

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.6	14	8.8	8.0	7.8		6.7	8.6	a12		9.5	11
2	7.3	14	8.8	8.0	8.0	a7.6	6.7	8.9	a11		9.5	11
3	7.6	13	8.6	7.8	8.2		6.9	8.6	h9.7		9.9	11
4	8.2	13	8.6	7.8	7.5	7.3	6.9	6.4	a11		9.9	12
5	8.8	13	8.6	8.0	7.3	7.3	7.3	7.8	a12		10	10
6	8.2	13	8.6	8.0	7.1	7.1	6.6	8.0	a13		9.9	9.9
7	8.2	12	8.6	8.2	6.9	7.1	6.6	7.6	a16		12	8.6
8	10	12	8.4	8.6	7.1	7.3	6.2	7.6	a16		13	8.4
9	9.0	12	8.8	8.6	7.3	7.5	6.4	10	a14		12	9.5
10	8.0	10	9.0	8.2	7.1	7.6	7.6	12	h12	9.3	12	11
11	9.0	10	8.6	8.2	7.1	7.8	7.8	11	10	7.3	10	11
12	12	11	8.6	8.4	7.3	7.3	7.8	11	9.9	8.0	9.7	9.9
13	14	10	8.6	8.8	9.0	7.3	7.5	12	10	7.8	9.3	7.8
14	13	9.7	8.6	8.8	8.2	6.2	7.5	15	8.8	8.2	8.0	8.0
15	12	9.5	8.6	7.8	8.4	5.6	7.3	12	8.2	8.0	9.0	8.8
16	11	9.5	8.6	7.6	6.9	5.8	7.3	10	7.5	8.0	14	8.4
17	11	9.7	8.6	7.5	6.9	10	7.3	12	7.1	8.0	13	9.3
18	12	9.5	8.0	7.5	6.9	11	7.1	11	8.0	7.8	9.9	11
19	12	9.5	8.0	7.5	6.7	11	7.1	10	8.4	7.8	7.8	11
20	12	9.3	8.2	7.5	6.9	11	6.6	9.5	9.0	8.4	10	10
21	12	9.5	8.0	7.3	7.1	11	6.2	7.5		e9.0	9.3	9.7
22	12	9.5	8.2	7.1	7.5	11	6.4	7.3			7.5	9.3
23	11	9.7	8.0	7.3	7.6	11	6.2	7.5		9.0	8.2	9.5
24	11	8.8	7.8	7.3	7.6	11	7.5	7.8		6.9	8.2	12
25	11	8.6	7.6	7.5	7.8	11	8.4	6.9		7.3	8.0	14
26	12	8.4	7.6	7.5		10	8.4	8.0	e10	5.8	7.3	18
27	15	8.4	6.9	7.5	a7.6	10	8.4	11		5.6	8.0	14
28	14	8.4	7.5	7.5		10	8.2	11		5.3	8.8	14
29	13	7.6	7.3			9.9	7.3	a11		5.3	8.9	16
30	15	8.6	7.6	7.5		9.7	8.6	a11		6.7	7.5	16
31	14	-	7.8	7.6		6.9	-	a11		12	9.9	-

a No gage-height record; discharge computed on basis of weather records and records for Malad River near Samaria and near Woodruff.

e Stage-discharge relation indefinite because of extreme moss growth; discharge computed on basis of weather records and records for Malad River near Samaria and near Woodruff.

h Computed from staff-gage reading.

1945

Day	Discharge	Day	Discharge	Day	Discharge
Oct. 1	15	Oct. 5	14	Oct. 9	a10
2	14	6	14	10	9.5
3	14	7	12	11	12
4	13	8	a10		

a No gage-height record; discharge computed on basis of weather records and records for Malad River near Samaria and near Woodruff.

Monthly discharge, in second-feet, 1944-45

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1944	359.9	15	7.3	11.0	674
November	312.0	14	8.4	10.4	619
December	255.8	9.0	6.9	8.25	507
Calendar year 1944	3,354.9	22	5.0	9.17	6,650
January 1945	242.2	8.8	7.1	7.81	480
February	209.0	9.0	6.7	7.45	415
March	268.5	11	5.6	8.66	533
April	217.3	8.6	6.2	7.24	431
May	297.0	15	6.4	9.58	589
June	313.6	16	7.1	10.6	622
July	261.1	-	5.3	8.42	519
August	298.3	14	7.3	9.62	592
September	330.1	18	7.8	11.0	655
Water year 1944-45	3,344.8	18	5.3	9.16	6,640
October 1-11, 1945	137.5	15	9.5	12.5	273

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

BEAR RIVER BASIN

Little Malad River above Elkhorn Reservoir, near Malad, Idaho

Location.- Water-stage recorder and Cippoletti weir, lat. 42°20', long. 112°26', on line between secs. 35 and 36, T. 12 S., R. 43 E., three-quarters of a mile upstream from county bridge, 2 miles downstream from Wright Creek, 2½ miles downstream from springs, 2½ miles upstream from Elkhorn Dam, and 14 miles northwest of Malad.

Records available.- August 1911 to August 1913, October 1931 to September 1932, November 1940 to September 1945.

Extremes.- Maximum discharge during year, 100 second-feet Aug. 14 (gage height, 1.97 feet); minimum, 9.5 second-feet Feb. 28 (gage height, 0.41 foot).
1911-13, 1931-32, 1940-45: Maximum discharge, 126 second-feet Apr. 4, 1942; minimum, 9.1 second-feet Feb. 5, 1943 (gage height, 0.40 foot), probably due to storage behind ice jam upstream.

Remarks.- Records good except those for periods of no gage-height record and those for Mar. 5 to Apr. 20, which are fair. Small ranch diversions from tributaries above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	14	14	a14	12	11	17	18	22	19	17	16
2	12	14	14		15	12	17	16	21	19	17	16
3	12	14	14		16	12	16	18	21	19	18	16
4	12	14	14	a13	14	12	16	19	22	19	18	18
5	12	16	14		14	12	17	19	28	19	17	17
6	12	15	15		13	12	17	19	28	18	17	17
7	12	14	14	a14	13	13	16	19	31	18	18	17
8	12	15	15		14	13	16	19	32	18	18	16
9	12	15	14		14	13	18	19	30	16	18	15
10	12	16	13	14	14	15	18	20	29	17	17	16
11	12	16	14	13	14	15	18	21	27	18	17	15
12	12	17	14	13	14	18	18	20	26	18	17	15
13	12	16	14	13	17	22	18	21	26	19	18	16
14	12	15	14	13	18	18	17	21	24	18	19	16
15	12	16	14	13	14	17	18	20	23	18	16	15
16	13	15	14	13	14	15	18	20	23	18	15	15
17	13	14	14	12	13	16	17	22	22	17	15	15
18	14	14	14	12	13	16	17	21	21	18	15	15
19	14	14	14	13	13	15	17	21	21	18	15	15
20	14	14	14	12	12	17	17	21	21	18	15	15
21	13	14	14	12	12	19	18	21	21	18	14	23
22	13	14	a14	11	12	25	18	21	19	18	14	18
23	13	14	14	12	12	22	18	21	21	18	14	15
24	14	15	14	12	12	18	18	22	21	18	14	14
25	14	14	14	12	11	19	18	20	a19	18	15	14
26	14	14	14	12	11	19	18	20		17	12	14
27	14	14	14	12	11	19	17	20		17	12	14
28	14	14	14	12	11	18	17	20	19	17	13	14
29	14	15	12	-	18	17	20	20	19	17	13	14
30	14	14	a14	12	-	18	17	20	-	17	14	14
31	14	-	-	12	-	18	-	23	-	17	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	399	14	12	12.9	791
November.....	436	17	13	14.5	865
December.....	435	15	13	14.0	863
Calendar year 1944.....	5,907	52	11	16.1	11,720
January.....	391	14	11	12.6	776
February.....	373	19	11	13.3	740
March.....	507	26	11	16.4	1,010
April.....	519	18	16	17.3	1,030
May.....	624	23	18	20.1	1,240
June.....	690	32	-	23.0	1,370
July.....	556	19	17	17.9	1,100
August.....	484	19	12	15.6	960
September.....	467	23	14	15.6	926
Water year 1944-45.....	5,861	32	11	16.1	11,670

a No gage-height record; discharge interpolated or computed on basis of records for Devil Creek above Campbell Creek, near Malad.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Elkhorn Reservoir near Malad, Idaho

Location.- Staff gage, lat. 42°18', long. 112°25', in sec. 7, T. 13 S., R. 35 E., 50 feet upstream from left end of partly completed dam on Little Malad River, 4½ miles downstream from Wright Creek, and 11½ miles northwest of Malad.

Records available.- December 1940 to September 1945.

Extremes.- Maximum gage height observed during year, 9.16 feet Mar. 31; minimum observed, -2.50 feet June 23.
1940-45: Maximum gage height observed, 12.06 feet Apr. 2, 1944; minimum gage height, below -3.3 feet in July 1944.

Remarks.- Reservoir is formed by partly completed multiple-arch concrete dam (capacity, about 7,600 acre-feet). Gage read once weekly. Large seepage losses from reservoir limit storage to a small range. Storage is negligible below a stage of about 3 feet.

Gage height, in feet, water year October 1944 to October 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	-	-	-	-	-	-	-	-	-	-	-1.80
2	-	-	3.23	-	-	-	-	-	-1.80	-	-	-
3	-	-	-	-	7.40	7.06	-	-	-	-	-	-
4	-	2.90	-	-	-	-	-	6.90	-	-	-1.70	-
5	-	-	-	-	-	-	-	5.55	-	-	-	-
6	-	-	-	8.12	-	-	-	-	-	-	-	-
7	-0.72	-	-	-	-	-	8.94	-	-	-1.52	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-1.70
9	-	-	3.47	-	7.14	-	-	-	1.50	-	-	-
10	-	-	-	-	7.06	7.14	-	-	-	-	-	-
11	-	3.34	-	7.80	-	-	-	-	-	-	-0.80	-
12	-	-	-	7.75	-	-	-	2.46	-1.40	-	-	-
13	-	-	-	7.64	-	-	-	-	-	-	-	-
14	.95	-	-	-	-	-	8.78	-	-	-1.80	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-1.80
16	-	-	5.89	-	-	-	-	-	-1.60	-	-	-
17	-	-	-	-	7.60	8.30	-	-	-	-	-	-2.17
18	-	2.64	-	-	-	-	-	-	-	-2.46	-1.22	-
19	-	-	-	-	-	-	-	-1.80	-	-	-	-
20	-	-	-	7.20	-	-	-	-	-	-	-	-
21	1.96	-	-	-	-	-	8.24	-	-	-1.20	-	-
22	-	-	-	-	-	-	-	-	-	-	-	1.60
23	-	-	-	-	-	-	-	-	-2.50	-	-	-
24	1.85	-	-	-	7.10	8.74	-	-	-	-	-	-
25	-	3.29	-	-	-	-	-	-	-	-	-1.70	-
26	-	-	-	-	-	-	-	1.70	-	-	-	-
27	-	-	-	6.58	-	-	-	-	-	-	-	-
28	2.10	-	-	-	-	-	7.84	-	-	1.60	-	-
29	-	-	-	-	-	-	-	-	-	-	-	7.16
30	-	-	8.10	-	-	-	-	-	.80	-	-	-
31	-	-	-	-	-	9.16	-	-	-	-	-	-

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.
To convert war time to standard time, subtract 1 hour.

Little Malad River below Elkhorn Reservoir, near Malad, Idaho

Location.— Water-stage recorder, lat. $42^{\circ}18'$, long. $112^{\circ}25'$, in sec. 7, T. 13 S., R. 35 E., just downstream from Elkhorn Dam, $4\frac{1}{2}$ miles downstream from Wright Creek and $11\frac{1}{2}$ miles northwest of Malad.

Records available.— December 1940 to September 1945.

Extremes (regulated).— Maximum discharge during year, 52 second-feet June 9 (gage height, 2.34 feet), from rating curve extended above 30 second-feet by logarithmic plotting; no flow Mar. 27, 28, and part of Jan. 4, 5, Mar. 29.
1940-45: Maximum discharge, 66 second-feet June 18, 1944 (gage height, 2.66 feet), from rating curve extended above 30 second-feet by logarithmic plotting; no flow at times during each year.

Remarks.— Records good except those for May 6 to June 10 and those below 5 second-feet, which are fair. Flow partly regulated by Elkhorn Reservoir (see preceding page). Small ranch diversions from tributaries above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	14	15	2.3	2.3	2.3	0.9	9.3	22	21	17	15
2	12	13	14	2.3	2.3	2.5	.9	15	20	20	17	16
3	12	13	14	2.3	2.5	2.5	.9	18	20	20	18	16
4	12	15	14	1.6	2.5	2.5	.9	17	20	20	17	17
5	12	15	14	.7	2.3	2.5	.9	17	25	19	17	18
6	12	16	14	3.1	2.3	2.5	.9	17	a27	19	16	18
7	12	15	14	3.1	2.3	2.5	.9	a18	a29	19	20	18
8	12	14	14	3.1	2.3	2.5	.9	20	a31	19	19	18
9	12	14	13	3.3	2.3	2.5	.9	21	33	19	18	18
10	12	15	13	3.3	2.2	2.5	.9	21	23	18	18	17
11	12	16	13	3.3	2.2	2.3	.9	22	27	20	18	19
12	12	16	8.1	3.3	2.0	2.5	.9	a22	26	20	16	17
13	12	17	3.0	3.6	2.2	2.7	.9	a22	26	21	19	17
14	12	16	3.0	3.3	2.3	2.8	.9	a22	25	20	23	17
15	12	14	2.8	3.1	2.3	2.6	.9	a21	24	19	16	17
16	12	14	3.0	3.1	2.3	2.8	.9	a21	23	19	15	17
17	13	14	3.3	3.0	2.2	2.8	1.1	a21	23	19	15	17
18	12	14	3.1	3.0	2.2	2.8	1.3	a21	23	19	16	18
19	12	14	3.0	3.0	2.2	2.8	1.3	a20	23	19	17	18
20	12	14	2.8	3.0	2.3	2.8	4.1	a20	22	18	17	18
21	12	14	2.7	2.8	2.3	2.8	7.2	a20	21	19	16	28
22	12	14	2.5	2.8	2.3	2.8	6.9	a20	20	19	16	22
23	12	14	2.3	2.8	2.3	2.8	7.4	a19	19	19	15	1.2
24	13	14	2.3	2.7	2.3	2.8	9.3	a19	25	18	15	1.3
25	14	14	2.3	2.7	2.3	2.8	8.7	a19	21	18	15	1.2
26	14	13	2.3	2.5	2.3	2.8	7.9	19	22	18	15	3.7
27	13	13	2.5	2.7	2.3	0	7.6	19	22	18	15	13
28	14	14	2.5	2.7	2.3	0	7.4	18	21	18	15	13
29	14	13	2.5	2.7	-	.4	7.4	18	20	18	15	12
30	14	13	2.5	2.7	-	1.0	7.6	18	20	18	16	12
31	14	-	2.3	2.5	-	1.0	-	21	-	17	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	398	14	12	12.5	770
November.....	429	17	13	14.3	851
December.....	210.8	15	2.3	6.80	418
Calendar year 1944	4,262.0	29	2.3	11.6	8,460
January.....	86.3	3.5	.7	2.78	171
February.....	63.9	2.5	0	2.28	127
March.....	71.1	2.6	0	2.29	141
April.....	99.6	9.3	.9	3.32	198
May.....	593.3	22	9.3	19.1	1,180
June.....	703	33	19	23.4	1,390
July.....	588	21	17	19.0	1,170
August.....	520	23	15	16.8	1,030
September.....	452.4	28	1.2	15.1	697
Water year 1944-45	4,205.4	33	0	11.5	8,340

a No gage-height record; discharge computed on basis of records for station above Elkhorn Reservoir.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Devil Creek above Campbell Creek, near Malad, Idaho

Location.— Water-stage recorder, lat. 42°18', long. 112°12', in sec. 12, T. 13 S., R. 36 E., 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 7/8 miles northeast of Malad.

Records available.— November 1938 to September 1945.

Extremes.— Maximum discharge during year, 57 second-feet June 6 (gage height, 1.17 feet); minimum, 3.3 second-feet (regulated), Oct. 9 (gage height, 0.47 foot); minimum daily, 5.7 second-feet Oct. 21, 22.

1938-45: Maximum discharge observed, 202 second-feet Apr. 2, 1943 (gage height, 2.10 feet); from rating curve extended above 40 second-feet; minimum, 3.3 second-feet (regulated) July 20, Oct. 9, 1944; minimum daily observed, 4.1 second-feet July 5, 1939, Aug. 16-19, 1940.

Remarks.— Records good except those for periods of no gage-height record and those for Dec. 1-16, May 13 to July 19, which are fair. Small diversions above station for irrigation. Stream receives part of flow of Birch Creek above station. Malad power plant and its small reservoir on Birch Creek causes slight diurnal fluctuations.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.4	6.8	6.8	7.6	9.2	8.0	18	16	22	12	9.2	8.8
2	6.4	6.8	7.2	8.0	10	8.0	14	16	22	11	9.6	8.8
3	6.4	6.8	6.8	7.6	10	8.4	13	17	22	11	9.6	8.8
4	6.4	6.7.1	6.8	8.0	9.6	8.4	16	18	28	10	9.6	8.8
5	6.4	7.2	6.8	7.6	10	8.4	21	18	35	9.6	9.2	8.8
6	6.0	7.6	6.4	7.6	9.6	8.4	20	18	35	9.2	8.8	9.2
7	6.0	6.8	6.4	8.0	7.6	8.4	20	18	34	9.2	9.2	8.8
8	6.0	6.4	6.4	8.0	7.2	8.4	20	18	28	8.8	11	8.4
9	6.0	6.4	6.4	7.6	7.2	8.4	18	18	30	8.4	9.2	8.4
10	6.0	6.4	6.4	7.6	7.6	8.8	16	19	29	8.6	9.2	8.4
11	6.0	7.6	6.8	8.4	7.6	8.8	13	21	25	8.4	9.2	8.4
12	6.0	8.4	6.4	8.0	7.6	9.2	13	21	23	8.4	9.2	8.4
13	6.0	8.4	6.4	8.4	8.4	9.6	12	21	23	8.4	9.6	8.4
14	6.0	7.6	6.4	8.4	8.8	9.6	12	21	22	8.4	9.6	8.4
15	6.4	7.6	6.8	8.4	8.4	9.6	13	20	22	8.8	9.2	8.4
16	6.4	7.6	7.2	8.4	8.0	9.2	14	19	20	8.8	8.8	8.4
17	6.4	7.6	7.2	8.4	8.4	9.2	16	20	20	8.8	8.8	8.4
18	6.0	7.2	7.6	8.8	8.4	8.8	17	19	18	7.2	8.8	8.4
19	6.0	7.2	7.2	8.8	8.4	8.8	21	18	18	9.2	9.2	8.0
20	6.0	7.2	7.6	8.8	8.4	8.8	25	18	18	9.6	9.6	8.0
21	5.7	7.2	7.6	8.8	8.0	9.2	27	20	18	9.6	9.2	8.8
22	5.7	7.2	7.6	8.8	8.4	11	27	25	17	9.6	9.2	8.4
23	6.4	7.2	7.6	9.2	8.4	12	18	17	16	9.2	9.2	8.0
24	6.0	7.2	7.2	9.6	8.4	11	20	17	16	9.2	9.2	8.0
25	6.0	7.2	7.2	9.6	8.4	11	16	17	16	9.2	9.2	8.0
26	6.0	6.8	7.2	9.6	7.6	11	15	18	16	9.2	9.2	8.0
27	6.4	6.8	7.2	9.6	7.6	11	14	18	14	9.2	9.2	8.0
28	6.4	6.8	8.0	9.6	8.0	11	14	19	13	9.2	8.8	8.0
29	6.8	6.8	8.0	9.6	-	12	14	19	13	9.6	8.8	8.0
30	6.8	6.8	8.0	8.8	-	14	16	19	15	9.6	9.2	8.0
31	6.8	-	7.6	9.2	-	17	-	24	-	9.2	8.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	192.2	6.8	5.7	6.20	381
November.....	214.8	8.4	6.4	7.16	426
December.....	219.2	8.0	6.4	7.07	435
Calendar year 1944	3,009.7	23	-	8.22	5,970
January.....	264.8	9.6	7.6	8.54	525
February.....	235.2	10	7.2	8.40	467
March.....	305.4	17	5.0	9.65	606
April.....	506	27	12	16.9	1,000
May.....	580	24	16	18.7	1,150
June.....	652	35	13	21.7	1,290
July.....	286.8	12	7.2	9.25	569
August.....	286.6	11	8.8	9.25	568
September.....	281.6	9.2	8.0	8.39	499
Water year 1944-45	3,994.6	35	5.7	10.9	7,920

a No gage-height record; discharge computed on basis of weather records and records for Little Malad River above Elkhorn Reservoir.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Deep Creek below First Creek, near Malad, Idaho

Location.- Water-stage recorder and wooden control, lat. 42°14', long. 112°11', in sec. 7, T. 14 S., R. 37 E., just downstream from site of proposed reservoir, 1 mile north and 3½ miles east of Malad, and 12 miles upstream from mouth.

Records available.- October 1931 to September 1945.

Average discharge.- 14 years, 8.89 second-feet.

Extremes.- Maximum discharge during year, 61 second-feet June 9 (gage height, 2.33 feet); minimum, 1.4 second-feet Oct. 25 (gage height, 0.76 foot).

1931-45: Maximum discharge observed, 172 second-feet July 8, 1937, from rating curve extended above 40 second-feet by logarithmic plotting; minimum observed, 0.3 second-foot Aug. 29, 1934.

Remarks.- Records good except those below 10 second-feet, which are fair, and those for periods of ice effect or no gage-height record, which are poor. Small diversions above station. Flow regulated at times by reservoir 2½ miles above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	2.3	3.6	2.6	4.1	3.7	10	17	28	17	14	9.0
2	2.0	2.3	3.7	2.6	5.6	3.9	8.4	18	26	16	15	8.4
3	2.0	2.3	3.9	2.6	7.1	3.9	7.3	20	29	15	17	8.4
4	1.8	2.4	3.7	2.4	5.9	3.7	7.9	23	28	15	15	8.7
5	1.8	3.2	3.7	2.4	5.4	3.6	8.2	28	34	17	13	9.8
8	1.8	3.2	3.9	2.4	5.2	b3.6	8.7	31	47	16	11	11
7	1.8	3.0	3.9	2.8	*3.9	3.9	9.2	32	47	14	12	8.2
9		2.6	3.9	3.2	3.4	3.7	10	30	45	14	10	7.9
8		2.8	b3.9	5.0	3.4	3.9	10	27	49	14	10	7.3
10		2.8	b3.6	*3.0	3.2	4.1	9.0	27	52	14	10	7.3
11		4.1	b3.6	2.8	3.2	4.5	8.7	26	50	14	9.8	7.3
12		5.2	b3.0	2.8	3.2	5.2	8.7	26	45	14	13	7.9
13		4.7	b3.0	2.8	3.9	*6.3	7.9	28	42	15	13	a7.6
14		3.7	b2.8	2.8	5.2	7.1	7.3	27	38	15	11	a7.6
15	a2.0	3.2	b2.5	2.8	4.1	6.6	8.2	24	34	15	10	7.6
16		3.0	*b2.3	3.0	3.9	5.9	8.2	23	30	14	10	7.6
17		2.8	b2.3	2.8	3.7	6.3	7.9	23	26	13	9.2	7.6
18		2.4	b2.0		3.7	5.6	8.4	25	24	13	9.2	7.6
19		2.6	2.0		3.7	5.2	10	27	23	12	9.2	8.2
20		2.6	2.2		3.7	5.6	14	28	23	12	9.5	8.2
21		2.4	2.2		3.2	6.6	16	26	21	14	9.2	10
22		2.4	2.4		3.7	8.7	17	27	20	14	9.0	9.8
23	2.3	2.2	2.6		3.7	10	16	26	19	14	8.4	8.4
24	2.0	2.8	2.4		3.6	9.5	16	26	19	14	9.5	8.2
25	1.7	b2.6	2.4	b2.8	b3.5	8.7	14	26	19	13	10	7.9
26	2.0	b2.6	2.4		b3.5	9.2	13	25	20	12	10	7.9
27	2.0	b3.0	2.6		b3.5	8.7	12	25	20	12	9.8	7.9
28	2.0	b3.0	2.6		5.7	8.4	12	25	19	12	9.8	7.6
29	2.0	b3.2	2.6		-	9.0	13	24	19	12	9.2	7.6
30	2.0	3.6	2.6		-	9.2	14	26	18	13	8.7	7.6
31	2.2	-	b2.6		-	11	-	29	-	14	9.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	61.4	2.3	1.7	1.98	122
November.....	59.0	5.2	2.2	2.97	177
December.....	90.9	3.9	2.0	2.93	180
Calendar year 1944	2,046.2	23	1.6	5.59	4,060
January.....	86.0	3.2	2.4	2.77	171
February.....	113.9	7.1	3.2	4.07	226
March.....	195.3	11	3.6	6.30	367
April.....	321.0	17	7.3	10.7	637
May.....	797	32	17	25.7	1,580
June.....	912	52	18	30.4	1,810
July.....	433	17	12	14.0	859
August.....	333.5	17	8.4	10.8	661
September.....	246.1	11	7.3	8.20	488
Water year 1944-45	3,679.1	52	1.7	10.1	7,500

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Malad River at Woodruff and other stations in Malad area.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Weber River near Oakley, Utah

Location.- Water-stage recorder, lat. 40°44'10", long. 111°14'45", in SE¼NE¼ sec. 15, T. 18., R. 6 E., 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 square miles.

Records available.- October 1904 to September 1945.

Average discharge.- 39 years (1906-45), 230 second-feet.

Extremes.- Maximum discharge during year, 1,200 second-feet June 22 (gage height, 3.26 feet); minimum not determined (occurred during period of ice effect).
1904-45: Maximum discharge observed, 4,010 second-feet July 6, 1907, June 5-7, 1909; minimum recorded, 16 second-feet Mar. 12, 1941.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	83	73				b60	68	178	604	450	143	a97
2	78	72				60	65	226	564	455	146	a94
3	73	69				58		273	660	444	134	a93
4	72	69				59	b60	341	791	402	156	a93
5	70	70	*b65				b62	466	608	402	141	a103
6	70	70			b60		b65	501	716	363	143	118
7	69	78					b68	551	611	337	186	116
8	68	72		b60			b70	625	538	311	160	116
9	68	69					b68	694	490	303	163	112
10	68	68					b65	724	532	300	148	110
11	68	68					b62	800	484	288	134	110
12	68	70					b60	757	513	262	141	108
13	66	75			61		b60	800	668	245	181	106
14	66	70			60	b60	*b55	660	653	230	153	104
15	68	69	b55				b55	532	611	206	150	102
16	68						b55	466	544	200	138	96
17	70						b56	501	532	166	129	96
18	69			(*)			65	618	639	183	127	98
19	68						76	660	816	189	136	100
20	68						100	544	960	194	155	96
21	66				b55		125	466	1,050	186	136	92
22	66						146	412	1,080	194	127	98
23	65	b65		b55			138	378	1,050	178	121	104
24	65					63	154	397	1,000	176	116	100
25	65					62	116	532	980	165	123	94
26	65		b60			62	112	660	808	168	118	92
27	*65					61	110	584	732	150	a114	90
28	65				(*)	63	110	611	611	141	a110	89
29	65					61	118	700	551	136	a108	87
30	65					62	148	716	444	138	a104	100
31	66					65		700		141	a100	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	2,116	63	65	68.3	4,200
November.....	2,036	78	-	67.9	4,040
December.....	1,850	-	-	59.7	3,870
Calendar year 1944	81,231	1,350	-	222	161,140
January.....	1,780	-	-	57.4	3,530
February.....	1,611	-	-	57.5	3,200
March.....	2,876	65	68	60.5	3,720
April.....	2,552	148	-	56.1	5,060
May.....	17,665	800	178	550	35,840
June.....	21,040	1,080	444	701	41,730
July.....	7,713	455	136	249	15,500
August.....	4,245	166	100	137	8,420
September.....	3,020	118	87	101	5,990
Water year 1944-45	66,902	1,080	-	183	132,700

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of water commissioner's notes of released water from small reservoirs and records at Coalville.

b Stage-discharge relation affected by ice (no gage-height record Dec. 18 to Jan. 18, Jan. 31 to Feb. 4, Feb. 11, 12, 24-26, discharge computed on basis of 1 discharge measurement, weather records, and records for station at Coalville).

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

WEBER RIVER BASIN

Weber River near Coalville, Utah

Location.- Water-stage recorder, lat. 40°53'40", long. 111°24'00", in SE $\frac{1}{4}$ sec. 20, T. 2 N., R. 5 E., at bridge, 1 $\frac{1}{2}$ miles upstream from high-water contour for Echo Reservoir, 1 $\frac{1}{2}$ miles south of Coalville, and 6 miles downstream from Silver Creek.

Drainage area.- 438 square miles.

Records available.- April 1927 to September 1945.

Average discharge.- 18 years, 200 second-feet.

Extremes.- Maximum discharge during year, 792 second-feet May 12 (gage height, 2.88 feet); minimum, 51 second-feet Oct. 3 (gage height, 0.39 foot).

1927-45: Maximum discharge observed, 1,960 second-feet June 17, 1929 (gage height, 4.30 feet); minimum, 6 second-feet Sept. 20, 1934 (gage height, -0.23 foot).

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	64	110	121			105	263	271	400	134	136	88
2	63	108	121			102	167	315	279	134	121	89
3	59	106	124			97	132	372	304	128	126	105
4	57	105	a120			95	124	403	434	141	259	100
5	56	113	a115		(*)	a80	137	424	428	122	185	94
6	57	117	124			a90	217	485	442	201	183	86
7	56	a130	113			a100	350	521	354	250	196	84
8	56	a120	115	a100		a90	414	561	282	242	229	86
9	56	a114	110		a155	a100	357	610	252	229	222	86
10	56	a117	b105			108	217	655	378	244	212	86
11	58	119	b100			126	185	715	333	257	176	80
12	60	122				161	178	720	239	239	169	82
13	60	124				208	149	705	215	210	196	80
14	58	128				201	145	615	220	194	196	76
15	60	128				178	139	400	205	161	201	78
16	62	122	a90			a140	149	324	187	153	167	77
17	68	119			105	a120	167	301	161	137	149	72
18	68	130		(*)	110	a100	260	372	147	136	141	72
19	72	134			103	a110	315	392	150	159	158	74
20	74	128			95	106	333	327	201	167	258	73
21	74	130			97	136	315	215	295	151	153	72
22	73	117			84	205	348	183	351	233	153	83
23	74	122		a85	105	375	290	147	366	192	141	103
24	77	a125			108	183	304	128	357	178	136	98
25	77	122			98	149	279	222	298	141	134	95
26	78	b115	a100		77	151	282	309	208	124	124	100
27	76	b125			92	134	232	312	174	112	119	98
28	82	b120			a113	132	215	247	165	102	110	98
29	84	119			-	128	212	290	157	95	105	102
30	84	b120			-	143	239	369	151	109	102	110
31	90	-			-	223	-	497	-	165	94	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	2,089	90	56	67.4	4,140
November.....	3,609	134	105	120	7,160
December.....	3,178	124	-	103	6,300
Calendar year 1944.....	67,985	1,440	39	186	134,800
January.....	2,860	-	-	92.3	5,670
February.....	3,667	-	77	131	7,270
March.....	4,366	375	80	141	8,660
April.....	7,114	414	124	237	14,110
May.....	12,407	720	128	400	24,610
June.....	8,113	442	130	270	15,090
July.....	5,230	257	95	169	10,370
August.....	5,083	259	94	164	10,080
September.....	2,630	110	72	87.7	5,220
Water year 1944-45.....	60,346	720	56	165	119,700

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for stations on nearby streams.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Echo Reservoir at Echo, Utah

Location.- Staff gage, lat. 40°57'50", long. 111°26'00", in N½S½ sec. 30, T. 3 N., R. 5 E., near outlet works at left end of Echo Dam, 1 mile southeast of Echo. Datum of gage is at mean sea level (surveys of Bureau of Reclamation).

Drainage area.- 732 square miles.

Records available.- October 1930 to September 1945.

Extremes.- Maximum contents during year, 74,240 acre-feet June 9-19 (elevation, 5,560.2 feet); no contents Oct. 12 to Nov. 21.
1930-45: Maximum contents, 74,460 acre-feet May 31, 1937 (elevation, 5,560.35 feet); no contents Sept. 12 to Dec. 3, 1931, Sept. 24 to Nov. 2, 1934, and Oct. 12 to Nov. 21, 1944.

Remarks.- Reservoir is formed by earth-fill, rock-faced dam; storage began in October 1930; dam completed in 1931. Capacity, 73,940 acre-feet between elevation 5,450 feet (bottom of outlet tunnel) and 5,560 feet (top of radial gates in spillway). Dead storage negligible. Elevation of spillway crest is 5,543 feet. Water is used for irrigation on Echo project. Records give contents represented by daily gage readings to half-tenths at 6 a.m.

Contents, in acre-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,750	0	675	3,740	6,750	11,200	20,670	39,850	70,500	71,160	51,290	43,410
2	2,490	0	750	3,850	6,910	11,200	21,390	40,660	70,440	70,440	50,540	42,780
3	2,230	0	812	3,970	7,430	11,230	21,830	41,600	70,370	69,580	49,870	42,220
4	1,960	0	979	4,040	8,120	11,260	22,190	42,670	70,590	68,790	49,250	41,600
5	1,690	0	1,060	4,120	8,580	11,260	22,470	43,860	71,580	67,870	49,010	41,000
6	1,420	0	1,160	4,260	8,800	11,200	22,840	45,080	72,550	67,090	48,460	40,330
7	1,140	0	1,280	4,580	9,960	11,170	23,460	46,800	73,290	66,600	48,160	39,740
8	862	0	1,390	4,610	9,080	11,170	24,470	48,100	73,650	66,110	47,920	39,250
9	704	0	1,480	4,630	9,290	11,170	25,360	49,740	74,240	65,690	47,800	38,720
10	478	0	1,530	4,760	9,470	11,200	26,440	51,600	74,240	65,200	47,560	38,290
11	250	0	1,560	4,890	9,550	11,280	27,020	53,490	74,240	64,720	47,200	37,870
12	0	0	1,600	5,020	9,600	11,660	27,500	55,670	74,240	64,300	46,900	37,450
13	0	0	1,650	5,130	9,600	12,440	27,950	57,620	74,240	63,820	46,490	37,030
14	0	0	1,710	5,270	9,970	13,170	28,270	59,680	74,240	63,400	46,070	36,620
15	0	0	1,770	5,400	10,450	13,990	28,670	61,290	74,240	62,860	45,750	36,200
16	0	0	1,850	5,560	10,730	14,300	28,990	62,440	74,240	62,240	45,540	35,800
17	0	0	1,920	5,680	10,890	14,560	29,360	63,340	74,240	61,630	45,080	35,440
18	0	0	1,990	5,740	11,000	14,860	29,820	64,370	74,240	60,820	44,670	34,990
19	0	0	2,050	5,800	11,090	14,990	30,520	65,480	74,240	60,150	44,270	34,580
20	0	0	2,140	5,920	11,120	15,200	31,510	66,670	74,160	59,540	44,360	34,180
21	0	40	2,310	5,970	11,140	15,400	32,520	67,590	74,090	58,950	44,670	33,790
22	0	145	2,460	6,030	11,140	15,890	33,440	68,220	74,090	58,350	44,840	33,440
23	0	159	2,640	6,070	11,140	16,580	34,440	68,650	74,020	57,890	44,960	33,200
24	0	248	2,800	6,130	11,140	17,190	35,240	68,860	73,940	57,300	45,140	33,050
25	0	310	2,960	6,200	11,140	17,700	36,100	68,790	73,940	56,650	45,190	32,960
26	0	340	3,090	6,280	11,140	18,150	36,820	68,860	73,650	55,860	45,250	32,910
27	0	423	3,200	6,390	11,120	18,600	37,500	69,290	73,210	55,090	45,090	32,910
28	0	544	3,270	6,450	11,120	18,940	38,080	69,580	72,770	54,320	44,840	32,960
29	0	613	3,390	6,520	-	19,280	38,610	69,720	72,180	53,490	44,610	32,960
30	0	618	3,530	6,560	-	19,700	39,200	69,720	71,750	52,730	44,380	32,960
31	0	-	3,660	6,620	-	20,050	-	69,870	-	51,970	45,920	-

Monthly elevation and contents, water year October 1944 to September 1945

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Oct. 1.....	5,478.95	2,750	-2,750
Nov. 1.....	-	0	+676
Dec. 1.....	5,468.2	676	+3,064
Calendar year 1944.....	-	-	-16,270
Jan. 1.....	5,482.15	3,740	+3,010
Feb. 1.....	5,490.06	6,750	+4,450
Mar. 1.....	5,498.9	11,200	+9,470
Apr. 1.....	5,512.85	20,670	+19,180
May 1.....	5,533.55	39,850	+30,450
June 1.....	5,557.5	70,500	+860
July 1.....	5,558.1	71,160	-19,870
Aug. 1.....	5,545.35	51,290	-7,880
Sept. 1.....	5,556.75	43,410	-10,410
Oct. 1.....	5,556.9	33,000	-
Water year 1944-45.....	-	-	+20,250

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Weber River at Echo, Utah

Location.- Water-stage recorder, lat. 40°58'05", long. 111°26'15", in NE¼NE¼ sec. 25, T. 3 N., R. 4 E., 900 feet upstream from Echo Creek, 2,400 feet downstream from Echo Dam, and 3,200 feet southeast of Echo.

Drainage area.- 732 square miles.

Records available.- April 1927 to September 1945.

Average discharge.- 18 years, 258 second-feet.

Extremes (regulated).- Maximum discharge during year, 680 second-feet June 10 (gage height, 3.80 feet); minimum daily, 4.3 second-feet Feb. 4, 14, Mar. 23 to Apr. 1, Apr. 3, 4.
1927-45: Maximum discharge, 2,370 second-feet June 2, 1943; maximum gage height, 6.17 feet June 2, 3, 1944; minimum daily discharge, 2 second-feet Feb. 27 to Mar. 2, Mar. 31, Apr. 3-13, 1940.

Remarks.- Records excellent except those below 10 second-feet and those for periods of backwater from debris, which are fair. Many diversions above and below station for irrigation. One small diversion between station and Echo Dam. Flow regulated by Echo Reservoir (see preceding page).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	233	130	114	68	68	118	4.3	5.5	400	533	485	404
2	225	149	97	69	36	123	4.6	5.5	404	577	481	408
3	225	142	94	69	5.2	123	4.3	5.5	394	609	481	422
4	225	145	96	69	4.3	123	4.3	5.5	246	647	481	426
5	225	147	88	69	50	123	4.6	5.8	132	590	422	414
6	225	153	83	70	77	123	4.6	5.8	235	542	418	387
7	210	164	85	72	79	123	4.9	5.8	311	525	418	367
8	198	164	86	72	79	123	4.9	5.8	215	508	400	348
9	201	157	83	68	77	123	5.2	5.8	290	525	387	317
10	201	153	77	64	94	123	5.2	6.1	554	546	387	296
11	168	153	77	64	120	65	5.2	6.4	564	521	397	293
12	96	159	73	64	130	4.5	5.5	6.7	387	500	422	293
13	96	157	62	64	78	4.5	5.5	8.1	364	488	411	293
14	93	157	62	65	4.3	4.5	5.5	7.3	361	488	404	293
15	93	157	62	65	37	4.5	5.5	7.7	323	500	397	288
16	91	153	62	65	54	17	5.5	8.1	285	496	390	288
17	97	151	62	67	83	20	5.8	8.1	270	504	390	288
18	99	161	62	67	106	20	5.8	8.1	243	504	377	285
19	104	170	63	67	120	20	5.8	8.9	268	473	364	285
20	109	166	63	67	123	28	6.1	8.9	308	462	260	285
21	109	146	64	67	123	32	6.1	32	380	462	164	282
22	109	146	68	67	123	10	6.4	65	454	469	113	265
23	109	129	67	67	123	4.3	5.2	111	492	481	96	225
24	109	129	67	67	123	4.3	5.2	233	469	500	130	192
25	109	121	67	67	123	4.3	5.2	279	469	508	161	161
26	108	104	67	67	111	4.3	5.2	254	458	508	203	145
27	111	101	68	67	106	4.3	5.5	254	432	516	220	134
28	113	113	68	67	106	4.5	5.5	262	451	508	238	125
29	113	123	68	67	-	4.3	5.5	364	451	496	270	125
30	114	125	68	68	-	4.3	5.5	379	458	508	317	125
31	118	-	68	68	-	4.3	-	425	-	500	358	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	4,436	233	91	143	8,800
November.....	4,319	170	101	144	8,570
December.....	2,291	114	62	73.9	4,540
Calendar year 1944.....	110,362.3	2,030	4	302	218,900
January.....	2,084	72	64	67.2	4,130
February.....	2,362.8	130	4.3	84.4	4,690
March.....	1,493.7	123	4.3	48.2	2,960
April.....	1,58.4	6.4	4.3	5.28	314
May.....	2,792.4	423	5.5	90.1	5,540
June.....	11,068	564	132	369	21,950
July.....	15,994	647	462	516	31,720
August.....	10,412	485	96	336	20,650
September.....	8,458	425	125	282	16,780
Water year 1944-45.....	65,869.3	647	4.3	180	130,600

Note.- Discharge computed from staff-gage readings Dec. 10 to Mar. 1, Mar. 6-11, 22, 23, Mar. 25 to May 20. Backwater from debris Mar. 12-21, 24; discharge computed on basis of observer's notes and records for station at Devils Slide.
Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.
To convert war time to standard time, subtract 1 hour.

Weber River at Devils Slide, Utah

Location.- Water-stage recorder, lat. 41°03'40", long. 111°34'25", in SE $\frac{1}{4}$ sec. 23, T. 4 N., R. 3 E., 350 feet downstream from highway underpass on U. S. Highway 308 $\frac{1}{2}$ miles west of Devils Slide, and $\frac{1}{2}$ miles downstream from Lost Creek.

Drainage area.- 1,100 square miles.

Records available.- February 1905 to September 1945.

Average discharge.- 40 years, 444 second-feet.

Extremes.- Maximum discharge during year, 934 second-feet (regulated) June 10 (gage height, 3.77 feet); minimum, 57 second-feet (regulated) Apr. 17, 1905-45; Maximum discharge observed, 6,000 second-feet May 22, 1920; minimum daily, 18 second-feet (regulated) Sept. 23, 1934.

Remarks.- Records excellent except those for periods of ice effect or no gage-height record, which are fair. Many diversions above station for irrigation. Flow regulated by Echo Reservoir (see p. 81).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	256	145	136	a88	b100	*142	99	237	483	556	502	422
2	253	150	115	a90	b150	154	86	293	493	587	a500	430
3	242	144	110	a90	248	150	73	351	516	808	a500	439
4	240	144	111	a90	115	148	87	401	430	852	a480	443
5	237	144	*107	a90	95	142	67	443	326	613	a450	439
6	234	155	103	a90	127	140	72	465	422	556	a440	414
7	229	166	103	a94	117	140	88	489	576	536	459	385
8	212	175	b103	a100	113	138	99	474	483	502	426	374
9	214	164	b103	a100	126	140	104	439	483	474	405	344
10	216	159	b95	a100	126	168	93	405	756	566	401	316
11	211	157	b95	a98	140	242	78	397	808	551	405	306
12	120	164	b90	a95	159	219	73	348	576	521	426	300
13	118	168	b78	a98	204	281	66	326	516	516	418	293
14	115	172	b78	a100	313	175	62	283	498	498	401	286
15	112	175	a78	a100	214	116	59	234	448	516	405	293
16	112	170	a78	*95	126	81	60	200	385	516	410	293
17	115	180	a78	93	127	95	59	185	348	546	405	293
18	116	162	a78	b93	144	79	61	162	290	561	399	300
19	117	170	a80	93	150	53	72	133	283	551	399	303
20	122	166	a80	91	152	92	113	122	316	526	344	306
21	122	150	a82	b90	150	99	139	123	381	521	209	309
22	117	144	a88	b90	150	116	166	152	448	507	155	306
23	117	140	a90	b90	150	140	166	139	502	516	129	274
24	116	140	a88	93	148	99	170	240	498	536	142	219
25	116	148	a85	b92	150	77	144	309	493	546	177	189
26	117	133	a85	b90	139	78	124	303	493	536	204	170
27	119	116	a88	b68	133	75	115	286	470	536	234	162
28	119	127	a88	b68	134	69	115	296	470	531	245	148
29	122	152	a88	b88	-	68	127	370	483	521	283	144
30	122	144	a88	b90	-	71	168	453	470	531	323	144
31	124	-	a88	b92	-	80	-	516	-	531	359	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	4,900	256	112	158	9,720
November.....	4,604	175	116	153	9,130
December.....	2,857	136	78	92.2	5,670
Calendar year 1944.....	132,125	2,250	78	361	262,100
January.....	2,879	100	88	92.9	5,710
February.....	4,200	313	95	150	8,330
March.....	3,907	281	68	126	7,750
April.....	2,981	170	59	99.4	5,910
May.....	9,578	516	122	308	19,000
June.....	14,144	808	283	471	28,050
July.....	16,764	652	474	541	33,250
August.....	10,995	502	129	355	21,510
September.....	9,044	443	144	301	17,940
Water year 1944-45.....	86,853	808	59	238	172,300

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for station at Echo.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Weber River at Gateway, Utah

Location.— Water-stage recorder, lat. 41°08', long. 111°50', in NW¼ sec. 27, T. 5 N., R. 1 E., 800 feet downstream from Union Pacific Railroad bridge, 2,500 feet downstream from Strawberry Creek, and 2,500 feet east of section house at Gateway.

Drainage area.— 1,610 square miles.

Records available.— June 1919 to September 1945. October 1889 to July 1903 at site 1 mile downstream, published as Weber River near Uinta.

Average discharge.— 25 years (1920-45), 574 second-feet.

Extremes.— Maximum discharge during year, 1,770 second-feet (regulated) June 6 (gauge height, 3.90 feet); minimum, 156 second-feet (regulated) Jan. 28 (gauge height, 0.67 foot); minimum daily, 170 second-feet Feb. 6.
1889-1903, 1919-45: Maximum discharge observed, 7,980 second-feet May 31, 1896; minimum, 45 second-feet (regulated) Sept. 24, 1934; minimum daily, 46 second-feet Sept. 23, 1934.

Remarks.— Records excellent except those for periods of ice effect, or doubtful or no gauge-height record, which are fair. Many diversions above and below station for irrigation. Flow regulated by Echo and East Canyon Reservoirs (see pp. 81, 89).

Cooperation.— Two discharge measurements furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	351	234	237	b180	200	d225	328	880	621	612	576	480
2	325	250	243	b180	425	243	246	1,070	617	645	567	469
3	321	243	237	b180	781	237	220	1,250	699	650	567	497
4	321	240	234	b180	443	231	209	1,360	798	664	594	502
5	351	246	228	b185	a250	220	228	1,470	924	669	545	493
6	321	256	223	b190	a170	217	286	1,560	1,610	621	527	480
7	321	262	220	200	a230	231	351	1,600	1,540	621	532	455
8	296	276	220	225	a200	220	406	1,550	1,340	598	532	443
9	293	262	209	223	a200	237	370	1,480	1,140	589	510	426
10	289	256	206	209	220	307	310	1,400	1,390	626	497	402
11	286	256	206	217	225	451	259	1,370	1,490	650	493	390
12	234	259	223	214	231	459	237	1,230	1,240	603	523	390
13	206	262	198	220	670	540	217	1,180	1,130	589	536	390
14	200	262	193	225	1,110	502	203	1,070	1,060	567	523	390
15	195	265	185	220	506	347	190	907	962	571	523	378
16	195	262	b180	214	307	246	231	798	846	576	514	378
17	193	259	b176	203	243	d180	269	755	750	576	502	382
18	195	262	b176	195	262	195	332	679	674	608	499	382
19	195	256	b185	209	256	211	410	640	585	612	514	396
20	195	259	193	195	253	228	532	598	567	580	626	394
21	198	256	195	195	246	314	476	545	549	576	455	406
22	203	237	206	193	240	418	545	497	576	562	346	398
23	203	243	228	198	246	410	750	443	598	567	318	370
24	203	237	223	206	240	296	863	451	674	580	307	328
25	203	240	206	198	234	262	719	510	636	589	356	314
26	203	220	195	193	d225	265	608	502	640	585	355	279
27	203	220	195	195	d215	237	554	459	621	580	386	279
28	203	211	198	190	d215	231	540	468	589	589	382	262
29	209	217	206	193	-	256	576	439	612	580	394	256
30	209	234	193	195	-	293	689	536	585	576	418	253
31	211	-	b185	200	-	343	-	631	-	598	447	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	7,501	351	193	242	14,880
November.....	7,433	276	211	248	14,740
December.....	6,400	243	175	206	12,690
Calendar year 1944.....	166,106	3,080	160	508	369,100
January.....	6,214	225	180	200	12,330
February.....	9,043	1,110	170	323	17,940
March.....	9,082	540	180	293	18,010
April.....	12,154	863	190	405	24,110
May.....	28,328	1,600	439	914	56,190
June.....	26,053	1,610	549	868	51,680
July.....	18,609	669	562	600	36,910
August.....	14,854	626	307	479	29,460
September.....	11,672	502	283	389	23,150
Water year 1944-45.....	157,343	1,610	170	431	312,100

a No gauge-height record; discharge computed on basis of records for station at Devils Slide.

b Stage-discharge relation affected by ice.

d Doubtful gauge-height record; discharge computed on basis of records for station at Devils Slide.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Weber River near Plain City, Utah

Location.-- Chain gage, lat. $41^{\circ}16'42''$, long. $112^{\circ}05'30''$, in NW $\frac{1}{4}$ sec. 8, T. 6 N., R. 2 W., at county highway bridge, 1 mile downstream from Fourmile Creek, $\frac{1}{2}$ miles south of Plain City, and 6 miles upstream from mouth.

Drainage area.-- 2,060 square miles.

Records available.-- May 1905 to September 1945. Records collected in 1904 by State engineer.

Extremes.-- Maximum discharge observed during year, 3,430 second-feet (regulated) June 8 (gage height, 18.33 feet); minimum observed, 40 second-feet (regulated) July 24 (gage height, 2.17 feet).

1904-45: Maximum discharge observed, 7,580 second-feet June 6, 1909 (gage height, 19.1 feet); practically no flow during latter part of several summers since 1915 (result of regulation).

Remarks.-- Records fair. Gage read once daily. In summer practically entire flow of Weber River is diverted above station for irrigation. Flow is partly regulated by Echo, East Canyon, and Pine View Reservoirs (see pp. 81, 89, 93).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	71	202	284	302	323	456	572	1,750	362	74	64	61
2	52	243	284	253	464	467	437	2,110	284	76	68	54
3	105	292	281	329	1,020	494	422	2,340	422	79	72	64
4	100	281	284	333	697	502	408	2,360	837	85	79	67
5	102	199	286	369	658	477	594	2,650	1,520	85	133	79
6	102	275	286	352	528	460	444	2,720	2,550	87	107	68
7	105	441	281	325	486	479	524	2,820	2,730	78	106	79
8	111	415	278	386	452	494	608	2,960	3,430	70	99	87
9	105	394	275	408	448	502	604	2,890	2,810	67	73	109
10	99	366	278	356	505	513	524	2,420	2,940	63	65	95
11	88	379	278	304	326	452	482	1,720	3,040	83	61	82
12	94	278	278	326	298	564	452	1,680	2,530	98	62	82
13	110	419	275	345	404	675	404	1,720	2,240	82	64	85
14	105	532	275	339	1,380	702	397	1,440	2,080	80	79	84
15	102	584	275	334	846	650	583	1,550	1,460	58	83	85
16	140	612	275	317	502	536	422	1,400	1,270	56	66	91
17	187	588	272	308	444	482	415	1,090	990	56	84	92
18	232	419	275	296	430	460	464	1,070	995	47	65	94
19	270	460	281	302	415	464	517	1,080	765	67	72	92
20	284	513	298	310	532	441	654	1,090	388	82	303	91
21	272	333	281	304	513	502	896	913	260	55	582	92
22	180	278	310	298	482	572	932	588	278	54	371	95
23	240	308	320	292	532	633	1,000	488	281	46	247	186
24	250	258	356	290	494	540	1,220	401	254	44	170	190
25	248	397	314	258	486	460	1,030	492	239	45	150	193
26	235	310	310	250	456	467	1,010	552	198	82	121	193
27	235	261	345	314	452	532	887	507	151	67	106	193
28	204	275	359	275	448	464	821	452	118	62	87	197
29	134	275	333	326	-	467	848	356	97	59	82	188
30	140	278	286	326	-	467	955	347	97	56	71	249
31	149	-	323	356	-	505	-	386	-	55	62	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	4,851	284	52	156	9,620
November.....	10,845	612	202	365	21,510
December.....	9,116	359	272	294	18,080
Calendar year 1944.....	171,737	3,740	28	469	340,600
January.....	9,864	408	250	318	19,560
February.....	15,019	1,380	296	536	29,790
March.....	15,879	702	441	512	31,500
April.....	19,126	1,220	353	658	37,940
May.....	44,542	2,960	347	1,430	87,950
June.....	35,614	3,430	97	1,187	70,640
July.....	2,096	96	44	67.6	4,160
August.....	3,834	582	61	124	7,600
September.....	3,417	249	54	114	6,780
Water year 1944-45.....	174,003	3,430	44	477	345,100

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Silver Creek near Wanship, Utah

Location.- Water-stage recorder, lat. 40°45'25", long. 111°28'15", in SW¼ sec. 2, T. 1 S., R. 4 E., 1.3 miles upstream from Tollgate Canyon, 5 miles southwest of Wanship, and 5½ miles upstream from mouth.

