UNITED STATES DEPARTMENT OF THE INTERIOR
HAROLD L. ICKES, Secretary

GEOLOGICAL SURVEY
W. E. WRATHER, Director

Water-Supply Paper 980

SURFACE WATER SUPPLY
of the UNITED STATES
1943

PART 10
THE GREAT BASIN

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SURFACE WATER SUPPLY OF THE GREAT BASIN, 1943

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, 1943. 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 9,670 gaging stations in the 48 States and also at many in the Territories of Alaska and Hawaii. In July 1943, 5,130 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, not including water in bank storage unless so indicated.

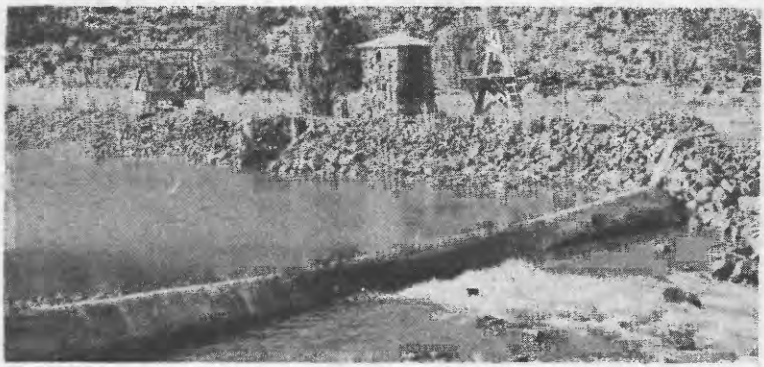
EXPLANATION OF DATA

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.

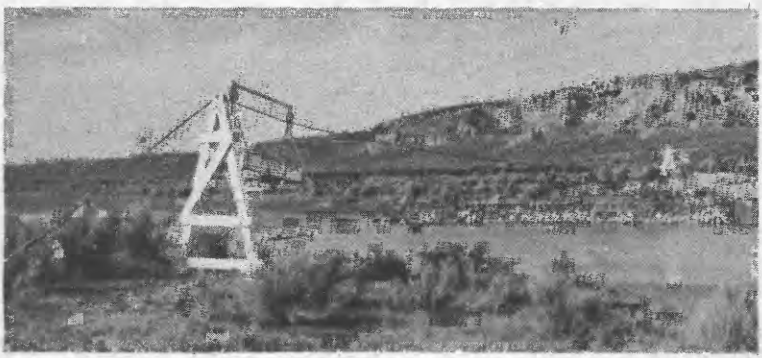
Rating tables giving the discharge for any stage are prepared from the discharge measurements. The application of the daily mean gage height to these rating tables gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject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

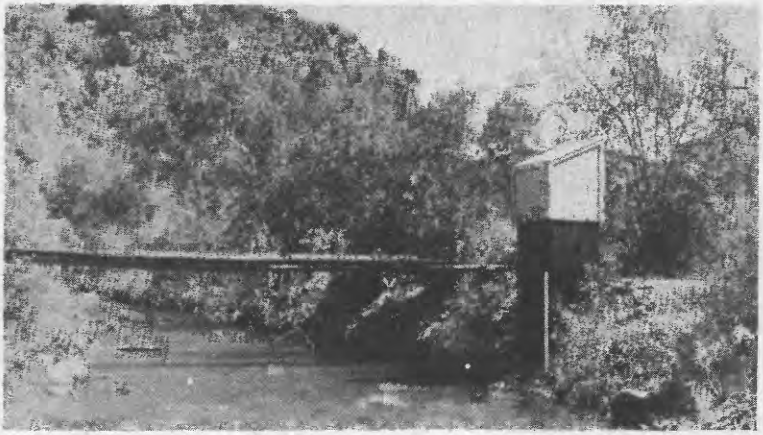
At most gaging stations in the northern part of the United States and at some in the mountainous regions of other parts the stage-discharge relation is affected by ice during the winter, which makes it impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed 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. The days included in the periods of ice effect and the days during the winter period on which discharge measurements were made are indicated in the table by symbols referring to footnotes or are given in a general note following the table.



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.

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 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. Records of daily discharge prior to February 9, 1942, were computed on the basis of standard time. Records subsequent to that date have been computed on the basis of war time. To convert war time to standard time, subtract 1 hour.

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 of reservoirs or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless 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 slope and eastern Gulf of Mexico basins (James River to Mississippi River).
3. Ohio River Basin.
4. St. Lawrence River Basin.
5. Hudson Bay and upper Mississippi River Basins.
6. Missouri River Basin.
7. Lower Mississippi River Basin
8. Western Gulf of Mexico basins.
9. Colorado River Basin.
10. The Great Basin.
11. Pacific slope basins in California.
12. Pacific slope basins in Washington and upper Columbia River Basin.
13. Snake River Basin.
14. Pacific slope basins in Oregon and lower Columbia River Basin.

Water-supply papers and other publications of the Geological Survey containing data 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 local 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., 3 North Rhodes Center NW.
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., 309 Mineral Industries Building.
New Philadelphia, Ohio, Muskingum Watershed Conservancy District Building.
Ocala, Fla., 302 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.
Williamsburg, Ky., Kentucky Highway Building.

West of the Mississippi River:
Albuquerque, N. Mex., 723 North Second Street.
Austin, Tex., 302 West Fifteenth Street.
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., 1404 Statehouse.
Los Angeles, Calif., 429-F United States Post Office and Courthouse.
Oklahoma City, Okla., 535 Capitol Building.
Portland, Oreg., 606 Post Office Building.
Rolla, Mo., Missouri Geological Survey Building, Missouri School of Mines and Metallurgy.
St. Louis, Mo., 1002 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:

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 Sept. 1890.
12th A, pt. 2	....do.....	1884 to June 30, 1891.
13th A, pt. 3	....do.....	1884 to Dec. 31, 1892.
14th A, pt. 2	Monthly discharge (long-time records, 1871-93).....	1888 to Dec. 31, 1893.
B 131.....	Descriptions, measurements, gage heights, and ratings.....	1893-94.
16th A, pt. 2	Descriptive information only.	
B 140.....	Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years).	1895.
W 11.....	Gage heights (also gage heights for earlier years).....	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).	1895-96.
W 15.....	Descriptions, measurements, and gage heights 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 (also some long-time records).	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 (also for many earlier years).....	1898.
W 35 to 39...	Descriptions, measurements, gage heights, and ratings.....	1899.
21st A, pt. 4	Monthly discharge.....	1899.
W 47 to 52...	Descriptions, measurements, gage heights, and ratings.....	1900.
22d A, pt. 4	Monthly discharge.....	1900.
W 65, 66.....	Descriptions, measurements, gage heights, and ratings.....	1901.
W 75.....	Monthly discharge.....	1901.

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 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 a summary of yearly discharge at gaging stations in the area covered by that report. Gaging stations at which 10 or more complete years of record have been collected are represented. These summaries are available also as separate reprints.

Numbers of water-supply papers containing results of stream measurements, 1899-1943

(For basins included see pp. 5-6)

Year	1	2	3	4	5	6	7	9	10	11	12	13	14
1899 a...	35	b35, 36	36	36	36	o36, 37	37	d37, 38	38, e39	38, f39	38	38	38
1900 g...	47, h48	48	48, 149	49	49	49, j50	50	50	51	51	51	51	51
1901.....	65, 75	65, 75	65, 75	65, 75	k65, 66, 75	66, 75	k65, 66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902.....	82	b82, 83	83	m82, 83	k83, 85	84	k83, 84	84	85	85	85	85	85
1903.....	97	b97, 98	98	97	k98, 99, n100	99	k98, 99	99	100	100	100	100	100
1904.....	o124, p125, q126	q126, 127	128	129	k128, 130	130, r131	k128, 131	132	133	133, s134	134	135	135
1905.....	o165, p166, q167	q167, 168	169	170	171	172	k169, 173	174	175, t177	176, s177	177	178	178 ul77, 178
1906.....	o201, p202, q203	q203, 204	205	206	207	208	k205, 209	210	211, t213	212, s213	213	214	214
1907-8...	241	242	243	244	245	246	247	248	249	250, s251	251	252	252
1909.....	261	262	263	264	265	266	267	266	269	270, s271	271	272	272
1910.....	281	282	283	284	285	286	287	288	289	290	291	292	292
1911.....	301	302	303	304	305	306	307	308	309	310	311	312	312
1912.....	321	322	323	324	325	326	327	328	329	330	331	332-A	332-B 332-C
1913.....	351	352	353	354	355	356	357	358	359	360	361	362-A	362-B 362-C
1914.....	381	382	383	384	385	386	387	388	389	390	391	392	393 394
1915.....	401	402	403	404	405	406	407	408	409	410	411	412	413 414
1916.....	431	432	433	434	435	436	437	438	439	440	441	442	443 444
1917.....	451	452	453	454	455	456	457	458	459	460	461	462	463 464
1918.....	471	472	473	474	475	476	477	478	479	480	481	482	483 484
1919-20..	501	502	503	504	505	506	507	508	509	510	511	512	513 514
1921.....	521	522	523	524	525	526	527	528	529	530	531	532	533 534
1922.....	541	542	543	544	545	546	547	548	549	550	551	552	553 554
1923.....	561	562	563	564	565	566	567	568	569	570	571	572	573 574
1924.....	581	582	583	584	585	586	587	588	589	590	591	592	593 594
1925.....	601	602	603	604	605	606	607	608	609	610	611	612	613 614
1926.....	621	622	623	624	625	626	627	628	629	630	631	632	633 634
1927.....	641	642	643	644	645	646	647	648	649	650	651	652	653 654
1928.....	661	662	663	664	665	666	667	668	669	670	67	672	673 674
1929.....	681	682	683	684	685	686	687	688	689	690	691	692	693 694
1930.....	696	697	698	699	700	701	702	703	704	705	706	707	708 709
1931.....	711	712	713	714	715	716	717	718	719	720	721	722	723 724
1932.....	726	727	728	729	730	731	732	733	734	735	736	737	738 739
1933.....	741	742	743	744	745	746	747	748	749	750	751	752	753 754
1934.....	756	757	758	759	760	761	762	763	764	765	766	767	768 769
1935.....	781	782	783	784	785	786	787	788	789	790	791	792	793 794
1936.....	801	802	803	804	805	806	807	808	809	810	811	812	813 814
1937.....	821	822	823	824	825	826	827	828	829	830	831	832	833 634
1938.....	851	852	853	854	855	856	857	858	859	860	861	862	863 864
1939.....	871	872	873	874	875	876	877	878	879	880	881	882	883 884
1940.....	891	892	893	894	895	896	897	898	899	900	901	902	903 904
1941.....	921	922	923	924	925	926	927	928	929	930	931	932	933 934
1942.....	951	952	953	954	955	956	957	958	959	960	961	962	963 964
1943.....	971	972	973	974	975	976	977	978	979	980	981	982	983 984

a Rating tables and index to Water-Supply Papers 35-39 contained in Water-Supply Paper 39. Tables of monthly discharge for 1899 in 21st Annual Report, part 4.
b James River only.
c Gallatin River.
d Green and Gunnison Rivers and Colorado River above Gunnison River.
e Mojave River only.
f Kings and Kern Rivers and south Pacific slope basins.
g Rating tables and index to Water-Supply Papers 47-52 and data on precipitation, wells, and irrigation in California and Utah contained in Water-Supply Paper 52. Monthly discharge for 1900 in 22d Annual Report, part 4.
h Wissahickon and Schuylkill Rivers to James River.
i Scioto River.
j Loup, Platte, and Elkhorn Rivers and tributaries below Platte River.
k Tributaries of Mississippi River from east.
m Lake Ontario and tributaries to St. Lawrence River proper.
n Hudson Bay only.
o New England rivers only.
p Hudson River to Delaware River, inclusive.
q Susquehanna River to Yadkin River, inclusive.
r Platte and Kansas Rivers.
s The Great Basin in California, except Truckee and Carson River Basins.
t Below mouth of Gila River.
u Rogue, Umpqua, and Siletz Rivers only.

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

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

Water-supply Paper	Period	State or drainage basin and title
		STATE
107	1895-1903	Alabama, Water powers of, with an appendix on stream measurements in Mississippi.
298	1887-1912	California, Water resources of, part 1, Stream measurements in Sacramento River Basin.
299	1878-1912	California, Water resources of, part 2, Stream measurements in San Joaquin River Basin.
300	1891-1912	California, Water resources of, part 3, Stream measurements in the Great Basin and Pacific Coast river basins.
447	1890-1918	California, southern, Surface water supply of Pacific slope of.
597-E	1895-1927	California, Surface water supply of Sacramento River Basin.
636-D	1895-1927	California, Surface water supply of San Joaquin River Basin.
636-E	1894-1927	California, southern, Surface water supply of Pacific slope basins in.
637-A	1895-1927	California, Surface water supply of minor San Francisco Bay, northern Pacific, and Great basins in.
74	1884-1900	Colorado, Water resources of.
197	1895-1905	Georgia, Water resources of.
415	1845-1915	Massachusetts, Surface waters of.
230	1894-1906	Nebraska, Surface water supply of.
370	1876-1910	Oregon, Surface water supply of.
850	1898-1937	Texas, Summary of records of surface waters of.
424	1875-1916	Vermont, Surface waters of.
492	1878-1919	Washington, Summary of hydrometric data in.
870	1919-35	Washington, Summary of records of surface waters of.
156	1895-1905	Wisconsin, northern, Water powers of.
469	1894-1921	Wyoming, Surface waters of, and their utilization.
		DRAINAGE BASIN
395	1888-1914	Colorado River (Ariz., Colo., N. Mex., Utah, Wyo.) and its utilization.
617	1897-1927	Colorado River, upper (Colo., Utah), and its utilization.
918	1891-1938	Colorado River Basin (Ariz., Calif., Colo., Utah, Wyo.), Surface waters at base stations in.
916	1898-1938	Columbia River Basin, upper (Mont., Idaho), Surface waters of.
517	1899-1920	Great Salt Lake Basin, Water powers of.
618	1894-1926	Green River (Colo., Utah, Wyo.) and its utilization.
198	1890-1906	Kennebec River Basin (Maine), Water resources of.
		Milk River. See St. Mary and Milk Rivers.
917	1881-1938	Missouri and St. Mary River Basins (Mont.), Surface waters of.
536	1895-1920	New-Kanawha River Basin (N. C., Va., W. Va.), Surface water supply of.
279	1904-9	Penobscot River Basin (Maine), Water resources of.
192	1895-1906	Potomac River Basin (D. C., Md., W. Va.)
358	1888-1913	Rio Grande Basin (Colo., N. Mex., Tex.), Water resources of.
491	1898-1917	St. Mary and Milk Rivers (Mont., Canada), Water supply of.
		St. Mary River. See St. Mary and Milk Rivers; Missouri and St. Mary River Basins.
109	1890-1904	Susquehanna River Basin (Pa., Md.), Hydrography of.

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....	1881-1935	Water resources of Colorado, Appendix 2, Data on stream-gaging stations of Colorado.[1]	State Planning Commission, Water Conservation Board, State engineer.
Do.....	1881-1938	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].....	Connecticut 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.

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
Indiana.....	1925-27	Pub. 72, Surfacs 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.....	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.
Kansas.....	1895-1919	Surface waters of Kansas.....	Kansas Water Commission.
Do.....	1919-24	....do.....	Do.
Do.....	1924-28	Report of Division of Water Resources...	Kansas State Board of Agriculture.
Do.....	1928-35	Stream-flow data of Kansas.....	Do.
Do.....	1935-39	....do.....	Do.
Do.....	1939-41	....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.
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.....	1881-1938	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 Jersey..	1891-1928	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.
New Mexico..	1888-1925	Surface water supply of New Mexico.....	Office of the State Engineer.
North Carolina.	1889-1923	Bull. 34, Discharge records of North Carolina streams.[3]	Department of Conservation and Development.
Do.....	1889-1936	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.....	1882-1938	Surface water in North Dakota.....	State Planning Board.
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. 84, Water resources of Tennessee.	Department of Education.
Do.....	1920-30	Bull. 40, Surface waters of Tennessee.[3]	Do.
Utah.....	1889-1905	5th biennial report, State engineer.....	Office of the State Engineer.
Do.....	1906-10	7th biennial report, State engineer.....	Do.
Do.....	1911-16	10th biennial report, State engineer....	Do.
Virginia....	1895-1927	Bull. 31, Water resources of Virginia...	Conservation Commission.
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, 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.

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 1942 to September 1943 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.	1937-43	Intermountain Forest & Range Experiment Station.
City Creek.....	Salt Lake City, Utah, near mouth of canyon.	1898-1942a	Salt Lake City.
Cottonwood Creek..	....do.....	1898-1942a	Do.
Deer Creek.....	Near Provo, Utah, in Provo Canyon.	1938-43	Bureau of Reclamation.
Emigration Creek..	Salt Lake City, Utah, near mouth of canyon.	1898-1943a	Salt Lake City.
Ephraim Creek.....	Near Ephraim, Utah.....	1914-43	Intermountain Forest & Range Experiment Station.
Farmington Creek..	Near Farmington, Utah.....	1937-43	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.

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

Stream	Location	Period	Collected by
Honey Creek.....	Near Plush, Oreg.....	1909-15, 1921-22, 1930-43b	Oregon State engineer.
Little Cottonwood Creek.	Salt Lake City, Utah, near mouth of canyon.	1898-1943a	Salt Lake City.
Mill Creek.....	....do.....	1898-1943a	Do.
Otter Creek (outlet).	Antimony, Utah, at former Geological Survey gaging station near Coyoto.	1920-43c	Sevier River water commissioner.
Parish Creek.....	Centerville, Utah, near mouth of canyon.	1937-43	Intermountain Forest & Range Experiment Station.
Parleys Creek.....	Salt Lake City, Utah, near mouth of canyon.	1898-1943a	Salt Lake City.
Provo River.....	Below Charleston, Utah, at middle of Deer Creek Reservoir area.	1938-43	Bureau of Reclamation.
Do.....	Below Deer Creek Dam, in Provo Canyon, Utah.	1938-43	Do.
Do.....	Near Hailstone, Utah.....	1940-43	Do.
Do.....	Near Olmsted, Utah, in Provo Canyon, above irrigation diversions.	1938-43	Do.
Provo River and streams tributary to Deer Creek Reservoir area.	Near Charleston, Utah, above backwater of reservoir.	1938-43	Do.
Provo River, North Fork.	Wildwood, Utah, in Provo Canyon....	1938-43	Do.
Ross Creek.....	Near Hailstone, Utah.....	1940-43	Do.
Sevier River.....	Delta, Utah, at former Geological Survey gaging station.	1920-43c	Sevier River water commissioner.
Strawberry tunnel outlet.	At West Portal, Utah.....	1913-43d	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.
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.
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. The Soil Conservation Service of the United States Department of Agriculture began in 1938 to make studies of runoff from four areas of less than 800 acres each in the vicinity of Safford, Ariz. Records of these studies are in the files of the Soil Conservation Service.

COOPERATION

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

California: State Department of Public Works, F. W. Clark, director to December 1942, succeeded by C. H. Purcell, and Edward Hyatt, State engineer; State engineer; San Bernardino and Los Angeles Counties.

Idaho: State Department of Reclamation, E. V. Berg, commissioner, until December 1942, succeeded by James Spofford, State reclamation engineer.

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

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

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

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

Work after June 30, 1943, 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, in constructing and operating four gaging stations in Utah and in obtaining high-water discharge measurements at stations in Utah and Nevada.

Assistance in collecting records was rendered also 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.

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

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. 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 and Carson River Basins), H. D. McGlashan; in Idaho (except for stations on Bear River), 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 and Carson River Basins in California and on Bear River in 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, assistant 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 1943 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, 4,196.25 feet May 1, 15, and June 15 at Midlake gage, and May 15 at Boat Harbor gage; minimum, 4,194.6 feet Nov. 1, 15 at Boat Harbor gage.

1851-1943: 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 1942-43

Day	Boat Harbor	Midlake
Oct. 1	7.95	-3.1
15	7.9	-3.25
Nov. 1	7.75	-3.35
15	7.75	-3.35
Dec. 1	7.9	-3.15
15	8.05	-3.1
Jan. 1	8.2	-2.9
15	8.3	-2.85
Feb. 1	8.4	-2.65
15	8.55	-2.6
Mar. 1	8.75	-2.4
15	8.85	-2.25
Apr. 1	8.95	-2.1
15	9.15	-1.9
May 1	9.3	-1.75
15	9.4	-1.75
June 1	9.3	-1.85
15	9.25	-1.75
July 1	9.15	-1.9
15	8.9	-2.15
Aug. 1	8.7	-2.4
15	8.5	-2.6
Sept. 1	8.15	-2.9
15	8.0	-3.15

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

Bear River at Millis, near Evanston, Wyo.

Location.- Water-stage recorder, lat. 41°14'15", long. 110°55'10", in NW¼ 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 1943.

Extremes.- Maximum discharge during year, 2,000 second-feet June 2 (gage height, 4.85 feet); no flow Sept. 23-26.

Remarks.- Records good except those for periods of no gage-height record Oct. 1 to Mar. 24, which are poor. Many diversions above station for irrigation.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a11	a25					196	1,220	1,400	459	12	7.8
2	h11	a27					344	a1,300	1,770	382	28	5.6
3	a11	a27					589	a1,250	1,110	320	32	4.5
4	a11	a27					760	a1,100	849	278	18	3.8
5	a11	*27	a28			a50	650	a1,000	795	246	10	3.1
6	a11	a27			(*)		450	898	650	212	32	2.8
7	a11	a27					400	760	611	178	38	2.4
8	a11	a27			a53		336	644	540	169	83	2.0
9	a11	h28					324	589	562	151	70	1.4
10	a11					a60	268	545	622	135	42	1.7
11	a15			a35		a70	196	510	716	124	37	1.0
12	a20					a80	236	495	721	105	42	.8
13	25					a100	348	490	682	90	34	.5
14	22					a90	282	466	682	77	18	2.8
15	26					a85	324	464	594	68	17	3.4
16	26					a80	344	436	556	100	25	2.0
17	26					a75	360	400	450	90	22	.8
18	26					a70	a400	348	520	70	19	.8
19	27					a65	a330	324	694	45	26	.8
20	27	a28	a40			a60	a470	290	a760	34	20	.5
21	26					a75	a500	305	a790	60	13	.8
22	25					a90	a550	305	a760	175	8.9	.5
23	25				60	a110	a694	360	a720	119	7.8	0
24						a130	867	464	a710	77	6.2	0
25						*b157	783	633	a700	60	4.5	0
26				a53		209	789	710	a700	51	4.5	0
27	a25					117	655	789	a640	36	4.2	.5
28		(*)				132	668	930	567	29	3.8	3.1
29					-	157	837	1,030	515	20	2.8	10
30					-	181	855	1,050	556	12	2.4	18
31		—			-	169	-	1,020	-	12	3.4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	626	27	-	20.2	1,240
November	830	-	-	27.7	1,650
December	1,132	-	-	36.5	2,250
Calendar year	-	-	-	-	-
January	1,247	-	-	40.2	2,470
February	1,575	-	-	56.2	3,120
March	2,812	209	-	90.7	5,580
April	14,625	867	196	494	29,400
May	21,145	1,300	290	682	41,940
June	21,942	1,770	450	731	43,620
July	3,985	459	12	129	7,900
August	686.5	83	2.4	22.1	1,360
September	61.0	18	0	2.70	161
Water year 1942-43	70,886.5	1,770	0	194	140,600

e Winter discharge measurement made on this day.
a No gage-height record (stage-discharge relation affected by ice most of period); discharge computed on basis of weather records and records for stations near Utah-Wyoming State line and near Evanston.
b Stage-discharge relation affected by ice.
h Computed from staff-gage reading.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

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 1943.

Average discharge.- 30 years, 231 second-feet.

Extremes.- Maximum discharge during year, 2,640 second-feet June 2 (gage height, 5.87 feet), from rating curve extended above 810 second-feet on basis of previous rating curve defined by current-meter measurements; minimum daily, 1.3 second-feet Oct. 1, 2.

1913-43: 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 below 30 second-feet or those for period of ice effect, which are fair. Some diversions above station for irrigation.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.3	19	23	43	50	50	279	1,070	1,270	440	12	5.0
2	1.3	24	25	39	50	50	436	1,280	2,400	370	16	5.5
3	1.9	23	24	36	50	*43	660	1,350	1,270	285	29	5.5
4	2.2	*24	23	33	50	50	796	1,390	909	223	20	5.0
5	2.2	24	23	*35	50	52	840	1,330	832	202	15	4.5
6	2.5	15	21	37	*50	50	600	990	688	170	15	4.0
7	3.5	10	22	36	50	52	524	860	632	146	39	3.8
8	4.0	16	23	34	50	60	454	740	556	132	68	3.0
9	3.8	19	25	34	50	75	440	688	542	122	78	3.0
10	3.8	19	30	34	50	70	408	628	576	128	54	2.5
11	3.8	9.5	35	33	50	68	307	570	648	114	40	2.2
12	4.0	7	40	32	50	60	335	556	664	98	39	2.2
13	4.2	14	45	34	50	100	475	548	628	83	28	2.0
14	7.0	22	45	37	50	160	391	548	628	56	21	2.0
15	8.5	21	45	39	50	150	433	517	556	43	17	1.9
15	11	19	45	38	51	130	476	492	542	73	20	2.2
17	12	15	44	36	52	120	482	447	436	124	22	2.2
18	8.5	25	43	33	54	100	496	398	475	106	22	1.9
19	13	26	41	35	60	95	531	360	596	89	24	1.8
20	14	29	39	37	70	90	596	307	696	76	23	1.8
21	14	21	38	38	80	100	640	304	724	80	19	1.8
22	8.5	20	39	42	80	120	632	318	708	162	16	1.8
23	8.0	21	40	50	90	140	732	363	672	148	11	1.6
24	11	24	43	50	80	160	884	461	668	110	9.6	1.8
25	19	24	40	50	70	190	852	588	668	78	7.5	1.8
26	21	20	38	50	60	*234	840	660	652	64	7.0	1.9
27	19	22	36	50	50	228	724	716	580	39	6.5	1.8
28	19	23	39	50	50	264	732	836	534	28	6.0	1.8
29	19	24	41	50	-	297	860	963	492	18	6.0	2.0
30	20	25	*42	50	-	332	888	995	520	14	5.5	5.5
31	16	-	43	50	-	249	-	990	-	10	5.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	287.0	21	1.3	9.26	569
November	604.5	29	7	20.2	1,200
December	1,100	45	21	35.5	2,180
Calendar year 1942	74,167.4	1,980	0	203	147,100
January	1,245	50	32	40.2	2,470
February	1,597	90	50	57.0	3,170
March	3,944	332	48	127	7,820
April	17,745	888	279	592	35,200
May	22,263	1,390	304	718	44,160
June	21,762	2,400	436	725	43,160
July	3,836	440	10	124	7,610
August	701.0	78	5.0	22.6	1,390
September	83.8	5.5	1.6	2.79	166
Water year 1942-43	75,168.3	2,400	1.3	206	149,100

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 23 to Mar. 26.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Bear River near Woodruff, Utah

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

Records available.- April 1942 to September 1943.

Extremes.- 1942: Maximum discharge during period April to September, 1,620 second-feet May 28 (gage height, 4.15 feet); no flow Aug. 14 to Sept. 30.

1942-43: Maximum discharge during water year, 1,720 second-feet June 3 (gage height, 4.27 feet); no flow Oct. 1-27, Sept. 24-30.

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

Discharge, in second-feet, 1942-43

1942

Day	Apr.	May	June	July	Aug.	Day	Apr.	May	June	July	Aug.
1	-	383	885	158	3.2	16	496	481	632	13	0
2	-	365	878	114	2.9	17	444	569	626	13	0
3	-	374	973	97	2.8	18	496	481	592	13	0
4	-	348	1,070	76	2.4	19	444	408	592	12	0
5	-	344	1,070	58	2.2	20	387	417	592	11	0
6	-	310	957	50	1.3	21	374	476	515	11	0
7	-	310	1,050	63	.9	22	417	656	440	11	0
8	-	370	1,160	44	.6	23	569	840	365	10	0
9	-	444	1,250	37	.5	24	603	1,010	318	9.0	0
10	1,220	536	1,170	31	.4	25	515	1,240	289	8.5	0
11	941	574	1,140	28	22	26	444	1,260	258	7.4	0
12	726	592	1,170	23	1.5	27	383	1,440	293	5.0	0
13	609	552	949	20	.4	28	348	1,580	277	4.4	0
14	542	505	762	16	0	29	378	1,380	243	4.2	0
15	510	476	686	14	0	30	383	1,260	201	4.0	0
						31	-	989	-	3.6	0

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	7.8	b22	33	45	65	225	825	997	422	21	2.8
2	0	6.8	b23	32	45	60	258	1,030	1,430	352	20	3.4
3	0	6.8	b22	30	45	60	374	1,160	1,660	289	15	2.8
4	0	*9.6	22	29	45	60	592	1,260	1,010	225	13	2.2
5	0	11	21	30	45	60	674	1,320	818	181	13	1.9
6	0	16	20	31	45	60	580	1,140	693	152	12	1.7
7	0	17	21	31	45	60	467	933	603	117	60	1.6
8	0	11	22	30	45	60	435	790	515	99	49	1.4
9	0	8.5	24	30	45	70	408	752	462	68	23	1.3
10	0	11	28	29	45	90	408	644	462	57	21	1.3
11	0	15	32	28	45	100	357	580	500	49	20	1.2
12	0	18	34	27	45	95	331	558	542	44	18	1.1
13	0	16	36	30	46	120	422	552	531	39	16	1.0
14	0	13	37	31	46	170	387	542	563	35	14	1.0
15	0	8.2	38	32	49	220	391	515	531	31	13	1.0
16	0	18	32	32	54	250	426	491	496	32	12	.9
17	0	21	37	31	*59	220	*440	462	430	29	14	.8
18	0	12	36	28	66	180	453	387	361	28	43	.7
19	0	11	35	26	66	150	462	340	422	32	23	.6
20	0	18	34	29	66	130	500	302	505	31	13	.5
21	0	22	33	32	85	120	558	254	580	41	11	.4
22	0	20	33	34	95	140	569	266	592	46	9.6	.2
23	0	19	33	37	110	160	597	277	574	55	11	.1
24	0	19	35	40	110	220	706	352	563	62	8.5	0
25	0	b18	33	43	110	275	790	*396	580	49	7.4	0
26	0	b15	31	45	90	375	680	496	568	39	5.7	0
27	0	b18	29	45	80	486	706	531	531	34	5.0	0
28	4.4	b20	31	45	70	413	620	592	476	27	4.4	0
29	6.8	b21	32	45	-	387	700	745	444	23	4.2	0
30	5.7	b22	33	45	-	314	797	832	448	20	3.6	0
31	7.8	-	34	45	-	270	-	893	-	19	2.9	-

* Winter discharge measurement made on this day.

b Stage-discharge relation affected by ice.

Note.- No gage-height record Dec. 4 to Mar. 26 (stage-discharge relation affected by ice most at period); discharge computed on basis of records for stations near Evanston and near Cokeville.

Monthly discharge, in second-feet, 1942-43

Month	Second foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
April 10-30, 1942	11,229	1,220	348	535	22,270
May	20,970	1,580	310	676	41,590
June	21,373	1,250	201	712	42,390
July	969.1	158	3.6	31.3	1,920
August	41.1	22	0	1.33	82
September	0	0	0	0	0
The period	-	-	-	-	108,300
October 1942	24.7	7.8	0	.80	49
November	449.7	22	6.8	15.0	892
December	939	38	20	30.3	1,860
January 1943	1,055	45	26	34.0	2,090
February	1,742	110	45	62.2	3,450
March	5,440	486	60	175	10,790
April	15,313	797	225	510	30,370
May	20,217	1,320	254	652	40,100
June	18,877	1,660	361	629	37,440
July	2,727	422	19	88.0	5,410
August	506.3	60	2.9	16.3	1,000
September	29.9	3.4	0	1.00	59
Water year 1942-43	67,320.6	1,660	0	184	133,500

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

Bear River near Cokeville, Wyo.

Location.- Water-stage recorder lat. 41°56'20", long. 110°59'05", in SE¼ sec. 25, T. 23 N., R. 120 W., 1,000 feet downstream from Pixley irrigation dam, 16.4 miles downstream from Twin Creek, and 11 miles south of Cokeville.

Records available.- October 1941 to November 1943 (discontinued).

Extremes.- 1941-42: Maximum discharge during period Oct. 31 to Sept. 30, 1,640 second-feet Apr. 6 or 7 (gage height, 8.35 feet, from high water mark in gage well), from rating curve extended above 1,200 second-feet; minimum daily, 27 second-feet Sept. 9, 10.

1942-43: Maximum discharge during water year, 934 second-feet Mar. 29 (gage height, 5.87 feet); minimum daily, 22 second-feet Jan. 12, 18.

Remarks.- Records good except those for periods of ice effect or no gage-height record in water year 1942, which are poor, and those for period of ice effect or no gage-height record in water year 1943, which are fair. Many diversions above station for irrigation.

Discharge, in second-feet, 1941-43
1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		*121	90	94	76	82	350	463	440	110	47	31
2		131	*88	90	76	82	500	457	430	105	46	31
3		134	95	88	78	82	700	424	420	98	45	31
4		131	105	82	80	82	950	365	380	96	43	30
5		131	100	78	82	82	1,150	288	400	92	42	30
6		*141	98	76	84	84	1,400	303	420	88	41	30
7		142	96	78	84	90	1,520	294	370	86	40	30
8		142	94	82	82	94	1,400	277	380	86	40	29
9		131	98	88	80	100	1,320	266	400	84	40	27
10		122	100	92	80	105	1,240	254	420	82	39	27
11		126	100	94	78	110	*1,200	258	440	76	39	28
12		128	100	90	*78	*119	1,160	264	450	74	40	33
13		129	100	84	76	125	1,110	301	450	72	39	33
14		132	100	78	70	130	1,020	343	450	70	39	31
15		127	105	76	66	135	899	362	440	68	38	32
16		126	100	*79	68	140	804	348	420	68	37	41
17		127	100	82	66	145	722	336	400	66	36	33
18		128	100	80	66	150	692	329	360	64	36	32
19		124	105	74	68	145	636	329	320	62	36	32
20		113	105	74	70	140	600	305	280	60	35	32
21		b110	105	76	72	135	564	178	250	68	35	32
22		b80	105	78	74	140	509	171	220	56	34	32
23		b80	100	80	76	155	463	139	190	56	34	31
24		b84	96	82	76	170	463	102	170	54	34	31
25		b90	92	82	72	170	517	106	155	54	36	30
26		b90	90	82	72	165	556	150	140	52	39	30
27		b88	86	82	76	170	543	242	140	50	34	30
28		b88	84	82	80	180	522	305	130	50	32	30
29		b90	88	82	-	190	499	330	116	52	32	30
30		b88	90	80	-	200	473	380	110	50	32	30
31	118	-	94	78	* -	230	-	430	-	48	31	-

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

Note.- No gage-height record Dec. 1 to Apr. 10 (stage-discharge relation affected by ice most of period), May 29 to July 30; discharge computed on basis of 5 discharge measurements, weather records and records for stations at Border and near Woodruff.

Discharge, in second-feet, of Bear River near Cokeville, Wyo., 1941-43--Continued

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	34	30	28	28	180	592	586	96	137	81	52
2	30	34	27	27	30	170	525	637	160	137	73	51
3	30	32	25	25	31	*163	488	676	308	136	64	49
4	30	32	24	26	33	130	458	724	444	132	57	49
5	30	*32	23	*27	35	90	486	796	533	127	59	49
6	31	31	23	26	37	80	614	844	698	232	60	48
7	31	31	24	26	40	100	696	858	813	180	95	47
8	31	31	*26	25	40	110	715	830	766	162	174	47
9	31	32	28	24	40	120	659	861	651	250	128	46
10	31	31	29	24	40	140	612	799	483	217	100	46
11	32	29	31	23	41	170	600	693	290	165	85	45
12	33	30	32	22	42	200	612	642	234	145	73	44
13	34	31	33	25	43	230	606	505	206	137	69	44
14	34	32	34	27	44	270	564	358	206	136	69	44
15	34	34	34	29	45	380	661	366	180	130	67	43
16	35	30	33	28	46	450	672	363	176	124	67	42
17	36	32	32	26	48	500	530	315	194	119	66	42
18	35	35	30	22	52	450	525	204	230	112	66	41
19	35	34	29	24	*54	400	530	210	260	106	64	41
20	35	33	28	25	56	300	539	188	228	102	64	40
21	35	32	28	26	60	220	642	176	190	97	63	39
22	34	32	28	28	60	170	572	165	162	95	63	39
23	35	32	29	29	60	180	606	108	137	93	63	39
24	35	30	30	30	60	200	623	99	120	88	61	39
25	34	28	29	30	70	250	614	80	115	84	61	39
26	32	25	27	30	90	300	640	70	118	80	60	39
27	31	30	25	30	120	400	698	69	124	77	58	39
28	33	35	28	30	180	600	724	54	131	74	57	39
29	33	35*	29	30	-	*900	710	49	133	73	54	39
30	34	33	30	30	-	886	598	51	136	71	53	39
31	34	-	30	25	-	763	-	64	-	69	52	-

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 24 to Jan. 5. No gage-height record Jan. 6 to Mar. 28 (stage-discharge relation affected by ice most of period); discharge computed on basis of 2 discharge measurements, weather records, and records for station at Border.

1943

Day	Oct.	Nov.	Day	Oct.	Nov.	Day	Oct.	Nov.
1	40	43	11	36	51	21	56	52
2	40	43	12	40	49	22	49	52
3	40	43	13	51	46	23	4f	61
4	40	44	14	40	44	24	46	52
5	39	44	15	38	45	25	45	51
6	39	42	16	38	46	26	45	48
7	38	37	17	38	46	27	46	46
8	37	42	18	39	48	28	46	b45
9	36	46	19	42	51	29	44	b43
10	36	47	20	47	52	30	45	b40
						31	44	-

b Stage-discharge relation affected by ice.

Monthly discharge, in second-feet, 1941-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	-	-	-	-	-
November 1941	3,474	142	80	116	6,890
December	3,009	105	84	97.1	6,970
January 1942	2,543	94	74	82.0	5,040
February	2,108	84	66	75.3	4,180
March	4,127	230	82	133	8,190
April	24,512	1,520	350	817	48,620
May	9,099	463	102	294	18,050
June	9,691	450	110	323	19,220
July	2,187	110	48	70.6	4,340
August	1,171	47	31	37.8	2,320
September	929	41	27	31.0	1,840
The period	-	-	-	-	124,700
October 1942	1,018	36	30	32.8	2,020
November	952	35	25	31.7	1,890
December	888	34	23	28.6	1,760
Calendar year 1942	69,225	1,520	23	162	117,500
January 1943	827	30	22	26.7	1,640
February	1,525	180	28	54.5	3,020
March	9,502	900	80	307	18,850
April	17,811	724	458	594	35,330
May	12,430	861	49	401	24,650
June	8,522	813	96	284	16,900
July	3,889	250	69	125	7,710
August	2,226	174	62	71.8	4,420
September	1,300	52	39	43.3	2,580
Water year 1942-43	60,890	900	22	167	120,800
October 1943	1,306	56	36	42.1	2,590
November	1,389	52	37	46.3	2,760

Time basis: Mountain standard time prior to 2 a.m., Feb. 9, 1942; mountain war 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 NE¼NE¼ 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 1943.

Extremes.- Maximum discharge during year, 1,900 second-feet May 6 (gage height, 6.69 feet); minimum daily, 80 second-feet Jan. 19.
1937-43: 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, which are fair. Diversions above station for irrigation.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	88	155	140	110	100	260	1,150	1,510	856	764	240	184
2	90	162	120	115	100	250	1,040	1,560	965	730	258	180
3	90	163	105	116	103	240	1,010	1,620	1,050	698	242	178
4	91	162	100	105	108	220	996	1,700	1,140	666	229	174
5	93	*156	100	110	110	190	980	1,780	1,180	635	212	184
6	94	145	100	115	113	*167	928	1,880	1,260	618	225	180
7	99	140	100	*104	118	175	948	1,850	1,380	670	278	178
8	102	156	106	104	120	180	1,040	1,780	1,430	618	333	172
9	106	155	110	103	120	195	1,080	1,690	1,380	600	387	169
10	107	146	115	100	120	210	1,060	1,640	1,280	642	336	167
11	108	132	120	97	125	220	1,050	1,620	1,150	579	302	169
12	113	124	120	94	125	240	1,030	1,420	1,080	564	291	172
13	115	132	115	90	125	300	1,030	1,370	1,020	522	267	169
14	118	140	118	95	125	350	1,050	1,070	1,060	510	227	163
15	120	153	120	105	125	470	1,070	1,020	1,080	613	223	158
16	126	144	125	*108	125	580	1,160	1,000	1,040	504	227	156
17	137	146	115	100	125	640	1,220	996	976	472	218	156
18	136	163	110	90	125	660	1,240	976	960	463	218	150
19	134	162	105	80	130	620	1,300	768	992	439	223	148
20	132	162	100	82	130	600	1,370	736	1,010	423	227	152
21	132	155	100	85	130	500	1,460	705	1,010	416	229	153
22	131	134	100	90	150	420	1,520	666	988	408	223	152
23	136	140	105	95	*151	370	1,520	646	964	395	220	153
24	145	130	110	105	166	370	1,540	621	900	382	218	156
25	142	120	105	100	155	400	1,600	646	832	360	212	153
26	139	110	98	110	170	500	1,660	652	784	350	208	152
27	139	140	90	116	185	600	1,690	680	780	336	208	155
28	147	160	100	115	220	800	1,650	691	792	304	206	160
29	147	170	105	115	-	*1,100	1,600	730	788	284	206	163
30	152	160	100	116	-	1,460	1,570	760	788	269	186	165
31	148	-	105	110	-	1,260	-	808	-	258	178	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,756	162	88	121	7,450
November	4,405	170	110	147	8,740
December	3,361	140	90	108	6,670
Calendar year 1942	115,163	2,010	57	316	228,430
January	3,177	115	80	102	6,300
February	3,658	220	100	132	7,320
March	14,567	1,460	167	470	28,890
April	37,562	1,690	928	1,252	74,500
May	35,391	1,880	621	1,142	70,200
June	30,918	1,430	780	1,031	61,320
July	15,392	764	258	497	30,530
August	7,457	387	178	241	14,790
September	4,921	184	148	164	9,760
Water year 1942-43	164,695	1,880	80	451	526,500

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 23 to Mar. 29 (no gage-height record Feb. 15-25; discharge computed on basis of weather records and records for station at Harer).
Time basis: Mountain war time. 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 NW¼ 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 1943.

Average discharge.- 27 years, 502 second-feet.

Extremes.- Maximum daily discharge during year, 2,400 second-feet May 7; minimum daily, 95 second-feet Jan. 19.
1913-16, 1919-43: Maximum discharge, 3,860 second-feet June 2, 1920 (gage height, 10.51 feet); minimum daily, 26 second-feet Aug. 21-27, 1934.

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

Cooperation.- Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project. Eight discharge measurements made by Geological Survey and three by Watermaster, District 5.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	112	169	170	130	135	250	1,370	1,960	1,040	842	306	216
2	114	172	147	130	135	265	1,210	1,960	1,140	814	303	220
3	112	181	120	130	135	275	1,120	2,060	1,220	780	306	218
4	114	189	120	130	135	285	1,070	2,170	1,300	746	291	218
5	114	189	*121	130	140	250	1,020	2,260	1,350	711	276	218
6	114	181	120	130	140	210	963	2,340	1,370	693	266	220
7	116	177	120	130	140	220	1,040	2,400	1,460	711	288	220
8	120	163	125	125	140	*229	1,140	2,360	1,520	711	347	218
9	125	172	130	125	140	235	1,260	2,210	1,540	663	406	216
10	125	181	135	120	*139	240	1,280	2,110	1,480	676	417	210
11	125	179	135	115	140	250	1,270	1,960	1,350	689	371	208
12	131	169	135	115	140	275	1,260	1,760	1,220	625	351	208
13	135	152	135	110	145	365	1,240	1,660	1,160	604	331	208
14	137	154	140	110	150	450	1,250	1,540	1,140	571	303	208
15	141	165	140	115	150	545	1,250	1,360	1,190	563	282	206
16	145	169	135	120	150	630	1,320	1,330	1,190	563	282	201
17	145	172	135	110	145	675	1,440	1,320	1,120	539	276	198
18	154	165	130	100	145	705	1,470	1,280	1,070	519	271	196
19	158	172	125	95	145	720	1,540	1,140	1,070	504	274	189
20	160	165	120	100	150	665	1,650	1,050	1,090	475	271	187
21	156	160	115	100	150	590	1,750	1,010	1,070	461	274	189
22	160	160	120	105	150	510	1,900	974	1,060	469	271	189
23	156	158	120	115	155	410	1,950	948	1,030	458	265	189
24	154	154	115	120	160	420	1,970	922	996	443	260	189
25	160	150	115	125	170	410	2,040	904	926	428	257	189
26	163	120	115	135	180	540	2,150	911	885	406	249	189
27	160	125	115	140	205	710	2,200	915	854	396	246	189
28	160	155	115	140	230	940	2,200	926	862	371	241	192
29	163	170	125	140	-	1,220	2,110	937	862	344	238	201
30	169	180	125	135	-	1,390	2,050	967	866	328	236	206
31	165	-	130	135	-	1,400	-	992	-	318	218	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,365	169	112	141	8,660
November	4,948	189	120	165	9,810
December	3,948	170	115	127	7,830
Calendar year 1942	128,926	2,280	76	353	255,700
January	3,760	140	95	121	7,460
February	4,239	230	135	151	8,410
March	16,279	1,400	210	525	32,290
April	45,483	2,200	963	1,516	90,210
May	46,636	2,400	904	1,504	92,500
June	34,451	1,540	854	1,149	68,290
July	17,419	842	318	562	34,550
August	8,975	417	218	290	17,800
September	6,105	220	157	203	12,110
Water year 1942-43	196,588	2,400	95	539	389,900

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 20-22, 25, 26, Nov. 28 to Dec. 1, Dec. 5 to Mar. 31 (no gage-height record Dec. 14 to Feb. 9; discharge computed on basis of unpublished records for Bear River at Stewart Dam and for Rainbow Inlet Canal.)

Time basis: Mountain war time. 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 1943.

Average discharge.- 28 years (1911-16, 1919-20, 1921-43), 752 second-feet.

Extremes (regulated).- Maximum daily discharge during year, 1,550 second-feet Apr. 4; minimum daily, 54 second-feet Dec. 27.
1911-16, 1919-43: 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 Geological Survey, in connection with a Federal Power Commission project.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	352	64	336	204	271	231	348	869	901	1,090	532	746
2	316	219	304	271	253	236	791	704	1,120	1,030	1,050	759
3	199	166	287	236	260	207	1,140	1,010	1,060	926	1,000	723
4	113	207	436	350	262	340	1,550	1,000	1,190	686	1,020	670
5	355	316	353	212	248	242	1,480	945	1,030	677	921	678
6	370	409	72	165	132	162	1,140	934	859	1,020	856	797
7	288	335	325	225	87	72	1,240	1,080	1,110	984	763	968
8	356	369	378	269	432	403	1,050	983	815	928	432	883
9	375	347	310	257	239	300	959	536	936	1,050	935	939
10	513	349	336	178	311	323	949	956	667	970	823	790
11	529	392	353	475	405	309	844	822	709	689	841	797
12	466	340	347	267	367	266	940	950	633	1,050	812	758
13	307	396	112	321	409	288	983	672	520	1,010	877	774
14	328	305	271	285	93	135	887	768	792	1,080	776	872
15	415	283	341	286	356	325	873	868	712	1,050	525	851
16	334	533	372	353	347	307	819	419	764	998	880	141
17	210	479	431	191	399	257	938	702	836	790	836	866
18	99	528	348	424	504	344	848	587	807	717	797	623
19	334	522	292	485	612	257	964	718	750	1,060	708	404
20	369	397	199	405	358	296	1,010	703	571	978	819	627
21	397	322	529	362	96	95	1,090	738	750	1,030	673	751
22	187	235	232	385	459	380	894	728	789	1,030	530	713
23	186	388	271	177	530	435	1,050	580	598	1,010	963	560
24	84	463	494	98	335	305	1,010	871	711	882	867	630
25	94	532	268	291	438	315	792	888	754	546	992	564
26	287	280	310	196	342	365	1,220	830	715	969	837	273
27	267	323	54	86	399	280	925	859	569	1,070	887	622
28	370	251	205	295	160	113	1,030	831	1,070	1,030	809	715
29	269	121	230	265	-	357	1,090	683	1,160	972	484	732
30	196	421	319	295	-	330	942	579	1,070	854	794	673
31	91	-	420	199	-	370	-	612	-	590	885	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	8,846	613	84	285	17,550
November	10,272	533	64	342	20,370
December	9,535	529	54	308	18,910
Calendar year 1942	178,936	1,220	54	490	354,900
January	8,498	485	86	274	16,860
February	9,106	612	87	325	18,060
March	8,655	435	72	279	17,170
April	29,799	1,550	348	993	59,110
May	24,625	1,080	419	794	48,840
June	24,968	1,190	520	832	49,520
July	28,713	1,090	544	926	56,950
August	24,912	1,050	432	804	49,410
September	21,397	968	273	713	42,440
Water year 1942-43	209,326	1,550	54	573	415,200

Note.- No gage-height record Mar. 21-28, Sept. 23, 24; discharge computed on basis of records for hydroelectric plant 600 feet above station.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Bear River near Weston, Idaho

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

Records available.- October 1919 to December 1932, February 1934 to September 1943. October 1889 to January 1917 at site near Preston, 12 miles upstream, published as Bear River near Preston.

Average discharge.- 22 years (1919-32, 1934-43), 884 second-feet.

Extremes (regulated).- Maximum daily discharge during year, 2,210 second-feet Apr. 6; minimum, not determined.
1919-32, 1934-43: Maximum discharge, 6,100 second-feet May 8 or 9, 1922 (gage height, 12.1 feet, from floodmarks), from rating curve extended above 4,000 second-feet; minimum daily, 30 second-feet Apr. 29, 1934, June 27, 1937.

Remarks.- West Cache Canal and many irrigation ditches divert above station. Flow regulated by Bear Lake Reservoir and by power plants above station.

Cooperation.- Records furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	389					-	756	1,370	428	664	448	436
2	634					-	1,110	1,210	614	588	384	416
3	305					-	1,200	861	933	669	575	566
4	321					-	1,630	1,470	1,220	687	570	592
5	92					-	2,030	1,560	1,340	98	669	692
6	282					-	2,210	1,650	1,140	871	837	861
7	313					-	2,060	1,640	919	775	933	1,020
8	422					-	2,080	1,320	1,190	628	531	775
9	438					-	1,870	1,580	813	724	231	710
10	651					-	2,070	1,300	972	1,050	871	747
11	840					-	1,380	919	1,020	353	842	818
12	511					-	1,280	1,320	789	262	610	813
13	435					-	2,120	914	515	460	562	384
14	453					-	1,160	991	710	715	765	623
15	607					-	1,340	962	1,040	735	489	752
16	362					-	1,960	715	1,270	670	412	919
17	266					-	1,450	808	1,100	420	706	1,160
18	350					-	1,250	928	1,210	655	808	852
19	260					-	1,390	957	952	695	804	494
20	383					-	1,640	962	842	895	597	513
21	479					-	1,560	799	804	520	683	436
22	644					306	1,760	575	729	715	678	632
23	239					523	1,520	246	696	815	765	494
24	350					813	1,650	216	701	887	765	566
25	310					575	1,690	262	567	804	619	664
26	300					655	1,430	353	527	628	527	506
27	500					570	1,890	400	584	952	575	328
28	700					692	1,780	452	306	909	646	510
29	560					570	1,690	623	384	575	562	952
30	540					986	1,330	641	1,040	655	317	498
31	270					1,140	-	189	-	428	527	-

Month	Second-feet-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	13,206	840	92	426	26,190
November	15,600	-	-	520	30,940
December	17,360	-	-	560	34,430
Calendar year 1942	214,989	-	-	589	426,400
January	17,500	-	-	565	34,710
February	15,900	-	-	568	31,540
March	18,900	-	-	610	37,490
April	48,306	2,210	756	1,610	95,810
May	28,193	1,650	189	909	55,920
June	25,345	1,340	306	845	50,270
July	20,302	1,050	98	655	40,270
August	19,308	933	231	623	38,300
September	19,529	1,160	313	651	38,740
Water year 1942-43	259,449	-	-	711	514,600

Note.- No gage-height record Oct. 24 to Mar. 21, July 14-23, discharge computed on basis of unpublished records for station at Oneida. Daily discharge Mar. 22-31 not used directly in monthly computations.
Time basis: Mountain war time. 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 NW¼SE¼ 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 5½ miles north of Collinston.
Drainage area.- 6,000 square miles.
Records available.- July 1889 to September 1943.
Extremes.- Maximum discharge during year, 4,830 second-feet (regulated) Apr. 23 (gage height, 5.58 feet); minimum daily, 18 second-feet (regulated) Aug. 14.
1889-1943: Maximum discharge observed, 11,600 second-feet June 7-10, 1909 (gage height, 7.70 feet, site and datum then in use); practically no flow (result of regulation) at midnight Aug. 5, 1920.
Remarks.- Records good. Many canals divert above station. Flow regulated by reservoirs and power plants above station.
Cooperation.- Five discharge measurements furnished by Utah Power & Light Co.

Rating tables, water year 1942-43 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 22

0.4	16	1.5	297	3.0	1,460
.6	37	1.8	460	3.5	2,000
.8	70	2.0	591	4.0	2,590
1.0	115	2.3	813	4.5	3,260
1.2	175	2.6	1,070	6.0	3,970

Apr. 23 to Sept. 30

2.30	819	4.00	2,620
2.60	1,080	4.50	3,270
3.00	1,470	5.00	3,970
3.50	2,030	5.50	4,710

Note.- Same as preceding table below 2.3 feet.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	77	1,370	894	1,290	2,550	1,730	3,570	2,050	78	22	21
2	210	627	1,830	1,710	1,290	2,230	2,140	3,370	2,020	55	20	a21
3	395	616	1,330	446	623	2,200	1,760	3,410	2,880	58	19	21
4	99	451	2,110	1,090	1,020	1,930	1,490	3,130	3,080	25	19	21
5	338	395	1,710	1,430	765	1,590	2,940	3,310	3,480	22	19	21
6	82	881	367	1,220	460	1,100	3,340	3,620	3,600	20	21	21
7	100	541	1,710	1,040	760	1,610	3,330	4,000	3,540	21	36	21
8	193	378	1,620	1,180	1,740	2,260	3,430	4,040	3,050	21	19	21
9	215	681	631	1,230	1,150	2,820	3,550	3,900	2,440	20	33	21
10	870	922	763	193	1,610	2,820	3,550	3,610	2,490	20	19	22
11	180	975	630	1,000	1,510	2,960	3,360	3,040	2,430	20	18	21
12	676	1,020	1,470	1,240	1,710	2,570	3,420	2,590	2,630	20	29	21
13	1,290	1,220	1,140	690	1,500	1,810	3,620	2,380	1,440	20	21	703
14	894	1,380	932	1,080	962	1,110	3,610	2,030	1,780	20	18	36
15	931	1,290	472	1,030	1,260	1,620	3,580	1,990	1,970	20	20	30
16	1,010	795	512	1,110	1,810	1,710	3,580	1,680	2,320	21	19	927
17	318	1,120	266	418	1,220	1,820	3,600	1,900	2,350	20	19	119
18	281	872	700	a1,760	1,360	1,770	3,600	1,530	2,370	21	20	748
19	843	856	768	a1,290	658	2,230	3,600	1,280	2,260	21	20	26
20	646	1,560	81	722	959	2,220	3,600	1,090	2,110	20	20	462
21	770	1,460	1,590	974	583	582	3,580	1,480	1,810	33	21	30
22	403	854	544	1,400	1,870	1,800	3,620	1,240	1,400	25	24	338
23	698	1,460	1,050	1,870	2,160	1,420	3,970	56	1,320	27	20	360
24	765	1,500	1,490	3,170	2,390	1,400	4,200	1,050	1,460	27	935	345
25	341	1,230	1,770	2,740	2,520	1,470	4,340	514	1,330	30	980	217
26	1,210	449	922	2,850	2,690	1,570	4,470	487	1,080	30	944	131
27	1,210	1,080	1,080	1,660	2,580	1,440	4,410	644	415	52	25	750
28	810	1,160	1,250	720	1,570	1,160	4,300	253	558	20	33	409
29	771	871	1,060	1,530	-	1,730	4,230	755	257	464	31	423
30	854	1,180	867	2,020	-	1,750	3,970	112	223	1,710	27	599
31	974	-	1,620	196	-	1,720	-	1,570	-	1,620	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	18,411	1,290	34	594	36,520
November	27,901	1,560	77	930	55,340
December	33,655	2,110	81	1,086	66,750
Calendar year 1942	353,085	3,110	17	967	700,400
January	39,903	3,170	193	1,287	79,150
February	40,020	2,690	460	1,436	79,380
March	56,962	2,960	582	1,837	113,000
April	103,920	4,470	1,490	3,464	206,100
May	63,631	1,040	56	2,053	126,200
June	60,043	3,600	223	2,001	119,100
July	4,681	1,710	20	148	9,090
August	3,491	980	18	127	6,920
September	6,904	927	21	230	13,690
Water year 1942-43	459,422	4,470	18	1,259	911,200

a No gage-height record; discharge interpolated or computed on basis of output of power plant.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Mill Creek near Evanston, Wyo.

Location.- Water-stage recorder, lat. 41°00', long. 110°52', in NE¼ 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 1943.
Extremes.- 1942: Maximum daily discharge during period July to September, 32 second-feet July 16; minimum daily, 5.2 second-feet Sept. 9, 10.
1942-43: Maximum discharge during water year, 212 second-feet June 1 (gage height, 2.35 feet); minimum daily, 3.4 second-feet Sept. 12.
Remarks.- Records good except those for Nov. 4 to Mar. 10, which are fair, and those for Mar. 11 to Apr. 14, which are poor. Four canals in Wyoming and four in Utah divert water above station for irrigation.
Cooperation.- Gage-height record and five discharge measurements for period Oct. 1, 1942, to June 30, 1943, furnished by Bureau of Reclamation. Records for July to September 1942 furnished by Bureau of Reclamation and reviewed by Geological Survey.

Discharge, in second-feet, 1942-43
1942

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1	24	9.1	6.4	11	14	7.5	9.1	21	16	6.0	8.0
2	23	10	6.0	12	12	14	9.1	22	12	5.0	8.0
3	23	11	5.6	13	9.6	9.1	8.6	23	12	5.6	7.5
4	20	9.1	6.0	14	10	7.1	7.5	24	12	6.0	7.5
5	18	7.5	6.0	15	12	6.4	6.4	25	12	12	7.5
6	18	7.5	5.6	16	32	6.0	6.0	26	11	8.6	7.5
7	18	7.5	5.6	17	21	6.4	6.0	27	10	6.7	7.5
8	17	7.5	5.6	18	24	6.0	6.4	28	9.1	6.4	7.5
9	16	7.1	5.2	19	18	6.7	6.7	29	9.6	6.4	7.5
10	15	6.7	5.2	20	16	6.4	6.7	30	9.6	7.1	7.5
								31	9.1	6.7	-

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.0	9.6					45	160	170	26	9.1	5.2
2	8.6	9.6					60	160	152	22	11	4.8
3	8.0	9.6					70	165	109	20	9.1	4.5
4	9.1	8.0			(*)		60	169	100	18	7.5	4.8
5	8.0	*6.0				11	50	127	92	18	7.1	4.8
6	8.0						50	111	92	20	8.0	4.5
7	8.0						47	92	90	19	10	3.7
8	8.6						45	79	87	19	9.6	3.7
9	8.6						40	76	84	15	8.0	3.7
10	8.0						30	78	92	14	7.1	3.7
11	8.6					14	35	81	93	13	7.5	3.7
12	14					17	55	75	93	12	8.0	3.4
13	11					20	95	73	90	11	7.1	3.7
14	9.6					23	94	67	84	11	6.7	5.7
15	9.1					21	*92	63	78	10	6.7	3.7
16	8.6		9	10	11	20	90	56	73	20	7.1	3.7
17	8.0	8				20	82	49	67	12	7.1	4.1
18	8.0					20	95	45	87	11	8.6	4.1
19	8.0					20	106	48	95	10	10	4.1
20	7.1					20	113	45	87	10	6.7	4.5
21	7.1					20	105	47	76	22	6.0	5.2
22	*8.0					21	116	41	64	19	5.6	5.2
23	8.6					22	138	63	58	14	5.6	5.2
24	7.5					23	129	72	53	12	5.2	5.2
25	7.1					24	113	97	52	12	4.8	5.2
26	7.5					25	106	106	45	11	4.5	6.7
27	8.0					26	84	115	35	10	4.1	7.1
28	9.1					27	111	138	30	9.6	4.5	9.6
29	8.0		(*)		-	28	133	136	32	8.6	4.5	8.6
30	8.6				-	29	138	120	32	7.5	5.2	6.7
31	8.6	-			-	30	-	131	-	7.5	5.2	-

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 4 to Dec. 2. No gage-height record Dec. 3 to Apr. 14 (stage-discharge relation affected by ice most of winter period); discharge computed on basis of 2 discharge measurements, weather records, and records for nearby stations.

Monthly discharge, in second-feet, 1942-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
July 1942	485.0	32	9.1	15.7	962
August	236.1	14	5.6	7.62	468
September	205.7	9.1	5.2	6.86	408
The period	-	-	-	-	1,840
October 1942	263.0	14	7.1	8.48	522
November	242.8	-	-	8.09	482
December	279	-	-	9	553
January 1943	310	-	-	10	615
February	308	-	-	11	611
March	580	30	-	18.7	1,150
April	2,527	138	30	84.2	5,010
May	2,885	169	41	93.1	5,720
June	2,392	170	30	79.7	4,740
July	444.2	26	7.5	14.3	881
August	217.2	11	4.1	7.00	431
September	146.8	9.6	3.4	4.89	291
Water year 1942-43	10,595.0	170	3.4	27.6	21,010

Time basis: Mountain war time. 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 1943.
Extremes.- 1942: Maximum discharge during period April to September not determined; minimum daily, 0.6 second-foot Sept. 23, 24, 26, 29, 30.
1942-43: Maximum discharge during water year, 319 second-feet Apr. 3 (gage height, 3.42 feet), from rating curve extended above 140 second-feet; minimum daily, 0.2 second-foot Sept. 14-17, 19. 20.
Remarks.- Records for water year 1943 good except those for periods of ice effect or no gage-height record, which are poor. Several diversions above station for irrigation.
Cooperation.- Gage-height record and eight discharge measurements for period October 1942 to June 1943 furnished by Bureau of Reclamation. Records for April to September 1942 furnished by Bureau of Reclamation and reviewed by Geological Survey.

Discharge, in second-feet, 1942-43

1942

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	-	-	-	a2.0	1.5	0.9	16	-	-	-	4.8	1.7	0.8
2	-	-	-	a9.0	1.5	.9	17	†69	-	-	6.6	2.0	.8
3	-	32	-	a9.0	1.9	.9	18	-	-	-	11	2.0	.8
4	-	34	-	a9.0	1.3	1.0	19	-	-	-	11	2.0	.8
5	-	39	-	a9.0	1.2	1.0	20	-	44	†9.0	7.3	1.9	.8
6	-	55	-	a9.0	1.2	1.1	21	-	-	-	4.6	1.9	.8
7	-	55	-	10	1.3	1.1	22	-	93	-	3.7	1.9	.8
8	-	60	-	8.3	1.4	1.1	23	†94	-	-	3.0	1.9	.6
9	-	57	-	5.8	1.3	.9	24	-	a93	-	2.2	1.6	.6
10	-	-	-	5.8	1.4	.9	25	-.	a34	-	1.9	1.6	.7
11	-	-	-	6.6	2.1	1.4	26	-	a34	-	1.7	1.6	.6
12	-	-	-	5.3	2.9	1.2	27	-	-	-	1.7	1.2	.7
13	-	-	-	4.4	2.4	1.1	28	-	a44	-	1.5	1.0	.7
14	-	-	-	2.9	2.0	.9	29	-	-	-	1.5	1.0	.6
15	-	-	-	2.4	1.7	.9	30	-	34	-	1.5	1.1	.6
							31	-	-	-	1.5	1.0	-

† Result of discharge measurement. a No gage-height record; discharge estimated.

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.3	0.8					a150	71	180	11	7.0	a0.5
2	.3	.8					*16e	72	203	7.3	3e	a.5
3	.4	1.0					197	70	135	7.6	17	h.5
4	.4	a.8					189	64	116	7.3	10	a.5
5	.4	*.6					162	61	120	8.0	12	a.5
6	.5	.6					116	50	84	8.8	24	a.5
7	.4	.7					103	43	38	5.4	22	a.5
8	.4	.9					84	43	54	5.1	41	a.5
9	.4	1.0					64	54	41	4.3	23	a.5
10	.4	.7					50	39	32	3.4	14	h.6
11	.5	.8	b2.0				39	34	32	2.3	14	a.5
12	.6	.7				a3.0	80	28	31	2.0	12	a.4
13	.6	1.0					90	26	30	1.8	7.6	a.3
14	.6	1.2					53	25	56	2.0	6.2	a.2
15	.5	1.6		a2.6	a2.6		59	21	56	2.9	5.6	a.2
16	.4	1.4					54	21	65	7.3	5.9	0.2
17	.4	1.5					48	20	38	6.5	5.9	0.2
18	.4	2.4					50	17	28	4.8	6.8	0.3
19	.5	2.5					50	15	21	3.4	5.6	0.2
20	.4	1.5					52	14	16	5.9	3.8	0.2
21	.5						52	14	14	25	2.0	0.3
22	.5						55	12	11	71	1.3	0.4
23	.5					a30	65	15	10	34	0.9	0.4
24	.5					a50	80	16	12	18	0.8	0.4
25	.6		b2.0	a2.7		a100	62	18	25	14	0.8	0.7
26	.6					a150	62	17	13	12	0.9	0.8
27	.6					a50	45	16	8.8	8.4	1.0	0.9
28	.6		(*)			a60	45	16	9.2	7.6	a0.9	10.8
29	.7				-	a70	65	16	16	5.6	a0.8	1.0
30	.7				-	a80	57	17	26	4.6	a0.7	0.8
31	.6	-			-	a70	-	29	-	4.1	a0.6	-

* Winter discharge measurement made on this day.
a No gage-height record; discharge interpolated or computed on basis of 2 discharge measurements, weather records, and records for nearby stations.
b Stage-discharge relation affected by ice. h Computed from staff-gage reading.

Monthly discharge, in second-feet, 1942-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
July 1942	171.0	11	1.5	5.52	339
August	50.5	2.9	1.0	1.63	100
September	26.0	1.1	.8	.87	52
October 1942	15.2	.7	.3	.49	30
November	42.5	2.5	.6	1.42	84
December	69.7	-	-	2.25	138
January 1943	80.6	-	-	2.60	160
February	72.8	-	-	2.60	144
March	726	150	-	23.4	1,440
April	2,446	197	39	81.5	4,850
May	974	72	12	31.4	1,930
June	1,571	203	8.8	52.4	3,120
July	311.4	71	1.8	10.0	618
August	292.1	41	.6	9.42	579
September	14.2	1.0	.2	.47	28
Water year 1942-43	6,615.5	203	.2	18.1	13,120

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

Big Creek near Randolph, Utah

Location.- Water-stage recorder, lat. 41°37', long. 111°15', in SE¼ sec. 10, T. 10 N., R. 6 E., 4½ miles southeast of Randolph and 7 miles upstream from mouth.

Records available.- March 1939 to September 1943.

Extremes.- Maximum and minimum discharges for periods of record in water years 1939 to 1943 are contained in the following table:

Water year	Maximum			Minimum	
	Date	Discharge (sec.-ft.)	Gage height (feet)	Date	Discharge (sec.-ft.)
1939*	Mar. 19	†25	-	Aug. 16, 18	4.0
1939-40	Nov. 28	†7.2	-	July 11, Aug. 7	.2
1940-41	Aug. 12	46	3.57	Aug. 3-6	.3
1941-42	Apr. 6	†15	-	Oct. 1-4, 18	1.7
1942-43	Mar. 27	‡117	4.30	Aug. 23	7.2

* Mar. 19 to Sept. 30.
† Maximum daily discharge.
‡ From rating curve extended above 50 second-feet.

Remarks.- Record good. Two small diversions above station and many below station for irrigation.

Cooperation.- Gage-height record and eight discharge measurements for period March to June 1943 furnished by Bureau of Reclamation. Records for March 1939 to September 1942 collected and computed by Bureau of Reclamation and reviewed by Geological Survey.

Discharge, in second-feet, 1939-43
1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	10	a14	9.4	7.1	5.8	4.4
2						-	a10	17	9.2	6.9	5.0	4.2
3						-	a10	16	8.4	6.7	5.0	4.4
4						-	a10	16	8.4	6.4	5.0	4.6
5						-	10	16	8.6	6.4	4.9	4.7
6						-	10	15	8.6	5.8	5.7	4.9
7						-	9.6	13	8.6	4.9	6.0	5.2
8						-	9.2	13	8.6	4.7	5.2	5.5
9						-	9.6	14	8.6	5.7	4.6	4.9
10						-	9.4	13	8.6	5.5	4.4	4.7
11						-	9.0	13	8.6	5.8	4.4	4.7
12						-	9.0	13	8.6	5.7	4.2	5.5
13						-	9.4	12	8.4	5.5	4.2	5.4
14						-	9.4	12	7.6	5.5	4.2	5.0
15						-	9.2	12	6.5	5.4	4.2	5.2
16						-	8.6	13	7.3	5.4	4.0	5.0
17						-	7.4	12	7.3	5.2	4.4	4.9
18						-	6.9	12	7.4	5.2	4.0	5.2
19						a25	7.3	11	7.8	5.2	4.2	4.7
20						20	8.0	10	8.6	4.9	4.2	4.7
21						18	8.4	10	8.4	5.0	4.4	4.7
22						15	8.8	10	8.4	4.9	4.2	4.9
23						10	9.4	10	8.2	4.9	4.4	4.9
24						10	10	10	8.0	4.9	4.4	5.0
25						9.0	10	9.2	7.8	4.9	4.4	6.0
26						10	9.8	9.2	7.6	4.9	4.6	5.5
27						9.0	9.8	9.2	7.4	5.0	4.7	4.9
28						11	10	9.0	7.3	5.2	4.9	4.9
29						a11	11	8.8	7.3	5.4	4.9	5.0
30						10	12	9.0	7.3	19	4.6	5.0
31						10	-	9.6	-	13	4.6	-

a No gage-height record; discharge estimated.

Discharge, in second-feet, of Big Creek near Randolph, Utah, 1939-43--Continued

1939-40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.2	5.8				4.9	5.2	2.6	1.9	2.0	0.9	1.2
2	6.4	5.4				4.9	4.9	1.7	1.9	1.9	.9	1.2
3	6.4	5.5				4.9	4.7	1.6	1.8	1.6	1.0	1.5
4	6.0	5.2				4.9	4.7	1.7	1.9	1.5	.9	1.6
5	5.2	5.4				4.9	4.6	1.9	2.6	1.2	.9	1.6
6	5.0	5.4				4.9	4.6	2.8	2.5	.9	.3	1.5
7	5.2	5.4				4.9	4.4	3.0	2.3	.8	.2	1.4
8	5.2	5.4				5.0	4.1	2.9	2.3	.9	.3	1.5
9	5.0	5.4				5.0	4.6	2.8	2.0	.7	.8	1.8
10	5.0	5.4				4.9	4.7	2.8	2.0	.3	.7	1.4
11	5.0	5.5				4.3	4.3	2.8	1.9	.2	.6	1.5
12	5.2	5.6	(*)			5.4	4.1	2.9	1.9	.4	.6	1.6
13	5.0	5.7				5.8	4.0	2.9	1.3	.5	.8	1.2
14	5.2	5.8				5.8	4.1	2.8	.4	.5	.9	1.8
15	5.2	5.9				4.3	4.1	2.6	.3	.5	.9	1.7
			4.6	5.0	4.9							
16	5.2	6.0				4.3	4.1	2.6	1.7	1.6	.9	1.6
17	5.2	6.1		(*)		4.1	4.0	2.5	1.6	1.8	.8	1.6
18	5.2	6.2				4.1	4.0	2.4	1.4	1.7	.9	1.6
19	5.7	6.3				4.3	3.8	2.0	1.5	1.6	1.1	1.7
20	5.4	6.4				4.4	3.8	.6	1.2	1.6	1.3	1.6
21	5.4	6.4				4.4	3.7	.9	1.2	1.3	1.6	1.2
22	5.5	6.5				4.6	3.8	.6	1.2	.9	1.3	.6
23	5.4	6.6				4.7	3.7	1.6	1.2	.9	1.2	.6
24	5.5	6.7				4.7	4.0	2.2	1.2	.8	2.9	1.2
25	5.7	6.2				4.9	3.8	2.3	1.2	.7	3.6	2.2
26	5.5	6.9				5.0	3.4	2.4	1.5	.9	2.0	2.5
27	5.4	7.0				6.4	3.6	2.3	1.2	.8	1.5	2.0
28	5.7	*7.2				5.7	3.3	2.2	1.0	.8	1.4	2.3
29	5.5	6.9				5.2	3.4	2.2	1.2	.9	1.3	2.3
30	5.4	6.7			-	5.2	3.3	2.0	1.3	.6	1.2	2.5
31	5.4	-			-	5.0	-	1.9	-	.9	1.2	-

* Winter discharge measurement made on this day.

Note.- No gage-height record Nov. 10 to Mar. 6 (stage-discharge relation affected by ice); discharge computed on basis of 3 discharge measurements.

1940-41

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.2	2.5					2.8	3.4	1.6	1.5	0.4	1.2
2	2.3	2.5					1.7	3.3	1.4	..4	.4	1.2
3	2.6	2.6					1.0	3.3	1.4	.4	.3	1.2
4	2.8	2.8					1.1	3.3	1.4	.9	.3	1.2
5	2.5	3.8					1.0	3.4	1.4	.9	.3	1.2
6	2.2	4.6					2.0	3.4	1.6	.9	.3	1.2
7	2.6	2.6					3.0	3.1	1.2	1.1	4.5	1.2
8	3.6	2.6					2.9	3.0	.7	1.1	4.9	1.5
9	5.2	2.5					2.9	3.0	2.2	.8	8.3	1.6
10	2.6	2.4				a3.0	3.0	2.9	2.0	.6	2.5	1.5
11	2.4	3.0					2.9	2.8	1.6	.6	7.2	1.5
12	2.3	3.7					2.9	2.8	1.6	.7	9.1	1.3
13	2.3	3.4					3.3	2.8	1.6	.7	1.6	1.4
14	2.3	3.4					3.0	1.7	1.6	.9	1.5	1.4
15	2.3	3.6					3.0	1.4	1.4	.8	1.5	1.4
16	2.3	4.0	a1.5	a2.0	a3.5		3.1	2.2	1.4	.6	1.5	1.4
17	2.3	4.0					3.1	2.5	1.3	.5	1.5	1.3
18	2.3	3.8				2.8	3.0	2.4	1.2	.4	1.5	8.8
19	2.4	3.6				2.6	2.9	2.6	1.2	.5	1.5	2.3
20	2.6	3.6				2.4	2.9	2.5	1.2	.9	1.5	1.6
21	2.5	a3.6				2.2	2.8	2.4	1.2	1.0	1.5	1.6
22	2.3	a3.6				2.3	2.8	2.2	1.1	.5	1.5	2.0
23	1.5	a3.6				2.3	2.5	2.0	.9	.4	1.5	3.0
24	1.2	a3.6				2.2	1.2	1.3	1.1	.4	1.5	2.4
25	1.7	a3.6				2.3	1.2	1.9	1.0	9.7	2.8	2.2
26	2.2	a3.6				2.4	1.4	2.2	1.0	2.6	1.6	2.2
27	3.1	a3.6				2.5	2.9	2.3	1.0	1.8	1.3	2.0
28	2.9	a3.6				2.5	3.3	2.3	1.2	.7	1.2	1.9
29	2.6	a3.6			-	2.8	3.3	2.0	1.2	.5	1.2	1.9
30	2.8	a3.6			-	2.8	3.4	1.8	1.3	.4	1.2	1.9
31	2.5	-			-	-	-	1.6	-	.4	1.2	-

a No gage-height record; discharge estimated.

Discharge, in second-feet, of Big Creek near Randolph, Utah, 1939-43--Continued

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	1.8					a10	6.4				
2	1.7	2.4					a11	6.2				
3	1.7	2.4					a12	5.7				
4	1.7	2.5					a13	5.4				
5	2.3	2.4					a14	5.7				
6	2.2	2.2					15	4.9		2.0		
7	1.9	1.9					14	4.4				
8	1.9	2.0					11	4.0				
9	1.8	1.9					11	3.3				
10	1.8	1.8					11	3.3				
11	1.8	1.8					9.4	3.3				
12	1.8	1.8					10	-				
13	2.4	1.8					9.8	-				
14	1.9	1.8					9.6	-				
15	1.8	1.8		1.7			9.4	-				
16	1.8	1.8					8.4	-				
17	1.8	2.0					8.2	-				
18	1.7	1.9					8.0	-				
19	1.8	-					7.1	-				
20	1.8	-					7.4	-				
21	2.4	-					8.4	-				2.2
22	2.8	-					9.6	-				
23	2.0	-					11	-				
24	2.0	-					9.8	-				
25	2.2	-					8.4	-				
26	2.4	-					7.4	-				
27	2.0	-					7.1	-				
28	2.3	-					7.8	-				
29	2.3	-					7.1	-				
30	2.0	-					6.4	-				
31	1.9	-					-	-				

a No gage-height record; discharge estimated.

1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	9.8	51	27	12	10	9.0
2						-	11	58	27	13	10	9.0
3						-	12	58	23	12	9.8	9.0
4						-	12	59	21	12	9.8	a9.0
5						-	12	62	21	10	9.8	a9.0
6						-	12	55	19	10	9.6	a8.8
7						-	13	48	18	10	15	a8.8
8						-	12	44	18	10	12	a8.6
9						-	13	40	19	10	10	8.6
10						-	13	36	19	9.0	10	8.6
11						-	12	35	19	9.2	10	8.6
12						-	11	34	19	11	9.8	8.6
13						-	11	33	18	9.2	9.6	8.6
14						-	11	32	19	7.8	9.4	8.6
15						-	14	32	19	8.0	9.6	8.6
16						-	20	30	17	11	9.6	8.8
17						-	25	27	17	11	9.6	8.6
18						-	29	26	17	10	10	8.6
19						-	29	24	17	10	9.8	8.8
20						-	34	24	17	10	9.2	8.8
21						-	36	25	17	20	7.4	9.0
22						-	40	25	17	12	7.4	8.8
23						-	45	27	17	11	7.2	8.6
24						30	53	28	16	10	7.4	8.6
25						34	54	28	15	10	8.8	8.8
26						25	56	28	13	9.4	8.8	9.2
27						41	50	25	13	8.8	8.8	9.0
28						31	48	25	13	8.2	9.0	11
29						22	50	25	13	8.2	9.0	9.6
30						17	48	24	12	8.2	9.0	9.0
31						12	-	24	-	9.2	9.4	-

a No gage-height record; discharge interpolated.

Monthly discharge, in second-feet, of Big Creek near Randolph, Utah, 1939-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October					
November					
December					
Calendar year					
January 1939	-	-	-	-	-
February	-	-	-	-	-
March 19-31	168	25	9.0	12.9	333
April	281.2	12	6.9	9.37	558
May	371.0	17	8.8	12.0	736
June	242.8	9.4	6.6	8.09	482
July	191.0	19	4.7	6.16	379
August	143.7	6.0	4.0	4.64	285
September	148.6	6.0	4.2	4.95	295
The period	-	-	-	-	3,070
October 1939	167.3	6.4	5.0	5.40	332
November	181.5	7.2	5.2	6.05	360
December	142.6	-	-	4.6	283
Calendar year	-	-	-	-	-
January 1940	155.0	-	-	6.0	307
February	142.1	-	-	4.9	282
March	151.8	6.4	4.1	4.90	301
April	122.8	5.2	3.3	4.09	243
May	68.5	3.0	.6	2.21	136
June	46.6	2.6	.3	1.55	92
July	31.7	2.0	.2	1.02	63
August	34.9	3.6	.2	1.13	69
September	48.0	2.5	.6	1.60	95
Water year 1939-40	1,292.8	7.2	.2	3.53	2,560
October 1940	77.4	6.2	1.2	2.50	154
November	101.0	4.6	2.4	3.37	200
December	46.5	-	-	1.6	92
Calendar year 1940	1,026.3	6.4	.2	2.80	2,030
January 1941	62.0	-	-	2.0	123
February	98.0	-	-	3.5	194
March	86.1	-	-	2.78	171
April	76.3	3.4	1.0	2.54	151
May	77.8	3.4	1.3	2.51	154
June	40.0	2.2	.7	1.33	79
July	33.6	9.7	.4	1.08	67
August	67.1	9.1	.3	2.16	133
September	56.5	8.8	1.2	1.88	112
Water year 1940-41	822.3	9.7	.3	2.25	1,630
October 1941	61.3	2.6	1.7	1.98	122
November 1-18	36.0	2.5	1.8	2.00	71
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January 1942	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	292.5	15	6.4	9.76	580
May 1-11	52.6	6.4	3.3	4.78	104
June	-	-	-	-	-
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
Water year	-	-	-	-	-
October 1942	-	-	-	-	-
November	-	-	-	-	-
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January 1943	-	-	-	-	-
February	-	-	-	-	-
March 24-31	213	41	12	26.6	422
April	795.8	55	9.8	26.5	1,580
May	1,092	62	24	35.2	2,170
June	537	27	12	17.9	1,070
July	320.2	20	7.8	10.3	635
August	294.8	15	7.2	9.51	585
September	266.6	11	8.6	8.89	529
Water year	-	-	-	-	-

Time basis: Mountain standard time prior to 2 a.m., Feb. 9, 1942; mountain war time thereafter. To convert war time to standard time, subtract 1 hour.

Otter Creek near Randolph, Utah

Location.- Water-stage recorder, lat. 41°43', long. 111°12', in NW¼ sec. 7, T. 11 N., R. 7 E., a quarter of a mile downstream from South Branch and 3 miles north of Randolph. Prior to Mar. 25, 1943 at site 100 feet downstream at same datum (staff gage prior to May 3, 1939).

Records available.- March 1939 to September 1943.

Extremes.- Maximum and minimum discharges for water years 1939 to 1943 are contained in the following table:

Water year	Maximum			Minimum	
	Date	Discharge (sec.-ft.)	Gage height (feet)	Date	Discharge (sec.-ft.)
1939*	Mar. 17	†57	2.70	July 2	2.5
1939-40	Mar. 27	15	1.68	July 13, 14, Aug. 11	3.0
1940-41	July 27	125	3.52	Nov. 29	2.0
1941-42	Apr. 6	‡29	1.54	June 10	3.5
1942-43	July 21	††203	4.52	July 1	3.0

* Mar. 10 to Sept. 30.
† Maximum observed.
‡ Maximum recorded.
†† From rating curve extended above 40 second-feet.

Remarks.- Records for water year 1943 good except those for Mar. 25-28, July 21, Aug. 7, which are fair. Staff gage read twice daily. Several diversions above station for irrigation.

Cooperation.- Gage-height record and two discharge measurements for period March to June 1943 furnished by Bureau of Reclamation. Records for March 1939 to June 1942 collected and computed by Bureau of Reclamation and reviewed by Geological Survey.

Discharge, in second-feet, 1939-43

1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	13	a8.9	6.5	3.1	7.3	5.0
2						-	13	a8.6	6.0	2.5	7.9	5.7
3						-	a13	8.6	5.5	3.1	8.3	5.7
4						-	13	7.9	5.5	3.3	8.6	5.2
5						-	a13	7.0	6.8	4.0	8.6	6.5
6						-	13	6.0	6.8	4.4	9.5	6.8
7						-	13	5.5	7.0	4.4	9.5	8.9
8						-	13	5.5	6.3	4.0	8.3	8.9
9						-	13	5.4	5.7	4.0	8.9	7.9
10						13	13	5.7	6.0	4.0	8.3	7.9
11						13	12	8.3	6.5	4.0	7.6	7.6
12						14	12	8.9	6.5	4.6	8.3	9.9
13						16	12	6.5	5.7	4.2	7.9	8.9
14						17	12	6.0	5.0	3.8	8.3	7.6
15						15	12	5.3	5.7	3.3	8.3	e.6
16						23	12	7.6	6.3	3.8	6.3	9.2
17						57	12	7.6	5.7	4.2	5.7	9.2
18						49	11	9.5	5.2	4.6	6.5	8.9
19						39	10	6.8	6.0	3.3	6.8	8.9
20						27	10	7.6	6.0	3.6	7.0	8.9
21						21	11	6.8	5.0	3.8	6.8	9.2
22						17	10	6.5	5.0	4.4	5.7	9.2
23						18	a11	7.0	2.9	4.9	5.7	9.2
24						18	11	7.9	3.4	4.9	6.7	8.3
25						18	a11	7.3	4.7	5.1	5.7	10
26						14	11	6.5	5.7	5.4	3.8	9.9
27						14	a10	6.3	5.0	5.4	4.7	9.5
28						a14	10	5.6	4.4	6.4	5.5	9.5
29						14	9.5	5.7	3.8	5.1	6.0	9.5
30						13	a9.2	e.0	4.5	22	5.7	9.6
31						13	-	8.6	-	13	4.5	-

a No gage-height record; discharge interpolated.

Discharge, in second-feet, of Otter Creek near Randolph, Utah, 1939-43--Continued

1939-40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	12	12			18	12	7.8	4.8	5.8	5.8	4.8
2	12	12	12			15	12	6.1	5.6	4.8	6.4	5.1
3	12	13	12			15	11	5.6	6.1	4.4	6.4	5.8
4	12	13	12			15	11	6.1	6.1	4.6	4.1	5.8
5	11	12	12			15	11	4.6	8.8	4.8	3.7	5.6
6	11	12	12			14	11	5.6	6.4	4.4	3.5	5.4
7	11	12	12			*12	9.4	5.5	5.6	4.1	3.7	6.1
8	11	12	12			12	9.4	4.6	5.1	3.7	4.4	6.4
9	11	12	12			11	10	4.8	6.1	3.7	3.5	6.9
10	11	12	12			10	9.7	5.1	5.8	3.3	3.9	6.9
11	11	12	12			10	9.1	5.6	4.6	3.5	3.0	6.9
12	11	12	12			10	9.7	5.4	4.1	3.5	3.5	6.9
13	11	12	*11			10	9.7	6.4	3.9	3.0	3.5	8.5
14	11	12	11			10	9.7	6.1	4.1	3.0	3.7	12
15	11	12	11			12	9.7	5.6	3.9	3.5	4.4	8.8
16	11	12	11	11	10	12	8.2	5.1	3.3	4.4	4.6	8.5
17	11	12	12			12	8.2	4.6	3.2	4.8	4.8	7.5
18	11	13	12	(*)		12	8.5	4.8	3.3	5.1	5.1	7.5
19	11	12	12			12	8.2	5.4	3.7	5.4	5.4	9.1
20	11	12	12			12	6.9	4.8	3.5	5.4	6.1	9.4
21	12	12	12			12	5.8	4.8	3.5	5.4	5.1	9.4
22	12	12	12			12	7.2	4.6	3.7	5.4	4.4	8.8
23	11	12	12			12	6.6	5.1	3.9	5.4	4.6	8.5
24	12	12	12			12	6.4	4.6	4.4	5.6	5.1	7.8
25	12	12	12			12	6.3	6.4	3.5	5.4	6.6	9.1
26	12	12	12			12	7.5	8.5	3.5	5.4	6.1	9.1
27	12	12	12		(*)	14	7.2	7.5	3.9	5.4	5.6	9.1
28	12	12	12			12	6.1	7.2	4.4	4.1	4.6	9.1
29	12	12	12			12	7.2	6.1	4.8	5.6	4.4	9.4
30	12	12	12		-	12	7.8	5.8	4.6	6.9	5.1	9.1
31	12	-	11		-	11	-	5.8	-	6.8	5.1	-

* Winter discharge measurement made on this day.

Note.- No gage-height record Jan. 1 to Feb. 29; discharge computed on basis of discharge measurements.

1940-41

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.1	10	7.5	4.8	11	14	12	8.8	6.4	4.8	9.1	9.1
2	9.1	10	7.5	5.1	11	14	12	7.5	6.4	5.4	8.8	9.1
3	10	11	7.5	5.1	11	12	12	7.5	5.6	4.8	8.8	9.1
4	9.4	11	7.2	5.4	11	11	12	9.1	5.8	4.6	9.7	9.7
5	9.1	11	7.2	5.6	11	10	14	8.2	6.9	4.8	9.7	9.7
6	9.1	10	6.9	5.8	11	10	13	8.5	5.6	4.1	9.7	9.4
7	9.1	12	6.6	6.1	11	10	13	8.2	9.1	4.4	9.1	9.7
8	10	12	5.4	6.4	11	11	12	6.9	6.6	4.4	9.7	9.7
9	12	11	6.1	6.6	11	12	13	7.5	14	3.9	9.7	8.2
10	10	10	6.9	6.9	10	11	12	7.2	8.2	3.9	12	8.2
11	11	10	12	7.2	11	10	12	6.9	6.6	4.4	9.4	8.5
12	10	11	a12	7.5	11	10	12	6.1	6.9	4.8	10	8.8
13	10	13	a11	7.8	10	10	13	6.6	6.4	4.8	9.1	9.1
14	10	8.5	a10	8.2	11	10	12	6.9	6.6	5.6	8.8	9.4
15	10	5.4	a9.0	8.5	11	10	11	6.9	6.4	4.8	8.8	9.7
16	10	5.8	a9.0	8.8	10	13	11	5.6	6.4	4.1	8.8	9.1
17	10	7.2	a8.0	9.1	11	16	11	5.1	5.6	3.5	8.8	9.1
18	10	10	a8.0	9.4	11	19	11	5.1	4.8	3.7	9.1	11
19	10	10	a7.0	9.7	10	14	11	7.5	4.1	4.4	9.1	10
20	10	10	a7.0	10	11	12	11	7.5	3.9	4.4	9.1	11
21	10	9.7	a6.0	10	11	11	11	6.1	3.5	4.1	9.1	11
22	10	9.4	a6.0	11	10	11	11	5.4	3.2	4.6	8.8	12
23	10	9.4	a5.0	11	11	10	10	5.6	3.3	5.6	8.5	13
24	10	9.4	a5.0	11	11	10	9.4	5.6	3.0	6.9	8.5	11
25	10	9.4	a4.0	11	10	10	9.7	5.4	3.2	11	8.8	11
26	10	9.1	a3.0	11	11	11	9.7	6.9	3.2	21	7.8	11
27	10	8.8	a2.8	11	11	12	11	6.6	3.3	39	8.5	12
28	10	6.4	2.8	11	12	12	9.7	7.2	3.3	10	8.5	11
29	10	2.0	3.2	11	-	12	9.1	6.6	4.4	9.7	8.5	11
30	11	7.8	4.6	11	-	12	7.2	7.2	4.8	9.7	9.1	11
31	10	-	5.1	11	-	12	-	6.6	-	9.4	9.1	-

a No gage-height record; discharge interpolated.

Discharge, in second-feet, of Otter Creek near Randolph, Utah, 1939-43--Continued

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	11	9.4				a16	10	5.4			
2	12	13	9.4				a16	9.7	5.5			
3	12	12	10				a17	8.5	5.8			
4	12	11	9.7				a17	9.4	4.8			
5	14	11	10				a18	9.7	4.6			
6	12	10	-				19	7.8	5.6	5.0		
7	12	10	-				19	7.8	5.6			
8	11	10	-				17	6.6	6.4			
9	11	11	-				14	7.2	4.4			
10	11	11	-				16	6.9	3.5			
11	10	11	-				14	8.5	4.6			
12	10	10	-				13	8.8	6.1			
13	13	10	-	11			13	7.8	6.1			
14	11	10	-				13	9.1	6.4			
15	11	10	-				12	6.9	6.4			
16	11	11	-				10	6.6	7.2			
17	11	11	-				12	7.2	6.6			
18	11	11	-				12	7.2	3.7			
19	11	10	-				11	6.6	4.4			
20	11	10	-				12	6.4	5.4			
21	13	9.4	-				11	5.6	5.4			
22	11	9.4	-				11	7.2	4.8			
23	11	9.7	-				10	6.9	6.6			
24	11	7.8	-				9.7	7.2	5.6			
25	11	5.6	-				9.7	8.2	5.8			
26	11	7.5	-				9.7	5.8	7.5			
27	11	9.1	-				10	5.6	7.5			
28	12	9.4	-				13	6.4	6.6			
29	12	9.4	-				12	6.6	5.8			
30	11	9.4	-				11	5.8	5.8			
31	11	-	-				-	6.6	-			

a No gage-height record; discharge estimated.

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jupe	July	Aug.	Sept.
1						-	16	9.4	10	3.0	8.6	6.0
2						-	17	8.6	12	3.5	8.5	4.5
3						-	16	9.4	10	4.2	9.0	4.0
4						-	16	12	10	3.5	9.4	4.5
5						-	15	11	9.0	4.2	9.4	4.8
6						-	14	11	8.6	5.1	9.0	5.1
7						-	15	10	8.2	4.8	66	6.0
8						-	14	12	6.9	5.1	15	7.2
9						-	15	12	6.9	4.8	11	6.9
10						-	16	11	6.6	4.0	9.7	6.9
11						-	18	10	5.7	4.5	9.4	6.6
12						-	18	9.7	6.3	6.0	9.7	6.9
13						-	16	9.7	8.2	6.3	10	7.5
14						-	15	9.0	10	7.9	9.7	7.5
15						-	15	9.4	9.7	7.9	10	8.6
16						-	15	9.0	7.9	8.6	9.7	9.4
17						-	14	9.0	6.3	8.2	9.7	8.2
18						-	14	11	6.0	7.5	10	8.6
19						-	14	9.7	6.6	7.5	9.4	9.0
20						-	13	9.4	7.5	6.6	7.9	9.0
21						-	13	8.6	6.9	32	8.2	9.4
22						-	13	8.6	5.7	20	8.2	9.0
23						-	12	8.2	6.3	12	8.2	9.7
24						-	12	8.2	6.3	11	8.6	9.4
25						57	11	8.2	6.3	9.0	8.2	9.7
26						52	11	7.9	5.7	8.6	9.0	9.4
27						61	10	7.5	5.4	8.6	9.0	9.0
28						48	10	7.2	5.7	8.2	8.6	9.0
29						34	11	7.5	4.0	8.6	6.9	9.0
30						20	10	7.5	4.2	7.9	6.9	9.0
31						16	-	8.2	-	8.2	6.9	-

Monthly discharge, in second-feet, of Otter Creek near Randolph, Utah, 1939-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October					
November					
December					
Calendar year					
January	--	--	--	--	--
February	--	--	--	--	--
March 10-31, 1939	457	57	13	20.8	906
April	548.7	13	9.2	11.6	692
May	215.5	8.9	5.4	6.95	427
June	165.1	7.0	2.9	5.50	327
July	155.6	22	2.5	5.02	309
August	217.7	9.5	3.8	7.02	432
September	250.0	10	5.0	8.34	496
Water year	--	--	--	--	--
October 1939	353	12	10	11.4	700
November	363	13	12	12.1	720
December	367	12	11	11.8	728
Calendar year	--	--	--	--	--
January 1940	341	--	--	11	676
February	290	--	--	10	575
March	382	18	10	12.3	758
April	263.1	12	5.8	8.77	522
May	176.1	8.5	4.6	5.68	349
June	139.2	8.8	3.2	4.64	276
July	145.8	6.9	3.0	4.70	289
August	146.0	6.6	3.0	4.71	290
September	233.3	12	4.8	7.78	463
Water year 1939-40	3,199.3	18	3.0	8.74	6,350
October 1940	308.9	12	9.1	9.96	613
November	280.3	13	2.0	9.34	556
December	210.3	12	2.8	6.78	417
Calendar year 1940	2,915.8	18	2.0	7.97	5,780
January 1941	264.0	11	4.8	8.52	524
February	303	12	10	10.4	601
March	362	19	10	11.7	718
April	337.8	14	7.2	11.3	670
May	212.8	9.1	5.1	6.86	422
June	167.5	14	3.0	5.58	332
July	220.6	39	3.5	7.12	438
August	282.5	12	7.8	9.11	560
September	301.6	13	8.2	10.1	598
Water year 1940-41	3,251.3	39	2.0	8.91	6,450
October 1941	354	14	10	11.4	702
November	300.7	13	5.6	10.0	596
December 1-5	48.5	-	-	9.70	96
Calendar year	--	--	--	--	--
January 1942	--	--	--	--	--
February	--	--	--	--	--
March	--	--	--	--	--
April	398.1	19	9.7	13.3	790
May	230.6	10	5.6	7.44	457
June	168	7.5	3.5	5.60	333
July	--	--	--	--	--
August	--	--	--	--	--
September	--	--	--	--	--
Water year	--	--	--	--	--
October 1942	--	--	--	--	--
November	--	--	--	--	--
December	--	--	--	--	--
Calendar year	--	--	--	--	--
January 1943	--	--	--	--	--
February	--	--	--	--	--
March 25-31	288	57	16	41.1	571
April	419	18	10	14.0	831
May	289.9	12	7.2	9.35	576
June	218.9	12	4.0	7.30	434
July	247.3	32	3.0	7.98	491
August	399.9	66	6.9	11.0	674
September	229.8	9.7	4.0	7.66	456
The period	--	--	--	--	4,030

Time basis: Mountain standard time prior to 2 a.m., Feb. 9, 1942; mountain war time thereafter. To convert war time to standard time, subtract 1 hour.

Twin Creek at Sage, Wyo.

Location.- Staff gage, lat. 41°49', long. 110°58', in SW¼ sec. 8, T. 21 N., R. 119 W., at Sage, .6 miles upstream from mouth.

Records available.- April to September 1943.

Extremes.- Maximum discharge observed during period, 137 second-feet Aug. 8 (gage height, 6.00 feet); minimum daily, 2.2 second-feet Aug. 5.

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

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							104	26	18	7.3	2.9	3.8
2							118	28	28	10	3.1	3.8
3							106	27	30	10	2.9	3.8
4							107	29	26	11	2.4	3.8
5							79	34	23	10	2.2	3.8
6							46	30	21	7.8	3.4	3.8
7							48	25	21	6.6	56	3.8
8							41	24	19	6.2	81	3.8
9							47	28	16	5.4	34	3.8
10							44	27	14	5.8	15	3.8
11							39	24	14	4.3	5.2	3.8
12							38	24	14	4.3	5.0	3.8
13							38	24	13	3.5	5.0	3.8
14							46	24	15	3.8	5.0	3.8
15							40	24	16	3.3	5.0	3.8
16							40	24	17	3.8	5.0	3.8
17							37	24	16	3.4	5.0	3.8
18							36	24	13	3.2	5.0	3.8
19							36	24	8.6	3.1	5.0	3.8
20							34	24	16	3.1	6.5	3.8
21							33	24	9.0	3.4	6.5	3.8
22							33	25	9.7	3.7	6.0	3.8
23							31	24	7.1	3.2	3.7	3.8
24							31	22	7.1	3.0	5.0	3.8
25							33	13	6.6	3.1	3.2	3.1
26							33	11	7.1	3.3	3.2	2.6
27							32	10	6.2	2.7	3.8	3.8
28							27	11	6.6	3.1	3.8	5.0
29							28	8.6	8.8	2.6	3.8	4.0
30							27	11	11	2.8	3.8	3.5
31							-	12	-	2.9	3.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	1,432	118	27	47.7	2,840
May	689.6	34	8.6	22.2	1,370
June	457.8	30	6.2	14.6	868
July	149.7	11	2.6	4.83	297
August	300.2	81	2.2	9.68	595
September	112.9	5.0	2.6	3.76	224
The period	-	-	-	-	6,190

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

Smiths Fork near Smoot, Wyo.

Location.- Water-stage recorder, lat. 42°30', long. 110°48', in sec. 17, T. 29 N., R. 117 W., unsurveyed, 2 miles downstream from Poker Hollow, 3½ miles upstream from North Fork, 10 miles upstream from Hobble Creek, and 11 miles southeast of Smoot.
Records available.- March to December 1943 (discontinued).
Extremes.- Maximum discharge during period, 274 second-feet June 21 (gage height, 2.94 feet); minimum, 3.1 second-feet Mar. 20.
Remarks.- Records good except those for period of no gage-height record and those for May 22-28, which are fair. No diversion above station.
Cooperation.- Gage-height record and 7 discharge measurements for period prior to June 30 furnished by Bureau of Reclamation.

Discharge, in second-feet, March to December 1943

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-	8.6	a60	202	167	35	22	17	13	13
2	-	8.6	a80	172	151	37	21	17	13	13
3	-	9.8	a100	145	144	34	22	17	14	13
4	-	11	a120	122	134	32	21	16	14	13
5	-	11	a110	109	126	32	21	16	14	13
6	-	11	a100	96	118	32	21	16	13	13
7	-	12	a90	90	112	39	21	16	12	13
8	-	13	a80	90	106	35	21	16	14	13
9	-	13	a70	97	102	31	20	15	14	11
10	-	13	a60	110	97	30	20	15	14	12
11	-	12	a56	128	92	29	20	19	14	13
12	-	13	54	144	87	28	20	17	14	12
13	-	12	55	151	76	28	20	16	14	13
14	-	14	57	139	72	27	19	16	14	12
15	-	18	56	124	69	27	19	16	14	12
16	-	21	53	115	66	27	19	15	13	12
17	-	25	50	126	62	27	19	15	14	12
18	7.2	26	48	169	58	27	18	15	14	-
19	7.2	32	49	211	56	27	18	17	14	-
20	5.8	37	54	249	53	25	19	16	14	-
21	5.2	42	67	253	53	25	18	16	13	-
22	6.9	43	82	249	52	25	18	15	13	-
23	6.9	39	104	221	47	24	18	15	14	-
24	7.2	39	138	226	45	24	18	16	14	-
25	7.8	51	140	224	43	24	18	16	12	-
26	7.2	55	151	221	42	24	18	16	14	-
27	7.2	a52	174	209	41	24	19	16	13	-
28	8.0	a50	197	195	40	22	20	16	13	-
29	9.4	a45	215	185	38	22	19	15	13	-
30	10	a50	224	180	38	22	18	15	14	-
31	9.0	-	216	-	35	22	-	14	-	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
March 18-31	104.8	10	5.2	7.49	208
April	787.0	55	8.6	26.2	1,560
May	3,111	224	48	100	6,170
June	4,952	253	90	165	9,820
July	2,422	167	35	78.1	4,800
August	867	39	22	28.0	1,720
September	585	22	18	19.5	1,160
The period	-	-	-	-	25,440
October	493	19	14	15.9	978
November	407	14	12	13.6	807
December 1-17	213	13	11	12.5	422

a No gage-height record; discharge computed on basis of records for Hobble Creek near Geneva, Idaho.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Smiths Fork near Border, Wyo.

Location.- Water-stage recorder, lat. 42°17', long. 110°52', in SW¼ sec. 33, T. 27 N., R. 118 W., 3½ miles upstream from Howland Creek, 7 miles downstream from Hobble Creek, and 11 miles northeast of Border.
Records available.- May 1942 to September 1943.
Extremes.- 1942: Maximum discharge during period May to September, 579 second-feet May 27 (gage height, 3.43 feet); minimum daily, 68 second feet Sept. 30.
1942-43: Maximum discharge during water year, 935 second-feet May 30 (gage height, 4.29 feet); minimum not determined.
Remarks.- Records good except those for period of no gage-height record, which are fair. No diversion above station.
Cooperation.- Gage-height record and 16 discharge measurements for period May 26, 1942, to June 30, 1943, furnished by Bureau of Reclamation.

Discharge, in second-feet, 1942-43

1942

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1	-	425	210	115	80	16	-	345	148	96	73
2	-	428	202	113	80	17	-	310	148	93	73
3	-	447	199	111	78	18	-	303	148	93	73
4	-	463	196	107	78	19	-	297	144	93	76
5	-	471	190	105	78	20	-	294	139	92	76
5	-	463	184	105	78	21	-	280	137	92	73
7	-	475	199	105	76	22	-	271	135	90	73
8	-	495	184	103	76	23	-	262	133	88	73
9	-	487	176	101	75	24	-	262	130	86	73
10	-	455	171	99	75	25	-	249	128	90	72
11	-	425	165	101	76	26	511	246	128	93	72
12	-	395	160	111	83	27	567	240	124	86	72
13	-	366	155	103	86	28	535	237	124	83	72
14	-	345	155	99	76	29	495	222	119	86	70
15	-	342	151	97	76	30	455	213	119	83	68
						31	436	-	117	81	-

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	67	73					a70	722	900	628	234	146
2	67	73					a70	790	850	599	240	142
3	68	72					a75	820	763	575	228	139
4	68	73					a80	865	678	551	225	137
5	68	70		(*)			a90	830	636	535	216	135
6	68	78					a100	727	599	515	213	135
7	68	68					a115	640	571	491	252	130
8	67	68					a140	575	551	471	231	130
9	67	67					a140	523	555	455	210	130
10	68	68					a140	499	579	444	204	128
11	68						a140	483	615	421	199	126
12	73					(*)	a140	475	640	406	193	126
13	72						a140	467	661	380	187	124
14	73						a165	475	661	366	184	124
15	72						a180	463	636	359	184	124
16	72		a64	a60	a60	a56	a220	451	599	345	187	122
17	70						a300	428	591	331	179	119
18	70						a400	410	615	320	179	119
19	68						a500	398	678	310	179	119
20	68	a66					a540	398	732	300	174	119
21	68						a520	417	754	300	171	117
22	68				(*)		a500	444	765	317	163	115
23	68						615	503	727	294	160	113
24	68						732	603	722	284	155	109
25	67						718	649	718	271	153	107
26	67						709	700	718	265	163	107
27	67						579	745	704	262	148	111
28	67	(*)					535	845	683	255	148	113
29	72				-		551	905	657	249	146	111
30	67				-	a62	579	915	644	240	146	107
31	64				-	a70		890	-	237	148	-

* Winter discharge measurement on this day.
a No gage-height record (stage-discharge relation affected by ice most of winter period); discharge computed on basis of 4 discharge measurements, weather records and records for Smiths Creek at Cokeville and near Smoot, and Hobble Creek near Geneva, Idaho.

Monthly discharge, in second-feet, 1942-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
May 26-31, 1942	2,999	567	436	500	5,950
June	10,513	495	213	350	20,850
July	4,818	210	117	155	9,560
August	2,999	115	81	96.7	5,950
September	2,257	86	68	75.2	4,480
The period	-	-	-	-	46,790
October 1942	2,125	73	64	68.5	4,210
November	2,070	-	-	69.0	4,110
December	1,984	-	-	64	3,940
January 1943	1,860	-	-	60	3,690
February	1,680	-	-	60	3,330
March	1,756	-	-	56.6	3,480
April	9,783	782	70	326	19,400
May	19,055	916	398	615	37,800
June	20,200	900	551	673	40,070
July	11,776	628	237	380	23,360
August	5,789	252	146	187	11,480
September	3,684	146	107	123	7,310
Water year 1942-43	81,762	915	-	224	162,200

Time basis: Mountain war time. 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 NW¼ sec. 4, T. 24 N., R. 119 W., 1 mile northeast of Cokeville and 2 miles upstream from mouth.
Records available.- April 1942 to September 1943.
Extremes.- 1942: Maximum discharge during period April to September, 517 second-feet May 27 (gage-height, 4.51 feet); minimum daily, 32 second-feet Aug. 18, 24, 25, Sept. 2, 3.
1942-43: Maximum daily discharge during water year, 1,050 second-feet May 5, computed from records for station near Border; minimum daily, 45 second-feet Oct. 1, 2.
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 station for irrigation.
Cooperation.- Gage-height record and 20 discharge measurements for period May 1942 to June 1943 furnished by Bureau of Reclamation.