Drainage area.- 25.8 square miles.

Records available.- October 1941 to September 1945. March 1939 to September 1941 in files of Bureau of Reclamation, as Silver Creek near Atkinson.

Extremes.- Maximum discharge during year, 134 second-feet Apr. 19 (gage height, 2.75 feet); minimum daily, 0.2 second-feet several days in July.
1941-45: Maximum discharge, 430 second-feet Apr. 4, 1942 (gage height, 4.28 feet); minimum, practically no flow at times in 1942, 1943.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	3.8	b2.5	b2.5	b3	b3.5	a30	12	2.2	1.1	0.5	a0.5
2	3.6	2.7			b6	3.6	a20	a10	1.3	1.0	.3	3.4
3	2.5	2.4			b12	3.9	a15	a8	2.7	.5	.3	a1
4	1.3	2.1			b8	4.1	a12	a9	3.0	.4	3.4	a.5
5	1.1	4.1			a6.5	b3	a15	a10	8.4	.4	.8	a.5
6	1.1	4.3	b2.5	b2.5	4.9	b2	a35	a9	13	.4	1.0	a.5
7	1.1	5.4			3.9	b4	a70	a8.5	8.1	.3	.5	a.5
8	1.0	3.2			3.9	b3	59	8.1	6.1	.3	.5	a.5
9	2.1	2.7			3.8	b4	31	6.8	4.5	.6	.6	a.5
10	1.4	2.5			b3.5	b5	17	4.1	22	2.4	.3	.5
11	2.2	4.9	b1.5	b1.5	3.8	10	17	6.3	14	2.5	.4	.7
12	2.7	4.3			3.8	38	19	3.4	6.1	.4	.3	.8
13	3.8	2.4			3.8	58	22	5.4	4.3	.3	.4	1.0
14	1.5	3.4			5.2	38	11	4.7	3.0	.3	.7	1.2
15	1.5	3.0			b4.5	17	9.2	2.8	2.0	.4	2.4	.8
16	2.0	2.5	b2.5	b2.5	b4	11	8.5	2.5	2.0	.4	.7	.5
17	2.2	2.4			b3.5	8.9	21	2.5	1.8	.2	.4	.5
18	2.5	2.5			3.6	6.8	43	2.8	1.8	.3	.4	.7
19	2.8	2.5			3.8	7.8	68	2.8	1.7	.3	8.2	.8
20	2.5				b3.5	8.8	71	2.8	1.1	.3	10	1.0
21	2.4	b2	b2.5	b2	b3.5	14	49	2.5	1.0	.4	3.9	1.0
22	2.4				b3	42	46	2.0	1.4	1.7	2.2	4.3
23	2.4				b3	34	34	1.1	1.4	1.1	1.0	5.2
24	2.5				b3	14	29	.7	1.3	.5	a1	3.8
25	2.6				b3	13	20	1.1	1.1	.5	a1.5	3.0
26	2.7	b2	b2.5	b2.5	b2.5	14	19	1.2	.9	.5	a1	3.0
27	a2.7				b3	12	18	.5	1.2	.3	a.5	3.4
28	2.7				a3.2	9.2	17	6	1.8	.2	a.5	3.8
29	2.7				-	9.7	18	6	1.2	.2	a1	3.4
30	2.4				-		a15	16	1.1	1.5	a.5	3.4
31	2.4	-			-		a35	-	3.6	.3	a.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	70.2	3.8	1.0	2.26	139
November.....	83.1	5.4	-	2.77	165
December.....	65.5	-	-	2.11	130
Calendar year 1944.....	2,490.8	133	-	5.80	4,940
January.....	69.5	-	-	2.24	138
February.....	120.8	12	2.5	4.31	240
March.....	450.3	56	2	14.5	893
April.....	856.7	71	8.5	28.6	1,700
May.....	136.5	12	.5	4.40	271
June.....	121.9	22	.9	4.06	242
July.....	13.7	2.5	.2	.80	37
August.....	45.7	10	.3	1.47	91
September.....	50.5	5.2	.5	1.68	100
Water year 1944-45.....	2,089.4	71	-	5.72	4,150

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records, and records for stations on nearby streams.

b Stage-discharge relation affected by ice (no gage-height record Nov. 28 to Dec. 3, Jan. 7-17, 22-31).

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Chalk Creek at Coalville, Utah

Location.- Water-stage recorder and concrete control, lat. 40°55'10", long. 111°24'00", in NE 1/4 sec. 8, T. 2 N., R. 5 E., 100 feet downstream from bridge on U. S. Highway 189 in Coalville and a third of a mile upstream from mouth.

Drainage area.- 253 square miles.

Records available.- October 1904 to December 1905, April 1927 to September 1945.

Average discharge.- 18 years (1927-45), 53.6 second-feet.

Extremes.- Maximum discharge during year, 818 second-feet Aug. 20 (gage height, 2.65 feet); minimum, 7.8 second-feet Nov. 23.

1927-45: Maximum discharge, 884 second-feet Aug. 21, 1940 (gage height, 3.41 feet, site and datum then in use); minimum, less than 1 second-foot for several days during June to November 1934.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	21	20	17	15	17	87	98	78	44	15	19
2	19	21	21	18	41	19	52	118	74	41	15	19
3	18	21	22	16	52	17	31	143	81	36	16	19
4	17	21	17	16	36	17	26	167	104	38	29	19
5	17	21	18	16	24	12	29	176	135	35	23	17
6	15	21	20	17	23	12	38	195	164	32	29	15
7	15	25	20	17	19	18	76	225	152	29	50	13
8	15	25	19	18	21	13	141	242	132	27	73	11
9	15	23	15	17	24	16	114	252	129	29	38	9.7
10	15	23	14	17	18	23	50	259	161	30	32	9.7
11	15	23	15	18	19	47	36	259	170	32	26	9.0
12	15	22	15	16	19	104	34	252	161	29	21	9.0
13	17	23	15	18	26	162	25	259	141	26	41	9.0
14	16	21	15	18	49	127	26	228	132	25	39	9.7
15	15	21	15	18	36	63	24	173	121	24	35	12
16	14	20	15	18	22	35	31	155	108	23	29	15
17	15	18	15	15	19	31	26	168	96	23	23	14
18	18	18	15	15	23	21	35	170	85	24	19	15
19	20	19	15	16	20	23	106	173	81	24	24	19
20	21	18	15	17	19	22	179	146	72	24	151	20
21	20	20	17	16	18	41	152	129	66	22	66	21
22	20	17	19	15	15	76	124	116	64	26	47	26
23	21	18	22	16	16	87	85	101	64	24	38	30
24	21	23	22	16	17	57	83	92	64	27	34	31
25	21	14	19	16	16	39	64	57	61	22	30	31
26	20	15	16	16	12	36	59	94	53	21	30	31
27	19	22	16	15	16	30	52	65	50	21	29	31
28	19	22	17	15	18	30	55	76	52	19	27	31
29	19	17	18	14	-	26	57	68	50	18	24	25
30	19	20	17	14	-	29	74	68	49	14	22	25
31	18	-	17	14	-	44	-	76	-	14	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	546	21	14	17.6	1,080
November.....	614	25	14	20.5	1,220
December.....	556	22	14	17.3	1,050
Calendar year 1944	30,505	655	12	83.3	60,500
January.....	507	18	14	16.4	1,010
February.....	654	52	12	23.4	1,300
March.....	1,284	152	12	41.4	2,550
April.....	1,971	179	24	65.7	3,810
May.....	4,873	289	68	157	9,570
June.....	2,950	170	49	98.3	5,850
July.....	823	44	14	26.5	1,530
August.....	1,095	151	15	35.3	2,170
September.....	867.1	31	9.0	18.9	1,120
Water year 1944-45	16,420.1	289	9.0	45.0	32,570

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Lost Creek near Croydon, Utah

Location.- Water-stage recorder, lat. $41^{\circ}11'$, long. $111^{\circ}24'$, in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T. 5 N., R. 5 E., 0.8 mile downstream from Francis Fork, 1.6 miles upstream from Hill Canyon, and $\frac{3}{4}$ miles northeast of Croydon.

Drainage area.- 133 square miles.

Records available.- February 1921 to December 1923, April 1941 to September 1945.

Extremes.- Maximum discharge during year, 216 second-feet May 6 (gage height, 3.15 feet); minimum, 5.3 second-feet Sept. 2.
1921-23, 1941-45: Maximum discharge, 770 second-feet May 10, 11, 18, 1923 (gage height, 4.20 feet, datum then in use), from rating curve extended above 200 second-feet; minimum, 3 second-feet for several days in August and September 1941, 1942.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	9.6			b9	*b11	25	92	46	23	8.4	6.8
2	9.2	10			b11	*12	19	113	40	22	8.4	6.5
3	8.4	9.6			17	12	17	139	45	21	10	6.5
4	7.7	9.2	b9		12	12	16	149	51	19	11	6.5
5	7.7	9.6	(*)		11	b12	16	168	63	19	9.6	6.8
6	7.4	10			10	b11	19	178	78	18	8.8	7.1
7	7.1	10			b10	b13	26	182	88	18	9.6	7.1
8	7.4	10		b9	40	b12	33	166	86	16	8.4	7.4
9	7.4	9.6			10	12	29	153	82	16	7.7	7.1
10	7.4	9.6			9.6	13	21	138	81	18	7.4	6.8
11	7.4	9.6			9.6	17	19	131	73	18	7.4	7.1
12	7.4	10			9.6	24	18	112	67	16	7.7	6.8
13	7.4	10			14	23	*16	101	83	16	8.8	6.8
14	7.4	10	b8		23	25	16	90	58	15	8.8	6.8
15	7.7	9.2			b15	18	14	77	54	14	8.8	6.8
16	7.7	8.4			b13	15	15	70	51	14	8.0	6.8
17	7.7	8.4		(*)	b12	14	15	66	47	13	7.1	7.4
18	7.7	b8			12	14	19	62	44	12	7.1	7.7
19	*7.7	b8			12	14	35	67	41	12	8.6	8.4
20	7.7	8.0			12	15	53	53	38	12	14	8.4
21	8.0	7.7			b11	20	66	52	37	11	11	9.2
22	8.0	7.7			b10	28	71	48	35	10	9.2	10
23	8.4	b8		b8	b11	27	64	45	34	10	8.0	10
24	8.0	b8			b11	19	59	43	33	10	7.4	9.6
25	8.8	b7	b9		b10	17	44	43	31	9.6	7.4	9.2
26	8.8	b7			b9	17	37	40	29	9.2	7.4	8.8
27	8.8	b9			b10	16	36	39	29	8.8	7.1	8.8
28	8.8	b9			b11	15	36	38	27	8.4	6.8	8.8
29	8.8	b8			-	16	47	37	25	8.0	6.8	8.8
30	8.8	b8			-	18	65	37	25	8.4	6.5	8.8
31	8.8	-			-	23	-	52	-	8.8	6.5	-
Month						Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet		
October						250.5	11	7.1	8.08	497		
November						286.2	10	7.0	8.87	528		
December						269	-	-	8.68	534		
Calendar year 1944						8,448.2	167	4.8	23.1	16,750		
January						263	-	-	8.48	522		
February						324.8	23	9.0	11.6	644		
March						521	29	11	16.8	1,030		
April						965	71	14	32.2	1,920		
May						2,771	182	37	89.4	5,500		
June						1,501	85	25	50.0	2,980		
July						434.2	23	8.0	14.0	861		
August						260.7	14	6.5	8.41	517		
September						233.6	10	6.5	7.79	463		
Water year 1944-45						8,061.0	182	6.5	22.1	15,990		

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

East Canyon Reservoir near Morgan, Utah

Location.- Staff gage, lat. 40°55'20", long. 111°35'50", in NE¼ sec. 10, T. 2 N., R. 3 E., 500 feet east of East Canyon Dam and 9 miles southeast of Morgan.

Drainage area.- 144 square miles.

Records available.- October 1937 to September 1945 in reports of Geological Survey.
November 1931 to September 1945 in reports of Weber River water commissioner.

Extremes.- Maximum contents observed during year, 28,950 acre-feet June 11 (gage height, 141.25 feet); minimum observed, 19,560 acre-feet Feb. 1-3.
1931-45: Maximum contents, 28,170 acre-feet June 2, 1943 (gage height, 141.67 feet); no contents Nov. 1, 1931, Sept. 2 to Nov. 1, 1934, Sept. 11 to Oct. 18, 1937.

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

Contents, in acre-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22,340	22,310	22,840	20,970	19,560	21,250	24,940	28,240	28,820	28,780	25,860	-
2	22,420	22,340	22,760	20,940	19,560	21,260	25,140	28,300	28,820	28,760	25,750	22,820
3	22,340	22,340	22,690	20,880	19,560	21,390	25,220	28,280	28,800	28,760	25,640	-
4	22,340	22,340	22,650	20,840	19,590	21,400	25,300	28,300	28,820	28,760	25,580	-
5	22,340	22,380	22,670	20,810	19,720	21,500	25,380	28,300	28,850	28,760	25,500	-
6	22,340	22,380	22,540	20,810	19,820	21,520	25,540	28,300	28,890	28,630	25,330	-
7	22,340	22,420	22,460	20,810	19,840	21,540	25,750	28,350	28,890	28,520	25,280	-
8	22,340	22,500	22,420	20,750	19,890	21,580	25,960	28,350	28,870	28,430	25,180	-
9	22,340	22,500	22,340	20,690	19,970	21,650	26,310	28,330	28,850	28,300	25,080	22,080
10	22,340	22,540	22,260	20,620	20,050	21,750	26,480	28,330	28,870	28,210	24,980	-
11	22,310	22,540	22,190	20,560	20,060	21,850	26,570	28,370	28,950	28,130	24,880	-
12	22,310	22,570	22,080	20,530	20,130	22,080	26,660	28,390	28,910	28,020	24,820	-
13	22,310	22,610	22,000	20,440	20,190	22,340	26,740	28,430	28,990	27,910	24,690	-
14	22,310	22,650	21,920	20,410	20,390	22,880	26,830	28,520	28,850	27,850	24,580	-
15	22,310	22,690	21,850	20,410	20,550	22,920	26,870	28,590	28,820	27,760	24,440	-
16	22,310	22,720	21,770	20,380	20,610	22,960	26,870	28,610	28,820	27,650	24,340	-
17	22,260	22,770	21,690	20,350	20,690	23,030	26,900	28,630	28,820	27,520	24,240	21,190
18	22,260	22,800	21,620	20,310	20,720	23,070	26,920	28,670	28,820	27,420	24,140	-
19	22,260	22,840	21,540	20,300	20,780	23,130	27,180	28,690	28,800	27,310	24,080	-
20	22,310	22,840	21,460	20,300	20,850	23,210	27,350	28,690	28,780	27,220	24,120	-
21	22,310	22,840	21,390	20,300	20,890	23,260	27,480	28,690	28,780	27,110	24,040	-
22	22,310	22,880	21,340	20,280	20,910	23,380	27,570	28,680	28,780	27,050	-	-
23	22,310	22,880	21,340	20,160	20,940	23,700	27,650	28,770	28,780	26,920	-	20,810
24	22,310	22,880	21,270	20,060	20,970	23,900	27,740	28,770	28,820	26,810	-	-
25	22,310	22,880	21,230	19,970	21,040	24,020	27,780	28,770	28,820	26,700	-	-
26	22,310	22,880	21,160	19,870	21,100	24,220	27,850	28,690	28,820	26,570	23,540	-
27	22,310	22,880	21,080	19,690	21,140	24,300	27,940	28,690	28,800	26,440	-	-
28	22,310	22,880	21,040	19,690	21,190	24,330	27,980	28,690	28,800	26,350	-	-
29	22,310	22,840	21,000	19,660	-	24,460	28,000	28,770	28,760	26,260	-	-
30	22,310	22,840	-	19,630	-	24,540	28,110	28,740	28,760	26,090	-	20,750
31	22,310	-	21,000	19,590	-	24,660	-	28,780	-	25,990	-	-

Monthly gage height and contents, water year October 1944 to September 1945

Date	Gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30.....	127.84	22,310	-
Oct. 31.....	127.84	22,310	0
Nov. 30.....	129.00	22,640	+530
Dec. 31.....	125.00	21,000	-1,840
Calendar year 1944.....	-	-	+3,280
Jan. 31.....	121.25	19,590	-1,410
Feb. 28.....	125.42	21,190	+1,600
Mar. 31.....	132.84	24,660	+3,470
Apr. 30.....	139.63	28,110	+3,450
May 31.....	140.92	28,780	+670
June 30.....	140.88	28,760	-20
July 31.....	135.55	26,990	-2,770
Aug. 31.....	-	28,020	-2,970
Sept. 30.....	124.34	20,750	-2,270
Water year 1944-45.....	-	-	-1,560

a No gage-height record; contents interpolated.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

East Canyon Creek near Morgan, Utah

Location.- Water-stage recorder and Lyman rectangular weir, lat. 40°55'20", long. 111°36'20", in NW 1/4 sec. 10, T. 2 N., R. 3 E., 2,500 feet downstream from East Canyon Dam, 2 1/2 miles upstream from Sheep Canyon, and 9 miles southeast of Morgan.

Drainage area.- 145 square miles.

Records available.- October 1937 to September 1945 in reports of Geological Survey. October 1931 to September 1945 in reports of Weber River water commissioner.

Average discharge.- 14 years (1931-45), 45.2 second-feet.

Extremes (regulated).- Maximum daily discharge during year, 150 second-feet May 2; minimum daily, 7.5 second-feet Feb. 9-24.

1931-45: Maximum daily discharge, 412 second-feet Apr. 23, 1936; minimum daily, 5 second-feet Jan. 20 to Apr. 10, Nov. 4-19, 1935.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	25	50	56	52	8.2	9.6	78	46	25	66	67
2	26	25	61	56	52	8.2	9.6	h150	60	27	67	66
3	26	25	61	56	54	8.2	9.6	a145	54	27	67	67
4	26	25	61	56	29	8.2	9.6	h140	73	28	67	67
5	26	25	61	55	8.2	8.2	9.6	a135	84	49	67	67
6	26	25	61	56	8.2	8.2	9.6	h130	103	68	67	67
7	26	25	61	56	8.2	8.2	9.6	a120	112	66	67	67
8	26	25	61	52	8.2	8.2	10	a110	100	66	67	67
9	26	25	61	54	7.5	9.2	10	101	86	66	67	67
10	26	25	61	54	7.5	8.2	10	101	88	66	67	67
11	26	25	61	52	7.5	8.2	10	101	110	66	67	67
12	26	24	61	54	7.5	8.2	10	94	123	66	67	67
13	26	24	61	52	7.5	8.2	10	80	112	66	67	67
14	26	23	61	52	7.5	8.2	10	81	89	64	67	66
15	26	23	61	52	7.5	8.2	29	94	67	64	67	64
16	26	23	61	52	7.5	8.2	51	83	62	66	67	64
17	26	23	61	54	7.5	9.2	51	76	62	66	67	64
18	26	23	61	54	7.5	8.2	66	67	62	66	67	64
19	25	23	61	55	7.5	8.2	112	67	58	66	67	64
20	25	23	58	55	7.5	8.2	75	67	52	66	67	64
21	25	30	56	55	7.5	8.2	45	55	43	66	67	46
22	25	36	56	55	7.5	8.2	58	50	38	66	67	29
23	25	36	56	55	7.5	8.2	89	47	41	66	67	29
24	25	36	56	54	7.5	8.2	93	47	42	66	66	29
25	25	36	56	54	8.2	8.2	93	46	a40	66	66	29
26	25	36	56	54	8.2	9.6	101	42	b37	67	66	29
27	25	36	56	54	8.2	9.6	105	40	h42	67	66	29
28	25	37	56	54	8.2	9.9	116	36	a36	67	66	29
29	25	40	56	54	-	9.6	83	31	b30	66	64	29
30	25	40	56	54	-	9.6	47	32	h25	66	64	25
31	25	-	56	52	-	9.6	-	35	-	66	64	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	793	26	25	25.6	1,570
November.....	847	40	23	28.2	1,680
December.....	1,822	61	50	58.8	3,610
Calendar year 1944.....	18,207.6	269	8.2	49.7	56,100
January.....	1,676	56	52	54.1	3,320
February.....	372.6	54	7.5	13.3	739
March.....	261.9	9.6	8.2	8.45	519
April.....	1,351.2	116	9.6	45.0	2,680
May.....	2,471	150	31	79.7	4,900
June.....	1,977	123	25	65.9	3,920
July.....	1,872	68	25	60.4	3,710
August.....	2,062	67	64	66.5	4,000
September.....	1,823	67	25	54.1	3,220
Water year 1944-45.....	17,128.7	150	7.5	46.9	53,960

a No gage-height record; discharge interpolated.

b Computed from staff-gage reading.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Hardscrabble Creek near Porterville, Utah

Location.- Water-stage recorder, lat. 40°57'10", long. 111°43'00", in SW1/4 sec. 34, T. 3 N., R. 2 E., two-thirds of a mile upstream from Tucker Hollow and 2 1/2 miles southwest of Porterville.

Drainage area.- 24.9 square miles.

Records available.- October 1941 to September 1945. Fragmentary records December 1937 to August 1940 on file in State engineer's office.

Extremes.- Maximum discharge during year, 631 second-feet Aug. 20 (gage height, 3.60 feet), from rating curve extended above 180 second-feet; minimum recorded, 4.3 second-feet Nov. 7, but may have been less during periods of ice effect.
1941-45: Maximum discharge, that of Aug. 20, 1945; minimum recorded, 3.0 second-feet Feb. 11, 1944, but may have been less during periods of ice effect.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.8	6.3			7.0	b7	20	104	71	38	14	8
2	7.8	7.0			b18	*b7	16	113	67	37	13	8
3	7.8	6.5			28	b7	15	140	72	35	12	8
4	7.8	6.2			12	b7	15	160	74	33	13	8
5	7.5	7.8	b7		9.2	b7	16	170	96	30	12	8
6	7.2	8.3	(*)		8.6	b7	20	171	171	29	11	8
7	7.2	8.9			8.3	b9	26	165	163	29	11	8
8	7.2	7.2		b7	8.0	b8	28	160	150	27	12	8
9	7.2	6.8			7.8	9.8	24	160	135	26	11	8
10	7.2	6.2			7.5	*11	20	174	147	27	11	8
11	7.2	7.0			7.5	13	18	177	135	26	10	8.3
12	7.2	7.0			7.5	16	*16	160	129	24	11	8.3
13	7.2	7.0			20	17	16	177	124	23	11	8.3
14	7.2	7.0			40	18	14	158	111	22	10	8.3
15	7.5	6.5	b6		18	13	13	127	96	22	9.5	8.3
16	7.2	6.5	(*)		13	12	13	111	88	20	8.9	8.3
17	7.5	5.8			b12	11	15	111	82	20	8.6	8.3
18	*7.5	b6			11	11	22	107	79	20	8.6	8.3
19	7.5	b6			9.2	11	40	104	76	18	19	8.9
20	7.5	5.8			8.9	11	59	87	69	18	41	8.9
21	7.2	5.8			b8	15	72	79	66	16	25	10
22	6.2	5.4			b7	19	77	74	62	17	15	12
23	6.2	b6		b6	b8	17	73	74	60	16	11	12
24	6.2	b6			b8	14	72	82	56	16	9	10
25	6.2	b5			b8	14	55	85	53	15	9	10
26	6.2	b5	b7		b6	14	49	83	50	15	9	10
27	6.2	b6			b7	13	45	83	47	14	9	10
28	6.2	b6			b7	13	54	81	45	14	8	10
29	6.2	b6			-	14	68	82	42	13	8	10
30	6.2	b6			-	16	87	80	41	14	8	10
31	6.8	-			-	20	-	79	-	13	8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	218.0	7.8	6.2	7.03	432
November	195.0	8.9	5	6.50	387
December	206	-	-	6.61	407
Calendar year 1944	10,180.4	194	5	27.9	20,190
January	201	-	-	6.48	399
February	320.5	40	6	11.4	636
March	351.8	20	7	12.3	757
April	1,081	87	13	36.0	2,140
May	3,715	177	74	120	7,370
June	2,657	171	41	88.6	5,270
July	669	38	13	22.2	1,370
August	376.6	41	8	12.1	747
September	269.1	12	8	8.97	534
Water year 1944-45	10,312.0	177	5	28.2	20,450

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice (no gage-height record Nov. 26 to Dec. 6).

Note.- No gage-height record May 3-5, Aug. 21 to Sept. 11; discharge computed on basis of weather records and records for stations on nearby streams.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

South Fork Ogden River near Huntsville, Utah

Location.- Water-stage recorder, lat. $41^{\circ}16'$, long. $111^{\circ}40'$, in SE $\frac{1}{4}$ sec. 12, T. 6 N., R. 2 E., half a mile downstream from Maggie Creek, 1 mile upstream from Huntsville Mountain Canal, and $5\frac{1}{2}$ miles east of Huntsville.

Drainage area.- 148 square miles.

Records available.- March 1921 to September 1945.

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

Extremes.- Maximum discharge during year, 985 second-feet May 4 (gage height, 4.27 feet); minimum daily, 33 second-feet Dec. 11-20, Jan. 29-31.
1921-45: Maximum discharge, 1,780 second-feet May 4, 1936 (gage height, 5.45 feet), from rating curve extended above 900 second-feet; minimum observed, 20 second-feet Nov. 25, 1931, July 23, 1934.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	40	38	b34	a35	40	119	518	189	108	55	44
2	40	39	38	b34	a45	41	100	609	177	103	57	43
3	39	38	38	b34	a62	42	90	705	193	102	63	42
4	38	38	37	b34	a45	42	82	774	226	97	58	42
5	38	41	36	b34	a40	41	86	824	285	92	55	43
6	38	41	37	b35	a39	b38	108	828	574	88	53	44
7	39	44	37	b36	a39	b39	129	837	617	86	53	44
8	39	41	37	38	a38	40	157	765	582	84	52	43
9	38	39	b35	37	38	41	149	697	529	80	51	43
10	38	39	b34	37	38	42	123	653	504	88	50	42
11	38	40	a33	36	38	48	110	621	435	85	49	42
12	38	41	a33	36	38	58	105	562	390	80	52	42
13	38	41	a33	36	45	72	96	518	356	77	55	41
14	38	39	a33	37	60	77	98	458	324	75	50	41
15	38	39	a33	37	b45	70	84	399	299	73	51	41
16	38	39	a33	38	b42	63	84	353	269	71	49	41
17	38	39	a33	36	b40	59	84	326	246	69	48	42
18	38	39	a33	b36	42	56	96	304	224	68	48	42
19	38	39	a33	37	42	55	134	293	207	68	57	42
20	38	39	a33	b36	41	59	228	272	195	64	58	42
21	38	38	a34	b35	40	76	324	256	181	63	52	45
22	38	38	a36	b34	b39	100	362	231	166	63	49	45
23	38	38	a38	a35	41	103	324	219	164	60	48	44
24	38	38	a38	a35	40	91	310	212	153	59	48	43
25	38	36	37	a35	b39	86	244	214	142	58	48	42
26	38	37	36	a35	b37	92	207	212	138	57	46	43
27	38	38	36	a34	b39	88	195	209	132	55	45	42
28	38	38	37	a34	40	82	209	200	126	55	45	42
29	38	37	b36	a33	-	88	272	193	123	53	45	42
30	36	38	36	a33	-	98	374	188	115	53	44	42
31	38	-	b35	a33	-	117	-	200	-	53	44	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	1,184	41	36	38.2	2,350
November.....	1,171	44	36	39.0	2,320
December.....	1,098	38	33	35.4	2,170
Calendar year 1944.....	31,486	581	33	96.9	62,450
January.....	1,094	38	33	35.3	2,170
February.....	1,166	62	35	41.6	2,310
March.....	2,044	117	38	66.9	4,050
April.....	5,072	374	82	169	10,060
May.....	13,650	837	188	440	27,070
June.....	8,260	617	115	276	16,560
July.....	2,287	108	53	75.8	4,540
August.....	1,576	83	44	50.8	3,130
September.....	1,276	45	41	42.5	2,530
Water year 1944-45.....	39,876	837	33	109	79,080

a No gage-height record; discharge computed on basis of weather records and records for stations on nearby streams.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Pine View Reservoir near Ogden, Utah

Location.- Staff gage, lat. 41°15'20", long. 111°50'25", in NW¼ sec. 16, T. 6 N., R. 1 E., at trash rack at Pine View Dam on Ogden River, 7 miles northeast of Ogden.
Datum of gage is at mean sea level, datum of 1929 (levels by Bureau of Reclamation).

Drainage area.- 310 square miles.

Records available.- November 1936 to September 1945.

Extremes.- Maximum contents during year, 43,950 acre-feet June 6-12 (elevation, 4,872.21 feet); minimum, 400 acre-feet Jan. 11 (elevation, 4,823.50 feet).
1936-45: Maximum contents, 45,370 acre-feet May 17, 1938 (elevation, 4,873.00 feet); minimum, 80 acre-feet Feb. 19, 1937 (elevation, 4,818.99 feet).

Remarks.- Reservoir is formed by earth-fill, rock-faced dam; storage began Nov. 16, 1936. Capacity, 43,580 acre-feet between elevations 4,818 feet (sill of trash rack-structure) and 4,872 feet (top of spillway gates); during September 1939 sills of radial spillway gates were raised 1 foot, thus changing top of spillway gates from elevation 4,871 to 4,872 feet). Dead storage, 45 acre-feet (below elevation 4,818 feet), which must be deducted from figures of total contents shown in tables to obtain usable contents. Water is used for irrigation on Ogden River project. Gage read daily at 8 a.m.; contents are as of that time.

Cooperation.- Capacity table furnished by Bureau of Reclamation.

Contents, in acre-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,060	5,720	634	751	823	2,290	8,380	30,740	43,630	43,000	33,370	25,760
2	10,030	5,490	622	767	830	2,110	8,990	32,170	43,490	42,790	33,130	25,440
3	9,910	5,400	610	790	1,180	1,980	9,290	33,400	43,700	42,590	32,890	24,960
4	9,860	5,220	604	821	1,550	1,870	9,660	34,720	43,810	42,310	32,640	24,530
5	9,920	5,000	610	683	1,760	1,760	10,010	35,390	43,810	42,030	32,290	24,150
6	9,730	5,000	616	586	1,270	1,650	10,530	36,030	43,950	41,750	32,060	23,890
7	9,670	4,820	616	580	742	1,520	11,120	36,940	43,950	41,330	31,810	23,580
8	9,610	4,610	616	610	660	1,300	11,780	37,190	43,950	41,060	31,700	23,320
9	9,560	4,470	616	537	648	1,060	12,640	37,190	43,950	40,720	31,470	23,010
10	9,500	4,300	610	440	710	1,040	13,230	39,340	43,950	40,370	31,170	22,710
11	9,470	4,100	604	400	803	1,070	13,770	39,340	43,950	40,230	30,890	22,310
12	9,410	4,020	598	428	897	1,180	14,230	42,640	43,950	39,970	30,630	21,910
13	9,170	4,060	596	440	1,050	1,270	14,720	43,490	43,810	39,700	30,300	21,510
14	8,940	3,870	598	432	2,060	1,460	15,040	43,770	43,670	39,360	30,000	21,240
15	8,710	3,380	598	504	2,570	2,090	15,290	43,630	43,670	39,100	29,780	20,890
16	8,680	2,910	592	531	3,400	2,310	15,470	43,350	43,670	38,770	29,430	20,520
17	8,450	2,330	586	540	3,590	2,450	15,800	43,190	43,810	38,430	29,150	20,020
18	8,260	1,830	586	571	3,700	2,530	16,140	43,210	43,810	38,040	28,800	19,650
19	8,040	1,360	586	560	3,890	2,530	16,480	43,210	43,670	37,790	28,580	19,390
20	7,880	972	586	558	3,770	2,560	17,170	42,930	43,670	37,450	28,580	19,040
21	7,670	855	604	540	3,620	2,640	18,230	42,790	43,810	37,070	28,800	18,690
22	7,460	878	622	540	3,470	2,940	19,550	42,790	43,810	36,690	28,580	18,430
23	7,460	894	767	558	3,320	3,230	21,050	43,070	43,810	36,440	28,530	18,250
24	7,270	901	965	656	3,160	4,080	22,620	43,580	43,810	36,060	28,300	17,900
25	7,040	782	1,000	744	3,030	4,430	24,190	43,850	43,810	35,670	28,120	17,650
26	6,840	671	1,020	823	2,780	4,910	25,270	43,850	43,670	35,300	27,700	17,270
27	6,640	671	928	784	2,610	5,410	26,260	43,770	43,670	35,100	27,430	17,010
28	6,390	665	832	713	2,440	5,790	27,040	43,630	43,560	34,860	27,140	16,540
29	6,200	659	736	761	-	6,110	27,930	43,700	43,420	34,480	26,820	16,150
30	6,150	653	736	792	-	6,610	29,220	43,630	43,210	34,170	26,480	15,770
31	5,910	-	730	799	-	7,350	-	43,630	-	33,740	26,100	-

Monthly elevation and contents, water year October 1944 to September 1945

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Oct. 1.....	4,845.16	10,060	-4,340
Nov. 1.....	4,838.68	5,720	-5,086
Dec. 1.....	4,825.47	634	+117
Calendar year 1944.....	-	-	-10,260
Jan. 1.....	4,826.19	751	+72
Feb. 1.....	4,826.56	823	+1,467
Mar. 1.....	4,831.54	2,290	+6,090
Apr. 1.....	4,842.85	8,380	+22,360
May 1.....	4,853.88	30,740	+12,390
June 1.....	4,872.03	43,630	+330
July 1.....	4,871.67	43,000	-9,630
Aug. 1.....	4,865.69	33,370	-7,610
Sept. 1.....	4,860.26	25,760	-10,530
Oct. 1.....	4,851.04	15,230	-
Water year 1944-45.....	-	-	+5,170

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Ogden River below Pine View Dam, near Ogden, Utah

Location.— Water-stage recorder, lat. 41°15'17", long. 111°50'47", in NE¼ sec. 16, T. 6 N., R. 1 E., 1,500 feet downstream from Wheeler Creek, 2,000 feet downstream from Pine View Dam, and 6½ miles northeast of Ogden.

Drainage area.— 321 square miles.

Records available.— October 1937 to September 1945, not including flow of Pine View pipe line, 1895-96, January 1904 to October 1912, October 1931 to September 1937 at same site, including flow of pipe line, published as Ogden River near Ogden, Utah.

Extremes (regulated).— Maximum discharge during year, 2,290 second-feet June 7; (gage height, 8.73 feet); minimum daily discharge, 0.5 second-foot Dec. 16 to Jan. 31 (reservoir gates closed).

1937-45: Maximum discharge, that of June 7, 1945; minimum, 0.3 second-foot at times when reservoir gates were closed.

Remarks.— Records good except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by Pine View Reservoir (see preceding page). Pine View pipe line diverts water above station for use in irrigation and power development. Diversions for irrigation and municipal supply above Pine View Reservoir.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.4	4.2					14	265	325	18	2.2	20
2	5.1	3.6			a1		3.0	606	215	20	17	20
3	5.1	3.3					6.4	810	202	31	18	20
4	5.1	3.3			a192		6.4	1,030	453	31	22	20
5	4.0	3.2				a1	5.5	1,380	786	27	20	20
6	5.1	3.2			a400	(*)	14	1,380	1,010	20	20	20
7	4.8	3.6	(*)		a129		22	1,550	1,760	25	19	20
8	4.8	3.9					28	1,660	1,770	23	14	20
9	4.2	3.6					24	1,360	1,260	29	10	20
10	3.6	3.3			a2		16	646	1,320	26	18	20
11	3.0	4.6					*13	517	1,280	14	15	20
12	3.3	3.9					10	717	850	19	15	20
13	3.6	43			h15		8.5	932	937	27	15	20
14	3.6	137			h20		6.8	932	778	28	15	20
15	3.6	147		(*)	a18	a2	6.4	918	559	26	15	19
16	3.9	168		a0.5	h15		7.6	817	315	24	16	19
17	3.2	173			a10		11	656	395	22	16	19
18	3.9	164			a5	2.0	19	652	482	22	16	19
19	3.3	171				2.2	30	644	395	23	6.4	19
20	3.3	62				3.2	a50	632	95	23	7.6	19
21	3.3	2.0				6.8	a70	513	28	23	6.8	19
22	3.0	1.7				12	a80	274	106	22	6.4	19
23	3.2	1.6				12	a80	362	138	22	6.0	38
24	*3.2	bl.5	b.5		a1	6.5	h52	174	138	22	6.0	41
25	3.2	bl.4				6.4	a45	326	86	22	6.4	41
26	3.2	bl.3				6.8	a35	392	29	21*	6.4	41
27	3.2	bl.2				4.4	36	396	22	20	4.4	40
28	3.2	bl.2				3.8	42	341	19	20	2.6	39
29	3.0	bl.2			-	6.4	46	332	18	19	2.0	39
30	3.2	bl.2			-	10	43	328	18	19	20	87
31	3.3	-			-	14	-	328	-	10	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	118.4	6.4	3.0	3.82	235
November	1,123.2	173	1.2	37.4	2,230
December	23.0	-	-	.74	46
Calendar year 1944	14,143.3	784	-	38.6	28,050
January	15.5	-	-	.5	31
February	823	400	-	29.6	1,640
March	120.8	14	-	3.90	240
April	848.6	80	6.4	28.3	1,660
May	21,870	1,660	174	705	43,380
June	15,659	1,770	18	522	31,060
July	702	31	10	22.6	1,390
August	384.2	22	2.0	12.4	762
September	798	87	19	26.6	1,580
Water year 1944-45	42,490.7	1,770	-	116	84,270

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of field estimate and observer's notes for winter months except Feb. 5-7, which was based on observer's estimate of discharge and time of gate changes at dam; discharge for Apr. 20-26 based on 1 staff-gage reading and records for stations on nearby streams.

b Stage-discharge relation affected by ice.

h Computed from staff-gage reading.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Jordan River at Narrows, near Lehi, Utah

Location.—Water-stage recorders, lat. 40°26'40", long. 111°55'20", in SE¼NW¼ sec. 26, T. 4 S., R. 1 W., at Narrows, 5½ miles northwest of Lehi and 7½ miles downstream from Utah Lake.

Drainage area.—2,960 square miles, including 280 square miles in Cedar Valley.

Records available.—October 1934 to September 1945. May to December 1904 and July 1913 to September 1934 at outlet of Utah Lake, 7½ miles upstream.

Average discharge.—32 years (1913-45), 361 second-feet.

Extremes (regulated).—Maximum daily discharge during year, 847 second-feet July 30; no flow Apr. 30 to May 2.

1913-45: Maximum daily discharge, 1,370 second-feet June 8, 1922 (gage height, 7.78 feet, site and datum then in use); no flow at times when gates were closed.

Remarks.—Records excellent except those below 10 second-feet, which are good. They represent combined flow of Jordan River, Utah & Salt Lake Canal, and East Jordan Canal. Flow completely regulated by gates and pumps at outlet of Utah Lake, pumps at Pelican Point, and diversion dam at Narrows.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	297	18	18	5.8	2.0	2.4	1.6	0	675	739	820	780
2	271	18	18	4.0	2.4	2.4	1.6	0	707	780	803	783
3	274	17	18	3.8	3.2	2.4	1.6	76	714	750	798	790
4	275	17	18	3.8	3.2	2.4	1.6	136	680	753	671	786
5	271	17	18	3.8	2.8	2.4	1.6	226	481	766	583	784
6	269	17	18	3.8	2.8	2.4	1.6	269	277	767	603	748
7	279	17	17	3.6	2.4	2.4	1.6	318	141	751	594	784
8	284	16	17	3.6	2.4	2.4	1.6	449	119	733	587	797
9	276	17	17	3.6	2.4	2.4	1.6	542	119	782	580	792
10	273	17	18	3.6	2.4	2.4	1.6	563	117	774	600	805
11	273	17	18	3.6	2.4	2.4	1.6	608	119	772	709	778
12	262	17	18	3.6	2.4	2.4	1.6	597	117	783	743	759
13	255	16	18	3.6	2.4	2.4	1.6	585	124	789	689	758
14	258	16	18	3.6	2.4	2.0	1.6	643	128	793	666	762
15	22	17	18	3.4	2.4	1.8	1.6	686	127	814	648	773
16	19	17	18	2.4	2.4	1.8	1.6	691	219	894	635	743
17	19	17	18	2.4	2.4	1.8	1.6	672	333	823	657	706
18	19	17	18	2.4	2.4	1.8	1.6	686	397	822	700	686
19	18	17	18	2.4	2.4	1.8	1.6	685	499	819	607	698
20	20	17	18	2.4	2.4	1.8	1.8	651	586	821	409	704
21	25	17	18	2.4	2.4	1.8	2.0	550	623	823	336	659
22	52	17	18	2.4	2.4	1.8	2.4	525	684	907	340	503
23	52	17	19	2.4	2.4	1.8	2.8	576	744	785	367	421
24	60	17	18	2.4	2.4	1.6	3.2	616	746	778	418	404
25	58	17	18	1.8	2.4	1.8	3.2	649	741	839	417	396
26	105	18	18	1.8	2.4	1.8	3.2	663	739	846	530	421
27	125	18	18	1.8	2.4	1.8	3.2	684	714	846	658	417
28	111	19	18	1.8	2.4	1.8	2.8	697	725	844	697	429
29	119	19	13	1.8	-	1.6	1.0	676	726	842	741	414
30	118	18	8.6	1.8	-	1.6	0	676	726	847	756	396
31	106	-	8.6	1.8	-	1.6	-	668	-	845	757	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	4,877	297	18	157	9,870
November.....	512	19	16	17.1	1,020
December.....	532.2	18	8.6	17.2	1,060
Calendar year 1944.....	99,729.4	858	1.0	272	197,800
January.....	91.4	5.8	1.8	2.96	181
February.....	69.2	5.2	2.0	2.47	137
March.....	63.0	2.4	1.6	2.03	125
April.....	56.0	3.2	0	1.87	111
May.....	16,056	691	0	518	31,850
June.....	13,850	746	117	462	27,470
July.....	24,726	847	733	798	49,040
August.....	19,122	820	336	617	37,930
September.....	19,661	805	596	655	39,000
Water year 1944-45.....	99,615.8	847	0	273	197,600

Time basis. Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Jordan River at Salt Lake City, Utah

Location.— Water-stage recorder, lat. 40°44', long. 111°55', in SW¼SW¼ sec. 14, T. 1 S., R. 1 W., a quarter of a mile downstream from highway bridge on Twenty-first South Street, Salt Lake City, and 2 miles downstream from Mill Creek.

Records available.— December 1942 to September 1945.

Extremes (regulated).— Maximum discharge during year, 261 second-feet Aug. 6 (gage height, 4.50 feet); minimum daily, 46 second-feet, Apr. 29.
Maximum combined discharge during year (Jordan River and Surplus Canal) 623 second-feet June 5; minimum daily, 152 second-feet Apr. 8, 22.
1942-45: Maximum discharge, 384 second-feet June 3, 1944 (gage height, 5.55 feet); minimum daily, 13 second-feet Apr. 9, 13, 14, 1943, July 19, 1944.
Maximum combined discharge (Jordan River and Surplus Canal), 1,190 second-feet June 3, 1944; minimum daily, that of Apr. 8, 22, 1945.

Remarks.— Records good. Flow regulated by gates and pumps at outlet of Utah Lake. Many diversions above station for irrigation and industrial and municipal water supplies. Surplus Canal diverts water 1,000 feet above station (see p. 107). For records of combined flow see following page.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	194	147	137	131	131	120	130	94	109	101	132	148
2	189	147	135	130	143	124	118	103	115	88	138	150
3	182	160	135	134	150	123	116	123	131	75	149	162
4	185	159	132	131	156	124	114	125	177	81	204	180
5	171	168	130	131	148	125	112	131	213	96	238	176
6	162	180	128	132	146	124	110	143	138	99	233	185
7	162	202	130	136	140	125	109	163	137	115	238	174
8	162	204	133	136	135	126	106	134	120	127	184	177
9	159	188	132	135	143	126	106	123	107	121	177	179
10	157	184	130	135	135	126	114	116	142	114	166	190
11	155	182	138	136	128	128	114	131	155	109	152	192
12	158	183	153	136	126	126	112	133	144	116	143	166
13	171	183	152	136	130	124	112	134	150	109	145	186
14	178	176	147	136	134	125	108	145	147	107	207	183
15	185	175	146	137	130	130	108	144	116	122	212	183
16	180	169	136	142	124	138	111	134	108	131	148	198
17	179	163	128	143	122	147	110	138	100	127	119	190
18	179	147	127	143	127	152	113	141	90	119	101	188
19	178	147	124	142	131	146	111	134	90	135	132	202
20	176	146	122	141	133	136	113	136	104	145	212	202
21	174	142	124	140	130	125	105	145	117	144	189	196
22	162	136	127	138	126	123	91	130	122	141	155	224
23	158	134	138	136	128	120	131	109	124	141	145	221
24	159	132	146	134	125	123	155	104	159	157	140	197
25	163	131	137	130	124	123	146	100	148	154	156	191
26	156	128	135	130	120	127	141	94	127	148	159	189
27	153	133	135	130	119	123	113	90	141	131	157	197
28	157	140	135	130	120	124	80	101	149	107	163	207
29	159	138	141	131	-	128	46	88	138	107	149	198
30	149	138	139	128	-	125	93	81	120	113	141	194
31	141	-	135	127	-	123	-	90	-	122	144	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	5,191	194	141	167	10,300
November	4,762	204	128	159	9,450
December	4,185	185	122	155	8,300
Calendar year 1944	49,442	299	13	135	98,100
January	4,177	143	127	135	8,280
February	3,702	156	119	132	7,340
March	3,961	182	120	128	7,860
April	3,350	155	46	112	6,640
May	3,747	153	81	121	7,430
June	3,938	213	90	131	7,810
July	3,702	157	75	119	7,340
August	5,108	238	101	165	10,130
September	5,645	224	148	188	11,200
Water year 1944-45	51,468	238	46	141	102,100

JORDAN RIVER BASIN

97

Combined discharge, in second-feet, of Jordan River and Surplus Canal at Salt Lake City, Utah
water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	380	252	236	193	181	176	189	192	311	246	256	247
2	366	247	239	190	201	183	171	207	319	220	268	233
3	350	282	239	195	215	180	168	281	353	210	292	252
4	352	224	232	191	225	183	164	285	481	217	384	279
5	354	241	228	191	210	184	161	294	573	235	380	267
6	318	266	223	192	208	180	158	311	558	222	317	288
7	315	307	220	196	197	181	157	336	544	224	338	261
8	314	307	221	196	191	181	152	287	491	244	336	266
9	308	268	219	194	203	180	158	253	435	233	330	273
10	293	251	213	194	195	179	167	247	467	222	314	300
11	281	244	208	194	192	181	166	303	475	221	297	295
12	281	245	213	194	189	176	164	314	448	228	280	281
13	306	247	212	194	195	174	164	328	452	220	285	279
14	314	242	206	195	204	177	158	345	459	218	335	276
15	317	240	204	200	198	184	158	320	371	232	351	285
16	287	226	199	209	187	198	162	296	337	230	287	308
17	285	234	197	210	184	213	160	318	311	220	270	288
18	276	235	195	208	194	221	163	317	288	214	238	300
19	273	235	180	205	201	211	160	296	285	278	302	329
20	267	234	186	202	205	191	163	292	315	278	480	348
21	263	232	188	201	200	177	155	301	341	270	397	332
22	238	229	193	197	191	174	152	252	357	265	279	396
23	227	233	212	192	191	171	182	197	348	285	260	392
24	229	227	225	189	188	177	232	200	404	302	225	348
25	240	224	210	183	185	178	245	233	377	307	238	330
26	228	219	206	183	178	186	250	244	317	296	252	324
27	223	225	205	182	176	177	211	237	328	258	252	347
28	234	235	203	182	176	180	201	259	337	204	239	365
29	239	234	212	181	-	185	180	240	316	208	237	349
30	237	234	207	177	-	180	190	253	283	226	240	345
31	248	-	200	175	-	177	-	276	-	246	241	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	8,820	380	223	285	17,490
November.....	7,267	307	219	242	14,410
December.....	6,541	239	186	211	12,970
Calendar year 1944	102,047	1,100	180	279	202,400
January.....	5,985	210	175	193	11,870
February.....	5,460	225	176	195	10,830
March.....	5,695	221	171	184	11,500
April.....	5,241	245	152	175	10,400
May.....	8,510	343	192	275	16,880
June.....	11,651	573	285	389	23,130
July.....	7,479	307	204	241	14,830
August.....	9,190	480	225	286	18,230
September.....	9,186	396	233	306	18,220
Water year 1944-45	91,035	573	152	249	180,600

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.
To convert war time to standard time, subtract 1 hour.

Spanish Fork at Thistle, Utah

Location.- Water-stage recorder, lat. 40°00', long. 111°30', in SW $\frac{1}{4}$ sec. 28, T. 9 S., R. 4 E., at Thistle, 600 feet downstream from confluence of Soldier Fork and Thistle Creek and 2 $\frac{1}{2}$ miles upstream from Diamond Fork.

Drainage area.- 490 square miles.

Records available.- January 1908 to September 1925 and October 1936 to September 1945 in reports of Geological Survey. January 1933 to September 1945 in reports of Spanish Fork water commissioner.

Average discharge.- 29 years (1908-25, 1933-45), 96.9 second-feet.

Extremes.- Maximum discharge during year, 510 second-feet Feb. 4 (gage height, 4.06 feet); minimum, 32 second-feet Oct. 9.

1908-25, 1933-45: Maximum discharge observed, 1,250 second-feet May 25, 1922; minimum observed, 10 second-feet Sept. 17, 22, 25, Oct. 25, 1934.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	50	44	b42	45	53	68	191	165	79	74	41
2	35	46	47	b45	70	59	61	231	155	74	59	53
3	35	45	48	b44	281	56	53	262	163	70	66	45
4	36	46	43	b42	205	54	51	287	177	68	122	46
5	34	44	40	b43	59	53	57	272	200	70	79	39
6	34	44	43	47	70	42	63	351	200	66	78	42
7	33	46	41	50	58	54	70	375	191	66	66	42
8	33	46	41	51	59	49	76	375	181	68	64	42
9	32	44	40	49	65	59	76	362	172	76	87	40
10	33	45	*35	49	64	54	72	362	191	69	54	39
11	32	45	37	50	59	56	63	434	186	59	63	58
12	33	47	37	48	58	119	63	434	173	59	87	37
13	34	48	38	50	79	127	59	431	159	56	125	39
14	36	47	37	52	180	98	60	411	152	58	54	39
15	36	47	36	52	109	85	58	364	146	57	52	38
16	36	46	40	51	*72	70	61	336	140	57	50	39
17	39	46	40	*46	63	65	60	333	138	53	50	41
18	42	49	41	42	65	61	66	336	138	53	50	41
19	43	48	39	50	58	57	62	325	131	61	57	39
20	43	48	39	44	58	57	103	302	129	61	52	39
21	45	47	40	43	53	65	121	277	125	53	47	37
22	44	46	43	b40	47	52	136	247	121	53	46	47
23	44	46	46	b39	53	52	127	253	118	53	48	53
24	44	49	48	b40	56	72	146	226	116	52	48	48
25	43	47	46	b41	53	63	134	216	116	51	51	47
26	41	42	45	b42	46	65	125	214	103	49	50	47
27	42	50	44	b43	47	63	125	204	86	46	49	49
28	42	43	46	b41	53	61	116	191	82	44	50	46
29	43	45	48	b39	-	59	121	179	80	43	49	46
30	45	42	44	b40	-	61	150	172	80	57	46	46
31	45	-	44	45	-	68	-	174	-	50	45	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	1,193	45	32	38.5	2,370
November.....	1,388	50	42	46.2	2,750
December.....	1,304	48	35	42.1	2,590
Calendar year 1944.....	33,352	579	26	91.1	66,160
January.....	1,400	52	39	45.2	2,780
February.....	2,219	291	46	79.2	4,400
March.....	2,119	127	42	68.4	4,200
April.....	2,625	150	51	87.5	5,210
May.....	9,079	434	172	293	18,010
June.....	4,313	200	80	144	6,550
July.....	1,834	79	43	59.2	3,640
August.....	1,880	125	45	60.6	3,730
September.....	1,289	53	37	43.0	2,560
Water year 1944-45.....	30,643	434	32	84.0	60,790

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Spanish Fork at Castilla, Utah

Location.— Water-stage recorder, lat. 40°03'00", long. 111°32'45", in SW¼NE¼ sec. 12, T. 9 S., R. 3 E., 600 feet 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 square miles.