Discharge, in second-feet, 1942-43

1942

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	-	-	335	92	36	33	16	-	-	217	49	33	46
2	-	-	333	90	37	32	17	-	-	193	48	33	46
3	-	-	333	85	36	32	18	-	-	179	49	32	46
4	-	-	336	82	36	33	19	-	-	166	50	33	50
5	-	†161	335	79	35	36	20	-	-	159	47	33	54
6	-	-	a330	73	36	35	21	-	-	153	45	33	54
7	-	-	a325	69	36	36	22	-	303	146	44	33	54
8	-	-	a320	64	35	36	23	-	325	137	43	33	46
9	-	-	a310	59	35	35	24	-	369	130	42	32	46
10	-	-	a290	53	35	35	25	-	399	125	43	32	46
11	-	-	a275	47	40	36	26	-	438	116	43	34	45
12	-	-	265	46	42	41	27	-	496	116	40	33	46
13	-	-	239	47	38	55	28	-	484	113	40	33	46
14	-	†228	219	48	36	49	29	†194	435	108	40	33	45
15	-	-	212	48	34	46	30	-	396	101	38	33	45
							31	-	359	-	36	33	-

† Result of discharge measurement.
a No gage-height record; discharge computed on basis of records for station near Border and unpublished canal diversion records.

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	70					a80	a840	860	a500	128	110
2	45	76					a80	h885	885	a480	137	110
3	46	76					a90	a950	811	h461	127	122
4	48	73					a100	a1,050	702	a430	123	130
5	50	73					a110	h907	630	a410	120	132
6	50	73					a130	952	561	391	122	130
7	51	73					a150	845	514	372	159	130
8	51	73					a190	744	a490	362	141	127
9	52	73					h191	654	469	341	125	123
10	54	65					a190	590	481	322	120	122
11	55	61					a190	558	508	a310	122	127
12	57	70					a190	520	551	298	116	127
13	59	74					a190	526	561	284	110	125
14	60	76		(*)			a250	a517	597	274	107	113
15	60	73	a68	a64	a64	a62	a300	520	584	268	106	110
16	60	71					a350	514	a560	259	110	103
17	59	71					a450	493	a540	241	107	91
18	59	73					a580	464	a520	230	107	85
19	59	73					h685	441	584	221	107	84
20	59	72			(*)		h754	424	620	217	104	84
21	59	a66					a740	424	654	221	100	84
22	61	a66					a720	435	661	224	97	83
23	64	72					a900	464	668	202	95	84
24	60	69					a1,000	536	630	191	94	76
25	54	a68					a980	590	620	183	92	72
26	56	a66					h903	630	594	179	94	74
27	56	a70					a800	674	a585	166	95	76
28	63	*b75				b62	a700	730	h577	150	95	78
29	64	b73			-	h61	a700	792	a550	141	94	79
30	64	b72			-	a68	a770	845	a520	139	95	76
31	65	-			-	a80	-	852	-	132	107	-

* Winter discharge measurement made on this day.
a No gage-height record (stage-discharge relation affected by ice Dec. 1 to Mar. 27); discharge computed on basis of 2 discharge measurements, weather records, and records for Smiths Fork near Border and near Smoot, and Hobble Creek near Geneva, Idaho.
b Stage-discharge relation affected by ice.
h Computed from staff-gage readings.

Monthly discharge, in second-feet, 1942-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
June 1942	6,614	335	101	220	13,120
July	1,679	92	36	54.2	3,330
August	1,074	42	32	34.6	2,130
September	1,285	55	32	42.8	2,550
October 1942	1,745	65	45	56.3	3,460
November	2,136	76	61	71.2	4,240
December	2,108	-	-	68	4,180
January 1943	1,984	-	-	64	3,940
February	1,792	-	-	64	3,550
March	1,945	80	-	62.7	3,860
April	13,473	1,000	80	449	26,720
May	20,364	1,050	424	657	40,390
June	18,075	883	469	602	35,850
July	8,599	500	132	277	17,060
August	3,456	159	92	111	6,850
September	3,067	132	72	102	6,080
Water year 1942-43	78,744	1,050	45	216	156,200

Time basis: Mountain war time. 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 to September 1943.

Extremes.- Maximum discharge during period, 532 second-feet June 1 (gage height, 2.17 feet); minimum daily, 35 second-feet Mar. 19.

Remarks.- Records fair. No diversion above station.

Cooperation.- Gage-height record and six discharge measurements for period Mar. 11 to June 30, furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	48	321	517	428	165	108
2						-	50	376	498	410	168	106
3						-	53	397	441	393	162	104
4						-	58	428	381	381	160	104
5						-	61	397	356	364	157	102
6						-	61	360	336	344	155	100
7						-	68	324	324	328	171	100
8						-	69	260	317	314	162	98
9						-	75	238	317	303	152	96
10						-	76	225	328	292	149	92
11						40	75	216	364	282	147	91
12						39	72	213	381	271	142	89
13						39	83	210	397	257	139	91
14						40	102	210	397	251	137	89
15						37	128	210	393	244	137	89
16						36	142	204	360	235	137	87
17						38	144	198	352	228	132	87
18						38	174	186	376	222	130	85
19						35	192	183	389	219	130	87
20						41	219	186	419	213	128	87
21						46	216	195	441	216	123	87
22						41	204	213	450	222	121	85
23						40	216	244	450	210	116	83
24						40	257	296	441	201	114	82
25						40	278	336	436	192	114	80
26						40	271	372	436	189	114	80
27						41	235	414	441	183	112	80
28						44	219	472	436	180	110	80
29						48	225	485	428	174	108	82
30						50	247	503	432	168	108	80
31						49	-	503	-	165	110	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March 11-31	862	50	35	41.0	1,710
April	4,318	278	48	144	8,560
May	9,375	503	183	302	18,600
June	12,034	517	317	401	23,870
July	8,079	428	165	261	16,020
August	4,210	171	108	136	8,350
September	2,711	108	80	90.4	5,380
The period	-	-	-	-	82,490

Time basis: Mountain war time. 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 1943.

Extremes.- Maximum discharge during year, 172 second-feet Apr. 24 (gage height, 3.95 feet); minimum daily, 1.5 second-feet Dec. 5, 27, Jan. 19, 31.
1939-43: Maximum discharge, that of Apr. 24, 1943; minimum daily, [illegible]3 second-feet Nov. 13, 23, 1940.

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

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.9	3.1	2.0	2.4	1.7	a2.2	6.9	126	59	18	7.4	5.2
2	2.0	3.4	2.2	2.3	1.9	a2.1	7.2	123	62	18	8.1	5.2
3	1.9	3.1	2.0	2.2	2.0	a2.0	11	117	54	18	7.4	5.2
4	1.9	2.9	1.8	2.1	2.0	a2.2	15	121	49	17	7.4	5.2
5	1.9	2.5	1.5	2.0	2.0	*2.3	15	114	47	16	7.0	4.9
6	2.0	2.0	1.7	2.0	2.0	a2.3	17	109	44	16	10	4.9
7	2.0	2.1	2.0	2.0	2.0	a2.3	23	99	42	14	14	4.9
8	2.0	2.2	a2.3	2.0	2.0	a2.3	35	91	41	14	9.2	4.7
9	2.0	2.1	a2.5	2.0	2.0	a2.3	43	86	40	14	7.4	4.7
10	2.0	1.8	*2.7	2.0	2.0	a2.3	51	81	38	13	6.7	4.4
11	2.2	1.9	2.7	2.0	2.0	a2.8	49	77	37	13	6.7	4.4
12	2.4	1.9	2.5	2.0	1.8	a2.8	*45	73	36	12	6.2	4.4
13	2.5	2.0	2.7	2.0	1.8	a2.8	67	71	35	12	6.2	4.4
14	2.5	2.2	2.7	2.0	1.8	a2.8	91	69	38	12	6.0	4.2
15	2.4	2.5	2.7	*2.2	1.8	a2.8	102	67	39	12	6.2	4.2
16	2.4	2.5	2.7	2.0	1.8	a2.8	105	67	35	11	6.7	4.2
17	2.2	2.5	2.7	a1.8	1.8	a2.5	111	65	32	11	6.2	4.2
18	2.2	3.1	2.5	a1.6	1.8	a2.5	125	61	30	10	6.0	4.2
19	2.2	3.3	2.4	a1.5	1.9	a2.5	130	58	28	10	6.0	4.2
20	2.2	2.7	2.3	a1.7	1.9	a2.3	152	55	27	9.6	5.7	4.2
21	2.2	2.4	2.2	a2.0	1.9	a2.3	138	55	26	10	5.4	4.4
22	2.2	2.0	2.1	a2.5	2.0	a2.4	139	54	24	10	5.4	4.4
23	2.4	2.7	2.1	a2.5	a2.2	a2.5	142	53	24	10	5.2	4.2
24	2.2	2.7	2.4	a2.2	a2.2	a2.6	159	52	24	9.2	5.2	4.2
25	2.2	2.4	2.4	a2.0	a2.0	a2.8	154	51	22	8.5	4.9	4.0
26	a2.2	1.7	2.0	a2.2	a2.3	a3.1	152	51	22	8.5	4.9	4.2
27	a2.2	2.2	1.5	a2.3	a2.3	a3.4	128	48	22	8.5	4.9	4.9
28	a2.4	2.4	2.0	*2.4	a2.3	a3.8	122	48	21	8.1	4.9	5.4
29	a2.7	2.4	2.4	2.3	-	a4.3	122	47	20	7.7	4.9	6.0
30	a2.5	*2.4	2.4	2.2	-	a4.8	119	48	20	7.7	4.9	4.4
31	*2.7	-	2.4	1.5	-	a5.5	-	49	-	7.4	5.2	-

Month	Second-feet-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	68.7	2.7	1.9	2.22	136
November	73.1	3.4	1.7	2.44	145
December	70.5	2.7	1.5	2.27	140
Calendar year 1942	2,927.9	86	1.5	8.02	5,810
January	63.9	2.5	1.5	2.06	127
February	55.2	2.3	1.7	1.97	109
March	86.9	5.5	2.0	2.80	172
April	2,576.1	159	6.9	85.9	5,110
May	2,286	126	47	73.7	4,530
June	1,038	62	20	34.6	2,060
July	366.2	18	7.4	11.8	726
August	202.3	14	4.9	6.53	401
September	138.0	6.0	4.0	4.60	274
Water year 1942-43	7,024.9	159	1.5	19.2	13,930

* Winter discharge measurement made on this day.
a No gage-height record (stage-discharge relation affected by ice during part of period); discharge computed on basis of weather records and records for Salt Creek near Geneva and Skinner Creek near Nounan.
Note.- Stage-discharge relation affected by ice Nov. 7-9, Dec. 4-7, 16-23, 26-28, Jan. 2-16, Jan. 28 to Feb. 9, Feb. 22.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Thomas Fork near Raymond, Idaho

Location.- Water-stage recorder, lat. 42°16', long. 111°05', in sec. 28, T. 13 S., R. 46 E., at J. W. Mumford Ranch, 1¼ miles southwest of Raymond. Prior to June 7, 1942, staff gage at same site.

Records available.- May 1942 to September 1943.

Extremes.- 1942: Maximum discharge observed during period May to September, 88 second-feet May 22 (gage height, 4.04 feet); minimum recorded, 1.8 second-feet Sept. 30.
1942-43: Maximum discharge during water year, 359 second-feet Apr. 25 (gage height, 7.68 feet); minimum daily, 1.8 second-feet Oct. 1.

Remarks.- Records fair. Gage read twice daily prior to June 7, 1942. Many diversions above station for irrigation.

Discharge, in second-feet, 1942-43

1942

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								-	41	8.5	10	
2								-	42	8.2	8.8	
3								-	42	9.5	9.5	
4								-	39	9.3	12	
5								-	37	9.3	11	
6								-	30	9.0	11	
7								-	27	9.5	11	6.0
8								-	26	10	10	
9								-	26	10	10	
10								-	26	11	9.8	
11								-	23	12	9.8	
12								-	20	11	10	
13								-	19	12		5.5
14								-	19	13		5.4
15								-	18	13		5.2
16								-	18	14		6.5
17								-	18	14		5.7
18								-	22	14		4.8
19								-	22	14		3.2
20								-	15	15		4.6
21								83	10	14	8.0	4.6
22								86	10	14		4.0
23								77	9.5	13		4.4
24								76	9.5	12		4.0
25								76	9.3	11		4.0
26								76	8.8	11		3.4
27								77	8.5	11		2.2
28								68	8.8	11		2.8
29								68	9.0	10		3.4
30								68	9.0	10		2.1
31								41	-	10		-

Note.- No gage-height record Aug. 13 to Sept. 12; discharge computed on basis of weather records and records for nearby stations.

Discharge, in second-feet, of Thomas Fork Creek near Raymond, Idaho, 1942-43--Continued

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.6	4.6	b4.0	b5.0		6.0	19	328	176	42	24	16
2	2.0	3.8	b3.5	b5.0		6.0	22	333	188	39	24	16
3	2.3	3.8	b3.5	b4.5		6.0	25	340	189	28	22	16
4		4.0	3.5	b4.0		6.3	27	340	183	26	20	16
5	2.5	3.8	3.0			6.6	28	340	169	27	20	16
6		b3.5	3.5			*6.9	29	344	160	27	20	16
7		b3.7	3.7			7.0	30	332	141	27	24	16
8		3.8	4.0			7.0	43	317	134	27	24	16
9	3.0	4.2	4.0	4.0		7.0	61	296	129	27	23	16
10	3.5	b3.5	4.5			7.0	81	276	122	27	22	16
11		b3.5	*b4.6			8.0	102	261	114	27	23	15
12		b3.5	b4.5			8.0	115	251	99	27	22	15
13		b3.5	b4.0			8.0	*142	242	98	24	22	15
14		b3.5	b4.0	4.5		8.0	170	236	102	25	22	16
15		3.7	b4.0		6.0	8.0	200	230	112	25	21	14
16		4.6	b4.0			8.0	224	227	115	26	22	14
17		3.8	b3.9	5.0		7.0	249	223	110	24	22	13
18		4.0	b3.8			7.0	276	215	102	24	22	13
19		4.0	b3.8			7.0	309	204	92	24	22	14
20	4.0	3.8	b3.7			6.0	330	200	85	24	21	14
21		b3.6	b3.6	6.0		6.0	347	198	85	24	20	14
22		b3.0	b3.6	7.0		6.0	353	196	77	24	20	13
23		4.0	b3.5	8.0		6.0	348	188	66	25	20	13
24		4.2	b4.0	8.0		6.0	349	186	64	24	20	12
25		b3.8	b4.0	7.0		7.0	357	184	52	24	20	13
26		b3.5	b4.0	6.0		8.0	356	182	41	24	19	13
27		b4.0	b3.5	*b5.5		9.0	356	170	41	24	18	13
28		b4.0	b4.0	5.4		11	346	168	40	24	17	13
29		b4.0	b4.0	5.3	-	12	337	167	39	24	17	13
30		b4.0	b4.0	5.2	-	14	333	164	39	24	17	13
31	*3.8	-	b4.5	5.1	-	15	-	166	-	24	16	-

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

Note.- No gage-height record Oct. 4-30, Dec. 4-10, Jan. 5 to Apr. 6 (stage-discharge relation affected by ice most of winter period); discharge computed on basis of 2 discharge measurements, weather records, and records for Thomas Fork near Geneva and Salt Creek near Geneva.

Monthly discharge, in second-feet, 1942-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
May 21-31, 1942	796	86	41	72.4	1,580
June	622.4	42	8.5	20.7	1,230
July	353.3	15	8.2	11.4	701
August	274.9	12	-	8.87	545
September	147.8	6	2.1	4.93	293
The period	-	-	-	-	4,350
October 1942	108.7	-	1.6	3.51	216
November	114.7	4.6	3.0	3.82	228
December	120.2	4.6	3	3.88	238
January 1943	157.5	8	-	5.08	312
February	140	-	-	5	278
March	240.8	15	6	7.77	478
April	5,964	357	19	199	11,830
May	7,504	344	164	242	14,880
June	3,164	189	39	105	6,280
July	812	42	24	26.2	1,610
August	646	24	16	20.8	1,280
September	432	16	12	14.4	857
Water year 1942-43	19,403.9	357	1.6	53.2	38,490

Time basis: Mountain war time. 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 4¾ miles northeast of Geneva post office.

Records available.- October 1939 to September 1943.

Extremes.- Maximum discharge during year, 292 second-feet Apr. 24 (gage height, 4.43 feet), from rating curve extended above 120 second-feet; minimum daily, 2.5 second-feet several days during winter period.
1939-43: Maximum discharge, that of Apr. 24, 1943; 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.9	4.2	3.3	3.5	2.7	3.3	14	174	53	23	9.7	5.4
2	3.1	4.6	3.2	3.5	3.0	3.3	17	185	54	22	9.8	5.1
3	3.1	4.2	3.2	3.3	3.0	3.3	20	174	52	22	8.7	5.1
4	3.1	4.2	3.0	3.0	3.0	3.5	24	169	48	21	8.3	5.4
5	3.2	4.0	2.5	2.9	3.0	3.5	26	181	45	20	8.3	4.8
6	3.1	3.2	3.0	2.8	3.0	*3.6	27	144	43	19	8.3	4.8
7	3.1	3.4	3.3	2.8	3.0	a3.6	34	122	42	18	13	4.8
8	3.1	4.0	3.4	2.8	3.0	a3.6	35	109	40	18	11	4.6
9	3.1	4.0	3.5	2.8	2.9	a3.6	41	110	39	18	9.1	4.6
10	3.1	3.0	*3.5	2.8	2.7	a4.0	45	104	38	17	8.0	4.6
11	3.2	3.0	3.5	2.8	2.7	a4.0	49	101	39	16	7.0	4.6
12	3.6	3.0	3.5	2.8	2.7	a4.0	*55	95	38	16	6.8	4.4
13	3.4	3.0	3.5	2.8	2.7	a4.0	83	89	38	16	6.8	4.4
14	3.6	3.0	3.5	3.0	2.7	a4.0	103	87	40	15	6.8	4.4
15	3.6	3.6	3.5	*3.7	2.7	a4.0	118	81	40	15	6.8	4.4
16	3.6	3.8	3.4	3.5	2.7	a4.0	155	79	38	15	7.0	4.4
17	3.6	3.6	3.2	3.0	2.7	a3.6	169	75	36	14	6.8	4.4
18	3.6	4.2	3.0	2.5	3.0	a3.5	185	68	34	14	6.5	4.2
19	3.4	4.4	2.9	a2.5	3.0	a3.5	199	65	32	13	6.8	4.2
20	3.4	3.8	2.8	a3.0	3.0	a3.0	236	59	31	13	6.2	4.4
21	3.4	3.5	2.7	a3.5	3.0	a3.0	233	56	30	13	5.6	4.6
22	3.4	2.8	2.7	a4.0	3.2	a3.0	196	57	29	14	5.4	4.4
23	3.4	3.8	2.7	a4.0	3.4	a3.2	208	58	29	13	5.4	4.4
24	3.4	4.0	3.0	a4.0	3.2	a3.4	251	56	28	12	5.4	4.2
25	3.4	3.3	3.0	a3.0	3.0	a4.0	236	55	27	12	4.8	4.2
26	3.4	2.5	3.0	3.3	3.0	a5.0	230	54	26	11	5.1	4.2
27	3.4	3.0	2.5	3.5	3.0	a6.0	184	52	25	10	5.1	4.4
28	3.6	3.5	3.0	*3.6	3.0	a7.0	158	50	25	10	4.8	4.4
29	3.2	3.5	3.2	3.5	-	a8.0	162	48	25	9.1	5.1	4.8
30	3.4	*3.6	3.2	3.2	-	a10	179	47	24	8.7	4.6	4.6
31	*3.4	-	3.5	2.5	-	a12	-	48	-	8.7	5.4	

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	103.3	3.6	2.9	3.33	205
November	107.7	4.6	2.5	3.59	214
December	97.2	3.5	3.0	3.14	193
Calendar year 1942	4,552.8	71	2.5	12.5	9,040
January	97.9	4.0	2.5	3.16	194
February	82.0	3.4	2.7	2.93	163
March	137.5	12	3.0	4.44	273
April	3,672	251	14	122	7,280
May	2,854	185	47	92.1	5,660
June	1,088	54	24	36.3	2,160
July	466.5	23	8.7	15.0	926
August	217.4	13	4.6	7.01	431
September	137.2	5.4	4.2	4.57	272
Water year 1942-43	9,060.7	251	2.5	24.8	17,970

* Winter discharge measurement made on this day.
a No gage-height record (stage-discharge relation affected by ice during most of period); discharge computed on basis of weather records and records for Thomas Fork near Geneva and Skinner Creek near Wounan.
Note.- Stage-discharge relation affected by ice Oct. 29, Nov. 6, 10-14, 21, 22, Nov. 25 to Dec. 15, Dec. 17 to Jan. 18, Jan. 26 to Mar. 6.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

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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 September 1943.

Extremes.- Maximum discharge during year, 136 second-feet Apr. 24 (gage height, 3.35 feet), from rating curve extended above 70 second-feet; minimum daily, 2.0 second-feet Jan. 19, 31.
1939-43: Maximum discharge, that of Apr. 24, 1943; 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 or no gage-height record, which are fair. One diversion from tributary about 2 miles above station for irrigation. Many diversions below station for irrigation.

Cooperation.- Water-stage recorder inspected by employee of local irrigation association.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.2	4.9	a4.5	5.1	4.5	b4.0	13	a96	61	32	17	10
2	4.2	6.6	a4.5	b5.0	4.5	b4.0	15	92	a68	31	17	10
3	4.2	5.8	a4.5	b4.5	4.5	b4.0	18	91	a62	31	17	10
4	4.2	5.6	a4.0	b2.5	a4.5	5.6	20	94	a62	31	16	11
5	4.2	5.3	a3.6	b4.9	a4.5	5.8	23	91	a58	29	16	10
6	4.2	4.9	4.0	4.9	a4.5	6.0	24	86	53	29	16	a9.6
7	4.4	4.7	4.2	4.5	4.5	5.4	28	82	49	28	22	a9.4
8	4.4	4.9	4.5	4.0	4.2	a5.0	30	75	47	27	19	a9.3
9	4.4	a4.5	4.7	b3.7	4.2	a5.0	35	70	46	26	15	a9.2
10	4.5	a4.0	*5.1	b3.5	4.0	a5.0	41	68	45	26	15	a9.0
11	4.5	a4.0	5.6	b3.1	4.2	a5.0	46	a62	45	25	14	a9.0
12	a4.5	a4.0	5.4	b3.0	4.0	a5.0	46	a58	45	24	13	8.8
13	4.5	a4.0	4.9	b2.2	*b4.0	a5.0	52	a58	46	23	12	8.8
14	4.5	a4.0	4.7	b3.0	b4.0	a5.0	64	a54	48	23	12	8.8
15	4.6	5.3	4.6	b4.0	b4.0	a5.0	77	a52	50	23	13	8.8
16	4.5	4.9	5.1	b4.4	b3.7	a3.2	86	a54	48	23	13	8.8
17	4.5	5.1	5.1	b4.3	b3.5	a2.5	108	a54	45	22	12	8.8
18	4.5	5.6	4.9	a3.0	b4.0	a2.5	110	52	44	21	12	9.0
19	4.5	5.6	5.4	a2.0	b4.0	a2.5	109	50	43	21	12	9.0
20	4.5	5.3	5.1	a3.0	b4.5	a2.4	117	48	41	a21	11	9.0
21	4.5	3.9	5.4	a5.0	b5.0	a2.7	117	47	41	a31	11	9.0
22	4.5	4.5	5.4	a6.0	a5.0	a4.2	114	46	41	a26	11	9.0
23	4.5	4.9	5.3	a5.4	a5.0	a4.5	113	45	39	a23	a11	8.8
24	4.5	5.1	5.3	4.9	a4.5	a5.0	122	46	39	a21	a11	8.8
25	4.5	5.1	4.9	4.4	a4.0	a5.6	114	46	38	a21	a11	8.8
26	4.5	4.7	b4.0	4.5	a3.8	a6.4	a110	47	36	19	a10	a8.8
27	4.5	5.1	b4.5	4.7	a3.5	*7.4	a105	47	34	a19	a10	a8.8
28	4.4	5.3	b5.0	*4.9	a3.5	8.5	a100	49	34	a18	a10	a8.8
29	4.2	5.3	5.1	4.7	-	10	a94	50	34	a18	10	a8.8
30	4.4	a5.3	4.9	b4.5	-	12	a94	51	33	a17	9.8	a8.8
31	*4.4	-	5.3	b2.0	-	11	-	54	-	a17	11	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	136.8	4.5	4.2	4.41	271
November	148.2	6.6	3.9	4.94	294
December	149.4	5.6	3.6	4.82	296
Calendar year 1942	3,221.9	42	-	e.84	6,400
January	125.6	6.0	2.0	4.05	249
February	118.1	5.0	3.5	4.22	234
March	165.2	12	2.5	5.33	328
April	2,145	117	13	71.5	4,250
May	1,915	96	45	61.8	3,800
June	1,375	68	33	45.8	2,730
July	746	32	17	24.1	1,480
August	409.8	22	9.8	13.2	813
September	274.7	11	8.8	9.16	545
Water year 1942-43	7,706.8	117	2.0	21.1	16,290

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of weather records and records for stations at irrigators weir near Montpelier and Skinner Creek at Nounan.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Bloomington Creek near Bloomington, Idaho

Location.- Water-stage recorder, lat. 42°11' long. 111°27' in SE¼ sec. 20, T. 14 S., R. 43 E., 2.1 miles west of Bloomington.
Records available.- April to September 1943.
Extremes.- Maximum discharge during period, 184 second-feet June 2 (gage height, 2.67 feet), from rating curve extended above 90 second-feet; minimum daily, 23 second-feet Apr. 1.
Remarks.- Records good. No diversion above station. Many diversions below station for irrigation.

Discharge, in second-feet, April to September 1943

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	23	100	166	73	a38	30	16	44	74	84	50	34	27
2	24	118	157	71	a38	30	17	48	66	82	50	34	27
3	26	124	121	69	a37	30	18	51	62	82	47	33	27
4	27	138	106	69	a36	30	19	52	61	85	46	33	27
5	26	131	95	68	36	30	20	55	66	87	45	33	27
6	28	105	90	67	36	29	21	62	76	86	49	33	27
7	29	86	85	68	38	29	22	66	82	85	48	33	27
8	28	79	85	66	37	28	23	68	95	83	46	33	27
9	32	76	86	64	38	28	24	86	108	83	43	32	26
10	32	82	90	61	37	28	25	91	112	81	43	32	26
11	32	88	94	69	37	28	26	94	113	79	43	32	26
12	32	88	91	56	37	28	27	71	114	77	42	31	25
13	34	86	92	51	34	27	28	69	121	75	41	31	25
14	38	90	94	50	34	27	29	77	118	72	40	31	24
15	43	84	94	50	34	27	30	76	121	71	a39	30	24
							31	-	135	-	a39	30	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
April	1,464	94	23	48.8	2,900
May	2,999	138	61	96.7	5,950
June	2,758	166	71	91.9	5,470
July	1,652	73	39	53.3	3,280
August	1,062	38	30	34.3	2,110
September	821	30	24	27.4	1,630
The period	-	-	-	-	21,340

a No gage-height record; discharge interpolated.

Mill Creek near Liberty, Idaho

Location.- Water-stage recorder, lat. 42°20', long. 111°29', in SE¼ sec. 36, T. 12 S., R. 42 E., 2 miles northwest of Liberty and 3½ miles upstream from North Creek.
Records available.- April to September 1943.
Extremes.- Maximum discharge during period, 144 second-feet June 1 (gage height, 2.98 feet), from rating curve extended above 70 second-feet; minimum daily, 4.6 second-feet Sept. 26.
Remarks.- Records good. One diversion above station for irrigation.

Discharge, in second-feet, April to September 1943

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	-	76	115	22	8.2	7.8	16	-	46	a45	11	7.2	7.0
2	-	78	90	21	7.8	8.6	17	-	42	a37	11	7.2	7.5
3	-	78	70	20	7.8	8.6	18	-	41	a41	11	7.5	7.8
4	-	87	63	20	7.5	8.9	19	-	38	a41	11	7.5	8.2
5	-	92	54	16	7.5	8.6	20	-	38	a37	11	7.2	8.2
6	-	77	52	18	7.5	7.2	21	-	40	a37	11	7.2	7.8
7	-	64	51	17	9.2	6.2	22	-	46	a34	11	6.8	7.2
8	-	59	50	16	10	6.5	23	-	59	a34	10	7.0	5.2
9	-	53	52	16	10	7.0	24	87	71	a31	10	7.0	5.0
10	-	52	55	16	10	7.0	25	84	80	a28	9.6	6.8	6.0
11	-	53	56	16	10	6.2	26	78	87	a26	9.6	6.8	4.6
12	-	a52	a52	15	10	6.5	27	68	92	a26	9.2	6.8	4.8
13	-	50	a52	13	10	6.5	28	70	86	a24	9.2	6.5	5.0
14	-	51	a52	12	7.5	6.5	29	68	91	a24	9.2	6.5	4.8
15	-	50	a50	12	7.5	6.5	30	68	92	23	8.6	6.8	4.8
							31	-	97	-	8.6	7.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
April 24-30	523	87	68	74.7	1,040
May	2,018	97	38	65.1	4,000
June	1,402	115	23	46.7	2,780
July	411.0	22	8.6	13.3	815
August	242.8	10	6.5	7.83	482
September	201.5	8.9	4.6	6.72	400
The period	-	-	-	-	9,520

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

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

North Creek near Liberty, Idaho

Location.- Water-stage recorder, lat. 42°24', long. 111°31', in SE¼ sec. 11, T. 12 S., R. 42 E., 3⅞ miles upstream from Emigration Creek and 6 miles northwest of Liberty.
Records available.- May to September 1943.
Extremes.- Maximum discharge during period, 47 second-feet May 4 (gage height, 1.81 feet); minimum daily, 1.4 second-feet Sept. 18, 23-26.
Remarks.- Records good. No diversion above station.

Discharge, in second-feet, May to September 1943

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1	30	37	8.5	2.9	1.6	16	20	15	5.0	2.2	1.5
2	30	32	8.0	3.1	1.6	17	18	14	4.4	2.2	1.5
3	30	28	8.0	2.9	1.6	18	16	15	4.4	2.2	1.4
4	39	24	7.5	2.7	1.6	19	15	15	4.2	2.2	1.5
5	35	22	7.2	2.7	1.5	20	15	14	4.0	2.0	1.5
6	27	20	6.9	2.7	1.5	21	17	13	4.2	2.0	1.5
7	22	20	6.6	2.9	1.5	22	19	12	4.2	2.0	1.5
8	18	19	6.3	2.7	1.5	23	24	12	3.8	1.9	1.4
9	17	19	6.3	2.5	1.5	24	28	11	3.6	1.9	1.4
10	18	19	6.3	2.3	1.5	25	28	10	3.6	1.9	1.4
11	18	18	6.0	2.3	1.5	26	30	9.9	3.4	1.8	1.4
12	19	18	5.6	2.3	1.5	27	32	9.9	3.4	1.8	1.6
13	21	18	5.3	2.2	1.5	28	33	9.4	3.4	1.8	1.5
14	22	18	5.3	2.2	1.5	29	33	9.4	3.4	1.8	1.5
15	21	18	5.3	2.2	1.5	30	33	9.9	3.4	1.8	1.5
						31	33	-	3.1	1.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
May	761	39	15	24.5	1,510
June	508.5	37	8.9	17.0	1,010
July	160.6	8.5	3.1	5.18	319
August	69.9	3.1	1.8	2.25	139
September	45.0	1.6	1.4	1.50	89
The period	-	-	-	-	3,070

Emigration Creek near Liberty, Idaho

Location.- Staff gage, lat. 42°22', long. 111°29', in SW¼ sec. 19, T. 12 S., R. 43 E., half a mile upstream from mouth and 3⅞ miles northwest of Liberty.
Records available.- April to September 1943.
Extremes.- Maximum discharge observed during period, 50 second-feet May 4 (gage height, 1.84 feet); minimum daily, 0.9 second-foot Aug. 30, Sept. 2-27.
Remarks.- Records fair. Staff gage read twice daily.

Discharge, in second-feet, April to September 1943

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	-	38	23	3.7	2.3	1.0	16	-	17	11	2.7	1.5	0.9
2	-	34	20	3.4	2.0	.9	17	†38	16	10	2.7	1.5	.9
3	-	33	20	3.4	2.0	.9	18	-	14	8.5	2.5	1.2	.9
4	-	42	15	3.0	2.0	.9	19	-	12	8.2	2.5	1.2	.9
5	-	33	16	2.5	1.9	.9	20	-	11	7.2	2.5	1.2	.9
6	-	35	15	2.8	1.9	.9	21	-	11	5.8	3.0	1.2	.9
7	-	27	14	3.1	2.0	.9	22	-	11	4.7	3.1	1.2	.9
8	-	24	13	3.0	2.1	.9	23	-	12	3.7	2.7	1.4	.9
9	-	22	12	2.7	2.0	.9	24	-	12	3.8	2.5	1.2	.9
10	-	20	12	2.5	1.9	.9	25	-	12	3.2	2.5	1.1	.9
11	-	20	12	2.4	1.9	.9	26	-	12	3.5	2.4	1.1	.9
12	-	20	11	2.8	1.8	.9	27	-	12	3.4	2.4	1.0	.9
13	-	18	12	2.8	1.4	.9	28	-	13	3.4	2.5	1.0	1.4
14	-	17	13	2.8	1.4	.9	29	†26	13	3.5	2.4	1.0	1.2
15	-	18	17	2.8	1.4	.9	30	34	14	3.4	2.3	.9	1.0
							31	-	16	-	2.3	1.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
April	-	-	-	-	-
May	609	42	11	19.6	1,210
June	308.3	23	3.2	10.3	612
July	84.7	3.7	2.3	2.73	168
August	46.7	2.3	.9	1.51	93
September	28.0	1.4	.9	.93	56
The period	-	-	-	-	2,140

† Result of discharge measurement.
Note.- Results of discharge measurements: Jan. 13, 1943, 1.0 second-feet; Feb. 18, 1.8 second-feet.

Time basis: Mountain war time. 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 1943. 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, 1.85 feet); minimum; 19 second-feet many days in March.
1939-43: Maximum discharge, that of June 15, 1943; 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	24	22	21	20	20	21	38	48	45	38	34
2	24	24	22	21	20	20	22	40	49	45	38	34
3	24	24	22	21	20	20	22	43	47	44	37	34
4	23	24	22	21	20	20	22	47	48	43	37	34
5	24	23	22	21	20	20	22	49	49	44	36	34
6	24	23	22	21	20	19	22	48	49	44	36	34
7	24	23	22	21	20	20	22	46	48	44	36	34
8	24	23	22	21	20	20	23	45	48	44	36	34
9	24	23	22	21	20	20	22	44	47	44	36	34
10	24	22	22	21	20	20	23	43	48	42	36	34
11	24	22	22	21	20	20	23	42	50	42	36	34
12	24	22	22	21	20	20	22	40	50	42	36	34
13	24	22	21	21	20	20	23	40	50	42	34	a34
14	24	22	21	21	20	20	23	38	50	42	34	a34
15	24	23	21	21	20	20	24	39	51	42	34	a34
16	24	23	21	21	20	20	24	40	50	42	34	a34
17	24	23	21	21	20	19	25	40	50	42	34	34
18	24	23	21	a21	20	19	26	40	50	42	34	34
19	25	22	21	a21	20	19	26	40	48	41	34	34
20	24	22	21	a21	20	19	28	40	47	40	34	34
21	24	22	21	a21	20	19	29	40	47	42	34	34
22	24	22	22	a21	20	19	30	41	47	43	34	34
23	24	22	22	a21	20	19	32	42	47	42	34	34
24	24	22	22	21	20	20	34	42	46	40	34	34
25	24	22	22	21	20	20	36	43	46	40	34	34
26	24	22	22	21	20	20	36	44	45	a40	34	34
27	24	22	21	21	20	20	36	44	45	a40	34	34
28	24	22	21	21	20	20	36	46	46	40	34	34
29	24	22	21	20	-	20	36	48	45	39	34	34
30	23	22	21	20	-	20	37	48	45	38	34	34
31	23	-	21	20	-	20	-	47	-	38	34	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	742	25	23	23.9	1,470
November	677	24	22	22.6	1,340
December	668	22	21	21.5	1,320
Calendar year 1942	8,774	34	19	24.0	17,390
January	646	21	20	20.9	1,290
February	560	20	20	20.0	1,110
March	612	20	19	19.7	1,210
April	807	37	21	26.9	1,600
May	1,327	49	38	42.8	2,630
June	1,436	51	45	47.9	2,850
July	1,298	45	38	41.9	2,570
August	1,084	38	34	35.0	2,150
September	1,020	34	34	34.0	2,020
Water year 1942-43	10,979	51	19	29.8	21,660

a No gage-height record; discharge interpolated.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Stauffer Creek near Nounan, Idaho

Location.- Water-stage recorder, lat. 42°28', long. 111°25', in N½ 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 2½ miles west of Georgetown. Prior to Dec. 11, 1942 at site 100 feet downstream at different datum.

Records available.- November 1939 to September 1943.

Extremes.- Maximum discharge during year, 133 second-feet May 5 (gage height, 2.85 feet); minimum daily, 1.8 second-feet Oct. 1-6.
1939-43: Maximum discharge, 186 second-feet May 28, 1941, from rating curve extended above 50 second-feet; July 13, 1941.

Remarks.- Records fair. Many diversions above station for irrigation. No diversion 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. In December 1942 a straight drain channel was dug from check dam to mouth and since that time station has been located on the new channel.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	*3.5					50	80	80	16	2.7	2.9
2	1.8	3.9					70	86	76	14	3.5	3.1
3	1.8	3.7					80	85	74	12	3.8	2.9
4	1.8	4.2					90	97	72	13	3.8	2.9
5	1.8	4.2	5				100	119	71	10	3.3	2.9
6	1.8	3.9					h83	102	h71	8.6	3.3	2.9
7	2.0	4.4					h82	88	64	7.9	3.1	2.9
8	2.2	4.6					h74	82	58	7.9	4.7	3.3
9	2.2	4.2					h80	72	53	8.2	3.5	3.3
10	2.4	3.3					h83	70	48	8.2	3.5	3.3
11	2.5	2.7		6			h88	65	50	8.2	3.1	3.1
12	2.7	2.7	(*)			7	*h76	61	50	8.2	2.9	3.1
13	2.9	2.9					h81	60	49	6.5	2.9	3.3
14	3.1	3.5					93	59	60	5.0	2.9	3.1
15	2.9	3.5			7		92	56	71	4.1	2.9	2.9
16	2.7	3.3					92	58	73	5.0	2.9	2.9
17	2.7	3.5					94	58	57	5.3	2.9	2.5
18	2.7	3.5					95	58	51	4.7	3.1	2.5
19	2.7	3.5					98	54	47	4.4	3.3	2.5
20	2.7	3.5	6				98	50	43	3.5	3.3	2.7
21	2.7	2.0					97	49	41	4.1	3.3	2.9
22	2.9	3.0					97	50	35	5.3	3.1	2.9
23	3.1	3.5					90	51	29	5.9	4.1	2.9
24	3.1	4.0				8	89	52	26	5.9	3.5	2.9
25	2.7	5.0				9	94	52	26	5.0	3.3	2.9
26	2.7	5.0		7		10	100	52	24	4.1	3.1	2.9
27	2.7	5.0				12	89	52	20	4.1	3.1	2.9
28	2.9	4.6				15	82	52	20	3.5	2.9	3.1
29	2.7	4.8		(*)	-	20	86	58	19	3.1	2.7	2.9
30	*2.7	4.8			-	30	80	h64	18	3.1	2.5	2.9
31	3.1	-			-	40	-	70	-	2.7	2.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	78.5	3.1	1.8	2.53	156
November	114.2	5.0	2.0	3.81	227
December	178	-	-	5.7	353
Calendar year 1942	3,762.2	110	.2	10.3	7,460
January	197	-	-	6.4	391
February	198	-	-	7.0	389
March	305	40	-	9.8	605
April	2,603	100	50	86.8	5,160
May	2,062	119	49	66.5	4,090
June	1,476	80	18	49.2	2,930
July	207.5	16	2.7	6.69	412
August	99.7	4.7	2.5	3.22	198
September	88.2	3.3	2.5	2.94	175
Water year 1942-43	7,605.1	119	1.8	20.8	15,090

* Winter discharge measurement made on this day.
h Computed from staff-gage reading.
Note.- No gage-height record Dec. 12 to Apr. 6, May 24-29, May 31 to June 5, June 7, Sept. 22-25 (stage-discharge relation affected by ice during part of winter period); discharge computed on basis of weather records and records for Skinner Creek near Nounan and North Creek near Liberty. Stage-discharge relation affected by ice, Nov. 18-22, 24-26, Dec. 1-11.
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 SW¼ 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 September 1943.

Extremes.- Maximum discharge observed during year, 50 second-feet May 4 (gage height, 1.92 feet, from rating curve extended above 25 second-feet); minimum observed, 0.3 second-foot Aug. 20, Sept. 15, 16.
1939-43: Maximum discharge observed, that of May 4, 1943; no flow July 19, 20, 1942.

Remarks.- Records fair. Gage read twice daily. One small diversion for irrigation about half a mile above station; many below. Diversion for Minnig Mill a third of a mile above station is returned to creek above station. 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 2½ miles above station to augment low-water supply for Minnig Mill. No such diversion during water year 1943.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a1.4	1.9	1.8	1.8	b1.2	b1.6	4.7	36	33	9.2	1.6	1.5
2	a1.4	1.8	1.8	1.8	b1.4	b1.6	5.4	34	30	8.4	3.0	1.7
3	a1.4	1.6	b1.5	1.6	1.6	b1.6	5.8	29	27	8.1	2.9	1.5
4	1.5	1.6	b1.3	b1.5	1.6	b1.8	6.3	46	28	7.3	2.9	1.5
5	1.0	1.6	b1.2	b1.4	1.6	b1.8	6.6	30	28	8.1	2.9	1.3
6	.6	b1.5	b1.4	b1.3	1.4	b1.8	8.4	29	26	8.1	3.2	.6
7	.6	1.6	b1.6	b1.2	1.6	1.8	8.4	26	24	8.7	3.2	1.2
8	.6	1.7	b1.8	b1.2	1.6	1.8	9.1	24	22	8.1	3.2	1.7
9	.6	1.6	1.8	b1.2	1.6	1.8	9.5	25	21	7.8	2.9	1.6
10	.6	b1.5	1.8	b1.2	1.8	1.8	9.5	24	22	8.3	a2.7	1.6
11	.7	b1.4	1.8	b.12	1.6	1.8	9.8	24	22	6.5	a2.5	2.0
12	.7	b1.4	*1.8	b1.2	1.6	1.7	*7.9	22	19	6.5	a2.4	2.4
13	2.1	b1.4	1.8	b1.2	1.6	1.8	13	21	17	6.1	a2.4	.6
14	1.8	1.6	1.8	b1.4	1.6	1.8	14	20	19	5.8	2.4	.4
15	1.7	1.8	1.7	1.6	1.4	1.8	9.1	20	24	5.8	2.5	.3
16	1.7	1.6	1.6	1.6	b1.3	b1.8	18	20	21	5.2	2.5	.3
17	1.7	1.8	1.6	b1.6	b1.2	b1.8	20	18	19	3.9	2.2	1.8
18	1.7	2.2	2.0	b1.2	1.6	1.8	19	16	19	4.3	2.4	1.8
19	1.6	2.0	2.0	b1.0	1.8	b1.6	23	16	16	4.7	2.4	1.7
20	1.6	2.0	2.0	b1.2	1.8	b1.6	24	16	16	3.9	.3	1.6
21	1.6	b1.6	1.6	b1.5	2.0	b1.6	23	19	16	4.7	2.0	1.5
22	1.6	b1.4	1.6	2.0	2.0	1.8	25	20	16	3.9	1.7	1.6
23	1.7	1.8	1.6	1.8	2.0	1.8	29	23	16	4.3	1.5	1.7
24	1.5	2.3	1.6	1.6	2.0	1.8	33	23	15	4.3	1.7	1.6
25	1.5	b1.6	1.8	b1.4	b1.8	2.0	35	22	15	2.9	2.2	1.6
26	1.5	b1.3	b1.7	b1.6	b1.6	2.2	26	20	12	3.2	2.0	1.6
27	1.5	2.2	b1.3	1.6	b1.5	3.2	21	22	12	3.8	a1.7	2.1
28	1.5	1.8	b1.6	1.8	b1.5	3.8	29	20	12	3.4	1.5	2.0
29	b1.4	1.8	1.8	*1.6	-	4.1	27	22	12	3.2	a1.5	1.8
30	*1.5	1.8	1.6	1.6	-	5.2	32	25	9.9	3.0	a1.5	1.6
31	1.4	-	1.8	b1.3	-	4.1	-	27	-	2.9	1.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	41.7	2.1	0.6	1.35	83
November	51.2	2.3	1.3	1.71	102
December	52.1	2.0	1.2	1.68	103
Calendar year 1942	1,320.5	18	0	3.62	2,620
January	45.1	2.0	1.2	1.45	89
February	45.5	2.0	1.2	1.62	90
March	66.5	5.2	1.6	2.15	132
April	511.5	35	4.7	17.0	1,010
May	741	46	16	23.9	1,470
June	568.9	33	9.9	19.6	1,170
July	172.4	9.2	2.9	5.56	342
August	69.3	3.2	.3	2.24	137
September	44.2	2.4	.3	1.47	88
Water year 1942-43	2,429.4	46	.3	6.66	4,820

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for Stauffer Creek near Nounan.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Cottonwood Creek near Swan Lake, Idaho

Location.- Water-stage recorder, lat. 42°23', long. 111°55', in SW¼ sec. 16, T. 12 S., R. 39 E., 1 mile downstream from Treasureton Canal head gate, 6⅝ miles northeast of Swan Lake and 11⅛ miles upstream from mouth.

Records available.- March 1939 to October 1943.

Extremes.- Maximum and minimum discharges for the water years 1939 to 1943 are contained in the following table:

Water year	Maximum			Minimum daily	
	Date	Discharge (sec.-ft.)	Gage height (feet)	Date	Discharge (sec.-ft.)
1939*	Apr. 2	192	2.36	Aug. 18	0.2
1939-40	Mar. 27	156	2.17	Aug. 17, 18	No flow
1940-41	Apr. 29	170	2.25	Aug. 4, 5	.9
1941-42	Apr. 11	†305	2.86	Sept. 8, 9	.6
1942-43	Apr. 6	†379	3.15	Aug. 30	.7

* Mar. 24 to Sept. 30.
† From rating curve extended above 180 second-feet.

Remarks.- Records for water year 1943 good except those for periods of no gage-height record, which are poor. Treasureton Canal is only diversion above station except some small diversions on meadow land in Cottonwood Valley.

Cooperation.- Gage-height record and seven discharge measurements for period October 1942 to June 1943 furnished by Bureau of Reclamation. Records for March 1939 to September 1942 collected and computed by Bureau of Reclamation and reviewed by Geological Survey.

Discharge, in second-feet, 1939-43

1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	134	77	4.5	4.5	2.5	0.3
2						-	141	70	6.0	4.9	2.5	.3
3						-	136	65	7.4	4.7	2.4	.3
4						-	139	63	6.7	4.7	2.2	.4
5						-	127	58	6.2	5.1	2.2	.5
6						-	110	50	7.6	5.1	2.4	.5
7						-	104	42	7.4	4.9	2.0	1.2
8						-	100	33	6.7	4.7	1.2	.8
9						-	96	28	8.7	4.2	1.4	.6
10						-	85	27	7.1	3.6	1.4	.5
11						-	76	31	6.2	3.8	1.4	.6
12						-	82	27	5.8	3.6	1.4	2.0
13						-	93	24	5.5	3.6	1.2	1.7
14						-	104	22	6.0	3.4	.8	1.5
15						-	108	19	6.2	3.4	.6	1.2
16						-	98	17	7.4	3.1	.6	.9
17						-	86	16	9.3	2.8	.6	.8
18						-	88	15	11	2.8	.2	.7
19						-	95	14	9.3	2.4	.3	.7
20						-	96	14	7.6	2.0	.3	.7
21						-	98	13	6.9	1.5	.4	.7
22						-	96	14	6.0	1.4	.4	.8
23						-	96	14	5.8	1.4	.3	.9
24						66	136	12	5.3	1.4	.3	.8
25						83	99	11	5.1	1.5	.5	1.5
26						86	86	11	4.7	1.6	.4	1.2
27						88	85	10	4.5	2.7	.6	1.1
28						90	72	9.3	4.3	2.7	.5	2.8
29						92	76	8.2	4.0	3.1	.5	5.5
30						102	86	6.7	4.0	3.8	.3	5.5
31						130	-	6.2	-	2.7	.3	-

Discharge, in second-feet, of Cottonwood Creek near Swan Lake, Idaho, 1939-43--Continued

1939-40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.5	6.2	6.5			a8.7	65	32	7.6	2.0	0.3	0.1
2	7.6	6.2	6.5			a8.9	60	32	6.2	2.4	.2	.2
3	6.7	6.5	6.8		a6.9	a9.1	47	35	5.1	1.6	.2	.2
4	6.5	6.2	7.3			a9.3	42	36	4.6	1.4	.2	.5
5	6.5	6.2	8.6	a7.2		a9.5	52	30	7.9	1.7	.2	.8
6	6.2	6.2	9.0			a9.7	45	26	5.4	1.4	.2	3.2
7	6.8	3.9	6.5			a9.9	42	23	5.9	1.4	.3	3.0
8	6.5	1.5	*6.5			a10	45	20	6.5	1.3	.3	3.4
9	6.2	1.4	6.5			a10	55	16	6.5	1.1	.3	3.2
10	6.2	1.5	6.2			a10	48	14	5.4	1.0	.3	3.4
11	6.2	2.0	5.9		a6.8	*11	42	11	5.1	.9	.3	3.2
12	6.2	2.0	4.4			15	42	13	4.4	.9	.4	3.9
13	6.5	1.9	5.1			15	53	19	4.3	1.1	.3	5.9
14	6.2	1.7	6.2	a7.1		13	63	11	2.6	1.0	.2	4.8
15	6.2	1.6	6.5			9.6	82	5.9	2.3	.6	.1	3.9
16	6.2	1.6	6.5			11	74	5.9	2.0	.7	.1	3.7
17	6.2	1.9	6.2			14	66	5.6	1.6	.8	0	3.7
18	6.2	2.3	7.9		a6.7	16	74	6.2	1.5	1.2	0	5.1
19	6.2	2.4	a7.7			18	86	6.2	1.4	2.0	.1	11
20	6.2	2.3	a7.5		(*)	20	96	5.4	1.3	1.9	.1	6.8
21	6.2	2.4	a7.3		a6.9	24	88	5.1	1.1	1.3	.1	5.6
22	6.2	2.6	*a7.3		a7.1	30	77	7.0	.9	.7	.1	5.1
23	6.2	3.7	a7.3		a7.3	37	80	9.0	.7	.6	.1	4.6
24	6.2	7.9	a7.3	a7.0	a7.5	43	85	5.6	.7	.6	.1	4.6
25	6.2	7.6	a7.2		a7.7	46	82	5.4	.6	.6	.1	4.6
26	6.2	7.9	a7.2		a7.9	54	77	6.8	.6	.6	.2	4.8
27	6.2	6.5	a7.2		a8.1	105	68	5.4	.6	.6	.2	4.8
28	6.5	7.3	a7.2		a8.3	55	60	6.2	1.0	.5	.2	6.5
29	6.5	8.6	a7.2		a8.5	43	50	7.9	1.1	.4	.2	8.6
30	6.5	6.2	a7.2	*a6.9	-	50	36	7.9	1.2	.4	.2	6.2
31	6.2	-	a7.2	a6.9	-	60	-	8.3	-	.3	.2	-

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of 3 discharge measurements.

1940-41

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.5	4.6	4.8	7.6	12	10	31	142	9.0	5.1	3.0	7.0
2	6.5	4.6	4.6	10	13	12	32	147	4.8	3.9	3.0	6.8
3	9.3	5.4	4.4	13	14	10	38	151	4.4	3.9	1.6	4.4
4	7.0	4.8	4.1	14	16	9.3	53	152	4.6	3.7	.9	4.1
5	6.5	4.4	3.9	10	16	8.6	66	136	4.3	3.9	.9	1.4
6	5.9	4.4	3.9	8.3	16	7.3	55	127	3.9	3.7	1.0	1.9
7	5.9	4.8	3.7	8.3	15	7.0	54	116	4.6	3.4	1.0	3.5
8	5.9	4.8	3.9	7.0	11	7.0	55	111	4.4	1.3	1.4	3.0
9	6.2	4.4	3.7	6.5	9.3	6.8	68	125	4.1	1.2	2.6	3.0
10	5.9	4.1	4.8	6.5	8.3	7.9	83	124	3.5	1.1	3.4	2.9
11	5.9	4.1	5.9	7.0	8.3	6.5	74	127	3.5	1.3	3.4	2.6
12	4.4	4.1	5.1	6.8	8.3	9.3	75	125	4.6	1.5	2.0	2.3
13	2.0	4.4	4.8	6.8	7.6	6.5	81	114	7.0	1.4	1.7	2.3
14	3.0	4.3	6.2	6.8	7.0	7.6	72	114	5.4	2.7	1.3	2.4
15	3.9	4.1	7.6	6.5	9.0	7.6	77	93	4.8	4.4	1.3	2.4
16	4.3	4.1	9.6	5.9	6.5	6.8	75	95	3.5	4.3	1.2	2.4
17	4.3	4.1	10	5.6	10	7.9	69	83	3.0	4.1	11	2.3
18	4.3	3.7	10	5.6	6.5	10	60	72	2.9	3.9	3.4	3.0
19	4.4	3.7	7.6	6.2	6.5	11	57	43	2.9	5.6	3.5	3.2
20	4.4	4.1	6.2	6.2	7.3	12	58	24	3.7	5.4	1.4	2.6
21	4.6	3.7	5.4	5.6	7.3	11	65	19	14	4.4	4.8	2.6
22	4.6	3.7	4.8	5.6	7.3	13	81	14	9.6	4.3	12	2.6
23	4.6	4.8	5.1	5.6	7.3	13	99	13	2.9	4.4	11	4.8
24	4.6	5.1	5.4	6.2	8.3	10	116	13	2.9	4.4	9.3	3.4
25	4.8	4.3	5.4	5.6	10	10	130	18	3.0	5.1	9.6	2.9
26	5.6	4.8	5.6	6.2	11	11	130	20	3.0	5.1	9.3	2.6
27	5.6	4.8	6.2	6.8	11	13	129	28	3.0	5.1	8.3	3.9
28	5.1	4.4	6.8	8.3	9.0	16	127	23	3.0	4.6	7.6	2.9
29	4.8	4.6	6.5	9.6	-	20	141	16	3.9	3.4	7.0	2.6
30	4.8	4.8	5.9	10	-	27	147	14	6.5	2.7	7.6	2.4
31	4.6	-	5.6	11	-	28	-	13	-	2.7	7.6	-

Discharge, in second-feet, of Cottonwood Creek near Swan Lake, Idaho, 1939-43--Continued

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.2	2.7					a63	51	13	7.8	2.6	0.9
2	9.3	3.8					a76	44	12	7.3	2.3	.8
3	9.0	3.6					a86	42	10	6.6	1.6	.8
4	8.3	5.6					90	43	9.2	6.3	1.6	.8
5	8.3	5.1					93	44	8.9	6.8	1.5	.7
6	9.0	10.	a7.0				111	44	8.2	9.2	1.6	.7
7	9.6	9.0					125	45	7.1	8.6	1.6	.7
8	8.6	8.3					129	55	5.3	8.2	1.6	.6
9	8.3	8.3					149	62	5.5	7.3	1.5	.6
10	7.9	8.3					188	68	4.8	7.1	1.4	.7
11	7.6	7.9					213	66	4.0	7.1	1.4	1.4
12	7.6	7.9	8.6				215	64	3.8	6.6	1.7	7.3
13	7.9	7.9	6.8				206	60	3.6	6.3	1.4	2.0
14	12	7.9	6.8				198	55	3.6	6.0	1.4	1.0
15	9.0	7.9	6.5	a6	a5	a10	169	57	5.0	6.0	1.2	1.1
16	8.3	7.9	6.8				141	66	4.6	4.2	1.1	1.6
17	8.3	8.3	6.8				139	59	3.2	4.2	1.0	1.7
18	7.9	8.3	6.5				125	55	4.6	3.2	1.0	2.0
19	7.9	8.3					122	58	7.1	2.7	1.0	2.4
20	7.9						139	60	7.1	2.6	1.2	2.6
21	7.9						142	66	6.8	2.7	1.0	2.6
22	8.3						149	66	6.0	2.6	1.0	3.2
23	8.3						122	68	5.8	3.0	1.0	3.2
24	7.9						100	59	6.0	2.7	.9	3.4
25	8.3	a6.6	a7.0				86	46	7.6	2.9	1.5	3.6
26	9.6						76	42	12	2.6	1.5	4.0
27	6.2						69	40	11	2.6	1.0	4.2
28	2.9						71	35	9.2	2.6	.9	4.6
29	2.7				-		65	32	8.6	2.2	1.0	4.8
30	2.7				-		58	28	7.6	2.0	1.0	4.0
31	2.7	-			-		-	21	-	2.3	1.0	-

a No gage-height record; discharge estimated.

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.8	2.9				10	95	165	25	7.9	6.8	1.7
2	4.2	2.7				10	144	153	41	7.6	7.6	2.2
3	6.6	2.7				11	168	144	43	7.1	6.8	2.3
4	6.8	2.9		*6		12	186	160	44	7.1	6.6	2.4
5	2.4	2.9				13	177	134	45	7.3	6.6	2.4
6	1.7	2.9				14	218	126	35	9.2	6.3	2.6
7	1.7	2.9				15	220	104	30	8.9	6.6	2.6
8	1.7	7.0				15	204	94	32	8.6	6.6	2.6
9	1.7					16	204	86	18	8.2	8.6	2.6
10	1.7					20	206	82	33	8.2	7.9	2.7
11	1.7				6	20	200	74	32	7.9	7.6	2.7
12	1.6					20	191	50	30	7.6	7.6	2.9
13	1.6	8.0				20	224	30	25	7.6	7.6	2.7
14	1.5			5		20	246	20	16	7.3	7.3	3.0
15	1.4		5			20	258	10	18	7.6	7.9	3.2
16	1.3					18	258	10	15	7.3	8.2	3.4
17	1.2					17	252	10	*13	7.1	7.6	3.4
18	1.2					15	256	13	12	6.8	7.6	3.4
19	1.2					14	254	28	11	6.8	8.2	3.6
20	*1.2					12	250	27	9.8	6.6	7.9	3.6
21	1.4	9.0				12	222	26	9.2	11	7.1	3.6
22	1.4					12	200	26	8.2	17	6.8	3.4
23	1.4					13	211	25	7.9	9.5	6.8	3.4
24	1.6					14	220	24	8.6	8.2	6.3	3.2
25	2.4	8.0		6	10	14	213	22	11	7.6	6.3	3.2
26	2.4	8.0				24	186	20	9.8	7.1	6.6	3.2
27	2.6	7.0				*37	151	20	9.5	7.1	6.3	2.5
28	2.7	6.0				50	151	20	8.9	7.3	6.3	3.0
29	3.4	6.0			-	94	148	20	8.6	6.8	3.2	3.0
30	2.7	5.0	6		-	112	151	19	7.9	6.6	.7	3.0
31	2.7	-			-	83	-	18	-	6.6	1.0	-

* Winter discharge measurement made on this day.

Note.- Stage-discharge relation affected by ice Nov. 6 to Dec. 4 (doubtful gage-height record Nov. 8-24). No gage-height record Dec. 5 to Mar. 26, May 12 to June 8 (stage-discharge relation affected by ice most of winter period); discharge computed on basis of 1 discharge measurement, weather records, and records for Cottonwood Creek near Cleveland and Treasureton Canal near Swan Lake.

Monthly discharge, in second-feet, of Cottonwood Creek near Swan Lake, Idaho, 1939-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
March 24-31, 1939	736	150	66	92.1	1,460
April	3,028	141	72	101	6,010
May	827.4	77	6.2	26.7	1,640
June	193.2	11	4.0	6.44	384
July	101.1	5.1	1.4	3.26	200
August	32.0	2.5	.2	1.03	64
September	37.0	5.5	.3	1.23	73
The period	-	-	-	-	9,830
October 1939	197.1	7.6	6.2	6.36	391
November	126.2	8.6	1.4	4.21	250
December	213.9	9.0	4.4	6.90	424
Calendar year	-	-	-	-	-
January 1940	219.4	7.2	6.9	7.08	435
February	205.4	8.5	6.7	7.08	407
March	784.7	105	8.7	25.3	1,560
April	1,882	96	36	62.7	3,730
May	427.8	36	5.1	13.8	849
June	96.1	7.9	.6	3.20	191
July	33.0	2.4	.3	1.06	65
August	5.8	.4	0	.19	11
September	126.0	11	.1	4.20	250
Water year 1939-40	4,317.4	105	0	11.8	8,560
October 1940	160.4	9.3	2.0	5.17	318
November	132.0	5.4	3.7	4.40	262
December	177.5	10	3.7	5.73	352
Calendar year 1940	4,250.1	105	0	11.6	8,430
January 1941	235.1	14	5.6	7.58	466
February	278.8	16	6.5	9.93	553
March	343.1	28	6.5	11.1	681
April	2,398	147	31	79.9	4,760
May	2,412	152	13	77.8	4,780
June	140.7	14	2.9	4.69	279
July	112.0	5.6	1.1	3.61	228
August	143.1	12	.9	4.61	284
September	94.2	7.0	1.4	3.14	187
Water year 1940-41	6,626.9	152	.9	18.2	13,140
October 1941	233.4	12	2.7	7.53	463
November	209.6	10	-	6.99	416
December	216.8	-	-	6.99	430
Calendar year 1941	6,816.8	152	.9	18.7	13,520
January 1942	186	-	-	6	369
February	140	-	-	5	278
March	310	-	-	10	615
April	3,714	215	58	124	7,370
May	1,601	68	21	51.6	3,180
June	211.2	13	3.2	7.04	419
July	151.8	9.2	2.0	4.90	301
August	41.5	2.6	.9	1.34	82
September	68.0	7.3	.6	2.27	135
Water year 1941-42	7,083.3	215	.6	19.4	14,060
October 1942	70.9	6.8	1.2	2.29	141
November	201.9	-	-	6.73	400
December	158	-	-	5.1	313
Calendar year 1942	6,854.3	215	.6	18.8	13,600
January 1943	173	-	-	5.6	343
February	200	-	-	7.1	397
March	777	112	10	25.1	1,540
April	6,064	258	95	202	12,030
May	1,760	165	10	56.8	3,490
June	617.4	45	7.9	20.6	1,220
July	247.5	17	6.6	7.98	491
August	205.3	8.6	.7	6.62	407
September	87.3	3.6	1.7	2.91	173
Water year 1942-43	10,562.3	258	.7	28.9	20,940

Time basis: Mountain standard time prior to 2 a.m., Feb. 9, 1942; mountain war time thereafter. To convert war time to standard time, subtract 1 hour.

Cottonwood Creek near Cleveland, Idaho

Location.- Staff gage, lat. 42°20', long. 111°46', in sec. 34, T. 12 S., R. 40 E., 500 feet upstream from Cleveland irrigation canal, 2½ miles west of Cleveland, and 4 miles downstream from proposed Cottonwood Dam.

Records available.- November 1938 to September 1943.

Extremes.- Maximum discharge observed during year, 380 second-feet Apr. 3, 4, 6 (gage-height, 3.00 feet), from rating curve extended above 260 second-feet; minimum observed, 2.3 second-feet Oct. 15, 17 (gage height, 0.64 foot).
1938-43: Maximum discharge observed, that of Apr. 3, 4, 6, 1943; minimum observed, 0.5 second-foot Aug. 17, 1940 (gage height, 0.46 foot).

Remarks.- Records fair. Gage read once daily. Several diversions for irrigation in upper valley, above proposed Cottonwood Dam.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a5.0	*5.1	8.2	13	b10	15	265	200	72	8.8	11	4.7
2	a5.0	5.4	8.2	14	b11	16	310	195	49	8.2	11	4.2
3	a5.0	5.4	7.8	b12	b12	17	380	190	60	7.5	11	3.3
4	5.4	5.6	7.8	b12	b13	18	380	175	49	8.8	11	3.3
5	3.3	5.9	7.8	b12	b13	20	373	175	60	11	10	3.3
6	4.7	6.2	7.6	b11	b13	21	350	180	56	13	11	3.3
7	3.1	6.2	7.8	b11	b12	22	373	180	53	13	12	3.3
8	3.0	10	8.2	b10	b11	23	366	175	47	13	10	3.8
9	3.1	10	8.5	b9.8	b11	30	310	a140	47	12	10	3.8
10	3.1	11	8.8	b9.2	b10	39	a290	100	45	12	9.6	3.8
11	2.6	11	8.8	b9.2	b10	37	*274	49	49	11	9.2	3.8
12	2.8	11	*10	b9.0	b11	39	310	45	41	12	8.8	3.8
13	2.6	11	10	b9.0	b12	42	324	37	39	13	8.8	4.2
14	2.4	12	9.6	b9.3	b11	39	304	30	39	12	8.2	4.2
15	2.3	12	9.6	b9.6	b10	34	292	13	35	12	8.8	4.2
16	2.4	12	b9.0	b10	b10	32	280	13	30	11	8.2	4.2
17	2.3	12	b8.0	b9.2	b10	30	262	12	23	10	8.8	4.2
18	2.6	12	b8.0	b8.4	b10	26	262	13	20	12	8.5	4.7
19	2.6	13	b8.0	b9.0	b10	23	256	60	19	13	8.8	4.7
20	2.8	13	b8.0	b11	b10	22	250	49	15	16	9.6	4.7
21	3.0	12	b9.0	15	b11	23	256	43	13	15	8.8	4.2
22	3.0	12	10	16	b12	27	262	45	13	16	8.5	4.2
23	3.3	12	*12	16	b15	29	256	47	12	16	8.2	4.7
24	3.3	13	11	15	17	26	250	39	11	15	8.2	4.7
25	4.2	12	11	14	17	26	245	41	13	13	7.5	4.7
26	4.0	11	11	13	18	35	235	40	15	13	7.5	a4.7
27	4.0	10	10	13	17	60	225	41	14	12	6.9	a4.7
28	4.2	9.6	11	a13	17	85	220	41	13	11	7.2	a4.7
29	4.4	8.8	11	*13	-	135	220	42	10	12	6.2	a4.7
30	4.4	8.5	12	b12	-	155	210	34	8.8	11	5.6	a4.7
31	4.7	-	12	b11	-	200	-	30	-	11	4.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	108.6	5.4	2.3	3.50	215
November	298.7	13	5.1	9.96	592
December	289.6	12	7.5	9.34	574
Calendar year 1942	9,372.2	250	2.3	25.7	18,600
January	358.7	16	8.4	11.6	711
February	344.0	18	10	12.3	682
March	1,346	200	15	43.4	2,670
April	8,620	380	210	287	17,100
May	2,474	200	12	79.8	4,910
June	970.8	72	8.8	32.4	1,930
July	374.3	16	7.5	12.1	742
August	275.6	12	4.7	8.82	543
September	125.5	4.7	3.3	4.18	249
Water year 1942-43	15,583.8	380	2.3	42.7	30,920

* 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 standerd time, subtract 1 hour.

Treasureton Canal near Swan Lake, Idaho

Location.- Water-stage recorder and Parshall flume, lat. 42°23', long. 111°55', in SE¼ sec. 8, T. 12 S., R. 39 E., 1,000 feet downstream from head gates and 6.8 miles northeast of Swan Lake. Prior to Sept. 28, 1939, staff gage at site 50 feet downstream, and Sept. 29, 1939, to June 1, 1942, staff gage in Parshall flume.
Records available.- April 1939 to September 1943.
Extremes.- Maximum and minimum daily discharges for periods of records in the water years 1939 to 1943 are contained in the following table:

Water year	Maximum		Minimum
	Date	Discharge (sec.-ft.)	
1939†	May 16	16	No flow July 14, 15, Sept. 29, 30
1939-40	May 5	33	No flow at times
1940-41	May 26	35	No flow at times
1941-42	June 1-3, 5-8	28	2.5 second-feet Sept. 24, 25
1942-43	June 1, 2	33	No flow at times

† Apr. 27 to Sept. 30

Remarks.- Records good. Canal diverts from Cottonwood Creek for irrigation in Battle Creek Basin in vicinity of Treasureton.
Cooperation.- Gage-height record October 1942 to June 1943 furnished by Bureau of Reclamation. Records for April 1939 to September 1942 collected and computed by Bureau of Reclamation and reviewed by Geological Survey.

Discharge, in second-feet, 1939-43

1939

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	-	12	12	3.7	2.4	3.2	16	-	16	7.1	1.2	2.0	4.8
2	-	12	11	3.4	2.6	3.1	17	-	15	8.5	.9	2.0	4.8
3	-	10	8.9	2.6	1.5	3.1	18	-	15	10	.3	2.0	4.8
4	-	7.6	9.8	2.5	1.1	3.2	19	-	16	7.8	.2	2.3	4.5
5	-	10	9.6	3.1	1.1	3.8	20	-	13	7.3	0	3.0	4.2
6	-	11	9.8	2.8	1.5	5.1	21	-	12	7.5	2.9	2.6	4.2
7	-	12	9.0	2.8	2.6	6.5	22	-	13	7.0	2.8	2.6	4.5
8	-	14	9.2	2.8	3.6	5.6	23	-	15	6.7	2.8	2.9	4.8
9	-	15	12	2.9	2.5	4.4	24	-	15	6.5	2.8	3.2	4.8
10	-	15	8.7	2.6	2.4	5.0	25	-	15	6.8	2.4	3.2	4.8
11	-	14	8.2	2.5	2.8	5.6	26	-	13	6.7	1.9	3.2	4.5
12	-	14	8.0	2.4	3.0	6.0	27	7.8	12	6.0	1.3	3.4	4.8
13	-	14	8.0	1.0	3.6	6.2	28	12	13	5.7	1.3	3.7	3.4
14	-	12	6.3	0	4.1	7.1	29	11	12	5.0	1.4	3.6	0
15	-	14	5.4	0	4.1	5.1	30	12	12	4.4	1.2	3.4	0
							31	-	13	-	3.1	3.1	-

1939-40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0					-	29	4.7	5.4	1.8	1.8
2		0					-	30	4.7	5.6	1.7	2.1
3		0					-	31	8.9	5.0	1.6	2.7
4		0					-	32	8.9	4.7	1.6	0
5		0					1.1	33	15	3.6	1.6	0
6		0					1.6	32	12	3.0	1.6	0
7		.6					2.2	30	7.3	3.0	1.5	0
8		1.3					3.0	27	5.0	2.8	1.6	0
9		1.4					3.8	28	5.4	2.6	1.4	0
10		1.5					4.7	29	5.0	2.6	1.3	0
11		1.6					5.8	31	5.0	2.5	1.3	0
12		1.7					6.9	30	4.3	2.4	1.1	0
13		2.0					8.2	50	3.6	2.1	1.5	0
14		2.2					9.4	27	4.5	2.5	1.5	0
15		2.5					11	29	4.5	3.0	1.6	0
16		2.8					13	27	4.7	3.8	1.4	0
17		3.1					14	25	4.1	4.0	1.5	0
18		3.1					16	22	4.3	2.2	1.6	0
19		3.4					17	19	3.8	2.1	5.0	0
20		3.8					19	18	4.0	1.5	1.8	0
21		4.1					20	17	3.3	1.7	1.7	0
22		4.3					20	16	3.8	2.1	3.4	0
23		4.5					21	12	4.5	2.1	3.0	0
24		1.6					22	12	4.7	2.1	2.4	0
25		0					23	12	4.7	1.8	2.2	0
26		0					24	13	4.7	2.4	2.6	0
27		0					25	12	4.3	2.5	2.4	0
28		0					26	9.4	3.6	2.6	2.2	0
29		0					27	7.5	3.0	2.5	2.1	0
30		0					28	6.4	3.3	2.1	2.0	0
31		-					-	4.7	-	1.8	1.8	-

Discharge, in second-feet, of Treasureton Canal, near Swan Lake, Idaho, 1939-43--Continued

1940-41

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	6.9	5.0					-	27	7.1	5.0	-
2	0	6.9	5.0					-	27	10	5.0	-
3	0	6.9	7.1					-	26	7.1	4.7	-
4	0	6.9	7.1					-	25	7.1	4.7	-
5	0	6.9	6.2					-	23	6.4	4.9	-
6	0	6.9	5.4					-	23	6.7	5.0	-
7	0	6.9	5.8					29	26	6.0	5.0	-
8	0	6.9	5.4					24	25	8.0	5.2	-
9	0	6.9	4.7					19	21	6.9	7.1	-
10	0	6.2	4.3					27	18	7.1	8.9	-
11	0	6.2	5.4					29	17	6.9	9.4	3.6
12	0	6.2	4.7					27	17	7.5	8.0	3.6
13	0	5.8	3.0					27	11	6.9	8.2	3.6
14	4.7	5.4	3.0					30	16	7.1	6.4	4.7
15	4.7	5.4	3.0					25	15	3.0	6.7	4.7
16	4.7	6.2	5.0					0	15	2.4	6.7	4.7
17	4.7	6.2	5.8					0	14	2.4	9.8	4.7
18	4.7	6.2	7.5					23	14	3.3	9.8	4.7
19	4.7	6.2	7.5					24	14	3.4	11	4.7
20	4.7	5.8	7.5					29	12	3.3	8.0	8.0
21	4.7	5.4	7.1					30	0	3.1	7.5	5.2
22	4.7	5.4	7.3					31	0	3.1	-	5.2
23	4.7	5.4	7.5					31	11	3.1	-	5.2
24	4.7	4.9	7.5					31	9.4	3.3	-	4.7
25	4.9	4.7	7.3					33	9.4	3.4	-	4.7
26	5.4	4.7	7.5					35	8.9	3.6	-	4.7
27	5.4	4.7	7.5					34	9.4	3.8	-	4.7
28	7.3	5.0	7.5					31	9.6	3.1	-	4.7
29	6.9	5.0	7.5					31	13.0	4.3	-	4.7
30	7.1	4.9	7.5					27	7.1	5.0	-	4.7
31	7.3	-	7.5					24	-	5.0	-	-

1942

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	28	9.1	6.2	4.7	11	23	3.8	4.5	4.0	21	14	7.3	4.0	3.0
2	28	8.7	3.4	4.7	12	22	3.6	4.3	4.1	22	13	7.1	4.1	3.0
3	28	8.4	3.6	4.5	13	21	3.4	4.3	4.7	23	11	7.1	4.0	2.6
4	27	8.2	4.7	4.5	14	25	3.4	5.6	5.6	24	9.8	7.5	4.0	2.5
5	28	6.4	5.4	4.1	15	25	3.3	4.9	4.7	25	11	6.7	4.0	2.5
6	28	4.7	5.2	4.5	16	21	3.4	4.9	3.8	26	12	6.9	4.0	2.8
7	28	4.1	5.0	4.3	17	17	7.1	4.9	3.3	27	10	6.7	4.1	3.0
8	28	4.3	4.9	4.3	18	14	9.8	4.7	3.3	28	10	6.0	6.9	3.0
9	26	4.0	4.9	4.1	19	14	8.2	4.5	3.1	29	9.6	6.9	5.4	3.0
10	24	3.8	4.7	4.1	20	14	7.5	4.1	3.1	30	9.1	6.7	4.7	2.8
										31	-	6.9	4.5	-

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	5						0	33	9.8	4.1	5.6
2	2.2	5						0	33	9.6	4.9	5.2
3	.9	5						0	28	9.4	4.7	5.4
4	1.0	5						0	21	9.4	4.5	5.2
5	4.7	5						0	13	7.9	4.9	4.9
6	5.6	5						0	13	5.1	4.5	5.0
7	5.6	5						0	12	4.7	5.2	4.9
8	5.6	0						0	14	4.5	4.6	4.7
9	5.6	0						0	25	4.7	0	4.1
10	5.6	0						0	12	4.7	0	4.0
11	6.2	0						1.1	12	4.3	0	3.8
12	7.3	0						3.8	11	4.3	0	3.6
13	7.1	0						11	16	4.1	0	3.6
14	7.3	0						18	28	4.0	0	3.3
15	6.7	0						20	30	3.8	0	a3.0
16	6.7	0						11	27	3.6	0	a2.8
17	6.7	0						10	25	3.6	0	2.6
18	6.4	0						15	23	3.4	0	2.2
19	6	0						21	21	3.1	0	2.2
20	6	0						19	19	3.0	0	2.2
21	6	0						22	18	5.2	0	2.1
22	6	0						24	17	7.5	0	2.2
23	6	0						23	16	4.5	0	2.0
24	5	0						23	14	3.8	0	2.1
25	5	0						26	11	3.3	0	2.1
26	5	0						29	10	3.1	0	2.5
27	5	0						29	10	3.8	0	4.1
28	5	0						28	9.8	4.0	0	4.1
29	5	0						28	9.8	3.4	2.2	3.6
30	5	0						28	9.6	3.4	5.2	3.0
31	5	-						31	-	3.4	6.2	-

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

Monthly discharge, in second-feet, of Treasureton Canal, near Swan Lake, Idaho, 1939-43--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 27-30, 1939	42.8	12	7.8	10.7	85
May	406.6	16	7.6	13.1	806
June	238.9	12	4.4	7.96	474
July	61.6	3.7	0	1.99	122
August	85.1	4.1	1.1	2.75	169
September	131.9	7.1	0	4.40	262
The period	-	-	-	-	1,920
October 1939	0	0	0	0	0
November	45.5	4.5	.6	1.52	90
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January 1940	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April 5-30	372.7	28	1.1	14.3	739
May	681.0	33	4.7	22	1,350
June	159.6	15	3.0	5.32	317
July	88.1	5.6	1.5	2.84	175
August	59.8	5.0	1.1	1.93	119
September	6.6	2.7	0	.22	13
Water year	-	-	-	-	-
October 1940	95.8	7.3	0	3.0	190
November	178.0	6.9	4.7	5.93	353
December	190.1	7.5	3.0	6.13	377
Calendar year	-	-	-	-	-
January 1941	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May 7-31	651.0	35	0	26.0	1,290
June	463.8	27	0	15.5	920
July	159.4	10	2.4	5.14	316
August 1-21	147.2	11.0	4.7	7.01	292
September 11-30	95.5	8.0	3.6	4.78	190
Water year	-	-	-	-	-
October 1941	-	-	-	-	-
November	-	-	-	-	-
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January 1942	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	-	-	-	-	-
May	-	-	-	-	-
June	578.5	28	9.1	19.3	1,150
July	191.0	9.8	3.3	6.16	379
August	144.4	6.9	3.4	4.66	286
September	111.7	5.6	2.5	3.72	221
The period	-	-	-	-	2,040
October 1942	164.0	7.3	.9	5.29	325
November	35	5	0	1.17	69
December	0	0	0	0	0
Calendar year	-	-	-	-	-
January 1943	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	420.9	31	0	13.6	835
June	541.2	33	9.6	18.0	1,070
July	152.4	9.8	3.0	4.92	302
August	51.0	6.2	0	1.65	101
September	106.1	5.6	2.0	3.54	210
Water year 1942-43	1,470.6	33	0	4.03	2,910

Time basis: Mountain standard time prior to 2 a.m., Feb. 9, 1942; mountain war 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 SE¼ sec. 11, T. 14 S., R. 40 E., 1⅛ miles southwest of Mink Creek post office and 2½ miles upstream from mouth.
Records available.- April to September 1943.
Extremes.- Maximum daily discharge during period, 413 second-feet June 2; minimum daily, 0.9 second-foot Sept. 21, 23.
Remarks.- Records good. Many diversions above station for irrigation.

Discharge, in second-feet, April to September 1943

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	a78	189	344	40	1.3	1.9	16	108	215	201	4.0	10	1.9
2	a78	245	413	30	1.3	2.2	17	118	178	159	2.5	2.5	1.3
3	78	266	386	21	1.9	2.5	18	134	154	151	2.8	4.0	1.3
4	80	317	305	17	2.5	2.5	19	154	127	159	3.7	11	1.0
5	82	389	266	12	2.5	2.8	20	173	99	154	17	7.6	1.0
6	78	365	231	a11	2.8	2.8	21	178	126	136	14	4.0	.9
7	86	323	206	a10	3.7	2.5	22	182	201	130	7.0	4.0	1.0
8	78	278	187	a6.0	3.1	1.5	23	159	245	115	5.2	6.4	.9
9	80	240	173	a5.0	2.5	1.6	24	206	232	108	3.7	5.2	1.0
10	82	215	162	a4.0	2.2	1.6	25	220	215	99	4.6	3.7	1.0
11	80	209	178	a3.0	2.2	1.6	26	229	226	88	2.2	3.7	1.3
12	71	215	195	a2.5	1.9	1.6	27	198	240	76	1.9	3.7	1.6
13	76	212	189	2.5	1.9	2.2	28	157	257	63	2.5	2.8	1.3
14	89	215	195	2.5	1.9	2.6	29	146	260	53	1.3	2.8	1.3
15	101	229	229	3.4	2.2	3.1	30	149	272	46	1.3	2.8	1.3
							31	-	278	-	1.0	2.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
April	3,708	229	71	124	7,350
May	7,230	389	99	233	14,340
June	5,398	413	46	180	10,710
July	244.6	40	1.0	7.89	485
August	110.6	11	1.3	3.57	219
September	51.4	3.1	.9	1.71	102
The period	-	-	-	-	33,210

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

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 to September 1943.
Extremes.- Maximum daily discharge during period, 151 second-feet May 31 (gage height, 2.32 feet); no flow May 22, 23.
Remarks.- Records good except those for Sept. 11-30, 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.
Cooperation.- Gage-height record prior to July furnished by Bureau of Reclamation.

Discharge, in second-feet April to September 1943

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	-	118	139	142	56	23	16	132	72	86	85	35	21
2	-	117	131	141	53	24	17	134	80	97	79	36	14
3	-	107	128	142	46	24	18	133	79	97	74	37	12
4	-	75	133	144	47	24	19	124	93	103	75	35	10
5	-	49	124	134	47	23	20	123	102	118	81	34	6.5
6	-	46	117	123	47	23	21	119	59	128	86	36	9.5
7	-	49	121	116	49	22	22	119	0	127	79	33	6.0
8	-	50	122	111	48	23	23	123	0	129	74	32	4.2
9	-	53	131	103	46	23	24	118	59	131	71	32	3.6
10	122	58	144	102	47	23	25	127	114	134	65	29	3.9
11	120	58	145	95	45	22	26	124	124	132	64	26	6.0
12	119	56	133	92	43	21	27	118	130	139	64	26	6.3
13	123	56	129	87	41	20	28	119	141	141	51	28	12
14	127	53	127	85	36	23	29	118	142	144	58	26	10
15	131	55	96	89	35	23	30	119	142	142	56	24	18
							31	-	151	-	56	24	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
April 10-30	2,592	134	118	12.3	5,140
May	2,488	151	0	80.3	4,930
June	3,768	145	86	126	7,470
July	2,834	144	56	91.4	5,620
August	1,179	56	24	38.0	2,340
September	483.8	24	3.6	16.1	960
The period	-	-	-	-	26,480

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

Battle Creek near Treasureton, Idaho

Location.- Staff gage, lat. 42°15', long. 111°50', in NE¼ sec. 36, T. 13 S., R. 39 E., 0.7 mile south of Treasureton and 1.6 miles upstream from Strongarm Reservoir dam.

Records available.- May to September 1943.

Extremes.- Maximum discharge during period, 10 second-feet June 3 (gage height, 2.53 feet); minimum daily, 0.7 second-foot Sept. 25-30.

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

Discharge, in second-feet, May to September 1943

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1	-	4.8	1.5	1.5	1.0	16	-	4.5	1.5	1.0	0.9
2	-	8.4	1.5	1.3	1.0	17	-	3.5	1.4	1.0	.8
3	-	9.4	1.5	1.3	1.0	18	-	2.8	1.5	.9	.8
4	-	5.3	1.6	1.3	1.0	19	-	2.9	1.5	1.0	.8
5	-	4.2	1.5	1.3	1.0	20	4.2	3.0	1.5	1.0	.8
6	-	4.3	1.5	1.3	1.0	21	4.0	2.8	1.5	1.0	.8
7	-	4.2	1.4	1.2	.9	22	4.0	2.7	1.5	1.0	.8
8	-	3.7	1.4	1.2	.9	23	4.2	2.7	1.5	1.0	.8
9	-	3.7	1.5	1.2	.9	24	4.0	2.7	1.4	1.0	.8
10	-	3.4	1.5	1.1	.9	25	4.2	2.5	1.3	1.0	.7
11	-	3.1	1.5	1.1	.9	26	4.0	2.4	1.4	1.0	.7
12	-	3.0	1.6	1.0	.9	27	4.0	2.0	1.4	1.0	.7
13	-	2.9	1.7	1.0	.9	28	2.2	1.7	1.4	1.0	.7
14	-	4.1	1.6	1.0	.9	29	1.6	1.6	1.5	1.1	.7
15	-	4.5	1.5	1.1	.9	30	2.1	1.6	1.5	1.0	.7
						31	2.4	-	1.6	1.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
May 20-31	40.9	4.2	1.6	3.41	81
June	108.4	9.4	1.6	3.61	215
July	46.2	1.7	1.3	1.49	92
August	34.0	1.6	.9	1.10	67
September	25.6	1.0	.7	.85	51
The period	-	-	-	-	506

Time basis: Mountain war time. 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 SW¼ sec. 5, T. 15 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 1943.

Extremes.- Maximum and minimum discharges for the water years 1940 to 1943 are contained in the following table:

Water year	Maximum			Minimum	
	Date	Discharge (sec.-ft.)	Gage height (feet)	Date	Discharge (sec.-ft.)
1940*	May 14	498	3.32	Mar. 12	17
1940-41	May 14	431	3.34	Dec. 20	14
1941-42	May 26	499	3.44	Jan. 12	19
1942-43	June 2	705	3.83	Dec. 8	†19

* Mar. 1 to Sept. 30.
† Minimum observed.

Remarks.- Records for water year 1943 good except those for periods of no gage-height record, which are fair. No diversion above station.

Cooperation.- Gage-height record and eight discharge measurements for period Oct. 1, 1942, to June 30, 1943 furnished by Bureau of Reclamation. Records for March 1940 to September 1942 collected and computed by Bureau of Reclamation and reviewed by Geological Survey.

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Discharge, in second-feet, of Cub River near Preston, Idaho, 1940-45

1940

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						a23	41	80	227	62	33	24
2						a23	44	76	214	59	32	25
3						a24	37	132	197	57	32	25
4						24	33	200	181	56	32	25
5						24	34	219	183	55	32	24
6						21	35	229	176	52	31	24
7						20	32	234	165	51	31	24
8						20	35	257	158	50	29	24
9						19	48	293	143	49	29	24
10						18	51	339	137	48	28	23
11						18	48	396	128	48	28	23
12						17	48	433	126	46	28	24
13						18	51	484	120	48	29	24
14						18	60	471	114	46	30	24
15						19	66	430	108	48	30	24
16						22	73	430	100	46	29	23
17						26	64	423	97	45	29	23
18						31	66	396	91	44	29	24
19						37	76	365	90	42	28	24
20						42	84	349	88	41	28	23
21						48	91	345	86	41	28	22
22						50	90	342	83	40	27	22
23						50	97	326	78	39	26	22
24						49	97	317	75	38	26	22
25						50	110	317	70	38	26	22
26						57	122	317	69	38	26	21
27						91	124	305	67	37	25	22
28						62	118	290	66	36	25	22
29						46	106	276	64	36	25	22
30						40	91	262	63	35	25	22
31						39	-	249	-	34	25	-

a No gage-height record; discharge estimated.

1940-41

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	19	18	16	16	22	38	121	269	68	34	26
2	21	19	18	16	16	27	39	157	246	64	34	27
3	23	19	18	16	16	25	38	189	233	63	33	28
4	21	19	18	16	16	24	35	191	225	60	33	27
5	21	19	18	16	16	22	44	172	217	58	32	26
6	20	18	17	16	16	22	42	146	209	57	32	26
7	20	18	17	16	16	21	38	144	196	56	31	26
8	20	18	17	16	16	22	37	146	186	54	31	26
9	21	18	17	16	16	22	37	191	174	53	31	26
10	20	18	17	16	16	22	40	244	157	52	35	25
11	20	18	16	16	17	22	39	294	140	52	34	24
12	20	18	16	16	19	22	39	321	136	51	34	24
13	20	18	16	16	18	22	47	396	136	51	32	24
14	20	18	16	16	17	20	46	399	132	50	32	24
15	20	18	16	16	17	20	44	314	128	48	31	24
16	20	18	15	16	17	20	48	289	121	48	32	24
17	20	18	15	16	17	23	45	309	116	47	34	24
18	20	18	15	16	17	29	44	358	110	46	32	24
19	20	18	16	16	17	32	40	309	106	47	31	24
20	20	18	15	16	17	32	38	271	99	44	31	24
21	20	18	15	16	18	31	37	280	95	44	31	24
22	20	18	15	16	19	31	37	312	90	42	30	24
23	20	18	16	16	19	31	40	358	86	41	29	24
24	20	18	16	16	20	27	44	361	82	41	29	24
25	20	18	16	16	20	26	50	347	80	40	29	24
26	21	18	16	16	20	26	55	350	77	39	28	24
27	22	18	16	16	20	27	63	361	75	38	28	24
28	20	18	16	16	20	31	67	341	74	38	28	24
29	20	18	16	16	-	34	78	318	72	37	28	24
30	19	18	16	16	-	38	95	303	70	35	26	24
31	19	-	16	16	-	37	-	283	-	34	27	-

Discharge, in second-feet, of Cub River near Preston, Idaho, 1940-43--Continued

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	24	20	20	21	19	46	93	296	112	49	32
2	24	24	20	a20	21	19	53	90	328	107	49	32
3	24	24	23	a20	21	19	56	86	334	104	48	31
4	24	24	22	a20	21	19	82	86	354	102	47	31
5	24	24	22	a20	20	19	86	83	361	98	46	31
6	24	24	21	a20	21	19	78	85	371	95	45	31
7	24	24	21	20	21	19	78	86	405	92	44	30
8	24	23	20	20	20	19	82	99	402	88	43	30
9	24	23	20	19	20	19	86	136	385	85	43	29
10	24	23	20	19	20	20	96	159	375	82	42	28
11	23	23	20	19	20	22	107	152	364	80	42	28
12	24	23	20	19	20	22	126	138	371	76	41	31
13	24	22	20	19	20	22	140	125	299	74	40	28
14	24	22	20	19	a20	22	a165	125	274	72	39	28
15	24	22	20	19	a20	22	a162	125	265	71	38	28
16	24	22	20	20	a20	21	a151	134	262	69	38	27
17	24	22	20	20	a19	20	a144	130	244	68	38	27
18	23	22	20	20	a19	20	a135	125	233	66	37	27
19	23	22	20	20	a19	20	a126	128	222	58	37	27
20	23	22	20	20	a19	20	a120	144	209	61	37	26
21	24	22	20	20	a19	20	a126	189	189	60	37	26
22	24	22	20	20	a19	20	a155	280	177	59	36	26
23	24	22	20	20	a19	22	a198	364	165	58	36	26
24	24	21	20	20	a19	24	a185	444	159	56	35	26
25	24	21	20	20	a19	23	a166	444	154	56	35	25
26	24	21	20	20	a19	23	a146	492	150	55	34	25
27	24	21	20	20	19	24	a130	492	142	54	34	25
28	24	21	20	22	19	25	117	402	132	53	34	25
29	24	20	20	22	-	28	106	351	121	53	34	25
30	24	20	20	21	-	32	96	302	116	52	33	25
31	24	-	20	21	-	40	-	290	-	50	33	-

a No gage-height record; discharge computed on basis of weather records and records for Cub River near Franklin.

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26					23	80	343	639	230	72	42
2	26					22	*92	438	665	212	71	43
3	26					21	101	466	586	196	70	42
4	26					20	110	462	438	186	69	42
5	26					20	112	418	361	177	68	41
6	26					20	107	368	319	165	66	40
7	25					25	116	306	309	159	68	40
8	25		(*)			30	112	268	293	152	65	38
9	25					35	112	225	306	146	63	37
10	25					33	116	204	353	140	62	37
11	26			19	20	31	114	209	383	132	60	36
12	25					30	110	222	383	128	59	35
13	26					25	119	233	376	123	58	35
14	25					30	144	262	361	116	57	35
15	25	22	21			29	174	277	339	114	56	34
16	25					27	199	256	309	109	54	34
17	24					25	217	228	283	106	53	33
18	24					21	244	194	299	101	54	32
19	*24					20	265	177	339	98	53	32
20	24					20	290	177	353	95	52	32
21	24			25	25	20	296	209	357	95	52	32
22	24			30	30	21	294	286	353	93	51	32
23	24			40	45	22	293	372	339	89	50	31
24	24			35	40	24	350	454	322	86	48	31
25	24			30	35	30	376	490	309	83	48	31
26	24			25	30	40	376	527	299	83	47	31
27	24			20	*26	50	319	531	283	82	46	30
28	24			20	25	70	268	586	268	78	45	30
29	24			20	-	80	256	582	250	77	45	29
30	23			20	-	90	274	573	242	76	44	29
31	23			20	-	88	-	586	-	72	43	-

* Winter discharge measurement made on this day.

Note.- No gage-height record Oct. 31 to Apr. 1, Apr. 22; discharge computed on basis of 2 discharge measurements, weather records, and records for Cub River near Franklin, Blacksmith Fork near Hyrum, and Little Bear River near Paradise.

Monthly discharge, in second-feet, of Cub River near Preston, Idaho, 1940-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
January	-	-	-	-	-
February	-	-	-	-	-
March 1940	1,046	91	17	33.7	2,070
April	2,072	124	32	69.1	4,110
May	9,582	484	76	309	19,010
June	3,564	227	63	119	7,070
July	1,405	62	34	45.3	2,790
August	881	33	25	28.4	1,750
September	697	25	21	23.2	1,380
The period	-	-	-	-	38,180
October 1940	629	23	19	20.3	1,250
November	545	19	18	18.2	1,080
December	505	18	15	16.3	1,000
Calendar year	-	-	-	-	-
January 1941	496	16	16	16.0	984
February	489	20	16	17.5	970
March	810	38	20	26.1	1,610
April	1,384	95	35	46.1	2,750
May	8,577	399	121	27.7	17,010
June	4,137	269	70	138	8,210
July	1,498	68	34	48.3	2,970
August	962	35	26	31.0	1,910
September	743	28	24	24.8	1,470
Water year 1940-41	20,775	399	15	56.9	41,210
October 1941	740	24	23	23.9	1,470
November	670	24	20	22.3	1,330
December	629	23	20	20.3	1,250
Calendar year 1941	21,136	399	15	57.9	41,930
January 1942	619	22	19	20.0	1,230
February	554	21	19	20.0	1,100
March	685	40	19	22.0	1,350
April	3,544	198	46	118	7,030
May	6,379	492	83	206	12,650
June	7,859.0	405	116	262	15,590
July	2,266	112	50	73.1	4,490
August	1,224	49	33	39.5	2,430
September	836	32	25	27.9	1,660
Water year 1941-42	26,003	492	19	71.2	51,580
October 1942	766	26	23	24.7	1,520
November	650	-	-	22	1,310
December	651	-	-	21	1,290
Calendar year 1942	26,041	492	19	71.3	51,650
January 1943	665	40	-	21.5	1,320
February	656	45	-	23.4	1,300
March	1,042	90	20	33.6	2,070
April	6,036	376	80	201	11,970
May	10,929	586	177	353	21,680
June	10,716	665	242	357	21,250
July	3,799	230	72	123	7,540
August	1,747	72	43	56.4	3,470
September	1,046	43	29	34.9	2,070
Water year 1942-43	38,713	665	-	106	76,790

Time basis: Mountain standard time prior to 2 a.m., Feb. 9, 1942; mountain war 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°03', long. 111°47', in SW¼ sec. 9, T. 16 S., R. 40 E., 1½ miles upstream from Maple Creek and 2½ miles north of Franklin. Prior to Aug. 9, 1941, staff gage at same site and datum.
Records available.- March 1940 to September 1943.
Extremes.- 1940: Maximum discharge observed during period March to September, 223 second-feet May 13 (gage height, 3.16 feet); minimum observed, 0.9 second-foot Aug. 1-13.
1940-41: Maximum discharge observed during water year, 449 second-feet May 14 (gage height, 3.73 feet); minimum daily, 1.5 second-feet Sept. 30.
1941-42: Maximum discharge recorded during water year, 65 second-feet May 26 (gage height, 3.90 feet); minimum daily, 1.5 second-feet July 30, 31, Aug. 1.
1942-43: Maximum discharge during water year, 617 second-feet June 2 (gage height, 4.34 feet); minimum daily, 2.8 second-feet many days.
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.
Cooperation.- Gage-height record and 11 discharge measurements for period Oct. 1, 1942 to June 30, 1943, furnished by Bureau of Reclamation. Records for March 1940 to September 1942 collected and computed by Bureau of Reclamation and reviewed by Geological Survey.

Discharge, in second-feet, 1940-43

1940

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a25	65	38	10	2.6	1.6	1.3	16	84	149	197	3.1	2.1	2.0	2.4
2	a25	93	11	10	2.6	1.5	1.5	17	22	143	191	2.9	2.1	1.8	2.3
3	a28	70	12	8.5	2.6	1.4	1.5	18	36	75	195	2.9	2.3	1.8	2.3
4	a28	57	47	22	2.6	1.3	1.6	19	41	78	184	2.9	2.4	1.7	2.3
5	a30	61	105	52	2.4	1.2	1.6	20	35	79	125	2.9	2.6	1.6	2.3
6	a30	60	86	39	2.4	3.9	1.6	21	60	90	98	2.9	2.8	1.6	2.3
7	a30	57	80	16	2.4	3.6	1.7	22	76	86	58	2.9	2.9	1.6	2.1
8	a35	57	87	14	2.4	3.4	1.7	23	60	78	60	2.9	1.6	1.5	2.1
9	a35	61	93	4.8	2.4	3.2	1.8	24	79	76	47	2.9	1.7	1.4	2.1
10	a40	84	108	3.9	2.4	1.0	2.1	25	100	79	49	2.9	1.8	1.3	2.1
11	a40	74	171	3.9	2.6	.9	2.3	26	87	93	46	2.8	2.0	1.3	2.1
12	41	118	107	3.4	2.6	.9	2.4	27	83	91	38	2.8	2.1	1.2	2.0
13	36	127	223	3.1	2.6	.9	2.4	28	74	96	30	2.8	2.3	1.2	2.0
14	84	131	209	3.1	2.0	2.3	2.4	29	69	97	25	2.8	1.3	1.2	2.0
15	78	143	203	3.1	2.1	2.1	2.4	30	65	83	14	2.8	1.4	1.2	2.4
								31	74	-	11	-	1.5	1.2	-

a No gage-height record; discharge estimated.

1940-41

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	5.2	4.3	8.2	11	25	59	197	103		a2.4	2.4
2	31	6.4	4.3	8.2	11	24	63	206	92		a2.4	2.4
3	31	7.0	4.3	10	11	48	67	283	66		a2.4	2.4
4	31	5.5	4.3	8.2	11	43	64	262	52		a2.4	2.6
5	27	5.2	4.3	27	11	28	67	236	31		a2.4	2.4
6	20	4.9	4.3	31	11	28	63	213	24		a2.4	2.4
7	21	4.9	4.3	35	12	28	66	197	21		a2.4	2.4
8	18	4.9	4.3	28	12	28	58	172	31		a2.4	2.2
9	17	4.9	4.3	12	12	28	58	202	19		2.4	2.2
10	15	4.9	4.3	11	12	26	54	255	19		3.2	2.0
11	12	4.9	4.3	8.2	15	23	68	288	5.8		2.8	2.2
12	11	4.6	4.3	12	29	21	72	423	5.5		4.3	2.2
13	8.6	4.6	3.2	11	27	20	94	436	5.5		4.0	2.2
14	8.6	4.3	2.8	8.2	24	16	100	449	4.9		2.8	2.2
15	9.0	4.3	2.8	9.8	20	16	96	291	4.9	a2	2.6	2.4
18	9.0	4.3	2.8	9.8	17	16	80	195	5.2		2.6	2.6
17	9.0	4.3	3.4	9.4	17	17	83	187	4.3		4.6	2.6
18	9.0	4.3	3.4	8.2	20	23	83	233	3.4		4.6	2.6
19	7.0	4.3	34	7.4	23	47	69	138	3.2		11	2.6
20	6.1	4.3	34	7.4	26	41	72	160	3.0		3.6	2.6
21	4.3	4.3	31	7.4	26	35	73	88	3.0		2.8	2.8
22	4.0	4.3	12	8.6	22	36	73	59	2.8		2.8	2.8
23	3.8	4.0	12	8.6	25	43	75	78	2.8		2.6	2.8
24	3.8	4.0	16	11	28	43	89	117	2.8		2.6	3.0
25	3.8	4.0	12	11	28	43	92	129	2.8		2.6	2.8
26	3.8	4.0	12	11	24	43	92	162	2.6		2.6	2.8
27	4.6	4.0	12	9.8	22	46	100	166	2.6		2.4	2.4
28	5.8	4.0	13	6.7	23	45	132	224	2.6		2.2	2.6
29	6.4	4.3	13	8.2	-	53	138	156	3.2		2.0	2.6
30	6.4	4.3	12	8.6	-	62	185	166	3.2		2.0	1.5
31	5.8	-	10	11	-	59	-	122	-		2.2	-

a No gage-height record; discharge estimated.

Discharge, in second-feet, of Cub River above Maple Creek, near Franklin, Idaho, 1940-43--Continued

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.8	2.6	3.2	12	28	31	98	154	245	5.8	1.5	1.9
2	5.8	4.6	3.2	13	28	31	115	154	258	5.2	1.6	1.9
3	5.8	4.0	3.4	13	28	30	135	145	275	5.2	1.6	1.9
4	6.0	3.2	10	13	28	31	151	145	294	4.9	1.6	1.9
5	6.0	3.4	9.0	13	27	31	202	150	307	4.6	1.6	1.9
6	6.0	3.2	12	13	27	31	170	148	324	4.0	1.6	2.0
7	6.1	3.0	11	13	28	30	168	152	320	4.0	1.6	2.0
8	4.9	2.8	10	13	28	30	168	164	282	3.8	1.7	2.0
9	3.4	2.8	11	13	28	30	174	200	230	3.6	1.6	2.0
10	3.2	2.8	11	28	28	31	227	229	166	3.4	1.6	2.0
11	3.2	2.8	12	28	28	35	206	231	132	3.4	1.7	2.0
12	3.2	2.8	11	28	28	40	220	215	109	3.2	1.9	2.6
13	3.1	2.6	10	28	28	43	220	204	64	3.2	1.8	2.6
14	3.1	2.6	11	28	29	42	243	187	41	3.0	1.7	2.4
15	3.0	2.6	11	28	29	38	240	189	39	3.0	1.6	2.2
16	3.0	2.8	11	28	29	36	202	272	58	2.8	1.6	2.2
17	3.0	3.0	12	28	29	35	185	238	24	2.8	1.6	2.2
18	2.8	3.0	12	28	29	35	185	227	20	2.6	1.6	2.2
19	2.8	2.8	12	28	29	33	166	224	60	2.6	1.6	2.2
20	2.8	2.6	11	28	29	34	172	213	76	2.4	1.6	2.4
21	2.8	2.6	11	28	29	34	240	272	10	2.2	1.6	2.4
22	2.8	2.6	12	28	29	35	304	246	8.2	2.0	1.7	2.4
23	2.8	2.6	12	27	29	38	335	238	7.8	1.8	1.7	2.4
24	2.6	2.6	12	27	29	43	293	360	7.0	1.8	1.7	2.4
25	2.6	2.8	12	27	29	41	243	356	6.7	1.7	1.8	2.4
26	2.6	3.0	9.4	28	29	40	202	502	12	1.7	1.9	2.0
27	2.6	3.0	11	28	30	45	180	500	17	1.7	1.8	3.2
28	2.8	3.2	13	33	30	53	174	364	7.4	1.6	1.8	25
29	2.8	3.2	15	31	-	65	160	270	7.4	1.6	1.8	26
30	2.6	3.2	14	29	-	68	154	255	6.1	1.5	1.8	20
31	2.6	-	14	28	-	80	-	235	-	1.5	1.9	-

Note.- No gage-height record Oct. 1-6, 11-15, Dec. 5-8, Jan. 4-15, Feb. 10 to Mar. 27 to Apr. 4, May 22 to June 10, July 28 to Sept. 10; discharge computed on basis of weather records and records for station near Preston.

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.5	2.5	17	16		a26	144	355	453	11	2.4	2.7
2	2.4	2.5	16	16		a25	182	458	595	9.8	2.4	2.5
3	2.4	2.5	13	14		a24	222	500	505	a8.0	2.3	2.7
4	2.4	3.7	12	11		a22	232	524	352	a7.0	2.3	2.7
5	2.3	3.3	10	12		a21	228	513	257	a6.0	2.3	2.5
6	2.4	3.3	13	14		a25	217	450	224	a5.0	2.3	2.7
7	2.4	3.1	13	12		a30	230	340	215	4.3	2.5	2.7
8	2.4	3.1	12	9.8		44	211	296	182	3.7	2.5	2.7
9	2.4	a3.1	12	a13		48	203	255	176	3.3	2.4	2.7
10	2.4	a3.1	12	h15	a25	37	203	200	203	3.1	2.3	2.7
11	2.5	a3.2	12	a15		37	203	170	a210	2.9	2.3	2.5
12	a2.5	a3.2	12	a15		36	180	170	a215	2.7	2.3	2.5
13	a2.5	a3.0	12	a15		32	196	168	a210	2.7	2.3	2.7
14	a2.5	a3.0	12	a15		42	234	176	a210	2.9	2.3	2.7
15	a2.5	2.9	12	a15		38	262	172	a205	2.7	2.4	2.7
16	a2.5	a3.0	12	a15		32	271	135	a200	2.7	2.5	2.7
17	a2.5	a4.0	11	h15		29	275	100	a190	2.5	2.4	2.9
18	2.5	a5.0	a11	a14		25	293	70	190	2.5	2.7	2.7
19	2.5	a4.0	a12	a11		24	316	35	207	2.9	2.9	2.9
20	2.7	a3.0	12	a15		23	343	28	224	2.9	2.7	2.9
21	2.7	a2.9	12	a20	a30	24	347	17	215	2.7	2.7	2.9
22	2.7	3.3	12	a25	a40	24	321	68	190	2.9	2.7	2.9
23	2.7	4.3	16	a70	a60	27	331	194	164	2.7	2.5	2.7
24	2.9	4.3	19	b59	a50	32	399	321	127	2.5	2.5	2.7
25	2.9	4.3	18	a40	a40	49	437	364	92	2.4	2.5	2.7
26	2.9	4.1	14		a30	62	453	326	72	2.5	2.4	2.9
27	2.9	7.0	12		h28	72	394	289	53	2.3	2.4	2.7
28	2.9	22	12	a25	a28	113	326	291	29	2.3	2.4	2.7
29	2.7	17	12		-	168	303	296	19	2.3	2.5	7.9
30	2.7	22	12		-	198	300	300	17	2.3	2.4	10
31	2.7	-	14		-	158	-	338	-	2.3	2.7	-

a No gage-height record; discharge interpolated or computed on basis of 1 discharge measurement, weather records, and records for station near Preston.
h Computed from staff-gage reading.