Records available.— May 1919 to September 1925 and October 1936 to September 1945 in reports of Geological Survey. January 1933 to September 1945 in reports of Spanish Fork water commissioner.

Average discharge.— 18 years (1919-25, 1933-45), 214 second-feet.

Extremes.— Maximum discharge during year, 696 second-feet May 12 (gage height, 4.94 feet); minimum, 40 second-feet Jan. 25, 1919-25, 1933-45: Maximum daily discharge, 1,520 second-feet May 22, 1920; minimum, 24 second-feet Jan. 19, 1943.

Remarks.— Records good except those for period of ice effect or no gage-height record, which are fair. Several small diversions above station for irrigation. Flow is materially increased by water diverted by tunnel from Strawberry Reservoir (capacity, 250,000 acre-feet) in Colorado River Basin into Diamond Fork for irrigation in Jordan River Basin.

Rating table, water year 1944-45, except period of ice effect
(gage height, in feet, and discharge, in second-feet)

2.4	34	3.0	115	4.0	337
2.6	57	3.3	169	4.5	512
2.8	84	3.6	232	5.0	722

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	127	90	74	64	73	74	109	286	408	508	314	294
2	107	84	76	71	94	85	94	340	381	481	281	297
3	105	81	84	66	303	77	94	391	408	443	169	308
4	129	80	84	66	236	78	84	432	426	401	221	271
5	154	81	73	66	109	76	90	458	346	440	141	244
6	169	81	73	73	94	66	96	606	308	500	136	225
7	183	84	73	74	78	78	109	601	292	532	127	204
8	195	83	73	74	78	73	120	606	281	572	129	204
9	204	80	71	71	87	87	115	568	274	601	118	214
10	189	80	60	71	83	115	109	572	297	560	102	204
11	187	80	56	73	80	136	98	656	286	504	98	219
12	165	84	58	*71	76	154	99	656	264	485	165	230
13	125	86	60	73	96	161	92	639	251	462	213	239
14	94	83	61	76	193	136	94	610	244	422	118	242
15	77	78	61	76	145	122	90	544	237	388	104	219
16	74	78	61	77	*96	102	96	492	232	412	99	223
17	76	78	61	73	84	96	93	481	225	440	109	212
18	77	83	60	65	92	83	106	496	217	454	158	187
19	78	78	62	74	81	87	129	477	249	468	185	185
20	77	78	64	67	81	88	161	443	328	408	195	195
21	81	77	67	66	74	96	193	436	426	359	161	177
22	77	69	61	67	112	112	214	429	489	311	175	165
23	76	78	b59	74	112	202	337	508	251	197	165	
24	80	84	76	b60	80	102	256	325	504	195	212	137
25	78	77	73	b62	74	93	214	314	508	237	242	127
26	76	a70	66	b64	64	96	200	308	548	328	256	124
27	76	a82	69	b64	67	93	187	300	568	394	246	137
28	76	a74	70	b62	77	92	181	311	532	394	237	141
29	77	69	73	66	-	96	181	368	516	354	258	154
30	76	77	67	60	-	93	237	422	528	346	284	167
31	77	-	65	70	-	102	-	436	-	352	294	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,445	204	74	111	8,830
November	2,393	90	69	79.8	4,750
December	2,110	84	56	68.1	4,180
Calendar year 1944	78,267	834	42	214	155,300
January	2,104	77	58	67.9	4,170
February	2,835	303	64	101	5,620
March	3,057	161	66	98.6	6,060
April	4,144	256	84	138	8,220
May	14,340	656	286	463	28,440
June	11,081	568	217	369	21,980
July	13,012	601	195	420	25,810
August	5,732	314	99	185	11,370
September	6,110	308	124	204	12,120
Water year 1944-45	70,363	656	56	193	139,600

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for station at Thistle.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Spanish Fork near Lake Shore, Utah

Location.- Water-stage recorder and low-water wooden control, lat. 40°10', long. 111°44', in SE $\frac{1}{4}$ sec. 32, T. 7 S., R. 2 E., 400 feet downstream from bridge, 1 mile upstream from mouth, and 2.5 miles north of Lake Shore.

Drainage area.- 700 square miles.

Records available.- January 1938 to September 1945. December 1903 to July 1907 and March 1909 to September 1925 at site 3 miles upstream.

Average discharge.- 24 years (1904-6, 1909-19, 1920-25, 1938-45), 93.2 second-feet.

Extremes.- Maximum discharge during year, 541 second-feet May 9; minimum daily, 0.3 second-foot on several days during July, August, and September.

1903-7, 1909-25, 1938-45: Maximum discharge observed, 1,100 second-feet May 7, 1922; practically no flow at times during irrigation season of most years.

Remarks.- Records good Jan. 17 to May 20 and fair remainder of year. Flow regulated by many diversions for irrigation and hydroelectric power plant. During latter part of irrigation season only waste and return waters pass gage. Station is below all diversions.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.8	30	72	65	86	93	128	a325	1.4	0.6	0.6	0.3
2	7.4	50	71	76	92	100	116	360	a1	.5	12	.4
3	9.2	65	a78	77	235	95	106	392	a1	.8	.7	10
4	7.8	60	a70	74	345	94	104	417	a1	2.1	20	1.9
5	11	64	a68	68	169	94	106	420	2.1	1.9	18	1.7
6	11	71	a70	74	124	91	108	438	.6	1.0	2.1	1.4
7	12	76	a70	73	114	93	120	500	.6	.5	8.6	1.2
8	12	79	a68	78	96	88	138	513	.6	.8	7.4	1.0
9	11	75	a65	82	108	95	137	523	7.8	.4	2.3	1.0
10	14	72	a60	75	107	118	135	497	37	5.7	1.7	1.0
11	14	71	a58	80	106	150	116	512	75	.9	1.7	.9
12	11	72	a56	82	98	172	120	443	21	.6	1.7	.7
13	11	79	a55	80	100	197	114	411	11	.6	98	.7
14	11	78	a58	82	168	153	115	394	16	.6	6.5	.5
15	11	80	a60	86	227	152	111	361	5.7	.7	3.2	.5
16	13	78	a60	93	132	131	114	319	3.0	.6	11	.4
17	14	77	a60	108	123	112	278	3.5	.5	.6	5.4	.6
18	26	72	a58	85	118	115	117	242	3.2	.5	3.2	.7
19	20	67	a60	86	110	112	138	216	2.1	.4	2.5	1.2
20	17	72	a62	87	108	114	174	187	1.9	6.2	5.2	.6
21	17	70	64	81	102	118	211	174	2.8	.7	1.9	.3
22	18	67	75	84	92	131	246	114	1.4	.3	.8	.7
23	19	64	83	75	85	144	255	a60	.7	.4	.4	8.3
24	21	72	86	78	102	130	284	a35	.4	.4	.3	1.7
25	20	75	78	79	97	115	260	a20	.6	.4	1.0	3.0
26	17	68	70	78	91	116	232	8.3	.4	.4	.5	.8
27	14	76	71	80	83	115	a220	4.6	.4	.4	.5	5.4
28	16	77	76	75	89	110	a215	5.4	.5	1.0	.3	3.2
29	18	75	74	81	-	108	a225	4.6	.7	.8	.5	5.2
30	16	72	74	78	-	108	a275	2.5	1.7	.6	.3	9.5
31	19	-	66	78	-	114	-	4.6	-	1.7	.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	442.2	26	3.8	14.3	877
November.....	2,104	80	3.4	70.1	4,370
December.....	2,099	86	56	67.7	4,160
Calendar year 1944.....	32,092.9	720	.1	87.7	63,650
January.....	2,464	93	65	79.5	4,890
February.....	3,500	345	83	125	6,940
March.....	3,689	197	83	119	7,320
April.....	4,832	284	104	161	9,580
May.....	8,181.0	523	2.5	264	16,230
June.....	205.1	75	.4	6.84	407
July.....	33.1	6.2	.3	1.07	66
August.....	218.6	98	.3	7.05	434
September.....	64.4	10	.3	2.15	128
Water year 1944-45.....	27,832.4	523	.3	78.5	55,200

a No gage-height record; discharge computed on basis of weather records and records for station at Castilla.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Diamond Fork near Thistle, Utah

Location.- Water-stage recorder, lat. 40°02'15", long. 111°29'20", in NW¼NE¼ sec. 16, T. 9 S., R. 4 E., 1¼ miles upstream from mouth, 3 miles north of Thistle, and 3½ miles downstream from Little Diamond Creek.

Drainage area.- 155 square miles.

Records available.- April 1940 to September 1945. December 1907 to September 1917 at site 1 1/3 miles downstream.

Extremes.- Maximum discharge during year, 532 second-feet (regulated) July 8 (gage height, 3.52 feet); minimum, 1.6 second-foot Nov. 26, probably caused by beaver dam 100 feet upstream.

1907-17, 1940-45: Maximum discharge observed, 735 second-foot May 9, 1909; minimum, that of Nov. 26, 1944.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Small diversions above station for irrigation. Flow is materially increased by water diverted by tunnel from Strawberry Reservoir in Colorado River Basin (capacity, 250,000 acre-feet) for irrigation in Jordan River Basin.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a90	23	12	b9	a11	13	29	100	189	458	234	246
2	a78	18	12	b10	13	16	23	118	178	432	171	244
3	a75	16	13	a10	22	14	19	131	193	406	95	234
4	90	14	9.7	a9	22	13	19	136	193	348	75	200
5	113	14	7.7	a10	17	12	20	148	107	381	62	182
6	131	14	10	a11	14	12	26	209	84	437	56	163
7	140	17	12	a11	11	15	32	198	73	484	50	142
8	154	16	12	a11	14	12	36	196	75	523	52	161
9	163	15	8.1	a10	15	15	32	185	75	493	41	161
10	144	14	*4.0	a10	14	20	30	178	84	432	36	154
11	144	14	6.1	a11	14	27	26	180	77	392	33	182
12	118	17	7.3	a10	13	31	27	178	75	375	64	180
13	82	16	7.7	a11	19	29	22	169	74	364	82	199
14	a50	14	8.5	a12	32	28	23	163	74	332	43	185
15	a25	14	8.5	a12	22	27	22	146	72	305	37	169
16	a19	14	9.1	a12	*14	20	24	135	72	332	34	174
17	a20	13	8.5	*a11	14	19	25	129	70	353	60	154
18	20	14	8.5	8.5	17	16	31	127	69	364	118	136
19	19	14	8.5	13	14	17	42	125	111	367	142	142
20	19	14	9.1	10	14	18	57	120	182	326	136	148
21	19	14	12	9.7	13	21	70	114	266	292	113	129
22	19	13	12	b9	9.7	24	80	109	321	248	129	111
23	20	12	15	b9	13	23	75	104	364	187	148	99
24	18	14	14	b9	14	20	87	100	364	142	176	78
25	18	13	12	b10	13	20	69	99	370	207	198	70
26	17	7.7	9.7	b11	9.7	21	64	99	437	287	200	89
27	18	17	b10	b10	13	20	56	99	481	334	185	80
28	18	13	b11	b9	14	20	57	118	461	337	189	84
29	18	8.1	12	b8	-	20	64	171	449	324	216	99
30	18	12	11	b9	-	23	82	222	458	284	241	113
31	16	-	b10	a10	-	27	-	213	-	263	246	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	1,893	163	16	61.1	3,750
November.....	428.8	23	7.7	14.3	851
December.....	311.0	15	4.0	10.0	617
Calendar year 1944.....	40,340.6	529	4.0	110	80,010
January.....	315.2	13	8	10.2	625
February.....	425.4	32	9.7	15.2	844
March.....	613	31	12	19.8	1,220
April.....	1,269	87	19	42.3	2,520
May.....	4,519	222	99	146	8,960
June.....	6,103	481	69	203	12,110
July.....	10,809	523	142	349	21,440
August.....	3,682	246	33	119	7,260
September.....	4,487	246	69	150	8,900
Water year 1944-45.....	34,835.4	523	4.0	95.4	69,100

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Spanish Fork at Castilla.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

JORDAN RIVER BASIN

Deer Creek Reservoir near Charleston, Utah

Location.- Mercury indicating gage, lat. 40°24', long. 111°32', in SW1/4 sec. 5, T. 5 S., R. 4 E., at dam on Provo River, half a mile upstream from Deer Creek and 4 1/2 miles southwest of Charleston. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

Records available.- December 1940 to September 1945.

Extremes.- Maximum contents during year, 86,350 acre-feet July 6 (elevation, 5,386.85 feet); minimum, 51,470 acre-feet Apr. 5, 6 (elevation, 5,364.75 feet).

1940-45: Maximum contents, that of July 6, 1945; minimum observed, 1,200 acre-feet Dec. 16, 1940 (elevation, 5,296.8 feet).

Remarks.- Reservoir is formed by earth-fill dam with concrete cut-off wall, completed in October 1941. Storage began in October 1940. Capacity, 152,560 acre-feet between elevations 5,280 feet (bottom of outlet tunnel) and 5,417 feet (top of 20-foot radial gates). Dead storage, 2,870 acre-feet below elevation 5,305 feet (sill of trash-rack structure). Water used for irrigation, domestic, and industrial purposes. Gage read once daily at 8 a.m.; contents given herein include dead storage and are computed from 12 p.m. elevations which are based on trend indicated by 8 a.m. readings.

Cooperation.- Records of daily elevations and contents furnished by Provo River water commissioner.

Contents, in acre-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54,280	53,360	55,060	56,960	54,450	56,500	52,120	53,930	63,610	86,490	80,510	71,920
2	54,210	53,320	55,180	57,000	55,200	56,450	52,120	54,280	64,070	85,680	80,250	71,600
3	54,170	53,290	55,290	57,080	56,210	56,370	52,030	54,700	64,820	86,860	80,080	71,270
4	54,120	53,320	55,380	57,080	56,640	56,280	51,750	55,200	65,600	86,100	79,910	70,950
5	54,100	53,360	55,460	57,080	56,740	56,190	51,470	56,790	67,510	86,300	79,650	70,630
6	54,070	53,360	55,530	57,080	56,790	56,090	51,470	56,570	68,880	86,350	79,360	70,310
7	54,040	53,380	55,600	57,060	56,740	55,990	51,610	57,440	69,990	86,170	79,070	69,990
8	54,010	53,360	55,680	57,000	56,710	55,890	51,690	58,240	70,630	85,990	78,790	69,670
9	53,980	53,360	55,700	56,960	56,740	55,750	52,070	59,120	71,030	86,510	78,540	69,360
10	53,970	53,400	55,700	56,900	56,790	55,600	52,000	60,300	71,680	86,630	78,280	69,090
11	53,950	53,440	55,720	56,820	56,740	55,460	51,960	61,570	72,160	85,450	77,990	68,880
12	53,940	53,500	55,730	56,710	56,710	55,420	51,920	62,550	72,480	85,270	77,690	68,650
13	53,900	53,560	55,750	56,610	56,930	55,450	51,840	63,910	72,690	85,060	77,390	68,410
14	53,860	53,620	55,760	56,530	57,220	55,680	51,790	64,830	73,210	84,820	77,100	68,170
15	53,810	53,670	55,780	56,450	57,410	55,990	51,680	65,450	73,640	84,590	76,850	67,920
16	53,780	53,740	55,790	56,380	57,440	56,180	51,680	65,910	73,750	84,380	76,560	67,680
17	53,770	53,610	55,810	56,290	57,460	56,240	51,720	66,150	73,790	84,160	76,280	67,350
18	53,730	53,600	55,820	56,130	57,610	56,060	51,720	66,390	73,820	83,930	75,990	67,080
19	53,700	54,000	55,850	56,080	57,460	56,710	51,680	66,610	74,820	83,700	75,730	66,860
20	53,680	54,100	55,920	55,980	57,390	56,200	51,680	66,840	75,430	83,470	75,460	66,660
21	53,670	54,180	55,990	55,920	57,320	54,700	51,690	66,950	76,610	83,220	75,200	66,500
22	53,660	54,260	56,280	55,660	57,230	54,520	52,170	66,950	77,860	82,960	74,940	66,340
23	53,640	54,350	56,420	55,500	57,150	54,590	52,620	66,530	79,500	82,730	74,670	66,190
24	53,620	54,440	56,570	55,350	57,060	54,420	52,870	66,070	80,890	82,610	74,410	65,990
25	53,570	54,520	56,640	55,220	56,970	54,070	53,150	65,600	81,900	82,490	74,130	65,710
26	53,500	54,600	56,680	55,090	56,830	53,640	53,360	65,120	82,960	82,280	73,850	65,400
27	53,430	54,690	56,730	54,960	56,680	53,160	53,470	64,650	83,840	81,990	73,540	65,060
28	53,360	54,780	56,770	54,830	56,540	52,660	53,590	64,170	84,470	81,730	73,210	64,710
29	53,290	54,860	56,890	54,700	-	52,510	53,680	63,760	84,820	81,470	72,890	64,360
30	53,220	54,950	56,930	54,680	-	52,030	53,710	63,380	85,240	81,200	72,560	64,010
31	53,290	-	56,930	54,450	-	51,960	-	63,300	-	80,660	72,240	-

Monthly elevations and contents, water year October 1944 to September 1945

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30.....	5,366.85	54,420	-
Oct. 31.....	5,366.05	53,290	-1,130
Nov. 30.....	5,367.22	54,950	+1,660
Dec. 31.....	5,368.60	56,930	+1,980
Calendar year 1944....	-	-	+30,560
Jan. 31.....	5,366.87	54,450	-2,490
Feb. 29.....	5,369.33	56,540	+2,090
Mar. 31.....	5,365.10	51,960	-4,580
Apr. 30.....	5,366.35	53,710	+1,750
May 31.....	5,372.90	63,300	+9,590
June 30.....	5,386.23	85,240	+21,940
July 31.....	5,383.75	80,860	-4,380
Aug. 31.....	5,378.60	72,240	-8,620
Sept. 30.....	5,375.36	64,010	-8,230
Water year 1944-45....	-	-	+9,590

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Provo River at Vivian Park, Utah

Location.- Water-stage recorder, lat. 40°22', long. 111°34', in NW 1/4 sec. 25, T. 5 S., R. 3 E., half a mile downstream from North Fork, 3,500 feet northeast of Vivian Park, and three-quarters of a mile upstream from South Fork.

Drainage area.- 600 square miles.

Records available.- November 1911 to September 1945.

Average discharge.- 33 years, 349 second-feet (since 1932 flow includes that of Weber-Provo diversion canal).

Extremes.- Maximum discharge during year, 921 second-feet (regulated) June 14 (gage height, 4.24 feet); minimum daily, 148 second-feet (regulated) Oct. 9, 12.
1911-45: Maximum discharge observed, 3,180 second-feet July 11, 1921; minimum, 49 second-feet July 17, 1934.

Remarks.- Records good. Station is below diversions for irrigation in Heber Valley and above those in vicinity of Provo. Flow regulated by Deer Creek Reservoir and small lakes at headwaters that serve as reservoirs. Records include flow of Weber-Provo diversion canal (see p. 105).

Cooperation.- Seventeen discharge measurements furnished by Bureau of Reclamation.

Discharges, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	215	192	188	184	255	268	300	466	552	419	422	387
2	199	190	188	184	289	268	286	519	508	419	419	384
3	184	190	188	184	309	265	286	628	537	435	416	396
4	175	188	188	184	265	265	286	757	544	445	409	390
5	164	186	188	197	260	263	286	878	605	442	400	387
6	160	186	188	224	255	260	286	883	685	438	393	384
7	158	190	188	234	252	263	289	878	797	442	384	371
8	164	186	186	234	252	260	292	878	888	432	371	368
9	148	186	186	234	255	260	295	874	883	416	371	369
10	150	188	186	254	252	263	292	874	893	359	368	332
11	150	188	186	244	252	265	289	883	883	362	371	317
12	148	188	184	252	252	268	289	878	883	364	381	332
13	158	188	184	252	273	273	286	883	907	390	387	341
14	158	188	184	252	268	284	286	874	921	393	387	341
15	158	188	184	252	260	273	286	864	916	396	390	341
16	158	188	184	255	257	292	286	855	912	390	390	347
17	158	188	184	255	285	297	289	855	907	390	390	347
18	158	188	184	260	270	320	292	850	893	390	384	344
19	158	188	181	260	270	384	297	850	706	393	374	332
20	158	188	184	257	268	442	300	850	590	396	374	332
21	160	188	184	257	268	462	312	860	590	396	374	332
22	169	186	188	257	268	462	320	860	567	387	371	335
23	175	188	199	257	268	468	323	855	512	394	365	332
24	175	188	188	257	268	494	326	855	526	387	374	332
25	184	188	188	255	268	522	323	860	541	393	381	359
26	188	188	186	255	265	522	320	860	541	396	378	384
27	188	188	184	257	268	522	317	864	537	409	374	384
28	188	188	186	258	268	522	317	864	533	416	384	381
29	188	188	186	255	-	526	332	864	526	419	390	381
30	188	188	184	257	-	469	412	869	472	419	390	378
31	195	-	184	255	-	384	-	723	-	419	390	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	5,267	215	148	170	10,450
November	5,640	192	186	188	11,190
December	5,770	188	181	186	11,440
Calendar year 1944	127,267	1,050	148	348	252,400
January	7,449	260	184	240	14,770
February	7,420	309	222	265	14,720
March	11,076	526	280	357	21,970
April	9,100	412	263	303	18,050
May	25,611	883	466	626	50,800
June	20,755	921	472	692	41,170
July	12,556	445	359	405	24,800
August	11,952	422	365	386	23,710
September	10,730	396	317	358	21,280
Water year 1944-45	133,326	921	148	365	264,400

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.
To convert war time to standard time, subtract 1 hour.

Provo River at Provo, Utah

Location.— Water-stage recorder, lat. 40°14'15", long. 111°41'45", in NE $\frac{1}{4}$ sec. 3, T. 7 S., R. 2 E., 1,300 feet downstream from bridge on State Highway 114, 2 miles west of Provo, and 2 miles upstream from mouth.

Records available.— June 1933 to September 1934 and November 1938 to September 1945.

January 1937 to November 1938 at site 1,100 feet upstream, above one small diversion.

May 1903 to June 1905 at site three-quarters of a mile upstream, above three small diversions. Records equivalent when adjusted for diversions.

Extremes.— Maximum discharge during year, 744 second-feet May 7 (gage height, 4.89 feet); minimum daily recorded, 0.8 second-foot Aug. 23, but may have been less during period of no gage-height record July 1-26.

1903-5, 1933-34, 1937-45: Maximum discharge observed, 1,620 second-feet May 27, 1904; practically no flow during several periods.

Remarks.— Records good except those for periods of no gage-height record, which are fair. Station is below all diversions. At times entire flow is diverted above station for irrigation. Factory race diverts water above station into Provo Bay, an arm of Utah Lake, and Provo River water commissioner furnished following records of this diverted flow for water year 1944-45:

Month	Diversion (acre-feet)	Month	Diversion (acre-feet)
October.....	570	May.....	273
November.....	756	June.....	390
December.....	750	July.....	360
January.....	756	August.....	626
February.....	862	September.....	726
March.....	961		
April.....	408	Water year 1944-45..	7,438

Cooperation.— Eleven discharge measurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	149	a200	214	302	302	371	327	146		3.4	1.9
2	16	179	a200	214	337	305	345	350	60		4.4	1.9
3	38	166	a205	216	400	305	342	405	46		5.4	2.1
4	42	151	a200	216	340	305	354	546	48		8.7	2.6
5	42	155	a200	231	320	302	332	694	186	a2	14	5.6
6	42	166	a195	254	317	298	334	721	461		13	13
7	49	185	a190	272	310	302	337	709	491		11	9.8
8	54	183	a190	272	305	302	347	693	519		9.4	8.0
9	49	197	a190	272	307	305	353	684	481		8.3	8.0
10	53	195	181	274	302	305	350	662	562		6.6	8.3
11	61	195	187	281	300	302	347	650	567		3.8	8.0
12	67	187	197	295	295	302	350	591	531		2.4	4.1
13	71	205	203	295	307	305	345	555	495		1.2	4.1
14	66	199	205	293	312	314	342	522	489		1.0	4.8
15	68	187	205	288	302	320	342	498	466	a3	1.1	3.6
16	74	197	205	293	295	310	342	469	447		1.1	2.8
17	86	193	203	288	302	314	342	450	441		1.3	2.8
18	107	185	201	293	312	314	334	444	430		1.2	5.9
19	114	185	205	290	310	350	332	444	314		.9	14
20	114	189	214	290	312	394	322	450	109		.9	31
21	113	195	214	290	310	422	320	450	81		.9	42
22	118	197	224	288	307	430	353	466	70		.9	48
23	124	199	263	288	307	430	353	444	32	a4	.8	56
24	124	205	255	290	305	441	360	422	20		1.1	61
25	125	a205	224	290	305	469	353	408	21		2.8	130
26	134	a210	220	293	302	478	342	411	20	a5	2.6	173
27	114	a200	216	295	305	481	337	394	42	3.1	1.7	210
28	114	a195	216	295	305	478	330	381	88	3.1	1.4	203
29	118	a195	216	295	-	469	300	363	102	3.1	1.6	203
30	107	a200	214	295	-	452	305	368	59	3.1	2.4	205
31	109	-	214	295	-	411	-	322	-	3.1	2.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	2,523	134	10	81.4	5,000
November.....	5,649	210	149	182	11,800
December.....	6,432	263	181	207	12,760
Calendar year 1944	74,537.9	772	.9	204	147,800
January.....	8,555	295	214	276	16,970
February.....	8,733	400	295	312	17,320
March.....	11,213	481	298	366	22,840
April.....	10,136	371	300	340	20,220
May.....	15,283	721	322	493	30,310
June.....	7,824	567	20	261	15,520
July.....	89.5	-	-	2.89	178
August.....	117.4	14	.8	3.79	233
September.....	1,493.3	210	1.9	49.8	2,960
Water year 1944-45	78,108.2	721	-	214	154,900

a No gage-height record; discharge computed on basis of recorded range in stage, weather records, and records for station at Vivian Park.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Weber-Provo diversion canal near Woodland, Utah

Location.- Water-stage recorder and sharp crested weir, lat. 40°36'40", long. 111°18'15", in SW $\frac{1}{4}$ sec. 30, T. 2 S., R. 6 E., 100 feet upstream from outlet to Provo River and $\frac{1}{2}$ miles northwest of Woodland.

Records available.- October 1931 to September 1945.

Extremes.- Maximum daily discharge during year, 633 second-feet June 25, 26; no water diverted from Weber River or Beaver Creek for several months.

1931-45: Maximum daily discharge, that of June 25, 26, 1945; no water diverted from Weber River or Beaver Creek for several months during each year.

Remarks.- Canal diverts water from Weber River in SW $\frac{1}{4}$ sec. 21, T. 1 S., R. 6 E., and from Beaver Creek in NE $\frac{1}{4}$ sec. 17, T. 2 S., R. 6 E., to Provo River for irrigation along Provo and Jordan Rivers. Figures given herein represent flow 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.

Cooperation.- Records of daily discharge furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	45	182	277		
2							-	65	244	275		
3							-	78	248	258		
4							-	86	320	228		
5							-	129	419	164		
6							-	155	437	42		
7							-	168	415	34		
8							-	160	397	19		
9							-	152	365	-		
10							-	152	393	-		
11							-	179	366	-		
12							-	168	382	-		
13							-	166	430	-		
14							-	219	441	-		
15							-	277	456	-		
16							-	262	400	-		
17							-	262	387	-		
18							-	275	437	-		
19							-	283	500	-		
20							-	302	556	-		
21							-	353	571	-		
22							-	320	604	-		
23							-	270	614	-		
24							-	210	628	-		
25							-	104	633	-		
26							-	103	633	-		
27							-	118	576	-		
28							6.7	201	452	-		
29							22	168	398	-		
30							34	109	310	-		
31							-	150	-	-		

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	-	-	-	-	-
November.....	-	-	-	-	-
December.....	-	-	-	-	-
Calendar year 1944	29,358.4	525	-	80.2	58,230
January.....	-	-	-	-	-
February.....	-	-	-	-	-
March.....	-	-	-	-	-
April.....	62.7	34	-	2.09	124
May.....	5,669	353	45	183	11,240
June.....	13,173	633	182	439	26,130
July.....	1,297	277	-	41.8	2,670
August.....	-	-	-	-	-
September.....	-	-	-	-	-
Water year 1944-45	20,201.7	633	-	55.3	40,060

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.
To convert war time to standard time, subtract 1 hour.

South Fork Provo River at Vivian Park, Utah

Location.- Water-stage recorder and Parshall flume, lat. $40^{\circ}21'$, long. $111^{\circ}34'$, in SE $\frac{1}{4}$ sec. 26, T. 5 S., R. 3 E., a quarter of a mile southeast of Vivian Park and half a mile upstream from mouth.

Drainage area.- 30 square miles.

Records available.- November 1911 to September 1945.

Average discharge.- 33 years, 30.1 second-feet.

Extremes.- Maximum discharge during year, 62 second-feet Feb. 2 (gage height, 1.45 feet); minimum, 19 second-feet Apr. 21.

1911-45: Maximum discharge observed, 123 second-feet May 27, 1922; minimum discharge, 13 second-feet several times in 1934, 1935, Apr. 2, 1937.

Remarks.- Records good. Station below all diversions.

Cooperation.- Twelve discharge measurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	34	a29	30	29	26	28	28	30	28	28	36
2	30	33	a29	30	40	27	28	22	28	28	28	36
3	30	32	a28	29	42	27	28	34	29	30	29	36
4	30	32	a28	29	31	27	28	36	32	30	29	35
5	30	32	a28	29	30	26	28	40	35	30	29	35
6	30	32	a28	29	29	26	28	43	36	30	30	34
7	30	33	a29	29	28	28	29	47	37	30	34	34
8	29	32	a29	29	28	26	29	49	36	31	34	34
9	29	a32	30	29	28	26	28	48	36	30	31	32
10	28	a32	29	29	28	27	28	47	36	31	30	36
11	28	a32	29	29	28	28	27	49	35	32	28	56
12	29	a31	28	29	27	28	27	50	34	30	28	36
13	29	a31	28	29	b27	28	26	53	34	32	28	36
14	29	a31	28	29	b28	30	26	53	35	32	28	36
15	29	a31	28	29	28	28	26	51	34	32	30	34
16	29	a30	28	29	26	27	26	48	32	31	32	34
17	29	a30	28	29	28	27	28	45	32	31	33	34
18	30	a30	28	29	28	26	26	44	32	30	34	34
19	32	a30	28	29	28	26	25	44	32	30	34	34
20	31	30	28	29	28	26	22	44	32	30	34	32
21	31	30	28	28	28	28	19	42	32	30	34	33
22	31	30	32	28	27	28	21	39	34	30	34	35
23	31	31	33	28	27	28	22	36	33	31	34	36
24	31	32	30	28	27	28	25	34	34	31	34	39
25	32	32	30	28	27	28	26	34	33	31	36	39
26	34	32	30	28	26	28	26	32	32	31	34	39
27	32	30	30	29	26	28	26	30	32	30	34	39
28	32	29	29	29	26	28	26	30	30	30	34	39
29	32	29	30	29	-	28	26	29	30	30	33	39
30	32	a29	29	29	-	28	27	30	29	29	34	39
31	34	-	29	28	-	29	-	31	-	29	35	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	942	34	28	30.4	1,870
November.....	934	34	29	31.1	1,850
December.....	898	33	28	29.0	1,780
Calendar year 1944	10,369	36	23	28.4	20,620
January.....	894	30	28	28.8	1,770
February.....	806	42	26	28.8	1,600
March.....	847	30	26	27.3	1,680
April.....	783	29	19	26.1	1,550
May.....	1,252	53	28	40.4	2,480
June.....	986	37	28	32.9	1,960
July.....	940	32	28	30.3	1,860
August.....	987	36	28	31.8	1,960
September.....	1,070	39	32	35.7	2,120
Water year 1944-45	11,358	53	19	31.1	22,480

a No gage-height record; discharge interpolated Nov. 9-19; discharge for Nov. 30 to Dec. 8 computed on basis of partial gage-height record Dec. 1, recorded range in stage, and weather records.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Surplus Canal at Salt Lake City, Utah

Location.- Water-stage recorder, lat. 40°44', long. 111°55', in SW¼ sec. 14, T. 1 S., R. 1 W., 300 feet 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 1945.

Extremes (regulated).- Maximum discharge during year, 436 second-feet June 5 (gage height, 4.82 feet); minimum daily, 48 second-feet Apr. 8.
1942-45: Maximum discharge, 965 second-feet June 3, 1944 (gage height, 7.50 feet); minimum daily, 31 second-feet July 4, 1943.

Remarks.- Records good. Flow regulated by head gates at diversion dam 300 feet above station. Canal was built to bypass floodwater of Jordan River around Salt Lake City residential area. (See p. 97 for records of combined flow of Jordan River and Canal.) Several diversions below station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	186	105	99	62	50	56	59	98	202	145	124	99
2	177	100	104	60	53	59	53	104	204	132	130	83
3	168	72	104	61	55	57	52	158	222	135	143	90
4	169	55	100	60	69	59	50	158	304	136	180	99
5	163	73	98	60	62	59	49	153	360	139	142	91
6	156	88	95	60	62	56	48	168	420	123	84	103
7	153	105	90	60	57	56	48	183	497	109	100	87
8	152	103	88	60	56	55	46	153	371	117	162	89
9	145	80	87	59	60	54	50	130	328	112	153	94
10	135	67	83	59	60	53	53	131	325	108	158	110
11	126	62	70	58	64	53	52	172	320	112	145	103
12	123	60	60	58	63	50	52	181	304	112	137	95
13	135	64	60	58	65	50	52	194	302	111	140	93
14	136	66	59	59	70	52	50	198	292	111	128	95
15	132	65	58	63	68	54	50	176	255	110	139	102
16	107	57	63	67	63	60	51	162	229	99	139	110
17	106	71	69	67	62	66	50	180	211	93	151	98
18	97	88	68	65	67	69	50	176	198	95	137	112
19	95	88	66	63	70	63	49	162	195	143	170	127
20	91	88	64	61	72	55	50	156	211	133	268	146
21	89	90	64	61	70	52	50	156	224	126	208	136
22	76	93	66	59	65	51	61	122	235	124	124	172
23	69	99	74	56	65	51	51	88	224	144	105	171
24	70	95	80	55	63	54	77	96	245	145	85	151
25	77	93	73	53	61	55	99	133	229	153	82	139
26	72	81	71	53	58	59	89	150	190	148	93	135
27	70	92	70	52	57	54	98	147	187	127	95	150
28	77	95	68	52	56	56	121	158	188	97	86	159
29	80	96	71	50	-	57	154	152	178	101	88	151
30	88	96	69	49	-	55	97	172	163	113	99	151
31	107	-	65	48	-	54	-	186	-	124	97	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	3,629	186	69	117	7,200
November.....	2,505	105	57	83.5	4,970
December.....	2,356	104	58	76.0	4,670
Calendar year 1944.....	52,616	893	39	144	104,400
January.....	1,808	77	48	58.3	3,590
February.....	1,758	62	50	62.8	3,490
March.....	1,734	69	50	55.9	3,440
April.....	1,891	134	46	63.0	3,750
May.....	4,763	198	96	154	9,450
June.....	7,723	420	163	257	15,320
July.....	3,777	153	93	122	7,490
August.....	4,082	268	82	132	8,100
September.....	3,541	172	85	118	7,020
Water year 1944-45.....	39,567	420	46	108	78,490

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.
To convert war time to standard time, subtract 1 hour.

Sevier River at Hatch, Utah

Location.- Water-stage recorder, lat. 37°39'00", long. 112°25'30", in SW¼ sec. 28, T. 36 S., R. 5 W., 100 feet downstream from bridge, 0.2 mile east of Hatch, and 2.8 miles downstream from Mammoth Creek.

Drainage area.- 260 square miles.

Records available.- June 1911 to September 1928 (many years incomplete), June 1939 to September 1945.

Average discharge.- 14 years (1912-13, 1914-16, 1917-18, 1922-23, 1924-27, 1939-45), 147 second-feet.

Extremes.- Maximum discharge during year, 480 second-feet May 14 (gage height, 2.65 feet); minimum, 57 second-feet Mar. 9, Apr. 15, but may have been less during period of no gage-height record.

1911-28, 1929-45: Maximum discharge not determined, occurred May 25, 1914, when Hatchtown Dam failed; maximum recorded, 1,490 second-feet May 26, 1922 (gage height, 5.25 feet, datum then in use); minimum daily, 10 second-feet (regulated) for several days in 1912 when water was stored in Hatchtown Reservoir.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Two small diversions from Mammoth Creek above station for irrigation. No regulation since Hatchtown Dam failed in 1914.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	89	78	72	b60		a62	93	217	287	126	121	82
2	89	78	72			a62	82	220	290	121	136	161
3	89	77	76			a62	77	242	287	117	131	113
4	85	80	b70			a62	77	261	333	117	129	96
5	84	82	b66			a60	82	280	342	113	124	94
6	84	85	66			a60	80	300	329	108	126	93
7	84	85	64			a60	85	300	293	106	141	93
8	80	84	64			a62	84	313	280	111	115	91
9	78	80	b62			*62	76	329	267	121	111	87
10	82	80	b60			b65	74	339	277	117	111	85
11	82	80	b60			b70	66	369	261	106	129	85
12	91	*87	b60			94	66	412	271	104	148	85
13	87	89	b60			84	65	453	258	100	151	85
14	84	85	*b60			78	64	470	255	96	126	85
15	80	91	b60			76	64	457	245	94	113	85
16	82	91	b60			b72	66	433	229	94	108	84
17	80	91	b60			b68	76	433	220	94	129	84
18	84	87	b60			b65	91	443	210	91	126	84
19	82	89	b64			64	98	433	198	93	104	85
20	82	87	68			66	117	419	189	91	100	85
21	84	84	68			71	138	382	175	87	98	84
22	84	78	68			71	151	323	166	89	96	84
23	92	80	70			68	136	316	161	96	89	84
24	90	82	70			66	148	356	153	132	96	84
25	80	84	66			71	161	382	153	159	96	84
26	80	84	68			71	143	389	146	146	133	82
27	80	77	68			70	136	369	143	136	96	82
28	80	76	70			71	151	352	141	129	91	80
29	80	77	66			68	181	336	138	121	87	78
30	78	78	b64			71	195	326	131	113	85	78
31	78	-	b62			82	-	310	-	119	84	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	2,664	91	78	82.7	5,090
November.....	2,486	91	76	82.9	4,930
December.....	2,024	76	60	65.3	4,010
Calendar year 1944	52,644	611	56	144	104,400
January.....	1,946	-	-	62.7	3,860
February.....	1,820	-	-	65.0	3,510
March.....	2,134	94	60	68.8	4,330
April.....	3,123	195	64	104	6,190
May.....	10,964	470	217	354	21,750
June.....	6,828	342	131	228	13,540
July.....	3,447	159	87	111	6,840
August.....	3,530	151	84	114	7,000
September.....	2,662	161	78	88.7	5,280
Water year 1944-45	43,527	470	-	119	86,330

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for station near Kingston.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Sevier River near Kingston, Utah

Location.- Water-stage recorder and concrete control, lat. $38^{\circ}12'$, long. $112^{\circ}12'$, in NE $\frac{1}{4}$ sec. 16, T. 30 S., R. 3 W., 1,000 feet upstream from bridge on State Highway 22, 1 mile west of Kingston, and 2 miles upstream from East Fork.

Drainage area.- 1,110 square miles.

Records available.- June 1914 to September 1945.

Average discharge.- 31 years, 150 second-feet.

Extremes.- Maximum discharge during year, 748 second-feet Sept. 3 (gage height, 2.62 feet); minimum daily, 18 second-feet July 15.
1914-45: Maximum discharge, 3,000 second-feet (including estimated flow of 360 second-feet, in overflow channel bypassing station) Mar. 4, 1938 (gage height, 5.20 feet), from rating curve extended above 1,100 second-feet; minimum, 4 second-feet Sept. 9, 1943.

Remarks.- Records good except those for periods of ice effect or doubtful or no gage-height record, which are fair. Many diversions above station; none between station and mouth of East Fork.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59	144	157	d130	148	138	160	201	109	20	34	23
2	72	138	157	d130	180	141	174	216	104	19	46	25
3	94	132	163	d130	184	141	154	235	96	d18	43	342
4	98	126	154	d130	180	141	135	239	96	d18	50	a100
5	98	138	141	d130	167	141	141	209	144	d18	104	a45
6	107	141	144	d130	157	d130	144	209	170	d18	126	a40
7	104	148	144	d130	151	138	151	209	135	19	96	a36
8	96	151	144	d130	154	138	157	187	123	20	132	a37
9	98	148	144	d140	157	144	157	144	144	22	160	a37
10	101	144	141	d180	154	144	157	129	138	22	107	a38
11	101	141	141	d155	154	154	157	126	151	22	88	40
12	109	138	132	160	157	180	160	174	135	20	70	48
13	121	148	121	163	157	209	160	174	123	20	141	53
14	118	151	121	170	174	191	151	212	121	20	121	52
15	115	154	123	170	180	191	144	270	129	18	86	48
16	112	160	b125	170	167	180	148	216	123	20	88	52
17	107	167	129	167	157	180	151	184	123	19	86	57
18	96	167	126	160	160	160	163	167	115	19	50	57
19	101	163	126	157	157	157	174	235	98	20	61	55
20	109	163	129	160	151	157	177	258	76	20	43	61
21	109	160	132	163	148	151	187	258	63	20	34	61
22	115	160	141	151	138	163	220	259	59	21	30	59
23	109	157	b150	d140	154	180	209	212	59	30	33	57
24	107	167	157	154	d140	154	184	212	59	37	21	354
25	118	157	148	144	d140	148	212	157	63	63	23	61
26	123	160	144	148	d140	154	212	177	43	84	20	68
27	138	160	141	157	138	151	198	198	38	78	24	68
28	126	157	138	151	135	144	184	191	35	48	25	70
29	132	154	d135	b145	-	141	170	151	27	50	28	78
30	141	157	d130	b140	-	135	174	148	22	40	28	86
31	138	-	d130	144	-	138	-	132	-	30	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	3,362	141	59	108	6,670
November.....	4,551	157	126	152	9,035
December.....	4,315	163	121	139	8,560
Calendar year 1944	54,607.4	554	7.0	149	108,300
January.....	4,609	170	130	149	9,140
February.....	4,345	184	135	155	8,620
March.....	4,774	209	130	154	9,470
April.....	5,075	220	135	169	10,070
May.....	6,062	270	126	196	12,020
June.....	2,921	170	22	97.4	5,790
July.....	893	84	18	28.8	1,770
August.....	1,996	160	20	64.4	3,960
September.....	1,917	342	23	64.9	3,800
Water year 1944-45	44,820	342	18	123	88,900

a No gage-height record; discharge computed on basis of weather records and records for station at Hatch.

b Stage-discharge relation affected by ice.

c Doubtful gage-height record; discharge computed on basis of weather records and records for station at Hatch.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Piute Reservoir near Marysville, Utah

Location.- Staff gage, lat. 38°20', long. 112°12', in NW 1/4 sec. 3, T. 29 S., R. 3 W., at Piute Dam, 9 miles south of Marysville. Datum of gage is 5,900.8 feet above mean sea level.

Drainage area.- 2,440 square miles.

Records available.- March 1914 to September 1945.

Extremes.- Maximum contents during year, 74,010 acre-feet May 2, 3 (gage height, 76.0 feet); minimum, 15,680 acre-feet Oct. 4, 10, 11 (gage height, 42.9 feet).
1914-45: Maximum contents, 82,300 acre-feet May 28, 1922 (gage height, 76.4 feet, 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, 84,750 acre-feet between gage heights 16 feet (approximate bottom of reservoir) and 80 feet (top of flashboards on spillway). Spillway crest is at gage height 70.2 feet. No dead storage. Water is used for irrigation. Contents correspond to gage readings about 4 p.m. daily.

Contents, in acre-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15,020	20,060	28,760	40,440	50,000	59,240	69,300	73,780	61,640	54,710	34,800	31,020
2	15,910	20,710	29,200	40,620	50,390	59,540	69,980	74,010	60,980	54,110	34,480	30,410
3	15,790	21,580	29,550	40,800	50,580	59,880	69,790	74,010	60,540	53,610	34,150	30,260
4	15,680	22,060	30,110	40,980	50,970	60,320	70,030	73,760	60,320	52,920	33,830	30,110
5	15,790	22,200	30,560	41,160	51,350	60,540	70,280	73,760	60,100	52,130	34,150	30,110
6	15,910	22,340	31,020	41,520	51,740	60,760	70,520	73,760	59,880	51,360	34,640	29,950
7	15,020	22,470	31,490	41,880	52,130	60,980	70,760	73,760	59,670	50,280	35,290	29,800
8	15,910	22,610	31,940	42,240	52,530	61,200	71,010	73,760	59,450	49,430	35,950	29,550
9	15,790	22,750	32,100	42,600	52,920	61,540	71,280	73,510	59,670	48,490	36,830	29,200
10	15,680	22,890	32,410	42,970	53,120	62,080	71,500	73,010	59,680	47,560	37,500	28,460
11	15,680	23,030	32,720	43,350	53,320	62,530	71,750	72,500	60,320	46,640	37,820	27,730
12	15,790	23,160	33,040	43,690	53,710	62,760	72,000	72,000	60,760	45,900	38,180	26,860
13	15,910	23,300	33,360	44,060	54,110	62,980	72,250	71,750	60,980	44,980	38,530	25,990
14	15,020	23,300	33,670	44,420	54,510	63,210	72,500	71,750	61,200	44,240	38,510	25,140
15	15,140	23,440	33,990	44,790	54,910	63,660	72,760	72,000	61,420	43,330	39,030	24,430
16	15,250	23,580	34,320	45,160	55,310	64,110	72,760	71,600	61,420	42,420	39,560	23,440
17	15,490	23,860	34,640	45,530	55,710	64,540	73,260	71,010	61,640	41,520	39,740	22,340
18	16,720	24,140	34,960	45,900	56,120	64,570	73,260	70,030	61,860	40,620	39,910	21,520
19	16,950	24,430	35,290	46,260	56,530	64,800	73,510	69,780	59,880	39,740	39,740	20,710
20	17,190	24,710	35,620	46,640	56,930	65,080	73,510	69,060	59,450	38,850	39,560	19,930
21	17,430	25,140	35,950	47,000	57,140	65,290	73,760	68,330	58,820	37,990	39,200	19,180
22	17,680	25,560	36,460	47,380	57,340	65,730	73,760	67,610	58,390	37,650	38,680	18,410
23	17,920	25,850	36,960	47,740	57,550	66,190	73,760	66,890	57,760	37,300	38,160	17,680
24	18,160	26,280	37,470	47,930	57,750	66,650	73,510	66,420	57,340	37,130	37,650	17,070
25	18,410	26,570	37,990	48,120	58,170	67,130	74,010	65,960	66,930	36,960	37,130	16,780
26	18,660	26,860	38,330	48,310	58,590	67,610	73,760	65,500	66,730	36,790	36,290	16,490
27	18,780	27,150	38,680	48,490	58,820	67,850	73,510	64,900	66,550	36,530	35,290	16,250
28	19,040	27,580	39,030	48,670	59,030	68,330	73,760	64,110	66,120	36,290	34,520	15,140
29	19,280	27,880	39,330	49,060	-	68,570	73,760	63,440	65,710	35,960	33,360	14,140
30	19,540	28,320	39,740	49,430	-	68,810	73,760	62,780	65,310	35,450	32,570	16,250
31	19,800	-	40,090	49,690	-	69,050	-	62,310	-	35,130	31,790	-

Monthly gage height and contents, water year October 1944 to September 1945

Date	Gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30.....	43.3	16,140	-
Oct. 31.....	45.3	19,800	+3,660
Nov. 30.....	52.4	28,320	+8,520
Dec. 31.....	59.7	40,090	+11,770
Calendar year 1944.	-	-	+7,520
Jan. 31.....	-	49,620	+9,530
Feb. 28.....	69.6	59,030	+9,410
Mar. 31.....	74.0	69,050	+10,020
Apr. 30.....	75.9	73,760	+4,710
May 31.....	71.1	62,510	-11,450
June 30.....	67.8	55,310	-7,000
July 31.....	66.8	35,130	-20,180
Aug. 31.....	54.7	31,790	-3,340
Sept. 30.....	45.4	16,250	-15,540
Water year 1944-45.	-	-	+110

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Sevier River below Piute Dam, near Marysville, Utah

Location.- Water-stage recorder, lat. 38°20', long. 112°11', in NE¼ sec. 34, T. 28 S., R. 3 W., three-quarters of a mile downstream from Piute Dam and 8 miles south of Marysville.

Drainage area.- 2,440 square miles.

Records available.- May 1911 to September 1945.

Average discharge.- 33 years (1912-45), 251 second-feet.

Extremes (regulated).- Maximum discharge during year, 729 second-feet May 20 (gage height, 2.72 feet); minimum daily, 6 second-feet on many days December to March. 1911-45: Maximum discharge, 2,600 second-feet May 23, 24, 1922; practically no flow at times when reservoir gates are closed.

Remarks.- Records good except those for periods of no gage-height record or staff-gage readings, which are fair. One small diversion between gage and Piute Reservoir. Flow regulated by Piute Reservoir (see preceding page).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	285	102	13	6	h6.3	6	7	111	485	361	566	594
2	285	102	h13	6	6	6	7	135	482	334	562	598
3	258	102	13	6	6	6	7	195	423	340	482	402
4	212	102	13	h6.3	6	6	7	201	364	587	301	280
5	179	98	13	6	6	6	7	156	314	474	206	188
6	182	92	13	6	6	6	7	133	317	622	160	206
7	182	92	13	6	6	h6.0	7	152	203	646	a75	203
8	215	90	h13	6	6	6	7	184	117	622	a30	276
9	243	90	h12	6	6	6	7	171	47	614	a30	350
10	226	90	h9.6	6	6	6	7	324	a26	618	a74	364
11	195	90	9.4	6	6	6	7	317	a10	614	126	406
12	126	90	h9.2	6	6	h6.0	h7.3	340	a10	578	152	463
13	130	92	h7.3	6	6	6	h12	340	a50	606	192	531
14	126	92	7	6	6	h6.3	h15	304	79	543	163	642
15	121	92	7	6	6	7	h19	311	113	594	124	602
16	102	87	7	6	6	7	h36	530	158	634	135	594
17	85	63	7	6	6	43	445	229	434	235	590	
18	85	63	h7.3	6	6	h6.6	60	612	287	642	235	586
19	71	63	7	6	6	h7.0	111	527	409	678	314	546
20	63	63	7	6	6	7	158	642	441	693	340	516
21	63	51	7	6	6	7	160	543	441	656	338	497
22	63	a50	7	6	6	7	140	543	409	562	456	493
23	63	a50	h7.0	6	6	7	130	546	374	434	539	467
24	69	a50	7	h6.3	6	7	126	543	270	371	535	398
25	111	51	7	6	6	h7.3	184	500	223	381	546	547
26	100	51	7	6	6	7	276	493	102	470	594	327
27	100	51	7	6	6	7	160	546	124	519	638	276
28	100	49	7	6	6	7	142	550	235	631	618	117
29	102	37	6	6	-	7	119	543	270	602	566	117
30	102	14	6	6	-	7	111	539	298	602	566	74
31	102	-	6	6	-	7	-	493	-	566	594	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	4,325	285	63	140	8,580
November.....	2,209	102	14	75.6	4,380
December.....	274.8	13	6	8.86	545
Calendar year 1944.....	95,957	1,150	5	262	190,300
January.....	186.6	6.3	6	6.02	370
February.....	186.3	6.3	6	6.01	354
March.....	203.2	7.3	6	6.55	403
April.....	2,086.3	276	7	69.5	4,140
May.....	11,671	642	111	376	23,150
June.....	7,290	485	10	243	14,460
July.....	16,910	693	334	545	33,540
August.....	10,542	638	30	340	20,910
September.....	11,977	642	74	399	23,760
Water year 1944-45.....	67,843.2	693	6	186	134,600

a No gage-height record; discharge computed on basis of water commissioner's estimate of discharge and time of gate changes.

b Computed from staff-gage reading.