Monthly discharge, in second-feet, of Cub River above Maple Creek, near Franklin, Idaho, 1940-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
January	-	-	-	-	-
February	-	-	-	-	-
March 1940	1,630	100	22	52.6	3,230
April	2,651	149	57	88.4	5,260
May	2,948	223	11	95.1	5,850
June	240.0	52	2.8	8.00	476
July	69.6	2.9	1.3	2.25	138
August	52.8	3.9	.9	1.70	105
September	61.1	2.4	1.3	2.04	121
The period	-	-	-	-	16,180
October 1940	383.8	31	3.8	12.4	761
November	139.2	7.0	4.0	4.64	276
December	293.0	34	2.8	9.45	581
Calendar year	-	-	-	-	-
January 1941	371.9	35	6.7	12.0	738
February	530	29	11	18.9	1,050
March	1,054	62	16	34.0	2,090
April	2,485	185	54	82.8	4,930
May	6,490	449	117	209	12,870
June	532.1	103	2.6	17.7	1,060
July	62.0	-	-	2.0	123
August	94.5	11	2.0	3.05	187
September	73.7	3.0	1.5	2.45	146
Water year 1940-41	12,509.2	449	1.5	34.3	24,810
October 1941	112.6	6.0	2.6	3.63	223
November	88.8	4.6	2.6	2.96	176
December	332.2	15	3.2	10.7	659
Calendar year 1941	12,226.8	449	1.5	33.5	24,250
January 1942	738	33	12	23.8	1,460
February	799	30	27	28.5	1,580
March	1,219	80	30	39.3	2,420
April	5,932	335	98	198	11,770
May	7,439	502	145	240	14,760
June	3,413.6	324	6.1	114	6,770
July	92.6	5.8	1.5	2.99	184
August	52.2	1.9	1.5	1.68	104
September	120.7	26	1.9	4.02	239
Water year 1941-42	20,339.7	502	1.5	55.7	40,340
October 1942	79.9	2.9	2.3	2.68	158
November	155.7	22	2.5	5.19	309
December	401	19	11	12.9	795
Calendar year 1942	20,442.7	502	1.5	56.0	40,550
January 1943	641.8	70	9.8	20.7	1,270
February	806	60	-	28.8	1,600
March	1,547	198	21	49.9	3,070
April	8,256	437	144	275	16,380
May	7,919	524	17	255	15,710
June	6,201	595	17	207	12,300
July	115.8	11	2.3	3.74	230
August	76.2	2.9	2.3	2.46	151
September	103.9	20	2.3	3.46	206
Water year 1942-43	26,303.3	595	2.3	72.1	52,180

Time basis: Mountain standard time prior to 2 a.m., Feb. 9, 1942; mountain war 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 to September 1943.
Extremes.- Maximum daily discharge during period, 82 second-feet May 24; no flow Apr. 15 to May 11.
Remarks.- Records good. Several diversions above station 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, April to September 1943

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	1.2	0	56	68	a16	4.1	16	0	41	55	38	5.9	0.6
2	1.2	0	55	69	15	4.1	17	0	41	46	37	6.4	.8
3	1.0	0	56	66	13	4.1	18	0	46	46	39	6.8	.5
4	.8	0	63	63	11	4.1	19	0	50	58	38	6.4	.3
5	.5	0	53	63	11	4.0	20	0	37	59	38	6.6	.4
6	.4	0	43	60	11	4.1	21	0	62	59	37	6.2	.4
7	.3	0	33	57	11	4.0	22	0	69	65	35	4.9	.4
8	.3	0	54	57	11	3.8	23	0	77	66	34	4.6	.4
9	.2	0	67	58	8.2	3.5	24	0	82	69	31	4.5	.4
10	.2	0	67	57	8.2	3.4	25	0	80	68	27	4.6	.4
11	.4	0	52	55	7.4	3.5	26	0	70	67	25	4.5	.5
12	.2	16	52	54	6.4	3.5	27	0	70	67	a20	4.6	.5
13	.1	26	61	51	5.9	1.9	28	0	73	71	a20	4.6	.5
14	.1	38	60	42	5.7	1.4	29	0	73	70	a20	4.5	.6
15	0	41	60	40	5.9	.6	30	0	74	68	a19	4.3	.6
							31	-	56	-	a17	4.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
April	6.9	1.2	0	0.23	14
May	1,122	82	0	36.2	2,230
June	1,766	71	33	58.9	3,500
July	1,335	69	17	43.1	2,650
August	230.2	16	4.1	7.43	457
September	57.4	4.1	.3	1.91	114
The period	-	-	-	-	8,960

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

Worm Creek near Preston, Idaho

Location.- Water-stage recorder, lat. 42°08', long. 111°46', in NW¼ 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 to September 1943.
Extremes.- Maximum discharge during period, 79 second-feet May 24 (gage height, 2.80 feet); minimum daily, 0.6 second-foot Sept. 30.
Remarks.- Records good. Several small diversions above station for irrigation. Cub River-Worm Creek Canal which discharges into Worm Creek one mile above station diverts from Cub River for storage and irrigation in Worm Creek Basin.

Discharge, in second-feet, March to September 1943

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	14	8.0	51	66	14	a2.7	16	-	20	39	53	31	7.0	a1.7
2	-	18	7.4	56	65	13	a2.6	17	-	19	39	43	31	6.8	a1.7
3	-	24	6.8	54	62	12	a2.6	18	-	18	43	44	32	6.8	a1.7
4	-	23	7.4	61	60	9.5	a2.5	19	-	18	48	57	32	6.6	a1.7
5	-	21	7.2	51	60	8.8	a2.5	20	-	18	39	59	32	a6.3	b1.7
6	-	19	6.8	44	55	9.0	b2.4	21	-	16	59	60	31	a5.9	a1.5
7	-	20	6.0	31	52	9.0	a2.3	22	-	14	65	64	31	a5.6	a1.4
8	-	17	5.4	48	52	9.0	a2.2	23	-	14	70	65	32	a5.2	a1.3
9	-	17	5.2	61	53	7.6	a2.1	24	-	14	76	67	30	a4.9	a1.2
10	-	18	5.2	65	52	7.2	a2.0	25	-	14	74	65	26	a4.6	a1.1
11	-	18	5.4	48	52	7.2	a1.9	26	*52.6	14	65	63	23	a4.2	a1.0
12	-	15	14	48	50	7.0	a1.8	27	-	10	61	63	18	a3.9	a.9
13	*36.8	18	24	57	48	7.0	b1.7	28	-	9.2	64	68	19	a3.5	a.8
14	-	20	36	57	38	7.0	a1.7	29	74	8.8	66	69	19	a3.2	a.7
15	-	22	40	57	32	7.0	a1.7	30	69	8.2	66	66	18	b2.8	a.6
								31	21	-	50	-	16	a2.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
March 29-31	-	-	-	-	325
April	499.2	24	8.2	16.6	990
May	1,108.8	76	5.2	35.8	2,200
June	1,695	69	31	56.5	3,360
July	1,218	66	16	39.3	2,440
August	214.4	14	2.8	6.92	425
September	51.7	2.7	.6	1.72	103
The period	-	-	-	-	9,840

* Result of discharge measurement.
a No gage-height record; discharge interpolated.
b Discharge computed from staff-gege reading.
Note.- Discharge Feb. 12, 1943, 0.8 second-foot (field estimate).

Time basis: Mountain war time. 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 1943 in reports of Geological Survey. January 1936 to October 1939 (fragmentary) in reports of Little Bear River Water commissioner.
Extremes.- Maximum discharge during year, 640 second-feet Apr. 20 (gage height, 3.77 feet); minimum, 10 second-feet Sept. 11.
1938-43: Maximum discharge, 720 second-feet Apr. 5, 1942 (gage height, 3.88 feet); minimum, 4 second-feet Aug. 14, 1940.
Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Several diversions above station for irrigation.

Rating table, water year 1942-43, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1-29, Feb. 14 to Mar. 29, Aug. 20 to Sept. 30)

0.8	9.5	1.4	81	2.3	277
.9	16	1.6	120	2.6	349
1.0	25	1.8	161	3.0	447
1.2	49	2.0	206	3.5	572

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	25	49	64	a54	76	199	344	140	27	20	18
2	12	25	58	56	a54	66	265	371	188	27	20	18
3	12	24	50	49	a54	66	325	363	197	28	20	15
4	13	27	*41	42	a54	69	349	378	183	27	20	16
5	13	28	39	45	a54	72	366	397	172	27	18	15
6	13	37	39	46	*54	62	366	385	148	25	17	15
7	13	41	41	42	a55	66	378	344	128	25	21	15
8	14	40	40	41	a56	181	351	296	112	25	21	15
9	14	44	42	41	a54	263	395	255	94	23	21	14
10	14	41	42	39	a52	132	349	222	96	23	20	15
11	15	41	42	39	a50	114	337	195	83	22	20	13
12	15	41	41	37	a48	*118	287	174	79	23	19	13
13	16	41	40	40	a46	124	289	168	79	21	a19	13
14	25	*41	40	41	48	194	344	163	87	20	a18	13
15	26	44	39	41	50	161	420	157	98	21	a18	13
16	27	40	39	41	50	116	460	150	94	20	a17	13
17	25	41	39	40	52	104	487	142	81	17	a16	13
18	27	45	39	b35	52	94	502	128	71	16	a16	15
19	28	46	*37	b30	52	85	510	96	64	17	a15	a15
20	28	44	37	b35	56	81	572	85	58	20	15	15
21	28	40	40	46	64	78	514	83	49	21	15	a15
22	28	37	39	71	142	81	477	85	42	21	13	a15
23	27	40	42	218	157	100	487	96	41	18	14	a15
24	26	42	62	*108	138	120	522	104	34	20	15	a15
25	26	42	54	a80	112	132	482	106	34	20	15	15
26	25	42	44	a50	78	142	467	108	34	20	16	16
27	27	54	39	a54	76	179	383	100	32	20	15	17
28	27	55	48	a54	76	253	344	92	30	20	15	17
29	26	49	52	a54	-	320	366	85	26	20	14	17
30	27	58	45	a54	-	330	344	81	25	20	15	18
31	26	-	67	a54	-	213	-	92	-	20	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	654	28	11	21.1	1,300
November	1,215	58	24	40.5	2,410
December	1,366	67	37	44.1	2,710
Calendar year 1942	26,170	496	8	71.7	51,920
January	1,689	218	30	54.5	3,350
February	1,888	157	46	67.4	3,740
March	4,192	330	62	135	8,310
April	11,937	572	199	398	23,680
May	5,840	397	81	188	11,580
June	2,599	197	25	86.6	5,160
July	674	28	16	21.7	1,340
August	535	21	13	17.3	1,060
September	452	18	13	15.1	897
Water year 1942-43	33,041	572	11	90.5	65,540

* Winter discharge measurement made on this day.
a No gage-height record; discharge interpolated or computed on basis of 1 discharge measurement, weather records, and records for South Fork Ogden River near Huntsville.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time. 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 SE¼NE¼ 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 1943.

Extremes.- Maximum contents during year, 18,680 acre-feet May 1 to June 29 (elevation, 4,672.0 feet); minimum, 5,190 acre-feet Oct. 11 (elevation, 4,637.3 feet).
1938-43: 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 is 4,660 feet. Water is used for irrigation on Hyrum project.

Contents, in acre-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,770	5,710	7,660	10,360	13,720	13,770	14,690	18,680	18,680	18,350	14,030	10,000
2	5,710	5,740	7,730	10,520	13,720	13,770	14,510	18,680	18,680	18,150	13,900	9,910
3	5,620	5,770	7,790	10,640	13,720	13,770	14,600	18,680	18,680	17,960	13,770	9,790
4	5,510	5,820	7,860	10,710	13,720	13,770	14,690	18,680	18,680	17,770	13,640	9,680
5	-	5,850	7,930	10,830	13,720	13,770	14,640	18,680	18,680	17,580	13,510	9,570
6	-	5,880	8,000	10,950	13,720	13,770	14,730	18,680	18,680	17,440	13,420	9,500
7	-	5,940	-	11,030	13,720	13,770	14,640	18,680	18,680	17,290	13,250	-
8	-	5,970	-	11,110	13,720	13,810	14,730	18,680	18,680	17,150	13,160	-
9	-	-	-	11,190	13,720	13,810	14,770	18,680	18,680	17,010	-	9,160
10	5,220	6,140	8,340	11,270	13,720	13,810	14,820	18,680	18,680	16,820	-	9,050
11	5,190	-	-	11,350	13,720	13,850	14,860	18,680	18,680	16,640	-	8,950
12	-	-	8,550	11,430	13,720	13,850	14,910	18,680	18,680	-	12,610	8,840
13	-	-	8,660	11,510	13,720	13,850	15,000	18,680	18,680	-	12,490	8,730
14	-	6,290	-	-	13,720	13,900	15,090	18,680	18,680	-	12,360	8,620
15	-	6,380	-		13,720	13,900	15,180	18,680	18,680	-	12,240	8,550
16	-	-	-	11,710	13,720	13,900	15,270	18,680	18,680	-	12,120	8,480
17	5,300	-	-	11,790	13,720	13,900	15,360	18,680	18,680	15,760	-	8,380
18	5,320	-	-	11,870	13,720	13,900	15,810	18,680	18,680	15,630	-	8,270
19	-	-	9,050	11,950	13,720	13,940	16,310	18,680	18,680	15,490	11,710	8,170
20	5,380	6,750	9,130	12,030	13,720	13,940	16,730	18,680	18,680	15,360	11,590	8,075
21	5,400	6,840	-	12,200	13,720	13,940	16,920	18,680	18,680	15,220	11,470	8,000
22	-	6,910	9,270	12,360	-	13,940	17,010	18,680	18,680	15,090	11,350	-
23	-	-	-	12,530	13,770	13,940	17,110	18,680	18,680	15,000	11,230	-
24	5,490	-	-	13,120	13,770	13,990	17,290	18,680	18,680	14,910	-	-
25	5,510	-	-	13,250	13,770	14,070	17,390	18,680	-	14,770	-	7,790
26	-	-	9,720	13,330	13,770	14,160	17,390	18,680	18,680	14,640	-	7,730
27	-	-	9,830	13,460	13,770	14,240	17,440	18,680	18,680	-	-	7,660
28	-	7,390	9,940	13,640	13,770	14,380	17,530	18,680	18,680	-	10,600	7,630
29	-	7,490	10,000	13,720	-	14,510	18,200	18,680	18,680	14,240	10,480	7,590
30	-	7,590	10,100	13,720	-	14,640	18,640	18,680	18,540	14,160	10,330	7,560
31	5,680	-	10,210	13,720	-	14,820	-	18,680	-	14,110	10,170	-

Monthly elevation and contents, water year October 1942 to September 1943

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30	4,639.6	5,820	-
Oct. 31	4,639.1	5,680	-140
Nov. 30	4,645.3	7,590	+1,910
Dec. 31	4,652.6	10,210	+2,620
Calendar year 1942	-	-	+150
Jan. 31	4,661.2	13,720	+3,510
Feb. 28	4,661.3	13,770	+50
Mar. 31	4,663.7	14,820	+1,050
Apr. 30	4,671.9	18,640	+3,820
May 31	4,672.0	18,680	+40
June 30	4,671.7	18,540	-140
July 31	4,662.1	14,110	-4,430
Aug. 31	4,652.5	10,170	-3,940
Sept. 30	4,645.2	7,560	-2,610
Water year 1942-43	-	-	+1,740

Time basis: Mountain war time. 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 NW¼SW¼ sec. 6, T. 10 N., R. 1 E., 800 feet upstream from road bridge, 1¼ miles downstream from Hyrum Dam, and 2 miles west of Hyrum.

Drainage area.- 222 square miles.

Records available.- October 1938 to September 1943.

Extremes (regulated).- Maximum discharge during year, 528 second-feet Apr. 23 (gage height, 3.89 feet); minimum daily, 1.2 second-feet Aug. 14, 15.
1938-43: Maximum discharge, that of Apr. 23, 1943; minimum daily, 1 second-foot at times during 1939-41.

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

Rating table, water year 1942-43 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Mar. 8)

0.6	1.0	1.2	23	2.5	196
.7	2.2	1.4	38	3.0	300
.8	5.0	1.6	57	3.5	422
.9	8.0	1.9	96	3.9	531
1.0	12	2.2	127		

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.5	4.2	4.2	2.2	46	85	307	180	11	6.8	1.8	2.0
2	2.5	4.2	4.4	2.1	46	81	285	251	50	6.8	2.2	1.7
3	3.8	3.9	4.4	2.0	49	76	291	298	192	6.5	2.0	1.7
4	3.6	3.9	4.4	2.0	51	73	298	312	227	5.6	1.5	2.5
5	3.6	3.6	4.4	2.0	51	74	316	419	176	4.7	1.4	2.8
6	2.8	3.3	4.4	2.0	51	72	328	441	151	3.9	1.5	2.2
7	2.2	3.0	4.4	2.0	51	70	342	430	85	3.0	1.8	3.3
8	2.1	2.8	4.4	2.0	53	88	382	394	72	3.0	2.1	3.6
9	2.1	2.8	4.4	1.8	55	166	359	223	73	3.0	2.0	3.9
10	1.8	2.5	4.4	1.8	54	171	364	105	62	3.0	1.7	3.6
11	3.0	2.2	4.4	1.8	54	162	359	106	57	3.0	1.6	3.6
12	6.5	2.2	4.7	1.8	53	155	352	92	46	3.6	1.5	4.4
13	7.7	3.0	4.7	1.8	52	149	333	92	42	4.2	1.4	4.7
14	8.0	6.8	4.2	2.0	52	155	330	104	40	4.4	1.2	4.2
15	8.9	7.1	4.2	2.0	52	167	347	122	101	5.6	1.2	3.6
16	8.5	7.1	4.2	1.8	51	160	376	166	100	5.0	1.7	4.2
17	8.0	7.4	4.2	1.8	51	151	335	158	121	3.6	1.8	4.2
18	8.5	7.7	4.4	1.8	53	137	287	155	93	3.3	3.6	4.2
19	8.0	8.9	4.4	2.1	54	124	284	134	21	2.8	3.6	4.4
20	7.7	8.0	4.4	4.4	57	111	352	100	14	2.8	3.6	4.7
21	7.4	8.0	4.4	4.7	59	102	454	40	11	2.8	3.6	4.7
22	6.8	7.7	4.4	5.0	70	96	482	7.7	8.9	3.3	3.3	4.7
23	6.8	7.4	4.7	6.5	113	95	490	7.7	13	2.5	3.3	3.0
24	6.5	7.4	5.0	5.9	121	102	354	7.1	18	2.2	4.7	2.5
25	6.5	5.9	5.0	5.3	113	113	388	11	20	2.2	5.0	3.3
26	6.2	3.9	4.4	4.4	104	125	394	15	13	2.1	2.8	3.3
27	6.2	4.4	2.2	6.2	95	124	384	16	8.9	2.5	2.5	3.6
28	7.4	4.2	2.1	6.5	89	155	282	14	8.0	2.2	2.2	3.6
29	5.9	4.2	2.1	27	-	213	134	12	8.5	2.1	1.8	3.3
30	5.0	4.4	2.0	45	-	235	137	9.8	7.1	2.0	1.8	3.9
31	4.4	-	2.0	46	-	255	-	9.4	-	2.0	2.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	170.4	8.9	1.8	5.50	338
November	152.1	8.9	2.2	5.07	302
December	125.9	5.0	2.0	4.06	250
Calendar year 1942	18,134.4	422	1.8	49.7	35,970
January	203.7	46	1.8	6.57	404
February	1,800	121	46	64.3	3,570
March	4,042	255	70	130	8,020
April	10,096	490	134	337	20,030
May	4,431.7	441	7.1	143	8,790
June	1,820.4	227	7.1	60.7	3,610
July	110.5	6.8	2.0	3.56	219
August	72.3	5.0	1.2	2.33	143
September	105.4	4.7	1.7	3.51	209
Water year 1942-43	23,130.4	490	1.2	63.4	45,880

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

East Fork Little Bear River near Avon, Utah

Location.- Water-stage recorder, lat. 41°30', long. 111°45', in NE¼ sec. 17, T. 9 N., R. 2 E., 500 feet upstream from Pole Creek, half a mile downstream from Porcupine Creek, and 3½ miles east of Avon. Prior to Mar. 13, 1939, staff gage at same site and datum.

Records available.- January 1938 to September 1943. April 1927 to September 1930 at site 1½ miles downstream.

Extremes.- Maximum and minimum discharges for the water years 1938 to 1943 are contained in the following table:

Water year	Maximum			Minimum daily	
	Date	Discharge (sec.-ft.)	Gage height (feet)	Date	Discharge (sec.-ft.)
1938*	Apr. 25	†276	3.25	-	Not determined
1938-39	Apr. 4	‡142	2.42	-	Not determined
1939-40	Apr. 15	110	2.23	Aug. 30 to Sept.1	6.5
1940-41	Apr. 28, 29	146	2.43	Dec. 5, 8, 11, 12, 16	5.1
1941-42	Apr. 11	249	2.94	Oct. 17-20, 22-27, Dec. 27	8.0
1942-43	Apr. 20	449	3.88	-	Not determined

* Jan. 1 to July 31.
† Maximum observed.
‡ Mean daily.

1927-30, 1938-43: Maximum discharge about 800 second-feet Apr. 27, 1927, from rating curve extended above 280 second-feet; minimum daily recorded, 5.1 second-feet Dec. 5, 8, 11, 12, 16, 1940.

Remarks.- Records for water year 1943 good except those for Oct. 1 to Jan. 19, Aug. 28 to Sept. 30, which are fair, and those for Jan. 20 to Mar. 7, Mar. 16 to Apr. 7, which are poor. No diversion above station. Many diversions below station for irrigation.

Cooperation.- Gage-height record and 11 discharge measurements for period Oct. 1, 1942 to June 30, 1943 furnished by Bureau of Reclamation. Records for January 1938 to September 1942 collected and computed by Bureau of Reclamation and reviewed by Geological Survey.

Discharge, in second-feet, 1938-43

1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				a12	a12	a23	33	248	97	a37		
2				a12	a12	26	a28	234	95	a37		
3				12	a12	a25	25	234	94	37		
4				a12	a12	a25	a25	a195	89	37		
5				a12	12	24	a27	156	80	37		
6				a12	a12	a23	a29	146	80	a36		
7				a12	a12	a22	a31	153	75	36		
8				12	12	22	33	146	67	a35		
9				a12	a12	a27	a38	159	67	34		
10				12	13	a33	44	153	a65	33		
11				a12	a13	a38	a49	175	a60	a32		
12				a13	a13	44	a54	169	57	32		
13				a13	a13	36	a59	172	a55	30		
14				a13	13	a36	a65	188	54	a30		
15				13	a13	a36	72	188	52	30		
16				a13	13	36	a153	211	52			
17				a12	a13	a42	234	a211	50			
18				a12	a13	a48	234	211	48			
19				12	a13	54	a240	185	46			
20				a12	a13	36	a246	169	44			
21				a12	a13	a36	a252	a158	44			
22				a12	13	a36	a258	146	42			
23				a12	a13	36	a264	140	41	a25		
24				12	a13	a34	a270	137	39			
25				a12	13	a33	276	137	39			
26				13	a15	a31	261	137	39			
27				a13	a17	a30	251	137	39			
28				a13	a20	30	248	134	37			
29				a12	-	a30	259	125	39			
30				a12	-	a30	268	122	37			
31				12	-	a31	-	111	-			

a No gage-height record; discharge estimated or interpolated.

Discharge, in second-feet, of East Fork Little Bear River near Avon, Utah, 1938-43--Continued

1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	79	108	31	17	13	9.1
2						-	84	100	30	17	11	9.1
3						-	132	96	29	17	11	8.5
4						-	142	94	30	17	11	8.5
5						-	123	93	30	17	11	8.5
6						-	86	87	30	16	11	9.1
7						-	80	80	29	15	11	10
8						-	96	75	28	15	11	10
9						-	105	71	29	14	11	9.6
10						-	84	68	27	14	11	9.6
11						-	80	70	26	14	11	9.6
12						-	87	67	25	13	11	12
13						15	103	61	24	13	11	11
14						15	103	59	24	13	10	11
15						15	99	55	23	13	10	11
16						17	91	54	24	12	10	11
17						18	84	52	25	12	9.6	10
18						22	86	48	25	13	9.6	10
19						27	88	46	23	12	9.6	10
20						27	90	44	23	12	9.6	9.6
21						36	94	41	22	12	9.6	9.6
22						44	97	40	20	12	9.1	9.6
23						67	102	39	20	12	9.1	9.1
24						94	126	40	20	12	9.1	9.1
25						124	120	38	20	12	9.1	10
26						80	105	36	19	12	9.6	10
27						80	97	34	18	12	9.6	9.6
28						57	94	32	18	12	9.6	9.6
29						55	99	31	18	13	9.6	9.6
30						62	105	30	17	15	9.6	9.6
31						71	-	31	-	13	9.1	-

1939-40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	10	9.5	10	8.5	15	56	58	21	13	9.0	6.5
2	12	10	9.5	10	8.5	15	53	56	20	13	9.0	7.0
3	12	10	9.5	10	9.0	14	46	60	19	12	9.0	8.0
4	12	10	9.5	9.5	9.5	13	42	63	19	12	9.0	8.0
5	11	10	9.5	9.5	9.0	13	47	62	21	12	9.0	8.0
6	11	10	9.5	9.5	9.0	13	52	61	20	12	9.0	8.0
7	11	10	9.5	9.0	9.5	13	48	57	19	11	9.0	8.0
8	11	10	9.5	9.0	9.0	13	48	56	18	11	8.5	8.5
9	11	9.5	10	9.0	8.5	13	54	56	17	11	8.0	8.5
10	11	9.5	10	9.0	9.0	13	61	56	18	11	8.0	8.5
11	11	9.5	10	9.0	9.5	13	57	55	17	10	8.0	8.5
12	10	9.5	10	9.0	9.0	13	60	54	16	10	8.0	8.5
13	10	9.5	9.5	8.5	8.5	12	74	54	16	10	7.5	9.0
14	10	9.0	9.5	8.5	8.5	12	84	51	16	10	7.5	8.5
15	10	9.0	9.5	8.5	9.0	12	94	47	15	10	8.0	8.5
16	10	9.0	9.5	8.5	8.5	13	84	43	15	11	8.0	8.0
17	10	9.0	9.5	9.0	8.0	13	74	41	15	12	8.0	8.0
18	10	9.0	9.0	8.5	8.5	13	78	38	15	11	8.0	9.0
19	10	8.5	9.0	9.0	8.5	15	83	36	15	10	8.0	9.0
20	10	8.5	9.0	9.0	8.0	15	86	33	14	10	8.0	9.0
21	10	9.0	9.0	9.0	8.5	17	86	32	14	10	8.5	9.0
22	10	9.0	8.5	9.0	9.0	19	79	30	14	9.5	8.5	9.0
23	10	9.0	8.5	9.0	9.5	21	77	29	14	10	8.5	9.0
24	10	8.5	8.5	9.0	9.0	26	78	27	14	10	8.5	8.5
25	10	9.0	8.5	9.0	9.5	39	79	26	13	9.5	9.0	9.5
26	10	9.0	8.5	9.0	10	42	77	25	13	9.5	8.5	9.5
27	10	9.0	8.5	9.0	12	61	73	24	13	10	9.0	10
28	10	9.5	8.5	9.0	14	50	68	23	13	10	7.5	10
29	10	9.0	9.0	9.0	16	43	66	23	13	9.5	7.0	10
30	10	9.0	9.0	8.5	-	47	63	23	13	9.5	6.5	10
31	10	-	9.0	8.5	-	53	-	22	-	9.5	6.5	-

Discharge, in second-feet, of East Fork Little Bear River near Avon, Utah, 1938-43--Continued

1940-41

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.5	9.0	5.7	8.0	7.5	12	30	125	28	15	10	8.0
2	9.0	9.0	5.7	8.0	8.5	13	29	122	26	15	10	7.5
3	10	9.0	5.4	8.0	8.0	13	29	118	25	15	9.5	8.5
4	10	8.5	5.4	8.0	8.0	13	26	114	24	14	9.5	8.5
5	9.5	9.0	5.1	7.5	8.0	13	46	108	25	14	9.5	8.0
6	9.5	9.0	5.4	7.5	8.0	13	41	99	25	13	9.5	7.5
7	9.0	9.0	5.4	7.5	8.0	13	38	91	25	13	9.5	7.5
8	9.5	9.0	5.1	8.0	8.0	13	37	84	25	13	10	8.0
9	9.5	9.0	5.4	8.0	8.0	13	38	92	25	13	10	7.5
10	9.5	9.0	5.4	8.0	8.0	13	44	94	25	13	11	7.5
11	9.0	9.0	5.1	8.0	9.0	13	41	91	23	13	11	7.0
12	9.0	8.5	5.1	8.0	11	12	41	91	22	12	10	7.5
13	8.5	8.0	5.4	8.0	9.5	12	48	88	21	12	10	7.5
14	8.5	8.0	5.4	8.0	9.5	11	48	84	20	12	10	8.0
15	8.5	8.0	5.4	8.0	9.0	11	42	74	19	12	9.5	7.5
16	9.0	7.0	5.1	7.5	9.0	11	49	68	19	11	9.5	7.5
17	9.0	7.0	5.4	7.5	9.0	11	45	64	18	10	9.5	8.0
18	9.0	7.0	5.4	7.5	9.0	12	42	62	19	10	9.5	9.0
19	8.5	6.5	5.4	7.5	9.5	12	39	56	18	12	9.0	9.5
20	9.5	6.5	5.4	7.5	9.5	13	40	50	18	12	9.0	9.0
21	9.5	6.5	6.0	7.5	9.5	14	40	46	17	11	9.0	9.5
22	9.0	6.0	6.0	7.5	9.5	15	46	44	16	10	9.0	10
23	9.5	5.7	6.5	7.5	10	16	58	41	16	10	8.5	10
24	10	5.7	7.0	7.5	11	16	74	40	15	11	8.5	10
25	9.5	5.4	7.0	7.5	11	15	86	37	15	12	8.5	10
26	10	5.7	7.0	7.5	10	15	95	36	15	12	8.5	10
27	11	5.7	7.5	7.5	10	15	102	36	15	12	8.5	10
28	10	5.4	7.5	7.5	10	16	116	36	15	11	8.0	10
29	10	5.7	7.5	7.0	-	17	125	33	15	10	7.5	9.5
30	10	6.0	8.0	7.0	-	20	128	31	15	10	8.0	9.5
31	9.5	-	8.5	7.0	-	25	-	30	-	10	8.0	-

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.0	8.5	9.5	8.5	11	9.0	27	82	79	27	15	14
2	9.0	9.5	9.5	8.5	10	9.0	31	84	78	26	16	13
3	9.0	9.0	12	8.5	11	9.5	38	78	75	25	16	13
4	9.0	9.5	13	8.5	10	9.5	54	78	73	24	16	14
5	9.5	9.0	12	8.5	11	9.5	83	72	69	24	14	13
6	9.5	9.0	11	8.5	10	10	81	75	65	23	14	13
7	9.0	9.0	11	8.5	11	9.5	82	75	63	23	14	13
8	9.0	9.0	10	9.0	11	10	88	81	60	23	14	12
9	9.0	9.0	10	9.0	10	10	105	92	56	22	14	11
10	9.0	9.0	10	8.5	10	12	131	95	53	21	14	11
11	9.0	9.0	10	8.5	10	13	158	94	50	20	14	12
12	9.0	9.0	10	8.5	10	14	173	94	49	20	15	14
13	9.5	9.5	10	8.5	10	14	173	88	46	19	15	12
14	9.0	9.5	10	8.5	a10	14	190	83	44	19	14	12
15	9.5	9.5	10	8.5	a10	13	157	79	43	19	14	11
16	8.5	9.5	10	9.0	a10	13	138	90	43	19	13	12
17	8.0	10	10	9.0	a10	13	133	92	42	18	13	11
18	8.0	10	10	9.0	a9.0	13	128	90	41	18	13	11
19	8.0	10	10	8.5	a9.0	13	112	87	39	17	13	c10
20	8.0	9.5	10	9.0	a9.0	13	128	87	38	17	13	c10
21	8.5	9.5	10	9.0	9.0	13	141	92	36	16	13	c10
22	8.0	9.5	10	9.0	9.0	13	153	105	35	16	13	c10
23	8.0	9.0	9.5	9.0	9.0	15	144	116	33	15	13	c10
24	8.0	9.0	9.5	9.5	9.0	16	123	120	32	15	14	c10
25	8.0	9.0	9.5	10	9.0	16	108	117	31	15	15	c10
26	8.0	9.0	9.0	10	9.0	16	95	116	32	15	15	c10
27	8.0	9.0	8.0	10	9.0	16	86	112	32	15	15	c10
28	9.0	9.0	8.5	11	9.0	16	86	101	31	15	15	c10
29	9.0	9.0	8.5	12	-	17	81	94	30	15	15	c10
30	9.0	9.0	9.0	12	-	19	78	87	29	15	15	c10
31	9.0	-	9.0	12	-	23	-	81	-	15	14	-

a No gage-height record; discharge interpolated.
c Backwater from beaver dam.

Discharge, in second-feet, of East Fork Little Bear River near Avon, Utah, 1938-43--Continued

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				a12		a25	a70	205	78	33	19	
2				a12		a20	a110	207	88	32	19	
3						a19	a150	194	85	31	18	
4						a18	a180	214	86	31	18	
5						a18	a190	196	76	30	18	c14
6	c10					a17	a190	190	74	29	20	
7						a17	a190	163	72	28	21	
8						19	192	147	67	28	18	
9						22	195	132	66	27	18	
10					a13	20	146	120	62	27	18	
11				a11		20	117	111	60	26	17	
12			a10			20	104	107	59	26	17	
13						21	128	102	58	25	17	
14						23	177	100	62	25	16	
15						24	230	97	60	25	16	
16		a10				a20	272	96	58	24	16	c13
17						a17	284	90	55	24	16	
18						a16	300	85	52	23	17	
19						a16	310	78	49	23	17	
20					a15	a16	330	73	48	22	17	
21	a10				a25	a16	276	73	46	23	16	
22					a35	a17	268	72	44	22	15	
23					a40	a19	268	73	43	22	16	
24					a35	a24	276	73	41	21	15	
25				a12	a30	a30	247	73	39	21	14	
26			a12		a25	a35	228	70	38	21	15	c12
27					a25	a40	183	69	37	20	15	
28					a25	a70	185	64	36	20		
29					-	a80	205	59	35	20	c14	
30					-	a60	194	58	34	19		
31		-			-	a50	-	61	-	19		-

a No gage-height record; discharge computed on basis of 3 discharge measurements, weather records, and records for Little Bear River near Paradise.
c Backwater from beaver dam.

Monthly discharge, in second-feet, 1938-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
January 1938	380	13	12	12.3	754
February	368	20	12	13.1	730
March	1,013	54	22	32.7	2,010
April	4,326	276	25	144	8,580
May	5,187	248	111	167	10,290
June	1,721	97	37	57.4	3,410
July	913	37	-	29.5	1,810
August	-	-	-	-	-
September	-	-	-	-	-
The period	-	-	-	-	27,580
October 1938	-	-	-	-	-
November	-	-	-	-	-
December	-	-	-	-	-
Calendar year	-	-	-	-	-
January 1939	-	-	-	-	-
February	-	-	-	-	-
March 13-31	926	124	15	48.7	1,840
April	2,959	142	79	98.6	5,870
May	1,820	106	30	58.7	3,610
June	727	31	17	24.2	1,440
July	423	17	12	13.6	839
August	316.5	13	9.1	10.2	628
September	293.0	12	8.5	9.8	581
The period	-	-	-	-	14,810
October 1939	324	12	10	10.5	643
November	279.5	10	8.5	9.32	554
December	286.0	10	8.5	9.23	567
Calendar year	-	-	-	-	-
January 1940	280.0	10	8.5	9.03	555
February	273.0	16	8.0	9.41	541
March	684	61	12	22.1	1,360
April	2,027	94	42	67.6	4,020
May	1,321	63	22	42.6	2,620
June	480	21	13	16.0	952
July	329.0	13	9.5	10.6	653
August	254.5	9.0	6.5	8.21	505
September	259.5	10	6.5	8.65	515
Water year 1939-40	6,797.5	94	6.5	18.6	13,480

Monthly discharge, in second-feet, of East Fork Little Bear River near Avon, Utah, 1938-43--C

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off
October 1940	291.5	11	8.5	9.40	
November	222.8	9.0	5.4	7.42	
December	185.6	8.5	5.1	5.99	
Calendar year 1940	6,607.9	94	5.1	18.1	1
January 1941	237.0	8.0	7.0	7.65	
February	255.5	11	7.5	9.12	
March	431	25	11	13.9	
April	1,663	128	29	55.4	3
May	2,185	125	30	70.5	4
June	604	28	15	20.1	1
July	373	15	10	12.0	
August	287.5	11	7.5	9.27	
September	257.5	10	7.0	8.58	
Water year 1940-41	6,993.4	128	5.1	19.2	13,
October 1941	270.0	9.5	8.0	8.71	
November	277.0	10	8.5	9.23	
December	308.5	13	8.0	9.95	
Calendar year 1941	7,149.0	128	7.0	19.6	14,1
January 1942	286.5	12	8.5	9.24	5
February	274.0	11	9.0	9.79	5
March	411.0	23	9.0	13.3	8
April	3,305	190	27	110	6,5
May	2,844	120	75	91.7	5,6
June	1,427	79	29	47.6	2,8
July	591	27	15	19.1	1,1
August	441	16	13	14.2	8
September	342	14	10	11.4	6
Water year 1941-42	10,777.0	190	8.0	29.5	21,3
October 1942	310	-	-	10	
November	300	-	-	10	6
December	328	-	-	10.6	5
Calendar year 1942	10,859.5	190	8.5	29.7	21,5
January 1943	355	-	-	11.5	
February	502	40	-	17.9	7
March	829	80	-	26.7	9
April	6,195	330	16	206	1,6
May	3,452	214	70	111	12,2
June	1,708	88	58	56.9	6,9
July	767	33	34	24.7	3,3
August	515	21	19	16.6	1,8
September	390	-	14	13	1,0
Water year 1942-43	15,651	330	-	42.9	31,0

Time basis: Mountain standard time prior to 2 a.m., Feb. 9, 1942; mountain war time thereafter. To convert war time to standard time, subtract 1 hour.

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 1943. 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.- 30 years (1913-43), 110 second-feet.
Extremes.- Maximum daily discharge during year, 958 second-feet June 1, 2 (gage height, 3.75 feet); minimum daily, 8 second-feet Aug. 15, 18.
1913-43: 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 50 second-feet and good below except those for periods of no gage-height record, which are fair. Water diverted from river and springs above station for power, irrigation, and municipal supply. Flow regulated by power plants above station.
Cooperation.- Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project. Eight discharge measurements made by Geological Survey.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	a14	13	16	14	11	23	768	958	320	22	15
2	16	a15	13	15	14	13	43	827	958	298	26	15
3	16	15	13	14	14	14	86	814	796	274	a22	18
4	16	15	13	15	14	14	126	890	699	257	19	15
5	16	14	11	16	a14	14	146	832	606	244	15	15
6	16	14	14	a15	all	14	143	674	564	228	14	15
7	16	14	14	a15	11	14	171	556	528	207	59	15
8	16	13	13	a15	15	15	160	478	490	190	15	15
9	16	14	13	a15	14	18	190	417	486	176	13	15
10	15	13	13	15	14	15	176	402	528	166	11	15
11	15	13	14	16	14	14	160	413	568	156	10	15
12	14	13	13	14	14	14	128	398	568	153	10	15
13	11	13	13	14	14	14	166	372	560	138	10	15
14	13	13	13	14	15	14	238	390	544	124	9	16
15	13	15	13	14	15	14	284	383	536	128	8	15
16	13	14	13	14	15	14	336	342	470	138	10	15
17	10	14	13	14	15	14	361	309	436	126	10	15
18	10	13	13	14	14	15	428	270	451	103	8	15
19	10	13	13	14	14	14	443	250	474	92	10	15
20	10	13	13	14	14	14	486	234	506	90	10	16
21	10	13	13	14	15	15	486	253	•517	78	10	16
22	10	13	13	18	14	14	474	313	501	80	10	16
23	10	13	13	16	30	13	505	390	474	67	13	16
24	a10	13	13	15	32	14	641	470	451	59	13	16
25	all	13	14	15	15	15	708	525	428	52	13	16
26	all	13	14	14	15	24	746	560	409	51	15	18
27	a12	14	14	14	14	29	650	588	390	43	15	18
28	a12	14	14	14	13	49	604	625	379	48	15	18
29	a13	14	14	14	-	58	662	645	357	38	15	18
30	a13	13	14	14	-	41	666	666	338	30	15	16
31	a14	-	15	14	-	26	-	738	-	24	15	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	404	16	10	13.0	801
November	408	15	13	13.6	809
December	412	15	11	13.3	817
Calendar year 1942	15,505	415	10	42.5	30,750
January	455	18	14	14.7	902
February	427	32	11	15.2	847
March	584	58	11	18.8	1,160
April	10,436	746	23	348	20,700
May	15,792	890	234	509	31,320
June	15,971	958	338	532	31,680
July	4,178	320	24	135	8,290
August	460	59	8	14.8	912
September	473	18	15	15.8	938
Water year 1942-43	49,999	958	8	137	99,180

a No gage-height record; discharge interpolated or based on range of gage readings made by Utah Power & Light Co. employees.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

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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 NE¼ sec. 36, T. 12 N., R. 1 E., 100 feet downstream from powerhouse of Utah Power & Light Co. and 2½ miles east of Logan.
Records available.- May 1913 to September 1943.
Average discharge.- 30 years, 104 second-feet.
Extremes.- Maximum daily discharge during year, 186 second-feet many days in May and June (gage height, 2.61 feet); minimum, no flow Apr. 30, May 1.
1914-43: 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 SE¼SW¼ 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 by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

Rating table, water year 1942-43 (gage height, in feet, and discharge, in second-feet)

0.70	0	1.20	21	2.00	101
.80	3	1.40	36	2.30	140
.90	6	1.60	55	2.50	168
1.00	10	1.80	77	2.70	201

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	67	85	85	73	a51	a84	166	0	184	182	184	182
2	70	84	83	75	a67	a84	173	1	184	182	184	155
3	70	87	83	75	75	a76	174	1	184	182	184	a153
4	72	87	a60	a69	74	a77	178	1	186	181	182	155
5	74	87	a73	63	69	85	a176	97	186	181	184	154
6	67	84	a58	70	68	a78	176	182	186	181	184	150
7	65	84	a62	72	67	73	178	179	186	182	184	152
8	66	83	68	69	68	79	176	178	186	182	184	150
9	64	82	72	68	69	94	178	178	186	182	184	146
10	66	81	74	64	68	a92	179	182	186	182	184	145
11	67	81	74	62	66	91	a178	182	186	182	184	141
12	81	77	72	62	65	90	a174	182	186	184	182	141
13	90	77	69	63	66	89	176	184	182	184	181	143
14	91	a77	72	69	68	90	178	184	186	184	a178	141
15	93	77	72	a80	65	90	178	184	186	184	174	139
16	90	83	73	a74	64	85	176	184	184	184	178	137
17	87	81	73	a70	66	87	170	184	186	184	173	139
18	88	84	72	a51	69	87	173	184	186	184	166	135
19	88	83	72	a49	75	65	174	164	186	184	171	a130
20	88	84	70	66	78	82	178	184	184	184	171	135
21	88	83	70	76	82	84	178	186	184	184	a162	135
22	88	78	72	83	90	77	178	186	184	184	154	134
23	88	a78	74	85	93	78	178	186	184	182	160	130
24	a88	77	79	84	91	78	162	186	184	182	160	128
25	a89	81	81	68	91	84	97	186	184	182	168	127
26	a89	76	77	66	90	90	57	184	184	182	162	131
27	89	77	64	73	88	96	2	184	184	182	166	131
28	89	83	68	72	85	96	2	184	184	184	164	a129
29	89	82	78	70	-	128	2	186	184	184	160	127
30	88	88	74	68	-	170	0	186	184	184	164	124
31	85	-	69	64	-	171	-	186	-	184	165	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,514	93	64	81.1	4,990
November	2,481	88	76	81.7	4,860
December	2,243	85	68	72.4	4,450
Calendar year 1942	38,098	196	1	104	75,570
January	2,153	85	49	69.5	4,270
February	2,066	93	51	73.8	4,100
March	2,850	171	73	91.9	5,650
April	4,365	179	0	145	8,660
May	4,875	186	0	157	9,670
June	5,546	186	182	185	11,000
July	5,669	184	181	183	11,050
August	5,383	184	154	174	10,680
September	4,199	162	124	140	8,330
Water year 1942-43	44,314	186	0	121	87,710

a No gage-height record; discharge computed on basis of records for hydroelectric plant 100 feet upstream.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Logan, Hyde Park & Smithfield Canal near Logan, Utah

Location.- Water-stage recorder and concrete rating flume, lat. 41°44'45", long. 111°47'05", in SE¼ sec. 25, T. 12 N., R. 1 E., 1¼ miles downstream from head of canal and 2⅛ miles east of Logan.
Records available.- June 1904 to December 1907, January 1909 to September 1943.
Average discharge.- 20 years (1923-43), 28.9 second-feet.
Extremes.- Maximum daily discharge during year, 131 second-feet July 1, 2; no flow at times.
1906, 1924-43: Maximum daily discharge, 136 second-feet May 30, 31, 1930; no flow at times most years.
Remarks.- Records excellent except those for periods of no gage-height record, which are fair. No diversion above station. Flow regulated by head gates at diversion works. Canal diverts water from Logan River in NE¼NE¼ sec. 31, T. 12 N., R. 2 E., for irrigation and domestic supply north of Logan.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25							16	45	131	83	37
2	25				3.6			22	23	131	88	36
3	28							29	22	130	81	33
4	28				h3.6			27	21	128	77	36
5	25						0	16	20	127	77	36
6	25							.4	20	126	72	36
7	25							0	23	127	40	36
8	25						0	11	34	127	67	36
9	25						.2	22	38	127	68	35
10	24						.8	32	38	128	61	35
11	24						.6	45	46	127	58	35
12	12						.5	60	57	126	57	36
13	5.4						.0	76	64	124	52	35
14	4.8						0	91	61	123	52	36
15	4.8						0	101	42	116	55	35
16	4.5	4	4	4	3.6	3.6	0	102	41	97	63	35
17	4.2						0	82	47	91	56	35
18	4.2						0	88	47	95	54	35
19	4.2						0	85	59	98	53	35
20	4.2						0	94	66	98	53	34
21	4.2						0	116	66	104	52	34
22	4.2						0	118	77	105	52	34
23	4.2						0	121	91	101	52	34
24	4.2						0	124	109	98	50	34
25	4.5						0	125	118	100	42	34
26	4.5						0	124	123	92	39	33
27	4.5						0	123	124	91	39	33
28	4.5						0	126	124	82	38	33
29	4.5				-		0	126	126	87	37	33
30	4.5				-		0	128	130	85	37	33
31	4.5	-			-		-	99	-	84	38	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	369.6	25	4.2	11.9	733
November	120	-	-	4	238
December	124	-	-	4	246
Calendar year 1942	7,831.6	124	0	21.5	15,530
January	124	-	-	4	246
February	100.8	-	-	3.6	200
March	111.6	-	-	3.6	221
April	2.5	.8	0	.08	4.6
May	2,327.4	128	0	75.1	4,620
June	1,902	130	20	63.4	3,770
July	3,406	131	82	110	6,760
August	1,743	88	37	56.2	3,460
September	1,040	37	33	34.7	2,060
Water year 1942-43	11,370.7	131	0	31.2	22,560

h Computed from staff-gage reading.
Note.- No gage-height record Oct. 30 to Feb. 3, Feb. 5 to Apr. 7; discharge estimated.

Blacksmith Fork at Hardware Ranch, near Hyrum, Utah

Location.- Water-stage recorder, lat. 41°37', long. 111°36', in NE¼ sec. 16, T. 10 N., R. 3 E., 1.2 miles downstream from Rock Creek and 13⅛ miles east of Hyrum.
Records available.- June to September 1943.
Extremes.- Maximum discharge during period, 98 second-feet Aug. 7 (gage height, 1.97 feet); minimum daily, 68 second-feet Sept. 11, 17, 18, 20-22, 24, 25.
Remarks.- Records fair. Some diversions above station for irrigation of meadow lands.

Discharge, in second-feet, June to September 1943

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	-	83	77	73	11	-	82	80	68	21	90	83	77	68
2	-	83	77	73	12	-	82	80	70	22	88	84	77	68
3	-	82	76	73	13	-	82	80	70	23	86	82	77	70
4	-	83	77	72	14	-	82	79	70	24	86	82	76	68
5	-	83	77	73	15	-	82	77	70	25	83	80	76	68
6	-	84	80	72	16	-	82	77	70	26	84	80	74	72
7	-	83	86	72	17	-	82	77	68	27	83	80	74	70
8	-	84	82	71	18	-	82	77	68	28	82	79	73	70
9	-	83	82	71	19	90	82	79	70	29	82	77	72	72
10	-	83	82	70	20	91	82	79	68	30	82	77	72	71
										31	-	76	73	-

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

Monthly discharge, in second-feet, of Blacksmith Fork at Hardware Ranch, near Hyrum, Utah, 1943

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
June 19-31.....	1,027	91	82	85.6	2,040
July.....	2,531	84	76	81.6	5,020
August.....	2,402	86	72	77.5	4,760
September.....	2,109	73	68	70.3	4,180
The period.....	-	-	-	-	16,000

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, 3¼ 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 1943.
Average discharge.- 29 years (1914-43), 120 second-feet.
Extremes.- Maximum discharge during year, 610 second-feet Apr. 20 (gage height, 4.20 feet); minimum, not determined.
1913-43: 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 except those for period of no gage-height record, which are fair. Several small diversions above station for irrigation. Low-water flow may be regulated by power plant above station.
Cooperation.- Water-stage recorder graph and four discharge measurements furnished by Utah Power & Light Co.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				56		70	153	364	174	118	102	91
2				56		67	190	381	174	118	107	90
3				56		64	234	362	177	116	106	91
4				56		67	248	404	181	116	104	91
5				56	a54	69	254	417	177	116	104	91
			a54									
6				56		63	252	356	167	116	106	90
7		a54		56		63	266	314	163	116	129	90
8						87	252	292	156	119	115	88
9					h54	149	272	270	154	118	112	87
10						94	250	244	151	116	102	85
					a54							
11			54			88	242	234	149	115	101	84
12			54			87	222	227	148	115	98	84
13		53	54		h54	90	227	217	146	113	98	85
14		54	54	a54		112	266	213	151	113	97	85
15		54	54			110	364	211	156	113	95	84
	a52											
16		55	54			91	444	208	151	113	97	84
17			54		a54	88	480	202	146	113	95	84
18			64			97	503	187	143	112	95	84
19		a56	55			83	511	174	139	110	98	83
20			56			80	539	170	138	110	97	84
21		56	56	a60	a60	75	490	165	136	108	95	84
22		56	56	a70	a70	74	469	165	132	108	92	83
23		56	56	h104	a100	76	484	168	131	110	95	84
24		56	56	a70	a90	84	497	172	129	108	94	83
25		56	56	a60	a80	97	459	174	126	108	94	83
26		56	56		a76	106	446	172	123	108	94	84
27			56		a74	115	362	170	123	107	91	91
28		a56	56		a74	160	350	168	121	106	91	87
29			56	a54	-	194	362	167	121	106	88	87
30			56		-	202	342	165	119	106	90	85
31		-	56		-	148	-	167	-	104	91	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	1,612	-	-	52.0	3,200
November.....	1,648	-	-	54.9	3,270
December.....	1,699	-	-	54.8	3,370
Calendar year 1942	23,425	171	37	64.2	46,480
January.....	1,782	104	-	57.5	3,530
February.....	1,704	100	-	60.9	3,380
March.....	3,040	202	63	98.1	6,030
April.....	10,430	539	153	348	20,690
May.....	7,300	417	165	235	14,480
June.....	4,402	181	119	147	8,730
July.....	3,477	119	104	112	6,900
August.....	3,073	129	90	99.1	6,100
September.....	2,586	91	83	86.2	5,130
Water year 1942-43	42,753	539	-	117	84,810

a No gage-height record; discharge interpolated or computed on basis of records for Little Bear River near Paradise and weather records.
h Computed from staff-gage reading.
Time basis: Mountain war time. 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 SE¼ sec. 5, T. 13 N., R. 1 W., 500 feet downstream from Newton Dam and 2½ miles north of Newton. Prior to Dec. 7, 1942 water-stage recorder 700 feet downstream from old Newton Dam and 1½ miles upstream from present site.

Records available.- March 1939 to September 1943.

Extremes (regulated).- Maximum and minimum discharges for the water years 1939 to 1943 are contained in the following table:

Water year	Maximum			Minimum	
	Date	Discharge (sec.-ft.)	Gage height (feet)	Date	Discharge (sec.-ft.)
1939*	Mar. 23	†70	-	Sept. 16-18	0.2
1939-40	Apr. 4	28	2.05	At times	.2
1940-41	Mar. 2	119	4.30	Oct. 20-22	.2
1941-42	Aug. 5, 6	†69	-	At times	No flow
1942-43	Feb. 23	‡261	3.10	Dec. 1-5	.2

* March to September.
† Maximum daily discharge.
‡ Maximum discharge observed.

1939-43: Maximum discharge observed, 261 second-feet Feb. 23, 1943 (gage height, 3.10 feet); no flow at times during October 1941, September 1942.

Remarks.- Records fair except those for periods of no gage-height record, which are poor. Gage read once daily Jan. 1 to Mar. 7 and twice daily Mar. 8 to Sept. 30, 1943. Diversions above and below station for irrigation. Flow regulated by old Newton Dam. New dam not completed at this time.

Cooperation.- Gage-height record and six discharge measurements furnished by Bureau of Reclamation for period Jan. 1 to June 30, 1943. Records for March 1939 to December 1942 furnished by Bureau of Reclamation and reviewed by Geological Survey.

Discharge, in second-feet, 1939-43

1939

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	8.8	8.2	9.1	14	6.2	4.7
2						-	15	7.2	9.1	15	4.5	5.0
3						8.6	18	6.9	9.1	15	2.8	4.5
4						8.6	17	6.2	8.8	15	4.8	4.7
5						8.6	16	5.8	7.9	15	5.4	4.4
6						8.6	12	4.1	6.5	15	7.2	4.3
7						8.6	11	2.2	2.3	15	7.5	4.3
8						9.0	11	2.5	2.3	15	7.3	4.1
9						8.8	12	2.3	2.3	14	7.2	2.2
10						8.8	12	2.0	4.1	13	7.2	3.1
11						9.0	10	1.6	4.8	13	7.1	5.3
12						9.1	9.5	2.7	4.8	11	7.1	6.1
13						10	10	4.8	4.8	11	6.9	6.5
14						10	11	4.8	5.0	9.8	6.8	2.9
15						11	11	4.8	5.9	9.7	6.5	.3
16						11	10	4.8	6.8	9.1	6.4	.2
17						11	9.2	4.8	6.8	8.4	6.4	.2
18						32	8.8	5.6	6.8	7.6	6.4	.2
19						41	9.2	5.9	6.6	6.5	6.5	1.0
20						35	9.1	5.9	6.6	6.4	6.5	1.2
21						39	9.2	5.8	6.6	4.7	6.5	1.2
22						66	9.1	3.1	6.6	4.0	6.4	1.2
23						70	9.1	3.4	6.8	5.2	6.2	1.2
24						67	11	5.8	7.1	7.2	6.2	1.2
25						60	14	5.8	7.2	7.2	6.0	1.2
26						40	13	5.8	9.0	7.1	6.0	1.2
27						33	10	5.8	10	6.9	5.8	1.2
28						37	9.0	5.8	12	6.8	5.6	1.2
29						29	9.1	8.2	14	6.8	5.6	1.2
30						23	9.0	9.1	14	6.5	5.3	1.2
31						15	-	9.1	-	6.2	5.3	-

Discharge, in second-feet, of Clarkston Creek near Newton, Utah, 1939-43--Continued

1939-40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	1.5	1.6	0.3	4.1	5.8	11	2.1	12	11	9.7	0.2
2	1.1	1.5	.9	.3	4.3	5.8	11	1.5	11	8.9	9.7	.2
3	1.1	1.5	.4	.3	4.3	6.7	11	1.3	11	8.7	9.7	.4
4	1.1	1.5	.4	.3	4.3	6.2	18	1.1	12	8.4	9.5	.2
5	1.1	1.5	.4	.3	4.3	4.3	21	.7	4.6	8.2	9.3	.3
6	1.1	1.5	.4	.3	4.4	4.6	14	.5	1.1	8.2	9.1	.4
7	1.1	1.5	.4	.3	4.3	5.5	3.6	.3	1.0	5.3	8.4	.3
8	1.1	1.5	.4	.3	4.6	12	4.4	.3	1.0	4.4	7.6	.5
9	1.1	1.5	.4	.3	4.6	23	6.6	.3	1.3	5.8	6.9	1.9
10	1.1	1.5	.4	.3	4.6	17	8.2	.2	1.6	6.0	7.8	1.9
11	1.1	1.5	.4	.3	7.8	14	8.7	.5	4.6	6.0	7.3	2.3
12	1.1	1.5	.4	.3	11	12	9.5	3.0	5.1	5.8	4.1	2.2
13	1.1	1.5	.4	.3	11	11	8.7	3.3	5.3	7.1	1.9	8
14	1.1	1.5	.4	.3	11	9.5	8.5	1.5	8.5	7.8	1.0	.9
15	1.1	1.5	.4	.3	9.8	7.1	9.1	1.6	9.7	7.5	.8	.5
16	1.1	1.5	.4	.3	8.9	5.1	10	1.6	9.7	6.2	.6	.2
17	1.1	1.5	.4	.3	8.7	5.8	9.7	1.6	9.5	6.2	.6	.2
18	1.2	1.5	.4	1.8	8.9	6.9	7.1	1.4	9.5	6.2	.5	.3
19	1.3	1.5	.4	2.0	9.1	7.6	6.9	1.3	9.8	6.0	.8	.5
20	1.3	1.5	.4	2.2	9.1	8.2	7.3	4.8	14	5.8	2.6	.4
21	1.3	1.5	.4	2.5	9.3	7.8	6.6	8.9	15	5.8	2.8	.3
22	1.3	1.6	.4	2.6	9.3	7.6	6.9	8.7	15	5.8	2.6	.2
23	1.3	1.6	.4	2.8	9.5	7.5	16	11	15	5.7	2.9	.2
24	1.3	1.6	.3	3.0	9.5	6.9	4.6	11	14	5.5	2.2	.3
25	1.3	1.6	.3	3.2	8.7	6.4	4.8	11	14	2.8	.6	.3
26	1.3	1.6	.3	3.3	5.3	5.8	4.8	11	13	3.8	.4	.3
27	1.3	1.6	.3	3.6	5.8	12	4.8	11	13	4.6	.3	.4
28	1.3	1.6	.3	3.8	6.4	15	5.1	12	12	4.6	.3	.4
29	1.3	1.6	.3	3.9	6.2	14	3.3	12	12	4.4	.2	.7
30	1.4	1.6	.3	3.8	-	14	5.7	12	12	7.5	.2	.9
31	1.4	-	.3	3.9	-	15	-	12	-	9.8	.2	-

1940-41

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	1.0	1.0	0.7	0.8	33	12	9.1	2.3	15	8.2	5.3
2	1.0	1.0	1.0	.7	.8	114	13	8.5	5.7	14	8.0	5.3
3	1.3	1.0	1.1	.7	.8	110	14	8.4	13	14	8.0	5.3
4	1.5	1.0	1.2	.8	.8	88	14	9.1	14	14	8.0	5.1
5	1.6	1.0	1.2	.8	.8	70	17	10	17	14	7.8	5.1
6	3.0	1.0	1.2	.8	.8	46	18	9.7	16	14	7.8	5.0
7	4.6	1.0	1.2	.8	.8	37	16	9.1	16	14	7.6	5.0
8	4.4	1.0	1.2	.7	.8	38	15	8.7	16	12	5.8	5.0
9	2.3	1.0	1.2	.7	.8	32	12	8.5	15	11	5.7	4.3
10	2.2	1.0	1.4	.7	.8	27	11	7.8	12	11	5.8	3.3
11	2.2	1.0	1.4	.7	.8	25	14	6.4	11	9.5	5.7	3.2
12	2.1	1.0	1.5	.7	2.2	12	17	4.3	12	9.7	7.5	3.3
13	2.2	1.1	1.6	.7	6.4	4.8	22	3.9	9.5	8.2	7.8	3.6
14	1.5	1.0	1.0	.7	7.1	6.7	22	4.1	4.6	6.2	7.6	3.8
15	1.4	1.0	.4	.7	7.5	8.4	20	4.4	4.4	6.2	7.5	3.8
16	1.3	1.1	.4	.7	8.2	9.7	21	3.9	4.4	5.8	7.3	3.8
17	1.3	1.0	.4	.7	8.4	11	21	3.8	4.4	5.8	7.3	3.8
18	1.4	1.0	.4	.7	12	13	19	2.3	5.0	5.8	7.3	3.6
19	1.0	1.1	.4	.7	14	18	17	.9	5.3	5.8	7.1	3.6
20	.2	1.1	.5	.7	14	17	16	.8	7.6	5.5	7.1	3.6
21	.2	1.1	.5	.7	14	16	12	.9	9.8	4.1	6.9	3.5
22	.2	1.2	.5	.7	13	9.1	8.9	1.0	10	4.1	6.9	3.6
23	.6	1.1	.5	.7	14	11	8.9	1.8	13	3.9	6.9	4.4
24	1.0	1.1	.5	.7	16	13	9.5	1.8	14	3.2	6.7	1.8
25	1.0	1.1	.5	.7	16	13	9.7	1.8	15	2.1	6.7	1.0
26	1.0	1.0	.6	.8	18	12	9.5	1.9	18	2.2	6.6	1.0
27	1.0	.9	.7	.8	22	11	9.5	2.1	17	2.6	6.4	1.0
28	1.0	1.0	.7	.8	24	8.4	10	2.1	17	4.1	6.4	1.4
29	1.0	1.0	.7	.8	-	9.5	9.8	2.3	17	5.7	6.0	3.9
30	1.0	1.0	.7	.8	-	11	9.3	2.5	17	8.4	6.0	3.5
31	1.0	-	.7	.8	-	12	-	2.5	-	8.2	5.7	-

Discharge, in second-feet, of Clarkston Creek near Newton, Utah, 1939-43--Continued

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.3	0.8	1.6	1.1	7.1	7.5	1.9	19	4.6	4.8	9.8	0.5
2	3.2	.8	1.8	1.2	7.1	7.8	2.1	20	4.6	3.8	7.8	.3
3	3.2	1.0	1.9	1.2	7.1	8.0	3.3	19	4.3	3.8	3.3	.2
4	2.6	1.0	2.0	1.5	7.1	8.0	25	18	3.9	6.2	3.0	.1
5	3.2	1.0	2.0	1.5	7.1	8.0	69	17	3.4	8.2	2.9	0
6	3.0	1.0	2.0	16	7.3	8.0	69	14	11	9.1	2.8	0
7	2.3	1.0	2.0	8.2	6.9	8.0	49	14	12	8.9	2.5	0
8	2.3	1.0	2.1	8.2	6.7	8.0	36	13	12	12	3.9	0
9	2.3	1.8	2.1	8.2	6.7	7.5	25	11	12	14	5.0	.5
10	2.2	3.6	2.1	7.8	6.9	7.3	19	11	13	15	7.6	.7
11	2.2	3.6	2.1	7.6	6.9	7.5	19	7.6	14	16	7.5	.6
12	1.5	3.6	2.2	7.6	6.9	7.5	21	7.1	15	17	7.3	.6
13	1.2	3.6	2.2	7.6	6.9	7.5	22	8.7	16	17	7.1	.5
14	1.3	3.8	2.3	7.5	7.1	7.5	18	9.8	15	17	6.9	.2
15	1.4	3.8	2.2	7.3	7.3	7.5	16	11	15	20	6.7	0
16	.7	2.1	2.2	7.3	7.3	11	16	23	15	19	6.6	0
17	.0	1.2	2.5	7.3	7.1	14	15	27	13	19	6.0	0
18	.0	1.2	2.6	7.3	7.1	15	15	24	9.5	19	5.8	0
19	.0	1.2	2.6	7.3	7.1	15	14	22	9.5	19	6.2	0
20	.7	1.3	2.5	7.3	7.3	15	14	23	9.3	16	6.4	0
21	.8	1.3	2.3	7.5	7.3	15	14	28	9.5	16	6.2	0
22	.8	1.4	2.3	7.3	7.5	13	14	19	9.3	15	6.0	0
23	.8	1.4	2.3	7.1	7.5	6.6	14	21	9.7	15	6.0	0
24	.8	1.4	2.3	7.1	7.1	6.7	14	20	11	15	5.5	0
25	.8	1.4	2.3	7.1	7.1	6.7	14	12	11	15	5.1	0
26	.8	1.5	2.5	7.1	7.1	6.9	14	10	11	14	4.8	0
27	.8	1.5	2.5	7.1	7.1	6.9	14	5.3	11	14	4.1	0
28	.8	1.6	2.5	7.1	7.3	7.3	15	1.4	6.9	14	2.9	0
29	.8	1.6	2.5	7.1	-	7.5	17	1.2	6.9	14	2.6	0
30	.8	1.6	2.5	7.1	-	4.6	18	4.1	6.7	11	2.3	0
31	.8	-	2.5	7.1	-	1.5	-	4.3	-	10	2.6	0

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.6	6.8	0.2	8.4	40	49	1.7	11	17	16	10	1.6
2	8.6	6.8	.2	8.4	40	39	1.7	10	13	17	10	1.4
3	9.2	6.7	.2	8.4	40	36	1.7	10	6.4	17	9.7	1.3
4	9.3	6.7	.2	8.4	40	34	1.7	10	6.4	17	9.7	1.3
5	9.8	6.0	.2	8.7	39	36	1.7	11	3.9	17	11	1.3
6	9.5	6.0	.3	8.7	39	10	1.7	12	3.9	17	11	1.3
7	9.5	5.6	.3	8.7	38	12	1.7	12	3.9	17	10	1.3
8	9.5	5.6	.3	8.7	38	70	1.7	11	3.9	17	10	1.6
9	7.5	5.6	.3	11	35	141	1.7	11	3.9	18	7.5	1.7
10	6.3	4.7	3.5	11	34	85	1.7	9.7	3.9	18	7.2	3.0
11	5.1	4.5	3.5	15	30	62	1.7	9.7	3.9	18	6.9	2.4
12	5.0	3.8	3.5	15	30	58	1.7	7.8	3.9	18	6.9	2.4
13	4.9	3.8	3.5	15	a.3	47	1.7	7.8	3.7	13	6.9	2.8
14	4.7	3.8	3.4	15	a.3	44	6.7	7.8	3.7	13	6.7	2.8
15	4.2	2.5	3.4	15	a.3	47	8.8	7.2	3.7	13	6.7	2.8
16	4.5	2.6	.4	14	a.3	38	5.8	7.2	3.7	12	6.4	2.3
17	5.5	2.6	.4	15	a.3	34	5.8	7.8	3.7	11	6.4	2.0
18	6.3	3.5	.4	14	8.8	27	5.8	7.8	7.2	11	6.1	.5
19	6.0	3.5	.4	14	10	27	6.7	7.8	7.2	11	5.8	.5
20	5.0	3.5	.4	14	13	27	6.7	7.8	8.4	11	5.6	.5
21	4.6	3.5	.4	14	17	25	7.2	7.8	11	11	5.6	.4
22	4.4	2.5	.4	16	23	21	7.2	8.4	13	11	5.3	.4
23	3.5	.3	.4	140	261	21	8.8	5.8	13	10	5.0	.3
24	3.0	.3	.5	a60	158	18	8.8	5.0	13	10	5.0	.3
25	2.1	.3	.5	a45	88	18	8.8	5.8	13	9.4	4.5	.6
28	2.0	.3	.5	a35	67	14	10	7.8	14	9.4	4.3	.4
27	1.7	.3	.5	a38	53	10	10	7.8	16	9.4	4.3	.4
28	1.6	.3	.5	a38	49	2.4	10	8.4	16	9.4	4.3	.3
29	1.7	.3	.5	38	-	2.4	10	17	16	10	4.8	.4
30	6.1	.3	.5	a38	-	1.7	11	21	16	10	4.8	.6
31	6.7	-	.6	a39	-	1.7	-	21	-	10	4.8	-

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

Monthly discharge, in second-feet, of Clarkston Creek near Newton, Utah, 1930 1939-43--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October					
November					
December					
Calendar year					
January	-	-	-	-	-
February	-	-	-	-	-
March 3-31, 1939	727.7	70	8.6	25.1	1,440
April	333.1	18	8.8	11.1	660
May	160.8	9.1	1.6	5.19	319
June	213.7	14	2.3	7.12	424
July	307.1	15	4.0	9.91	609
August	191.6	7.5	2.8	6.18	380
September	77.2	6.5	.2	2.57	153
The period	-	-	-	-	3,980
October 1939	37.0	1.4	1.1	1.19	73
November	45.9	1.6	1.5	1.53	91
December	13.3	1.6	.3	.43	26
Calendar year	-	-	-	-	-
January 1940	47.5	3.9	.3	1.53	94
February	209.1	11.4	4.1	7.21	415
March	290.1	23	4.3	9.36	575
April	256.9	21	3.3	8.56	510
May	149.5	12	.2	4.82	296
June	277.3	15	1.0	9.24	550
July	199.8	11	2.8	6.45	396
August	120.6	9.7	.2	3.89	239
September	20.6	2.8	.2	.68	41
Water year 1939-40	1,667.6	23	.2	4.56	3,310
October 1940	46.5	4.6	.2	1.50	92
November	30.9	1.2	.9	1.03	61
December	26.3	1.6	.4	.85	52
Calendar year 1940	1,675.1	23	.2	4.58	3,320
January 1941	22.7	.8	.7	.73	45
February	225.6	24	.8	8.06	447
March	846.6	114	4.8	27.3	1,680
April	428.1	22	8.90	14.3	849
May	144.4	10	.8	4.66	286
June	343.0	18	2.3	11.4	680
July	250.1	15	2.1	8.07	496
August	216.1	8.2	5.7	6.97	429
September	109.9	5.3	1.0	3.67	218
Water year 1940-41	2,690.2	114	.2	7.37	5,340
October 1941	45.4	3.3	0	1.47	90
November	53.1	3.8	.8	1.77	105
December	69.5	2.6	1.6	2.24	138
Calendar year 1941	2,754.5	114	0	7.55	5,460
January 1942	207.7	16	1.1	6.70	412
February	199.0	7.5	6.7	7.11	395
March	268.3	15	1.5	8.65	532
April	617.3	69	1.9	20.6	1,220
May	445.5	28	1.2	14.4	884
June	305.1	16	3.4	10.2	605
July	417.8	20	3.8	13.5	829
August	163.2	9.8	2.3	5.26	324
September	4.2	.7	0	.14	8.3
Water year 1941-42	2,796.1	69	0	7.68	5,540
October 1942	176.5	9.8	1.6	5.69	350
November	103.0	6.8	.3	3.43	204
December	30.3	3.5	.2	.98	60
Calendar year 1942	2,937.9	69	0	8.05	5,820
January 1943	737.4	140	8.4	23.8	1,460
February	1,192.3	261	.3	42.6	2,360
March	1,058.2	141	1.7	34.1	2,100
April	160.2	11	1.7	5.34	318
May	302.2	21	5.0	9.75	599
June	256.3	17	3.7	8.54	508
July	411.6	18	9.4	13.3	816
August	213.2	11	4.3	6.88	423
September	38.9	3.0	.3	1.30	77
Water year 1942-43	4,680.1	261	.2	12.8	9,280

Time basis: Mountain standard time prior to 2 a.m., Feb. 9, 1942; mountain war 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 SW¼ 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 1943.

Average discharge.- 31 years, 225 second-feet.

Extremes.- Maximum daily discharge during year, 686 second-feet May 28; no flow Jan. 23 to Feb. 2, Feb. 22 to Apr. 28.
1912-43: Maximum daily discharge, 709 second-feet June 20, 1941; no flow during periods in every year except 1914.

Remarks.- Records good. Canal diverts from west side of Bear River in NW¼SW¼ sec. 26, T. 13 N., R. 2 W., at dam at which Hammond (East Side) Canal and intake of Cutler power plant also divert. Water used for irrigation in eastern Box Elder County.

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

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	328	110	h57	a24	0		0	169	393	662	536	565
2	328	110	h57	h26	0		0	211	108	660	542	536
3	328	106	a57	a26	h15		0	209	75	656	544	538
4	338	a106	a56	h26	h15		0	209	237	654	554	527
5	338	h105	a56	h26	h15		0	209	185	658	584	507
6	336	h98	a55	h25	a15		0	210	180	654	577	489
7	350	h102	h55	h25	a15		0	242	170	658	503	480
8	358	h102	h55	h24	h15		0	267	122	658	449	471
9	358	h102	h57	h23	a15		0	267	116	658	514	489
10	352	h102	h57	a24	h15		0	267	118	660	494	476
11	339	h102	h57	h26	h15		0	296	231	660	498	466
12	316	a102	h57	h26	h15		0	379	285	660	500	469
13	195	a102	a57	h26	a15		0	460	284	646	500	467
14	114	a102	h57	h24	a15		0	457	285	636	511	466
15	110	a102	h57	h24	h15		0	540	286	632	527	467
16	104	h102	h55	h24	h15		0	540	300	557	521	467
17	104	h68	h59	a25	h15		0	538	330	572	538	466
18	102	h68	h59	h26	h15		0	538	328	567	574	467
19	104	a68	a59	h26	h15		0	578	342	582	574	469
20	113	a68	h59	a26	a15		0	630	397	593	578	458
21	104	a68	h59	h26	a15		0	626	441	586	576	417
22	103	a68	h59	h26	0		0	650	502	546	576	409
23	102	h68	h59	0	0		0	646	584	521	574	411
24	a104	h68	h23	0	0		0	646	634	527	572	411
25	a106	h68	a23	0	0		0	660	662	527	574	413
26	a108	a64	a23	0	0		0	666	652	520	572	414
27	110	a60	a23	0	0		0	674	654	512	574	400
28	107	a56	h23	0	0		0	686	656	509	574	376
29	106	a54	h23	0	-		91	678	656	509	574	378
30	110	h52	h23	0	-		117	674	648	505	574	380
31	110	-	h23	0	-		-	605	-	507	574	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	6,185	358	102	200	12,270
November	2,553	110	52	85.1	5,060
December	1,499	59	23	48.4	2,970
Calendar year 1942	82,939	694	0	227	164,500
January	554	26	0	17.9	1,100
February	285	15	0	10.2	565
March	0	0	0	0	0
April	208	117	0	6.9	412
May	14,425	686	169	465	28,610
June	10,861	662	75	362	21,540
July	18,452	662	505	595	36,600
August	16,932	584	449	546	33,580
September	13,749	565	376	458	27,270
Water year 1942-43	85,703	686	0	235	170,000

a No gage-height record; discharge interpolated.
h Computed from staff-gage reading.
Time basis: Mountain war time. 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 1943.

Average discharge.- 26 years (1917-43), 51.0 second-feet.

Extremes.- Maximum daily discharge during year, 158 second-feet July 1; no flow Oct. 14 to 18, Nov. 17 to Apr. 29.
1912-43: Maximum daily discharge, 182 second-feet June 28, July 1, 1932, June 27, 28, 1933; no flow for periods during each year.

Remarks.- Records good. Canal diverts from east side of Bear River in NW¼SW¼ sec. 26, T. 13 N., R. 2 W., at dam at which West Side Canal and intake of Cutler power plant also divert. Diversion for irrigation in eastern Box Elder County.

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

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73	21					0	87	80	158	137	119
2	74	21					0	87	42	151	137	116
3	74	17					0	85	28	150	137	115
4	73	13					0	84	37	150	137	115
5	73	13					0	84	38	142	137	116
6	73	15					0	84	38	149	136	117
7	69	17					0	82	38	150	116	113
8	64	17					0	79	40	150	104	109
9	62	17					0	78	40	149	119	105
10	60	16					0	80	40	149	118	108
11	56	16					0	82	46	150	119	107
12	52	17					0	83	50	150	120	107
13	20	17					0	99	48	145	137	108
14	0	17					0	115	58	147	136	106
15	0	17					0	129	18	146	139	102
16	0	6					0	137	26	137	139	104
17	0	0					0	130	44	139	139	103
18	0	0					0	128	68	134	139	99
19	20	0					0	129	74	135	140	92
20	29	0					0	134	86	136	139	93
21	31	0					0	140	88	135	140	82
22	28	0					0	132	108	131	139	74
23	24	0					0	142	126	137	139	73
24	21	0					0	143	136	136	140	79
25	21	0					0	142	142	136	134	79
26	21	0					0	144	140	137	125	79
27	21	0					0	145	143	137	125	79
28	21	0					0	145	152	137	125	79
29	21	0					0	140	162	136	123	79
30	21	0					64	138	153	134	120	79
31	21	-					-	112	-	136	120	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,123	74	0	36.2	2,230
November	257	21	0	8.6	510
December	0	0	0	0	0
Calendar year 1942	17,482	157	0	47.9	34,670
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	64	64	0	2.1	127
May	3,519	145	78	114	6,980
June	2,279	153	18	76.0	4,520
July	4,409	158	131	142	8,750
August	4,057	140	104	131	8,050
September	2,936	119	73	97.9	5,820
Water year 1942-43	18,644	158	0	51.1	36,990

Time basis: Mountain war time. 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, 8½ miles upstream from Little Malad River, and 5¾ miles northwest of Malad.

Records available.- November 1940 to September 1943. November 1931 to September 1932 at site 1¼ miles downstream.

Extremes.- Maximum discharge during year, 16 second-feet Apr. 20-28, 30, May 3, 4; maximum gage height, 1.69 feet June 16, due to obstruction; minimum discharge, 6.9 second-feet Nov. 4-7, 9 (gage height, 1.03 feet).
1931-32, 1940-43: 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. No diversion or regulation above station.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.9	7.0	7.8	9.2	11	13	15	15	13	12	10	9.8
2	7.8	7.0	7.6	9.2	11	13	15	15	13	12	10	9.8
3	7.8	7.0	7.6	9.3	11	13	15	16	13	12	10	9.8
4	7.8	6.9	7.6	9.3	11	13	15	16	13	12	10	9.8
5	7.8	6.9	7.6	9.4	11	13	15	15	13	12	10	9.7
6	7.6	6.9	7.6	9.4	11	13	15	15	13	12	10	9.7
7	7.6	6.9	7.8	9.5	11	13	15	15	13	12	10	9.7
8	7.5	7.0	7.8	9.5	11	13	15	15	13	11	10	9.7
9	7.5	6.9	7.9	9.7	11	13	15	15	13	11	10	9.7
10	7.6	7.0	7.9	9.8	11	13	15	15	13	11	10	9.7
11	7.5	7.0	8.0	9.8	11	13	15	15	13	11	10	9.7
12	7.5	7.0	8.1	9.8	11	13	15	15	13	11	9.9	9.7
13	7.5	7.2	8.1	9.9	12	13	15	15	13	11	9.9	9.7
14	7.4	7.2	8.0	10	12	13	15	14	13	11	9.9	9.7
15	7.4	7.2	8.0	10	12	13	15	14	13	11	9.9	9.7
16	7.2	7.2	8.1	10	12	13	15	14	13	11	9.9	9.8
17	7.2	7.4	8.2	10	12	13	15	14	13	11	9.8	9.8
18	7.2	7.5	8.2	9.9	12	13	15	14	13	11	9.8	9.8
19	7.2	7.4	8.2	9.9	12	14	15	14	13	11	9.7	9.8
20	7.2	7.3	8.2	10	12	14	16	14	12	11	9.7	9.7
21	7.1	7.2	8.3	11	12	14	16	14	13	11	9.7	9.7
22	7.1	7.3	8.6	11	13	14	16	14	12	11	9.7	9.7
23	7.1	7.3	8.7	11	12	14	16	13	12	10	9.7	9.7
24	7.1	7.4	8.8	10	12	14	16	13	12	10	9.7	9.7
25	7.1	7.3	8.7	10	12	14	16	13	12	10	9.5	9.7
26	7.0	7.4	8.7	11	13	14	16	13	12	10	9.5	9.7
27	7.0	7.5	8.8	11	13	14	16	13	12	11	9.5	9.7
28	7.0	7.4	8.8	11	13	14	16	13	12	11	9.5	9.7
29	7.0	7.6	8.8	11	-	15	15	13	12	11	9.7	9.7
30	7.0	7.6	8.9	11	-	14	16	13	12	10	9.7	9.5
31	7.0	-	8.9	11	-	15	-	13	-	10	9.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	227.7	7.9	7.0	7.35	452
November	215.9	7.6	6.9	7.20	428
December	254.3	8.9	7.6	8.20	504
Calendar year 1942	3,402.1	14	6.7	9.32	6,750
January	312.6	11	9.2	10.1	620
February	328	13	11	11.7	651
March	418	15	13	13.5	829
April	460	16	15	15.3	912
May	440	16	13	14.2	873
June	380	13	12	12.7	754
July	342	12	10	11.0	678
August	304.4	10	9.5	9.82	604
September	291.6	9.8	9.5	9.72	578
Water year 1942-43	3,974.5	16	6.9	10.9	7,880

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

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 steel 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 September 1943.

Extremes.- Maximum discharge during year, 147 second-feet Jan. 23 (gage height, 3.46 feet), based on extension of previous and subsequent ratings above 15 second-feet; minimum, 0.2 second-foot May 25-27 (gage height, 0.67 foot).

1940-43: Maximum discharge, that of Jan. 23, 1943; minimum, 0.2 second-foot May 10, July 13, 1941, May 25, 26, 27, 1943; minimum gage height, 0.36 foot May 10, 1941, Sept. 8, 9, 1942.

Remarks.- Records good except those above 20 second-feet and below 0.5 second-foot, which are poor. Flow regulated by Samaria Reeervoir and augmented by waste from Malad River bypass channel and from Warm Springs Canal. Many diversions above and below station for irrigation.

Rating tables, water year 1942-43 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Feb. 24 to Mar. 27, Apr. 4-8)

Oct. 1 to Jan. 23				Jan. 23 to Sept. 30			
0.6	2.5	1.8	26	0.7	0.3	1.6	18.5
0.8	4.7	2.1	35	.9	2.1	1.9	34
1.0	7.7	2.5	51	1.1	4.7	2.2	54
1.2	11.0	2.9	75	1.3	8.2	2.5	75
1.5	17.5						

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	5.0	9.6	8.8	9.9	10	11	1.7	3.3	5.9	2.8	2.2
2	3.4	5.0	9.8	9.3	9.3	9.9	10	.8	1.2	3.3	2.5	2.2
3	3.6	5.0	9.6	8.8	9.6	10	9.6	.6	.4	2.0	2.6	2.0
4	4.1	5.2	9.6	8.8	9.3	11	9.6	.8	.3	2.2	3.4	1.9
5	4.0	5.0	9.6	8.7	8.8	12	11	.6	.3	2.6	3.4	2.0
6	3.9	5.0	9.8	8.7	8.0	11	10	.6	1.4	3.7	3.7	2.2
7	3.9	5.2	.10	8.5	8.2	11	10	.6	.9	4.1	3.3	2.1
8	3.9	5.2	10	8.5	7.8	18	11	.5	.4	4.0	3.3	2.3
9	4.0	5.3	10	8.7	7.6	17	12	.5	.3	3.7	3.4	2.3
10	4.1	5.3	10	8.7	7.6	13	12	.4	.3	4.0	3.3	1.3
11	4.5	5.4	10	8.2	8.0	13	12	.5	.4	4.6	3.4	1.1
12	4.2	5.9	10	8.0	8.5	12	11	.6	.6	3.4	3.7	1.1
13	4.1	6.4	10	7.9	8.2	11	11	.6	1.1	2.0	3.7	1.0
14	4.0	7.4	10	8.2	7.8	11	9.9	1.1	1.8	2.6	3.7	1.0
15	4.0	7.1	10	8.5	7.8	11	7.0	.6	1.9	3.4	3.9	1.0
16	4.0	7.0	10	8.5	7.6	11	7.0	.6	1.4	4.3	4.3	1.1
17	4.1	9.5	10	d8.0	7.6	12	6.8	.4	2.1	4.3	4.6	1.3
18	4.2	10	9.5	d7.5	7.8	12	6.2	.3	1.8	3.9	4.6	1.3
19	4.2	10	10	d7.5	7.8	12	6.2	.3	1.2	3.9	4.6	1.4
20	4.3	8.8	10	d7.5	7.6	12	6.2	.3	1.7	2.8	4.6	1.4
21	4.3	8.7	10	11	7.8	12	6.2	.3	1.6	3.7	4.3	1.6
22	4.3	9.0	10	45	16	12	6.2	.3	2.2	6.2	2.7	1.7
23	4.6	9.5	11	74	22	12	5.9	.3	2.3	1.8	2.5	1.8
24	4.7	9.5	13	20	11	12	4.0	.3	2.9	1.9	2.3	2.1
25	4.8	9.3	11	12	10	12	2.2	.3	2.8	2.0	2.2	2.1
26	5.0	9.3	11	12	10	12	2.5	.3	1.7	2.0	2.1	2.5
27	5.0	10	9.3	12	10	11	2.3	.3	1.8	2.1	2.1	2.8
28	5.0	9.5	9.8	12	10	11	2.6	.3	1.9	3.6	2.1	3.3
29	5.0	10	9.8	12	-	11	2.5	.5	2.3	2.2	2.1	5.3
30	5.0	11	10	11	-	11	2.3	.3	2.9	3.2	2.1	5.3
31	5.0	-	10	10	-	11	-	.6	-	2.7	2.1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	132.6	5.0	3.4	4.28	263
November	224.5	11	5.0	7.48	445
December	312.4	13	9.3	10.1	620
Calendar year 1942	2,269.7	13	.3	6.22	4,500
January	398.3	74	7.5	12.8	790
February	261.6	22	7.6	9.34	519
March	366.9	18	9.9	11.8	728
April	226.2	12	2.2	7.54	449
May	16.2	1.7	.3	.52	32
June	45.2	3.3	.3	1.51	90
July	100.1	6.2	1.8	3.23	199
August	99.4	4.6	2.1	3.21	197
September	60.7	5.3	1.0	2.02	120
Water year 1942-43	2,244.1	74	.3	6.15	4,450

d Doubtful gage-height record; discharge computed on basis of weather records and records for station at Woodruff.

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

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 1943.

Extremes.- Maximum discharge during year, 500 second-feet Jan. 22 or 23 (gage height, 8 feet, from information by observer), from rating curve extended above 250 second-feet by logarithmic plotting; minimum observed, 19 second-feet Aug. 30 (gage height, 2.00 feet).

1938-43: Maximum discharge, that of Jan. 22 or 23, 1943; minimum observed, 15 second-feet July 15, 16, 1940; minimum gage height observed, 1.98 feet May 20, 1939, July 16, 1940.

Remarks.- Records good except those above 300 second-feet and 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	37	153	146	71	183	167	74	36	30	22	20
2	20	37	153	175	66	167	160	68	50	30	21	20
3	21	36	126	126	71	146	160	63	113	28	21	20
4	22	36	77	139	71	132	160	58	113	28	22	20
5	21	36	66	83	66	146	160	71	95	28	22	20
6	21	36	66	90	71	153	167	77	83	28	22	20
7	22	36	56	71	77	139	175	96	77	28	23	20
8	21	36	56	71	83	146	175	71	71	27	23	20
9	22	38	56	71	83	191	183	74	60	27	23	20
10	21	42	59	66	66	223	183	63	60	26	23	20
11	21	42	71	48	83	199	199	56	60	26	26	20
12	21	43	77	53	83	183	199	52	45	25	23	20
13	21	43	71	59	89	175	191	55	40	25	24	20
14	22	46	77	50	101	175	160	50	40	25	23	20
15	23	53	71	59	101	167	146	45	48	25	23	21
16	23	53	56	59	107	146	139	48	56	24	23	21
17	24	59	56	53	107	139	139	52	50	24	23	22
18	26	77	56	53	101	146	132	60	48	23	23	23
19	26	125	56	48	95	139	139	50	45	23	23	22
20	26	118	53	48	95	125	125	45	43	23	23	21
21	26	111	53	43	101	95	113	43	38	23	23	21
22	28	77	53	a450	107	101	101	40	36	22	23	20
23	28	83	59	a450	271	119	101	38	36	22	23	21
24	28	77	71	341	279	119	95	36	36	23	23	21
25	29	83	83	287	223	113	89	36	36	26	23	21
26	31	65	90	207	175	113	89	36	34	23	23	21
27	32	65	111	153	175	119	101	34	34	23	23	21
28	34	77	80	119	175	125	95	32	32	22	22	21
29	34	83	71	101	-	132	89	32	32	23	20	21
30	34	126	71	101	-	153	83	32	30	22	19	21
31	37	-	77	62	-	167	-	32	-	21	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	785	37	20	25.3	1,560
November	1,874	126	36	62.5	3,720
December	2,328	153	53	75.1	4,620
Calendar year 1942	23,965	341	18	65.7	47,540
January	3,870	450	43	125	7,680
February	3,193	279	66	114	6,330
March	4,576	223	95	148	9,080
April	4,215	199	83	140	8,360
May	1,617	95	32	52.2	3,210
June	1,566	113	30	62.2	3,110
July	773	30	21	24.9	1,530
August	698	26	19	22.5	1,380
September	619	23	20	20.6	1,230
Water year 1942-43	26,114	450	19	71.5	51,810

a No gage-height record; discharge computed on basis of information by observer regarding range in stage.

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

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 September 1943.

Extremes.- Maximum discharge recorded during year, 28 second-feet Jan. 22, from rating curve extended above 15 second-feet, but may have been greater Jan. 23; maximum gage height, 1.24 feet Aug. 30; minimum discharge, 2.7 second-feet June 18; minimum gage height, 0.07 foot Feb. 6.

1940-43: Maximum discharge, that of Jan. 22, 1943; maximum gage height, 1.39 feet July 2, 1942, affected by backwater from aquatic vegetation; minimum discharge, that of June 18, 1943; minimum gage height, that of Feb. 6, 1943.

Remarks.- Records fair. 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, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.5	12	9.9	5.6	6.2	5.8	7.3	6.4	11	11	7.1	6.4
2	9.7	12	9.9		6.4	5.8	7.5	7.5	9.0	13	7.1	6.6
3	9.7	12	9.5		5.9	5.8	7.5	9.0	8.8	13	6.7	6.4
4	9.3	12	9.5		5.9	6.2	7.5	11	e.2	13	6.6	5.6
5	9.0	12	9.5		5.2	5.9	7.5	10	6.7	11	8.4	5.0
6	9.0	12	9.5		5.2	6.0	7.3	11	6.6	11	9.5	5.2
7	8.8	12	9.5		5.2	6.0	7.3	11	6.7	11	8.6	5.3
8	8.6	12	9.5		5.2	7.8	7.5	11	9.3	12	8.6	5.9
9	8.e	12	9.5		5.3	7.3	7.3	11	10	12	12	5.6
10	9.0	12	9.7		5.2	6.9	7.5	9.5	11	10	14	6.0
11	12	12	9.7		5.2	6.7	7.8	7.5	12	11	9.5	5.8
12	12	12	9.9	a5.5	5.0	6.6	7.8	5.9	14	12	8.2	5.8
13	11	12	9.9		5.2	6.2	8.0	6.4	14	13	8.0	5.8
14	11	11	9.9		5.3	6.2	9.5	8.6	13	12	7.1	5.2
15	12	11	9.5		5.6	6.0	12	9.5	8.6	12	6.7	5.9
16	12	11	9.5		5.6	6.0	12	9.0	5.0	12	6.4	5.6
17	14	11	8.4		5.8	6.2	11	9.7	3.5	15	6.6	5.9
18	14	10	7.3		5.8	6.0	11	13	11	12	6.4	7.3
19	14	10	6.9		5.8	6.0	11	14	11	12	6.4	9.0
20	14	9.9	7.3		5.8	6.2	11	16	9.3	10	6.6	9.5
21	14	9.5	7.5		5.9	7.3	10	16	9.3	10	6.2	8.8
22	14	9.7	7.5	13	8.0	7.5	10	13	12	12	6.4	7.3
23	14	9.5	7.6	f15	9.7	7.3	10	10	13	10	6.4	5.6
24	14	9.5	7.8	6.9	5.9	7.5	8.8	9.7	13	9.5	6.4	4.6
25	14	9.5	7.8	6.2	6.0	7.6	6.4	9.3	11	9.9	6.6	5.6
26	14	9.7	7.8	6.7	6.0	7.5	7.8	9.5	11	8.8	6.6	8.2
27	14	9.7	6.7	6.7	6.2	7.6	6.7	9.7	12	8.8	6.6	12
28	14	9.7	6.7	6.9	6.2	7.5	6.9	9.9	14	9.0	6.6	11
29	14	9.7	6.6	7.1	-	7.5	6.4	8.8	12	7.6	9.2	11
30	13	10	6.2	6.9	-	7.1	6.4	8.6	12	7.3	20	11
31	13	-	5.8	6.6	-	7.3	-	8.6	-	7.1	11	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	369.4	14	8.6	11.9	733
November	326.4	12	9.5	10.9	647
December	262.3	9.9	5.8	8.46	520
Calendar year 1942	3,044.9	18	5.0	8.34	6,040
January	197.6	15	-	6.37	392
February	164.7	9.7	5.0	5.88	327
March	207.3	7.8	5.8	6.69	411
April	254.7	12	6.4	8.49	505
May	310.1	16	5.9	10.0	615
June	308.0	14	3.5	10.3	611
July	338.0	15	7.1	10.9	670
August	252.5	20	6.2	8.15	501
Septsmber	208.9	12	4.6	6.96	414
Water year 1942-43	3,199.9	20	3.5	8.77	6,350

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

f Computed on basis of partly estimated gage-height record.

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

Little Malad River above Elkhorn Reservoir, near Malad, Idaho

Location.- Water-stage recorder, 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.- October 1931 to September 1932, November 1940 to September 1943.

Extremes.- Maximum discharge during year, 63 second-feet Mar. 8 (gage height, 1.44 feet); minimum, 9.1 second-feet Feb. 5 (gage height, 0.40 foot), probably due to storage behind ice jam upstream.
1931-32, 1940-43: Maximum discharge, 126 second-feet Apr. 4, 1942 (gage height, 2.28 feet); minimum, that of Feb. 5, 1943.

Remarks.- Records good. Small ranch diversions from tributaries above station for irrigation.

Discharge, in second-feet, water year October 1942 to September 1943

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

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	438	15	14	14.1	869
November	425	17	12	14.2	843
December	416	15	12	13.4	823
Calendar year 1942	5,754	60	12	15.8	11,420
January	439	19	11	14.2	871
February	413	17	14	14.8	819
March	576	31	14	18.6	1,140
April	687	25	17	22.9	1,360
May	619	23	18	20.0	1,230
June	559	24	16	18.6	1,110
July	525	18	15	16.9	1,040
August	447	17	12	14.4	887
September	406	14	12	13.5	805
Water year 1942-43	5,948	31	11	16.3	11,800

Time basis: Mountain war time. 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 constructed dam on Little Malad River, 4½ miles downstream from Wright Creek, and 11½ miles northwest of Malad.

Records available.- December 1940 to September 1943.

Extremes.- Maximum gage height observed during year, 8.84 feet Mar. 14, 15; minimum observed, 0.40 foot Sept. 12.
1940-43: Maximum gage height observed, 11.00 feet Apr. 2, 1941; minimum observed, -1.54 feet May 10, 1941.

Remarks.- Reservoir is formed by partly constructed multiple-arch concrete dam (capacity, about 7,600 acre-feet). Gage read once daily prior to May 23 and once weekly thereafter. Regulation has been limited to a very small range due to large losses in impounded water.

Gage height, in feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.86	3.26	6.66	7.10	6.74	7.22	8.54	6.57	-	-	1.48	-
2	2.20	3.54	6.82	7.18	6.74	7.12	8.52	6.55	-	-	-	-
3	1.84	3.55	6.90	7.08	6.62	6.98	8.44	6.51	-	-	-	-
4	1.18	3.56	6.88	6.92	6.54	6.86	8.48	6.55	-	1.65	-	-
5	1.80	3.56	6.88	6.76	6.48	7.04	8.52	6.39	-	-	-	0.50
6	1.00	3.54	6.90	6.70	6.68	6.96	8.62	6.23	2.40	-	-	-
7	1.48	3.52	7.04	6.62	6.58	6.94	8.64	6.17	-	-	-	-
8	1.54	3.50	7.06	6.60	6.58	7.40	8.62	6.09	-	-	-	-
9	1.36	3.62	7.12	6.52	6.52	8.62	8.56	5.99	-	-	.75	-
10	1.50	3.70	7.16	6.44	6.46	8.56	8.36	5.91	-	-	-	-
11	2.42	3.72	7.20	6.28	6.38	8.60	8.18	5.99	-	2.60	-	-
12	2.84	3.52	7.28	6.18	6.30	8.54	8.04	5.91	-	-	-	.40
13	2.32	3.56	7.32	6.12	6.30	8.62	7.96	5.75	2.10	-	-	-
14	1.96	3.70	7.35	6.16	6.34	8.84	7.74	5.63	-	-	-	-
15	1.88	3.78	7.36	6.24	6.36	8.84	7.60	4.87	-	-	2.35	-
16	2.08	3.82	7.38	6.30	6.38	8.76	7.56	3.00	-	-	-	-
17	2.00	3.86	7.38	6.22	6.38	8.66	7.50	3.47	-	-	-	-
18	1.94	4.46	7.32	6.06	6.40	8.58	7.46	3.10		1.10	-	1.26
19	1.94	4.62	7.28	5.98	6.42	8.48	7.44	2.22	-	-	-	1.50
20	1.82	3.46	7.24	6.18	6.42	8.38	7.44	3.16	1.61	-	-	-
21	1.86	1.86	7.20	6.36	6.46	8.22	7.32	3.29	-	-	-	-
22	1.90	2.84	7.22	6.78	6.58	8.14	7.30	3.37	-	-	2.98	-
23	2.40	2.04	7.24	7.20	6.64	8.14	7.30	3.71	-	-	-	-
24	2.88	2.42	7.36	7.54	6.70	8.22	7.27	-	-	-	-	-
25	2.72	2.80	7.44	7.46	6.82	8.28	7.04	-	-	.68	-	-
26	2.70	2.00	7.36	7.38	6.96	8.36	6.98	-	-	-	-	2.50
27	2.80	2.88	7.20	7.30	7.06	8.44	6.94	-	1.85	-	-	-
28	2.88	4.14	7.08	7.26	7.10	8.49	6.92	-	-	-	-	-
29	3.06	5.78	7.06	7.18	-	8.56	6.88	-	-	-	.60	-
30	3.14	6.20	7.04	7.06	-	8.64	6.80	1.52	-	-	-	-
31	3.16	-	7.04	6.84	-	8.60	-	-	-	1.48	-	-

Time basis: Mountain war time. 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°18', long. 112°25', in sec. 7, T. 13 S., R. 35 E., just downstream from Elkhorn Dam, 4½ miles downstream from Wright Creek and 11½ miles northwest of Malad.

Records available.- December 1940 to September 1943.

Extremes (regulated).- Maximum discharge during year, 52 second-feet Aug. 30 (gage height, 2.06 feet), from rating curve extended above 22 second-feet by logarithmic plotting; no flow part of Aug. 23; minimum daily, 5.0 second-feet several days in January.
1940-43: Maximum discharge, that of Aug. 30, 1943; no flow Mar. 19-23, 1941 and part of June 22, 1942, Aug. 23, 1943.

Remarks.- Records 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	13	6.1	5.6	5.4	5.8	6.4	18	21	15	16	14
2	12	13	5.8	5.6	5.6	5.8	6.4	18	26	18	18	14
3	12	13	5.8	5.8	5.8	6.1	6.4	18	22	18	15	14
4	12	14	5.8	6.1	6.1	5.8	6.7	20	22	18	15	14
5	12	13	5.8	6.1	6.1	5.8	6.7	21	21	18	16	14
6	12	13	5.8	6.1	6.1	5.8	6.7	21	21	18	14	14
7	12	13	5.8	5.6	5.8	6.1	6.7	21	20	18	14	13
8	12	13	5.8	5.3	5.8	6.4	9.6	21	19	18	14	13
9	12	13	5.6	5.3	5.8	6.7	13	21	20	17	13	14
10	12	13	5.6	5.0	5.6	6.7	16	20	19	17	13	14
11	13	13	5.6	5.0	5.6	6.7	16	19	19	18	13	14
12	13	13	5.6	5.0	5.3	6.4	16	19	18	18	13	14
13	13	13	5.6	5.0	5.3	6.4	16	19	19	18	13	14
14	13	13	5.6	5.3	5.3	6.4	16	20	20	18	13	14
15	12	14	5.6	5.6	5.3	6.4	16	25	21	19	14	14
16	12	14	5.6	5.6	5.3	6.4	16	22	21	16	14	14
17	12	13	5.6	5.3	5.3	6.4	16	22	20	16	14	13
18	12	13	5.8	5.3	5.6	6.7	14	21	20	17	14	13
19	13	16	5.8	5.3	5.6	6.7	13	20	19	17	14	13
20	13	13	5.8	5.3	5.6	6.7	16	20	18	17	14	14
21	13	11	5.6	5.0	5.6	6.7	16	19	18	18	13	14
22	13	10	5.8	5.0	5.6	6.7	15	19	18	19	13	14
23	13	11	5.8	5.0	5.6	6.7	16	19	18	17	15	14
24	13	12	5.8	5.0	5.8	6.4	17	19	17	17	14	14
25	13	12	5.8	5.3	5.8	6.7	19	16	17	16	13	14
26	13	11	5.8	5.0	5.8	6.4	19	19	16	16	13	14
27	13	9.9	5.8	5.0	5.8	6.1	18	18	15	18	14	15
28	13	6.4	5.8	5.3	5.8	6.4	18	17	15	15	14	16
29	13	6.4	5.6	5.3	-	6.4	18	16	16	16	13	16
30	13	6.4	5.6	5.3	-	6.7	18	18	15	15	15	15
31	13	-	5.6	5.3	-	6.7	-	20	-	15	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	388	13	11	12.5	770
November	361.1	15	6.4	12.0	716
December	177.5	6.1	5.6	5.73	352
Calendar year 1942	4,095.0	24	4.8	11.2	8,120
January	155.7	6.1	5.0	5.35	329
February	158.1	6.1	5.3	5.65	314
March	198.1	6.7	5.8	6.39	393
April	406.6	19	6.4	13.6	806
May	606	25	15	19.5	1,200
June	571	26	15	19.0	1,130
July	528	19	15	17.0	1,050
August	434	18	13	14.0	861
September	421	16	13	14.0	835
Water year 1942-43	4,415.1	26	5.0	12.1	8,760

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

Devil Creek above Campbell Creek, near Malad, Idaho

Location.- Staff gage, 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 7⅞ miles northeast of Malad.

Records available.- November 1938 to September 1943.

Extremes.- Maximum discharge observed during year, 202 second-feet Apr. 2 (gage height, 2.10 feet), from rating curve extended above 40 second-feet; minimum observed, 3.4 second-feet Feb. 14 (gage height, 0.50 foot), but may have been less during period of ice effect.

1938-43: Maximum discharge observed, that of Apr. 2, 1943; minimum observed, that of Feb. 14, 1943.

Remarks.- Records fair. Gage read once daily except Feb. 9 to Apr. 24 when it was read twice daily. 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 may cause slight diurnal fluctuations.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.0	e6.0	6.8	9.2	e7.5	8.0	82	22	13		8.8	
2	6.0	e6.0	7.6	9.2	e7.5	e8.0	118	22	13			
3	6.0	6.0	7.6	9.2	7.6	e8.0	65	22	13			
4	6.0		7.6	8.4	7.6	e8.0	58	22	13			
5	6.0		7.6	8.4	e7	8.0	60	21	13			
6	6.0		8.4	5.0	7.6	7.6	62	21	14		e8.5	
7	6.0		9.2	5.5	5.5	8.4	53	21	14			
8	6.0			6.8	9.2	14	4e	21	14			e7
9	6.0				8.0	11	45	20	14			
10	6.8		e9		e7	9.6	35	20	13			
11	6.8				4.7	13	36	18	13	e9		
12	6.8				7.6	12	45	17	12		8.4	
13	7.6		e9.2		7.6	14	39	17	12		8.4	
14	6.6				6.0	16	37	16	13		8.4	
15	6.8	e6			7.8	14	37	16	13			
16				e7	e7	12	35	17	12			6.4
17					7.2	12	32	16	12			
18					6.6	11	31	16	11			
19					6.4	11	33	16	11			
20					7.6	10	32	16	11			
21					10	10	31	14	11	11	e8	
22			e9		9.2	11	28	14				e6.5
23	e6				10	13	29	14				
24					9.2	20	29	14				
25					8.6	28	29	13				
26				e8	8.0	34	24	13	e10	e9		
27		e6			8.4	50	24	13				
28		e6			8.4	84	22	12				
29		e6			-	167	22	12				
30		e7		*7.5	-	96	21	12				
31		-		e7.5	-	64	-	12	-			-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	191.6	7.6	-	6.18	380
November	181.0	-	-	6.03	359
December	271.0	-	-	8.74	538
Calendar year 1942	3,611.5	65	-	9.89	7,160
January	231.7	-	-	7.47	460
February	215.0	10	4.7	7.68	426
March	791.5	167	7.6	25.5	1,570
April	1,242	118	21	41.4	2,460
May	520	22	12	16.8	1,030
June	355	14	-	11.8	704
July	281	-	-	9.1	557
August	253	-	-	8.23	505
September	202	-	-	6.75	401
Water year 1942-43	4,737.3	167	-	13.0	9,390

* Winter discharge measurement made on this day.

e Stage-discharge relation affected by ice or gage-height record missing or doubtful; discharge computed on basis of weather records and record for station above Evans dividers, near Malad, and Deep Creek near Malad, or interpolated.

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

Devil Creek above Evans dividers, near Malad, Idaho

Location.- Water-stage recorder, lat. 42°15', long. 112°13', in sec. 35, T. 13 S., R. 36 E., at Evans Ranch, 900 feet upstream from Evans dividers, 3.1 miles downstream from Campbell Creek, and 3.6 miles northeast of Malad.
Records available.- December 1940 to December 1943 (discontinued).
Extremes.- 1942-43: Maximum discharge during water year, 254 second-feet Mar. 30 (gage height, 5.29 feet), from rating curve extended above 60 second-feet; minimum, 4.8 second-feet Sept. 22 (gage height, 0.90 foot).
1943: Maximum discharge during period October to December, 13 second-feet Nov. 25; minimum discharge recorded, 5.6 second-feet Oct. 6 (gage height, 0.97 foot).
1940-43: Maximum discharge, that of Mar. 30, 1943; minimum recorded, 2.5 second-feet Sept. 21, 1941 (gage height, 0.44 foot, site and datum then in use).
Remarks.- Records good except those for periods of ice effect or of doubtful or no gage-height record, which are fair, and those above 100 second-feet, which are poor. Several 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 may cause diurnal fluctuations.