Note.- Recorder not operating Dec. 1 to Apr. 16; discharge computed on basis of 17 staff-gage readings, 5 discharge measurements, and observer's notes.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Sevier River above Clear Creek, near Sevier, Utah

Location.- Water-stage recorder, lat. 38°34'20", long. 112°15'25", in WANE sec. 5, T. 25 S., R. 4 W., 0.6 mile upstream from bridge on U. S. Highway 89, 0.7 mile upstream from Clear Creek, and 1 mile south of Sevier.

Drainage area.- 2,700 square miles.

Records available.- April 1939 to September 1945. May 1911 to September 1929 at site 0.8 mile downstream, published as Sevier River at Sevier; those for Nov. 16, 1916, to September 1929 include flow of Clear Creek and are not equivalent.

Average discharge.- 10 years (1912-16, 1939-45), 316 second-feet.

Extremes (regulated).- Maximum discharge during year, 732 second-feet May 20, July 20 (gage height, 2.97 feet); minimum, 13 second-feet Feb. 22.

1911-29, 1939-45: Maximum discharge, 2,800 second-feet during last week in May 1922, computed on basis of records for station near Marysville; minimum, 10 second-feet Nov. 27, 1919 (including flow of Clear Creek).

Remarks.- Records excellent except those for periods of ice effect or no gage-height record, which are fair. Many diversions above station for irrigation. Flow regulated by Piute and Otter Creek Reservoirs.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	293	124	51	b29	32	30	29	171	549	436	595	605
2	301	124	44	b29	35	30	30	153	539	467	600	610
3	290	124	43	b28	36	31	28	260	529	449	595	596
4	250	126	40	b28	34	30	29	301	472	449	347	347
5	230	126	40	b29	32	30	31	275	422	467	343	297
6	210	126	b40	b30	32	b28	31	230	405	626	324	260
7	207	124	b40	b31	31	*b30	31	230	384	698	246	297
8	204	121	40	b32	32	29	30	276	268	687	210	278
9	260	119	42	b33	31	29	30	293	192	681	144	351
10	260	*117	b40	b34	31	29	31	331	144	661	119	368
11	236	117	b35	33	32	29	32	401	114	697	119	397
12	214	114	*b28	b34	32	28	32	427	95	676	177	462
13	180	114	b28	b35	31	27	32	431	99	642	257	510
14	174	114	b30	34	33	28	32	436	198	648	260	590
15	171	114	b30	34	35	36	37	392	240	610	236	626
16	168	a114	b30	35	34	38	36	397	278	670	210	605
17	144	a110	b30	34	33	36	58	422	308	676	254	600
18	117	91	b30	34	33	35	66	584	401	681	290	600
19	110	93	b30	31	32	33	91	569	464	681	328	584
20	99	91	b30	35	32	33	128	654	574	727	351	644
21	90	88	b32	33	26	32	163	632	605	710	384	534
22	86	77	b34	33	35	31	177	600	681	427	514	514
23	84	77	b35	b33	33	32	166	584	569	584	614	610
24	82	77	b35	*b33	31	32	154	590	495	462	554	449
25	97	78	35	b32	31	32	160	584	427	431	554	405
26	129	72	b35	b32	29	31	285	549	355	476	579	376
27	119	b72	34	b31	30	30	254	574	250	549	616	347
28	124	b75	35	b30	31	30	217	600	347	569	654	284
29	126	75	31	b29	-	30	192	605	405	600	605	207
30	124	61	b30	b30	-	30	174	600	410	637	584	183
31	124	-	b30	b31	-	30	-	569	-	621	590	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	5,302	301	82	171	10,520
November	3,055	126	61	102	6,080
December	1,087	51	28	35.1	2,160
Calendar year 1944	112,427	1,140	28	307	223,000
January	998	35	26	31.9	1,960
February	899	36	26	32.1	1,780
March	959	38	27	30.9	1,900
April	2,786	286	28	92.9	5,530
May	13,722	654	171	443	27,220
June	11,128	605	95	371	22,070
July	18,659	727	431	602	37,010
August	12,195	654	119	365	24,190
September	13,335	626	193	444	26,460
Water year 1944-45	84,115	727	26	230	166,800

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for station below Piute Dam, near Marysville.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Sevier River near Sigurd, Utah

Location.- Water-stage recorder, lat. 38°52', long. 111°57', in SW¼ sec. 19, T. 22 S., R. 1 W., 200 feet 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 square miles.

Records available.- July to September 1912, July 1914 to September 1945.

Average discharge.- 31 years (1914-45), 116 second-feet.

Extremes (regulated).- Maximum discharge during year, 413 second-feet Apr. 23 (gage height, 2.93 feet); minimum, 2.6 second-feet June 27.

1914-45: Maximum discharge, 2,400 second-feet May 30, 1922 (gage height, 8.1 feet, datum then in use), from rating curve extended above 600 second-feet on basis of maximum discharge for other Sevier River stations; practically no flow (seepage only) when Rockyford Reservoir gates are closed.

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

Extreme low flow during irrigation season represents seepage and return flow from canals. Flow regulated by dams and reservoirs above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	127	139	120	125	118	139	127	18	4.6	6.2	18
2	92	125	135	116	131	118	135	116	20	5.0	5.8	23
3	107	127	141	118	141	118	139	114	18	5.0	5.8	23
4	100	127	143	112	141	116	141	118	20	5.0	6.2	27
5	97	118	135	114	137	116	141	141	64	5.0	5.8	36
6	83	123	136	116	129	118	143	131	68	5.0	4.8	72
7	97	126	135	121	121	118	143	97	59	4.8	4.6	87
8	105	129	133	125	120	120	127	47	57	5.8	a5	86
9	100	121	131	127	121	118	137	37	57	4.8	a5	84
10	93	121	125	127	120	118	152	27	69	4.2	a6	82
11	126	120	118	129	120	118	163	13	95	4.0	a6	72
12	120	121	114	127	120	116	198	9.5	98	3.8	a5	66
13	111	129	111	127	120	116	165	7.4	97	3.8	a15	57
14	114	120	112	129	121	116	129	7.4	87	4.0	a15	23
15	153	120	111	129	129	120	121	7.4	67	4.0	a18	12
16	127	114	112	131	120	143	129	5.4	54	4.4	a18	6.2
17	120	121	112	129	111	174	133	4.2	48	4.6	a18	4.2
18	143	133	112	129	112	185	152	3.8	34	4.8	a29	4.6
19	143	129	111	123	116	192	139	3.4	18	4.2	37	5.4
20	141	127	111	121	121	192	133	3.4	6.8	3.8	37	5.4
21	148	125	121	123	121	195	143	3.4	4.8	4.0	37	5.0
22	154	123	125	120	120	195	190	7.8	5.0	4.2	37	5.8
23	145	123	133	118	118	188	304	5.4	5.0	4.2	23	6.2
24	139	131	141	118	118	183	205	3.8	4.4	4.2	9.5	5.8
25	127	127	139	120	120	123	178	4.0	3.8	4.2	6.6	5.8
28	125	128	131	116	121	100	165	4.2	3.6	4.8	8.2	5.8
27	127	127	129	118	120	69	102	4.4	3.2	5.8	8.2	34
26	128	131	129	120	120	56	104	4.8	3.0	6.2	7.8	80
29	125	127	129	112	-	69	123	5.0	3.2	6.2	7.6	109
30	127	133	129	111	-	135	127	5.0	4.0	6.6	7.0	123
31	125	-	125	112	-	163	-	5.8	-	6.2	8.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	3,685	154	43	119	7,320
November.....	3,738	133	114	125	7,410
December.....	3,903	143	111	126	7,740
Calendar year 1944.....	51,767.6	936	2.8	141	102,700
January.....	3,758	131	111	121	7,450
February.....	3,434	141	111	123	6,810
March.....	4,126	195	56	133	8,180
April.....	4,520	304	104	151	8,970
May.....	1,073.5	141	3.4	34.6	2,130
June.....	1,093.8	98	3.0	36.5	2,170
July.....	147.2	6.6	3.8	4.75	292
August.....	419.9	37	4.6	15.6	553
September.....	1,176.2	123	4.2	39.2	2,330
Water year 1944-45.....	31,077.6	304	3.0	86.1	61,640

a No gage-height record; discharge computed on basis of water commissioner's notes.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Sevier River below San Pitch River, near Gunnison, Utah

Location.— Water-stage recorder, lat., 39°09', long. 111°52', in NE¼ sec. 14, T. 19 S., R. 7 W., 1,000 feet downstream from San Pitch River and 3 miles west of Gunnison.

Drainage area.— 4,880 square miles.

Records available.— October 1917 to September 1945.

Average discharge.— 28 years, 229 second-feet.

Extremes (regulated).— Maximum discharge during year, 543 second-feet Apr. 24 (gage height, 3.24 feet); minimum, 67 second-feet July 7, 8 (gage height, 1.33 feet). 1917-45: Maximum discharge, 2,620 second-feet June 1, 1922 (gage height, 5.68 feet, present datum); minimum daily, 8 second-feet July 13-17, Sept. 6, 1934.

Remarks.— Records good except those for period of no gage-height record, which are fair. Flow regulated by reservoirs and by many diversions for irrigation above station. Most of flow diverted above station during irrigation season.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	121	267	280	250	254	270	344	360	169	108	108	103
2	136	264	288	247	294	270	344	353	159	106	96	113
3	157	260	299	247	313	272	353	395	157	111	122	136
4	237	267	307	247	310	272	336	404	169	111	165	140
5	225	267	299	247	299	270	299	369	181	111	146	131
6	225	270	286	252	283	250	288	401	211	108	163	129
7	223	280	288	254	270	270	299	463	250	95	171	142
8	225	275	296	262	262	272	313	508	242	73	161	167
9	228	262	294	267	267	267	299	473	220	73	154	165
10	228	260	277	270	264	264	294	422	244	78	122	177
11	230	257	277	270	260	270	324	426	392	88	120	198
12	267	254	264	270	260	272	350	432	374	98	125	190
13	260	260	262	264	262	286	393	444	371	103	163	179
14	262	272	254	267	267	296	393	426	339	108	173	177
15	247	270	254	270	272	321	310	447	305	108	171	161
16	277	262	254	275	275	342	291	368	291	115	167	140
17	272	260	260	277	264	356	272	283	244	111	165	136
18	267	267	252	267	260	400	262	286	211	96	169	125
19	267	272	250	264	267	432	272	280	192	84	175	122
20	267	264	252	262	262	472	283	286	173	87	188	116
21	272	264	257	264	262	466	327	289	146	88	177	113
22	275	262	275	260	254	476	365	262	136	87	169	116
23	263	262	263	252	260	413	378	228	125	90	157	122
24	272	270	263	250	270	403	469	280	123	90	151	125
25	264	272	266	252	270	372	492	228	120	90	142	127
26	267	264	280	252	267	299	429	250	113	99	129	138
27	267	277	272	254	267	264	413	218	115	85	106	144
28	260	263	270	252	270	221	339	192	115	88	106	159
29	260	263	275	245	-	216	311	192	115	85	106	205
30	262	277	267	235	-	257	331	183	110	103	104	228
31	267	-	257	242	-	321	-	186	-	101	103	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	7,559	283	121	244	14,990
November.....	8,004	283	254	267	15,880
December.....	8,498	307	250	274	16,860
Calendar year 1944.....	112,438	1,310	85	307	223,000
January.....	7,987	277	235	258	15,840
February.....	7,565	313	254	271	15,040
March.....	9,842	486	216	317	19,520
April.....	10,163	492	262	339	20,160
May.....	10,314	508	183	333	20,460
June.....	6,112	392	110	204	12,120
July.....	2,996	115	73	96.6	5,840
August.....	4,466	183	96	144	8,540
September.....	4,424	228	103	147	8,770
Water year 1944-45.....	57,940	508	73	241	174,400

a No gage-height record; discharge computed on basis of records for station near Sigurd.
Time basis. Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.
 To convert war time to standard time, subtract 1 hour.

SEVIER LAKE BASIN

/ 115

Sevier Bridge Reservoir near Juab, Utah

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

Drainage area.- 5,120 square miles.

Records available.- January 1914 to September 1945.

Extremes.- Maximum contents during year, 231,800 acre-feet Apr. 27 to May 3 (gage height, 79.6 feet); minimum, 120,400 acre-feet Oct. 1-3 (gage height, 65.5 feet).
1914-45: Maximum contents, 251,000 acre-feet Apr. 19, 20, 1922 (gage height, 80.0 feet), from former capacity table; no contents at times during 1927-28, 1930-36.

Remarks.- Reservoir was formed by a 30-foot earth-fill dam and storage began about 1904; dam ultimately raised to 90 feet by June 1916. Capacity, 236,000 acre-feet between gage heights 6 feet (approximate bottom of outlet tunnel) and 80.0 feet (top of flashboard on spillway). No dead storage. Figures given herein represent total contents. Water is used for irrigation. Gage read to half-tenths about 9 a.m. daily; contents are as of that time.

Contents, in acre-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	120,400	133,100	148,400	163,900	180,800	197,800	216,400	231,800	203,900	192,900	160,800	156,300
2	120,400	133,800	149,100	164,700	181,600	198,300	216,400	231,800	202,100	191,200	160,100	155,600
3	120,900	134,400	149,900	165,400	182,500	199,300	217,500	231,800	201,100	189,400	159,300	155,600
4	121,500	135,000	150,500	166,200	183,300	200,200	218,500	230,700	199,300	188,500	158,600	154,900
5	121,800	135,900	150,800	167,000	184,200	200,200	219,500	229,700	198,300	185,900	158,600	154,900
6	122,000	135,600	151,200	167,900	185,000	201,100	219,500	228,600	197,400	185,000	159,300	154,100
7	122,500	136,000	151,600	168,200	185,900	201,100	219,500	228,600	196,500	183,300	160,100	154,100
8	122,800	136,300	152,000	168,600	186,700	201,100	220,500	228,500	196,500	182,500	160,100	153,400
9	123,100	136,900	152,700	169,000	187,600	202,100	220,500	228,500	196,500	180,800	160,100	152,700
10	123,700	137,600	153,400	169,400	188,000	202,100	221,500	224,500	197,400	179,900	160,100	152,700
11	124,000	138,200	153,800	169,800	188,500	203,000	221,500	224,500	198,300	179,100	160,100	153,400
12	124,200	138,900	154,100	170,500	189,000	203,000	222,500	223,500	198,300	178,300	160,100	153,400
13	124,500	139,500	154,500	171,400	189,400	203,900	223,500	223,500	199,300	176,600	161,600	153,400
14	124,900	139,800	154,900	172,200	189,800	205,800	223,500	222,500	199,300	175,800	161,600	153,400
15	125,100	140,200	155,600	172,600	190,300	205,800	224,500	221,500	199,300	175,800	161,600	153,400
16	125,400	140,500	156,300	173,000	190,800	206,200	224,500	221,500	200,200	175,000	161,600	152,700
17	125,700	141,200	156,700	173,400	191,200	206,200	225,500	220,500	201,100	174,200	161,600	153,400
18	126,000	141,800	157,100	173,800	192,000	206,700	225,500	219,500	201,100	173,400	162,300	152,700
19	126,500	142,200	157,400	174,200	192,900	207,700	225,500	218,500	201,100	172,600	162,300	152,700
20	127,100	142,600	157,900	174,600	193,800	208,700	227,600	217,500	201,100	170,900	162,700	152,700
21	127,700	142,900	158,200	175,000	194,700	209,600	227,600	217,500	201,100	170,100	162,300	152,000
22	128,000	143,200	159,000	175,400	194,700	210,600	227,600	216,400	201,100	169,400	162,300	152,000
23	128,600	143,500	159,700	175,800	195,600	211,600	228,600	216,400	200,200	168,600	162,300	152,000
24	129,200	143,800	160,100	176,600	196,500	212,000	229,700	215,400	200,200	167,000	162,300	152,000
25	129,800	144,600	160,400	177,000	196,500	212,000	230,700	214,500	199,300	166,200	161,600	152,700
26	130,400	145,200	160,800	177,400	196,900	212,000	230,700	213,500	198,300	165,400	160,100	152,700
27	131,000	146,000	161,200	178,000	197,400	213,000	231,800	211,600	197,400	165,400	160,100	152,700
28	131,600	146,600	161,600	178,300	197,400	213,000	231,800	210,600	196,500	163,900	159,300	152,700
29	131,900	147,400	162,000	179,100	-	213,500	231,800	208,700	195,600	163,100	159,300	153,400
30	132,200	148,000	162,300	179,500	-	-	231,800	206,700	194,700	162,300	157,800	153,400
31	132,900	-	163,100	179,900	-	-	-	205,800	-	161,600	157,100	-

Monthly gage height and contents, water year October 1944 to September 1945

Date	Gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Oct. 1.....	65.5	120,400	+12,700
Nov. 1.....	67.7	133,100	+15,300
Dec. 1.....	70.0	148,400	+15,500
Calendar year 1944.....	-	-	+38,800
Jan. 1.....	72.1	163,900	+15,500
Feb. 1.....	74.2	180,800	+17,000
Mar. 1.....	76.15	197,800	+18,600
Apr. 1.....	78.1	216,400	+15,400
May 1.....	79.6	231,800	-27,900
June 1.....	76.8	203,900	-11,000
July 1.....	75.6	192,900	-32,100
Aug. 1.....	71.7	160,800	-4,500
Sept. 1.....	71.1	156,300	-2,900
Oct. 1.....	70.7	153,400	-
Water year 1944-45.....	-	-	+38,000

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Sevier River near Juab, Utah

Location.- Water-stage recorder, lat. $39^{\circ}22'$, long. $112^{\circ}02'$, in NE $\frac{1}{4}$ sec. 2, T. 17 S., R. 2 W., 1,600 feet downstream from Sevier Bridge Dam and 11 miles southwest of Juab.

Drainage area.- 5,120 square miles.

Records available.- September 1911 to September 1945.

Average discharge.- 34 years, 251 second-feet.

Extremes (regulated).- Maximum discharge during year, 1,040 second-feet May 7 (gage height, 4.81 feet); minimum, 6.1 second-feet Nov. 21.
1911-45: Maximum discharge, 2,140 second-feet June 2, 1922 (gage height, 8.50 feet); practically no flow at times when reservoir gates were closed.

Remarks.- Records good. No diversions between this station and station near Gunnison. Flow regulated by Sevier Bridge Reservoir (see preceding page).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	14	14	12	14	16	18	422	942	759	559	408
2	12	12	14	12	14	16	18	602	884	592	574	391
3	12	15	12	13	14	16	18	702	884	584	489	391
4	12	15	12	13	14	16	18	783	780	881	322	343
5	12	15	14	13	14	16	18	786	698	870	154	286
6	12	15	15	13	14	16	18	786	657	718	81	281
7	12	15	15	13	14	17	18	906	376	584	88	278
8	12	15	15	13	14	17	18	1,010	180	574	99	246
9	12	15	15	13	14	17	18	988	177	618	99	218
10	12	14	15	13	14	17	18	808	182	641	99	187
11	12	14	14	13	15	17	18	618	140	640	99	135
12	12	14	14	13	15	17	18	634	106	640	86	130
13	12	12	14	13	15	17	19	689	86	500	72	130
14	12	11	13	13	15	17	19	685	54	350	72	128
15	12	8.0	13	13	15	17	19	695	54	350	74	128
16	14	8.0	13	13	15	17	19	653	51	350	74	126
17	14	8.0	12	14	15	17	19	596	95	450	74	147
18	15	8.0	12	14	15	17	19	615	160	540	95	182
19	15	7.0	12	14	15	17	19	679	160	582	123	190
20	15	7.0	12	14	15	17	19	504	157	593	190	160
21	15	7.0	12	14	15	17	19	546	157	522	251	138
22	19	7.0	12	14	15	17	19	634	157	531	259	130
23	19	8.0	12	14	15	17	19	644	215	574	257	111
24	23	8.0	12	14	16	17	19	663	350	434	333	81
25	21	8.0	12	14	16	17	19	130	702	442	354	74
26	19	8.0	12	14	16	17	233	769	439	274	391	74
27	17	8.0	12	14	16	17	190	822	479	457	391	74
28	17	8.0	12	14	16	18	190	822	498	442	448	67
29	17	9.2	12	14	-	18	190	884	577	449	513	63
30	15	14	12	14	-	18	251	999	644	513	513	60
31	14	-	12	14	-	18	-	996	-	574	480	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	449	23	12	14.5	891
November.....	327.2	15	7	10.9	649
December.....	402	15	12	13.0	797
Calendar year 1944	87,255.9	1,290	-	238	173,100
January.....	416	14	12	13.4	825
February.....	415	16	14	14.8	823
March.....	525	18	16	16.9	1,040
April.....	1,623	251	18	54.3	3,230
May.....	22,642	1,010	422	730	44,910
June.....	10,811	942	51	360	21,440
July.....	17,513	892	274	565	34,740
August.....	7,762	574	72	250	15,400
September.....	5,367	408	60	179	10,650
Water year 1944-45	68,257.6	1,010	7	187	135,400

h Computed from staff-gage reading.

Note.- No gage-height record Oct. 2-13, Dec. 8 to Apr. 24, July 11-18; discharge computed on basis of 3 discharge measurements, water commissioner's notes, and record of gate openings at Sevier Bridge Reservoir.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

SEVIER LAKE BASIN

117

Sevier River near Lynndyl, Utah

Location.- Water-stage recorder, lat. 39°29', long. 112°24', in SE $\frac{1}{4}$ sec. 27, T. 15 S., R. 5 W., $\frac{1}{4}$ miles downstream from highway bridge and $\frac{3}{4}$ miles southwest of Lynndyl.

Drainage area.- 6,270 square miles.

Records available.- April 1914 to October 1919. November 1942 to September 1945.

Extremes (regulated).- Maximum discharge during year, 837 second-feet May 8 (gage height, 5.94 feet); minimum recorded, 9.6 second-feet Jan. 22 (gage height, 1.55 feet), but may have been less during period of ice effect.
1914-19, 1942-45: Maximum daily discharge, 1,820 second-feet June 9, 1914, based on records at Leamington; minimum recorded, that of Jan. 22, 1945.

Remarks.- Records good except those for periods of ice effect, which are fair. Flow regulated by Sevier Bridge Reservoir (see p. 115). Several diversions for irrigation between reservoir and station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	92	61	65	b18	*18	14	20	234	712	458	380	347
2	97	66	48	b18	19	16	24	380	704	500	409	295
3	88	69	29	b18	18	15	62	560	646	411	228	
4	82	69	26	b18	18	15	64	665	640	673	394	226
5	79	71	26	b18	18	15	65	753	633	638	322	200
6	76	74	*27	b18	17	15	65	759	540	660	212	162
7	77	77	26	b18	16	15	63	777	516	608	158	142
8	78	78	24	b18	16	15	62	804	433	436	132	129
9	76	74	b23	b18	16	14	61	613	142	411	137	125
10	74	72	b23	b18	16	15	60	795	100	438	132	85
11	73	72	b22	*18	16	14	61	759	104	448	130	79
12	73	73	b22	17	16	14	65	626	93	426	130	67
13	73	71	b21	17	16	14	66	568	87	421	137	44
14	73	71	b21	17	16	14	64	560	86	382	120	43
15	72	71	b20	17	15	37	61	538	102	216	98	46
16	70	70	b20	17	15	56	61	536	104	222	90	44
17	69	70	b19	b17	15	46	60	460	102	224	85	44
18	69	70	b19	b17	15	45	66	373	98	262	84	52
19	69	69	b18	17	16	38	63	351	169	361	92	88
20	69	68	*b18	17	16	24	62	580	202	354	126	153
21	63	68	b18	16	16	22	62	580	202	385	160	172
22	58	67	b18	17	16	21	61	566	202	397	237	157
23	58	66	b18	b17	15	22	60	640	194	363	264	165
24	61	67	b18	b17	15	21	63	638	198	440	260	137
25	62	68	b18	b17	15	20	69	598	306	421	281	109
26	57	65	b18	b17	16	20	72	600	338	290	366	81
27	59	69	b18	b17	16	20	200	576	335	172	378	76
28	60	66	b18	b17	14	20	222	608	347	273	378	81
29	60	66	b18	b17	-	21	220	578	390	295	360	96
30	59	66	b18	b17	-	20	224	580	399	284	358	90
31	59	-	b18	18	-	20	-	698	-	290	358	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	2,185	97	57	70.5	4,330
November.....	2,084	78	61	69.5	4,130
December.....	714	65	18	23.0	1,420
Calendar year 1944.....	71,702	977	-	196	142,200
January.....	538	18	16	17.4	1,070
February.....	452	19	14	16.1	897
March.....	678	56	14	21.9	1,340
April.....	2,428	224	20	80.9	4,820
May.....	18,554	813	234	599	36,800
June.....	9,114	712	86	30.4	18,080
July.....	12,414	673	172	400	24,820
August.....	7,199	411	84	232	14,280
September.....	3,752	347	43	125	7,440
Water year 1944-45.....	60,112	813	14	165	119,200

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

East Fork Sevier River near Kingston, Utah

Location.- Water-stage recorder, lat. 38°12', long. 112°09', in SW $\frac{1}{4}$ sec. 13, T. 30 S., R. 3 W., 1,000 feet downstream from bridge on State Highway 22, 1.7 miles east of Kingston, and 4.1 miles upstream from mouth.

Drainage area.- 1,260 square miles.

Records available.- March 1913 to September 1945. May to September 1912 at site 2 $\frac{1}{2}$ miles downstream, below all diversions.

Average discharge.- 32 years, 89.9 second-feet.

Extremes (regulated).- Maximum discharge during year, 342 second-feet Aug. 12 (gage height, 2.41 feet); minimum, 7.8 second-feet Jan. 26.

1913-45: Maximum discharge, 2,030 second-feet May 12, 1941 (gage height, 5.05 feet); minimum, 6 second-feet Oct. 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. Station is above diversions in vicinity of Kingston. Flow regulated by Otter Creek Reservoir (capacity, 52,600 acre-feet), 8 miles above station.

Rating table, water year 1944-45, except period of ice effect
(gage height, in feet, and discharge, in second-feet)

0.1	6	0.6	26	1.6	140
.2	9	.8	39	1.9	199
.3	12	1.0	59	2.2	275
.4	16	1.3	95	2.5	374

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	a55	56			18	17	16	30	34	242	110
2	46	a55	56			17	17	16	31	35	242	118
3	46	a55	57		a15	17	18	16	31	33	244	112
4	45	a55	56			18	16	22	33	31	242	50
5	44	a55	51	a12		17	17	24	38	33	253	44
6	44	a60	55			b14	16	25	58	61	250	39
7	44	a60	45			b14	16	26	39	122	250	38
8	44	a60	39		a16	*15	16	26	39	127	244	37
9	44	a60	16			17	16	27	39	129	242	36
10	44	a60			16	17	16	30	41	127	240	36
11	44	*59			17	18	18	30	41	124	242	36
12	44	60			16	17	19	28	41	124	258	36
13	44	60	(*)		17	16	20	27	58	124	250	36
14	44	57			18	18	18	39	34	124	255	35
15	44	56			18	20	18	43	33	124	253	33
16	44	57			17	20	18	35	34	124	253	33
17	44	58	b13		17	20	18	31	35	122	253	33
18	44	58			18	19	18	30	34	121	253	32
19	44	59			18	18	18	30	33	121	253	32
20	44	59			17	18	20	31	33	145	250	33
21	44	58			17	18	18	31	32	244	247	33
22	44	57			b17	18	16	32	33	250	244	32
23	44	57			a13	18	17	31	34	250	244	32
24	44	58			*h12	18	17	29	36	253	247	32
25	45	55			a11	17	18	29	40	255	250	32
26	40	51		11	18	18	16	29	42	255	210	32
27	18	b50		10	18	18	16	29	40	258	112	32
28	15	b50		b11	18	18	16	30	33	261	110	32
29	16	b52	a14	a12		18	16	29	33	255	112	31
30	a55	55		a13	-	19	16	30	33	250	110	28
31	a55	-		a14	-	18	-	30	-	247	109	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,313	55	15	42.4	2,600
November	1,702	30	50	56.7	3,530
December	723	57	-	23.3	1,430
Calendar year 1944	42,152	1,080	-	115	85,600
January	399	-	-	12.9	791
February	469	18	-	16.8	930
March	547	20	14	17.6	1,080
April	514	20	15	17.1	1,080
May	881	43	16	28.4	1,750
June	1,071	42	30	35.7	2,120
July	4,763	261	31	154	9,450
August	6,964	258	109	225	13,810
September	1,275	118	28	42.5	2,530
Water year 1944-45	20,621	261	-	56.5	40,890

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of discharge estimates and notes by water commissioner, and weather records.

b Stage-discharge relation affected by ice.

c Computed from staff-gage reading.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Clear Creek at Sevier, Utah

Location.- Water-stage recorder, lat. 38°34'55", long. 112°15'25", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 32, T. 25 S., R. 4 W., at bridge on U. S. Highway 89, 600 feet upstream from mouth and 0.3 mile south of Sevier.

Drainage area.- 169 square miles.

Records available.- February 1912 to September 1919 and October 1940 to September 1945 in reports of Geological Survey. April 1934 to September 1945 in reports of Sevier River water commissioner.

Average discharge.- 10 years (1912-17, 1940-45), 35.0 second-feet.

Extremes.- Maximum discharge during year, 329 second-feet May 4, 8 (gage height, 2.71 feet); minimum daily, 2.7 second-feet Oct. 9-12.

1912-19, 1940-45: Maximum discharge observed, 487 second-feet Aug. 7, 1941 (gage height, 4.05 feet); no flow Aug. 26, 1913.

Remarks.- Records good except those for periods of ice effect or doubtful or no gage-height record, which are fair. Station is below all diversions for irrigation. Practically entire flow is diverted each year during latter part of irrigation season.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.9	3.8	17	b10	17	15	33	239	120	90	29	
2	2.9	3.8	17	b10	24	b15	26	273	118	92	48	
3	3.2	3.8	b17	b10	26	15	24	297	120	86	d45	
4	3.2	3.8	b15	b10	19	15	20	279	144	81	d48	
5	2.9	4.1	b13	b10	17	15	24	234	147	81	d45	
6	2.9	4.1	b13	b10	16	11	28	243	138	76	d52	
7	2.9	3.6	b13	b10	13	*15	35	283	121	66	d50	
8	2.9	4.1	b13	b10	18	15	48	289	108	63	d40	
9	2.7	4.1	b11	b12	17	17	45	251	100	60	d55	
10	2.7	*4.2	10	15	14	18	37	251	113	62	d50	
11	2.7	3.8	10	15	17	18	34	253	108	56	d23	
12	2.7	3.4	*b9	15	16	21	34	273	102	56	d18	
13	3.2	3.2	b9	15	17	25	32	279	121	50	d23	
14	3.2	2.9	b9	15	20	24	31	265	149	47	d21	
15	3.2	2.9	b9	15	20	25	34	222	165	43	d20	
16	3.2	2.9	b9	17	17	23	31	185	149	42	d19	a10
17	3.2	2.7	b9	16	15	23	33	177	147	38	d18	
18	3.2	2.7	b10	15	19	22	48	181	133	38	d23	
19	3.2	2.7	b12	b14	15	19	138	174	135	39	28	
20	3.2	2.7	15	b14	17	20	184	168	140	35	23	
21	3.2	2.7	15	b14	15	23	198	155	147	33	20	
22	3.2	2.7	15	b13	12	25	211	141	147	29	18	
23	3.4	3.9	b15	13	b12	23	185	126	135	32	12	
24	3.2	17	b15	*b13	b12	22	194	128	126	32	a11	
25	3.2	15	15	b12	b12	20	172	132	120	28	a12	
26	3.4	12	15	b12	b12	24	154	142	115	23	a11	
27	3.4	17	15	b12	12	22	140	144	108	22	a11	
28	3.4	16	b15	b12	b14	21	161	142	105	21	a11	
29	3.6	15	b14	b12	-	21	190	142	94	23	a11	
30	3.6	17	b12	b13	-	19	230	142	90	23	a11	
31	3.8	-	b10	b15	-	24	-	132	-	26	a11	

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	97.6	3.8	2.7	3.15	194
November.....	187.6	17	2.7	6.25	372
December.....	396	17	9	12.8	785
Calendar year 1944.....	15,676.5	246	2.3	42.8	31,100
January.....	399	17	10	12.9	781
February.....	455	26	12	16.2	902
March.....	615	25	11	19.8	1,220
April.....	2,757	230	20	91.9	5,470
May.....	6,314	289	126	204	12,520
June.....	3,763	165	90	125	7,460
July.....	1,495	92	21	48.2	2,970
August.....	777	50	11	25.1	1,540
September.....	300	-	-	10	595
Water year 1944-45.....	17,556.2	289	2.7	48.1	34,820

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Beaver River near Beaver.

b Stage-discharge relation affected by ice.

c Doubtful gage-height record; discharge computed on basis of weather records and records for Beaver River near Beaver.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Salina Creek at Salina, Utah

Location.-- Water-stage recorder and concrete control, lat. $38^{\circ}57'$, long. $111^{\circ}52'$, in NW $\frac{1}{4}$ sec. 25, T. 21 S., R. 1 W., at Salina, 150 feet upstream from bridge on U. S. Highway 89 and three-quarters (revised) of a mile upstream from mouth.

Drainage area.-- 298 square miles.

Records available.-- April 1914 to September 1919, November 1942 to September 1945.

July 1900 to April 1901 at site 5 miles upstream, published as Salina Creek near Salina.

Extremes.-- Maximum discharge during year, 742 second-feet May 14 (gage height, 3.46 feet), from rating curve extended above 400 second-feet; minimum daily, 0.2 second-foot Sept. 18.

1914-19, 1942-45: Maximum discharge, 804 second-feet Aug. 7, 1943 (gage height, 3.44 feet), from rating curve extended above 400 second-feet; minimum daily, 0.2 second-foot on several days during 1943, 1944, 1945.

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

Diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					b16	11	9.5	114	42	3.5	12	2.0
2	0.4	14			16	12	6.0	144	43	4.5	44	22
3	.3	12			16	11	6.0	187	50	4.0	68	6.8
4	.8	12			16	11	3.5	190	48	4.0	28	2.0
5	1.0	12			12	7.5	3.0	130	56	4.0	20	.5
6	.8	12			14	*b7.0	3.5	248	48	2.2	23	.5
7	1.2	11			12	8.0	5.5	348	42	1.6	7.5	.5
8	.5	*9.5			15	7.0	6.0	304	26	2.2	8.8	.5
9	.8	8.0			16	7.5	4.0	268	24	1.2	2.8	.5
10	.8	8.8			12	7.5	6.5	324	85	1.8	1.8	.5
11	.5	8.3	(*)		12	8.8	4.5	344	66	1.5	1.8	.5
12	.8	9.5			15	16	2.8	415	102	1.8	2.8	.8
13	.8	8.0			16	25	2.5	332	66	1.2	3.0	.8
14	.8	7.5			21	25	2.8	442	58	2.0	2.0	.5
15	.8	7.0			20	25	2.2	240	40	2.2	5.5	.4
16	1.0	7.5	b10	b12	16	7.5	2.0	176	30	1.8	2.2	.4
17	1.2	10			12	8.0	2.5	195	21	1.2	1.2	.4
18	1.2	11			18	8.0	4.0	229	20	1.8	1.8	1.0
19	1.0	11			12	6.5	14	185	18	2.2	4.0	.8
20	1.0	10			15	5.5	33	176	15	2.0	1.8	1.0
21	2.5	10			12	7.5	53	132	13	2.8	1.8	1.0
22	1.5	9.5			14	8.8	54	112	14	2.8	1.2	1.0
23	1.2	b10		(*)	19	8.8	26	81	13	2.2	1.0	1.0
24	1.0	10			17	8.0	53	99	10	2.0	1.2	1.2
25	1.2	b10			15	6.0	29	138	8.0	2.0	1.8	1.0
26	2.8	b10			12	7.0	23	146	8.0	1.2	2.0	1.0
27	12	b9			13	5.5	17	88	8.0	1.0	2.0	1.0
28	12	b8			19	5.5	18	88	8.0	.9	1.8	1.5
29	12	b9			-	5.0	29	98	7.5	.8	1.5	1.2
30	13	b10			-	4.0	62	81	7.5	1.0	2.5	1.2
31	13	-			-	6.0	-	58	8.0	1.8	2.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	89.2	13	0.4	2.88	177
November.....	299.1	14	7.0	9.97	593
December.....	310	-	-	10	615
Calendar year 1944.....	11,788.0	402	-	32.2	25,390
January.....	372	-	-	12	738
February.....	423	21	12	15.1	839
March.....	297.9	26	4.0	9.61	591
April.....	487.8	62	2.0	16.3	968
May.....	6,082	442	58	196	12,060
June.....	997.0	102	7.5	33.2	1,980
July.....	87.3	5.5	1.0	2.17	133
August.....	255.8	65	1.0	8.25	507
September.....	55.5	22	.4	1.85	110
Water year 1944-45.....	9,736.6	442	-	26.7	19,310

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice (no gage-height record Jan. 12-22).

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Chalk Creek near Fillmore, Utah

Location.— Water-stage recorders, lat. $38^{\circ}58'$, long. $112^{\circ}18'$, in NE $\frac{1}{4}$ sec. 28, T. 21 S., R. 4 W., 1 mile east of Fillmore and $2\frac{1}{4}$ miles downstream from South Fork.

Drainage area.— 60 square miles.

Records available.— March 1944 to September 1945. May to July 1914 at site $1\frac{1}{2}$ miles upstream.

Extremes.— Maximum discharge during year, 356 second-feet May 11; minimum daily, 8.5 second-feet Nov. 16, Dec. 10.

1914, 1944-45: Maximum discharge, 490 second-feet May 9, 1914 (gage height, 3.40 feet, site and datum then in use); minimum daily, that of Nov. 16, Dec. 10, 1945.

Remarks.— Records good except those for period of no gage-height record, which are fair. Records include flow of Fillmore Canal which diverts on left bank at flood-control dam 400 feet upstream. During low-water periods flow is diverted 2 miles upstream and carried in a lined ditch to head of Fillmore Canal. One small irrigation diversion above gage.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June *	July	Aug.	Sept.
1	15	14	12	12	11	12	27	189	134	54	26	16
2	15	13	12	12	11	12	27	210	154	52	28	15
3	14	13	12	11	11	12	27	246	138	49	29	23
4	14	13	12	11	12	12	25	260	143	46	38	21
5	13	14	12	11	11	12	25	259	137	43	40	18
6	a12	14	12	11	12	10	27	272	124	42	33	16
7	a12	16	12	11	10	12	31	273	111	41	28	17
8	a12	14	12	11	11	12	42	279	100	41	26	17
9	a12	14	11	11	9.7	12	45	289	95	41	25	16
10	a13	13	8.5	11	11	13	40	304	111	40	23	16
11	a14	13	9.5	12	12	14	35	329	106	37	22	15
12	a15	13	9.5	12	11	15	34	331	106	36	24	15
13	a14	13	9.5	12	11	16	31	308	115	35	29	15
14	13	13	10	12	12	17	30	298	125	34	26	15
15	13	8.7	11	12	12	14	28	245	122	33	23	14
16	13	8.5	11	12	12	17	27	214	115	31	21	14
17	13	9.1	11	12	11	19	28	207	108	30	20	14
18	13	9.7	11	11	12	18	33	221	104	30	23	14
19	13	10	11	11	12	18	47	220	101	30	28	14
20	13	10	11	12	12	19	82	202	97	29	22	14
21	13	10	11	12	11	23	116	171	95	27	21	14
22	13	10	12	11	11	27	130	154	90	28	20	14
23	13	10	12	9.7	12	26	114	144	87	33	20	16
24	13	9.5	12	12	12	25	118	139	82	34	20	15
25	13	10	12	11	12	24	102	155	77	30	22	14
26	13	12	12	11	11	26	97	168	73	28	17	14
27	13	13	11	11	12	25	88	166	68	27	19	16
28	13	12	12	9.5	12	25	98	163	66	26	18	16
29	13	12	11	10	-	24	98	160	62	26	18	16
30	13	12	12	10	-	23	137	160	57	25	17	15
31	13	-	11	10	-	24	-	148	-	27	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	409	15	12	13.2	611
November.....	366.5	16	6.5	11.9	707
December.....	348.0	12	6.5	11.2	690
Calendar year	-	-	-	-	-
January.....	347.2	12	9.5	11.2	669
February.....	319.7	12	9.7	11.4	654
March.....	563	27	10	18.2	1,120
April.....	1,777	137	25	59.2	3,520
May.....	6,884	331	139	222	13,650
June.....	3,083	143	57	103	6,120
July.....	1,095	54	25	35.0	2,150
August.....	745	40	17	24.0	1,480
September.....	472	23	14	15.7	936
Water year 1944-45	16,389.4	331	8.5	44.9	32,510

A no gage-height record; discharge computed on basis of recorded range in stage and records for Beaver River near Beaver.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Beaver River near Beaver, Utah

Location.- Water-stage recorder, lat. $38^{\circ}17'$, long. $112^{\circ}34'$, in $SW\frac{1}{4}$ sec. 17, T. 29 S., R. 6 W., at Fishlake National Forest boundary, three-quarters of a mile downstream from Bakers Canyon and $4\frac{1}{4}$ miles east of Beaver.

Drainage area.- 82 square miles.

Records available.- June to September 1906, March 1914 to September 1945.

Average discharge.- 31 years (1914-45), 56.8 second-feet.

Extremes.- Maximum discharge during year, 333 second-feet May 11 (gage height, 3.33 feet); minimum, 12 second-feet Nov. 29.

1914-45: Maximum discharge, 1,080 second-feet July 22, 1936 (gage height, 7.27 feet, site and datum then in use); from rating curve extended above 500 second-feet; minimum, 5 second-feet Aug. 29, 1931, Nov. 30, 1939.

Remarks.- Records good except those for periods of ice effect, which are fair. No diversions above station for irrigation. Water diverted for hydroelectric power, but returned to stream above station. Some regulation by power plants and several small reservoirs.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27	33	24	b21	21	22	26	122	165	115	50	34
2	28	29	26	b21	23	22	26	143	170	111	51	35
3	29	28	25	b21	19	22	26	170	188	104	50	35
4	26	26	25	b22	22	22	24	170	200	95	51	35
5	26	25	26	22	23	22	23	154	190	98	48	a34
6	26	29	26	22	22	b21	24	178	170	93	56	34
7	25	25	26	22	b22	22	27	200	154	92	56	31
8	26	26	26	22	22	24	32	211	143	92	51	34
9	26	27	b24	22	22	24	27	211	132	107	47	33
10	26	25	b22	22	22	24	26	228	141	105	46	32
11	27	27	b20	22	21	25	26	246	134	98	43	31
12	29	27	b20	22	22	28	24	285	143	93	47	30
13	29	26	b20	22	22	27	24	285	165	93	44	a30
14	28	25	20	21	22	25	24	268	195	90	41	a29
15	24	25	b20	22	22	19	23	203	195	88	40	29
16	26	26	b21	23	22	18	24	200	175	84	39	a28
17	26	26	b21	22	21	19	25	240	170	82	38	28
18	25	*26	*b21	21	21	22	26	268	175	84	42	a26
19	25	24	22	b20	21	25	42	252	162	82	41	a27
20	25	24	22	b20	b21	25	55	231	182	78	36	a27
21	24	25	22	b20	b21	26	65	195	178	75	35	a28
22	24	25	22	b20	b21	26	68	180	170	76	34	28
23	24	25	22	b20	22	26	62	190	163	76	35	28
24	24	24	22	b21	22	25	62	219	152	65	36	a27
25	24	23	b22	b21	21	24	54	240	147	57	38	a27
26	24	22	22	22	b21	24	54	228	141	55	37	28
27	24	18	b22	22	b21	24	54	200	141	54	37	28
28	24	17	22	b21	22	24	71	208	137	52	37	27
29	25	16	22	b21	-	22	87	214	126	51	36	28
30	26	21	b21	*b21	-	22	111	206	120	48	35	26
31	27	-	b21	21	-	24	-	175	-	45	33	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	798	29	24	25.7	1,580
November.....	745	33	17	24.8	1,480
December.....	697	26	20	22.5	1,380
Calendar year 1944.....	26,107	505	17	71.3	51,770
January.....	662	23	20	21.4	1,310
February.....	604	25	19	21.6	1,200
March.....	725	29	18	23.4	1,440
April.....	1,244	111	23	41.5	2,470
May.....	6,520	285	122	210	12,930
June.....	4,544	200	120	161	9,610
July.....	2,544	115	48	82.1	5,050
August.....	1,515	56	33	42.4	2,610
September.....	895	35	26	29.8	1,780
Water year 1944-45.....	21,593	285	17	59.2	42,840

a No gage-height record; discharge interpolated.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Beaver River at Adamsville, Utah

Location.- Water-stage recorder, lat. 38°16', long. 112°48', in S $\frac{1}{2}$ sec. 30, T. 29 S., R. 8 W., 600 feet 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 square miles.

Records available.- December 1913 to September 1936, October 1937 to September 1945.

Average discharge.- 29 years (1914-36, 1938-45), 38.5 second-feet.

Extremes.- Maximum discharge during year, 438 second-feet July 28 (gage height, 2.98 feet); minimum, 7.7 second-feet Oct. 4, 1913-36, 1937-45: Maximum discharge, 1,090 second-feet July 23, 1941 (gage height, 4.68 feet), from rating curve extended above 500 second-feet; no flow during periods in 1924, 1931, 1934, 1935, 1939.

Remarks.- Records good except those for periods of ice effect, which are fair. No diversions between station and Rockyford Reservoir. Several ditches above station divert practically entire flow during irrigation season to supply Adamsville and Beaver districts.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	34	54	b46	52	38	35	43	49	38	56	12
2	18	43	54	b46	60	40	37	41	46	35	66	15
3	20	52	55	b46	64	41	36	38	45	37	66	19
4	16	51	54	b47	54	41	37	23	51	36	81	26
5	16	50	52	b49	51	41	36	13	60	31	128	24
6	15	66	55	51	50	b38	36	14	67	27	141	24
7	17	64	52	52	47	b39	36	23	70	30	156	21
8	15	63	55	54	46	b41	41	35	51	31	138	20
9	12	57	51	54	46	b42	45	27	48	40	94	19
10	13	57	b49	56	44	44	45	32	48	34	65	16
11	17	57	b48	56	43	40	48	28	50	31	81	16
12	20	57	b47	55	42	41	50	63	42	32	79	15
13	18	58	b46	52	42	40	51	65	41	31	77	12
14	18	*56	b46	49	42	*40	47	76	46	27	67	11
15	16	52	b45	49	42	61	43	55	54	25	57	11
16	17	54	b44	50	42	57	43	41	50	28	50	9.6
17	18	54	b44	b48	40	49	42	45	48	23	46	9.0
18	20	51	*b45	b47	44	47	43	44	48	24	58	9.0
19	20	49	b47	b46	43	51	36	36	46	29	48	9.0
20	20	48	49	b46	41	52	38	45	50	26	46	9.0
21	21	49	50	b47	40	42	36	45	49	23	41	8.5
22	20	49	51	b46	b40	40	37	29	57	22	40	8.1
23	21	48	55	b46	44	40	37	26	66	26	34	8.5
24	22	46	51	b47	43	41	35	23	61	39	32	9.6
25	24	b45	49	b47	42	37	34	40	51	36	32	11
26	27	b45	49	b49	b41	38	27	57	41	39	26	11
27	27	b46	48	b49	b39	39	23	52	43	44	23	11
28	28	48	49	b47	38	39	23	46	44	78	22	13
29	28	48	48	b48	-	38	27	50	46	84	21	16
30	29	52	49	*b49	-	35	35	49	42	71	18	17
31	30	-	b47	49	-	34	-	51	-	51	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	620	30	12	20.0	1,230
November.....	1,549	66	34	51.6	3,070
December.....	1,536	55	44	49.6	3,050
Calendar year 1944.....	16,746.0	415	4.4	51.2	37,190
January.....	1,523	56	46	49.1	3,020
February.....	1,262	64	38	45.1	2,500
March.....	1,306	61	34	42.1	2,590
April.....	1,139	51	23	38.0	2,260
May.....	1,255	76	15	40.5	2,480
June.....	1,510	70	41	50.3	3,000
July.....	1,130	84	22	36.5	2,240
August.....	1,945	156	14	62.7	3,860
September.....	420.3	26	8.1	14.0	634
Water year 1944-45.....	15,197.3	156	8.1	41.6	30,140

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Rockyford Reservoir near Minersville, Utah

Location.- Staff gage, lat. 38°14', long. 112°50', in NE¼ sec. 11, T. 30 S., R. 9 W., at ROCKYford Dam on Beaver River and 5 miles east of Minersville.

Drainage area.- 510 square miles.

Records available.- October 1937 to September 1945.

Extremes.- Maximum contents observed during year, 23,810 acre-feet Apr. 22, 25, 28, 30, May 1 (gage height, 51.5 feet); minimum observed, 11,960 acre-feet Oct. 5 (gage height, 38.5 feet).

1937-45: Maximum contents observed, that of Apr. 22, 25, 28, 30, May 1, 1945; no contents Oct. 16, 31, 1939.

Remarks.- Reservoir is formed by earth-fill dam completed in 1914. Capacity, 23,260 acre-feet between gage heights 0 foot (bottom of outlet tunnel) and 51.0 feet (spillway crest). Prior to fall of 1937 spillway crest was at elevation 52.5 feet. Dead storage negligible. Water is used for irrigation on lands of Delta Land & Water Co.

Contents, in acre-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	-	-	-	-	-	-	23,810	-	-	-	17,000
2	-	-	-	-	-	-	-	-	20,590	-	-	-
3	-	-	-	-	20,120	21,500	-	-	-	-	-	-
4	-	-	-	-	-	-	-	23,590	-	-	16,340	-
5	11,960	13,350	-	-	-	-	-	23,480	20,400	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	23,260	-	-	16,610	-	-
8	12,030	-	-	18,230	-	-	-	23,040	-	-	-	16,020
9	-	-	-	-	-	-	-	-	20,210	-	-	-
10	-	-	-	-	-	21,830	-	22,820	-	-	-	-
11	-	14,000	-	-	-	-	23,260	-	-	-	18,230	-
12	-	-	-	-	20,590	-	-	22,600	-	-	-	-
13	-	-	16,810	18,610	-	-	-	-	20,030	-	-	-
14	12,300	-	-	-	-	-	23,260	-	-	17,950	18,420	-
15	-	-	-	-	-	-	-	22,380	-	-	-	15,210
16	-	-	17,000	-	-	-	23,260	-	19,930	-	18,510	-
17	-	-	-	-	20,880	22,360	-	-	-	17,470	-	-
18	-	14,560	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	18,700	-
20	12,460	-	-	-	-	-	-	22,050	19,740	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	19,360	-	-	23,810	21,500	19,650	16,810	18,420	-
23	-	-	-	-	-	-	-	-	-	-	-	14,320
24	-	-	-	-	21,180	22,820	-	21,180	19,550	16,430	-	-
25	-	-	-	-	-	-	23,810	-	-	-	17,950	-
26	-	-	-	-	-	-	-	20,970	-	-	-	13,920
27	12,870	-	17,660	19,650	-	-	23,810	-	-	16,100	-	-
28	-	-	-	-	21,280	-	-	-	-	-	-	13,590
29	-	-	-	-	-	-	23,810	-	-	-	-	13,510
30	-	15,610	-	-	-	-	-	-	19,180	-	17,360	-
31	13,110	-	17,850	19,930	-	23,150	-	20,690	-	16,020	17,190	-

Monthly gage height and contents, water year October 1944 to September 1945

Date	Gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30.....	38.4	11,890	-
Oct. 31.....	40.0	13,110	+1,220
Nov. 30.....	43.1	15,610	+2,500
Dec. 31.....	45.6	17,850	+2,240
Calendar year 1944	-	-	+3,930
Jan. 31.....	47.8	19,930	+2,080
Feb. 28.....	49.2	21,260	+1,350
Mar. 31.....	50.9	23,150	+1,870
Apr. 30.....	51.5	23,810	+660
May 31.....	48.6	20,690	-3,120
June 30.....	47.0	19,180	-1,510
July 31.....	45.6	16,020	-3,160
Aug. 31.....	44.9	17,190	+1,170
Sept. 30.....	40.5	13,510	-3,680
Water year 1944-45	-	-	+1,620

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter. To convert war time to standard time, subtract 1 hour.

Beaver River at Rockyford Dam, near Minersville, Utah

Location.- Water-stage recorder and concrete control, lat. 38°14', long. 112°50', in NW 4 sec. 11, T. 30 S., R. 9 W.; half a mile downstream from Rockyford Dam and 4 1/2 miles east of Minersville.

Drainage area.- 512 square miles.

Records available.- December 1913 to September 1945.

Average discharge.- 30 years (1914-36, 1937-45), 40.0 second-feet.

Extremes (regulated).- Maximum discharge observed during year, 116 second-feet July 13, 14, 16 (gage height, 1.79 feet); minimum observed, 7.0 second-feet Nov. 5, 11, 18, 1913-45: Maximum discharge, 727 second-feet June 10, 1921 (gage height, 3.53 feet); minimum, 0.3 second-foot Mar. 19, 20, 1914.

Remarks.- Records good. One small diversion between dam and station. Flow regulated by Rockyford Reservoir (see preceding page). Several diversions above reservoir for irrigation and municipal supply.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	S.2	7.2	7.7	10	13	13	12	47	85	88	79	68
2	S.2	7.2	7.5	10	13	13	12	100	101	88	67	69
3	S.2	7.1	7.9	10	h13	h13	12	99	98	98	12	59
4	S.2	7.0	8.0	10	13	13	S.S	98	96	88	13	89
5	h8.2	h7.0	8.1	10	13	13	S.2	96	94	88	13	68
6	S.2	7.0	S.2	h10	13	13	11	96	91	h78	13	88
7	S.2	7.0	S.2	10	14	13	h14	93	95	h76	12	86
8	h8.2	7.0	8.3	10	14	12	16	100	92	76	12	86
9	S.2	7.0	8.4	11	14	12	18	100	h81	h95	12	88
10	S.2	7.0	S.5	11	h14	h12	19	101	90	109	12	87
11	S.2	h7.0	8.6	12	13	12	h21	109	86	109	22	87
12	S.2	7.2	8.7	12	h12	12	24	109	h77	109	28	87
13	h8.2	7.4	h8.8	h12	12	13	27	107	h82	h114	28	86
14	h8.2	h7.6	9.0	12	12	h13	h30	107	79	h116	28	66
15	S.2	7.4	9.2	12	12	15	30	109	76	116	28	h86
16	S.2	7.3	h9.4	12	12	13	31	109	h72	h100	28	h80
17	S.2	7.2	9.4	12	h12	h13	34	105	72	h100	29	78
18	S.2	h7.0	h9.4	12	12	13	36	105	72	107	56	76
19	S.2	7.0	9.5	12	12	14	30	105	h72	107	70	h71
20	h8.2	7.1	9.5	12	12	14	16	100	72	h106	72	72
21	8.1	7.2	9.6	12	13	14	16	99	h72	h110	82	h66
22	8.0	7.2	9.7	h12	13	15	20	98	72	107	82	h66
23	7.9	7.2	9.7	12	13	15	20	98	h72	104	81	66
24	7.9	7.3	9.8	12	h13	h15	21	98	72	101	81	66
25	7.6	7.4	9.9	13	13	15	21	96	72	96	81	66
26	7.7	7.4	9.9	13	13	14	21	94	h80	96	88	h66
27	h7.6	7.4	h10	h13	13	14	22	93	h86	94	88	62
28	7.5	7.5	10	13	13	15	22	86	87	94	88	58
29	7.4	7.6	10	13	-	13	22	86	87	96	89	h54
30	7.4	h7.6	10	h13	-	12	22	86	h88	96	88	54
31	7.3	-	h10	13	-	12	-	66	-	96	88	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	248.6	6.2	7.3	8.02	493
November.....	216.5	7.6	7.0	7.22	429
December.....	261.2	10	7.7	9.07	558
Calendar year 1944.....	17,487.2	448	6.4	47.8	34,680
January.....	361	13	10	11.6	716
February.....	359	14	12	12.8	712
March.....	409	15	12	13.2	811
April.....	617.0	36	8.2	20.6	1,220
May.....	3,016	109	47	97.3	5,980
June.....	2,494	101	72	62.8	4,930
July.....	3,048	116	76	98.3	6,050
August.....	1,570	69	12	50.6	3,110
September.....	2,517	89	54	77.2	4,600
Water year 1944-45.....	14,926.3	116	7.0	40.9	29,610

h Computed from staff-gage reading.

Notes.- No gage-height record Oct. 1 to Mar. 30, Apr. 6-15, May 3, 21, June 3, 4, June 8 to July 23, Sept. 9-30, except for staff-gage readings as noted; discharge computed by interpolation between staff-gage readings and records of gage changes at Rockyford Dam.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Center Creek near Parowan, Utah

Location.- Water-stage recorder, lat. $37^{\circ}50'$, long. $112^{\circ}49'$ in SE $\frac{1}{4}$ sec. 24, T. 34 S., R. 9 W., 600 feet downstream from Parowan municipal power plant, $1\frac{1}{2}$ miles south of Parowan, and $2\frac{1}{2}$ miles downstream from Left Fork.

Drainage area.- 60 square miles.

Records available.- October 1942 to September 1945.

Extremes.- Maximum discharge during year, 396 second-feet Aug. 5 (gage height, 4.59 feet), from rating table extended above 50 second-feet by logarithmic plotting; minimum, 6.3 second-feet Mar. 13.
1942-45: Maximum discharge, that of Aug. 5, 1945; minimum, 3.9 second-feet Mar. 5, 1944.

Remarks.- Records good except those for periods of ice effect of doubtful or no gage-height record, and those above 50 second-feet, which are fair. Flow slightly regulated by Yankee Meadows Reservoir (capacity, about 700 acre-feet) and by power plant above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	12	9.8	8.9	10	9.5	11	27	26	26	26	17
2	12	12	9.8	10	11	9.5	11	28	27	26	30	20
3	12	12	9.8	10	11	9.5	10	32	26	26	26	17
4	12	12	9.8	9.5	11	10	12	29	27	26	26	17
5	12	11	b9.3	9.8	11	9.5	10	29	29	27	42	16
6	12	12	b9.5	9.2	11	b9.0	11	30	27	27	d30	15
7	12	11	9.5	9.2	11	b9.2	11	35	24	27	d27	15
8	12	9.8	9.5	9.2	11	b9.3	11	37	24	28	d24	15
9	12	9.8	b9.2	9.2	11	9.5	11	41	23	30	d23	15
10	12	11	9.8	9.5	11	9.8	11	45	24	28	26	15
11	12	9.5	8.6	9.2	11	9.8	11	45	28	27	36	13
12	12	9.8	b9.4	9.8	10	11	11	50	30	29	d24	15
13	13	9.5	8.3	9.5	11	*9.8	11	51	29	26	d23	15
14	13	11	b8.6	9.8	11	10	11	42	29	25	d22	14
15	13	11	8.9	9.8	11	10	10	41	28	25	d21	13
16	13	10	9.9	9.8	9.8	9.8	11	43	28	26	d21	d12
17	13	*10	*9.2	10	10	9.8	14	49	27	24	24	d12
18	13	10	9.5	10	10	10	17	45	26	25	d21	d12
19	13	10	9.8	10	9.8	9.8	19	41	26	26	d20	d12
20	13	9.8	9.2	9.8	9.8	10	19	38	26	25	d19	d12
21	13	9.8	9.2	b9.5	9.8	10	20	37	26	24	d19	d11
22	13	10	9.2	b9.5	b9.5	11	18	34	27	25	a19	d11
23	13	9.8	9.2	b9.6	10	10	18	32	29	26	a19	d11
24	13	9.5	9.2	10	11	10	16	30	27	26	a20	d11
25	13	b9.3	9.8	b10	9.8	9.8	16	30	27	26	a18	d11
26	13	b9.2	10	10	b9.8	11	15	30	27	26	a18	d11
27	13	9.8	9.2	b10	b9.5	9.8	14	29	26	25	a18	d11
28	13	b9.5	9.8	b9.5	9.8	10	18	28	26	26	a18	d11
29	13	b9.7	9.8	b10	-	9.8	19	28	26	26	18	d11
30	12	10	9.8	*b10	-	9.8	22	28	26	26	18	d11
31	12	-	8.9	b10	-	10	-	27	-	25	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	390	13	12	12.6	774
November.....	309.8	12	9.2	10.3	614
December.....	288.6	10	8.3	9.31	572
Calendar year 1944	6,301.3	65	7.4	17.2	12,490
January.....	300.2	10	8.9	9.68	595
February.....	291.6	11	9.5	10.4	573
March.....	306.3	11	9.0	9.89	608
April.....	415	22	10	13.8	823
May.....	1,109	51	27	35.8	2,200
June.....	800	30	23	26.7	1,580
July.....	808	30	23	26.1	1,600
August.....	712	42	17	23.0	1,410
September.....	402	20	11	13.4	797
Water year 1944-45	6,132.5	51	9.0	16.8	12,160

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Beaver River near Beaver.

b Stage-discharge relation affected by ice.

d Doubtful gage-height record; discharge computed on basis of records for Beaver River near Beaver.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

CEDAR CITY VALLEY
Coal Creek near Cedar City, Utah

127

Location.- Water-stage recorder, lat. $37^{\circ}40'15''$, long. $113^{\circ}00'20''$, in SE $\frac{1}{4}$ sec. 17 T. 38 S., R. 10 W., 2 miles downstream from South Creek and 3.3 miles southeast of Cedar City. Prior to May 15, recorder at site $\frac{1}{2}$ miles downstream at different datum.

Records available.- May 1935 to September 1945. May 1915 to November 1919 at approximately same site as May 1935 to May 1945, but records do not include flow of power canal operated during this period (abandoned since 1919). Records for May 1915 to November 1919 equivalent if flow of power canal is added.

Extremes.- Maximum discharge during year, 816 second-feet July 29 (gage height, 3.50 feet), from rating curve extended above 300 second-feet; minimum not determined (occurred during period of ice effect).

1935-45: Maximum discharge observed, 2,910 second-feet July 9, 1936 (gage height, 6.4 feet, site and datum then in use), from rating curve extended by broad-crested weir formula; minimum observed, 4 second-feet Dec. 15, 1935, but may have been less during periods of ice effect.

Remarks.- Records poor. No diversions above station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a10	14			13	a10	26	a150	72	29	a25	25
2	a10	14			17	a11	22	a180	80	28	a40	
3	a10	14			16	a11	17	a180	82	28	25	
4	a10	13			b12	a11	a15	a180	98	26	60	
5	a10	21			b11	a10	a11	a180	98	26	41	
6	a10	26	b9		b10	a8	a12	a210	82	26	a30	
7	a10	22			10	a10	a17	a240	70	26	a25	
8	a10	a15			b10	a12	a30	a260	66	26	a25	
9	a10	a12			14	a15	a35	a280	64	28	a25	a14
10	a10	a11			b11	a20	a30	a300	77	27	a40	
11	a10	a10		b10	b11	22	a27	a310	82	25	a35	
12	10	b10			b12	24	a24	314	77	25	a30	
13	10	b10			14	*23	a22	298	75	25	a30	
14	10	*b10			b14	17	a20	226	75	24	a25	
15	10	b10			b11	15	a20	200	72	22	a25	
16	10	b10	bs		b11	12	a20	213	64	22	a30	
17	10	b10	(*)		b12	a20	213	59	21	a27		
18	10	b10			14	b12	a25	158	55	21	a25	
19	10	b10			b11	12	a35	130	55	24	a23	
20	10	a10			b11	13	a50	111	49	26	a20	
21	10	a10			b10	21	a55	95	48	21	a18	
22	10	a10			a10	22	a50	98	48	21	a18	
23	10	a10			a11	17	a50	104	43	27	a17	a12
24	10	a10			a11	14	a50	104	41	24	a15	
25	10	a9			a10	12	a40	104	37	26	a14	
26	11	a9	b10	b9	a10	18	a40	101	35	27	a13	
27	11	a9			a10	14	a50	95	24	24	a13	
28	12	a9			a10	14	a70	93	33	24	a12	
29	12	a9		(*)	-	14	a90	90	30	61	12	
30	12	a9			-	14	a110	90	29	a40	12	
31	13	-			-	20	-	77	-	a25	11	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	321	13	10	10.4	637
November.....	356	26	9	11.9	706
December.....	280	-	-	9.0	555
Calendar year 1944.....	14,269	463	-	39.0	28,300
January.....	299	-	-	9.6	593
February.....	326	17	10	11.6	647
March.....	460	24	6	14.8	912
April.....	1,081	110	11	36.4	2,180
May.....	5,394	314	77	174	10,700
June.....	1,832	68	29	61.1	3,830
July.....	824	61	21	26.6	1,830
August.....	761	60	11	24.5	1,510
September.....	401	25	-	13.4	795
Water year 1944-45.....	12,345	314	-	33.8	24,480

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of 1 discharge measurement, weather records, and records for Center Creek near Parowan and Beaver River near Beaver.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time up to 2 a.m., Sept. 30, 1945; mountain standard time thereafter.

To convert war time to standard time, subtract 1 hour.

SALTON SEA BASIN

Salton Sea, Calif.

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

Drainage area.- 8,360 square miles.

Records available.- November 1904 to September 1945. Records prior to September 1932 in Water-Supply Paper 735.

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

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

Elevation, in feet, below mean sea level, of Salton Seg., Calif., water year
October 1944 to September 1945

Nov. 1.....241.35	Mar. 1.....240.4	June 30.....240.65
Dec. 1.....241.1	31.....240.25	Aug. 1.....240.9
Jan. 2.....240.8	Apr. 30.....240.25	20.....240.5
Feb. 1.....240.6	June 1.....240.6	31.....240.65

MOJAVE RIVER BASIN

Deep Creek near Hesperia, Calif.

Location.- Water-stage recorder and broad-crested weir, lat. 34°20'30", long. 117°13'40",
in SE 1/4 sec. 18, T. 3 N., R. 3 W., 0.5 mile upstream from confluence with West Fork of
Mojave River and 8 miles southeast of Hesperia. Altitude of gage, about 3,050 feet.

Drainage area.- 137 square miles.

Records available.- December 1929 to September 1945.

Average discharge.- 15 years (1930-45), 71.8 second-feet.

Extremes.- Maximum discharge during year, 6,350 second-feet Feb. 2 (gage height, 6.80

feet); minimum daily discharge, 2.5 second-feet July 24.
1929-45: Maximum discharge, 46,600 second-feet Mar. 2, 1938; by slope-area method;
minimum, 0.1 second-foot at times during 1932-34, 1936.

Remarks.- Records good. Flow partly regulated by Lake Arrowhead. Hesperia Water Co.'s
canal diverts water about 2 miles above station for irrigation and domestic use.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.1	7.2	26	21	78	47	219	95	28	5.4	4.7	6.0
2	4.4	7.2	29	21	2,700	52	253	88	28	5.3	4.6	6.4
3	4.5	7.2	31	20	1,150	52	196	82	32	5.1	19	12
4	4.5	7.2	25	21	324	63	175	80	33	4.8	15	11
5	4.5	12	24	21	197	112	166	73	27	4.1	12	7.2
6	4.4	24	24	22	148	175	183	71	24	3.9	12	6.4
7	4.5	18	23	21	121	75	200	67	24	3.8	11	6.2
8	4.7	15	23	21	106	82	224	65	23	3.8	8.9	6.0
9	5.0	14	22	24	92	100	287	65	22	3.8	7.0	6.6
10	5.1	14	22	27	80	112	301	57	21	3.8	6.4	12
11	5.1	279	21	27	73	130	183	55	19	3.6	6.0	10
12	5.0	1,130	21	23	71	141	175	52	18	3.6	6.6	8.2
13	5.1	169	20	22	65	152	162	49	16	3.4	6.2	7.2
14	5.1	165	20	22	61	148	152	50	16	3.1	5.8	5.6
15	5.3	120	20	21	65	367	137	45	16	3.0	5.6	6.0
16	5.4	71	19	20	65	460	148	42	15	2.8	5.4	5.4
17	5.5	52	19	20	59	327	279	41	14	2.7	5.6	5.3
18	5.1	41	19	19	57	224	205	38	13	2.7	21	5.4
19	5.3	39	19	19	59	200	205	39	12	2.8	30	5.4
20	5.3	35	19	21	57	196	214	36	12	3.0	17	5.6
21	5.4	33	19	18	53	219	205	35	9.4	3.1	14	6.0
22	5.6	31	19	20	49	205	192	33	7.2	2.8	12	6.6
23	5.8	31	20	21	47	233	175	32	8.2	2.6	9.6	7.4
24	6.0	33	20	19	49	238	148	30	8.4	2.5	7.8	7.4
25	6.2	33	20	23	52	162	148	29	8.0	2.8	6.8	6.8
26	6.2	30	20	22	45	179	141	29	7.6	3.6	6.4	6.6
27	6.0	29	19	22	45	162	124	28	7.2	3.5	6.0	6.4
28	6.2	27	24	21	50	152	115	28	6.6	3.8	6.0	6.2
29	6.2	27	24	18	-	148	106	28	5.8	4.7	6.0	6.0
30	6.4	26	21	19	-	170	100	28	5.6	4.7	6.0	6.0
31	6.6	-	18	21	-	166	-	29	-	4.7	5.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	164.3	6.6	4.1	5.30	326
November.....	2,525.8	1,130	7.2	84.2	5,010
December.....	670	31	18	21.6	1,330
Calendar year 1944.....	25,405.2	1,130	3.2	69.4	50,390
January.....	657	27	18	21.2	1,300
February.....	6,018	2,700	45	215	11,940
March.....	5,239	460	47	169	10,390
April.....	5,418	301	100	181	10,780
May.....	1,516	95	28	49.0	3,010
June.....	487.0	33	5.6	16.2	966
July.....	113.3	5.4	2.5	3.65	225
August.....	337.6	46	4.7	10.9	670
September.....	210.3	12	5.3	7.01	417
Water year 1944-45.....	23,368.3	2,700	2.5	64.0	46,330

Peak discharge.- Nov. 12 (2 a.m.) 3,650 sec.-ft.; Feb. 2 (1 p.m.) 6,350 sec.-ft.; Mar. 15 (8 p.m.)
735 sec.-ft.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.
To convert war time to standard time, subtract 1 hour.

Mojave River at lower narrows, near Victorville, Calif.

Location.— Water-stage recorder, lat. 34°34'25", long. 117°19'10", in SW 1/4 sec. 29, T. 6 N., R. 4 W., 500 feet upstream from bridge on U. S. Highway 66 and 3 miles northwest of Victorville.

Drainage area.— 530 square miles.

Records available.— October 1936 to September 1945. February 1899 to July 1906, November 1930 to September 1936 at site 3 miles upstream.

Extremes.— Maximum discharge during year, 5,500 second-feet Feb. 2 (gage height, 4.78 feet); minimum daily discharge, 14 second-feet July 6, 9.
1930-45: Maximum discharge, 70,600 second-feet Mar. 2, 1938 (gage height, 18.7 feet, present datum), by slope-area method; minimum, 9 second-feet July 28, 1942.

Remarks.— Records fair except those for Nov. 12-19, Feb. 2-8, Mar. 15, 16, which are poor. Diversions above station principally for irrigation. Minor regulation by Lake Arrowhead.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	30	42	48	45	45	310	60	29	16	22	19
2	25	30	46	44	1,250	48	365	53	27	17	27	22
3	25	30	48	48	el,500	48	313	48	24	16	23	23
4	22	30	44	48	e500	60	246	42	26	15	23	20
5	24	34	42	44	e515	81	215	34	20	16	24	22
6	25	42	44	46	d225	190	205	29	20	14	18	20
7	22	38	44	48	d160	123	220	24	20	15	17	19
8	24	36	44	44	d120	92	252	33	19	15	15	19
9	22	36	42	46	90	92	312	29	20	14	18	22
10	24	34	44	42	67	100	440	29	20	15	16	22
11	26	38	50	46	56	121	285	26	19	16	15	22
12	25	300	48	44	48	144	200	27	23	17	16	23
13	28	d85	44	40	45	156	182	29	23	17	19	22
14	28	d60	44	44	43	178	156	27	19	15	20	24
15	26	d60	44	48	50	365	140	29	19	15	23	23
16	28	d55	46	49	40	875	132	31	23	18	23	24
17	31	d50	42	44	35	670	144	29	22	16	27	24
18	28	d48	40	44	40	495	174	29	22	19	36	27
19	28	d47	42	46	45	370	192	27	17	22	29	29
20	30	46	42	48	38	307	200	27	17	20	27	31
21	33	46	44	46	43	313	200	27	17	20	23	33
22	28	46	46	46	43	368	182	27	19	20	22	29
23	30	42	50	46	40	326	165	27	19	17	22	27
24	31	46	46	46	43	424	148	27	26	17	20	27
25	30	50	46	46	43	264	132	27	22	17	19	26
26	31	49	44	46	43	262	128	31	22	18	18	22
27	31	42	46	42	40	302	110	27	20	15	15	20
28	30	46	48	44	45	267	93	26	18	16	17	18
29	30	44	46	42	-	246	74	31	17	18	18	19
30	31	44	46	44	-	230	68	29	16	18	19	20
31	30	-	50	42	-	256	-	29	-	20	19	-
Month						Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet		
October						848	33	22	27.4	1,680		
November						1,583	300	30	52.8	3,140		
December						1,394	50	40	45.0	2,760		
Calendar year 1944						38,708	1,900	16	106	76,770		
January						1,400	48	40	45.2	2,780		
February						5,055	1,500	38	181	10,030		
March						7,813	875	45	252	15,510		
April						5,983	440	68	199	11,870		
May						970	60	24	31.3	1,920		
June						625	29	16	20.8	1,240		
July						524	22	14	16.9	1,040		
August						650	36	15	21.0	1,290		
September						698	33	18	23.3	1,350		
Water year 1944-45						27,548	1,500	14	75.5	54,640		

Peak discharge.— Nov. 12 (10 a.m.) 850 sec.-ft.; Feb. 2 (6:30 p.m.) 5,500 sec.-ft.; Mar. 15 (9:15 p.m.) 1,350 sec.-ft.

d Doubtful gage-height record; discharge computed on basis of combined discharge of Deep Creek and West Fork Mojave River near Hesperia.

e Stage-discharge relation uncertain; discharge computed on basis of combined discharge of Deep Creek and West Fork Mojave River near Hesperia.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Mojave River at Barstow, Calif.

Location.- Water-stage recorder, lat. $34^{\circ}54'25''$, long. $117^{\circ}01'20''$, in SW $\frac{1}{4}$ sec. 31, T. 10 N., R. 1 W., 75 feet upstream from bridge on U. S. Highway 91 at Barstow. Altitude of gage, about 2,090 feet.

Records available.- October 1930 to September 1945.

Average discharge.- 15 years, 48.8 second feet.

Extremes.- Maximum discharge during year, 1,750 second-feet Feb. 3 (gage height, 3.02 feet); no flow for several months.

1930-45: Maximum discharge, 64,300 second-feet Mar. 3, 1938 (gage height, 8.60 feet), by slope-area method; no flow for several months each year.

Remarks.- Records poor. Minor storage and many diversions above station. Although this record shows no flow at this station during the current water year prior to February, it is probable that there may have been minor runoff from the storm of Nov. 12-15 which was not recorded.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					0	6.8	155	21				
2					2	1.2	185	9.0				
3					e730	.9	250	7.0				
4					e395	3.0	185	1.0				
5					e190	4.8	175	.5				
6					90	3.4	175	.3				
7					57	1.0	165	.3				
8					45	1.5	145	.1				
9					13	3.0	135	.1				
10					2.8	1.6	195	0				
11					1.4	12	220	0				
12					1.0	41	135	0				
13					.7	115	110	0				
14					.4	155	105	0				
15					1.8	175	95	0				
16					1.6	540	84	0				
17					1.2	710	78	0				
18					.8	470	95	0				
19					1.2	425	135	0				
20					1.1	370	125	0				
21					.6	355	125	0				
22					1.4	325	120	0				
23					1.2	340	125	0				
24					1.0	355	105	0				
25					1.0	370	68	0				
26					1.4	195	68	0				
27					1.4	140	63	0				
28					4.1	175	45	0				
29					-	165	35	0				
30					-	165	34	0				
31					-	185	-	0				

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	0	0	0	0	0
November.....	0	0	0	0	0
December.....	0	0	0	0	0
Calendar year 1944.....	18,277.9	1,230	0	49.9	36,260
January.....	0	0	0	0	0
February.....	1,546.1	730	0	55.2	3,070
March.....	5,810.2	710	.9	187	11,520
April.....	3,740	250	34	125	7,420
May.....	39.3	21	0	1.27	78
June.....	0	0	0	0	0
July.....	0	0	0	0	0
August.....	0	0	0	0	0
September.....	0	0	0	0	0
Water year 1944-45.....	11,135.6	730	0	30.5	22,090

e Stage-discharge relation uncertain; discharge computed on basis of record of discharge for station at lower narrows, near Victorville.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

West Fork Mojave River near Hesperia, Calif.

Location.- Water-stage recorder, lat. $34^{\circ}20'20''$, long. $117^{\circ}14'35''$, in SE $\frac{1}{4}$ sec. 13, T. 3 N., R. 4 W., at highway bridge, 0.5 mile upstream from confluence with Deep Creek and 7 miles southeast of Hesperia. Altitude of gage, about 3,050 feet.

Drainage area.- 74.8 square miles.

Records available.- January 1930 to September 1945.

Average discharge.- 15 years, 37.6 second-feet.

Extremes.- Maximum discharge during year, 2,350 second-feet Feb. 2 (gage height, 5.87 feet); no flow during several months.
1930-45: Maximum discharge, 26,100 second-feet Mar. 2, 1938, by slope-area method; no flow during several months of each year.

Remarks.- Records good below 100 second-feet and fair above. Water diverted from Lake Gregory above station for domestic use and fire protection; no regulation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	12	13	18	38	122	19	4.7		0	
2		0	19	11	1,120	38	120	18	4.7		0	
3		0	20	10	460	40	103	18	3.0		0	
4		0	18	10	197	68	90	15	3.5	60.05	0	
5		.1	16	11	145	71	82	15	2.6		0	
6		0	15	10	119	78	73	15	2.6		0	
7		0	14	10	95	75	68	14	1.9	0	0	
8		0	15	10	83	75	66	14	1.8	0	0	
9		0	13	11	74	75	103	14	1.5	0	0	
10		0	12	11	62	76	90	14	.8	0	0	
11		338	12	11	55	82	73	14	.7	0	0	
12		455	13	11	49	52	71	14	.5	0	0	
13		104	12	11	46	86	66	11	.3	0	0	
14		216	10	11	42	84	61	13	.2	0	0	
15		144	12	10	42	644	59	11	.2	0	0	
16		78	11	10	42	468	53	9.5	.2	0	0	
17		54	11	8.9	36	345	50	7.4	.2	0	0	
18		39	10	8.3	38	284	50	7.4	.1	0	.2	
19		31	8.3	8.3	45	211	49	7.4	.1	0	0	
20		25	7.7	9.6	40	172	46	8.1	.1	0	0	
21		22	8.3	9.6	35	178	44	7.4	.1	0	0	
22		20	9.6	8.3	28	169	41	6.7	.2	0	0	
23		19	10	8.9	22	172	40	f6.0	.2	0	0	
24		18	9.6	7.7	29	148	41	f5.3	.1	0	0	
25		17	9.6	8.9	32	135	36	f5.3	.1	0	0	
26		17	8.9	8.3	30	172	33	6.0	.1	0	0	
27		17	9.6	8.3	31	150	28	6.8	.1	0	0	
28		16	18	8.3	41	158	27	4.7	.1	0	0	
29		16	19	8.9	-	125	26	4.7	.1	0	0	
30		13	18	8.9	-	120	24	5.3	.1	0	0	
31		-	14	8.9	-	120	-	5.3	-	0	0	

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	0	0	0	0	0
November.....	1,659.1	455	0	55.3	3,290
December.....	395.6	20	7.7	12.8	785
Calendar year 1944.....	20,666.80	3,270	0	56.5	40,990
January.....	301.1	13	7.7	9.71	597
February.....	3,058	1,120	18	109	6,060
March.....	4,719	644	38	152	9,360
April.....	1,824	122	24	60.8	3,620
May.....	322.3	19	4.7	10.4	639
June.....	30.9	4.7	.1	1.03	61.3
July.....	.30	-	0	.010	.6
August.....	0	0	0	.01	0
September.....	0	0	0	0	0
Water year 1944-45.....	12,308.5	1,120	0	33.7	24,410

Peak discharge.- Nov. 12 (12:30 a.m.) 2,200 sec.-ft.; Feb. 2 (2 p.m.) 2,350 sec.-ft.; Mar. 15 (1 p.m.) 1,380 sec.-ft.

Discharge less than 0.1 second-foot.

Computed on basis of partly estimated gage-height record.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Rock Creek near Valyermo, Calif.

Location.- Water-stage recorder, lat. 34°25'10", long. 117°50'25", in NE¼ sec. 20, T. 4 N., R. 9 W., 1.8 miles southeast of Valyermo. Altitude of gage, about 4,050 feet.

Drainage area.- 23.0 square miles.

Records available.- January 1923 to September 1937, May 1938 to September 1945.

Average discharge.- 21 years (1923-37, 1938-45), 16.7 second-feet.

Extremes.- Maximum discharge during year, 513 second-feet Nov. 11 (gage height, 3.88 feet); minimum daily discharge, 5.8 second-feet several days in August and September. 1923-45: Maximum discharge, 8,300 second-feet Mar. 2, 1938, by slope-area method; minimum, 1.2 second-feet Aug. 22, 1925.

Remarks.- Records good except those for period of doubtful gage-height record, which are poor. No diversions above station.

Cooperation.- Twelve discharge measurements furnished by Los Angeles County Flood Control District, through H. E. Hedger, chief engineer.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.1	9.1	13	11	7.3	14	21	22	16	11	9.8	5.8
2	9.1	9.1	13	11	129	14	21	21	16	11	9.8	d15
3	9.1	9.1	13	9.8	61	14	21	21	16	11	9.8	d15
4	9.1	8.3	13	9.8	35	14	20	21	16	11	9.8	d10
5	9.1	8.3	13	9.8	29	14	20	21	16	11	9.1	d8.5
6	8.3	8.3	13	9.8	26	14	20	21	15	11	9.1	d8.0
7	8.3	8.3	12	9.8	25	14	20	20	15	11	9.1	7.7
8	9.1	8.3	12	9.8	22	14	19	20	15	11	9.1	7.7
9	9.1	8.3	12	9.8	21	14	22	20	15	11	8.4	7.7
10	8.3	8.3	12	11	20	15	20	20	15	11	7.7	7.7
11	8.3	101	12	11	19	16	20	20	15	11	7.7	7.7
12	8.3	85	12	11	17	17	19	20	14	11	7.7	7.7
13	8.3	17	11	9.8	16	20	17	20	14	11	7.7	7.7
14	8.3	17	11	9.1	15	20	16	19	14	11	7.1	7.7
15	8.3	20	11	9.1	16	25	15	19	14	11	7.1	7.7
16	8.3	25	11	9.1	16	25	15	17	14	11	7.1	7.7
17	9.1	25	11	9.1	16	25	16	16	13	11	7.1	7.7
18	9.1	24	11	9.1	16	25	19	16	13	11	7.1	7.7
19	9.1	22	11	9.1	16	24	24	17	13	11	7.7	7.7
20	9.1	22	11	8.4	15	24	26	19	13	11	7.7	7.7
21	9.1	21	11	8.4	15	25	29	19	13	11	8.4	7.1
22	9.1	21	11	8.4	15	24	28	17	13	9.1	8.4	6.4
23	9.1	20	11	8.4	15	24	28	17	13	9.1	8.4	6.4
24	9.9	20	11	8.4	14	22	28	17	13	9.1	8.4	6.4
25	9.9	19	11	7.7	14	21	28	17	13	9.8	7.7	6.4
26	9.9	19	11	7.7	13	22	29	17	13	9.1	7.1	6.4
27	9.9	17	11	7.7	13	21	26	17	13	9.8	7.1	6.4
28	9.9	16	12	7.7	14	21	25	17	13	9.8	7.1	5.8
29	9.9	15	11	7.7	-	21	24	17	13	9.1	6.4	5.8
30	9.9	14	11	7.1	-	20	22	17	12	9.8	6.4	5.8
31	9.9	-	11	7.1	-	20	-	17	-	9.8	5.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	281.3	9.9	8.3	9.07	558
November.....	625.4	101	8.3	20.8	1,240
December.....	360	13	11	11.6	714
Calendar year 1944.....	12,287.7	101	8.3	33.6	24,370
January.....	282.7	11	7.1	9.12	561
February.....	650.3	129	7.3	23.2	1,290
March.....	603	25	14	19.5	1,200
April.....	658	29	15	21.9	1,310
May.....	579	22	16	18.7	1,150
June.....	420	16	12	14.0	833
July.....	325.5	11	9.1	10.5	645
August.....	246.9	9.8	5.8	7.96	490
September.....	233.0	15	5.8	7.77	462
Water year 1944-45.....	5,265.1	129	5.8	14.4	10,450

Peak discharge.- Nov. 11 (10 p.m.) 513 sec.-ft.; Feb. 2 (12:30 p.m.) 324 sec.-ft.

Doubtful gage-height record; discharge computed on basis of records for Little Rock Creek near Little Rock and Deep Creek near Hesperia.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Little Rock Creek near Little Rock, Calif.

Location.- Water-stage recorder, lat. 34°27'50", long. 118°01'05", 0.2 mile upstream from Santiago Creek and 5 miles south of Little Rock, Los Angeles County. Altitude of gage, about 3,290 feet.

Drainage area.- 49.0 square miles.

Records available.- October 1930 to September 1945 (1937-38 and 1938-39 incomplete).

Average discharge.- 13 years (1930-37, 1939-45), 23.5 second-feet.

Extremes.- Maximum discharge during year, 1,080 second-feet Nov. 11 (gage height, 7.10 feet); minimum daily discharge, 0.1 second-foot Sept. 1, 16.
1930-45: Maximum discharge, 17,000 second-feet (estimated) Mar. 2, 1938; no flow during parts of most years.

Cooperation.- Records furnished by Los Angeles County Flood Control District, through H. E. Hedger, chief engineer.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.4	3.0	9	6.5	19	11	35	16	11	1.6	0.2	0.1
2	1.4	3.0	10	8	323	12	37	15	9.5	1.3	.2	4.5
3	1.3	3.0	9	8	182	11	33	13	9	1.0	.2	9
4	1.2	3.0	6.5	8	104	13	30	15	9	1.0	.2	3.4
5	1.2	3.5	6.5	8	71	13	28	12	9	1.0	.2	1.5
6	1.3	5.5	8.5	8	52	13	28	11	8.5	.8	.2	.8
7	1.4	4.7	8.5	8	41	14	28	11	8.5	.8	.3	.4
8	1.8	4.2	8.5	8.5	31	16	31	11	8.5	2.0	.2	.4
9	1.8	4.0	8.5	8.5	27	22	35	11	8	2.6	.2	.3
10	1.8	4.4	8.5	8	24	27	30	10	7	1.4	.2	.3
11	1.8	118	8.5	7.5	21	32	29	10	6.5	1.4	.2	.2
12	1.6	241	8.5	7	19	32	28	9	5.5	1.2	.2	.2
13	1.8	48	8	7	17	31	27	8.5	5	.8	.2	.2
14	1.8	44	8	6.5	16	30	25	8.5	4.4	.8	.2	.2
15	1.9	40	8	6.5	19	48	23	8.5	4.2	.7	.2	.2
16	1.9	24	7.5	6.5	17	46	23	8.5	3.8	.6	.2	.1
17	1.9	19	8	6.5	16	43	26	8.5	3.6	.6	.2	.2
18	2.0	17	8	6.5	15	42	30	8	3.2	.6	.3	.2
19	2.0	16	8	6.5	15	36	34	8.5	2.8	.4	.3	.3
20	2.2	15	8	6.5	14	34	34	8.5	2.6	.4	.3	.3
21	2.2	14	7.5	6	12	36	35	8.5	2.2	.4	.3	.3
22	2.2	12	8	6.5	12	35	34	8	2.8	.3	.3	.3
23	2.4	12	9.5	6.5	11	33	31	7.5	2.8	.4	.2	.3
24	2.4	12	8.5	6.5	11	30	27	7.5	2.8	.3	.2	.2
25	2.4	11	8.5	6.5	11	30	28	7.5	2.8	.2	.2	.2
26	2.6	10	8.5	6.5	9.5	38	26	7	2.6	.2	.2	.2
27	2.6	10	8.5	6.5	9.5	36	24	8.5	2.6	.2	.2	.2
28	2.8	9.5	11	6	12	34	20	10	2.6	.2	.2	.2
29	2.8	9	11	5.5	-	32	18	10	2.4	.2	.2	.2
30	3.0	9	9.5	5.5	-	29	16	11	1.9	.2	.2	.2
31	3.0	-	8.5	6	-	30	-	12	-	.2	.2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	61.9	3.0	1.2	2.00	183
November.....	729.1	241	3.0	24.3	1,450
December.....	267.0	11	7.5	8.61	1,890
Calendar year 1944	17,232.3	736	1.2	47.1	34,190
January.....	216.5	8.5	5.5	6.98	429
February.....	1,131.0	323	9.5	40.4	2,840
March.....	889	48	11	28.7	1,760
April.....	853	37	16	28.4	1,890
May.....	307.0	16	7	9.90	609
June.....	155.1	11	1.9	5.17	308
July.....	23.7	2.6	.2	.76	47
August.....	6.8	.3	.2	.22	13
September.....	25.4	9	.1	.85	50
Water year 1944-45	4,685.5	323	.1	12.8	9,250

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.
To convert war time to standard time, subtract 1 hour.

MONO LAKE BASIN

Mono Lake near Mono Lake, Calif.

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

Records available.- June 1912 to September 1945; those prior to September 1934 are published in Water-Supply Paper 765.

Extremes.- 1912-45: Maximum gage height observed, 37.4 feet July 18, 1919; minimum observed, 23.8 feet Nov. 18, 1935.

Cooperation.- Gage-height record furnished by city of Los Angeles.

Gage height, in feet, water year October 1944 to September 1945

Oct. 3	25.9	Apr. 11	26.0
6	25.9	17	26.0
10	25.9	20	26.0
13	25.9	27	26.0
17	25.8	May 4	26.0
20	25.8	9	26.2
24	25.7	15	26.1
27	25.7	18	26.1
Nov. 3	25.7	29	26.2
7	25.7	June 1	26.3
17	25.7	8	26.3
22	25.6	12	26.3
28	25.6	15	26.4
Dec. 12	25.6	19	26.4
19	25.6	26	26.4
22	25.6	29	26.5
26	25.6	July 3	26.6
Jan. 1	25.6	10	26.7
9	25.6	20	26.7
12	25.6	24	26.7
23	25.6	27	26.7
26	25.6	31	26.7
30	25.6	Aug. 7	26.7
Feb. 12	25.9	10	26.7
16	26.0	14	26.7
26	25.9	17	26.7
Mar. 3	26.0	21	26.8
8	25.9	28	26.7
12	25.9	31	26.7
19	26.0	Sept. 7	26.6
30	26.0	11	26.6
Apr. 6	26.0	25	26.5

WALKER LAKE BASIN

Walker Lake near Hawthorne, Nev.

Location.- Bench mark at United States naval depot, lat. $38^{\circ}35'$, long. $118^{\circ}42'$, in NE $\frac{1}{4}$ sec. 2, T. 8 N., R. 29 E., 3 miles northwest of Hawthorne. Bench mark is 4,053.41 feet above mean sea level, adjustment of 1912.

Records available.- August 1928 to September 1945. Occasional readings prior to August 1928.

Extremes.- 1928-45: Maximum elevation observed, 4,051.8 feet Mar. 13, 1928 (Indian Service); minimum observed, 4,013.0 feet Jan. 12, 1945.
An elevation of 4,078.0 feet, 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, above mean sea level, water year October 1944 to September 1945

Oct. 26...	4,013.7	May 8...	4,013.1
Dec. 5...	4,013.2	June 9...	4,013.6
Jan. 12...	4,013.0	July 3...	4,014.2
Feb. 6...	4,013.1	Aug. 12...	4,014.3
Mar. 7...	4,013.1	Sept. 7...	4,014.0

Bridgeport Reservoir near Bridgeport, Calif.

Location.- Float gage or reference point, 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 and 4½ miles north of Bridgeport. Datum of gage is at mean sea level.

Drainage area.- 362 square miles.

Records available.- October 1931 to September 1945 in reports of Geological Survey. March 1928 to September 1945 in files of Walker River Irrigation District.

Extremes.- Maximum contents during year, 43,670 acre-feet May 3, 4, 7, 8, 10, 12, 14 (elevation, 6,460.4 feet); minimum, 10,260 acre-feet Oct. 10, 11 (elevation, 6,444.05 feet).

1928-45: Maximum contents, 44,580 acre-feet June 12, 1938 (elevation, 6,460.7 feet); 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-feet between elevations 6,412 feet (sill of outlet gate) and 6,460 feet (crest of spillway). No dead storage. Water is used for irrigation in Walker River Irrigation District. Contents correspond to gage readings made about 8 a.m. daily.

Cooperation.- Elevations and capacity table furnished by Walker River Irrigation District.

Contents, in acre-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,790	11,760	16,580	21,110	24,560	38,010	43,520	43,520	42,020	43,070	39,960	30,650
2	10,730	11,880	16,520	21,110	30,360	38,150	43,370	43,520	41,880	43,070	39,540	30,850
3	10,670	12,840	17,060	21,210	31,700	38,290	43,370	43,670	42,020	43,220	39,260	30,490
4	10,610	12,070	17,230	21,210	32,350	38,430	43,220	43,670	42,020	43,220	39,980	29,890
5	10,550	12,190	17,520	21,310	33,090	38,570	43,220	43,520	41,880	43,220	38,710	29,640
6	10,500	12,440	17,400	21,400	33,350	38,840	43,220	43,520	42,020	43,370	38,430	29,400
7	10,440	12,630	17,490	21,400	33,480	38,980	43,220	43,670	42,020	43,370	38,150	29,160
8	10,380	12,770	17,580	21,400	33,600	39,120	43,220	43,670	42,170	43,220	38,010	28,930
9	10,320	12,970	17,660	21,800	33,980	39,260	43,370	43,520	42,170	43,220	37,770	28,580
10	10,260	13,110	17,750	21,990	34,240	39,400	43,220	43,670	42,170	43,670	37,320	28,240
11	10,280	13,390	17,830	22,190	34,640	39,540	43,370	43,520	42,310	43,670	37,590	27,900
12	10,320	13,650	17,920	22,290	35,040	39,690	42,990	43,670	42,310	43,820	37,460	27,550
13	10,320	13,920	18,010	22,380	35,170	39,830	43,070	43,370	42,460	43,670	37,320	27,320
14	10,320	14,060	18,090	22,480	35,440	40,120	43,070	43,670	42,460	43,670	37,180	27,090
15	10,380	14,360	18,180	22,580	35,830	40,560	43,070	43,370	42,760	43,520	36,900	26,960
16	10,440	14,660	18,260	22,680	35,960	41,150	43,070	43,220	43,220	43,370	36,630	26,640
17	10,500	14,880	18,350	22,790	36,250	41,580	43,070	43,070	43,220	43,070	36,350	26,420
18	10,550	14,950	18,440	23,000	36,500	41,750	43,220	42,460	42,220	42,760	35,960	26,200
19	10,670	15,030	18,520	23,200	36,630	41,880	43,370	42,460	43,220	42,460	35,570	25,980
20	10,730	15,100	18,610	23,310	36,760	42,020	43,520	42,460	43,370	42,460	35,170	25,760
21	10,790	15,170	18,780	23,410	36,900	42,170	43,670	42,170	43,370	42,460	34,770	25,540
22	10,850	15,250	19,060	23,520	37,040	42,310	43,670	42,170	43,370	42,310	34,380	25,320
23	10,910	15,320	19,330	23,620	37,180	42,460	43,580	42,020	43,370	42,310	33,980	25,210
24	11,030	15,400	19,610	23,720	37,320	42,760	43,520	41,880	43,220	42,170	33,600	25,100
25	11,140	15,550	19,890	23,830	37,460	42,920	43,370	42,020	43,070	42,170	33,220	24,980
26	11,200	15,710	20,160	23,930	37,590	43,070	43,370	42,020	43,070	42,170	32,840	24,770
27	11,320	15,870	20,440	24,040	37,730	43,220	43,370	41,880	42,760	42,020	32,460	24,660
28	11,380	16,030	20,720	24,140	37,870	43,370	43,220	41,880	42,760	41,580	32,080	24,560
29	11,440	16,190	20,910	24,240	-	43,370	43,370	42,170	42,760	41,290	31,700	24,450
30	11,570	16,340	21,010	24,350	-	43,370	43,520	42,310	42,760	40,850	31,320	24,350
31	11,630	-	21,110	24,450	-	43,520	-	42,310	-	40,420	31,090	-

Monthly elevation and contents, water year October 1944 to September 1945

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Oct. 1.....	6,444.5	10,790	+970
Nov. 1.....	6,445.3	11,760	+4,320
Dec. 1.....	6,448.7	16,580	+4,530
Calendar year 1944.....	-	-	-13,000
Jan. 1.....	6,451.25	21,110	+3,450
Feb. 1.....	6,452.95	24,560	+15,450
Mar. 1.....	6,455.45	38,010	+5,510
Apr. 1.....	6,460.35	43,520	0
May 1.....	6,460.35	43,520	-1,500
June 1.....	6,459.85	42,020	+1,050
July 1.....	6,460.20	43,070	-3,090
Aug. 1.....	6,459.15	39,980	-9,130
Sept. 1.....	6,455.70	30,850	-6,610
Oct. 1.....	6,452.80	24,240	-
Water year 1944-45.....	-	-	+13,450

Time basis: Pacific war time 'p to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

East Walker River near Bridgeport, Calif.

Location.— Water-stage recorder, lat. 38°19'40", long. 119°12'50", in SW¼ sec. 34, T. 8 N., R. 25 E., 1,500 feet downstream from Bridgeport Reservoir, 5 miles north of Bridgeport, and 10 miles upstream from Sweetwater Creek.

Drainage area.— 362 square miles.

Records available.— October 1921 to September 1945. July 1911 to September 1914 at site 1½ miles upstream (gage heights only).

Average discharge.— 22 years (1922-24, 1925-45), 130 second-feet.

Extremes (regulated).— Maximum daily discharge during year, 809 second-feet July 11;

minimum daily, 1.8 second-feet Nov. 20-24.

1921-45: Maximum discharge, 1,240 second-feet Jan. 22, 1943 (gage height, 4.5 feet);

minimum daily recorded, that of Nov. 20-24, 1944.

Remarks.— Records good. Diversions for irrigation of meadow and pasture lands near Bridgeport. Flow regulated by Bridgeport Reservoir (see preceding page).

Rating table, water year 1944-45 (gage height, in feet, and discharge in second-feet)
(Shifting-control method used July 21 to Sept. 30)

0.1	2.0	0.6	30	1.6	229
.2	4.0	.7	42	2.0	351
.3	7.5	.8	56	2.4	487
.4	13	1.0	91	2.8	631
.5	20	1.3	154	3.3	821

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	4.6	7.5	5.4	6.1	7.2	134	279	297	522	384	270
2	80	3.2	7.5	5.8	7.5	7.2	132	297	297	547	384	270
3	80	3.0	7.5	5.8	5.4	7.2	132	297	297	555	364	270
4	80	3.0	6.8	5.8	5.4	7.2	130	288	300	576	338	270
5	80	3.2	6.1	5.8	5.4	7.2	130	294	304	576	338	270
6	80	3.2	6.1	5.8	5.8	7.2	128	329	307	576	338	270
7	80	2.8	6.1	5.4	5.8	7.2	128	404	307	555	338	270
8	80	2.6	6.4	5.0	5.8	7.2	128	435	304	587	316	270
9	80	2.8	6.4	5.0	5.8	7.2	126	484	307	714	297	267
10	59	3.0	6.4	5.0	6.1	7.5	126	432	310	790	297	267
11	42	2.8	6.4	5.0	6.1	7.5	124	484	313	809	291	267
12	40	2.6	6.4	5.0	6.1	7.5	109	425	319	763	291	267
13	40	2.2	6.4	4.7	6.1	7.5	93	529	332	668	291	238
14	27	2.2	6.4	4.7	6.1	7.5	93	540	364	606	313	200
15	18	2.2	6.4	4.7	6.1	7.5	93	494	450	565	335	210
16	18	2.2	6.1	4.7	6.1	7.5	93	396	504	518	341	216
17	18	2.2	6.1	4.7	6.1	8.0	97	341	508	449	341	213
18	18	2.0	6.1	4.7	6.4	7.5	117	325	518	442	338	213
19	19	1.9	6.1	5.0	7.2	8.0	136	313	598	415	338	213
20	19	1.8	6.1	5.0	7.2	8.0	159	310	664	391	338	200
21	10	1.8	6.1	5.0	7.2	8.0	221	313	612	364	338	177
22	5.4	1.8	6.1	4.7	7.2	8.6	258	313	654	338	322	170
23	5.4	1.8	6.1	4.7	7.2	19	246	310	710	300	297	170
24	5.4	1.8	5.8	4.7	7.2	35	238	307	668	270	300	170
25	5.4	4.2	5.8	4.7	7.2	40	235	304	642	291	300	154
26	5.4	6.8	5.8	4.7	7.2	43	218	300	606	319	300	130
27	5.8	6.8	5.8	4.7	7.2	61	216	297	565	358	297	130
28	5.8	6.8	5.8	4.7	7.2	78	216	297	533	391	291	130
29	5.8	6.8	5.8	4.7	-	86	224	297	522	387	276	130
30	6.1	7.2	5.8	4.7	-	117	235	300	515	387	276	130
31	6.1	-	5.8	4.7	-	139	-	300	-	387	273	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	1,104.6	80	5.4	35.6	2,190
November.....	99.3	7.2	1.8	3.31	197
December.....	194.0	7.5	5.8	6.28	385
Calendar year 1944.....	45,521.8	340	1.8	124	90,290
January.....	155.0	5.8	4.7	5.00	307
February.....	180.2	7.5	5.4	6.44	357
March.....	783.4	139	7.2	25.3	1,550
April.....	4,715	258	93	157	9,350
May.....	11,036	540	279	356	21,890
June.....	15,666	710	297	456	27,110
July.....	15,435	809	270	498	30,610
August.....	9,681	384	273	319	19,600
September.....	6,422	270	130	214	12,740
Water year 1944-45.....	63,671.5	609	1.8	174	126,300

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.
To convert war time to standard time, subtract 1 hour.

West Walker River below East Fork, near Coleville, Calif. . .

Location.- Water-stage recorder, lat. 38°22'45", long. 119°27'00", in SE¼ sec. 9, T. 6 N., R. 23 E., 75 feet downstream from East Fork, 200 feet upstream from bridge on U. S. Highway 395, and 13 miles southeast of Coleville.

Drainage area.- 182 square miles.

Records available.- April 1938 to September 1945. October 1902 to July 1908 at site 9½ miles downstream; March 1909 to August 1910 and June 1915 to March 1938 at site 10 miles downstream, published as West Walker River near Coleville.

Extremes.- Maximum discharge during year, 1,890 second-feet June 22 (gage height, 5.03 feet); minimum daily, 31 second-feet Oct. 27, 28, 30.
1938-45: Maximum discharge, 2,490 second-feet June 9, 1938 (gage height, 4.90 feet, site and datum then in use), from rating curve extended above 1,600 second-feet; minimum, 6 second-feet Dec. 10, 1940.
Maximum discharge known, 5,800 second-feet Dec. 11, 1937, by slope-area method.