Discharge, in second-feet, 1942-43

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.2	7.5	8.7				84	34	21	12	7.4	8.9
2	7.1	7.4	9.4				114	35	26	11	8.9	8.7
3	7.4	7.4		e9.5		e9.5	111	33	23	11	9.8	8.7
4	7.2	7.7					96	33	22	12	9.8	6.9
5	7.2	7.4					85	33	20	13	9.5	6.2
6	7.2	7.1				h9.1	90	34	19	13	9.2	7.3
7	7.1	7.2				e10	83	31	18	13	9.5	8.3
8	6.9	7.2	e9.5				72	29	18	13	9.4	8.1
9	6.9	7.4					61	27	17	13	9.2	8.0
10	7.1	7.2			e9.5	e20	62	29	17	12	8.0	8.0
11	8.4	6.9					62	29	16	12	7.1	8.1
12	8.0	7.1					54	28	17	12	7.8	7.7
13	8.2	7.1				24	56	27	20	12	8.9	7.7
14	7.9	7.2		e8.0		27	56	25	20	11	8.6	7.6
15	7.7	7.5	*9.4			26	56	24	18	9.0	8.9	7.7
16	7.9	7.4				22	55	26	15	8.9	9.2	7.1
17	7.7	8.2				20	53	24	15	8.9	8.9	5.6
18	7.5	9.9				19	52	23	13	9.0	9.0	5.2
19	7.5	9.2			9.2	18	51	21	13	8.7	9.0	5.1
20	7.7	7.5				17	50	24	14	10	8.7	5.3
21	7.7				e9.5	17	47	23	13	13	8.4	5.3
22	7.7	e7.5				18	46	23	14	14	5.6	5.6
23	7.9		e9.5			20	43	22	12	11	7.7	8.4
24	7.7				9.6	28	42	21	12	11	8.5	8.4
25	7.7	7.5				47	42	21	11	9.7	8.6	8.6
26	7.7	e7.5		e9.5	e9.5	57	40	21	12	8.4	8.6	8.6
27	7.7	e7.5				74	37	19	12	8.0	8.4	8.9
28	7.7	e7.5				104	36	19	14	7.8	8.4	8.9
29	7.4	7.7				172	35	18	14	7.0	8.3	8.7
30	7.4	9.2		*9.4	-	151	33	19	14	7.6	8.4	8.7
31	7.2	-		9.0	-	66	-	20	-	7.4	8.9	-

* Winter discharge measurement made on this day.
e Stage-discharge relation affected by ice or gage-height record missing or doubtful; discharge computed on basis of weather records and records for Devil Creek above Campbell Creek and Malad River at Woodruff.
h Computed on basis of staff-gage reading.

1943

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1	8.5	10	12	9	9.7	10	a10	17	10	12	-	25	10	12	-
2	8.7	10	12	10	9.7	10	a10	18	10	12	-	26	10	12	-
3	8.0	10	12	11	11	10	a10	19	11	12	-	27	10	12	-
4	6.9	10	12	12	10	10	a10	20	10	12	-	28	10	12	-
5	6.5	10	12	13	9.8	10	11	21	11	12	-	29	10	12	-
6	7.1	11	11	14	9.8	12	11	22	10	12	-	30	10	12	-
7	9.4	10	11	15	9.8	12	-	23	10	12	-	31	11	-	-
8	9.5	10	a10	16	9.8	12	-	24	10	12	-				

a No gage-height record; discharge computed on basis of weather records and records for station above Campbell Creek.

Monthly discharge, in second-feet, 1942-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1942	235.6	8.4	6.9	7.54	463
November	228.4	9.9	6.9	7.61	453
December	293.5	-	-	9.47	582
Calendar year 1942	4,358.6	60	5.6	11.9	8,640
January 1943	269.9	-	-	8.71	535
February	265.8	-	-	9.49	527
March	1,093.6	172	-	35.3	2,170
April	1,802	114	33	60.1	3,570
May	796	35	18	25.6	1,580
June	491	26	11	16.4	974
July	329.4	14	7.0	10.6	653
August	267.7	9.8	6.6	8.64	531
September	226.3	8.9	5.1	7.54	449
Water year 1942-43	6,296.2	172	5.1	17.2	12,490
October 1943	297.3	11	8.5	9.59	590
November	355	12	10	11.2	664
December 1-14	154	12	-	11.0	305

Time basis: Mountain war time. 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 1943.

Average discharge.- 12 years, 9.05 second-feet.

Extremes.- Maximum discharge during year, 125 second-feet July 21 (gage height, 3.05 feet), from rating curve extended above 30 second-feet by logarithmic plotting; minimum discharge recorded, 1.1 second-feet Dec. 3 (gage height, 0.24 foot), but may have been less during period of ice effect.

1931-43: 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 May to September and fair October to April. Small diversions above station. Flow regulated at reservoir 2½ miles above station.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	3.4	3.8	4.7	*b6.7	b9	36	38	27	17	9.0	5.2
2	3.6	3.4	3.8	4.7	6.9	b8	40	38	34	17	8.2	*4.7
3	3.8	3.6	a3.5	4.0	6.9	b8	45	37	29	17	8.2	4.7
4	4.2	3.8	a3.0	2.4	6.7	b8	45	40	27	15	8.2	4.3
5	4.0	3.6		2.9	6.9	b8	48	40	25	14	8.7	3.9
6	4.0	3.2	a2.5	3.6	6.7	8.1	45	39	23	14	8.7	3.4
7	4.0	3.2		3.8	6.7	10	49	36	23	14	9.2	3.2
8	4.0	3.4		3.6	6.7	13	50	34	21	15	9.0	3.2
9	4.2	3.4		3.6	6.4	14	48	31	19	17	8.2	3.2
10	4.5	3.0	3.8	2.7	b6.0	12	45	28	20	17	7.9	3.0
11	4.7	2.7	4.2	a2.5	6.4	13	43	26	20	17	7.9	2.8
12	5.3	2.7	4.7	a2.5	6.4	14	36	25	20	17	7.6	2.8
13	6.4	2.7	4.5	a2.5	6.4	14	40	24	21	17	7.1	3.0
14	6.4	3.2	4.2	2.9	6.4	15	41	24	22	17	6.8	2.8
15	6.2	3.2	*4.5	2.9	6.4	14	44	25	22	17	7.1	2.8
16	6.0	3.4	4.0	2.9	6.4	14	45	25	21	16	6.3	2.8
17	5.8	3.8	3.0		b6.5	14	45	24	21	16	5.6	3.0
18	5.8	6.0			7.6	13	51	23	17	15	5.6	3.0
19	5.8	4.9		b2.5	7.9	12	52	21	16	14	5.9	3.0
20		3.0	a2.5		8.4	11	50	20	16	13	6.6	3.0
21		2.4			9.2	11	46	20	15	22	8.6	3.0
22		2.4		3.8	10	12	46	20	18	15	6.6	3.0
23		2.5	3.8	7.4	11	13	42	20	19	14	6.6	2.8
24		3.2	5.8	6.4	11	15	42	19	16	13	6.1	2.8
25	a4.0	2.9	5.1	5.5	10	19	42	19	14	13	6.1	2.6
26		2.8	3.0	5.3	9.9	21	42	22	15	13	6.3	3.0
27		2.9	a3.0	5.3	10	f25	40	22	14	12	6.3	3.2
28		3.2	3.4	5.3	b9	32	38	21	14	10	5.9	3.4
29		3.8	3.8	4.9	-	43	39	21	16	10	5.4	3.2
30		4.9	4.0	4.9	-	47	37	20	17	9.8	5.9	3.2
31		-	4.9	b4.0	-	39	-	23	-	9.5	5.6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	140.1	6.4	-	4.52	278
November	99.8	6.0	2.0	3.33	198
December	108.8	5.8	-	3.51	216
Calendar year 1942	4,304.0	59	2.0	11.8	8,530
January	117.5	7.4	-	3.79	233
February	215.5	11	6.0	7.70	427
March	509.1	47	8	16.4	1,010
April	1,312	52	36	43.7	2,600
May	825	40	19	26.6	1,640
June	602	34	14	20.1	1,190
July	457.3	22	9.5	14.8	907
August	219.2	9.2	5.4	7.07	435
September	98.0	5.2	2.6	3.27	194
Water year 1942-43	4,704.3	52	2.0	12.9	9,330

* 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.
b Stage-discharge relation affected by ice.
f Computed on basis of partly estimated gage-height record.
Time basis: Mountain war time. 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. 1 S., 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 1943.

Average discharge.- 37 years (1906-43) 232 second-feet.

Extremes.- Maximum discharge during year, 1,560 second-feet June 1 (gage height, 3.55 feet); minimum recorded, 36 second-feet Mar. 10, but may have been less during periods of ice effect.
1904-43: 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56	56	60				81	930	1,420	519	119	91
2	56	58	60				101	1,010	1,110	439	121	89
3	55	56	60				128	1,050	863	368	114	87
4	53	b56	b56				144	1,060	724	358	103	85
5	53	b56	b48			b50	151	920	618	332	97	91
6	53	b54	b48				148	766	532	322	105	93
7	53	55	b50				159	632	501	306	108	87
8	53	56	a50				168	551	532	290	108	85
9	52	56	a50				176	478	684	271	97	81
10	53	b56	a52			62	162	450	816	253	93	78
11	56	b54	a52	b45	b45	*60	154	450	920	235	91	73
12	63	b52	a52			58	154	461	882	222	91	69
13	63	b52	a50			56	178	478	774	209	91	69
14	65	53	a50			59	219	472	653	197	93	73
15	63	55	a50			55	286	461	564	203	91	80
16	59	55	a50			62	340	444	466	219	91	81
17	58	55	a50			63	373	417	544	185	93	81
18	58	55	a50			59	417	397	800	173	103	80
19	58	56	a50				478	373	960	165	108	80
20	56	56	a50				519	358	1,000	168	105	80
21	56	b52	*b50			b50	532	368	960	171	103	78
22	56	b50	b50				519	385	960	162	99	76
23	56	b52	b52				618	461	910	151	93	74
24	56	b54	b52			50	700	564	882	144	91	71
25	56	b56	b50		b50	55	646	732	791	138	89	73
26	56	b52	b50	b50 (*)		58	590	950	808	134	89	73
27	56	b52	b50			63	532	1,060	692	128	87	73
28	58	b54	b50			76	558	1,230	625	126	87	85
29	58	56	b50		-	89	584	1,250	604	121	87	80
30	58	60	b48		-	87	676	1,220	639	119	89	73
31	55	-	b48		-	78	-	1,160	-	119	89	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,757	65	52	56.7	3,480
November	1,640	60	50	54.7	3,250
December	1,588	60	48	51.2	3,150
Calendar year 1942	72,704	1,490	48	199	144,200
January	1,450	-	-	46.8	2,880
February	1,300	-	-	46.4	2,580
March	1,790	89	-	57.7	3,550
April	10,489	700	81	350	20,800
May	21,526	1,250	358	694	42,700
June	23,234	1,420	466	774	46,080
July	6,947	519	119	224	13,780
August	3,085	121	87	97.6	6,000
September	2,387	93	69	79.6	4,730
Water year 1942-43	77,133	1,420	48	211	153,000

* Winter discharge measurement made this day.
a No gage-height record; discharge computed on basis of weather records and records for station near Coalville.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Weber River near Coalville, Utah

Location.- Water-stage recorder, lat. 40°53'40", long. 111°24'00", in SE¼NE¼ sec. 20, T. 2 N., R. 5 E., at bridge 1½ miles upstream from high-water contour for Echo Reservoir, 1½ miles south of Coalville, and 6 miles downstream from Silver Creek.
Drainage area.- 438 square miles.
Records available.- April 1927 to September 1943.
Average discharge.- 16 years, 202 second-feet.
Extremes.- Maximum discharge during year, 1,570 second-feet June 2 (gage height, 4.08 feet); minimum, 40 second-feet Oct. 2, 3 (gage height, 0.36 foot).
1927-43: 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 those computed from staff-gage readings, which are fair. Records do not include flow bypassing gage during extreme high water (estimated 150 second-feet at 1943 maximum discharge). 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.

Rating table, water year 1942-43, except period of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 7 to Sept. 20)

0.3	34	1.3	199	3.0	860
.5	55	1.7	330	3.7	1,370
.7	82	2.0	394	4.1	1,580
1.0	134	2.5	595		

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	47	96	144	106	b90	130	381	665	1,160	415	63	62
2	43	93	168	110	b90	110	444	783	1,400	355	74	59
3	41	88	152	95	b100	100	412	849	978	310	72	60
4	43	95	119	78	b100	128	349	938	728	282	69	52
5	47	90	b105	b90	b100	123	298	884	739	266	69	50
6	50	92	b110	b95	b100	b110	251	695	483	246	65	47
7	53	98	b115	b95	b100	b140	266	572	401	216	81	46
8	50	98	b115	82	b108	178	274	520	364	216	82	48
9	48	96	115	87	b105	381	298	440	387	199	74	50
10	47	92	124	101	b100	194	258	378	475	174	68	52
11	47	87	128	106	b95	*190	251	318	550	163	68	52
12	56	92	121	95	b90	197	221	310	564	152	65	51
13	68	98	119	b90	b90	228	213	298	516	140	64	51
14	75	101	124	b95	b90	327	251	279	511	130	62	48
15	72	103	117	b100	b90	256	310	266	459	138	64	53
16	82	106	121	b95	b90	204	368	264	358	238	65	54
17	88	110	119	b90	b95	183	404	248	310	169	60	55
18	h90	138	124	b85	b105	163	437	216	378	146	67	52
19	h88	136	123	b80	119	140	487	194	507	134	69	54
20	h85	113	121	b75	124	144	520	169	582	124	69	59
21	h82	b95	112	b90	134	138	541	146	586	130	64	65
22	h76	b90	*124	b250	204	148	520	140	533	188	63	63
23	h76	b115	*108	b200	216	161	568	134	511	146	64	62
24	h76	140	138	b125	172	221	630	169	524	123	68	64
25	h78	142	119	b100	144	279	620	223	620	110	62	63
26	76	113	110	b100	130	364	559	387	655	101	62	64
27	78	144	85	*b110	115	437	487	520	582	85	62	68
28	84	163	b100	b110	119	598	475	655	516	75	59	71
29	92	134	b100	b105	-	761	499	788	471	62	60	78
30	92	151	103	b105	-	605	507	854	499	65	64	76
31	90	-	110	b100	-	324	-	854	-	64	60	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,122	92	41	68.5	4,210
November	3,339	161	87	111	6,620
December	3,690	165	85	119	7,320
Calendar year 1942	76,788	1,300	35	210	152,300
January	3,245	250	75	105	6,440
February	3,212	216	90	115	6,370
March	7,682	761	100	248	15,240
April	12,099	630	213	403	24,000
May	14,155	938	134	457	28,080
June	17,247	1,400	310	575	34,210
July	5,362	415	62	173	10,640
August	2,058	82	60	66.4	4,080
September	1,729	78	46	57.6	3,430
Water year 1942-43	75,941	1,400	41	208	150,600

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
h Discharge computed from staff-gage reading.
Time basis: Mountain war time. 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 NW¼SW¼ 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 1943.

Extremes.- Maximum contents during year, 74,390 acre-feet June 1, 2, 4, 14, 25, 26 (elevation, 5,560.3 feet); minimum, 15,640 acre-feet Oct. 13-16 (elevation, 5,506.05 feet).
1930-43: 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.

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 elevations 5,450 feet (bottom of outlet tunnel) and 5,560 feet (top of radial gates in spillway) above mean sea level. 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18,520	15,880	16,690	16,940	18,520	21,510	38,340	59,880	74,390	74,020	54,000	31,990
2	18,260	15,950	16,760	16,940	18,480	21,580	38,770	61,360	74,390	73,650	53,170	31,320
3	17,960	15,950	17,080	16,970	18,480	21,620	39,300	62,860	74,310	73,210	52,350	30,660
4	17,670	15,950	17,230	16,940	18,480	21,670	39,740	64,650	74,390	72,690	51,600	30,050
5	17,380	15,950	17,190	16,870	18,480	21,790	40,120	66,600	74,310	72,260	50,910	29,500
6	17,080	15,950	17,160	16,800	18,480	21,850	40,440	68,150	73,940	71,750	50,170	28,900
7	16,830	15,950	17,080	16,800	18,480	21,910	40,660	69,440	74,020	71,090	49,560	28,270
8	16,580	15,980	17,080	16,050	18,480	22,030	41,000	69,870	74,160	70,300	48,890	27,660
9	16,300	16,020	17,080	16,650	18,600	25,130	41,330	70,010	74,310	69,580	48,288	27,460
10	16,020	16,020	17,080	16,650	18,560	24,340	41,660	69,940	74,310	68,860	47,680	27,060
11	15,770	15,980	17,080	16,620	18,560	24,890	41,880	69,580	74,310	68,010	47,020	26,660
12	15,670	15,950	17,120	16,620	18,600	25,320	42,000	69,150	74,310	67,300	46,320	26,270
13	15,640	15,910	17,080	16,580	18,640	25,960	42,000	68,720	74,310	66,460	45,660	25,880
14	15,640	15,910	17,050	16,580	18,640	26,840	42,110	68,720	74,390	65,690	44,960	25,450
15	15,640	15,950	17,010	16,620	18,640	28,220	42,550	68,940	74,310	64,920	44,270	25,060
16	15,640	15,980	17,010	16,650	18,640	28,860	43,350	69,360	74,310	64,300	43,630	24,720
17	15,670	16,020	16,940	16,650	18,640	29,220	44,090	69,720	74,240	63,820	42,950	24,380
18	15,700	16,050	16,900	16,650	18,710	29,590	44,840	70,150	74,240	63,270	42,280	24,040
19	15,740	16,160	16,830	16,580	18,790	29,910	45,780	70,590	74,310	62,580	41,550	23,790
20	15,770	16,230	16,720	16,510	18,900	30,140	46,840	70,950	74,310	61,970	40,880	23,500
21	15,810	16,230	16,620	16,510	19,050	30,420	48,040	71,160	74,240	61,360	40,230	23,250
22	15,810	16,120	16,510	16,650	19,240	30,710	49,250	71,160	74,240	60,820	39,520	23,050
23	15,770	16,120	16,510	17,120	20,050	30,940	50,420	70,880	74,310	60,480	38,820	22,800
24	15,770	16,160	16,580	17,700	20,640	31,460	51,720	70,590	74,310	60,010	38,130	22,640
25	15,770	16,260	16,720	17,920	20,960	32,130	53,230	70,440	74,390	59,540	37,400	22,510
26	15,740	16,300	16,800	18,040	21,150	32,910	54,570	70,300	74,390	59,010	36,670	22,310
27	15,740	16,260	16,800	18,190	21,310	33,840	55,670	70,370	74,310	58,280	35,800	22,190
28	15,740	16,370	16,720	18,280	21,430	34,980	56,590	70,730	74,310	67,490	34,980	22,110
29	15,770	16,440	16,800	18,450	-	36,570	57,620	71,530	74,240	56,710	34,180	22,070
30	15,810	16,550	16,870	18,480	-	37,660	58,680	72,620	74,160	55,800	33,440	22,070
31	15,840	-	16,870	18,560	-	38,030	-	73,720	-	54,890	32,660	-

Monthly elevation and contents, water year October 1942 to September 1943

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Oct. 1	5,510.05	18,520	-2,640
Nov. 1	5,506.4	15,880	+810
Dec. 1	5,507.55	16,690	+250
Calendar year 1942	-	-	+1,170
Jan. 1	5,507.9	16,940	+1,580
Feb. 1	5,510.05	18,520	+2,990
Mar. 1	5,513.9	21,510	+16,830
Apr. 1	5,532.15	38,340	+21,640
May 1	5,550.0	59,880	+14,510
June 1	5,560.3	74,390	-370
July 1	5,560.05	74,020	-20,020
Aug. 1	5,545.5	54,000	-22,010
Sept. 1	5,525.86	31,990	-9,960
Oct. 1	5,514.55	22,030	-
Water year 1942-43	-	-	+3,510

Time basis: Mountain war time. 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 1943.

Average discharge.- 16 years, 260 second-feet.

Extremes (regulated).- Maximum discharge during year, 2,370 second-feet June 2 (gage height, 6.12 feet); minimum daily, 3 second-feet Mar. 10-16.
1927-43: Maximum discharge, that of June 2, 1943; minimum daily, 2 second-feet Feb. 27 to Mar. 2, Mar. 31, Apr. 3-13, 1940.

Remarks.- Records excellent except those for period 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	209	101	160	125	127	102	284	370	1,450	640	548	423
2	207	112	114	125	127	102	303	419	2,040	645	512	400
3	207	118	78	125	127	102	306	419	1,250	625	490	389
4	204	118	125	125	127	102	306	427	1,090	600	474	374
5	204	118	152	125	127	102	306	430	1,160	590	454	370
6	204	118	152	125	127	102	306	434	807	615	442	370
7	204	118	152	125	127	102	306	558	615	650	438	303
8	201	118	152	125	114	65	309	685	535	645	438	289
9	201	125	152	111	120	10	309	746	595	635	434	281
10	177	129	152	107	125	3	306	741	695	630	438	287
11	141	129	152	107	125	3	306	741	807	615	454	287
12	118	129	152	107	125	3	303	736	774	605	462	284
13	90	129	152	107	125	3	303	695	715	595	462	287
14	90	129	152	107	125	3	237	385	790	580	466	269
15	90	129	152	107	125	3	105	260	763	576	470	269
16	90	129	152	107	125	3	237	223	650	553	454	251
17	90	129	149	107	114	34	237	225	517	526	462	237
18	90	129	149	99	102	47	239	152	530	522	478	220
19	90	143	158	96	83	47	239	129	690	522	466	214
20	90	147	177	96	74	47	242	154	730	522	450	214
21	97	147	177	96	74	47	242	263	790	508	438	212
22	101	147	152	97	74	47	245	356	670	446	442	209
23	101	147	125	84	76	47	281	400	650	425	442	196
24	101	147	125	78	76	47	297	400	630	419	442	181
25	101	147	125	99	76	62	390	450	763	430	458	160
26	101	154	125	99	76	100	297	517	802	478	462	152
27	101	160	125	118	94	100	300	644	730	508	458	147
28	101	160	125	125	102	100	297	499	665	526	450	135
29	101	160	125	127	-	262	300	478	640	526	454	129
30	101	160	125	127	-	400	300	504	635	548	446	129
31	101	-	125	127	-	290	-	720	-	562	434	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,104	209	90	132	8,140
November	4,026	160	101	134	7,990
December	4,388	177	78	142	8,700
Calendar year 1942	108,352	1,560	3	297	214,900
January	3,436	127	78	111	6,810
February	3,019	127	74	108	5,990
March	2,487	400	3	80.2	4,930
April	8,348	309	105	278	16,560
May	13,960	746	129	450	27,690
June	24,178	2,040	517	806	47,960
July	17,255	650	419	557	34,220
August	14,218	548	434	459	28,200
September	7,646	423	129	255	15,170
Water year 1942-43	107,064	2,040	3	293	212,400

Note.- Discharge computed from staff-gage readings Dec. 4 to Mar. 9, Mar. 29. Backwater from debris Mar. 10-28; discharge computed on basis of observer's estimates of discharge released from and time of gate changes at Echo Reservoir.
Time basis: Mountain war time. 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 SE¼SE¼ sec. 23, T. 4 N., R. 3 E., 350 feet downstream from highway underpass on U. S. Highway 308, 1⅛ miles west of Devils Slide, and 1⅝ miles downstream from Lost Creek.

Drainage area.- 1,100 square miles.

Records available.- February 1905 to September 1943.

Average discharge.- 38 years, 451 second-feet.

Extremes.- Maximum discharge during year, 2,420 second-feet (regulated) June 2 (gage height, 5.95 feet); minimum, 97 second-feet (regulated) Oct. 19, 20.
1905-43: Maximum discharge observed, 6,000 second-feet May 22, 1920; minimum, 18 second-feet (regulated) Sept. 23, 1934.

Remarks.- Records excellent except those for periods of ice effect and those for Nov. 20 to Dec. 22, May 4-10, which are good, and those for Mar. 10 to Apr. 10, which are fair. Many diversions above station for irrigation and domestic supply. Flow regulated by Echo Reservoir (see p.97).

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	210	114	220	170	b140	156	500	890	1,450	660	551	441
2	205	121	350	168	b140	148	510	962	2,200	676	536	412
3	199	128	260	164	b145	146	520	928	1,530	655	499	400
4	199	128	200	b160	b150	152	560	900	1,260	620	494	392
5	199	128	170	b160	b150	154	580	850	1,380	616	462	381
6	203	128	170	160	b150	144	600	800	1,050	625	458	381
7	206	128	180	156	b150	156	620	825	808	655	450	334
8	203	128	190	b150	b155	320	640	950	709	670	445	283
9	208	133	190	b150	198	796	640	1,050	726	650	441	289
10	196	137	190	148	162	286	640	1,000	830	640	432	298
11	152	135	190	144	158	150	620	968	902	630	445	298
12	144	137	190	142	170	150	585	950	878	610	454	298
13	104	135	180	133	177	150	585	830	808	590	454	298
14	102	135	180	135	179	300	590	635	866	585	458	280
15	102	137	180	140	183	250	536	454	902	585	458	278
16	103	137	180	137	190	125	731	392	802	555	445	269
17	102	139	180	b130	183	175	792	377	920	531	445	250
18	100	139	180	b120	177	170	808	308	610	536	454	237
19	98	146	181	b110	179	160	854	264	742	531	462	220
20	98	155	190	b110	185	160	890	261	814	536	454	220
21	103	160	200	b150	210	150	854	373	819	541	445	218
22	111	160	200	240	240	170	836	445	709	489	450	215
23	112	160	172	237	278	200	902	508	665	441	458	208
24	112	160	183	148	185	250	974	512	645	432	462	196
25	112	160	181	144	137	300	956	546	764	445	485	172
26	112	170	170	142	131	330	920	625	814	485	494	164
27	112	180	172	146	135	340	802	640	780	517	485	158
28	114	200	166	162	154	400	802	610	698	546	476	152
29	112	210	166	158	-	500	808	570	665	527	476	137
30	112	210	164	158	-	650	780	605	665	536	467	135
31	114	-	168	b150	-	550	-	792	-	551	458	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,357	210	98	141	8,640
November	4,438	210	114	148	8,800
December	5,883	350	164	190	11,670
Calendar year 1942	125,926	1,660	98	345	249,800
January	4,722	240	110	152	9,370
February	4,751	278	131	170	9,420
March	8,078	650	125	261	16,020
April	21,435	974	500	714	42,520
May	20,818	1,050	261	672	41,290
June	27,411	2,200	610	914	54,370
July	17,665	676	432	570	35,040
August	14,453	551	432	466	28,670
September	8,014	441	135	267	15,900
Water year 1942-43	142,025	2,200	98	389	281,700

b Stage-discharge relation affected by ice.

Note.- No gage-height record Nov. 20 to Dec. 22, Mar. 10 to Apr. 10, and May 4-10; discharge computed on basis of discharge measurements on Dec. 19, Mar. 10, Apr. 2, May 5, recorded range in stage, weather records and records for stations at Echo and at Gateway.

Time basis: Mountain war time. 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 NW¼SW¼ 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 1943. October 1889 to July 1903 at site 1 mile downstream, published as Weber River near Uinta.
Average discharge.- 23 years (1920-43), 583 second-feet.
Extremes.- Maximum discharge during year, 2,970 second-feet (regulated) June 3 (gage height, 5.40 feet); minimum, 170 second-feet (regulated) Oct. 20 (gage height, 0.71 foot).
1889-1903, 1919-43: Maximum discharge observed, 7,980 second-feet May 31, 1896; minimum, 45 second-feet (regulated) Sept. 24, 1934.
Remarks.- Records excellent except those for periods of ice effect, which are fair. Many diversions above and below station for irrigation. Flow affected by East Canyon Creek and Echo Reservoirs (capacity, 28,730 and 73,400 acre-feet, respectively).
Cooperation.- Two discharge measurements furnished by Utah Power & Light Co.

Rating table, water year 1942-43, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 19 to Sept. 30)

0.7	168	1.8	544	4.0	1,840
.8	193	2.1	680	4.5	2,240
1.0	249	2.5	885	5.0	2,640
1.2	313	3.0	1,170	5.5	3,060
1.5	422	3.5	1,480		

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	246	188	290	306	b210	274	946	1,620	1,530	680	620	502
2	258	188	562	296	b210	249	1,040	1,750	2,650	690	624	477
3	256	198	327	264	b220	240	1,160	1,650	2,490	685	597	461
4	258	201	243	240	b230	258	1,230	1,580	1,890	661	588	457
5	261	198	b250	237	232	264	1,250	1,470	2,000	652	566	449
6	261	196	b240	246	229	240	1,270	1,400	1,710	647	557	445
7	264	198	b250	237	229	261	1,320	1,310	1,420	661	557	442
8	261	201	264	229	243	695	1,310	1,370	1,220	700	548	438
9	264	206	268	232	232	1,790	1,310	1,420	1,140	680	540	442
10	271	209	271	217	229	695	1,250	1,390	1,210	666	527	449
11	243	206	268	206	232	438	1,220	1,350	1,240	666	531	438
12	232	209	261	201	243	388	1,120	1,290	1,210	652	531	445
13	204	212	252	204	280	399	1,090	1,150	1,140	638	527	445
14	190	212	255	206	283	666	1,150	978	1,210	628	527	438
15	186	220	252	212	287	633	1,240	789	1,310	647	527	430
16	186	220	249	215	290	370	1,420	714	1,240	642	519	430
17	183	229	249	201	303	341	1,590	695	1,070	606	515	418
18	178	234	252	b190	313	306	1,660	633	940	602	527	411
19	178	237	249	b180	324	268	1,720	492	968	602	544	395
20	173	243	271	b180	338	268	1,830	482	1,030	606	531	388
21	173	234	280	237	359	264	1,750	523	1,010	620	515	392
22	183	232	277	399	414	300	1,700	575	907	597	498	388
23	188	234	252	498	557	355	1,780	638	779	531	510	380
24	188	237	345	338	414	430	1,900	647	729	523	506	373
25	186	240	341	240	293	579	1,860	656	754	519	519	362
26	188	232	283	229	271	719	1,780	719	779	548	523	355
27	188	268	249	234	252	815	1,540	719	784	566	519	352
28	193	287	266	249	271	951	1,490	719	719	602	519	352
29	193	271	264	240	-	1,120	1,510	700	685	588	515	344
30	190	327	255	240	-	1,250	1,460	700	680	588	515	287
31	188	-	290	226	-	1,060	-	863	-	610	510	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	6,610	271	173	213	13,110
November	6,767	327	188	226	13,420
December	8,600	562	230	277	17,060
Calendar year 1942	201,861	2,250	173	553	400,400
January	7,629	490	180	246	15,130
February	7,988	557	210	285	15,840
March	16,686	1,790	240	545	33,490
April	42,896	1,900	946	1,430	85,080
May	30,982	1,750	482	999	61,450
June	36,444	2,650	680	1,215	72,290
July	19,303	700	519	623	38,290
August	16,652	624	498	537	33,030
September	12,385	502	287	413	24,570
Water year 1942-43	213,142	2,650	173	584	422,800

b Stage-discharge relation affected by ice.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Weber River near Plain City, Utah

Location.- Chain gage, lat. 41°16'42", long. 112°05'30", in NW¼NE¼ sec. 8, T. 6 N., R. 2 W., at county highway bridge, 1 mile downstream from Fourmile Creek, 1½ miles south of Plain City, and 6 miles upstream from mouth.

Drainage area.- 2,060 square miles.

Records available.- May 1905 to September 1943. Records collected in 1904 by State engineer.

Extremes.- Maximum discharge observed during year, 3,310 second-feet (regulated) Apr. 26 (gage height, 15.89 feet); minimum observed, 31 second-feet (regulated) Sept. 24; minimum gage height observed, 1.75 feet Aug. 23, Sept. 24.
1904-43: 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 Creek, and Pine View Reservoirs (see pp. 97, 106, 111).

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	231	384	416	416	516	1,170	2,480	984	97	56	37
2	50	233	391	455	419	484	1,260	2,470	1,700	72	68	61
3	50	233	364	398	453	450	1,550	2,580	2,690	80	84	54
4	52	231	336	318	428	504	1,640	2,440	2,660	82	71	46
5	52	233	313	303	428	508	1,670	2,200	2,180	90	68	44
6	58	233	334	361	428	457	1,670	2,150	2,360	79	55	42
7	63	236	369	374	413	484	1,740	1,780	1,960	80	54	42
8	54	236	472	415	450	618	1,940	1,690	1,560	66	59	50
9	69	232	484	394	484	2,150	2,010	1,620	1,320	59	57	44
10	71	234	512	384	484	1,430	2,110	1,590	1,200	68	56	36
11	69	238	498	415	461	726	2,160	1,380	1,110	61	52	52
12	71	240	382	426	469	658	2,070	1,170	1,140	64	51	54
13	131	240	326	419	528	671	1,980	970	1,010	65	47	52
14	130	248	448	433	533	731	2,040	765	990	62	47	42
15	131	268	474	467	541	1,000	2,140	631	1,190	56	48	35
16	150	276	478	448	549	971	2,180	524	1,230	62	49	39
17	136	309	432	408	545	627	2,450	490	1,010	68	52	45
18	146	281	467	401	554	601	2,540	437	894	59	41	49
19	157	297	432	377	566	520	2,810	343	735	48	52	56
20	148	292	514	429	575	508	3,070	250	768	48	34	55
21	150	282	560	467	618	500	3,080	149	692	52	40	54
22	152	266	526	620	618	537	3,160	103	547	190	40	50
23	168	266	572	590	754	562	3,180	81	296	152	32	47
24	168	285	585	572	740	640	3,280	79	222	107	34	31
25	166	299	678	401	587	740	3,300	70	262	82	40	48
26	166	285	581	401	512	863	3,310	68	185	67	34	50
27	161	313	482	463	488	980	3,140	76	175	67	47	52
28	178	340	514	463	496	1,130	2,820	98	138	64	37	52
29	207	369	448	452	-	1,260	2,750	128	111	61	44	53
30	233	375	380	467	-	1,570	2,490	122	82	61	36	54
31	231	-	380	429	-	1,360	-	155	-	47	36	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,851	233	50	124	7,640
November	8,101	375	231	270	16,070
December	14,206	678	313	458	28,180
Calendar year 1942	212,758	2,770	16	583	422,000
January	16,365	620	305	431	26,510
February	14,536	754	413	519	28,830
March	24,446	2,150	450	789	48,490
April	70,710	3,310	1,170	2,367	140,300
May	28,989	2,580	68	936	57,500
June	31,399	2,690	82	1,047	62,280
July	2,306	190	47	74.4	4,570
August	1,521	64	32	49.1	3,020
September	1,426	61	31	47.5	2,830
Water year 1942-43	214,856	3,310	31	589	426,200

Time basis: Mountain war time. 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 SW¼SW¼ sec. 2, T. 1 S., R. 4 E., 1.3 miles upstream from Toll Gate Canyon, 5 miles southwest of Wanship, and 5¾ miles upstream from mouth.

Drainage area.- 25.8 square miles.

Records available.- October 1941 to September 1943. March 1939 to September 1941 in files of Bureau of Reclamation, as Silver Creek near Atkinson.

Extremes.- 1941-42: Maximum discharge during water year, 430 second-feet Apr. 4 (gage height, 4.28 feet); practically no flow for many days during irrigation season.
1942-43: Maximum discharge during water year, 272 second-feet Mar. 28 (gage height, 3.56 feet); practically no flow for many days during irrigation season.

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

Discharge, in second-feet, 1941-43

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a4	9					57	25	6	1		0
2	a4	26					90	22	5	0		0
3	a4	15					126	20	4	0		0
4	a4	11					206	17	3	0		0
5	a20	9				b3	151	14	3	0		0
6	a10	8					94	12	3	0		0
7	a7	8					79	8	1	1		0
8	a6	7					77	8	2	4		0
9	a5	8					65	7	3	2		0
10	a4	7					49	5	3	1		1
11	a4	7					38	10	3	2		1
12	a4	8					30	11	3	1		2
13	a8	7					23	12	2	0		1
14	a5	7					19	10	1	0		1
15	a4	6				b5	18	9	2	1		0
16	4	6	b5	b3	b3		18	12	1	10		0
17	5	18					18	10	2	6		0
18	6	16					13	8	3	1		0
19	6	10					12	5	2	0		1
20	6	b5					11	8	2	2		1
21	14	b4					11	8	1	2		1
22	8	b3				b10	12	7	1	a1		1
23	7	b3				*10	16	12	2	a1		1
24	9	*b3				10	13	10	2	a1		0
25	13	b3				10	10	9	1	a1		0
26	10	b5				10	12	8	1	a1		0
27	8	b5				10	14	16	3	a1		0
28	24	b5				12	30	12	4	a1		0
29	18	b5			-	14	31	13	2	a1		0
30	15	b5			-	20	26	11	2	a1		0
31	8	-			-	27	-	8	-	a1		-

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for Chalk Creek at Coalville and South Fork Ogden River near Huntsville.
b Stage-discharge affected by ice (no gage-height record Nov. 20-23, Dec. 20 to Mar. 22).

Discharge, in second-feet, of Silver Creek near Wanship, Utah, 1941-43--Continued

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Jnly	Aug.	Sept.
1	0	5					84	4	31	0	0	1
2	0	4					95	4	32	0	0	1
3	0	3					77	8	16	0	0	1
4	0	5				a5	57	14	25	0	0	1
5	2	4					39	10	28	0	0	1
6	2	4					33	15	13	0	0	1
7	2	4					33	14	9	0	1	0
8	1	4			a3		27	14	5	1	1	0
9	1	4					28	10	4	0	0	0
10	2	3					20	6	4	0	0	0
				a3								
11	2	3				(*)	24	4	5	0	0	0
12	3	3					16	4	4	0	0	0
13	5	4					14	3	4	0	0	0
14	6	3					12	3	12	0	0	0
15	4	3				a20	10	4	14	3	1	0
			a4									
16	5	3					9	6	9	4	a0	0
17	6	2					10	5	4	0	a0	0
18	6	12					7	4	3	0	a0	0
19	6	6					7	4	2	0	a0	0
20	5	2					6	3	2	0	a0	0
21	4	4	(*)		a8		6	3	2	0	0	0
22	5	a4				a25	4	4	1	1	1	0
23	5	a5				a40	3	3	0	1	0	1
24	5	a5				a50	4	2	0	1	0	0
25	4	a5				a60	5	1	0	1	0	1
				a8								
26	4	a4		(*)		*67	5	0	0	1	0	1
27	4	a6				79	5	0	0	0	0	1
28	6	a6				119	4	0	0	0	0	1
29	5	a6			-	121	7	1	0	0	0	1
30	6	a6			-	91	5	1	0	0	0	0
31	4	-			-	69	-	2	-	0	0	-

* Winter discharge measurement made on this day.

a No gage-height record (atage-discharge relation affected by ice part of winter period); discharge computed on basis of 3 discharge measurements, weather records, and records for Lost Creek near Croydon and Hardscrabble Creek near Porterville.

Monthly discharge, in second-feet, 1941-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1941	254	24	4	8.2	504
November	239	26	3	8.0	474
December	155	-	-	5.0	307
Calendar year 1941	-	-	-	-	-
January 1942	93	-	-	3.0	184
February	84	-	-	3.0	167
March	224	27	-	7.2	444
April	1,369	206	10	456	2,720
May	353	25	7	11.4	700
June	73	6	1	2.4	145
July	44	10	0	1.4	87
August	0	0	0	0	0
September	11	2	0	.4	22
Water year 1941-42	2,899	206	0	7.9	5,750
October 1942	110	6	0	3.5	218
November	132	12	2	4.4	262
December	124	-	-	4.0	246
Calendar year 1942	2,617	206	0	7.2	5,200
January 1943	148	-	-	4.8	294
February	154	-	-	5.5	305
March	1,036	121	-	33.4	2,050
April	656	95	3	21.9	1,300
May	156	15	0	5.0	309
June	229	32	0	7.6	454
Jnly	13	4	0	.4	26
August	4	1	0	.1	8
September	12	1	0	.4	24
Water year 1942-43	2,774	121	0	7.6	5,500

Time basis: Mountain standard time prior to 2 a.m., Feb. 9, 1942; mountain war 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 NE¼SE¼ 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 1943.

Average discharge.- 16 years (1927-43), 52.2 second-feet.

Extremes.- Maximum discharge during year, 444 second-feet May 5 (gage height, 1.88 feet); minimum, 6 second-feet Dec. 4, Mar. 21.
1927-43: 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 affected by Chalk Creek Reservoir (capacity, 1,200 acre-feet).

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	20	20	21	16	22	64	372	289	57	21	11
2	10	20	27	21	17	16	60	385	381	55	29	11
3	10	20	23	17	17	16	95	381	297	53	27	12
4	9	21	11	11	17	20	120	389	277	50	23	11
5	8	20	12	14	18	20	147	394	273	47	21	13
6	8	18	14	19	17	15	156	317	262	43	21	13
7	8	20	17	18	18	20	165	293	247	48	29	16
8	8	21	18	15	19	33	159	262	225	45	39	18
9	7	21	20	16	18	136	184	236	214	42	30	21
10	7	17	21	16	19	53	139	214	200	39	29	20
11	7	14	21	16	17	42	105	207	194	36	28	21
12	8	14	19	15	17	40	89	204	181	32	27	20
13	8	17	16	14	15	64	103	194	174	32	23	20
14	9	20	18	15	15	133	153	190	200	33	22	20
15	8	22	19	17	15	57	177	177	207	34	21	19
16	8	20	17	17	16	32	190	171	207	40	22	18
17	10	21	17	17	18	32	190	159	177	39	22	16
18	9	21	18	16	18	29	194	147	168	34	22	14
19	10	21	16	13	21	20	218	139	162	36	22	15
20	10	21	17	12	22	25	243	130	147	42	21	16
21	10	11	18	18	25	19	266	136	133	66	19	17
22	10	13	16	61	53	28	254	130	122	61	17	18
23	11	20	20	47	57	45	285	147	100	50	16	17
24	12	23	27	23	29	59	334	156	93	42	14	18
25	13	20	21	18	22	91	317	168	85	37	12	17
26	13	11	20	18	21	89	313	171	78	34	11	16
27	13	25	13	20	15	103	254	174	72	32	10	18
28	14	25	20	21	17	112	266	187	66	28	10	20
29	16	22	23	19	-	107	301	187	64	24	10	21
30	19	27	18	19	-	80	305	174	62	22	10	23
31	20	-	21	18	-	55	-	187	-	20	10	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	323	20	7	10.4	641
November	556	27	11	19.5	1,160
December	578	27	11	18.6	1,150
*Calendar year 1942	25,631	542	7	70.2	50,840
January	602	61	11	19.4	1,110
February	589	57	15	21.0	1,170
March	1,613	136	15	52.0	3,200
April	5,866	334	64	196	11,640
May	6,778	394	130	219	13,440
June	5,357	381	62	179	10,630
July	1,253	66	20	40.4	2,490
August	638	39	10	20.6	1,270
September	510	23	11	17.0	1,010
Water year 1942-43	24,693	394	7	67.7	48,990

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

Lost Creek near Croydon, Utah

Location.- Water-stage recorder, lat. 41°11', long. 111°24', in SW¼SE¼ sec. 8, T. 5 N., R. 5 E., 0.8 mile downstream from Francis Fork, 1.6 miles upstream from Hill Canyon, and 9½ miles northeast of Croydon.

Drainage area.- 133 square miles.

Records available.- February 1921 to December 1923, April 1941 to September 1943.

Extremes.- Maximum discharge during year, 298 second-feet Apr. 24 (gage height, 4.03 feet); minimum daily, 5 second-feet Oct. 1-4, but may have been less during periods of no gage-height record.

1921-23, 1941-43: 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 no gage-height record, which are fair. No diversion above station.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	7	a10				38	239	75	22	8	7
2	5	7	a10				62	251	76	22	10	7
3	5	7	9				97	236	69	21	9	7
4	5	7	8				114	236	67	20	8	7
5	6	7	8			a8	123	206	68	19	8	7
6	6	7	10				117	183	68	18	9	7
7	6	7	7				130	155	65	18	11	7
8	6	7	9				119	139	64	17	14	7
9	6	7	a		a6	a15	131	123	63	16	10	7
10	6	7		a6		*12	108	113	62	15	9	7
11	6	7				10	89	108	60	15	9	7
12	6	8				10	72	106	57	14	8	7
13	6	8				10	82	101	56	14	8	7
14	6	6				12	121	99	62	14	8	7
15	6	7				12	176	95	60	14	8	7
16	6	7				11	202	89	56	16	8	7
17	7	7				10	225	81	51	14	9	7
18	7	8				10	237	75	46	12	10	7
19	7	8	(*)			9	240	69	44	12	9	7
20	7	8	a8			9	255	66	42	12	8	7
21	7	8				10	243	66	38	13	8	7
22	7	8			a10	11	230	66	37	12	7	7
23	7	5				10	242	69	35	12	7	7
24	7	7				10	263	69	33	10	7	7
25	7	8		a8		14	246	67	31	10	7	8
26	7	8				17	239	64	29	10	7	9
27	7	a8				21	197	62	27	9	7	8
28	7	a10				37	204	61	26	9	7	9
29	7	a10			-	63	206	58	25	8	7	9
30	7	a10			-	65	201	57	24	8	7	9
31	7	-			-	43	-	58	-	8	7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	197	7	5	6.4	391
November	226	10	5	7.5	448
December	255	-	-	8.2	506
Calendar year 1942	5,875	106	3	16.1	11,660
January	208	-	-	6.7	413
February	220	-	-	7.9	436
March	495	65	-	16.0	982
April	5,009	263	38	167	9,940
May	3,469	251	57	112	6,880
June	1,516	76	24	50.5	3,010
July	435	22	8	14.0	863
August	259	14	7	8.4	514
September	220	9	7	7.3	436
Water year 1942-43	12,509	263	5	34.3	24,820

* Winter discharge measurement made on this day.

a No gage-height record (stage-discharge relation affected by ice during winter period); discharge computed on basis of 1 discharge measurement, weather records, and records for Chalk Creek at Coalville.

Time basis: Mountain war time. 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 1943 in reports of Geological Survey. November 1931 to September 1943 in reports of Weber River water commissioner.

Extremes.- Maximum contents observed during year, 29,170 acre-feet June 2 (gage height, 141.67 feet); minimum observed, 14,200 acre-feet Oct. 3-5.
1931-43: Maximum contents, that of June 2, 1943; 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), was 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). Spillway crest is 135 feet. No dead storage. Water is used for irrigation in Davis and Weber Counties.

Contents, in acre-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14,240	14,330	-	17,370	18,830	20,280	23,540	26,700	28,870	28,690	25,830	22,460
2	14,220	14,330	15,800	17,420	18,830	20,310	23,780	26,700	29,170	28,650	25,730	22,340
3	14,200	-	15,880	-	18,880	20,380	24,100	26,870	29,040	28,610	25,640	22,210
4	14,200	-	-	17,470	18,910	20,410	24,420	27,130	28,980	28,540	25,540	22,080
5	14,200	-	16,090	17,500	19,020	20,500	24,620	27,440	29,000	28,480	25,420	21,960
6	14,220	-	16,120	17,560	19,020	20,530	24,620	27,780	28,930	28,410	25,300	21,850
7	14,220	-	16,170	17,560	19,020	20,530	24,660	28,090	28,930	28,350	25,220	21,730
8	14,220	14,580	-	17,580	19,080	20,660	24,700	28,220	28,850	28,240	25,100	21,370
9	14,220	-	-	17,640	19,100	20,880	24,700	28,260	28,850	28,150	25,020	21,020
10	14,220	14,680	16,360	-	19,160	21,000	24,740	28,240	28,850	28,040	24,900	20,740
11	14,220	-	16,390	17,720	19,220	21,060	24,780	28,200	28,800	27,960	24,780	20,440
12	14,220	-	16,420	17,740	19,280	21,270	24,820	28,130	28,850	27,920	24,680	19,960
13	14,230	-	16,470	17,740	19,310	21,390	24,800	28,200	28,870	27,860	24,600	19,820
14	14,240	14,900	16,520	17,800	19,350	21,500	24,820	28,260	28,910	27,650	24,480	19,470
15	14,260	14,900	16,550	17,910	19,380	21,850	24,940	28,300	28,950	27,570	24,340	19,160
16	14,260	14,950	16,610	17,910	19,440	21,920	25,120	28,300	28,950	27,480	24,260	18,880
17	14,290	15,000	-	-	19,470	22,040	25,300	28,480	28,850	27,390	24,120	18,640
18	-	-	16,690	17,960	19,530	22,190	25,460	28,500	28,820	27,310	24,020	18,340
19	-	15,080	16,740	17,960	19,590	22,230	25,620	28,560	28,820	27,220	23,940	18,040
20	-	15,180	16,770	18,040	19,660	-	25,730	28,600	28,800	27,130	23,860	17,770
21	-	15,230	16,820	18,040	-	22,340	25,830	28,630	28,800	27,000	23,720	17,500
22	-	-	16,850	18,120	19,780	22,340	26,010	28,630	28,780	26,920	23,620	17,190
23	-	15,300	16,880	18,260	19,940	22,340	26,140	28,670	28,780	26,830	23,500	16,920
24	-	15,400	16,990	18,390	20,000	22,360	26,270	28,690	28,780	26,740	23,400	16,640
25	-	15,420	17,040	18,450	-	22,310	26,400	28,730	28,780	26,610	23,260	16,320
26	-	15,450	17,090	18,500	-	22,250	26,530	28,780	28,780	26,570	23,150	16,040
27	-	-	17,150	18,560	-	22,040	26,570	28,780	28,780	26,440	23,000	15,720
28	14,290	15,590	17,120	18,720	20,220	22,420	26,680	28,730	28,780	26,310	22,920	15,450
29	-	-	17,200	-	-	22,840	26,660	28,780	28,780	26,180	22,780	15,170
30	-	15,750	17,260	-	-	23,300	26,700	28,780	28,780	26,070	22,670	15,000
31	-	-	17,310	18,830	-	23,460	-	28,780	-	26,010	22,540	-

Monthly gage height and contents, water year October 1942 to September 1943

Date	Gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept.30	104.50	14,240	-
Oct. 31	-	a14,320	+80
Nov. 30	109.59	15,750	+1,430
Dec. 31	114.42	17,310	+1,560
Calendar year 1942	-	-	-1,400
Jan. 31	119.09	18,830	+1,520
Feb. 28	122.92	20,220	+1,390
Mar. 31	130.34	23,460	+3,240
Apr. 30	136.92	26,700	+3,240
May 31	140.92	28,780	+2,080
June 30	140.92	28,780	0
July 31	135.59	26,010	-2,770
Aug. 31	128.34	22,540	-3,470
Sept.30	107.09	15,000	-7,540
Water year 1942-43	-	-	+760

a No gage-height record; contents interpolated.
Time basis: Mountain war time. 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°55'00", long. 111° 36'20", in NW¼ sec. 10, T. 2 N., R. 3 E., 2,500 feet downstream from East Canyon Dam, 2½ miles upstream from Sheep Canyon, and 9 miles southeast of Morgan.

Drainage area.- 145 equare miles.

Records available.- October 1937 to September 1943 in reports of Geological Survey. October 1931 to September 1943 in reports of Weber River water commissioner.

Extremes (regulated).- Maximum daily discharge during year, 198 second-feet June 2 (gage height, 1.39 feet); minimum daily, 7 second-feet Nov. 2-5.
1931-43: 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. No diversions between station and East Canyon Reservoir (see preceding page) which completely regulates flow.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	h17	a9	h9	a9	a10	h144	h112	88	54	66	67
2	20	h7	h9	h9	a9	a10	h144	h80	198	55	66	67
3	20	h7	a9	h8	a9	h10	h144	h38	194	55	66	67
4	20	a7	a8	a8	a10	a10	h146	h26	152	55	64	66
5	18	a7	h8	h8	a10	a10	a156	h25	131	55	66	66
6	17	a8	h8	h8	h10	a10	h168	h25	154	58	66	64
7	17	a8	a8	a8	h10	h10	h168	52	129	67	66	132
8	17	h8	a8	a8	a10	a10	h168	106	108	66	66	162
9	17	a8	a9	a8	a10	h11	h134	119	96	66	66	164
10	17	h8	h9	h8	a10	h11	h136	127	93	66	66	164
11	17	a8	a8	h9	a10	a11	h121	123	73	64	66	164
12	17	a8	h8	h9	h10	a11	h121	88	64	66	66	164
13	17	a8	h8	a9	a10	h11	h107	68	73	66	66	164
14	17	h8	a8	a9	h10	a11	h108	68	86	66	66	162
15	17	h8	h9	a9	a10	a11	h108	68	123	66	66	164
16	17	h8	a9	a9	a10	h11	h108	70	140	66	67	162
17	h17	a8	a9	h9	h10	a11	h110	72	110	66	66	162
18	h17	a8	a9	a9	a10	h11	h110	62	81	66	66	162
19	h17	h8	h9	a9	a10	a11	a110	58	73	67	66	162
20	h17	a8	a9	a10	h10	h29	h110	67	62	67	66	162
21	h17	a8	h8	h10	h10	h41	h110	67	60	67	66	164
22	h17	h8	a8	a10	a10	h47	h112	55	51	66	66	164
23	h17	a8	h8	h10	a10	h50	h112	47	47	66	66	164
24	h17	h9	a8	a10	a10	h114	h112	47	40	66	66	164
25	h17	a9	a9	a10	a10	h129	h112	48	36	66	66	164
26	h17	a9	h9	h10	a10	h129	h114	50	37	66	66	164
27	h17	h9	h8	a10	a10	h129	h112	51	36	66	66	164
28	h17	h9	a8	a10	h10	h129	h112	50	32	66	66	164
29	a17	a9	a8	a9	-	h144	h114	50	31	66	66	131
30	a17	h9	h8	a9	-	h144	h114	51	47	67	67	91
31	a17	-	a8	h9	-	h144	-	54	-	67	68	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	641	21	17	17.5	1,070
November	252	17	7	8.4	500
December	261	9	8	8.4	518
Calendar year 1942	20,473	259	7	56.1	40,610
January	280	10	8	9.0	555
February	277	10	9	9.9	549
March	1,430	144	10	46.1	2,840
April	3,745	168	107	125	7,430
May	2,022	127	25	65.2	4,010
June	2,695	198	31	89.8	5,350
July	1,986	67	54	64.1	3,940
August	2,048	68	64	66.1	4,060
September	4,181	164	64	139	8,290
Water year 1942-43	19,718	198	7	54.0	39,110

a No gage-height record; discharge interpolated.
h Computed from staff-gage readings.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

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Hardscrapble Creek near Porterville, Utah

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

Drainage area.- 24.9 square miles.

Records available.- October 1941 to September 1943. Fragmentary records December 1937 to August 1940 on file in State Engineer's office.

Extremes.- 1941-42: Maximum discharge during water year, 374 second-feet May 25 (gage height, 3.10 feet) from rating curve extended above 200 second-feet; minimum recorded, 5 second-feet Sept. 9 (gage height, 0.94 foot), but may have been less during period of ice effect.