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.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	48	43	b70	350	70	106	1,170	798	1,270	261	81
2	37	43	(*)	b65	550	68	91	1,260	998	1,260	258	84
3	36	48		b60	179	66	84	1,370	1,010	1,270	247	99
4	36	62		b62	134	66	86	1,420	1,210	1,140	238	115
5	36	57		66	113	64	94	1,340	864	1,120	287	102
6	34	52		63	110	66	102	1,270	692	1,090	270	94
7	33	52		60	106	66	115	1,220	608	1,060	230	91
8	38	46		59	115	66	113	1,370	618	906	206	66
9	37	50		54	108	67	104	1,350	724	1,060	184	81
10	37	70	b45	54	97	77	101	1,490	864	1,010	170	80
11	35	57		54	104	80	102	1,470	998	852	184	78
12	35	55		54	108	91	99	1,300	1,250	822	155	75
13	34	62		*52	115	104	94	1,110	1,510	828	144	71
14	34	63		52	110	101	94	876	1,590	769	134	70
15	35	62		55	94	84	106	792	1,420	639	126	68
16	34	54		49	91	81	149	876	1,240	618	115	67
17	34	b52		52	89	74	199	920	1,270	623	106	68
18	34	b52	46	54	84	86	261	786	1,580	568	110	70
19	33	b50	47	53	*83	94	361	696	1,530	530	198	67
20	*33	49	67	b52	80	94	471	628	1,620	498	124	66
21	33	b50	62	b52	83	97	598	618	1,610	475	115	70
22	34	b50	66	62	81	97	534	618	1,680	462	113	75
23	33	b50	74	b60	81	89	511	649	1,430	428	110	71
24	33	49	65	b58	80	83	539	593	1,430	387	102	63
25	32	49	54	b55	78	87	598	565	1,110	350	94	64
26	32	49	64	54	71	77	544	583	1,150	336	91	62
27	31	44	b60	48	73	83	544	606	1,190	372	89	60
28	31	42	57	b50	71	81	644	613	1,210	368	86	59
29	32	43	b50	b50	-	77	780	649	1,340	342	84	59
30	31	43	b50	b50	-	77	1,020	618	1,350	295	83	58
31	44	-	b65	43	-	91	-	583	-	267	83	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,067	44	31	34.4	2,120
November	1,583	70	42	51.8	3,070
December	1,623	86	-	62.4	3,280
Calendar year 1944	69,553	1,140	31	190	137,930
January	1,722	70	43	55.5	3,420
February	3,540	650	71	126	7,020
March	2,492	104	64	80.4	4,940
April	9,234	1,020	94	306	18,320
May	29,404	1,490	568	949	58,320
June	35,494	1,680	608	1,183	70,400
July	22,005	1,270	267	710	43,650
August	4,687	270	83	151	9,300
September	2,259	115	58	75.3	4,480
Water year 1944-45	115,080	1,680	31	315	228,300

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.
To convert war time to standard time, subtract 1 hour.

Topaz Reservoir near Topaz, Calif.

Location.- Float and staff gages at outlet works of Topaz Reservoir, lat. 38°41', long. 119°31', in sec. 28, T. 10 N., R. 22 E., 6 miles north of Topaz. Datum of gage is at mean sea level (levels by Walker River Irrigation District).

Records available.- October 1931 to September 1945.

Extremes.- Maximum contents observed during year, 60,220 acre-feet July 21, 22 (elevation, 5,005.34 feet); minimum, 14,510 acre-feet Oct. 22-27 (elevation, 4,981.46 feet).

1931-45: Maximum contents observed, 60,240 acre-feet June 30, 1941 (elevation, 5,005.35 feet); minimum observed, 505 acre-feet Oct. 22-25, 1931 (elevation, 4,972.63).

Remarks.- Topaz Reservoir, formerly known as Alkali Lake, was formed by diversion of water from West Walker River through a feeder canal and construction of an outlet tunnel through a low saddle in rim of lake. Storage began Jan. 30, 1922. Usable capacity, 59,440 acre-feet between elevations 4,972.3 feet (lowest practical elevation for diversion through tunnel, bottom of outlet tunnel at elevation 4,970 feet) and 5,005 feet (3 feet below top of levee). Capacity of reservoir increased from about 45,000 acre-feet to 59,440 acre-feet in October 1937 by an earth-fill, rock-faced levee at south end. Water is used for irrigation in Walker River Irrigation District.

Cooperation.- Elevations furnished by Walker River Irrigation District.

Contents, in acre-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15,120		19,220	-	-	-	49,200	59,970	57,820	60,130	56,570	40,770
2	15,000	14,540	-	-	32,160	41,780	50,940	59,900	57,650	-	55,890	40,060
3	14,890	14,560	-	-	-	-	-	59,850	-	-	55,220	-
4	14,810	-	-	-	-	-	-	59,670	-	-	54,550	-
5	14,770	-	-	25,840	34,510	-	-	59,550	-	-	53,880	-
6	14,720	15,120	-	-	-	-	50,940	59,440	-	-	-	-
7	14,660	15,150	-	-	-	-	-	-	-	60,170	-	-
8	-	15,200	20,480	-	-	-	-	-	-	60,200	-	36,520
9	14,580	-	-	-	35,900	43,520	-	-	58,890	-	-	35,990
10	14,580	-	-	-	-	-	-	-	58,800	-	-	-
11	14,610	-	-	-	-	-	-	-	-	-	51,660	-
12	14,610	-	-	27,140	-	-	-	-	-	-	51,630	-
13	14,610	-	-	-	-	-	52,030	-	-	-	-	-
14	14,610	-	-	-	-	-	-	-	-	60,080	-	-
15	14,610	-	21,570	-	-	-	-	-	-	60,010	-	-
16	14,590	-	-	-	39,000	45,180	-	-	59,320	-	-	33,830
17	14,580	16,590	-	-	-	-	52,910	-	59,250	-	-	-
18	14,580	-	-	-	-	-	-	-	-	-	48,350	-
19	14,560	-	-	28,450	-	-	53,240	58,710	-	-	47,770	-
20	14,540	-	-	-	-	-	53,690	58,710	-	-	-	-
21	14,530	-	-	-	-	-	53,910	-	-	60,220	-	-
22	14,510	-	22,930	-	-	-	-	-	-	60,220	-	-
23	14,510	-	-	-	40,060	46,360	55,310	-	59,390	-	-	-
24	14,510	17,950	-	-	-	-	-	-	59,320	-	-	-
25	14,510	-	-	-	-	-	-	-	-	-	44,470	30,910
26	14,510	-	-	29,580	-	-	-	-	-	-	43,890	-
27	14,510	-	-	-	-	-	-	58,410	-	-	43,310	-
28	14,530	-	-	-	41,470	-	59,030	58,270	-	59,490	42,790	30,640
29	14,530	-	24,470	-	-	-	59,440	58,180	-	58,870	42,200	-
30	14,530	-	-	-	-	48,990	59,670	58,070	60,080	58,520	41,730	30,640
31	-	-	25,040	30,460	-	49,200	-	57,930	-	57,840	41,270	-

Monthly elevation and contents, water year October 1944 to September 1945

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30.....	4,981.91	15,250	-
Oct. 31.....	-	14,530	-720
Nov. 30.....	-	19,040	+4,510
Dec. 31.....	4,987.73	25,040	+6,000
Calendar year 1944.....	-	-	-9,280
Jan. 31.....	4,990.85	30,460	+5,420
Feb. 28.....	4,996.70	41,470	+11,010
Mar. 31.....	5,000.40	49,200	+7,730
Apr. 30.....	5,005.10	59,670	+10,470
May 31.....	5,004.34	57,930	-1,740
June 30.....	5,005.28	60,080	+2,150
July 31.....	5,004.30	57,840	-2,240
Aug. 31.....	4,996.50	41,970	-16,870
Sept. 30.....	4,990.88	30,540	-10,730
Water year 1944-45.....	-	-	+15,290

a No gage-height record; contents interpolated.
Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

CARSON RIVER BASIN

East Fork Carson River near Gardnerville, Nev.

Location.— Water-stage recorder, lat. 38°51'30", long. 119°41'50", in NE¼ sec. 2, T. 11 N., R. 20 E., 2 miles east of Mud Lake Reservoir, 3 miles downstream from Leviathan Creek, and 7 miles southeast of Gardnerville.

Drainage area.— 360 square miles.

Records available.— May 1939 to September 1945. April 1890 to December 1893, October 1900 to December 1906, June to October 1917, December 1924 to September 1929, October 1935 to December 1937 at site 2 miles downstream, March 1906 to December 1910 at site 2 miles upstream.

Average discharge.— 18 years (1890-93, 1901-3, 1908-10, 1925-28, 1935-37, 1939-45); 428

second-feet (average discharge published in previous water supply papers erroneous).

Extremes.— Maximum discharge during year, 4,110 second-feet Feb. 2 (gauge height, 5.57

feet); minimum, 44 second-feet Oct. 7.

1890-93, 1900-1906, 1908-10, 1917, 1924-29, 1935-37, 1939-45: Maximum discharge, 12,000 second-feet Dec. 11, 1937 (gauge destroyed by flood) computed on basis of slope-area determinations of flow of tributaries, 14 miles upstream; minimum discharge observed, 8 second-feet Dec. 4-10, 19-23, 1904.

Remarks.— Records good except those for periods of ice effect or no gauge-height record, which are fair. Station is above all diversions in Carson Valley. Diversions above station for irrigation. Flow slightly regulated by several small reservoirs (total capacity, about 5,000 acre-feet).

Rating table, water year 1944-45, except periods of ice effect
(gauge height, in feet, and discharge, in second-feet)

0.7	37	1.8	307	4.0	1,870
.8	50	2.2	481	4.5	2,470
1.0	82	2.6	696	5.0	3,170
1.2	124	3.0	968	5.6	4,160
1.5	204	3.5	1,375		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	181	104	a110	713	170	296	1,990	1,080	916	181	a116
2	50	109	b96	b105	2,540	172	243	1,960	1,220	873	178	a114
3	98	*b92	b110	b102	702	170	214	2,050	1,260	873	175	a112
4	46	a150	b84	211	462	172	214	2,130	1,980	817	175	a140
5	47	a160	b90	143	372	148	230	2,100	1,410	798	161	a122
6	45	124	b90	134	319	170	233	2,300	1,130	758	201	a122
7	44	117	b88	129	285	146	263	2,370	1,020	739	201	a126
8	49	102	b86	124	292	162	288	2,240	963	708	172	a125
9	54	104	b84	126	292	162	260	2,270	1,070	746	164	a124
10	53	331	b80	129	253	181	239	2,430	1,150	715	151	a122
11	53	195	b76	124	260	204	253	2,300	1,190	644	138	a115
12	53	151	b74	113	267	233	246	1,940	1,330	583	131	a109
13	52	138	b74	122	263	270	230	1,680	1,510	557	126	a105
14	53	129	b76	122	307	281	226	1,320	1,520	521	120	a100
15	54	129	b80	*151	260	260	239	1,170	1,360	467	117	a96
16	54	120	b82	122	228	230	343	1,270	1,200	434	111	a104
17	56	104	b86	109	236	214	486	1,360	1,200	407	109	a107
18	56	111	b90	120	217	210	638	1,150	1,280	381	111	a110
19	54	106	102	120	207	226	909	968	1,330	351	141	a105
20	54	115	164	111	*190	286	1,190	897	1,360	327	146	a100
21	*54	100	156	b105	190	292	1,380	880	1,420	303	131	a95
22	59	102	243	b100	190	277	1,080	866	1,420	288	a135	a90
23	58	111	217	a100	203	263	1,080	1,280	1,280	274	a116	a85
24	56	115	178	b96	190	225	1,170	899	1,160	233	a112	82
25	56	98	148	b100	181	239	1,300	824	1,030	239	a106	80
26	54	106	122	b105	164	236	1,160	824	1,010	220	a106	79
27	54	106	126	b100	184	217	1,180	866	1,010	230	a106	79
28	56	96	146	b96	181	220	1,340	852	976	243	a107	80
29	58	104	115	b102	-	214	1,590	946	968	214	a114	80
30	58	102	a108	102	-	201	1,820	859	991	199	a111	79
31	125	-	a110	106	-	226	-	852	-	187	a120	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,711	125	44	56.2	3,390
November	3,634	331	96	127	7,560
December	3,464	243	74	112	6,870
Calendar year 1944	91,483	1,350	40	250	181,400
January	3,547	143	96	114	7,040
February	10,144	2,540	164	362	20,120
March	6,685	998	146	216	13,260
April	20,350	1,820	214	678	40,360
May	45,616	2,430	824	1,468	90,280
June	36,878	1,980	968	1,229	73,150
July	15,264	916	187	492	30,280
August	4,293	201	106	138	8,520
September	3,103	140	79	103	6,150
Water year 1944-45	154,769	2,540	44	424	307,000

* Winter discharge measurement made on this day.

a No gauge-height record; discharge computed on basis of water commissioner's notes, weather records, and records for West Walker River below East Fork, near Coleville, Calif.

b Stage-discharge relation affected by ice.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

Carson River near Carson City, Nev.

Location.— Water-stage recorder, lat. 39°06'30", long. 119°42'30", in NW¼ sec. 2, T. 14 N., R. 20 E., 2 miles downstream from Clear Creek, 2½ miles upstream from bridge on road to Mexican Dam, and 5 miles southeast of Carson City.

Records available.— May 1939 to September 1945.

Extremes.— Maximum discharge during year, 3,860 second-feet Feb. 3 (gage height, 5.61 feet); minimum, 22 second-feet Oct. 1.
1939-45: Maximum discharge, 8,500 second-feet Jan. 22, 1943 (gage height, 8.40 feet), by slope-area method; minimum daily, 4 second-feet (estimated) Aug. 17, 1939.

Remarks.— Records good except those for period of ice effect or no gage-height record, which are fair. Many diversions above station for irrigation. Flow slightly regulated by several small reservoirs on tributaries.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	69	194	b190	255	324	351	1,940	958	690	51	26
2	23	112	219	b190	1,600	324	380	2,070	1,140	653	57	22
3	25	101	215	b180	3,340	335	347	2,090	1,310	641	42	22
4	26	97	194	b200	1,440	335	328	2,220	1,520	559	37	25
5	26	197	186	b250	799	332	324	2,330	2,050	551	36	22
6	24	215	189	b260	647	316	320	2,300	1,740	562	39	24
7	31	197	192	b255	540	320	312	2,530	1,370	582	46	28
8	37	189	189	b250	510	297	335	2,770	1,190	535	55	27
9	37	169	186	248	530	297	355	2,750	1,130	505	45	29
10	37	235	177	241	480	297	335	2,710	1,140	650	42	32
11	37	535	166	241	447	308	328	2,770	1,160	606	41	31
12	39	389	b155	225	438	324	328	2,790	1,050	557	37	28
13	39	316	b150	212	420	351	308	2,420	1,060	500	35	30
14	39	268	148	215	443	376	286	2,050	1,180	482	31	28
15	39	235	158	222	495	399	282	1,600	1,240	365	30	30
16	40	222	166	219	429	393	301	1,370	1,100	316	28	23
17	42	206	166	206	393	372	372	1,370	1,060	248	28	24
18	42	186	169	194	368	368	447	1,410	1,100	169	29	28
19	42	183	177	200	355	380	595	1,220	1,120	139	37	28
20	42	180	209	192	343	424	860	1,060	1,170	99	46	25
21	45	183	265	177	328	471	1,210	965	1,230	83	47	23
22	45	166	261	b165	332	429	1,310	935	1,260	80	42	24
23	47	175	359	a155	328	402	1,160	905	1,220	76	38	28
24	50	177	320	a150	335	372	1,140	875	1,210	73	32	33
25	51	177	290	a170	324	351	1,280	789	1,120	68	26	36
26	50	166	258	a170	320	372	1,320	729	1,070	65	27	37
27	45	172	219	a160	312	351	1,290	709	958	74	30	41
28	50	169	258	a155	324	332	1,290	768	836	77	29	47
29	50	166	b210	a160	-	332	1,460	890	796	80	26	50
30	54	186	b190	a165	-	316	1,720	1,120	775	60	22	55
31	58	-	b180	194	-	316	-	1,020	-	56	23	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	1,234	58	22	39.8	2,450
November.....	6,038	535	69	201	11,980
December.....	6,395	359	148	206	12,680
Calendar year 1944.....	91,324.3	1,420	8.9	250	181,100
January.....	6,211	260	150	200	12,320
February.....	16,865	3,340	255	602	33,450
March.....	10,906	471	297	352	21,630
April.....	20,634	1,720	282	688	40,930
May.....	51,495	2,790	709	1,661	102,100
June.....	35,265	2,080	775	1,176	69,950
July.....	10,121	690	56	329	20,210
August.....	1,132	57	22	36.5	2,250
September.....	906	55	22	30.2	1,800
Water year 1944-45.....	167,272	3,340	22	458	331,800

a No gage-height record; discharge computed on basis of weather records and records for Carson River near Fort Churchill and East Fork Carson River near Gardnerville.

b Stage-discharge relation affected by ice.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

Carson River near Fort Churchill, Nev.

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

Drainage area.- 1,450 square miles.

Records available.- January 1934 to September 1945. April 1911 to December 1933 at site 8 miles upstream.

Average discharge.- 34 years (1911-45), 368 second-feet.

Extremes.- Maximum daily discharge during year, 2,440 second-feet May 12; no flow Oct. 1-26, July 28 to Sept. 30.

1911-45: Maximum discharge, 6,300 second-feet Jan. 24, 1943; no flow during some periods in nearly every year since 1923.

Remarks.- Several diversions above station for irrigation, including diversions for irrigation of 720 acres between present site and site used prior to Jan. 1, 1934. Practically entire flow is diverted during late irrigation-season.

Cooperation.- Records of daily discharge furnished by Truckee-Carson Irrigation District.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	55	167	224	256	365	345	1,690	837	719		
2	0	75	165	217	845	365	375	1,620	877	642		
3	0	94	217	217	1,700	370	365	1,820	1,070	617		
4	0	110	243	192	2,200	380	365	1,840	1,150	611		
5	0	104	227	206	1,130	375	345	2,000	1,510	575		
6	0	142	217	270	621	360	345	2,020	1,790	553		
7	0	192	209	283	675	350	340	2,060	1,400	530		
8	0	186	209	288	611	345	340	2,200	1,150	513		
9	0	170	213	283	569	330	355	2,360	1,070	497		
10	0	183	213	270	575	330	360	2,410	1,070	508		
11	0	311	209	256	525	330	340	2,370	1,070	575		
12	0	480	189	256	502	350	325	2,440	1,020	541		
13	0	401	198	247	486	385	350	2,400	945	497		
14	0	340	195	234	470	401	315	2,090	1,000	459		
15	0	292	195	238	502	417	297	1,660	1,090	412		
16	0	274	192	238	525	422	297	1,310	1,070	360		
17	0	261	209	247	464	417	311	1,170	978	302		
18	0	243	202	234	439	412	365	1,220	970	256		
19	0	227	202	220	412	401	422	1,070	1,010	189		
20	0	209	217	251	401	417	558	1,030	1,030	155		
21	0	202	234	224	390	464	789	911	1,070	129		
22	0	202	292	209	375	486	1,110	861	1,140	100		
23	0	198	306	192	370	448	1,070	789	1,150	85		
24	0	198	390	183	370	422	1,030	781	1,120	77		
25	0	198	365	266	375	396	1,070	733	1,110	72		
26	0	192	340	234	365	390	1,200	675	1,030	59		
27	16	186	302	247	355	390	1,190	624	1,000	27		
28	28	179	270	234	370	370	1,180	635	869	0		
29	26	176	278	227	-	370	1,260	661	761	0		
30	36	173	256	220	-	360	1,470	829	749	0		
31	45	-	227	224	-	360	-	986	-	0		

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	151	45	0	4.97	300
November.....	6,253	480	55	208	12,400
December.....	7,348	390	165	237	14,570
Calendar year 1944.....	85,757	1,190	0	234	170,100
January.....	7,311	288	183	236	14,500
February.....	17,077	2,200	256	610	33,870
March.....	11,978	486	330	386	23,760
April.....	18,485	1,470	297	616	36,660
May.....	45,456	2,440	624	1,456	90,180
June.....	32,126	1,790	749	1,071	65,720
July.....	10,062	718	0	325	19,960
August.....	0	0	0	0	0
September.....	0	0	0	0	0
Water year 1944-45.....	156,247	2,440	0	428	309,900

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

CARSON RIVER BASIN

West Fork Carson River at Woodfords, Calif.

Location.- Water-stage recorder, lat. 38°46'00", long. 119°50'00", in SE¼SW¼ sec. 34, T. 11 N., R. 19 E., 0.3 mile downstream from bridge on State Highway 8, 0.8 mile west of Woodfords, and 3¼ miles downstream from Willow Creek.

Drainage area.- 68 square miles.

Records available.- October 1900 to May 1907, 1910-11 (fragmentary), October 1938 to September 1945. April 1890 to March 1892 and June 1907 to September 1920 at site 0.7 mile downstream and below three diversions for irrigation.

Average discharge.- 22 years (1901-3, 1905-15, 1916-20, 1939-45), 133 second-feet.

Extremes.- Maximum discharge during year, 975 second-feet May 10 (gage height, 5.26 feet); minimum, 14 second-feet Oct. 5-7.

1900-1920, 1938-45: Maximum discharge, 1,570 second-feet May 9, 10, 1906 (gage height, 6.8 feet, datum then in use); minimum, (1900-1907, 1938-45) 9 second-feet Dec. 11, 1940.

Maximum discharge known, 3,500 second-feet Dec. 11, 1937 (gage height, 9.0 feet, present datum, from floodmarks), by slope-area method.

Remarks.- Records good. One small diversion above station for irrigation. Flow slightly regulated by several small reservoirs (total capacity, about 1,500 acre-feet).

Rating table, water year 1944-45, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 16 to July 13)

0.7	13	1.6	59	3.5	335
.9	18	2.0	97	4.0	465
1.1	26	2.5	157	4.5	621
1.3	37	3.0	234	4.9	770

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	48	25	b30	45	47	68	667	245	149	67	45
2	17	31	25	30	153	48	59	638	269	145	65	30
3	15	34	24	29	120	45	53	578	358	139	64	25
4	15	69	24	29	104	46	53	642	509	129	62	23
5	14	44	25	30	99	43	56	607	333	123	57	21
6	14	34	25	31	83	43	56	693	269	118	44	20
7	14	33	24	32	86	43	62	727	239	112	40	19
8	16	28	24	30	37	40	61	708	224	112	37	19
9	16	35	25	30	79	40	62	712	238	134	36	19
10	16	35	22	30	73	45	56	739	239	117	34	18
11	15	36	24	29	75	45	57	667	241	104	32	25
12	15	36	21	28	72	50	55	561	265	96	26	41
13	15	38	21	30	73	55	53	512	297	91	33	41
14	15	35	24	29	76	58	53	410	285	82	49	40
15	15	35	24	30	66	52	59	357	248	76	56	38
16	15	35	23	29	63	48	90	387	217	73	53	38
17	15	28	23	25	62	29	126	392	212	70	48	24
18	15	28	23	28	60	46	170	312	222	64	44	20
19	15	28	26	26	59	56	247	273	234	58	40	19
20	15	31	32	b25	53	59	345	254	239	72	36	19
21	16	25	39	b25	54	57	389	247	234	76	34	18
22	16	28	50	b24	53	55	345	232	231	66	33	19
23	16	29	49	b24	53	50	369	239	212	49	32	19
24	16	27	42	b24	53	49	454	220	188	45	28	19
25	16	25	34	b25	51	51	485	215	180	43	23	19
26	16	28	28	b26	48	40	437	212	176	42	21	19
27	16	26	33	26	48	51	477	214	172	43	21	25
28	16	24	30	25	50	47	540	212	161	44	23	35
29	16	26	26	25	-	48	607	234	158	39	30	37
30	16	26	31	25	-	47	663	212	157	33	45	35
31	54	-	b30	25	-	56	-	209	-	43	45	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	522	54	14	16.8	1,040
November.....	987	68	24	32.9	1,960
December.....	872	50	21	28.1	1,730
Calendar year 1944.....	23,878	485	13	65.2	47,360
January.....	854	32	24	27.6	1,690
February.....	1,998	153	45	71.4	3,960
March.....	1,489	59	29	48.0	2,950
April.....	6,607	663	53	220	13,100
May.....	13,382	739	209	432	26,540
June.....	7,222	509	157	241	14,320
July.....	2,587	149	33	83.5	5,130
August.....	1,253	67	21	40.6	2,500
September.....	790	45	18	26.3	1,570
Water year 1944-45.....	38,568	739	14	106	76,490

b Stage-discharge relation affected by ice.
Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.
To convert war time to standard time, subtract 1 hour.

Humboldt River near Elko, Nev.

Location.— Water-stage recorder, lat. 40°56', long. 115°38', in SE¼ sec. 11, T. 35 N., R. 56 E., 1 mile southeast of Ryndon, 6 miles downstream from North Fork, and 10 miles northeast of Elko. Staff gage at site 11 miles downstream prior to Oct. 11, 1902, at different datum.

Records available.— October 1944 to September 1945. June 1895 to October 1902 at site 11 miles downstream.

Extremes.— Maximum discharge during year, 2,530 second-feet June 9 (gage height, 8.96 feet); minimum not determined, occurred during period of no gage-height record. 1895-1902, 1944-45: Maximum discharge, that of June 9, 1945; minimum observed, 0.5 second-foot several days in August and September 1901.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					b55	193	503	922	1,110	1,360	136	21
2					187	189	549	940	1,200	1,240	123	20
3					193	208	532	971	1,270	1,150	109	17
4					a170	181	445	1,020	1,230	1,070	104	17
5					a160	183	402	1,120	1,300	996	98	16
6			a15	a50	a160	157	387	1,260	1,580	950	93	16
7					*183	161	404	1,460	2,020	932	93	15
8				(*)	a210	165	458	1,610	2,410	898	102	14
9		*20			a280	169	503	1,680	2,480	859	104	14
10		22			a250	189	522	1,690	2,360	856	97	14
11			27		a270	225	497	1,780	2,200	782	89	13
12					a300	357	469	1,870	2,100	754	76	12
13			(*)	a50	347	511	456	1,990	1,880	740	67	11
14					439	698	443	1,980	1,610	708	61	12
15					a520	859	425	2,000	1,460	669	54	13
16		a10	a30	a40	*557	764	422	1,880	1,450	625	47	11
17					680	599	466	1,780	1,410	568	42	11
18					571	497	511	1,640	1,320	515	40	10
19					445	425	540	1,480	1,200	469	36	10
20			(*)	a75	367	384	599	1,370	1,100	435	38	11
21					306	377	682	1,240	1,080	404	46	12
22				(*)	288	412	814	1,160	1,090	374	42	14
23					281	505	996	1,120	1,200	340	38	15
24					242	602	1,080	1,130	1,420	299	35	16
25					223	598	1,060	1,200	1,770	280	33	16
26			a40	a60	202	530	1,080	1,380	2,020	229	28	16
27					191	516	1,050	1,320	1,960	204	27	18
28					193	487	996	1,130	1,800	183	24	19
29				a50	-	453	964	1,060	1,600	173	23	20
30				a50	-	461	943	1,030	1,480	165	22	20
31				*b50	-	490	-	1,040	-	151	21	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	310	-	-	10	615
November.....	859	-	-	28.6	1,700
December.....	1,240	1	-	40	2,460
Calendar year.....	-	-	-	-	-
January.....	1,835	-	-	59.2	3,640
February.....	8,232	660	55	294	16,330
March.....	12,555	859	157	404	24,860
April.....	19,198	1,080	367	640	38,080
May.....	43,253	2,000	922	1,395	85,790
June.....	48,090	2,450	1,060	1,603	95,590
July.....	19,357	1,360	151	624	38,390
August.....	1,948	136	21	62.8	3,960
September.....	444	21	10	14.8	881
Water year 1944-45.....	157,301	2,480	-	431	312,000

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of 5 discharge measurements, weather records, and records for stations at Palisade and near Carlin.

b Stage-discharge relation affected by ice.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Humboldt River near Carlin, Nev.

Location.— Water-stage recorder, lat. 40°43', long. 116°00', in sec. 28, T. 32 N., R. 53 E., 4½ miles southwest of Moleen, 5 miles upstream from Susie Creek, 5½ miles east of Carlin, and 15 miles southwest of Elko.

Drainage area.— 4,810 square miles.

Records available.— October 1943 to September 1945.

Extremes.— Maximum discharge during year, 3,640 second-feet June 10 (gage height, 7.78 feet); minimum, 13 second-feet several days in October.

1943-45: Maximum discharge, that of June 10, 1945; minimum daily, 10 second-feet Oct. 1-7, 1943.

High water of February 1943 reached a stage of 9.8 feet (discharge, 5,900 second-feet, by slope-area method).

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

Rating table, water year 1944-45, except period of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 8 to Sept. 30)

0.8	13	1.9	167	4.7	1,300
.9	20	2.2	242	5.4	1,720
1.0	28	2.6	363	6.0	2,140
1.2	49	3.0	501	7.0	2,920
1.4	76	3.6	698	8.0	3,660
1.6	108	4.0	930		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	25	60	65	100	288	809	1,760	1,710	2,370	239	50
2	14	26	60	62	350	282	842	1,820	1,720	2,190	215	50
3	15	26	70	67	320	285	809	1,880	1,730	2,060	202	50
4	16	25	62	65	400	279	791	2,000	1,870	1,940	195	68
5	15	33	65	67	300	288	764	2,200	2,100	1,820	163	66
6	15	44	65	70	280	264	711	2,400	2,240	1,710	195	56
7	15	*45	65	72	210	260	707	2,580	2,370	1,600	190	50
8	14	41	60	74	300	242	750	2,620	2,730	1,530	195	48
9	15	40	58	76	376	245	814	2,750	3,260	1,450	185	47
10	14	40	56	*78	*322	253	818	2,860	3,630	1,430	188	42
11	14	44	55	80	347	285	823	3,010	3,570	1,390	174	37
12	14	49	*55	80	396	341	832	3,070	3,280	1,340	163	36
13	13	49	55	82	399	345	795	3,060	2,980	1,260	152	36
14	a13	57	56	85	542	732	759	3,210	2,880	1,170	140	31
15	a13	69	56	95	566	642	732	3,190	2,660	1,120	130	29
16	a13	65	58	110	588	870	746	3,040	2,430	1,080	119	28
17	14	61	58	110	627	930	791	2,900	2,240	1,000	108	29
18	16	45	60	110	694	900	866	2,690	2,160	925	103	27
19	17	35	62	105	690	777	995	2,500	2,130	866	105	27
20	16	65	64	105	640	669	1,160	2,300	2,100	791	106	29
21	20	60	66	100	523	627	1,350	2,140	2,090	715	105	32
22	19	70	68	90	444	556	1,580	2,000	2,100	640	98	34
23	22	*60	65	85	410	777	1,680	1,890	2,160	592	94	36
24	23	65	60	85	386	809	1,720	1,900	2,240	542	86	38
25	23	65	58	85	347	800	1,970	1,930	2,390	501	79	39
26	26	70	60	90	303	915	2,060	1,870	2,470	451	75	40
27	25	75	60	90	291	980	1,990	1,830	2,730	403	69	40
28	24	65	62	90	288	885	1,870	1,930	2,930	363	62	41
29	24	65	62	85	-	851	1,790	1,920	2,840	334	61	44
30	24	75	60	85	-	800	1,750	1,750	2,630	306	58	46
31	24	-	60	90	-	768	-	1,710	-	279	49	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	546	26	13	17.6	1,080
November.....	1,554	75	25	51.8	3,080
December.....	1,921	80	55	62.0	3,810
Calendar year 1944.....	132,238	1,920	12	361	262,300
January.....	2,633	110	62	84.9	5,220
February.....	11,441	694	100	409	22,690
March.....	18,395	990	242	593	36,490
April.....	34,074	2,060	707	1,136	67,580
May.....	72,710	3,210	1,710	2,345	144,200
June.....	74,350	3,630	1,710	2,478	147,800
July.....	34,168	2,370	279	1,102	67,770
August.....	4,123	239	49	133	8,180
September.....	1,228	68	27	40.9	2,440
Water year 1944-45.....	257,143	3,630	13	705	510,000

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of recorded range in stage.

Note.— Stage-discharge relation affected by ice Nov. 18 to Feb. 7.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Humboldt River at Palisade, Nev.

Location.- Water-stage recorder, lat. 40°37', long. 116°12', in sec. 36, T. 32 N., R. 51 E., 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 square miles.

Records available.- November 1902 to October 1906, July 1911 to September 1945.

Average discharge.- 37 years (1903-6, 1911-45), 365 second-feet.

Extremes.- Maximum discharge during year, 3,780 second-feet June 11 (gage height, 7.59 feet); minimum daily, 20 second-feet Oct. 1, 1902-6, 1911-45; Maximum discharge, 6,250 second-feet Feb. 26, 1943 (gage height, 9.92 feet); minimum, 2 second-feet Aug. 25-28, 1931.

Remarks.- Records excellent except those for periods of ice effect, which are fair. Diversion above station for irrigation of about 150,000 acres of hay and pasture lands.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	41	84	84	135	353	1,090	2,330	1,900	2,530	280	66
2	31	35	100	82	361	345	1,070	2,370	1,900	2,320	245	68
3	30	36	90	86	449	353	1,010	2,460	1,890	2,180	224	71
4	29	34	82	b80	462	349	962	2,520	1,960	2,040	218	71
5	29	37	84	b82	410	353	942	2,700	2,250	1,920	206	92
6	30	42	84	86	337	333	942	2,940	2,450	1,820	208	77
7	30	52	86	88	318	318	962	3,090	2,550	1,700	245	71
8	30	52	b80	94	369	302	1,030	3,130	2,790	1,620	241	68
9	30	48	b75	98	510	302	1,090	3,140	3,150	1,540	221	66
10	30	54	b70	98	440	310	1,050	3,280	3,600	1,500	215	66
11	29	61	b70	100	427	345	1,020	3,410	3,780	1,470	202	60
12	29	71	b70	107	471	410	1,040	3,490	3,600	1,430	187	57
13	29	69	b70	109	510	575	994	3,460	3,300	1,330	175	57
14	30	68	b70	116	692	850	942	3,440	3,070	1,240	167	55
15	30	77	b70	130	739	962	923	3,520	2,910	1,190	156	49
16	30	77	b70	138	703	988	982	3,410	2,690	1,140	148	48
17	31	68	b72	135	703	1,010	1,090	3,280	2,460	1,080	133	48
18	31	59	b75	143	750	1,030	1,260	3,060	2,320	988	126	48
19	31	61	b78	135	782	916	1,430	2,830	2,260	923	126	48
20	34	82	b80	135	744	804	1,730	2,830	2,230	866	126	48
21	35	77	b85	125	682	782	2,080	2,450	2,190	788	128	52
22	37	82	b85	b120	561	856	2,350	2,500	2,190	708	121	57
23	37	73	b80	b110	510	1,030	2,440	2,180	2,230	662	116	60
24	39	84	b75	b110	479	1,000	2,450	2,180	2,330	608	111	61
25	40	80	71	b110	444	936	2,530	2,170	2,460	556	103	61
26	41	84	77	b115	385	1,080	2,760	2,110	2,530	506	96	63
27	42	86	b77	b115	369	1,140	2,630	2,010	2,710	457	94	63
28	42	82	b77	b115	357	1,060	2,460	2,050	2,920	410	84	65
29	44	79	79	b110	-	1,030	2,370	2,130	2,960	377	79	66
30	44	88	79	b110	-	975	2,320	2,000	2,760	349	77	68
31	42	-	79	b120	-	962	-	1,910	-	318	73	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	1,036	44	20	33.4	2,050
November.....	1,938	88	34	64.6	3,940
December.....	2,424	100	70	78.2	4,610
Calendar year 1944.....	145,755	1,960	20	398	289,100
January.....	3,386	143	82	109	6,720
February.....	14,119	782	135	504	28,000
March.....	22,059	1,140	302	712	43,750
April.....	45,999	2,760	925	1,535	91,240
May.....	83,980	3,590	1,610	2,708	166,500
June.....	78,360	3,760	1,890	2,612	155,400
July.....	36,556	2,530	318	1,179	72,510
August.....	4,934	280	73	159	9,790
September.....	1,850	92	48	61.7	3,670
Water year 1944-45.....	296,611	3,760	20	613	588,300

b Stage-discharge relation affected by ice.

n Computed from staff-gage reading.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

HUMBOLDT RIVER BASIN

Rye Patch Reservoir near Rye Patch, Nev.

Location.- Mercury indicating gage, lat. 40°28'15", long. 118°18'20", in NE¼ sec. 18, T. 30 N., R. 33 E., at control works at left end of Rye Patch Dam, 2 miles northwest of Rye Patch. Datum of gage is at mean sea level (Southern Pacific Railroad datum).

Drainage area.- 13,700 square miles.

Records available.- February 1936 to September 1945.

Extremes.- Maximum contents during year, 189,500 acre-feet, June 10 (elevation, 4,133.95 feet); minimum, 157,200 acre-feet May 13 (elevation, 4,130.92 feet).
1936-45: Maximum contents, that of June 10, 1945; minimum since operation began, 1,760 acre-feet Oct. 15, 1937.

Remarks.- Reservoir is formed by earth-fill, rock-faced dam; storage began Feb. 20, 1936. Capacity, 179,100 acre-feet (revised) between elevations 4,072.5 feet (sill of trash-rack structure) and 4,133.0 feet (top of spillway gates). Dead storage negligible. Elevation of spillway (gate sill) is 4,116 feet. Water is used for irrigation on Humboldt project.

Contents, in acre-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	180,000	159,200	159,900	162,500	168,200	179,100	179,100	171,800	175,300	180,800	174,500	171,600
2	159,600	158,900	160,300	162,700	169,900	179,100	179,100	170,500	177,400	180,800	174,800	171,600
3	159,500	159,100	160,700	162,600	170,200	179,100	179,100	169,100	178,300	181,100	174,200	171,200
4	159,300	159,400	160,900	162,600	170,600	179,100	179,100	167,600	179,800	181,600	174,400	171,200
5	159,200	159,500	161,100	162,700	171,000	179,100	179,100	166,500	182,000	182,400	174,200	171,200
6	159,400	159,000	161,300	162,800	171,300	179,100	179,100	164,900	183,700	181,600	172,700	171,600
7	159,400	159,000	161,300	163,000	171,600	179,100	179,100	164,100	185,300	181,600	172,500	171,200
8	159,100	158,600	161,300	163,100	171,800	179,100	179,100	163,500	186,100	180,800	172,500	171,600
9	159,300	159,300	161,100	163,200	172,000	179,100	179,100	161,500	187,700	180,100	172,100	171,200
10	159,700	159,900	161,300	163,300	172,200	179,100	179,100	160,600	189,500	179,900	171,600	170,700
11	159,900	159,500	161,300	163,400	172,500	179,100	179,100	159,600	188,900	179,500	171,200	170,500
12	159,600	159,100	161,500	163,400	172,700	179,100	179,100	158,700	188,400	179,300	170,300	171,000
13	159,700	159,400	161,700	163,500	173,100	179,100	179,100	157,800	188,900	178,600	170,000	170,500
14	159,500	159,700	161,700	163,500	174,100	179,100	179,100	156,000	187,800	178,600	170,200	170,100
15	159,400	159,700	161,900	163,800	175,200	179,100	179,100	156,300	187,400	177,600	170,200	169,500
16	159,300	159,500	162,000	163,100	176,300	179,100	179,100	157,800	188,000	176,900	170,200	170,100
17	159,300	159,500	161,800	163,100	176,500	179,100	179,100	159,100	187,800	176,100	170,500	169,500
18	159,300	159,300	161,800	163,300	176,100	179,100	179,100	159,100	187,600	175,700	170,600	169,700
19	159,300	159,500	161,700	163,400	176,700	179,100	179,100	160,100	186,900	175,100	170,600	169,500
20	159,300	159,300	161,900	163,600	176,000	179,100	179,100	160,500	186,300	174,700	171,100	167,400
21	159,300	159,300	161,900	163,900	179,100	179,100	178,900	161,300	185,400	174,200	171,600	168,400
22	159,200	159,400	162,200	164,000	179,100	179,100	178,400	162,100	184,600	175,700	171,600	168,400
23	159,200	159,400	162,300	164,200	179,100	179,100	178,000	162,100	183,900	173,700	171,700	168,600
24	159,200	159,200	162,300	164,700	179,100	179,100	177,400	163,800	182,800	174,300	171,600	168,600
25	159,100	159,100	162,300	164,700	179,100	179,100	176,700	166,300	181,600	174,700	171,800	168,400
26	159,000	159,300	162,500	167,400	179,100	179,100	175,900	166,200	180,500	175,400	171,800	169,500
27	159,000	159,700	162,500	167,500	179,100	179,100	175,000	167,800	180,800	175,900	172,200	169,500
28	158,900	159,700	162,400	167,700	179,100	179,100	174,500	168,900	180,300	175,100	171,900	169,600
29	158,900	159,900	162,400	167,800	-	179,100	173,100	169,900	179,600	174,800	172,000	168,600
30	158,600	159,700	162,400	167,900	-	179,100	172,600	171,400	180,400	175,100	171,900	168,400
31	157,800	-	162,500	168,100	-	179,100	-	173,900	-	174,800	172,100	-

Monthly elevation and contents, water year October 1944 to September 1945

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Oct. 1.....	4,131.19	160,000	-1,800
Nov. 1.....	4,131.02	159,200	-1,700
Dec. 1.....	4,131.18	159,900	+2,600
Calendar year 1944.....	-	-	+14,600
Jan. 1.....	4,131.43	162,500	+5,700
Feb. 1.....	4,131.98	168,200	+10,900
Mar. 1.....	4,133.00	179,100	-
Apr. 1.....	4,133.00	179,100	-7,300
May 1.....	4,132.32	171,800	+3,500
June 1.....	4,132.65	175,300	+5,500
July 1.....	4,133.16	180,800	-6,300
Aug. 1.....	4,132.57	174,500	-2,700
Sept. 1.....	4,132.32	171,800	-3,000
Oct. 1.....	4,132.04	168,800	-
Water year 1944-45.....	-	-	+8,800

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

Humboldt River near Rye Patch, Nev.

Location.- Water-stage recorder, lat. 40°27'25", long. 118°18'20", in NE¼NE¼ sec. 19, T. 30 N., R. 33 E., 5,000 feet downstream from Rye Patch Dam and 1 mile northwest of Rye Patch. Prior to Apr. 5, 1945, discharge computed from gate openings at dam.

Drainage area.- 13,700 square miles.

Records available.- October 1935 to September 1941 and October 1943 to September 1945. January 1896 to December 1909, September 1910 to September 1922, and September 1924 to September 1932 (fragmentary) at site near Oreana, 7 miles downstream, published as Humboldt River near Oreana.

Average discharge.- 31 years (1899-1909, 1910-16, 1917-22, 1930-32, 1935-41, 1943-45), 203 second-feet.

Extremes.- 1943-44: Maximum daily discharge during year, 390 second-feet July 31,

Avg. 1-4; practically no flow for many days when gates were closed.

1944-45: Maximum daily discharge during year, 2,000 second-feet June 19-23;

practically no flow for many days when gates were closed.

1896-1922, 1924-32, 1935-41, 1943-45: Maximum discharge, 3,050 second-feet May 12, 1897 (gage height, 12.0 feet, site and datum then in use); practically no flow during some periods in 1905, 1915, 1918-20, 1931-32, 1935-41, 1943-45.

Remarks.- Records good. Flow completely regulated by Rye Patch Reservoir (see preceding page) and slightly regulated by Humboldt (Taylor-Pitt) Reservoirs. Many diversions above station for irrigation.

Cooperation.- Records of daily discharge Oct. 1, 1943, to Apr. 4, 1945, furnished by Pershing County Water Conservation District of Nevada.

Discharge, in second-feet, 1943-45

1943-44

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	19				0	75	40	227	220	390	121
2	37	19				0	57	103	227	220	390	121
3	37	19				0	42	127	227	220	390	121
4	37	19				0	23	127	316	220	390	141
5	32	19				0	23	152	388	220	378	155
6	19	19				0	23	199	388	220	357	155
7	19	19				0	32	230	388	221	368	139
8	19	19				0	41	230	388	227	357	133
9	19	19				0	41	230	388	293	357	105
10	19	19				0	79	230	267	293	357	105
11	19	19				0	106	230	98	294	357	103
12	19	19				0	106	230	79	294	332	122
13	19	19				0	146	230	218	294	324	122
14	19	19				0	172	230	218	294	278	122
15	19	19				0	172	230	218	294	240	122
16	19	9				0	172	229	218	312	229	122
17	19	0				0	172	228	218	316	221	122
18	19	0				0	172	228	218	316	221	109
19	19	0				0	172	228	218	352	196	88
20	19	0				0	172	228	219	375	187	88
21	19	0				0	172	228	219	375	168	88
22	19	0				0	172	228	219	375	153	81
23	19	0				0	172	228	220	375	153	38
24	19	0				0	101	228	220	375	153	38
25	19	0				0	25	228	220	375	153	38
26	19	0				0	25	228	220	375	153	38
27	19	0				0	25	228	220	375	153	38
28	19	0				17	25	228	220	375	153	38
29	19	0				49	25	228	220	375	153	38
30	19	0				99	25	227	220	385	139	39
31	19	-				99	-	227	-	390	121	-

HUMBOLDT RIVER BASIN

Discharge, in second-feet, of Humboldt River near Rye Patch, Nev., 1943-45--Continued
1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	10	10			0	791	1,320	1,280	1,750	933	153
2	38	10	10			0	791	1,420	1,290	1,750	863	153
3	38	10	10			0	791	1,420	1,300	1,760	847	153
4	38	10	8			0	746	1,420	1,310	1,760	778	153
5	38	10	5			0	774	1,420	1,310	1,770	778	143
6	38	10	5			0	774	1,420	1,320	1,770	747	137
7	41	10	5			62	774	1,420	1,330	1,770	709	137
8	21	10	5			174	770	1,420	1,340	1,770	709	128
9	21	10	5			174	774	1,420	1,340	1,780	679	120
10	21	10	5			174	786	1,420	1,340	1,780	646	120
11	19	10	5			189	786	1,410	1,950	1,770	625	107
12	0	10	5			202	786	1,410	1,950	1,770	563	99
13	0	10	5			202	786	1,260	1,950	1,770	456	149
14	0	10	5			202	782	1,180	1,960	1,770	64	167
15	0	10	5			202	782	1,160	1,310	1,770	200	179
16	0	10	5			160	778	1,150	1,670	1,770	177	151
17	3	10	5			72	778	1,150	1,950	1,780	163	124
18	12	10	5			202	778	1,150	1,970	1,780	175	124
19	10	10	5			202	778	1,190	2,000	1,780	153	124
20	19	10	5			202	778	1,280	2,000	1,780	141	106
21	19	10	5			202	732	1,210	2,000	1,780	89	78
22	19	10	5			202	675	1,160	2,000	1,640	89	65
23	19	10	5			202	806	1,170	2,000	1,070	86	65
24	19	10	5			202	980	1,170	1,990	1,070	80	65
25	19	10	5			202	1,020	1,200	1,990	1,070	80	39
26	19	10	5			202	1,070	1,200	1,990	1,060	74	26
27	14	10	5			263	1,070	1,230	1,990	1,060	63	25
28	10	10	3			417	1,110	1,300	1,990	1,060	71	26
29	10	10	0			504	1,190	1,290	1,890	1,060	104	19
30	10		0			560	1,170	1,270	1,740	1,000	149	5
31	10	-	0			666	-	1,280	-	946	163	-

Monthly discharge, in second-feet, 1943-45

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1943	674	37	19	21.7	1,340
November	294	19	0	9.80	583
December	0	0	0	0	0
Calendar year	-	-	-	-	-
January 1944	0	0	0	0	0
February	0	0	0	0	0
March	264	99	0	8.52	524
April	2,765	172	23	92.2	5,480
May	6,465	230	40	209	12,820
June	7,314	328	79	244	14,510
July	9,675	390	220	312	19,190
August	7,971	390	121	257	15,815
September	2,890	155	38	963	5,730
Water year 1943-44	38,312	390	0	105	75,990
October 1944	563	41	0	18.2	1,180
November	300	10	10	10.0	595
December	156	10	0	5.03	310
Calendar year 1944	38,363	390	0	105	76,080
January 1945	0	0	0	0	0
February	0	0	0	0	0
March	6,061	666	0	196	12,020
April	25,406	1,190	675	847	50,390
May	39,900	1,420	1,150	1,287	79,140
June	51,750	2,000	1,280	1,725	102,600
July	48,216	1,780	946	1,555	95,640
August	11,484	933	63	370	22,780
September	3,140	179	5	105	6,230
Water year 1944-45	186,976	2,000	0	512	370,800

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.
To convert war time to standard time, subtract 1 hour.

Marys River below Hot Springs Creek, near Deeth, Nev.

Location.- Water-stage recorder, lat. 41°14', long. 115°17', in NW¼ sec. 25, T. 39 N., R. 59 E., 300 feet downstream from Hot Springs Creek, 7¼ miles north of Cross Ranch, and 13¼ miles north of Deeth.

Drainage area.- 415 square miles.

Records available.- October 1943 to September 1945.

Extremes.- Maximum discharge during year, 676 second-feet May 9 (gage height, 5.99 feet); minimum, 0.9 second-foot Oct. 1.

1943-45: Maximum discharge, that of May 9, 1945; minimum, that of Oct. 1, 1944.

Flood in January 1943 reached a stage of 7.2 feet, from floodmarks (discharge, 1,030 second-feet by slope-area method).

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.9	2.9	7.4		b14	26	78	336	329	136	9.2	1.5
2	1.0	2.9	8.0		b17	25	75	406	318	120	8.7	1.4
3	1.2	2.9	8.2		18	27	68	475	295	110	8.7	1.5
4	1.2	3.0	8.2		b17	26	65	550	307	102	8.4	1.6
5	1.3	3.5	9.0	(*)	19	26	65	589	350	97	7.4	1.7
6	1.3	3.3	*9.2		20	26	68	641	392	90	6.8	1.5
7	1.5	3.2	9.2		20	*27	71	634	454	82	6.8	1.4
8	1.4	3.0	9.2		21	24	79	663	432	77	7.7	1.4
9	1.6	3.0	9.4		23	26	86	653	392	75	7.2	1.4
10	1.6	3.2	9.4		24	37	85	624	360	79	6.4	1.3
11	1.7	3.3	9.7		27	60	80	617	323	77	5.5	1.3
12	1.7	4.2	9.7		*29	84*	78	603	302	77	5.1	1.2
13	1.9	4.0			36	106	73	594	271	75	4.4	1.2
14	1.9	4.0			b40	99	71	548	266	68	3.8	1.2
15	1.8	3.8			*b55	90	71	507	278	67	3.5	1.3
16	2.2	4.0		b12	42	72	71	452	271	63	2.9	1.2
17	2.0	4.0			39	67	82	392	244	53	2.5	1.4
18	2.2	4.2	a10		35	60	95	343	217	43	2.5	1.3
19	2.2	4.4			b29	55	109	309	203	38	2.9	1.3
20	2.3	4.4			b28	60	135	286	203	34	3.5	1.4
21	2.3	4.6			b26	71	180	266	211	32	3.0	1.7
22	2.5	4.7			b26	77	235	251	225	29	2.7	2.0
23	2.5	4.9			27	82	313	244	238	24	2.3	2.0
24	2.5	5.1			30	84	352	266	252	23	1.9	2.5
25	2.5	5.5			28	76	373	290	254	21	1.7	2.5
26	2.5	5.5			b23	75	365	309	236	19	1.5	2.5
27	2.5	5.7	b10		b25	75	313	286	217	16	1.4	2.3
28	2.6	6.2			26	72	269	276	192	15	1.3	2.3
29	2.6	6.4			-	71	271	276	170	14	1.4	2.3
30	2.7	6.8		(*)	-	73	293	295	151	12	1.5	2.6
31	2.9	-			-	82	-	318	-	10	1.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	61.0	2.9	0.9	1.97	121
November.....	126.6	6.8	2.9	4.22	251
December.....	296.6	-	-	9.57	588
Calendar year 1944.....	17,349.7	301	.2	47.4	34,410
January.....	372	-	-	12	738
February.....	744	42	14	26.6	1,480
March.....	1,959	106	24	60.0	3,680
April.....	4,805	392	63	154	9,130
May.....	13,297	663	244	429	26,370
June.....	8,553	454	151	278	16,570
July.....	1,778	136	10	57.4	3,530
August.....	134.2	9.2	1.3	4.33	266
September.....	50.2	2.6	1.2	1.67	100
Water year 1944-45.....	31,676.6	663	.9	86.8	62,830

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for South Fork Humboldt River near Elko.

b Stage-discharge relation affected by ice.

Time Basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

Lamoille Creek near Lamoille, Nev.

Location.- Water-stage recorder, lat. 40°41'30", long. 115°28'30", in NE¼ sec. 6, T. 32 N., R. 58 E., at Lamoille Creek bridge at mouth of canyon, 300 feet downstream from Elko-Lamoille power plant and 3 miles south of Lamoille.

Drainage area.- 25 square miles.

Records available.- May 1915 to June 1923, October 1943 to September 1945.

Extremes.- Maximum discharge during year, 486 second-feet June 23; minimum not determined (occurred during period of no gage-height record).
1915-23, 1943-45: Maximum discharge, probably exceeded 500 second-feet in June 1917 when gage was washed out; minimum, 1 second-foot Jan. 24, 1918.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Records include flow of McDermott ditch which diverts about 200 feet upstream from gage. Elko-Lamoille power plant diverts about 6 miles upstream but flow is returned to channel at power plant 300 feet upstream from station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.6	5.8	5.8	a4.4	b4.5	5.2	9.6	56	200	254	56	12
2	6.3	5.5	5.8	a4.4	b4.5	5.0	9.2	75	216	262	53	11
3	6.1	5.8	5.8	a4.4	4.4	5.0	9.2	95	239	272	55	13
4	5.8	6.3	5.8	a4.4	4.4	5.0	9.2	135	239	280	50	13
5	5.5	6.6	5.8	4.4	4.4	4.7	9.6	211	226	262	44	13
6	5.5	6.1		4.4	4.4	5.0	9.9	234	216	259	42	12
7	5.5	6.1		5.0	4.7	5.0	10	230	204	245	48	12
8	5.5	5.5		4.7	4.7	5.0	11	230	194	239	40	11
9	5.5	5.8		4.7	4.7	5.0	11	240	196	225	36	10
10	5.5	5.8		4.7	4.4	5.0	11	250	196	233	34	10
11	5.5	5.5		4.7	4.7	5.2	11	247	197	207	32	9.6
12	5.5	5.8		4.7	4.7	5.2	10	230	203	198	30	9.2
13	5.5	5.8		5.0	5.0	5.5	10	224	228	188	31	8.8
14	5.5	5.5		5.2	5.8	5.8	10	198	226	190	26	8.4
15	5.8	5.5		5.0	4.4	5.8	10	174	228	170	23	8.4
16	5.8	5.5		5.0	5.0	5.8	11	163	232	159	21	8.1
17	5.5	5.5		4.4	5.2	5.8	12	168	229	146	21	8.1
18	5.8	5.5		5.2	5.0	6.1	14	154	261	113	21	8.1
19	5.2	5.5	a4.5	4.7	4.7	5.5	17	140	304	129	25	8.1
20	5.2	5.5			5.0	6.1	22	127	339	121	25	7.7
21	5.5	5.5			5.0	6.3	25	113	375	125	22	8.8
22	5.5	5.5			5.0	7.0	25	113	400	115	19	8.8
23	5.5	5.5			5.2	7.0	27	120	451	103	18	8.4
24	5.5	5.5			5.0	7.0	31	117	395	101	17	8.4
25	5.5	5.5		b4.0	4.7	7.7	31	125	346	94	16	8.1
26	5.5	5.5			5.5	7.7	30	132	307	84	15	8.1
27	5.2	5.5			5.2	7.3	29	140	319	79	14	8.1
28	5.2	5.5			5.0	6.4	30	143	284	76	14	7.7
29	5.2	5.5			-	6.4	34	163	256	70	14	7.3
30	5.2	5.5			-	6.4	43	178	256	66	13	7.0
31	5.8	-			-	9.2	-	182	-	61	12	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-ft
October.....	172.7	6.6	5.2	5.57	343
November.....	170.2	6.6	5.5	5.87	358
December.....	146.0	-	-	4.71	260
Calendar year 1944.....	16,206.8	298	-	44.3	32,140
January.....	137.4	-	-	4.43	273
February.....	135.2	5.8	4.4	4.83	268
March.....	191.1	9.2	4.7	6.16	379
April.....	531.7	45	9.2	17.7	1,050
May.....	5,107	250	56	165	10,130
June.....	7,952	451	187	265	15,770
July.....	5,126	280	61	165	10,170
August.....	591	56	12	28.7	1,770
September.....	282.2	13	7.0	9.41	560
Water year 1944-45.....	20,842.5	451	-	57.1	41,340

a No gage-height record; discharge computed on basis of 2 discharge measurements, weather records, and records for stations on nearby streams.

b Stage-discharge relation affected by ice.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

North Fork Humboldt River at Devils Gate, near Halleck, Nev.

Location.-- Water-stage recorder, lat. 41°11', long. 115°29', in SE¼ sec. 13, T. 38 N., R. 57 E., 3 miles north of Devils Gate Ranch, 16 miles north of Halleck, and 26 miles upstream from mouth.

Drainage area.-- 830 square miles.

Records available.-- November 1913 to September 1921, October 1943 to September 1945.

Extremes.-- Maximum discharge during year, 615 second-feet Mar. 13 (gage height, 4.82 feet); minimum, 5.8 second-feet Sept. 11, 12.

1913-21, 1943-45: Maximum discharge, 1,600 second-feet Mar. 2 or 3, 1921; minimum 1 second-foot, 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 and below station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.4	9.6			b20	30	142	354	215	155	22	7.0
2	6.4	10			b35	30	142	373	199	141	22	7.0
3	6.8	10			b70	31	100	393	192	120	21	7.0
4	6.8	12			b58	28	87	411	201	106	21	7.5
5	6.8	14			b50	26	87	433	258	97	20	7.5
6	6.8	14			b48	28	104	482	395	90	19	6.7
7	6.8	14			b50	28	148	458	522	82	18	7.0
8	6.8	14			b55	28	175	446	538	73	18	7.0
9	6.8	14			b60	28	168	433	508	75	21	6.7
10	6.8	14			a85	40	130	411	395	72	20	7.0
11	6.8	16			a75	155	109	417	343	78	19	6.1
12	7.2	18			a106	285	104	462	307	84	18	6.1
13	7.6	19			128	510	96	453	260	86	16	6.7
14	7.6				240	451	91	422	232	84	16	7.0
15	7.6				a196	261	92	420	234	89	14	6.7
16	7.6		b15	b15	115	170	128	382	240	84	14	6.7
17	8.0				96	128	162	340	223	81	13	7.0
18	7.2				74	98	197	296	190	71	12	7.0
19	7.2				57	83	271	264	169	65	12	7.0
20	7.2				48	80	365	238	152	62	12	7.5
21	8.4				b42	121	458	228	145	57	11	8.0
22	8.4				b40	186	513	219	148	52	10	8.0
23	8.4				43	261	476	208	166	48	11	9.0
24	8.8				38	204	420	268	244	42	10	8.5
25	8.8				35	131	433	345	264	38	9.5	9.0
26	8.8				b51	123	398	296	262	36	9.0	10
27	8.8				b29	118	328	226	242	35	8.5	12
28	9.2				31	99	307	206	234	30	7.5	13
29	9.2				-	94	309	206	211	26	7.5	12
30	10				-	89	330	221	178	25	7.5	13
31	10			(*)	-	97	-	232	-	24	7.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	240.0	10	6.4	7.74	476
November.....	450.6	-	9.6	15.0	894
December.....	465	-	-	15	922
Calendar year 1944.....	17,697.4	531	-	48.4	35,100
January.....	465	-	-	15	922
February.....	1,934	240	20	69.1	3,840
March.....	4,035	510	26	130	8,000
April.....	6,370	513	87	229	13,630
May.....	10,523	462	206	339	20,870
June.....	7,887	538	145	262	15,580
July.....	2,211	155	24	71.3	4,390
August.....	447.0	22	7.5	14.4	827
September.....	240.7	13	6.1	8.02	477
Water year 1944-45.....	35,738.3	538	6.1	97.9	70,890

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for Marys River below Hot Springs Creek, near Deeth, and Humboldt River near Elko.

b Stage-discharge relation affected by ice.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

South Fork Humboldt River near Lee, Nev.

Location.- Water-stage recorder, lat. 40°34', long. 115°33', in SE¼ sec. 16, T. 31 N., R. 57 E., 400 feet downstream from Kleckner Creek and 2½ miles east of Lee.

Drainage area.- 54 square miles.

Records available.- February to September 1945.

Extremes.- Maximum discharge during period, 815 second-feet June 23 (gage height, 3.70 feet); minimum daily, 9.2 second-feet Feb. 4.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					a10	b12	45	225	335	432	74	15
2					*11	*b12	42	269	376	436	71	15
3					9.6	11	39	313	425	476	71	18
4					9.2	b10	35	386	443	491	65	18
5					9.6	b10	36	432	436	461	59	16
6					11	b10	41	461	421	446	59	15
7					10	b10	47	450	421	418	62	14
8					10	b10	51	450	400	396	55	14
9					11	b10	50	454	390	376	50	13
10					11	11	46	468	369	369	46	12
11					11	13	43	439	342	335	42	12
12					12	16	40	418	355	310	40	11
13					15	22	37	410	404	291	37	11
14					17	21	35	369	400	279	34	10
15					b14	20	39	316	352	261	32	9.5
16					b14	b19	45	291	376	244	29	9.5
17					b14	b19	*54	279	386	227	27	9.9
18					b13	b17	74	261	428	208	29	9.9
19					b12	b17	109	244	508	194	34	9.9
20					b12	20	168	232	600	179	32	9.5
21					b12	23	187	213	679	171	26	12
22					b13	28	176	208	712	159	24	13
23					b13	30	156	219	755	147	22	12
24					b12	31	158	258	662	136	21	12
25					b12	32	131	244	568	127	20	12
26					a11	34	131	252	517	117	19	10
27					a11	34	117	264	525	107	18	10
28					11	32	122	270	483	103	17	10
29					-	32	136	288	443	94	16	9.9
30					-	33	176	307	432	85	16	9.9
31					-	37	-	313	-	79	16	-
Month					Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet			
October.....					-	-	-	-	-			
November.....					-	-	-	-	-			
December.....					-	-	-	-	-			
Calendar year.....					-	-	-	-	-			
January.....					-	-	-	-	-			
February.....					331.4	17	9.2	11.8	657			
March.....					635	37	10	20.8	1,280			
April.....					2,556	187	35	85.2	5,070			
May.....					9,983	468	208	322	19,800			
June.....					13,971	755	335	466	27,710			
July.....					8,156	491	79	263	16,180			
August.....					1,163	74	16	37.5	2,310			
September.....					363.0	18	9.5	12.1	720			
The period.....					-	-	-	-	73,710			

* Winter discharge measurement made on this day.

a No gage-height record; discharge interpolated.

b Stage-discharge relation affected by ice.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

South Fork Humboldt River near Elko, Nev.

Location.— Water-stage recorder, lat. 40°43'15", long. 115°49'50", in NW¼ sec. 30, T. 33 N., R. 55 E., a quarter of a mile upstream from head of canyon, 1.5 miles downstream from highway bridge, 9 miles upstream from mouth, and 10 miles southwest of Elko.

Drainage area.— 1,150 square miles.

Records available.— August 1896 to September 1922, October 1923 to September 1932, October 1936 to September 1945.

Average discharge.— 37 years (1896-1903, 1904-9, 1910-18, 1923-26, 1927-32, 1936-45) 134 second-feet.

Extremes.— Maximum discharge during year, 1,440 second-feet May 11 (gage height, 5.33 feet); minimum daily, 7.4 second-feet Oct. 8.
1896-1922, 1923-32, 1936-45: Maximum discharge, 2,400 second-feet Jan. 26, 1914, from rating curve extended above 1,200 second-feet; practically no flow during some periods in nearly every year since 1915.

Remarks.— Records good except those for period 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.

Rating table, water year 1944-45, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

1.1	7.8	1.9	91	3.5	580
1.2	13	2.1	128	4.2	870
1.3	19	2.4	194	4.7	1,110
1.5	36	2.7	278	5.3	1,420
1.7	60	3.1	420		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		7.8	17		(*)	95	330	784	740	688	86	21
2		9.4	18			95	310	865	724	672	83	20
3		8.8	*18			95	257	951	744	668	83	40
4		8.3	21			65	234	1,020	888	672	83	57
5		7.8	45			95	234	*1,160	1,050	676	75	39
6		7.8	39			95	257	1,250	1,100	640	74	33
7		7.8	32			100	310	1,220	1,190	624	96	31
8		7.4	29		(*)	100	370	1,240	1,280	580	93	30
9		7.8	27			100	374	1,290	1,100	540	88	27
10		7.8	28			110	330	1,280	1,060	536	80	25
11		7.8	32			118	307	1,410	960	516	70	25
12		7.8				180	288	1,300	830	480	66	23
13		7.8				362	272	1,280	784	436	59	21
14		7.8				448	257	1,220	807	404	55	21
15		8.8				355	257	1,080	820	393	50	21
16		9.4		20	25	260	313	956	794	355	45	18
17		9.9		(*)	100	210	381	861	780	310	43	18
18		10				187	476	754	756	284	44	18
19		11				170	608	716	807	266	51	20
20		12				172	764	668	902	251	68	20
21		13	30			*204	933	840	1,000	234	56	21
22		13				275	960	558	1,120	217	50	24
23		14				377	884	860	1,220	200	40	26
24		15				300	920	740	1,270	184	35	27
25		16				281	928	780	1,190	166	32	30
26		15				337	874	688	1,140	152	27	29
27		15				310	764	652	1,020	136	28	28
28		16				278	688	618	920	128	27	28
29		16				260	672	608	807	122	26	28
30		16				263	704	840	728	109	28	29
31		17				275	-	704	-	98	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	339.0	17	7.4	10.9	872
November.....	876	-	-	29.2	1,740
December.....	620	-	-	20	1,230
Calendar year 1944.....	56,796.6	934	1.6	155	112,700
January.....	776	-	-	25	1,540
February.....	2,800	-	-	100	5,650
March.....	6,602	448	95	213	13,090
April.....	15,256	960	234	509	30,280
May.....	28,572	1,410	580	922	56,670
June.....	28,491	1,270	724	950	56,610
July.....	11,737	688	98	379	23,280
August.....	1,766	96	25	57.0	3,500
September.....	796	57	18	26.6	1,580
Water year 1944-45.....	98,632	1,410	7.4	270	195,600

* Winter discharge measurement made on this day.

Note.— Stage-discharge relation affected by ice Nov. 12 to Mar. 10 (no gage-height record Jan. 2-8, 20-31, Feb. 22 to Mar. 10).

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Little Humboldt River at Chimney dam site, near Paradise Valley, Nev.

Location.- Water-stage recorder, lat. 41°24', long. 117°11', in NE¼ sec. 36, T. 41 N., R. 42 E., at Chimney dam site, 300 feet downstream from confluence of North and South Forks and 25 miles east of Paradise Valley.

Records available.- October 1941 to September 1945.

Extremes.- Maximum discharge during year, 560 second-feet Feb. 2 (gage height, 9.65 feet); no flow Sept. 8-10.

1941-45: Maximum discharge, 4,000 second-feet about Jan. 22, 1943 (gage height, 14.4 feet, from floodmarks) by slope-area method; no flow Aug. 9-25, 1942, Sept. 8-10, 1945.

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

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	2.4	3.1	3.5	7.2	12	62	166	79	27	3.1	0.2
2	1.1	2.5	b2.9	3.2	170	12	87	181	72	25	2.9	.2
3	1.1	2.7	b2.8	3.5	a150	12	59	188	66	23	2.9	.3
4	1.2	2.9	2.7	3.4	*160	11	47	194	70	21	2.6	.5
5	1.3	2.9	2.9	3.5	66	9.4	37	196	96	19	1.9	.4
6	1.3	3.0	3.0	3.4	27	10	34	200	134	18	2.0	.2
7	1.3	3.2	b3.0	4.1	22	10	53	198	158	17	2.9	.1
8	1.3	3.0	b3.0	6.5	15	11	62	188	141	15	3.0	0
9	1.3	2.9	2.9	9.2	66	10	70	169	118	14	3.0	0
10	1.4	3.4	b2.7	11	55	11	50	159	95	14	3.1	0
11	1.5	3.7	b2.8	9.0	51	29	43	162	88	13	2.7	.1
12	1.5	4.4	b2.9	5.8	75	57	40	172	75	13	2.3	.1
13	1.6	4.8	b2.8	6.6	84	100	34	164	71	13	1.9	.2
14	1.6	3.9	b2.8	5.1	149	122	30	145	66	12	1.5	.2
15	2.0	3.5	b2.8	5.9	140	93	27	130	64	12	1.3	.3
16	2.0	3.5	b2.8	5.3	58	48	30	122	59	11	1.0	.6
17	2.0	3.4	b2.8	*5.1	62	36	62	114	51	10	1.0	.7
18	2.1	3.4	b2.9	5.1	38	29	83	115	45	10	1.0	.1
19	2.1	3.1	b3.0	4.5	26	24	112	109	41	9.0	.4	.4
20	2.0	2.9	b3.5	b4.5	22	25	155	102	35	8.1	.9	.4
21	2.0	2.9	b3.9	4.1	15	30	197	96	32	7.0	.9	.3
22	2.0	3.1	b4.2	3.8	17	84	249	88	30	5.9	.9	.8
23	2.0	2.9	b4.5	b3.8	19	104	243	53	30	5.9	.9	.9
24	2.0	3.0	b4.1	b3.8	15	63	195	82	36	5.3	.9	1.0
25	2.1	3.0	3.8	3.8	13	49	169	74	42	5.0	.6	2.1
26	2.3	3.0	3.8	3.8	12	47	156	70	43	4.8	.5	1.9
27	2.3	2.9	3.2	b3.8	13	46	129	67	36	4.5	.3	1.5
28	2.3	2.9	3.7	b4.0	12	40	122	73	30	4.2	.2	1.5
29	2.1	*3.0	3.4	b4.2	-	35	131	84	32	4.2	.2	1.5
30	2.3	3.0	3.5	b4.5	-	39	149	60	29	3.9	.2	1.5
31	2.3	-	3.4	b5.0	-	38	-	78	-	3.5	.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	54.4	2.3	1.0	1.75	108
November.....	95.2	4.0	2.4	3.17	189
December.....	99.6	4.5	2.7	3.21	195
Calendar year 1944.....	4,558.9	74	.4	11.9	8,650
January.....	153.9	11	3.2	4.96	305
February.....	1,594.2	170	7.2	56.9	3,160
March.....	1,266.4	122	9.4	40.9	2,510
April.....	2,936	249	27	97.9	5,820
May.....	4,041	200	67	130	8,020
June.....	1,969	158	29	65.6	3,910
July.....	369.3	27	3.5	11.6	711
August.....	47.3	3.1	.2	1.53	94
September.....	18.0	2.1	0	.60	36
Water year 1944-45.....	12,633.3	249	0	34.6	25,060

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for station near Paradise Valley.

b Stage-discharge relation affected by ice.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Little Humboldt River near Paradise Valley, Nev.

Location.— Water-stage recorder, lat. 41°25', long. 117°24', in NE $\frac{1}{4}$ sec. 19, T. 41 N., R. 41 E., 300 feet south of Humboldt Hot Spring, 4 $\frac{1}{2}$ miles downstream from Bullshead Ranch, and $\frac{1}{2}$ miles southeast of Paradise Valley.

Drainage area.— 1,030 square miles.

Records available.— October 1921 to June 1928 (fragmentary), October 1943 to September 1945.

Extremes.— Maximum discharge during year, 250 second-feet Feb. 2 (gage height, 9.31 feet); minimum, 5.7 second-feet Oct. 8, 1921-28, 1943-45; Maximum discharge, 500 second-feet Feb. 23, 1927 (gage height, 12.1 feet, datum then in use), from rating curve extended above 150 second-feet; minimum, 5 second-feet Dec. 28, 1924.

Remarks.— Records good except those for period of no gage-height record, which are fair. Bullshead Ranch diverts above station for irrigation. Station is above all diversions in Paradise Valley.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.2	8.1	8.9	8.2	9.5	19	40	122	77	28	8.2	7.4
2	6.2	8.2	9.2	8.2	159	19	41	134	72	26	8.2	7.4
3	5.9	8.5	9.2	8.2	89	19	55	147	70	24	8.2	7.4
4	5.9	8.5	8.9	8.1	180	18	61	153	67	22	8.2	7.5
5	5.9	8.6	8.5	8.2	151	18	53	156	73	20	8.1	7.5
6	5.8	8.2	8.1	8.3	98	16	44	162	91	19	8.2	7.5
7	5.8	8.3	8.6	11	57	16	38	163	122	17	8.5	7.5
8	5.8	8.2	8.6	9.2	39	16	43	166	140	16	8.2	7.5
9	5.9	8.1	8.6	8.8	34	16	50	163	134	16	8.1	7.5
10	6.1	8.9	8.3	8.9	39	15	54	168	126	15	7.8	7.5
11	6.1	8.6	8.3	10	65	15	54	153	a114	15	7.6	7.4
12	6.3	9.2	7.9	10	65	21	47	145	a98	14	7.6	7.4
13	6.3	9.3	7.9	10	59	34	42	150	a80	14	7.6	7.5
14	6.5	9.0	7.9	9.7	77	48	39	152	a68	13	7.5	7.5
15	6.7	8.6	7.9	9.7	75	71	35	144	a63	13	7.5	7.5
16	7.0	8.5	8.1	9.7	106	82	32	138	88	12	7.4	7.5
17	7.1	10	8.2	9.7	93	64	31	129	54	12	7.4	7.5
18	7.2	9.9	8.2	9.7	58	48	40	121	50	11	7.4	7.5
19	7.4	8.8	8.5	9.6	47	39	51	114	44	11	7.4	7.5
20	7.5	8.6	8.5	9.5	39	32	64	113	39	10	7.4	7.5
21	7.5	8.8	8.6	9.5	28	30	85	107	35	9.9	7.4	7.6
22	7.8	8.6	8.6	9.3	25	29	110	102	34	9.6	7.4	7.9
23	7.8	8.6	8.6	9.3	25	47	138	96	38	9.2	7.4	7.9
24	7.5	8.5	8.6	9.2	24	65	170	93	38	8.9	7.2	7.9
25	7.2	8.6	8.6	8.6	21	76	159	86	37	8.8	7.8	7.9
26	7.4	8.8	8.5	8.8	18	64	149	82	45	8.5	7.8	7.9
27	7.4	8.5	8.3	8.8	18	52	141	75	44	8.5	7.4	7.8
28	7.5	8.6	8.3	8.6	19	49	124	74	39	8.5	7.5	7.8
29	7.6	8.5	8.3	8.5	-	46	116	71	34	8.3	7.5	7.8
30	7.8	8.5	8.3	8.3	-	40	115	74	31	8.3	7.4	7.8
31	8.1	-	8.2	8.3	-	40	-	80	-	8.3	7.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	211.2	6.1	5.8	6.81	419
November	260.1	10	5.1	8.67	516
December	261.5	9.2	7.9	8.45	518
Calendar year 1944	4,991.1	45	5.8	13.6	9,900
January	281.9	11	8.1	9.09	559
February	1,717.5	180	9.5	61.3	3,410
March	1,184	82	15	37.5	2,310
April	2,221	170	31	74.0	4,410
May	3,823	166	71	123	7,580
June	2,015	140	31	67.2	4,000
July	424.8	28	8.3	13.7	843
August	227.5	8.5	7.2	7.66	471
September	227.8	7.9	7.4	7.59	462
Water year 1944-45	12,845.1	180	5.8	35.2	25,490

a No gage-height record; discharge computed on basis of records for stations on nearby streams.
Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.
To convert war time to standard time, subtract 1 hour.

Martin Creek near Paradise Valley, Nev.

Location.- Water-stage recorder, lat. 41°32'00", long. 117°25'40", in NW¼ sec. 12, T. 42 N., R. 40 E., 0.6 mile upstream from Humboldt County Fish Hatchery and 7 miles northeast of Paradise Valley.

Drainage area.- 172 square miles.

Records available.- October 1921 to September 1945.

Average discharge.- 23 years (1921-26, 1927-45), 28.1 second-feet.

Extremes.- Maximum discharge during year, 2,200 second-feet Feb. 2 (gage height, 5.00 feet), from rating curve extended above 250 second-feet; minimum, 1.5 second-feet Feb. 6.

1921-45: Maximum discharge, 9,000 second-feet Jan. 21, 1943 (gage height, 11.1 feet, datum then in use), by slope-area method; minimum, that of Feb. 6, 1945.

Remarks.- Records good. No diversions above station.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.2	8.6	9.6	11	13	14	76	205	112	38	9.1	5.7
2	6.2	8.6	10	10	1,020	15	44	211	114	34	8.6	5.2
3	6.2	9.1	7.6	8.6	134	16	44	219	116	32	8.1	5.2
4	6.2	9.6	8.7	8.6	39	11	32	234	122	30	7.6	5.2
5	6.2	10	8.6	11	19	13	36	240	141	28	7.6	5.2
6	6.2	9.6	8.6	12	8.6	15	52	243	192	26	8.1	5.2
7	6.2	9.6	8.6	16	8.1	14	60	231	214	24	9.6	5.7
8	6.7	9.1	9.1	35	152	14	70	216	174	23	9.6	5.7
9	6.7	9.1	7.2	22	108	30	44	208	164	24	9.1	5.2
10	6.7	16	6.7	17	42	56	41	219	152	24	8.6	5.2
11	6.7	16	7.2	15	161	92	40	219	141	21	8.1	5.7
12	6.7	13	8.1	13	84	119	31	197	134	19	7.6	5.2
13	6.7	12	7.6	13	194	126	27	184	128	18	7.6	5.2
14	7.2	9.6	7.6	13	132	97	26	164	120	19	7.2	5.2
15	7.2	10	7.6	16	36	44	36	159	110	17	7.2	5.2
16	7.2	9.6	7.6	16	26	36	77	152	97	16	7.2	5.7
17	7.6	9.6	7.6	11	30	30	99	154	89	15	6.7	6.2
18	7.6	9.1	7.6	12	20	24	134	143	94	15	6.7	6.2
19	7.6	8.6	8.6	11	18	22	169	134	80	14	8.1	6.7
20	7.6	8.6	9.6	10	15	75	205	126	77	13	7.6	7.2
21	7.6	8.6	10	10	14	114	243	118	74	13	6.7	7.6
22	7.6	8.6	11	9.6	18	108	202	110	76	13	6.2	8.1
23	7.6	9.1	12	8.6	20	79	166	106	85	12	5.2	8.6
24	7.6	9.6	11	9.6	15	42	169	106	84	11	5.2	8.1
25	8.1	8.1	10	9.6	13	45	137	99	65	11	4.9	8.1
26	8.1	9.6	9.6	10	15	47	118	101	59	10	5.2	7.6
27	8.1	10	9.1	10	17	25	114	97	54	10	5.7	7.6
28	8.1	7.6	10	9.1	16	39	126	116	48	10	5.7	7.6
29	8.1	9.1	9.6	9.1	-	36	145	112	44	9.6	5.7	7.6
30	8.1	9.6	9.6	9.6	-	42	171	110	41	9.6	5.7	7.6
31	8.6	-	7.6	11	-	70	-	112	-	9.1	5.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	223.2	8.6	6.2	7.20	443
November.....	295.3	16	7.6	9.84	566
December.....	271.3	12	6.7	8.75	538
Calendar year 1944.....	8,767.0	137	4.9	24.0	17,380
January.....	387.4	35	8.6	12.5	768
February.....	2,387.7	1,020	8.1	55.3	4,740
March.....	1,489	126	11	48.0	2,950
April.....	2,936	243	26	97.9	5,520
May.....	5,044	243	97	163	10,000
June.....	3,191	214	41	106	6,330
July.....	568.3	38	9.1	18.3	1,130
August.....	221.9	9.6	4.9	7.16	440
September.....	190.5	8.6	5.2	6.35	378
Water year 1944-45.....	17,205.6	1,020	4.9	47.1	34,120

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

HUMBOLDT RIVER BASIN

157

Cottonwood Creek at Paradise Valley, Nev.

Location.— Water-stage recorder, lat. 41°31'00", long. 117°32'30", in NW¼ sec. 25, T.

42 N., R. 39 E., at highway bridge, 300 feet west of Paradise Valley post office.

Drainage area.— 62 square miles.Records available.— October 1944 to September 1945.Extremes.— Maximum discharge during year, 253 second-feet Feb. 14 (gage height, 2.16 feet); minimum not determined (probably occurred during period of no gage-height record).Remarks.— Records good except those for period of ice effect or no gage-height record, which are fair. Several diversions above and below station for irrigation.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0.4		2.5	5.8	31	75	38	8.8	0.7	0.5
2			.4	b0.4	94	5.8	32	84	36	6.3	.7	.5
3			.5		*26	6.3	26	93	36	3.3	.7	.5
4			.5		12	7.1	22	106	40	.7	.7	.5
5			.5	.4	8.8	6.3	22	106	56	1.6	.7	.5
6												
7			.5	.4	8.2	5.4	23	108	85	1.0	.7	.5
8			.7	.5	6.7	5.0	24	103	96	1.0	.9	.5
9			.7	.5	41	5.4	26	93	85	1.0	.7	.5
10				.5	38	6.7	23	88	79	1.0	.5	.5
11				.5	30	9.9	22	101	70	.7	.5	.5
12				.5	47	9.9	21	94	62	.7	.5	.5
13				.5	42	15	20	86	51	.7	.5	.5
14				.5	64	27	14	84	45	1.3	.5	.5
15				.5	159	29	13	75	40	.7	.5	.5
16				.5	43	23	16	72	55	.5	.5	.5
17	a0.3	a0.4		.7	28	20	23	72	26	.5	.5	.5
18				*.5	24	18	28	70	16	.5	.5	.5
19				.5	21	20	38	61	14	.5	.5	.5
20					16	18	53	55	10	.5	.5	.5
21				b.5	16	26	68	47	12	.5	.5	.5
22					16	28	88	43	9.9	.5	.5	.5
23					12	31	86	40	8.8	.5	.5	.5
24					11	30	72	32	9.3	.5	.5	.5
25				b.5	9.3	18	75	26	13	.5	.5	.5
26					9.9	23	61	23	10	.5	.5	.5
27					8.8	25	47	26	11	.5	.5	.5
28					8.2	27	46	26	12	.7	.5	.5
29					6.7	27	50	32	9.9	.7	.5	.5
30					-	25	55	30	9.3	.5	.5	.5
31		*.4			27	66	34	8.8	.5	.5	.5	.5
1				1.6	-	30	-	37	-	.5	.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	9.3	-	-	0.3	18
November.....	12.0	-	-	.40	24
December.....	15.7	-	-	.51	31
Calendar year.....	-	-	-	-	-
January.....	16.2	1.6	-	.52	32
February.....	778.1	139	2.5	27.8	1,540
March.....	580.6	31	5.0	18.1	1,110
April.....	1,138	88	13	38.6	2,360
May.....	2,022	108	23	68.2	4,010
June.....	1,034.0	96	8.8	34.5	2,050
July.....	37.7	8.8	.5	1.22	75
August.....	17.3	.9	.5	.56	34
September.....	15.0	.5	.5	.50	30
Water year 1944-45.....	5,705.9	139	-	15.6	11,310

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for Martin Creek near Paradise Valley.

b Stage-discharge relation affected by ice.

PYRAMID AND WINNEMUCCA LAKES BASIN

Pyramid Lake near Nixon, Nev.

Location.— Bench mark N 21 of U. S. Coast and Geodetic Survey, 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. 298 B, 150 feet southwest of milepost 297, 11.5 miles south along Southern Pacific Railroad from station at Sutcliffe, and 6 miles west of Nixon. Elevation of bench mark is 3,940.04 feet above mean sea level, datum of 1929.

Records available.— 1867 to 1925 (occasional elevations in some years). June 1926 to September 1945. Elevations prior to January 1934 referred to adjustment of 1912, datum of which is 0.57 foot above that of datum of 1929.Extremes.— 1926-45: Maximum elevation observed, 3,847.35 feet, datum of 1929; June 1926; minimum observed, 3,815.10 feet Dec. 9, 1941.Cooperation.— Records furnished by Office of Indian Affairs.

Elevation, in feet, above mean sea level, water year 1944-45

Oct. 17.....	3,817.26	Feb. 19.....	3,816.52	June 18.....	3,817.02
Nov. 17.....	3,816.87	Mar. 31.....	3,816.37	July 20.....	3,816.77
Dec. 12.....	3,816.57	Apr. 17.....	3,816.50	Aug. 23.....	3,816.17
Jan. 24.....	3,816.44	May 10.....	3,816.74	Sept. 11.....	3,815.84

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

PYRAMID AND WINNEMUCCA LAKES BASIN

Truckee River near Truckee, Calif.

Location.— Water-stage recorder, lat. 39°17'30", long. 120°12'30", in SW¼ sec. 28, T. 17 N., R. 16 E., 1.4 miles upstream from Donner Creek and 2½ miles southwest of Truckee.

Drainage area.— 548 square miles.

Records available.— December 1944 to September 1945.

Extremes (regulated).— Maximum discharge during period, 1,110 second-feet Feb. 2 (gage height, 3.34 feet); minimum daily, 49 second-feet Jan. 19.

Remarks.— Records good. Flow regulated at Lake Tahoe.

Rating table, December 1944 to September 1945 (gage height, in feet, and discharge, in second-feet)

1.1	56	1.9	260
1.2	52	2.2	394
1.3	72	2.5	587
1.5	123	2.7	677
1.7	186		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			-	52	404	68	94	569	249	153	484	473
2			-	50	667	62	84	616	260	200	484	473
3			-	50	276	62	79	622	268	197	484	473
4			301	79	186	62	79	622	260	186	489	468
5			306	74	153	60	84	592	252	179	489	425
6			306	68	129	62	89	646	222	222	489	584
7			260	68	123	56	99	640	211	222	494	566
8			260	68	123	56	107	598	215	215	494	506
9			260	68	120	56	96	575	222	268	484	260
10			256	70	110	58	94	626	230	310	478	237
11			260	68	110	62	94	617	237	310	478	215
12			256	68	116	68	89	456	260	306	476	183
13			256	64	116	77	84	410	265	301	473	183
14			260	66	132	89	84	346	262	346	473	183
15			260	62	112	86	96	310	211	356	473	183
16			260	68	107	82	141	384	186	399	473	183
17			260	54	101	74	190	360	190	430	473	183
18			260	56	99	79	241	297	208	430	473	183
19			310	49	89	77	310	260	218	441	473	183
20			314	54	86	77	399	237	222	451	473	183
21			230	91	82	77	450	222	208	468	468	183
22			252	96	79	84	380	208	186	468	468	183
23			170	96	77	79	360	204	179	462	468	186
24			204	89	74	74	410	193	153	462	468	186
25			196	84	72	77	456	193	147	462	468	186
26			183	79	68	77	369	186	141	468	473	186
27			179	74	68	72	399	183	136	489	473	186
28			179	72	68	70	430	166	123	489	473	186
29			173	68	-	66	500	179	120	489	473	186
30			132	252	-	64	523	186	160	489	473	183
31			64	264	-	77	-	211	-	484	473	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	-	-	-	-	-
November.....	-	-	-	-	-
December 4-31.....	6,594	314	54	235	13,080
Calendar year.....	-	-	-	-	-
January.....	2,469	264	49	80.6	4,960
February.....	3,948	667	68	141	7,850
March.....	2,190	89	56	70.6	4,340
April.....	6,890	523	79	230	13,670
May.....	11,796	646	166	361	25,400
June.....	6,230	285	120	208	12,360
July.....	11,156	499	153	360	22,130
August.....	14,767	489	463	476	29,690
September.....	7,571	473	183	252	15,080
The period.....	-	-	-	-	146,100

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

Twentymile Creek near Adel, Oreg.

Location.— Water-stage recorder, lat. 42°04', long. 119°57', in NE¼ sec. 25, T. 40 S., R. 23 E., 2 miles downstream from Twelvemile Creek and 8 miles southwest of Adel. Prior to Mar. 13, 1945, water-stage recorder at site 1½ miles upstream, at different datum.

Records available.— March 1910 to July 1916, December 1917 to September 1919, March 1921 to June 1922, March to September 1945. September 1940 to November 1944 at site 1½ miles upstream.

Average discharge.— 10 years (1910-15, 1918-19, 1940-44), 44.7 second-feet.

Extremes.— Maximum discharge during year, 670 second-feet June 6 (gage height, 4.18 feet), from rating curve extended above 150 second-feet; minimum, 2.6 second-feet Aug. 16, Sept. 8, 10, 12, but may have been less during period of no gage-height record. 1910-16, 1917-19, 1921-22, 1940-45: Maximum discharge, 3,000 second-feet Dec. 27, 1942 (gage height, 4.28 feet, site and datum then in use), from rating curve extended above 400 second-feet by logarithmic plotting; minimum, 0.9 second-feet Aug. 19, 23, 24, 1942.

Remarks.— Records fair except those above 200 second-feet and those for periods of ice effect, which are poor. Many diversions above station for irrigation; no regulation.

Rating tables, water year 1944-45, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Mar. 22 to Apr. 16)

Oct. 1 to Nov. 30

Mar. 13 to Sept. 30

0.6	2.3	0.3	2.6	0.8	24	2.1	197
.7	4.8	.4	4.5	1.0	43	2.5	275
.8	5.1	.5	7.1	1.2	66	3.0	375
		.6	11.0	1.5	105	3.5	500
		.7	17	1.8	147		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.6	5.8				-	141	99	76	12	3.1	2.9
2	3.6	5.1				-	50	113	67	11	3.1	2.9
3	3.3	6.4				-	40	147	78	11	3.1	2.9
4	3.0	7.4				-	38	180	69	10	3.1	2.9
5	3.5	5.8				-	65	147	117	9.4	3.1	2.9
6	3.8	4.5				-	111	141	456	9.0	3.1	2.9
7	3.6	4.5				-	120	140	142	9.0	3.1	2.9
8	3.6	4.0				-	78	140	69	8.7	3.1	2.9
9	3.6	5.5				-	43	144	53	8.7	3.1	2.8
10	3.6	8.1				-	32	215	56	8.3	2.9	2.8
11	3.5	6.1				-	41	155	53	8.3	2.9	2.8
12	3.6	9.1				-	35	150	52	7.9	2.9	2.8
13	3.8	5.1				158	28	110	51	7.5	2.9	2.8
14	4.0	5.5				128	28	99	47	7.5	2.9	2.8
15	3.8	5.6				57	112	98	42	7.5	3.1	2.9
16	3.8	4.6				51	189	197	35	6.8	2.9	2.9
17	3.4	4.0				14	124	189	33	6.3	2.9	3.1
18	3.6	4.0				14	102	144	32	5.7	2.9	3.1
19	3.3	4.0				20	95	122	32	4.1	3.3	3.1
20	5.5	64.1				48	80	106	32	4.0	3.4	3.5
21	3.6	64.5				118	77	87	32	3.8	3.3	3.8
22	3.6	64.8		15.7		289	65	78	33	3.8	3.1	4.0
23	3.6	4.8				202	60	72	31	3.8	3.1	4.0
24	3.6	64.2				72	71	96	29	3.8	3.1	3.8
25	3.8	64.1				62	66	62	28	3.4	3.1	3.8
26	3.8	4.5				80	63	90	28	3.4	3.1	3.8
27	4.0	4.8				76	61	69	23	3.3	3.3	3.8
28	4.0	64.3				85	63	70	18	3.1	3.1	3.6
29	4.0	4.6				51	78	99	15	3.1	3.1	3.6
30	4.0	4.8				58	85	261	13	3.1	2.9	3.6
31	4.6	-				182	-	113	-	3.1	2.9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	113.8	4.6	3.0	3.67	226
November	149.9	8.1	4.0	5.00	297
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	-	-	-	-	-
March 13-31	1,755	289	14	92.4	3,490
April	2,235	189	28	74.5	4,430
May	3,852	261	62	124	7,540
June	1,841	456	12	61.4	8,460
July	200.4	12	3.1	6.48	397
August	96.0	3.4	2.9	3.06	188
September	96.8	4.0	2.6	3.19	180
Water year	-	-	-	-	-

† Result of discharge measurement.

‡ Stage-discharge relation affected by ice.

§ No gage-height record Dec. 1 to Mar. 12; water diverted around station; discharge not determined.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

WARNER LAKES BASIN

Deep Creek above Adel, Oreg.

Location.- Water-stage recorder, lat. 42°11', long. 119°59', in E¹/₄ sec. 15, T. 39 S., R. 25 E., a third of a mile downstream from Drake Creek and 5 miles west of Adel. Datum of gage is 4,965 feet above mean sea level (from river-profile survey).

Drainage area.- 249 square miles.

Records available.- September 1922 to September 1923 and October 1932 to September 1945 in reports of Geological Survey. September 1922 to September 1923 and October 1929 to September 1936 in reports of State engineer.

Average discharge.- 17 years (1922-23, 1929-45), 101 second-feet.

Extremes.- Maximum discharge during year, 1,880 second-feet May 17 (gage height, 5.47 feet); minimum, 7.5 second-feet Sept. 4 (gage height, 0.41 foot).
1922-23, 1932-45: Maximum discharge, 5,030 second-feet Dec. 11, 1937 (gage height, 7.5 feet, from floodmark), from rating curve extended above 1,200 second-feet on basis of velocity-area studies; minimum, 1.7 second-feet July 20, 27-29, 1934.

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

Rating table, water year 1944-45, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

0.4	7.2	1.2	60	2.5	312
.5	10	1.4	83	3.0	465
.6	14	1.6	111	3.5	665
.7	20	1.8	147	4.0	920
.8	26	2.1	212	5.0	1,550
1.0	41				

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	21		31	99	40	139	552	424	69	12	8.8
2	14	22		31	278	45	100	800	388	68	11	8.5
3	13	30		28	186	40	95	624	465	58	10	8.5
4	12	62		28	111	38	88	534	430	48	10	8.2
5	12	51		24	83	39	104	616	434	45	10	8.5
6	12	37		24	52	37	154	584	458	43	10	9.8
7	12	35		139	83	36	153	552	365	40	10	9.4
8	14	32		177	301	37	156	516	329	39	11	9.4
9	13	32		141	240	41	139	496	312	35	11	8.5
10	13	35	a24	123	151	50	123	584	286	35	10	8.5
11	14	29		113	297	95	126	548	270	37	10	8.8
12	14	31		95	265	155	110	468	252	35	10	9.1
13	15	27		139	592	162	102	504	240	32	9.4	9.4
14	17	a25	(*)	235	398	136	96	592	228	31	9.8	9.1
15	17	a26		194	184	97	132	678	214	29	9.8	9.1
16	18	a23		116	147	72	307	1,050	199	27	9.4	9.4
17	18	a21		92	126	51	348	1,500	179	24	9.4	9.8
18	14	a21		b70	93	51	400	992	168	22	9.4	9.8
19	14	a21	37	*b60	93	54	504	936	158	21	10	10
20	14	22	44	b45	77	71	568	909	151	19	12	11
21	14		46	b30	69	135	670	652	143	16	12	14
22	14		94	b30	69	250	556	528	132	16	11	17
23	14		110	b30	62	160	435	479	130	16	9.8	15
24	14		92	b32	55	90	540	434	134	16	9.1	14
25	14	a26	74	b33	48	106	479	397	149	14	9.1	14
26	14		78	b31	51	95	412	472	147	14	9.8	13
27	14		78	b29	49	88	376	444	116	13	10	13
28	14		50	32	45	114	394	437	98	13	10	13
29	14		41	35	-	81	472	409	87	12	10	14
30	14		35	37	-	86	508	608	73	11	9.8	14
31	15		b33	37	-	141	-	560	-	12	9.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	436	17	12	14.1	865
November.....	362	52	-	28.7	1,710
December.....	1,335	110	-	39.8	2,450
Calendar year 1944.....	28,562.7	725	7.1	78.1	56,710
January.....	2,253	235	24	72.7	4,470
February.....	4,299	592	45	154	8,530
March.....	2,621	250	36	86.8	5,340
April.....	9,942	670	86	205	17,840
May.....	19,385	1,500	397	625	39,480
June.....	7,181	465	73	239	14,240
July.....	911	69	11	29.4	1,610
August.....	314.2	12	9.1	10.1	623
September.....	324.6	17	8.2	10.8	644
Water year 1944-45.....	48,733.8	1,500	8.2	134	96,670

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for Twentymile Creek near Adel and Chewaucan River near Paisley.

b Stage-discharge relation affected by ice.

c Computed from partly estimated gage-height record.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Chewaucan River above Conn ditch, near Paisley, Oreg.

Location.—Water-stage recorder, lat. 42°41', long. 120°35', in SW $\frac{1}{4}$ sec. 27, T. 33 S., R. 18 E., at bridge 20 feet downstream from former power plant of Paisley Electric Co., 700 feet upstream from diversion dam of Conn ditch, a quarter of a mile downstream from Mill Creek, and 2 $\frac{1}{2}$ miles west of Paisley. Datum of gage is 4,504.9 feet above mean sea level (river-profile survey).

Drainage area.—275 square miles.

Records available.—April to September 1912, May 1924 to September 1945. January 1905 to December 1907 and January 1909 to April 1912 at site 2 miles downstream, below Conn ditch. November 1912 to September 1921 at site half a mile upstream, above Mill Creek. Records of yearly runoff at these sites practically equivalent.

Average discharge.—35 years (1905-7, 1909-21, 1924-45), 132 second-feet.

Extremes.—Maximum discharge during year, 935 second-feet May 16; maximum gage height, 4.16 feet Feb. 8 (ice jam); minimum discharge, 22 second-feet sometime during period Nov. 13-16, from recorded range in stage.

1905-7, 1909-21, 1924-45: Maximum discharge, 4,000 second-feet Nov. 23, 1909 (gage height, 9.40 feet, site and datum then in use), from rating curve extended above 900 second-feet; no flow part of Dec. 7, 1929, Dec. 12, 1932 (frozen).

Remarks.—Records good except those for periods of ice effect or no gage-height record, and those for Dec. 25 to Jan. 4, Feb. 17 to Mar. 6, Aug. 10-25, which are poor. About 160 acres is irrigated above station.

Rating table, water year 1944-45, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

1.6	25	2.6	187
1.8	44	2.9	276
2.0	67	3.2	390
2.2	98	3.5	535
2.4	139	3.8	705

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	62	51	52	114	63	93	579	430	a98	59	28
2	59	48	48	59	198	61	77	840	417	a76	58	27
3	37	67	b43	44	104	61	63	675	440	a87	37	26
4	36	90	b40	48	75	44	86	741	399	b78	35	25
5	34	68	b40	51	77	57	100	735	495	a75	34	27
6	32	64	b58	53	75	59	112	717	506	a70	34	31
7	33	64	*b37	132	71	54	114	681	399	a68	33	30
8	33	50	b37	128	b350	55	118	645	358	b67	32	29
9	33	65	b35	88	127	55	95	606	338	b66	31	29
10	31	51	b35	81	122	57	98	663	314	a66	30	28
11	35	51	b36	93	137	63	104	606	296	a72	29	27
12	35	56	b36	81	131	77	90	579	282	a70	28	27
13	37	a46	b37	133	324	84	80	711	275	a68	28	27
14	42	a47	b37	137	263	77	64	645	266	a66	28	27
15	39	a47	b36	131	135	67	108	574	254	66	28	a27
16	37	a42	b39	96	112	65	167	706	245	a54	28	a27
17	36	b38	b40	74	120	60	198	659	239	a50	27	a26
18	35	b38	b45	b60	96	60	248	690	a220	67	27	a28
19	35	b38	57	b50	80	63	310	612	a200	54	27	a28
20	35	b40	84	b45	77	75	394	546	h187	51	30	a29
21	35	b45	120	a35	71	93	475	476	a180	48	34	a31
22	37	b55	114	*a35	81	126	445	470	a170	46	32	a33
23	36	b62	104	b37	71	102	422	465	a165	46	30	a33
24	35	b50	77	b37	62	65	450	422	a170	45	28	33
25	35	46	71	b40	53	80	390	394	a175	44	29	32
26	34	52	61	b38	59	73	350	430	a175	43	32	31
27	34	47	77	b38	63	71	362	412	a155	42	32	31
28	35	45	84	b37	59	75	399	408	a135	41	31	31
29	35	50	78	b40	-	65	470	408	a120	40	31	31
30	35	52	59	b43	-	73	510	450	a106	39	30	31
31	46	-	65	71	-	96	-	525	-	39	29	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	1,117	46	31	36.0	2,220
November.....	1,536	90	38	51.2	3,060
December.....	1,763	120	35	56.9	3,500
Calendar year 1944.....	31,597	774	-	56.8	62,280
January.....	2,089	137	35	67.4	4,140
February.....	3,356	334	53	120	6,660
March.....	2,166	126	44	69.9	4,300
April.....	7,032	510	77	234	13,950
May.....	17,778	741	394	573	35,280
June.....	8,109	505	105	270	16,080
July.....	1,672	98	39	60.4	3,710
August.....	961	59	27	31.0	1,910
September.....	872	33	25	29.1	1,730
Water year 1944-45.....	48,651	741	25	133	96,510

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for Twentymile Creek near Adel and Deep Creek above Adel.

b Stage-discharge relation affected by ice.

c Computed from staff-gage reading.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Silver Creek near Silver Lake, Oreg.

Location.- Water-stage recorder, lat. 43°07', long. 121°04', in SW 1/4 sec. 29, T. 28 S., R. 14 E., 1 1/2 miles downstream from diversion dam of Silver Lake Irrigation District, 1 1/2 miles southwest of Silver Lake post office, and 3 miles upstream from Bridge Creek. Datum of gage is 4,361.23 feet above mean sea level, datum of 1929.

Drainage area.- 221 square miles.

Records available.- December 1904 to March 1907, January 1909 to September 1945.

Average discharge.- 33 years (1906-6, 1909-27, 1929-41, 1943-45), including Silver Lake Irrigation District canal, 24.4 second-feet.

Extremes.- Maximum discharge during year, 49 second-feet May 29; maximum gage height, 2.54 feet Dec. 26 (ice jam); minimum discharge, 1.3 second-feet Nov. 5.

1904-7, 1909-45: Maximum discharge, 1,800 second-feet Mar. 20, 1907 (gage height, 9.08 feet, datum then in use), from rating curve extended above 700 second-feet; no flow at times in 1931, 1932, 1934, 1937.

Remarks.- Records fair except those for period November to January, which are poor. Flow regulated by reservoir (capacity, 900 acre-feet) above diversion dam 1 1/2 miles above station, and by Thompson Valley Reservoir (capacity, 17,400 acre-feet) 11 miles above station, both of which are owned by Silver Lake Irrigation District. No water was diverted above station by Silver Lake Irrigation District canal during year; canal out of repair, may not be used again, according to county watermaster.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.7	2.1	3.9	b5.2	b7.0	8.4	2.9	14	40	32	80	10
2	3.7	2.5	4.2	b5.2	8.4	b5.0	3.1	16	31	32	18	12
3	3.7	2.1	b4.2	b5.2	7.1	7.5	3.4	17	34	34	14	13
4	3.4	1.5	4.2	b5.2	7.1	b7.5	3.4	18	30	39	12	15
5	3.4	1.5	4.2	b5.4	7.5	b7.1	3.4	19	29	40	13	14
6	3.4	1.4	4.2	5.6	8.0	6.7	3.4	19	28	40	13	13
7	3.4	1.9	4.2	5.6	8.0	6.7	3.4	19	28	40	12	13
8	3.4	1.7	b4.8	5.6	8.8	6.7	3.4	18	28	40	12	13
9	3.1	2.1	b4.8	5.6	14	6.7	4.5	17	27	46	9.6	12
10	3.1	2.5	b4.0	5.6	14	6.7	4.6	19	26	40	9.6	12
11	3.1	2.6	b4.1	5.9	13	6.3	4.8	24	25	40	9.6	11
12	3.1	2.8	b4.1	5.9	12	5.4	4.8	24	25	40	9.6	11
13	3.4	2.6	b4.2	6.3	12	5.1	4.8	25	25	41	9.6	11
14	3.1	2.6	b4.2	6.3	12	5.1	5.1	25	25	41	9.6	11
15	2.9	b2.6	b4.4	6.7	b12	5.1	2.5	26	29	40	10	11
16	2.8	b2.5	b4.5	6.7	11	3.1	2.5	28	29	40	9.6	11
17	2.8	b2.5	b4.7	6.7	11	5.1	2.5	28	29	42	9.6	11
18	2.8	b2.6	b5.0	b6.7	10	b5.1	2.5	30	28	38	9.6	11
19	2.8	2.6	b5.5	b6.7	b9.6	3.1	2.5	31	28	39	9.6	11
20	2.6	2.6	b6.5	b6.7	9.6	3.1	2.5	30	28	37	9.6	11
21	2.5	2.9	8.0	b5.5	b9.6	5.1	2.9	30	28	27	9.6	12
22	2.5	2.9	7.1	b5.5	9.2	2.9	3.4	33	29	27	9.6	12
23	2.5	3.1	6.3	b5.6	9.2	2.9	4.8	35	28	24	9.6	12
24	2.5	3.1	5.9	b5.8	8.8	2.9	6.7	36	28	20	9.6	12
25	2.5	b3.1	b5.6	b6.2	b6.4	2.9	8.4	37	31	29	9.6	12
26	2.5	3.1	b5.8	b6.0	8.4	2.9	10	37	32	28	9.2	12
27	2.5	3.4	b5.8	b6.0	8.4	2.9	10	27	32	28	9.2	12
28	2.5	2.7	5.9	b5.6	8.4	2.9	11	29	32	28	9.2	12
29	2.5	3.7	b5.6	b5.8	-	2.9	12	40	32	29	9.2	12
30	2.5	2.7	b5.4	b6.0	-	2.9	13	42	32	29	9.2	12
31	2.3	-	b5.2	b6.2	-	2.9	-	43	-	21	9.2	12

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	90.6	5.7	2.5	2.92	1.89
November.....	76.6	3.7	1.5	2.55	1.59
December.....	154.5	8.0	2.9	4.98	2.95
Calendar year 1944.....	4,064.8	34	1.5	11.1	8,060
January.....	183.0	6.7	5.2	5.90	3.26
February.....	272.5	14	7.0	9.73	5.60
March.....	158.3	6.4	2.9	4.47	2.73
April.....	149.9	15	5.3	5.00	2.97
May.....	865	43	14	27.8	1,712
June.....	879	40	25	29.2	1,746
July.....	1,081	41	21	34.9	2,149
August.....	333.4	29	9.2	10.8	682
September.....	329	13	10	11.0	682
Water year 1944-45.....	4,547.9	43	1.5	12.5	8,060

* Winter discharge measurement made on this day.

† Stage-discharge relation affected by ice.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Silvies River near Burns, Oreg.

Location.-- Water-stage recorder, lat. 43°43', long. 119°11', in NW 1/4 sec. 31, T. 21 S., R. 30 E., 1 mile downstream from dam site for proposed lower Silvies Reservoir and 11 miles northwest of Burns.

Drainage area.-- 324 square miles.

Records available.-- May 1903 to July 1906, December 1908 to September 1945.

Average discharges.-- 32 years (1903-5, 1909-12, 1917-21, 1922-45), 144 second-feet.

Extremes.-- Maximum discharge during year, 1,380 second-feet Feb. 14 (gage height, 11.69 feet); minimum, 6 second-feet Oct. 1-9.

1903-5, 1908-45: Maximum discharge, 4,730 second-feet Apr. 15, 1904 (gage height, 17.12 feet, site and datum then in use); no flow July 19 to Sept. 22, 1934.

Remarks.-- Records good except those for Nov. 16 to Feb. 23, which are fair, and those for periods of ice effect or no gage-height record, which are poor. Small areas on Silvies River above station are irrigated with flood water.

Rating tables, water year 1944-45, except periods of ice effect
(gage height, in feet; and discharge, in second-feet)
(Shifting-control method used Feb. 15 to Mar. 20)

Oct. 1 to Feb. 14

Feb. 15 to Sept. 30

0.6	6	1.6	46	5.0	545	0.6	5	1.8	67	5.0	418
.7	8	2.0	72	6.5	506	.8	13	2.2	101	6.5	604
.9	13	2.5	110	8.0	683	1.0	20	2.6	141	8.0	810
1.1	21	3.0	153	9.5	909	1.2	30	3.0	182	9.5	1,035
1.3	30	4.0	245	11.0	1,200	1.6	47	4.0	262	11.0	1,520

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1												
2	6	11	21	245	245	99	354	810	784	78	16	9
3	6	14	23	245	260	31	350	845	770	74	16	9
4	6	21	21	245	260	80	297	861	880	84	15	9
5	6	26	21	47	181	75	285	873	820	54	14	6
6	6	27	22	50	220	265	264	866	860	49	13	7
7												
8	6	22	22	52	235	60	289	816	594	51	15	7
9	6	19	21	55	198	68	324	767	546	51	13	8
10	6	17	19	310	425	66	376	689	490	49	13	8
11	6	17	19	326	760	61	357	598	456	46	15	8
12	7	16	17	234	789	70	374	556	396	44	14	8
13	7	18	18	293	615	218	350	494	356	42	14	8
14	7	18	16	274	757	294	326	461	322	44	14	8
15	7	17	15	368	970	247	296	494	299	40	14	9
16	8	15	15	554	1,140	255	255	554	290	38	13	9
17	8	15	15	356	727	205	310	522	254	39	15	9
18	10	12	15	232	396	159	400	539	207	37	12	6
19	10	13	17	1,160	544	144	521	595	208	44	12	8
20	9	13	17	1,100	276	132	634	601	126	41	11	8
21	8	15	19	1,000	217	120	836	618	165	32	11	6
22	8	16	24	1,065	163	171	996	654	164	61	10	6
23	8	17	84	555	142	396	1,080	594	140	30	10	8
24	8	16	160	550	135	456	1,100	566	124	28	10	9
25	8	18	118	545	119	449	1,050	549	110	26	10	9
26	8	17	91	545	119	374	1,050	568	84	34	9	10
27	8	17	69	540	106	314	1,170	667	94	31	9	10
28	9	17	70	535	97	264	1,050	685	103	28	9	11
29	9	18	60	525	111	239	964	637	96	25	10	11
30	9	19	59	530	84	255	896	697	92	25	10	11
31	9	17	1,055	530	-	240	812	680	93	21	10	11
32	9	19	1,055	530	-	276	789	768	87	18	10	11
33	10	-	1,050	535	-	352	-	824	-	18	9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	245	10	6	7.8	438
November.....	514	27	11	17.1	1,020
December.....	1,246	180	15	40.2	2,470
Calendar year 1944.....	21,776	560	3	59.6	43,190
January.....	4,249	554	25	137	8,430
February.....	9,201	1,180	45	329	18,250
March.....	6,273	456	55	202	12,440
April.....	18,152	1,170	263	505	36,000
May.....	20,395	873	461	688	40,450
June.....	9,308	784	84	310	18,460
July.....	1,330	78	15	39.7	2,440
August.....	370	16	9	11.9	734
September.....	264	11	7	8.8	524
Water year 1944-45.....	71,445	1,170	6	106	141,705

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for Malheur River near Drewsey.

b Stage-discharge relation affected by ice.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Donner und Blitzen River near Frenchglen, Oreg.

Location.- Water-stage recorder and concrete control, lat. 42°47', long. 118°52', in NW 1/4 sec. 20, T. 32 S., R. 32 E., 1 1/2 miles upstream from upper diversions for Malheur Migratory Waterfowl Refuge, 2 miles downstream from Fish Creek, and 3 1/2 miles south-east of Frenchglen.

Drainage area.- 180 square miles.

Records available.- December 1937 to September 1945. January 1909 to November 1910, fragmentary records at sites downstream, below several irrigation diversions. May 1910 to September 1921 at site 1 1/2 miles downstream, in SW 1/4 sec. 8, above diversions, published as Donner and Blitzen River near Diamond. July 1929 to September 1930 in reports of State engineer.

Average discharge.- 15 years (1911-13, 1914-16, 1917-21, 1938-45), 130 second-feet.

Extremes.- Maximum discharge recorded during year, 1,280 second-feet June 4 (gage height, 4.65 feet); minimum, 11 second-feet Dec. 10 (gage height, 1.70 feet).

1909-21, 1937-45: Maximum discharge, 2,870 second-feet May 5, 1942 (gage height, 5.85 feet), from rating curve extended above 650 second-feet by velocity-area studies and logarithmic plotting; minimum, 8 second-feet Jan. 14, 1940 (ice jams upstream).

Remarks.- Records good except those for November to February, which are fair, and those for Apr. 5 to Apr. 26, which are poor.

No regulation or diversion above station.

Cooperation.- Water-stage recorder inspected by employee of Fish and Wildlife Service.

Rating table; water year 1944-45, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

1.9	22	2.7	127	3.7	640
2.1	36	2.9	180	4.0	730
2.3	56	3.1	245	4.3	955
2.5	86	3.4	375		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	40	40	49	b64	46	246	793		202	67	45
2	40	39	40	41	b295	47	116	751	a350	199	67	44
3	40	48	37	34	183	46	103	808		196	66	43
4	39	73	36	41	97	40	88	815	931	196	64	43
5	38	50	42	47	67	41		839	665	192	63	45
6	38	45	40	43	54	49		793	915	186	63	47
7	38	46	39	92	57	44		765	469	183	62	47
8	38	44	36	96	279	45		758	458	180	62	46
9	38	45	31	64	142	44			492	177	60	46
10	39	48	22	212	84	49			a490	172	60	46
11	37	43	32	99	125	75		a620	a470	166	59	45
12	37	43	26	89	115	100	a250		a460	150	59	45
13	38	42	29	105	137	88			464	155	59	46
14	40	36	33	101	101	105		504	375	152	57	45
15	40	37	38	86	60	82		464	330	150	57	44
16	39	40	41	64	59	69		585	321	142	57	44
17	39	39	45	53	69	56		552	344	134	56	45
18	39	38	44	53	59	54		454	335	130	56	45
19	38	39	46	56	54	56		528	415	120	55	45
20	38	39	71	49	49	80	356	486	425	116	55	47
21	38	34	74	46	53	165	492	360	464	109	55	53
22	38	42	104	38	55	369		366	469	103	55	52
23	37	43	84	b28	50	199		362	395	99	54	52
24	38	40	50	b48	47	134			362	94	54	49
25	38	b34	35	b50	45	155			350	90	53	49
26	37	44	38	b45	46	163			295	86	52	49
27	37	40	44	b38	50	118		a400	269	83	53	47
28	37	31	48	b34	45	163			235	80	50	47
29	37	45	43	b49	-	150			218	76	49	47
30	37	40	41	b59	-	235			211	73	48	46
31	38	-	38	b55	-	433	-		-	70	47	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	1,187	43	37	38.3	2,350
November.....	1,259	73	31	42.5	2,580
December.....	1,453	154	22	46.9	2,880
Calendar year 1944.....	32,341	370	22	86.4	64,140
January.....	1,936	212	28	62.5	3,840
February.....	2,539	295	43	90.7	5,040
March.....	3,498	433	40	115	6,940
April.....	10,551	-	-	352	20,950
May.....	17,307	-	-	558	34,330
June.....	12,600	931	211	420	24,980
July.....	4,271	202	70	138	8,470
August.....	1,774	67	47	57.2	3,520
September.....	1,392	53	43	46.4	2,760
Water year 1944-45.....	59,787	931	22	164	118,600

a No gage-height record; discharge computed on basis of weather records and records for Bridge Creek near Frenchglen.

b Stage-discharge relation affected by ice.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Donner und Blitzen River near Voltage, Oreg.

Location.— Water-stage recorder, lat. 43°16', long. 118°51', in SW¼ sec. 2, T. 27 S., R. 31 E., just downstream from Sodhouse diversion dam of Fish and Wildlife Service, 1½ miles south of Sodhouse lane and headquarters of Malheur Migratory Waterfowl Refuge, and 2 miles southwest of Voltage. Datum of gage is 4,097.58 feet above mean sea level, datum of 1929 (levels by Fish and Wildlife Service).

Records available.— February 1938 to September 1945. April 1916 to June 1919 and March 1921 to June 1922, fragmentary records at site 1½ miles downstream, including diversions and overflow through 16 culverts crossing Sodhouse Lane.

Extremes.— Maximum discharge during year, 464 second-feet (regulated) May 10 (gage height, 4.99 feet); minimum stage and discharge not determined (water below inlet at times). 1916-19, 1921-22, 1937-45: Maximum discharge observed, 800 second-feet May 21, 1917 (gage height, 3.3 feet, site and datum then in use); little or no flow at times June to August 1918.

Remarks.— Records fair (not computed for periods when stage was below inlet). Most of flow diverted above station for irrigation and for flooding waterfowl refuge; Kado and Springer Canals divert water below station.

Cooperation.— Water-stage recorder inspected by employee of Fish and Wildlife Service.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	-	56	-	118	62	261	-	391	167	34	-
2	-	-	59	-	144	59	304	-	394	159	32	-
3	-	-	69	-	226	30	140	-	387	147	31	-
4	-	-	60	-	270	27	87	-	390	140	28	-
5	-	-	52	102	208	28	80	191	393	125	28	-
6	-	-	57	110	153	54	89	187	393	88	27	-
7	-	-	56	110	128	64	131	172	430	88	18	-
8	-	-	48	125	124	34	151	194	450	107	-	-
9	-	-	-	139	194	30	134	282	429	130	-	-
10	-	-	-	110	232	30	101	294	429	118	-	-
11	-	-	-	130	173	32	78	321	429	103	-	-
12	-	-	-	167	164	36	49	321	426	101	-	-
13	-	-	-	118	178	51	36	322	423	94	-	-
14	-	-	-	130	179	60	30	332	412	97	-	-
15	-	-	-	149	173	65	26	351	399	87	-	-
16	-	-	-	131	130	74	-	358	390	83	-	-
17	-	-	-	114	53	75	-	390	366	87	-	-
18	-	-	-	92	41	65	-	390	298	89	-	-
19	-	-	100	90	49	55	-	387	261	84	-	-
20	-	-	91	97	73	41	-	386	249	78	-	-
21	-	-	110	94	70	26	-	390	264	72	-	-
22	-	-	135	-	66	15	-	375	274	68	-	-
23	-	-	193	-	66	166	-	375	304	65	-	-
24	-	-	181	-	68	254	-	376	318	54	-	-
25	-	-	52	140	-	67	136	-	390	317	52	78
26	-	54	120	-	65	84	-	393	292	47	-	-
27	-	63	112	195	61	142	-	388	252	42	-	-
28	-	75	-	-	60	145	-	396	242	40	-	-
29	-	62	-	-	-	149	-	387	230	36	-	-
30	-	60	-	94	-	148	-	382	179	36	-	-
31	-	-	-	114	-	182	-	382	-	36	-	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	-	-	-	-	-
November 25-30	366	75	52	61	726
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January	-	-	-	-	-
February	3,531	270	41	126	7,000
March	2,412	254	-	77.8	4,780
April 1-15	1,717	304	-	114	3,410
May 5-31	9,082	393	-	336	16,010
June	10,371	430	179	346	20,570
July	2,710	167	36	87.4	5,890
August	-	-	-	-	-
September	-	-	-	-	-
Water year 1944-45	-	430	-	-	-

† Result of discharge measurement.

Note.— No gage-height record Oct. 1 to Nov. 24, Apr. 16 to May 4, Aug. 8 to Sept. 30. Water level below inlet during these periods and discharge known to be less than 18 sec.-ft. Stage-discharge relation affected by ice Dec. 9-18, Dec. 28 to Jan. 4, Jan. 22-29; discharge not computed because of regulation.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

Bridge Creek near Frenchglen, Oreg.

Location.— Water-stage recorder and concrete control, lat. 42°50', long. 118°51', in NW 1/4 Sec. 33, T. 31 S., R. 32 E., at mouth of canyon, 1,000 feet upstream from road crossing and 3 1/2 miles northeast of Frenchglen.

Records available.— March 1911 to September 1916, December 1937 to September 1945.

Average discharge.— 11 years (1912-16, 1938-45), 14.5 second-feet.

Extremes.— Maximum discharge during year, 151 second-feet May 19 (gage height, 2.01 feet), from rating curve extended above 55 second-feet by logarithmic plotting; minimum, 10 second-feet Feb. 18 to Mar. 11.
1911-16, 1937-45: Maximum discharge, 332 second-feet Feb. 22, 1943 (gage height, 2.55 feet), from rating curve extended above 55 second-feet by logarithmic plotting; minimum observed, 7 second-feet Feb. 24, 25, 1912, and Dec. 30, 1937, to Jan. 4, 1938.

Remarks.— Records good except those for period Apr. 1-20, which are poor. No diversion or regulation above station. Low-water flow is maintained by large springs.

Cooperation.— Water-stage recorder inspected by employee of Fish and Wildlife Service.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	14	13	12	13	10	21	48	28	15	12	13
2	12	14	13	12	21	10	16	51	26	15	12	13
3	12	14	13	12	14	10	15	54	27	15	12	13
4	12	14	13	12	11	10	14	54	40	15	12	13
5	14	14	13	12	11	10	16	49	46	15	12	13
6	14	14	13	12	11	10	19	47	60	15	12	13
7	14	14	13	12	11	10	19	42	58	15	13	13
8	14	14	12	12	12	10	18	40	58	15	13	13
9	15	14	13	12	13	10	16	37	27	16	13	13
10	16	14	13	12	11	10	16	37	25	16	13	13
11	15	14	13	12	11	10	15	38	25	16	12	13
12	15	14	13	12	12	14	15	39	20	15	12	13
13	15	14	13	12	11	14	14	31	21	16	11	13
14	15	14	13	12	12	14	14	30	20	15	11	14
15	16	14	13	12	11	12	15	28	19	15	11	14
16	16	13	13	12	11	11	19	34	18	15	11	14
17	16	13	13	12	11	11	20	38	17	14	12	14
18	14	13	13	12	10	11	a28	36	17	14	12	14
19	14	13	13	11	10	11	a32	37	18	14	12	14
20	14	13	13	11	10	12	34	61	18	14	13	14
21	14	13	12	11	10	24	46	42	16	14	13	14
22	14	13	12	11	10	35	37	40	15	13	13	14
23	14	13	12	11	10	25	35	37	15	13	13	14
24	14	13	12	11	10	17	45	34	16	12	12	14
25	14	13	12	11	10	19	32	32	15	13	13	14
26	14	13	12	11	10	21	28	31	16	13	13	14
27	14	13	12	11	10	19	30	46	15	12	13	14
28	14	13	13	11	10	21	37	32	15	12	13	14
29	14	13	13	11	-	20	42	35	15	12	13	14
30	14	13	13	11	-	19	46	37	15	12	13	14
31	14	-	13	12	-	24	-	42	-	12	13	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	440	15	13	14.2	875
November.....	402	14	13	13.5	825
December.....	394	13	12	12.6	788
Calendar year 1944.....	5,062	51	12	13.8	10,040
January.....	358	19	11	11.5	710
February.....	317	21	10	11.3	629
March.....	454	35	10	15.0	860
April.....	775	54	14	23.7	1,535
May.....	1,287	67	22	40.9	2,323
June.....	682	60	15	22.7	1,330
July.....	438	16	12	14.1	860
August.....	325	13	11	12.4	754
September.....	408	14	13	13.6	800
Water year 1944-45.....	6,354	67	10	17.3	12,590

a No gage-height record; discharge computed on basis of weather records.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.
To convert war time to standard time, subtract 1 hour.

Trout Creek near Denio, Oreg.

Location.— Water-stage recorder, lat. $42^{\circ}10'$, long. $118^{\circ}28'$, in S $\frac{1}{2}$ sec. 26, T. 36 S., R. 36 E., 0.4 mile upstream from bridge at mouth of canyon, 5 miles east of Trout Creek Ranch, and 14 miles northeast of Denio. Datum of gage is 4,351.69 feet above mean sea level, datum of 1929.

Records available.— March 1911 to March 1912, April 1922 to November 1923, April 1925 to September 1945.

Average discharge.— 14 years (1922-23, 1932-45), 14.6 second-feet.

Extremes.— Maximum discharge during year, 228 second-feet May 11 (gage height, 4.00 feet); minimum, 1.6 second-feet Dec. 10.

1911-12, 1922-23, 1925-45: Maximum discharge, 343 second-feet Aug. 1, 1923, from rating curve extended above 125 second-feet; probably no flow at times.

Maximum stage known, 6.0 feet (caused by cloudburst) sometime between 1922 and 1923.

Remarks.— Records fair except those for Dec. 8 to June 8, which are poor. Small diversions above and large diversions below station for irrigation.

Rating tables, water year 1944-45, except periods of ice effect

(gage height, in feet, and discharge, in second-feet)

(Shifting-control method used Feb. 3 to Apr. 18)

Oct. 1 to May 10

May 11 to Sept. 30

2.6	40	5.4	134	1.6	3.3	2.4	38
2.8	52	5.7	172	1.7	4.8	2.6	42
3.1	100			1.8	6.8	2.8	65
				1.9	8.7	3.1	86
				2.0	11.5	3.4	132
				2.2	19.5	3.7	172

Note.— Same as following table below 2.6 feet.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.1	6.6	6.8	7.4	67.0	9.0	24	113	111	24	8.7	4.4
2	6.8	6.6	6.9	7.4	61.1	9.5	23	122	99	25	6.5	5.9
3	6.6	7.0	5.9	6.6	11	9.5	28	120	96	21	7.0	5.9
4	6.2	5.5	5.7	6.8	9.3	7.8	220	133	95	19	7.4	3.9
5	5.5	5.1	7.2	7.0	8.7	7.9	418	154	94	18	7.9	4.0
6	5.5	7.4	6.9	6.6	7.6	9.8	417	136	95	17	7.1	4.5
7	5.7	7.4	6.6	7.2	9.3	8.5	417	134	91	17	7.6	4.5
8	5.5	6.8	6.1	7.9	10	9.0	420	137	95	18	6.1	4.5
9	5.7	6.6	4.4	6.8	11	8.7	422	142	81	14	9.3	4.5
10	5.7	7.4	3.3	7.2	9.5	9.3	419	139	79	16	6.1	5.9
11	6.1	7.2	4.5	7.9	10	9.5	417	136	78	15	7.4	5.3
12	6.1	7.2	4.8	8.6	10	9.5	417	146	78	15	7.0	5.4
13	6.8	7.2	4.3	7.4	14	10	416	124	71	15	6.4	5.4
14	6.6	6.8	64.5	6.5	16	11	416	113	67	15	6.6	5.4
15	6.6	7.0	64.5	8.3	14	11	16	104	62	16	6.8	5.5
16	6.3	6.6	64.5	7.6	14	11	19	98	99	16	5.7	5.9
17	5.4	6.2	65.0	8.4	15	10	21	105	58	14	5.5	5.4
18	6.4	6.4	65.5	65.8	12	11	27	95	55	15	5.9	5.4
19	6.6	6.6	65.9	65.9	12	11	24	92	52	15	5.8	5.4
20	6.9	6.2	65.5	65.5	11	15	47	90	49	13	5.7	4.0
21	6.9	5.3	7.4	65.0	9.8	16	76	84	46	13	5.3	5.9
22	6.9	6.3	7.4	65.0	41.5	15	65	79	45	13	5.9	5.4
23	5.3	7.4	7.4	64.5	11	10	65	78	42	13	4.8	5.9
24	5.9	6.6	6.6	64.5	11	16	84	78	47	12	4.8	5.9
25	5.1	5.7	5.3	64.5	8.5	18	78	67	44	12	4.8	5.3
26	6.3	7.4	5.9	64.5	8.5	19	70	79	40	11	4.6	5.2
27	5.4	7.0	4.2	64.9	11	17	65	76	37	10	4.6	5.2
28	4.8	6.2	7.6	64.9	9.5	20	62	77	35	9.5	4.6	5.2
29	6.1	7.0	6.8	64.0	-	20	70	80	30	9.0	4.6	5.2
30	6.1	7.0	4.2	64.5	-	21	88	80	27	8.7	4.6	5.5
31	6.4	-	5.1	65.5	-	25	-	101	-	9.0	5.0	-

Month	Second-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	191.1	6.3	5.5	6.15	379
November	204.2	5.3	5.2	5.61	408
December	189.6	7.6	5.8	5.83	368
Calendar year 1944	4,905.1	104	1.8	13.4	9,720
January	190.3	8.5	4.0	6.14	377
February	202.7	19	7.0	11.6	613
March	222.0	25	7.2	15.0	797
April	1,194	96	16	39.6	2,370
May	1,947	122	6.7	129	5,708
June	1,947	111	27	64.9	5,820
July	421.2	84	8.7	14.6	922
August	190.5	8.7	4.2	6.21	328
September	123.8	5.5	5.2	4.23	227
Water year 1944-45	8,767.4	129	3.2	24.9	17,390

^a Winter discharge measurements made on this day.

^b No gage-height record; discharge computed on basis of records for Malheur River near Drewsey.

^c Stage-discharge relation affected by ice.

^d Partial gage-height record; discharge computed on basis of records for Malheur River near Drewsey and Silver River near Burns.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Measurements of stream flow in the Great Basin made at points other than gaging stations are given in the following table:

Miscellaneous discharge measurements in the Great Basin during water year
October 1944 to September 1945

Great Salt Lake Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
June 16	Bear River.....	Great Salt Lake.	SE $\frac{1}{4}$ sec. 31, T. 12 S., R. 44 E., at Bern Bridge, $\frac{1}{2}$ mile below confluence with Bear Lake Outlet Canal and 2 $\frac{1}{2}$ miles northwest of Montpelier, Idaho.	359
15	Dingle Canal....	Bear River.....	NW $\frac{1}{4}$ sec. 15, T. 14 S., R. 44 E., 1 mile south of Dingle, Idaho.	19.9
15	Paris Creek.....	Bear Lake Outlet Canal.	Sec. 15, T. 14 S., R. 42 E., 50 feet below power-canal diversion, 200 feet below Paris Creek spring, and 6 miles southwest of Paris, Idaho.	27.9
17	Last Chance Canal.	Bear River.....	Sec. 30, T. 9 S., R. 41 E., just above en- trance to tunnel and $\frac{1}{4}$ miles north of Grace, Idaho.	253
18	Bench "B" Canal.	.....do.....	Sec. 1, T. 10 S., R. 40 E., 1,000 feet below canal heading and 1 mile north of Grace, Idaho.	101
18	Tanner "B" Canal	.....do.....	Sec. 1, T. 10 S., R. 40 E., 200 feet below canal heading and 1 mile north of Grace, Idaho.	†.25
Oct. 21	Owenford Mill ditch.	Malad River.....	In sec. 11, T. 15 S., R. 35 E., $\frac{3}{8}$ mile be- low point of diversion, 250 feet northeast of gaging station on Malad River near Samarra, and $\frac{1}{2}$ miles north of Samarra, Idaho.	2.14
Dec. 15	.....do.....	.....do.....	.....do.....	0
Jan. 11	.....do.....	.....do.....	.....do.....	0
12	.....do.....	.....do.....	.....do.....	0
Feb. 8	.....do.....	.....do.....	.....do.....	0
Mar. 11	.....do.....	.....do.....	.....do.....	0
23	.....do.....	.....do.....	.....do.....	0
May 4	.....do.....	.....do.....	.....do.....	2.65
June 11	.....do.....	.....do.....	.....do.....	4.97
July 18	.....do.....	.....do.....	.....do.....	2.88
Sept. 16	.....do.....	.....do.....	.....do.....	2.80
Jan. 19	New Canyon Creek	Devil Creek....	Sec. 19, T. 13 S., R. 37 E., 80 feet above irrigation diversion, 250 yards above Gled ranch house, and 7 miles northeast of Malad, Idaho.	†.4
Mar. 13	.....do.....	.....do.....	.....do.....	.31
24	.....do.....	.....do.....	.....do.....	.34
May 3	.....do.....	.....do.....	.....do.....	9.08
5	.....do.....	.....do.....	.....do.....	6.20
June 11	.....do.....	.....do.....	.....do.....	6.61
July 19	.....do.....	.....do.....	.....do.....	1.95
May 10	East Canyon Creek.	Weber River.....	Sec. 23, T. 2 N., R. 3 E., above East Canyon Reservoir, near Morgan, Utah.	104
Nov. 13	Santaquin plant tailrace.	Santaquin Creek.	Sec. 15, T. 10 S., R. 1 E., at power plant on Santaquin Creek, 2 miles southeast of Santaquin, Utah.	7.95
May 29	.....do.....	.....do.....	.....do.....	17.8
Apr. 17	American Fork...	Utah Lake.....	Sec. 32, T. 4 S., R. 2 E., at Utah Power & Light Co.'s lower power plant, 5 miles northeast of American Fork, Utah.	28.2
May 3	.....do.....	.....do.....	.....do.....	210
9	.....do.....	.....do.....	.....do.....	326
17	.....do.....	.....do.....	.....do.....	234
28	.....do.....	.....do.....	.....do.....	233
June 7	.....do.....	.....do.....	.....do.....	246
22	.....do.....	.....do.....	.....do.....	290
July 5	.....do.....	.....do.....	.....do.....	202
19	.....do.....	.....do.....	.....do.....	139
Aug. 20	.....do.....	.....do.....	.....do.....	59.6
May 30	Stairs plant tailrace.	Big Cottonwood Creek.	Sec. 20, T. 2 S., R. 2 E., at Utah Power & Light Co.'s power plant on Big Cottonwood Creek.	60.9
30	Mill Creek.....	Jordan River....	Sec. 31, T. 1 S., R. 2 E., $\frac{1}{2}$ mile above Utah Power & Light Co.'s lower power plant on Mill Creek, near Salt Lake City, Utah.	18.0
30	Tailrace of Lower Hill Creek power plant.	Mill Creek.....	Sec. 36, T. 1 S., R. 1 E., at Utah Power & Light Co.'s lower power plant on Mill Creek.	†1.8
June 1	South Willow Creek plant tailrace.	South Willow Creek.	Sec. 27, T. 3 S., R. 6 W., at Utah Power & Light Co.'s power plant, 6 miles southwest of Grantsville, Utah.	7.93

† Field estimate.

Sevier Lake Basin

Oct. 8	Duck Creek Spring.	Duck Creek.....	Sec. 12, T. 38 S., R. 8 W., 18 miles south- west of Hatch, Utah.	16.4
8	Upper Assay spring.	Assay Creek.....	Sec. 33, T. 37 S., R. 6 W., 9 miles south- west of Hatch, Utah.	8.6
10	Lower Assay spring.	.....do.....	.....do.....	26.3
10	West Fork Assay spring.	West Fork Assay Creek.	Sec. 19, T. 37 S., R. 6 W., 9 miles south- west of Hatch, Utah.	1.1

Miscellaneous discharge measurements in the Great Basin during water year
October 1944 to September 1945--Continued

Sevier Lake Basin--Continued

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Oct. 8	Mammoth Spring....	Mammoth Creek....	Sec. 5, T. 37 S., R. 7 W., 13 miles west of Hatch, Utah.	9.0
8	Blue Spring.....	Deer Creek.....	Sec. 8, T. 36 S., R. 7 W., 14 miles north-west of Hatch, Utah.	5.2

Pavant Valley

Oct. 14	Pine Creek.....	Drains to Pavant Valley.	Sec. 15, T. 22 S., R. 4 W., 4 miles south-east of Fillmore, Utah.	70.25
Apr. 27	....do.....	....do.....	....do.....	4.2
May 24	....do.....	....do.....	....do.....	12.5
June 28	....do.....	....do.....	....do.....	7.0
Aug. 5	....do.....	....do.....	....do.....	Dry
30	....do.....	....do.....	....do.....	.36
Oct. 14	Meadow Creek.....	Pavant Valley....	Sec. 17, T. 22 S., R. 4 W., 4 miles east of Meadow, Utah.	2.5
Nov. 14	....do.....	....do.....	....do.....	2.5
Dec. 19	....do.....	....do.....	....do.....	2.0
Jan. 31	....do.....	....do.....	....do.....	1.8
Mar. 14	....do.....	....do.....	....do.....	5.0
Apr. 26	....do.....	....do.....	....do.....	17.6
May 24	....do.....	....do.....	....do.....	35.8
June 28	....do.....	....do.....	....do.....	20.2
Aug. 4	....do.....	....do.....	....do.....	7.4
29	....do.....	....do.....	....do.....	4.9
Oct. 14	Corn Creek.....	....do.....	Sec. 35, T. 23 S., R. 5 W., 4 miles southeast of Kanosh, Utah.	7.9
Nov. 14	....do.....	....do.....	....do.....	6.4
Dec. 19	....do.....	....do.....	....do.....	7.5
Jan. 31	....do.....	....do.....	....do.....	7.3
Mar. 14	....do.....	....do.....	....do.....	8.2
Apr. 26	....do.....	....do.....	....do.....	85.7
May 24	....do.....	....do.....	....do.....	65.0
June 28	....do.....	....do.....	....do.....	28.7
Aug. 4	....do.....	....do.....	....do.....	21.7
29	....do.....	....do.....	....do.....	14.5

† Field estimate.

Cedar City Valley

May 16	Coal Creek.....	Cedar City Valley	Sec. 3, T. 36 S., R. 11 W., above Woodberry Canal, 1 mile northwest of Cedar City, Utah.	186
16	....do.....	....do.....	Sec. 3, T. 36 S., R. 11 W., below Woodberry Canal, 1 mile northwest of Cedar City, Utah.	79.1

Summer Lake Basin

July 24	Summer Lake Canal.	Ana River.....	SW $\frac{1}{4}$ sec. 6, T. 30 S., R. 17 E., 6 miles north-east of Summer Lake, Oreg.	25.0
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Malheur and Harney Lakes Basin

June 12	Silver Creek.....	Harney Lake.....	Sec. 30, T. 22 S., R. 26 E., 1 mile north of Suntut, Oreg.	62.3
12	....do.....	....do.....	Sec. 22, T. 25 S., R. 28 E., 20 miles southeast of Burns, Oreg.	51.1

Alvord Lake Basin

June 15	Wildhorse Creek...	Alvord Lake.....	Sec. 23, T. 35 S., R. 35 E., 1 $\frac{1}{2}$ miles northeast of Andrews, Oreg.	39.9
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INDEX

	Page		Page
Accuracy of field data and computed results.....	5	Cleveland, Idaho, Cottonwood Creek near	49
Acres-foot, definition of.....	1	Coal Creek, Utah, discharge measure-	189
Adamsville, Utah, Beaver River at.....	123	ments of.....	127
Adel, Oreg., Deep Creek above.....	180	near Cedar City, Utah.....	87
Twentymile Creek near.....	159	Coalville, Utah, Chalk Creek at.....	80
Agencies other than Geological Survey, records collected by.....	11-12	Weber River near.....	34
Alexander, Idaho, Bear River at.....	22	Cokeville, Wyo., Pine Creek near.....	32
Alvord Lake Basin, Oreg., discharge measurement in.....	169	Smiths Fork at.....	137
American Fork, Utah, discharge measurements of.....	168	Coleville, Calif., West Walker River near.....	24
Antelope Valley, Calif., gaging-station records in.....	132-133	Collinston, Utah, Bear River near.....	69
Asay spring, West Fork, Utah, discharge measurement of.....	168	Hammond (East Side) Canal near.....	68
Avon, Utah, East Fork Little Bear River near.....	61	West Side Canal near.....	8
		Computations, accuracy of results of.....	2
		Contents, definition of.....	1
		Control, definition of.....	12
		Cooperation, record of.....	169
		Corn Creek, Utah, discharge measurements of.....	49
		Cottonwood Creek (Bear River Basin) near Cleveland, Idaho.....	48
Barstow, Calif., Mojave River at.....	130	near Swan Lake, Idaho.....	157
Bear River at Alexander, Idaho.....	22	Cottonwood Creek (Humboldt River Basin) at Paradise Valley, Nev.....	28-29
at Border, Wyo.....	20	Coyote Creek near Evanston, Wyo.....	88
at Harer, Idaho.....	21	Croydon, Utah, Lost Creek near.....	55
at Millis, near Evanston, Wyo.....	18	Cub River above Maple Creek, near Franklin, Idaho.....	54
discharge measurement of.....	168	near Preston, Idaho.....	56
near Collinston, Utah.....	24	Cub River-Worm Creek Canal near Preston, Idaho.....	5
near Evanston, Wyo.....	17		2-4
near Preston, Idaho.....	23	Deep Creek (Bear River Basin) below First Creek, near Malad, Idaho.....	78
near Randolph, Utah.....	19	Deep Creek (Mojave River Basin) near Hesperia, Calif.....	128
near Utah-Wyoming State line.....	15	Deep Creek (Warner Lakes Basin) above Adel, Oreg.....	160
near Woodruff, Utah.....	18	Deer Creek Reservoir near Charleston, Utah.....	102
Bear River Basin, Idaho-Utah-Wyo., gaging-station records in.....	15-78	Deeth, Nev., Marys River below Hot Springs Creek, near.....	149
Beaver River at Adamsville, Utah.....	123	Denio, Oreg., Trout Creek near.....	187
at Rockyford Dam, near Minersville, Utah.....	125	Devil Creek above Campbell Creek, near Malad, Idaho.....	77
near Beaver, Utah.....	3, 122	Devils Slide, Utah, Weber River at.....	83
Beaver River Basin, Utah, gaging-station records in.....	122-125	Diamond Fork near Thistle, Utah.....	101
Bench "B" Canal, Utah, discharge measurement of.....	168	Dingle Canal, Idaho, discharge measurement of.....	168
Blacksmith Fork above Utah Power & Light Co.'s dam, near Hyrum, Utah.....	66	Donner und Blitzen River near Frenchglen, Oreg.....	3, 164
at Hardware Ranch, near Hyrum, Utah.....	65	near Voltage, Oreg.....	185
Bloomington Creek near Bloomington, Idaho.....	39	Duck Creek Spring, Utah, discharge measurement of.....	168
Blue Spring, Utah, discharge measurement of.....	169		
Border, Wyo., Bear River at.....	20	East Canyon Creek, Utah, discharge measurement of.....	168
Smiths Fork near.....	31	near Morgan, Utah.....	90
Bridge Creek near Frenchglen, Oreg.....	166	East Canyon Reservoir near Morgan, Utah.....	89
Bridgeport, Calif., Bridgeport Reservoir near.....	135	East Side Canal. See Hammond Canal.	
East Walker River near.....	136	East Walker River near Bridgeport, Calif.....	136
Bridgeport Reservoir near Bridgeport, Calif.....	135	Echo, Utah, Echo Reservoir at.....	81
Burns, Oreg., Silvers River near.....	163	Weber River at.....	82
		Echo Reservoir at Echo, Utah.....	81
Carlin, Nev., Humboldt River near.....	144	Elkhorn Reservoir near Malad, Idaho.....	75
Carson River, East Fork, near Gardnerville, Nev.....	139	Elko, Nev., Humboldt River near.....	143
near Carson City, Nev.....	140	South Fork Humboldt River near.....	153
near Fort Churchill, Nev.....	141	Evanston, Wyo, Bear River near.....	16, 17
West Fork, at Woodfords, Calif.....	142	Coyote Creek near.....	28, 29
Carson River Basin, Calif.-Nev., gaging-station records in.....	139-143	Mill Creek near.....	25
Castilla, Utah, Spanish Fork at.....	99	Sulphur Creek near.....	26
Cedar City, Utah, Coal Creek near.....	127	Yellow Creek near.....	27
Cedar City Valley, Utah, discharge measurements in.....	169		
gaging-station record in.....	127	Floods, special reports on.....	11
Center Creek near Parowan, Utah.....	126	Fort Churchill, Nev., Carson River near.....	141
Chalk Creek (Pavant Valley) near Fillmore, Utah.....	121	Franklin, Idaho, Cub River near.....	55
Chalk Creek (Weber River Basin) at Coalville, Utah.....	87	Frenchglen, Oreg., Bridge Creek near.....	168
Charleston, Utah, Deer Creek Reservoir near.....	102	Donner und Blitzen River near.....	3, 164
Chewaucan River above Conn ditch, near Paisley, Oreg.....	161		
Clarkston Creek near Newton, Utah.....	67	Gardnerville, Nev., East Fork Carson River near.....	139
Clear Creek at Sevier, Utah.....	119		

	Page		Page
Gateway, Utah, Weber River at.....	84	Lower Assay spring, Utah, discharge	168
Geneva, Idaho, Hobbie Creek near.....	33	measurement of.....	168
Salt Creek near.....	37	Lynndyl, Utah, Sevier River near.....	117
Thomas Fork near.....	35		
Georgetown Creek near Georgetown, Idaho	45	Malad, Idaho, Deep Creek near.....	78
Great Salt Lake, Utah, gages on.....	14	Devil Creek near.....	77
Great Salt Lake Basin, Idaho-Utah-Wyo.,		Elkhorn Reservoir near.....	75
discharge measurements in.....	168	Little Malad River near.....	74, 78
gaging-station records in.....	14-107	Malad River near.....	70
Gunnison, Utah, Sevier River near.....	127	Malad River at Woodruff, Idaho.....	72
Gwenford Mill ditch, Idaho, discharge		below springs, near Malad, Idaho.....	70
measurements of.....	168	near Samaria, Idaho.....	71
Halleck, Nev., North Fork Humboldt River		Malheur and Harney Lakes Basin, Oreg.,	
near.....	151	discharge measurements in.....	169
Hammond (East Side) Canal near Collins-		gaging-station records in.....	163-166
ton, Utah.....	69	Mammoth Spring, Utah, discharge	
Hardscrabble Creek near Porterville,		measurement of.....	169
Utah.....	91	Martin Creek near Paradise Valley, Nev.	156
Harer, Idaho, Bear River at.....	21	Marys River below Hot Springs Creek,	
Harney Lake Basin. See Malheur and		near Deeth, Nev.....	149
Harney Lakes Basin.		Marysville, Utah, Plute Reservoir near..	110
Hatch, Utah, Sevier River at.....	106	Sevier River near.....	111
Hawthorne, Nev., Walker Lake near.....	134	Meadow Creek, Utah, discharge measure-	
Hesperia, Calif., Deep Creek near.....	128	ments of.....	169
West Fork Mojave River near.....	131	Mill Creek (tributary to Bear Lake Out-	
Hobbie Creek near Geneva, Idaho.....	33	let) above West Fork, near	
Humboldt River at Palisade, Nev.....	145	Liberty, Idaho.....	43
near Carlin, Nev.....	144	near Liberty, Idaho.....	44
near Elko, Nev.....	143	Mill Creek (tributary to Bear River)	
near Rye Patch, Nev.....	147-148	near Evanston, Wyo.....	25
North Fork, at Devils Gate, near		Mill Creek (tributary to Jordan River),	
Halleck, Nev.....	151	Utah, discharge measurement of...	169
South Fork, near Elko, Nev.....	153	Minersville, Utah, Beaver River near...	125
near Lee, Nev.....	152	Rockyford Reservoir near.....	124
Humboldt River Basin, Nev., gaging-		Mink Creek, Idaho, Preston-Riverdale &	
station records in.....	143-157	Mink Creek Canal near.....	53
Humboldt-Carson Sink Basin, Calif.-		Twin Lakes Canal near.....	52
Nev., gaging-station records in.....	139-157	Mink Creek near Mink Creek, Idaho.....	51
Huntsville, Utah, South Fork Ogden		Mojave River at Barstow, Calif.....	130
River near.....	92	at lower narrows, near Victorville,	
Hyrum, Utah, Blacksmith Fork near.....	65, 66	Calif.....	129
Hyrum Reservoir near.....	59	West Fork, near Hesperia, Calif.....	131
Little Bear River near.....	60	Mojave River Basin, Calif., gaging-	
Hyrum Reservoir near Hyrum, Utah.....	59	station records in.....	128-131
		Mono Lake near Mono Lake, Calif.....	134
Jordan River at Narrows, near Lehi,		Montpelier Creek at irrigators weir,	
Utah.....	95	near Montpelier, Idaho.....	38
at Salt Lake City, Utah.....	96-97	near Montpelier, Idaho.....	37-38
Jordan River Basin, Utah, gaging-station		Morgan, Utah, East Canyon Creek near...	90
records in.....	95-107	East Canyon Reservoir near.....	89
Juab, Utah, Sevier Bridge Reservoir			
near.....	115	New Canyon Creek, Idaho, discharge	
Sevier River near.....	3, 116	measurements of.....	168
		Newton, Utah, Clarkston Creek near.....	67
Kingston, Utah, East Fork Sevier River		Nixon, Nev., Pyramid Lake near.....	157
near.....	118	Nounan, Idaho, Skinner Creek at.....	47
Sevier River near.....	109	Stauffer Creek near.....	46
Lake Shore, Utah, Spanish Fork near...	100	Oakley, Utah, Weber River near.....	
Lamolle Creek near Lamolle, Nev.....	150	Ogden, Utah, Ogden River near.....	9
Last Chance Canal, Idaho, discharge		Pine View Reservoir near.....	93
measurement of.....	168	Ogden River below Pine View Dam, near	
Lee, Nev., South Fork Humboldt River		Ogden, Utah.....	94
near.....	152	South Fork, near Huntsville, Utah....	92
Lehi, Utah, Jordan River near.....	95		
Liberty, Idaho, Mill Creek near.....	43, 44	Paisley, Oreg., Chewaucan River near..	161
Little Bear River, East Fork, near		Palisade, Nev., Humboldt River at.....	145
Avon, Utah.....	61	Paradise, Utah, Little Bear River near.	58
near Hyrum, Utah.....	60	Paradise Valley, Nev., Cottonwood Creek	
near Paradise, Utah.....	58	at.....	157
Little Humboldt River at Chimney dam		Little Humboldt River near.....	54, 155
site, near Paradise Valley, Nev..	154	Martin Creek near.....	158
near Paradise Valley, Nev.....	155	Paris, Idaho, Paris Creek near.....	40
Little Malad River above Elkhorn Reser-		Slight Canyon Creek near.....	42
voir, near Malad, Idaho.....	74	Paris Creek, Idaho, discharge measure-	
below Elkhorn Reservoir, near Malad,		ment of.....	168
Idaho.....	76	near Paris, Idaho.....	40
Little Rock Creek near Little Rock,		Paris power canal near Paris, Idaho....	41
Calif.....	133	Parowan, Utah, Center Creek near.....	126
Logan, Utah, Logan, Hyde Park & Smith-		Pavant Valley, Utah, discharge measure-	
field Canal near.....	64	ments in.....	169
Logan River near.....	62	gaging-station record in.....	121
Utah Power & Light Co.'s tailrace		Pine Creek (Bear River Basin) near Coke-	
near.....	63	ville, Wyo.....	34
Logan, Hyde Park & Smithfield Canal		Pine Creek (Pavant Valley), Utah, dis-	
near Logan, Utah.....	64	charge measurements of.....	169
Logan River above State dam, near		Pine View Reservoir near Ogden, Utah...	93
Logan, Utah.....	62	Plute Reservoir near Marysville, Utah...	110
Lost Creek near Croydon, Utah.....	88	Plain City, Utah, Weber River near....	85
		Porterville, Utah, Hardscrabble Creek	
		near.....	91

	Page		Page
Ereton, Idaho, Bear River near.....	23	Stage-discharge relation, definition of.....	1
Cub River near.....	54	Stairs plant tailrace, Utah, discharge measurement of.....	168
Cub River-Worm Creek Canal near.....	56	Stauffer Creek near Nounan, Idaho.....	46
Worm Creek near.....	57	Sulphur Creek near Evanston, Wyo.....	26
Preston-Riverdale & Mink Creek Canal near Mink Creek, Idaho.....	53	Summer Lake Basin, Oreg., discharge measurement in.....	169
Provo River at Provo, Utah.....	104	Summer Lake Canal, Oreg., discharge measurement of.....	169
at Vivian Park, Utah.....	103	Surplus Canal at Salt Lake City, Utah..	107
South Fork, at Vivian Park, Utah.....	106	Swan Lake, Idaho, Cottonwood Creek near	40
Publications on stream flow by Geological Survey.....	5-9,11	Treasuron Canal near.....	50
by State agencies.....	9-10	Tailrace of lower Mill Creek power plant, Utah.....	168
Pyramid Lake near Nixon, Nev.....	157	Tanner "B" Canal, Idaho, discharge measurement of.....	168
Pyramid and Winnemucca Lakes Basin, Nev.-Calif., gaging-station records in.....	157-158	Terms, definition of.....	1-2
Randolph, Utah, Bear River near.....	19	Thistle, Utah, Diamond Fork near.....	101
Raymond, Idaho, Thomas Fork near.....	36	Trout Creek near Geneva, Idaho.....	35
Rock Creek near Valermo, Calif.....	132	near Raymond, Idaho.....	4-5
Rockyford Reservoir near Minersville, Utah.....	124	Time basis of records.....	138
Runoff in inches, definition of.....	1	Topaz Reservoir near Topaz, Calif.....	50
Rye Patch, Nev., Humboldt River near.....	147-148	Treasuron Canal near Swan Lake, Idaho	167
Rye Patch Reservoir near.....	146	Trout Creek near Denio, Oreg.....	158
Rye Patch Reservoir near Rye Patch, Nev.....	146	Truckee River near Truckee, Calif.....	159
Sage, Wyo., Twin Creek at.....	30	Twentymile Creek near Adel, Oreg.....	30
Salina Creek at Salina, Utah.....	120	Twin Creek at Sage, Wyo.....	52
Salt Creek near Geneva, Idaho.....	37	Twin Lakes Canal near Mink Creek, Idaho	52
Salt Lake City, Utah, Jordan River at.....	96-97	Upper Asay spring, Utah, discharge measurement of.....	168
Surplus Canal at.....	107	Utah Power & Light Co.'s tailrace near Logan, Utah.....	63
Salton Sea, Calif., elevations of.....	127-128	Valermo, Calif., Rock Creek near.....	132
Samaria, Idaho, Malad River near.....	71	Victorville, Calif., Mojave River near.....	129
Warm Springs Canal near.....	73	Vivian Park, Utah, Provo River at.....	103
Santaquin plant tailrace, Utah, discharge measurements of.....	168	Salt Fork Provo River at.....	106
Second-foot per square mile, definition of.....	1	Voltage, Oreg., Donner and Blitzen River near.....	165
Second-foot, definition of.....	1	Walker Lake near Hawthorne, Nev.....	134
Second-foot-day, definition of.....	1	Walker Lake Basin, Calif.-Nev., gaging-station records in.....	134-138
Sevier, Utah, Clear Creek at.....	119	Wanship, Utah, Silver Creek near.....	86
Sevier River near.....	112	Warm Springs Canal near Samaria, Idaho.....	73
Sevier Bridge Reservoir near Juab, Utah.....	115	Warner Lakes Basin, Oreg., gaging-station records in.....	159-160
Sevier Lake Basin, Utah, discharge measurements of.....	168-169	Weber River at Devils Slide, Utah.....	83
Sevier River above Clear Creek, near Sevier, Utah.....	108-120	at Echo, Utah.....	82
at Hatch, Utah.....	108	at Gateway, Utah.....	84
below Plute Dam, near Marysvale, Utah below San Pitch River, near Gunnison, Utah.....	111	near Coalville, Utah.....	80
East Fork, near Kingston, Utah.....	114	near Oakley, Utah.....	79
near Juab, Utah.....	118	near Plain City, Utah.....	85
near Kingston, Utah.....	116	Weber River Basin, Utah, gaging-station records in.....	79-94
near Lynndyl, Utah.....	109	Weber-Provo diversion canal near Woodland, Utah.....	105
near Sigurd, Utah.....	113	West Side Canal near Collinston, Utah..	68
Sigurd, Utah, Sevier River near.....	113	West Walker River below East Fork, near Coleville, Calif.....	137
Silver Creek (Malheur and Harney Lakes Basin), Oreg., discharge measurements of.....	169	Wildhorse Creek, Oreg., discharge measurement of.....	169
Silver Creek (Silver Lake Basin) near Silver Lake, Oreg.....	162	Winnemucca Lake Basin. See Pyramid and Winnemucca Lakes Basin.	
Silver Creek (Weber River Basin) near Wanship, Utah.....	86	Woodfords, Calif., West Fork Carson River at.....	142
Silvies River near Burns, Oreg.....	163	Woodland, Utah, Weber-Provo diversion canal near.....	105
Skinner Creek at Nounan, Idaho.....	47	Woodruff, Idaho, Malad River at.....	72
Slight Canyon Creek near Paris, Idaho.....	42	Woodruff, Utah, Bear River near.....	18
Smiths Fork at Cokeville, Wyo.....	32	Work, division of.....	12-13
near Border, Wyo.....	31	slope of.....	1
South Willow Creek plant tailrace, Utah at Thistle, Utah.....	99	Worm Creek near Preston, Idaho.....	57
Spanish Fork at Castilla, Utah.....	98	Yellow Creek near Evanston, Wyo.....	27
at Thistle, Utah.....	100		
Spanish Fork near Lake Shore, Utah.....	100		