1942-43: Maximum discharge during water year, 216 second-feet May 25 (gage height, 2.64 feet); minimum recorded, 6 second-feet Sept. 17 (gage height, 0.93 foot), but may have been less during periods of ice effect.

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

Discharge, in second-feet, 1941-43

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		a9	b8				a20	61	139	35	11	8
2		a10					a35	60	150	34	11	8
3		a11					57	58	165	32	11	7
4	a8	a12					a100	59	174	30	11	7
5		a15				a6	a170	59	174	28	11	7
6		a12					a110	60	162	28	10	7
7	9	a10					93	71	178	27	10	7
8	8						93	93	156	25	10	6
9	8						100	121	144	24	10	6
10	9	a8					112	139	136	23	10	6
11	8						131	136	123	22	10	7
12	8						147	118	108	21	12	11
13	10						162	108	90	20	10	8
14	8	8					198	96	a85	20	10	a8
15	8	8					168	96	a80	20	10	a8
16	8	8	a7	a6	a6		141	126	a75	22	9	a7
17	8	10					144	108	a70	20	9	a7
18	8	8				a8	136	108	a65	19	9	a7
19	8	b6					112	118	a62	18	9	a7
20							118	144	a64	17	9	a7
21		b5					144	162	a60	17	9	a7
22	a8						165	206	a56	16	9	a7
23							159	278	51	16	8	7
24							131	295	50	14	8	8
25							104	303	47	14	9	7
26							88	303	49	14	9	7
27		b8					78	250	43	14	8	8
28	a9						76	186	40	13	8	7
29					-	a9	68	153	37	14	8	7
30					-	a10	61	136	35	13	8	8
31		-			-	a15	-	128	-	12	8	-

a No gage-height record (stage-discharge relation affected by ice during most of winter period), discharge computed on basis of recorded range in stage, weather records, and records for Chalk Creek at Coalville and South Fork Ogden River near Huntsville.

b Stage-discharge relation affected by ice.

Discharge, in second-feet, of Hardscrabble Creek near Porterville, Utah, 1941-43--Continued

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	8	10				*51	132	119	32	13	9
2	8	8	17				67	150	140	31	13	8
3	8	8	11				81	147	116	29	12	8
4	8	10					86	160	107	28	12	8
5	8	8				a10	86	160	105	26	12	8
6	8	8					86	157	101	26	12	8
7	8	8					91	a130	99	25	12	8
8	9	9			a8		88	a120	97	24	12	8
9	9	9					90	a110	95	23	11	8
10	9	8		a8			77	a100	88	22	11	8
11	10	8				a20	69	a98	85	22	14	8
12	10	10					61	a96	80	21	11	7
13	10	9					69	a90	79	21	10	7
14	10	8					96	a80	79	20	10	7
15	10	9					131	a70	76	21	10	7
16	10	9					156	a62	68	20	10	7
17	10	9	a10				174	a58	63	19	11	7
18	10	10					184	a54	61	18	11	7
19	9	10					186	a52	59	18	11	8
20	a9	9				a10	174	52	56	18	10	8
21	a9	9					160	52	52	18	9	8
22	a9	13			a12		154	57	49	18	9	8
23	a9	10	(*)				150	66	46	16	9	8
24	a9	9					157	70	45	16	9	8
25	a9	8					154	75	42	15	8	8
26	a9	10		a10		a30	129	78	40	14	9	8
27	a9	11					119	78	38	14	8	8
28	9	10					105	79	36	13	8	8
29	8	10			-		105	78	35	13	8	8
30	8	15			-		114	75	34	13	8	8
31	8	-			-		-	71	-	13	9	-

* Winter discharge measurement made on this day.
a No gage-height record (stage-discharge relation affected by ice during most or winter period); discharge computed on basis of 1 discharge measurement, weather records, and records for Lost Creek near Croydon and Silver Creek near Wanship.

Monthly discharge, in second-feet, 1941-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1941	257	1	-	8.6	510
November	248	15	-	8.3	492
December	218	-	-	7.0	432
Calendar year	-	-	-	-	-
January	186	-	-	6.0	369
February	168	-	-	6.0	333
March	246	15	-	7.9	488
April	3,421	198	20	114	6,790
May	4,341	303	58	140	8,610
June	2,868	178	35	95.6	5,690
July	642	35	12	20.7	1,270
August	294	12	8	9.5	583
September	219	11	5	7.3	434
Water year 1941-42	13,108	303	-	35.9	26,000
October 1942	277	10	8	8.9	549
November	280	15	8	9.3	555
December	318	-	-	10.3	631
Calendar year 1942	13,260	303	-	36.3	26,300
January 1943	270	-	-	8.7	536
February	276	-	-	9.9	547
March	530	-	-	17.1	1,050
April	3,450	186	51	115	6,840
May	2,857	160	52	92.2	5,670
June	2,190	140	34	73.0	4,340
July	627	52	13	20.2	1,240
August	322	14	8	10.4	639
September	234	9	7	7.8	464
Water year 1942-43	11,651	186	7	31.9	23,060

Time basis: Mountain standard time prior to 2 a.m., Feb. 9, 1942; mountain war time thereafter. To convert war time to standard time, subtract 1 hour.

South Fork of Ogden River near Huntsville, Utah

Location.- Water-stage recorder, lat. 41°16', long. 111°40', in SE¼ sec. 12, T. 6 N., R. 2 E., half a mile downstream from Magpie Creek, 1 mile upstream from Huntsville Mountain Canal, and 5⅛ miles east of Huntsville.

Drainage area.- 148 square miles.

Records available.- March 1921 to September 1943.

Average discharge.- 22 years, 103 second-feet.

Extremes.- Maximum discharge during year, 995 second-feet Apr. 23 (gage height, 4.50 feet); minimum discharge recorded, 26 second-feet Oct. 16 but may have been less during period of ice effect.

1921-43: 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 28, 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	33	36	37	a35	66	191	650	226	90	47	a39
2	32	33	43	38	a35	59	245	702	231	87	47	a40
3	32	33	38	36	a37	59	324	642	219	84	46	41
4	32	34	b35	34	a36	61	356	638	214	80	45	41
5	32	33	b32	b32	a40	59	373	562	211	77	45	40
6	32	33	b30	b33	a40	55	370	522	214	76	44	41
7	32	34	b32	34	a40	55	412	449	214	74	58	41
8	32	34	35	34	b42	*71	384	390	214	71	54	40
9	32	34	35	36	b42	107	357	344	209	70	47	39
10	33	33	34	36	b40	92	327	306	202	68	46	39
11	34	32	34	b35	b39	88	281	295	195	64	45	39
12	34	32	34	b34	b38	91	248	295	184	63	45	38
13	34	32	34	b33	b37	94	264	290	180	62	45	38
14	33	32	33	b34	b37	122	345	292	186	60	44	38
15	36	34	34	b35	b37	107	476	290	176	60	43	37
16	32	34	34	b35	b45	91	604	263	163	60	43	37
17	31	35	34	b34	b50	85	662	233	153	58	45	37
18	33	34	*34	b32	59	78	690	214	147	57	43	37
19	33	34	33	b30	65	72	755	191	141	56	43	37
20	33	34	32	b28	71	68	846	180	138	55	41	37
21	33	33	32	b35	79	67	739	182	*132	58	41	37
22	34	32	32	a60	89	68	702	193	127	58	42	37
23	34	33	34	a50	92	71	783	211	122	54	41	37
24	33	34	38	a45	83	82	851	221	115	53	39	38
25	33	34	37	a40	73	102	787	223	110	52	39	38
26	33	32	34	a40	70	126	727	221	107	52	39	38
27	34	40	b30	a40	68	155	573	209	102	51	39	38
28	35	36	b32	a40	67	221	566	200	97	50	39	38
29	34	36	34	*41	-	290	555	193	97	49	38	38
30	34	41	34	a40	-	284	551	191	93	48	38	37
31	34	-	36	a38	-	208	-	191	-	48	a38	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,025	36	31	33.1	2,030
November	1,018	41	32	33.9	2,020
December	1,059	43	30	34.2	2,100
Calendar year 1942	31,601	547	27	86.6	62,680
January	1,151	60	28	37.1	2,280
February	1,488	92	35	53.1	2,950
March	3,254	290	55	105	6,450
April	15,372	851	191	512	30,490
May	9,963	702	180	322	19,800
June	4,919	231	93	164	9,760
July	1,945	90	48	62.7	3,860
August	1,349	56	38	43.5	2,680
September	1,152	41	37	38.4	2,280
Water year 1942-43	43,715	851	28	120	86,700

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of weather records and records for stations on upper Weber River.

b Stage-discharge relation affected by ice.

Time basis: Mountain war time. 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 NW¼SW¼ 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 1943.

Extremes.- Maximum contents during year, 43,810 acre-feet June 2-21 (elevation, 4,872.13 feet); minimum, 8,480 acre-feet Feb. 21, 22 (elevation, 4,843.00 feet).
1936-43: 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 feet 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17,290	16,120	17,000	12,740	11,090	10,390	23,670	38,280	43,740	41,430	31,970	21,910
2	17,090	16,120	17,160	12,770	10,970	10,450	24,570	38,880	43,810	41,160	31,680	21,610
3	16,930	16,120	17,420	12,840	10,850	10,510	25,720	39,290	43,810	40,640	31,450	21,310
4	16,840	16,170	17,420	12,880	10,730	10,510	27,400	39,360	43,810	40,400	31,090	21,240
5	16,730	16,170	17,420	12,900	10,580	10,570	28,250	39,690	43,810	40,000	30,810	20,740
6	16,650	16,160	17,420	12,950	10,520	10,600	29,520	39,890	43,810	39,700	30,510	20,470
7	16,570	16,160	17,420	12,990	10,320	10,620	30,700	40,120	43,810	39,330	30,190	20,240
8	16,470	16,160	17,230	12,840	10,190	10,730	32,030	40,380	43,810	39,030	30,120	19,970
9	16,400	16,160	17,040	12,630	10,030	11,980	32,670	40,620	43,810	38,640	29,810	19,750
10	16,310	16,170	16,790	12,430	9,840	12,940	33,010	40,820	43,810	38,280	29,670	19,500
11	16,300	16,180	16,550	12,310	9,670	13,200	33,310	40,820	43,810	37,930	29,360	19,260
12	16,290	16,180	16,310	12,060	9,510	13,750	33,370	41,130	43,810	37,580	29,040	18,990
13	16,260	16,190	16,200	11,850	9,360	14,340	33,220	41,450	43,810	37,190	28,690	18,750
14	16,260	16,210	16,160	11,680	9,230	14,870	33,310	42,590	43,810	36,910	28,330	18,550
15	16,250	16,210	15,880	11,460	9,080	15,630	33,400	42,860	43,810	36,630	28,010	18,300
16	16,240	16,260	15,710	11,320	8,900	16,050	34,040	43,110	43,810	36,340	27,620	18,050
17	16,230	16,310	15,470	11,140	8,750	16,380	35,090	43,280	43,810	36,090	27,250	17,830
18	16,220	16,350	15,180	10,950	8,660	16,720	36,310	43,440	43,810	35,800	26,930	17,560
19	16,220	16,390	15,180	10,740	8,570	16,840	37,340	43,460	43,810	35,500	26,520	17,330
20	16,220	16,390	14,610	10,520	8,510	17,010	38,040	43,390	43,810	35,250	26,220	17,120
21	16,220	16,410	14,370	10,330	8,480	17,130	38,440	43,350	43,810	35,000	25,950	16,890
22	16,220	16,430	14,080	10,440	8,480	17,290	38,440	43,420	43,670	34,690	25,500	16,630
23	16,200	16,440	13,860	10,760	8,990	17,460	38,440	43,520	43,510	34,490	25,170	16,400
24	16,160	16,460	13,710	11,020	9,520	17,720	38,670	43,560	43,250	34,280	24,800	16,170
25	16,140	16,480	13,560	11,740	9,830	18,010	38,930	43,590	43,000	34,100	24,420	15,990
26	16,120	16,490	13,300	11,780	10,010	18,390	39,080	43,630	42,740	33,920	24,010	15,790
27	16,110	16,520	13,070	11,620	10,170	18,800	38,890	43,630	42,320	33,680	23,690	15,630
28	16,140	16,530	12,830	11,500	10,290	19,450	38,010	43,670	42,050	33,380	23,330	15,480
29	16,130	16,660	12,580	11,420	-	20,410	37,950	43,590	41,980	33,010	22,960	15,360
30	16,120	16,830	12,850	11,370	-	21,580	37,880	43,520	41,640	32,730	22,600	15,230
31	16,120	-	12,610	11,220	-	22,840	-	43,490	-	32,430	22,260	-

Monthly elevation and contents, water year October 1942 to September 1943

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Oct. 1	4,853.03	17,290	-1,170
Nov. 1	4,851.91	16,120	+880
Dec. 1	4,852.75	17,000	-4,260
Calendar year 1942	-	-	-2,620
Jan. 1	4,848.41	12,740	-1,650
Feb. 1	4,846.47	11,090	-700
Mar. 1	4,845.58	10,390	+13,280
Apr. 1	4,858.65	23,670	+14,610
May 1	4,868.86	38,280	+5,460
June 1	4,872.09	43,740	-2,310
July 1	4,870.76	41,430	-9,460
Aug. 1	4,864.74	31,970	-10,060
Sept. 1	4,857.22	21,910	-6,810
Oct. 1	4,850.91	15,100	-
Water year 1942-43	-	-	-2,190

Time basis: Mountain war time. 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 NE¼SW¼ 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 1943, 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.

Extremes (regulated).- Maximum discharge during year, 1,260 second-feet Apr. 23-26 (gage height, 5.43 feet); practically no flow Feb. 9-15 when reservoir gates were closed.

1937-43: Maximum discharge, 1,260 second-feet Apr. 25, 26, 1938, Apr. 23-26, 1943; maximum gage height, that of Apr. 23-26, 1943; practically no flow at times when reservoir gates were closed.

Remarks.- Records good. 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	3	3	2	a1	3	27	e02	96	23	29	25
2	2	3	10	3	a1	2	30	869	273	27	28	25
3	2	3	4	2	a1	2	27	972	326	28	32	25
4	2	3	2	2	1	2	61	968	296	31	32	22
5	2	3	2	2	1	a2	80	838	382	27	28	18
6	2	3	1	1	1	a2	98	734	460	28	28	11
7	2	3	1	1	a1	a10	99	594	320	28	27	2
8	2	3	1	1	a0	*19	308	452	293	28	22	18
9	3	3	1	1	0	30	570	442	222	31	21	19
10	3	2	1	1	0	12	610	442	128	32	18	20
11	4	3	1	1	0	9	626	330	109	32	18	21
12	4	2	1	1	0	9	634	208	107	32	20	22
13	4	2	1	1	0	10	642	208	107	30	20	22
14	4	2	1	1	0	22	646	208	112	28	20	22
15	4	1	1	1	0	15	650	210	123	28	20	22
16	4	1	1	1	1	10	646	210	128	27	20	21
17	4	1	1	1	a1	8	654	208	128	24	20	21
18	4	1	1	a1	1	7	714	208	123	22	21	21
19	4	1	*1	b1	2	5	986	167	114	22	21	21
20	4	1	1	1	3	4	1,120	106	104	22	16	21
21	4	1	1	a2	3	6	1,250	56	95	22	21	20
22	4	1	1	4	10	4	1,240	20	42	22	23	20
23	4	1	1	10	16	6	1,240	22	24	22	20	15
24	4	1	2	6	10	8	1,260	24	23	17	12	12
25	4	1	2	3	6	12	1,260	26	36	9	4	12
26	4	1	2	3	4	14	1,240	27	30	20	18	11
27	4	1	2	2	4	23	1,220	27	25	24	20	10
28	5	2	1	2	3	27	1,040	28	25	25	23	10
29	4	1	1	*2	-	43	990	28	15	25	25	7
30	3	4	1	2	-	36	833	28	4	26	25	4
31	3	-	2	1	-	23	-	28	-	29	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	105	5	2	3.4	208
November	58	4	1	1.9	115
December	52	10	1	1.7	103
Calendar year 1942	27,986	714	1	76.7	55,490
January	63	10	1	2.0	125
February	71	16	0	2.5	141
March	385	43	2	12.4	764
April	20,801	1,260	27	693	41,260
May	9,490	972	20	306	18,820
June	4,270	460	4	142	8,470
July	791	32	9	25.5	1,570
August	677	32	4	21.8	1,340
September	520	25	2	17.3	1,030
Water year 1942-43	37,283	1,260	0	102	73,950

* Winter discharge measurement made on this day.

a No gage-height record; discharge interpolated or computed on basis of records for stations on Weber River.

b Stage-discharge relation affected by ice.

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

Jordan River at Narrows, near Lehi, Utah

Location.- Water-stage recorders, lat. 40°28'40", long. 111°55'20", in SE¼NW¼ sec. 26, T. 4 S., R. 1 W., at Narrows, 5⅔ miles northwest of Lehi, and 7⅔ miles downstream from Utah Lake.

Drainage area.- 2,960 square miles, including 280 square miles in Cedar Valley.

Records available.- October 1934 to September 1943. May to December 1904 and July 1913 to September 1934, at outlet of Utah Lake, 7⅔ miles upstream.

Average discharge.- 30 years (1913-43), 367 second-feet.

Extremes (regulated).- Maximum daily discharge during year, 844 second-feet July 14; minimum daily, 1 second-foot on many days.
1913-43: 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	515	18	19	7	5	3	1	560	532	768	724	714
2	470	18	19	7	5	3	1	646	149	764	718	694
3	491	18	19	6	5	3	1	657	108	774	716	639
4	494	18	19	7	5	2	1	650	106	774	737	700
5	494	18	19	7	5	2	2	659	99	784	768	668
6	494	18	21	7	5	2	2	628	88	783	770	721
7	493	18	21	7	5	2	2	613	87	796	762	717
8	491	18	21	7	5	2	2	533	87	784	720	715
9	490	18	19	7	5	2	2	466	102	795	724	704
10	492	18	18	7	4	1	2	475	220	828	726	707
11	473	18	18	7	4	1	2	532	328	822	733	704
12	416	18	19	7	4	1	2	593	444	814	710	698
13	370	18	19	7	4	1	2	593	476	833	690	691
14	124	17	19	7	4	1	3	590	454	844	697	696
15	19	16	19	7	4	1	3	652	204	731	720	670
16	19	16	19	7	4	1	2	639	174	786	713	663
17	19	17	18	7	4	1	61	634	177	815	715	646
18	19	17	18	7	4	1	101	660	209	807	708	639
19	17	17	18	7	4	1	192	672	302	801	711	645
20	16	18	18	7	4	1	228	672	339	804	715	645
21	16	19	16	7	4	1	226	657	486	810	711	642
22	16	19	12	7	4	1	272	697	600	800	700	616
23	16	19	12	6	4	1	319	714	681	764	696	629
24	16	19	12	9	3	1	325	713	701	758	728	643
25	16	19	12	5	3	1	306	722	719	776	731	633
26	44	18	7	5	3	1	327	722	731	775	714	575
27	67	18	7	5	3	1	473	728	745	765	714	553
28	36	19	7	5	3	1	532	719	753	745	712	553
29	18	19	7	5	-	1	539	711	750	727	737	551
30	18	19	7	5	-	1	548	710	762	728	690	536
31	18	-	7	5	-	1	-	716	-	725	696	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	6,697	515	16	216	13,280
November	540	19	16	18.0	1,070
December	486	21	7	15.7	964
Calendar year 1942	107,855	807	1	295	213,900
January	203	9	5	6.5	403
February	116	5	3	4.1	230
March	43	3	1	1.4	85
April	4,479	548	1	149	8,880
May	19,943	728	466	643	39,560
June	11,613	762	87	387	23,030
July	24,280	844	725	783	48,160
August	22,306	770	690	720	44,240
September	19,627	721	536	654	38,930
Water year 1942-43	110,353	844	1	302	218,800

Time basis: Mountain war time. 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-one South Street, Salt Lake City, and 2 miles downstream from Mill Creek.

Records available.- December 1942 to September 1943.

Extremes (regulated).- Maximum discharge during period, 322 second-feet June 2 (gage height, 5.03 feet); minimum daily, 13 second-feet Apr. 9, 13, 14.

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.126).

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			-	122	123	153	116	65	177	129	150	137
2			-	122	121	145	88	62	286	139	156	144
3			-	101	121	143	54	57	258	139	159	137
4			-	95	122	140	56	62	225	133	163	140
5			-	107	126	149	58	89	213	130	166	144
6			-	107	129	146	61	86	191	130	145	148
7			-	107	129	139	33	85	159	129	135	156
8			-	111	129	140	14	101	140	129	160	156
9			-	115	131	142	13	103	136	129	163	157
10			-	115	129	142	15	75	133	132	152	166
11			-	115	130	140	22	37	126	139	134	171
12			125	115	133	139	15	41	119	146	137	174
13			127	115	142	138	13	49	123	144	134	177
14			126	115	140	138	13	50	144	152	139	179
15			123	116	140	144	14	54	178	173	145	175
16			119	117	139	146	17	60	183	199	150	178
17			118	117	138	149	34	56	155	205	158	142
18			121	117	138	156	57	58	129	172	129	144
19			119	113	138	154	58	59	125	162	144	145
20			119	114	141	155	67	59	128	146	138	152
21			119	118	137	150	76	65	120	140	122	150
22			119	121	138	143	77	68	120	157	145	151
23			117	122	138	139	94	76	115	163	152	150
24			122	129	147	136	109	76	120	155	144	152
25			122	128	158	134	112	94	128	159	128	174
26			121	124	179	133	121	116	116	156	135	176
27			122	123	164	132	112	135	116	149	140	175
28			122	124	159	126	112	134	113	133	133	143
29			122	124	-	113	97	141	121	136	112	144
30			122	125	-	114	68	146	119	152	123	150
31			125	125	-	118	-	144	-	155	136	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	-	-	-	-	-
November	-	-	-	-	-
December 12-31	2,430	127	117	121	4,820
Calendar year	-	-	-	-	-
January	3,619	129	95	117	7,180
February	3,859	179	121	138	7,650
March	4,336	156	113	140	8,600
April	1,796	121	13	59.9	3,560
May	2,503	146	37	80.7	4,960
June	4,516	286	113	151	8,960
July	4,615	205	129	149	9,150
August	4,427	166	112	143	8,780
September	4,687	179	137	156	9,300
The period	-	-	-	-	72,960

Time basis: Mountain war time. 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 SW¼ sec. 28, T. 9 S., R. 4 E., at Thistle, 600 feet downstream from confluence of Soldier Fork and Thistle Creek and 2½ miles upstream from Diamond Fork.

Drainage area.- 490 square miles.

Records available.- January 1908 to September 1925, October 1936 to September 1943 in reports of Geological Survey. January 1933 to September 1943 in reports of Spanish Fork water commissioner.

Average discharge.- 27 years (1908-25, 1933-43), 97.6 second-feet.

Extremes.- Maximum discharge during year, 375 second-feet Feb. 22 (gage height, 3.62 feet); minimum, 23 second-feet Sept. 18, 19.
1908-25, 1933-43: Maximum discharge observed, 1,250 second-feet May 26, 1922; minimum observed, 10 second-feet Sept. 17, 22, 25, Oct. 25, 1934.

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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	45	59	54	41	69	80	183	148	a65	36	35
2	38	44	61	55	47	82	86	192	268	a65	37	34
3	37	44	60	50	51	89	92	196	196	a60	37	36
4	35	47	51	43	50	84	93	197	185	56	36	33
5	35	48	45	46	48	85	98	199	185	55	35	31
6	36	53	41	50	52	50	90	172	172	53	37	33
7	36	53	47	48	51	66	98	161	172	53	37	30
8	37	53	45	46	58	102	90	169	170	52	40	30
9	41	53	50	45	64	a170	94	153	169	51	32	28
10	41	51	58	45	51	a105	89	153	153	46	31	29
11	44	50	52	46	50	a85	86	134	147	42	71	30
12	52	50	52	47	61	a80	82	134	139	39	58	28
13	52	52	52	47	74	a80	86	130	136	39	44	28
14	51	53	54	48	78	a85	100	129	138	40	43	28
15	51	53	52	53	80	a80	111	127	132	43	42	28
16	48	53	52	54	83	a65	113	125	122	44	40	30
17	46	53	52	46	94	a65	116	120	a115	41	44	30
18	45	53	53	b35	104	a70	116	110	a105	42	46	28
19	46	53	52	b30	110	a60	120	108	a105	38	45	26
20	47	53	50	b40	122	a65	123	106	a100	40	42	28
21	46	47	52	47	116	a60	125	105	a90	59	42	31
22	47	44	50	78	227	a65	127	96	a80	54	42	31
23	47	48	54	127	165	a65	138	87	a70	46	41	31
24	46	55	64	70	106	a70	149	85	a60	45	39	28
25	46	54	59	52	85	a75	151	76	a75	46	37	32
26	46	46	56	48	76	a78	151	72	a70	45	38	33
27	44	58	43	53	74	a82	149	72	a60	46	34	34
28	43	59	51	63	72	96	153	71	a70	52	34	34
29	44	55	56	52	-	96	165	71	a85	47	36	32
30	43	62	52	53	-	89	172	71	a70	52	41	32
31	44	-	54	48	-	76	-	69	-	48	37	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,351	52	35	43.6	2,680
November	1,542	62	44	51.4	3,060
December	1,629	64	41	52.5	3,230
Calendar year 1942	37,182	442	25	102	73,730
January	1,608	127	30	51.9	3,190
February	2,280	227	41	81.4	4,520
March	2,399	170	50	77.4	4,760
April	3,443	172	80	115	6,830
May	3,862	199	69	125	7,660
June	3,776	268	60	126	7,490
July	1,504	66	38	48.5	2,980
August	1,254	71	31	40.5	2,490
September	921	36	26	30.7	1,830
Water year 1942-43	25,569	268	26	70.1	50,720

a No gage-height record; discharge computed on basis of records for Spanish Fork at Castilla and Diamond Fork near Thistle.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time. 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 1943 in reports of Geological Survey. January 1933 to September 1943 in reports of Spanish Fork water commissioner.

Average discharge.- 16 years (1919-25, 1933-43), 216 second-feet.

Extremes.- Maximum discharge during year, 568 second-feet (regulated) Aug. 11 (gage height, 4.79 feet); minimum, 24 second-feet Jan. 19.
1919-25, 1933-43: Maximum daily discharge, 1,520 second-feet May 22, 1920; minimum, that of Jan. 19, 1943.

Remarks.- Records good except those for period of 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 of lands in Jordan River Basin.

Rating table, water year 1942-43 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Dec. 31)

2.30	14	3.40	182
2.40	26	3.80	276
2.60	53	4.30	408
3.00	116	4.80	571

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	148	79	90	82	58	103	127	334	396	582	188	241
2	151	78	95	84	68	95	143	329	388	505	182	241
3	153	78	92	74	76	89	161	316	276	492	156	241
4	148	86	76	62	62	100	162	321	264	438	184	226
5	145	81	66	71	71	103	173	306	264	417	201	206
6	145	84	58	78	66	79	156	274	244	408	224	197
7	154	86	74	73	73	103	168	256	234	394	238	201
8	154	86	71	62	84	143	164	251	231	429	228	208
9	161	84	79	64	81	284	173	234	226	479	212	208
10	168	79	86	66	73	153	159	221	219	460	234	212
11	173	76	86	68	73	135	150	208	210	402	286	192
12	162	78	79	71	86	122	143	221	208	376	304	184
13	150	79	78	71	100	124	151	228	205	379	274	178
14	a142	82	81	73	108	135	175	246	210	394	274	173
15	a108	84	79	79	111	127	197	266	201	382	261	182
16	a92	82	78	79	116	105	208	264	199	363	258	182
17	a81	84	78	64	130	105	214	271	175	336	271	180
18	a78	82	81	49	138	108	226	276	162	261	266	184
19	a78	84	81	43	143	89	236	306	158	226	258	173
20	a80	86	76	60	154	102	241	334	153	271	228	166
21	a78	73	82	73	158	92	248	363	175	294	212	169
22	a78	70	76	114	288	102	281	374	278	254	228	166
23	a77	76	84	173	201	100	321	376	339	224	244	156
24	a76	87	94	114	148	105	339	382	394	203	261	153
25	a76	87	89	78	129	116	311	388	438	197	298	161
26	a76	70	86	82	114	124	291	414	447	208	298	162
27	a76	92	64	81	110	129	294	444	457	236	296	156
28	a75	92	82	87	106	145	318	454	499	274	304	151
29	78	86	86	76	-	156	336	438	546	286	314	145
30	76	100	78	78	-	145	331	429	543	274	274	137
31	78	-	82	70	-	122	-	385	-	246	246	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,516	173	75	113	6,970
November	2,471	100	70	82.4	4,900
December	2,487	95	58	80.2	4,930
Calendar year 1942	80,532	600	38	221	159,700
January	2,385	173	43	76.9	4,730
February	3,125	288	58	112	6,200
March	3,740	284	79	121	7,420
April	6,597	339	127	220	13,080
May	9,907	454	208	320	19,650
June	8,739	546	153	291	17,330
July	10,630	522	197	343	21,080
August	7,712	314	166	249	15,300
September	5,550	241	37	184	10,970
Water year 1942-43	66,858	546	43	183	132,600

a No gage-height record; discharge computed on basis of records for Spanish Fork at Thistle and Diamond Fork near Thistle.
Time basis: Mountain war time. 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 SE¼SE¼ 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 1943. December 1903 to July 1907 and March 1909 to September 1925 at site 3 miles upstream.

Average discharge.- 22 years (1904-6, 1909-19, 1920-25, 1938-43) 94.2 second-feet.

Extremes.- Maximum discharge during year, 334 second-feet Mar. 10 (gage height, 8.98 feet); practically no flow at times during irrigation season.
1903-7, 1909-25, 1938-43: Maximum discharge observed, 1,100 second-feet May 7, 1922; practically no flow at times during irrigation season for most years.

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

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		42	82	78	72	116	126	1	15		a1	1
2		42	96	78	75	108	140	1	180		1	0
3		43	86	78	84	100	b68	1	180		a1	1
4		54	74	63	80	104	168	1	140		a1	0
5	a1	52	61	66	78	106	178	5	162		a1	0
6		55	51	77	75	106	150	14	93	a1	1	1
7		54	51	77	81	97	153	4	39		1	0
8		60	65	75	98	116	149	1	32		1	0
9		52	68	71	98	246	134	1	31		1	0
10	a2	60	70	74	a95	237	85		20		1	0
11	a1c	46	80	77	b95	160	81		15		0	0
12	10	47	72	75	94	144	62		14	1	14	0
13	10	49	73	71	112	140	58		13	1	1	0
14	15	51	65	72	119	140	a45		19	1	0	0
15	10	62	74	82	124	168	35		12	1	1	0
16	10	68	69	91	125	120	a20		8	1	1	0
17	25	75	74	80	130	126	a10		7	1	1	0
18	23	76	75	70	146	128	a1		5	1	0	0
19	25	74	75	b50	153	114	a1		4	1	0	0
20	a20	78	77	b60	157	120	a1	a1		1	0	0
21	a25	77	67	74	182	116	1			1	0	0
22	a26	73	74	96	227	120	1			1	0	0
23	a27	87	76	152	264	116	1			1	0	0
24	28	90	88	182	184	122	1				0	1
25	32	95	102	80	148	130	1		a1		0	1
26	33	84	86	70	130	148	1				0	1
27	28	86	68	75	121	149	1			a1	0	1
28	42	92	69	82	118	163	1				0	1
29	45	86	76	84	-	173	1				0	1
30	44	87	72	86	-	162	0				3	1
31	42	-	70	84	-	148	-		-		1	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	541	45	-	17.5	1,070
November	1,997	95	42	66.6	3,960
December	2,276	102	51	73.4	4,510
Calendar year 1942	29,691	377	-	81.3	58,880
January	2,529	182	50	81.6	5,020
February	3,465	264	72	124	6,870
March	4,240	246	97	137	8,410
April	1,764	178	0	58.8	3,500
May	51	14	-	1.6	101
June	1,002	180	-	33.4	1,990
July	31	-	-	1.0	61
August	32	14	0	1.0	63
September	10	1	0	.3	20
Water year 1942-43	17,938	264	0	49.1	35,580

a No gage-height record; discharge computed on basis of weather records, water commissioner's notes, and records for station at Castilla, and at Thistle.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time. 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 3¼ miles downstream from Little Diamond Creek.

Drainage area.- 155 square miles.

Records available.- April 1940 to September 1943. December 1907 to September 1917 at site 1 1/3 miles downstream.

Extremes.- Maximum discharge during year, 486 second-feet June 30 (gage height, 3.07 feet); minimum recorded, 2 second-feet Dec. 27 (but may have been less during periods of ice effect).

1907-17, 1940-43: Maximum discharge observed, 735 second-feet May 9, 1909; minimum daily, 2 second-feet Dec. 15, 16, 1940, Jan. 4, 5, 1941.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Some 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 of lands in Jordan River Basin.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	102	16	18	16	b10	21	43	162	217	452	131	a190
2	108	15	20	16	b12	19	59	144	112	432	122	a190
3	110	16	18	11	b15	19	71	131	82	421	116	a190
4	98	17	12	*8	b12	21	71	129	66	363	131	a180
5	90	17	10	16	b12	21	73	110	58	344	151	a160
6	84	17	8	18	b12	20	59	104	43	341	170	a155
7	112	17	17	14	b14	22	64	98	35	333	175	a160
8	116	16	16	13	*b16	32	64	92	43	371	164	a160
9	120	16	20	11	a16	75	66	79	56	424	151	a160
10	127	15	19	12	a14	35	59	73	56	415	175	a170
11	129	15	18	14	a14	30	58	68	55	357	207	a150
12	98	15	17	14	a15	28	56	82	55	338	224	a145
13	88	16	14	14	a18	*28	64	92	55	347	217	a135
14	61	15	18	16	a20	32	75	127	58	360	214	133
15	27	15	16	16	a20	31	86	142	55	341	205	146
16	18	15	15	14	a23	28	96	135	50	312	200	142
17	18	16	15	10	a25	25	100	155	48	268	214	137
18	16	15	17	b6	a25	26	104	168	45	205	205	144
19	16	16	16	b4	a25	23	108	202	42	182	200	133
20	16	15	14	b10	a28	23	110	234	41	231	173	127
21	15	14	14	18	a30	21	110	268	77	222	a165	129
22	15	14	13	31	a50	23	142	283	193	186	a150	118
23	14	18	15	40	a35	23	177	286	260	166	a190	112
24	14	18	14	21	a32	25	182	294	328	146	a205	116
25	15	18	17	19	a30	28	159	309	355	142	a230	122
26	15	13	17	18	25	31	135	347	366	159	a230	114
27	15	22	11	18	24	34	142	368	387	186	a230	106
28	15	19	b16	17	24	43	166	366	421	222	a235	106
29	16	18	*17	16	-	56	177	355	452	241	a245	98
30	15	24	14	16	-	49	168	341	466	222	a210	88
31	15	-	17	b14	-	38	-	299	-	179	a190	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,718	129	14	55.4	3,410
November	496	24	13	16.5	984
December	463	20	8	15.6	958
Calendar year 1942	38,623	452	8	106	76,620
January	481	40	4	15.5	954
February	596	50	10	21.3	1,180
March	930	75	19	30.0	1,840
April	3,044	182	43	101	6,040
May	6,043	368	68	195	11,990
June	4,577	466	35	153	9,080
July	8,908	452	142	287	17,670
August	5,855	245	116	189	11,610
September	4,218	190	88	141	8,370
Water year 1942-43	37,349	466	4	102	74,090

* Winter discharge measurement made on this day.

a No gage-height record; discharge computed on basis of records for Spanish Fork at Thistle and at Castilla.

b Stage-discharge relation affected by ice.

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

Deer Creek Reservoir near Charleston, Utah

Location.- Mercury indicating gage, lat. 40°24', long. 111°32', in SW¼SW¼ sec. 5, T. 5 S., R. 4 E., at dam on Provo River, half a mile upstream from Deer Creek and 4½ miles southwest of Charleston. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

Records available.- December 1940 to September 1943.

Extremes.- 1940-41: Maximum contents during period December to September, 7,450 acre-feet July 13-15 (elevation, 5,317.25 feet); minimum observed, 1,200 acre-feet Dec. 16 (elevation, 5,296.7 feet).

1941-42: Maximum contents during water year, 19,500 acre-feet June 14 (elevation, 5,335.45 feet); minimum, 1,730 acre-feet Oct. 4 (elevation, 5,299.95 feet).

1942-43: Maximum contents during water year, 47,230 acre-feet June 24 (elevation, 5,361.65 feet); minimum, 8,550 acre-feet Oct. 2-13 (elevation, 5,319.40 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 interpolated elevations for midnight.

Cooperation.- Records of daily elevations and contents furnished by Bureau of Reclamation.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Prepared by Bureau of Reclamation)

5,280	0	5,310	4,410	5,360	45,040
5,285	111	5,315	6,400	5,370	58,970
5,290	416	5,320	8,870	5,380	74,520
5,295	947	5,330	15,300	5,400	112,020
5,300	1,740	5,340	23,360	5,420	160,780
5,305	2,870	5,350	33,110		

Contents, in acre-feet, 1940-43

1940-41

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			-	-			2,260	3,560	4,850	6,360	4,870	3,220
2			-	-			-	3,370	4,850	6,490	4,700	3,220
3			-	-			-	3,370	4,850	6,630	4,540	3,220
4			-	-			-	3,370	4,890	6,850	4,360	3,220
5			1,340	-			-	3,430	4,920	7,040	4,220	3,230
6			1,380	-			-	3,460	4,920	7,160	4,050	3,220
7			1,420	-			-	3,460	4,960	7,260	3,900	3,220
8			1,420	-			-	3,370	5,310	7,330	3,800	3,220
9			-	-			-	3,370	5,720	7,380	3,720	3,200
10			1,450	-			-	3,430	6,540	7,380	3,600	3,200
11			1,450	-			-	3,520	6,630	7,350	3,520	3,200
12			1,380	-			-	3,710	6,670	7,380	3,430	3,200
13			-	-			-	3,870	6,540	7,450	3,320	3,170
14			-	-			-	4,410	6,360	7,450	3,230	3,160
15			-	-			2,280	5,080	6,270	7,450	3,200	3,140
16			1,200	-			2,320	5,190	6,180	7,260	3,200	3,130
17			-	-			2,440	5,080	6,050	7,140	3,220	3,090
18			-	1,470			2,560	5,080	6,180	7,020	3,220	3,060
19			-	-			2,660	5,150	6,360	6,900	3,220	3,000
20			1,290	-			2,760	4,920	6,440	6,740	3,220	2,910
21			-	1,450			2,980	4,590	6,400	6,600	3,220	2,790
22			-	-			3,290	4,700	6,310	6,470	3,200	2,660
23			-	-			3,520	4,960	6,180	6,290	3,200	2,580
24			-	-			3,840	5,080	6,100	6,140	3,200	2,500
25			1,380	-			3,900	5,040	5,920	5,970	3,200	2,400
26			-	-			4,030	5,110	5,760	5,820	3,200	2,310
27			1,440	-			4,130	5,310	5,760	5,650	3,220	2,220
28			-	-			4,240	5,350	5,880	5,510	3,220	2,140
29			-	-			4,070	5,110	6,010	5,370	3,220	2,050
30			1,500	-			3,820	4,850	6,180	5,170	3,220	1,930
31			-	-			-	4,850	-	5,020	3,220	-

Contents, in acre-feet, of Deer Creek Reservoir near Charleston, Utah, 1940-43--Continued

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,900	3,420	6,900	5,720	3,790	3,100	3,950	11,090	15,630	16,780	15,660	10,900
2	1,910	3,560	6,970	5,590	3,820	3,100	4,100	10,380	15,700	16,740	15,520	10,810
3	1,820	3,770	6,970	5,430	3,850	3,100	4,270	9,740	15,920	16,630	15,410	10,720
4	1,730	3,920	7,140	5,290	3,870	3,100	4,520	9,000	16,290	16,560	15,260	10,600
5	1,760	4,100	7,250	5,170	3,920	3,100	4,980	8,100	16,590	16,480	15,120	10,500
6	1,830	4,240	7,230	5,080	3,950	3,100	5,350	7,900	16,740	16,370	14,970	10,380
7	1,870	4,360	7,230	4,890	3,970	3,100	5,550	7,720	17,010	16,290	14,830	10,270
8	1,910	4,460	7,230	4,740	4,030	3,100	5,740	7,600	17,320	16,290	14,680	10,180
9	1,950	4,570	7,230	4,700	4,070	3,100	5,940	7,570	17,700	16,370	14,540	10,090
10	1,970	4,680	7,180	4,640	4,100	3,110	6,200	7,670	18,220	16,370	14,360	9,940
11	2,040	4,770	7,110	4,570	4,080	3,140	6,540	7,800	18,690	16,400	14,190	9,880
12	2,060	4,850	7,070	4,460	4,020	3,200	6,950	7,870	19,180	16,400	14,080	9,800
13	2,090	4,940	7,040	4,360	3,970	3,320	7,380	7,950	19,460	16,400	13,910	9,740
14	2,140	5,040	7,020	4,240	3,870	3,420	7,920	8,020	19,500	16,370	13,770	9,650
15	2,160	5,130	6,950	4,100	3,770	3,420	8,550	8,020	19,460	16,290	13,630	9,560
16	2,180	5,230	6,920	3,970	3,690	3,420	9,280	7,970	19,300	16,290	13,460	9,450
17	2,210	5,310	6,880	3,890	3,620	3,420	9,940	7,970	19,090	16,290	13,280	9,360
18	2,270	5,590	6,850	3,740	3,540	3,420	10,620	7,900	19,130	16,290	13,110	9,250
19	2,300	5,780	6,810	3,630	3,450	3,370	11,240	7,820	19,050	16,260	12,940	9,170
20	2,340	5,920	6,740	3,450	3,340	3,340	11,660	7,700	18,930	16,220	12,780	9,120
21	2,390	6,030	6,670	3,340	3,240	3,320	11,980	7,650	18,890	16,180	12,570	9,060
22	2,460	6,140	6,650	3,300	3,210	3,300	12,380	7,770	18,690	16,180	12,410	9,000
23	2,520	6,250	6,560	3,320	3,180	3,400	12,710	8,260	18,490	16,140	12,240	8,950
24	2,580	6,340	6,470	3,360	3,140	3,590	13,080	8,980	18,250	16,030	12,080	8,900
25	2,690	6,400	6,380	3,370	3,140	3,680	13,010	10,060	17,980	16,030	11,950	8,840
26	2,750	6,490	6,290	3,400	3,140	3,710	12,840	11,150	17,700	15,990	11,790	8,790
27	2,840	6,580	6,140	3,430	3,110	3,710	12,510	12,740	17,430	15,960	11,660	8,730
28	2,980	6,670	5,990	3,480	3,110	3,710	12,240	14,190	17,320	15,880	11,470	8,650
29	3,100	6,760	5,880	3,600	-	3,760	12,080	14,510	17,120	15,850	11,340	8,630
30	3,230	6,850	5,820	3,680	-	3,800	11,720	14,900	16,970	15,810	11,180	8,600
31	3,320	-	5,800	3,740	-	3,870	-	15,480	-	15,740	11,060	-

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,570	9,000	11,850	12,780	13,870	11,400	12,310	23,590	39,200	46,960	40,570	32,880
2	8,550	9,030	12,050	12,640	13,700	11,210	12,440	24,300	41,590	45,900	40,410	32,580
3	8,550	9,060	12,210	12,510	13,530	11,000	12,710	25,210	43,230	45,770	40,190	32,300
4	8,550	9,120	12,340	12,340	13,420	10,780	13,050	26,230	44,520	45,630	39,960	32,030
5	8,550	9,170	12,410	12,180	13,280	10,840	13,390	27,030	45,370	45,500	39,740	31,760
6	8,550	9,230	12,510	12,010	13,080	10,720	13,660	27,710	45,770	45,370	39,560	31,480
7	8,550	9,280	12,610	12,820	12,880	10,500	13,840	28,290	46,030	45,240	39,380	31,210
8	8,560	9,340	12,710	11,630	12,710	11,090	13,910	28,630	46,230	45,110	39,200	30,940
9	8,550	9,390	12,810	11,440	12,540	12,110	13,910	28,780	46,360	44,940	39,020	30,680
10	8,550	9,460	12,940	11,240	12,410	12,640	13,910	28,730	46,500	44,780	38,780	30,410
11	8,550	9,540	13,080	11,060	12,280	12,810	13,840	28,680	46,700	44,580	38,520	30,140
12	8,550	9,600	13,180	10,870	12,150	12,910	13,730	28,630	46,760	44,360	38,260	29,880
13	8,550	9,680	13,280	10,690	11,950	13,050	13,660	28,580	46,760	44,130	38,000	29,580
14	8,560	9,750	13,350	10,750	11,720	13,360	13,770	28,540	46,700	43,940	37,740	29,280
15	8,590	9,820	13,420	10,810	11,470	13,490	14,080	28,580	46,630	43,800	37,480	28,980
16	8,600	9,940	13,490	10,870	11,240	13,420	14,580	28,680	46,500	43,680	37,250	28,680
17	8,630	10,090	13,560	10,870	11,090	13,220	15,300	28,780	46,300	43,480	37,020	28,390
18	8,650	10,240	13,660	10,810	10,900	13,080	16,030	28,830	46,100	43,260	36,790	28,090
19	8,680	10,380	13,660	10,660	10,690	12,880	16,700	28,780	46,100	43,040	36,560	27,800
20	8,710	10,500	13,560	10,500	10,540	12,640	17,430	28,780	46,300	42,850	36,270	27,580
21	8,730	10,600	13,420	11,150	10,500	12,340	18,180	28,830	46,760	42,660	35,990	27,270
22	8,760	10,690	13,280	12,570	11,090	12,110	18,850	28,930	47,030	42,530	35,710	27,010
23	8,790	10,780	13,250	14,010	11,790	12,010	19,620	28,180	47,160	42,400	35,420	26,760
24	8,810	10,870	13,420	14,610	12,110	11,920	20,530	29,630	47,230	42,210	35,140	26,500
25	8,840	11,000	13,490	14,760	12,110	11,850	21,420	30,390	47,100	42,020	34,860	26,230
26	8,870	11,120	13,420	14,680	11,920	11,850	22,100	31,210	46,740	41,820	34,590	25,950
27	8,890	11,240	13,280	14,580	11,720	11,920	22,530	32,100	46,300	41,610	34,310	25,670
28	8,920	11,370	13,150	14,470	11,560	11,900	22,750	33,330	46,100	41,400	34,040	25,390
29	8,940	11,530	13,050	14,360	-	12,150	22,930	34,750	46,030	41,190	33,760	25,120
30	8,960	11,690	12,940	14,220	-	12,310	23,100	35,990	46,030	40,960	33,470	24,840
31	8,980	-	12,840	14,080	-	12,310	-	37,140	-	40,740	33,170	-

Monthly elevation and contents of Deer Creek Reservoir near Charleston, Utah, 1941-43

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Mar. 31, 1941	-	2,260	-
Apr. 30,	5,308.25	3,820	+1,560
May 31	5,311.20	4,850	+1,030
June 30	5,314.50	6,180	+1,330
July 31	5,311.65	5,020	-1,160
Aug. 30	5,306.25	3,220	-1,800
Sept.30	5,301.00	1,930	-1,290
Oct. 31, 1941	5,306.60	3,320	+1,390
Nov. 30	5,316.00	6,850	+3,530
Dec. 31	5,313.60	5,800	-1,050
Calendar year	-	-	-
Jan. 31, 1942	5,308.00	3,740	-2,060
Feb. 28	5,305.90	3,110	-630
Mar. 31	5,308.40	3,870	+760
Apr. 30	5,324.80	11,720	+7,850
May 31	5,330.25	15,480	+3,760
June 30	5,332.25	16,970	+1,490
July 31	5,330.60	15,740	-1,230
Aug. 31	5,325.75	11,060	-4,680
Sept.30	5,319.50	8,600	-2,460
Water year 1941-42	-	-	+6,670
Oct. 31, 1942	5,320.20	8,980	+380
Nov. 30	5,324.75	11,690	+2,710
Dec. 31	5,326.50	12,840	+1,150
Calendar year 1942	-	-	+7,040
Jan. 31, 1943	5,328.30	14,080	+1,240
Feb. 28	5,324.55	11,560	-2,520
Mar. 31	5,325.70	12,310	+750
Apr. 30	5,339.70	23,100	+10,790
May 31	5,355.60	37,140	+14,040
June 30	5,360.75	46,030	+8,890
July 31	5,356.62	40,740	-5,290
Aug. 31	5,350.05	33,170	-7,570
Sept.30	5,341.65	24,840	-8,330
Water year 1942-43	-	-	+16,240

Time basis: Mountain standard time prior to 2 a.m., Feb. 9, 1942; mountain war 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 NW¼ 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 1943.

Average discharge.- 31 years, 349 second-feet (since 1932 flow includes that of Weber-Provo diversion canal).

Extremes.- Maximum discharge during year (regulated), 1,010 second-feet May 5, 6; minimum daily, 140 second-feet (regulated) Oct. 3.
1911-43: 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.124).

Cooperation.- Gage-height record and 20 discharge measurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	154	156	169	273	300	306	387	907	548	365	312	320
2	146	158	171	273	303	306	390	912	552	362	309	320
3	140	158	166	273	300	306	393	916	533	368	309	314
4	142	160	166	273	300	309	396	936	660	374	312	312
5	144	160	166	278	303	220	396	985	801	381	303	306
6	144	160	166	286	303	237	432	921	792	359	292	300
7	142	160	166	284	303	314	466	788	788	365	297	300
8	144	160	169	284	300	347	559	788	788	374	295	300
9	146	160	171	284	297	381	609	779	788	374	292	300
10	146	160	171	281	295	338	597	775	792	368	300	300
11	146	160	171	281	297	332	590	770	801	347	312	300
12	146	162	171	284	297	326	574	770	801	347	309	300
13	148	162	171	284	312	344	567	775	797	347	312	303
14	148	164	171	204	320	368	574	779	797	353	306	303
15	150	162	171	158	317	359	574	685	792	329	309	303
16	150	164	169	158	317	368	571	613	779	335	317	306
17	152	164	171	158	317	381	574	559	775	335	317	306
18	152	166	171	181	317	378	578	526	784	335	314	303
19	154	166	192	232	323	378	632	526	719	329	314	303
20	154	166	260	213	320	374	673	497	582	326	320	295
21	150	166	276	158	317	371	736	438	537	332	317	289
22	152	164	276	166	335	371	770	412	605	320	317	289
23	154	164	276	173	323	371	824	419	652	312	314	292
24	154	164	297	173	323	371	850	422	652	306	309	292
25	154	164	278	199	317	374	842	429	656	306	300	292
26	154	162	273	281	314	378	883	472	664	312	309	295
27	154	166	273	306	314	384	897	508	660	312	314	297
28	154	166	273	306	312	384	912	435	504	309	317	295
29	156	166	270	306	-	387	907	344	409	303	317	295
30	156	169	273	306	-	390	912	381	384	303	320	295
31	158	-	273	303	-	384	-	452	-	309	320	-

Month	Second-feet-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,644	158	140	150	9,210
November	4,879	169	156	163	9,680
December	6,537	297	166	211	12,970
Calendar year 1942	112,546	950	140	308	223,200
January	7,619	306	158	246	15,110
February	8,696	335	295	311	17,250
March	10,837	390	220	350	21,490
April	19,065	912	387	636	37,810
May	19,919	985	344	643	39,510
June	20,392	801	384	680	40,450
July	10,497	381	303	339	20,820
August	9,605	320	292	310	19,050
September	9,025	320	289	301	17,900
Water year 1942-43	131,715	985	140	361	261,200

Time basis: Mountain war time. 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 NE¼SE¼ 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, November 1938 to September 1943. 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, 617 second-feet Apr. 27 (gage height, 4.18 feet); minimum daily, 1 second-foot several days in July and August.
1903-5, 1933-34, 1937-43: Maximum discharge observed, 1,620 second-feet May 27, 1904; practically no flow during several periods.

Remarks.- Records good except those below 5 second-feet, which are fair. Station is below all diversions. At time entire flow is diverted above station for irrigation. Factory race diverts water above station into Provo Bay, an arm of Utah Lake.

Cooperation.- Gage-height record and 15 discharge measurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	128	141	277	341	359	329	476	78	23	1	4
2	6	131	146	277	334	355	366	476	235	12	1	4
3	6	133	144	277	329	355	378	464	217	7	2	4
4	7	141	141	279	327	382	332	466	266	6	2	3
5	6	138	142	281	329	357	336	468	437	7	3	2
6	6	138	142	283	329	316	341	476	410	6	3	2
7	7	138	145	283	329	366	408	382	428	4	3	2
8	13	138	145	279	336	380	444	378	437	6	3	2
9	14	145	148	279	334	419	562	366	396	4	4	2
10	10	146	148	290	327	408	557	343	375	2	3	2
11	16	146	149	292	332	398	572	329	382	1	3	3
12	21	126	149	292	332	364	564	312	368	2	4	3
13	23	103	149	294	338	366	545	303	345	2	2	4
14	25	103	149	280	362	384	540	298	329	2	1	13
15	25	104	149	200	345	391	524	242	338	1	2	9
16	28	126	151	200	348	364	500	166	325	1	3	6
17	28	142	149	200	348	419	507	127	325	1	5	5
18	28	141	149	205	348	428	528	66	325	1	4	5
19	29	142	182	252	350	421	507	48	290	1	4	5
20	29	142	285	258	352	424	521	54	207	1	4	5
21	30	141	266	219	355	417	524	65	117	2	4	6
22	32	141	270	224	378	417	524	62	113	4	9	6
23	36	140	275	229	380	414	540	62	171	2	14	4
24	62	140	303	237	408	414	550	59	182	2	10	5
25	96	141	290	235	391	421	564	59	202	2	5	6
26	98	141	281	285	371	424	600	61	258	3	4	8
27	95	144	277	325	366	428	600	44	266	2	3	9
28	104	145	277	334	362	382	543	73	216	1	2	12
29	112	140	275	341	-	352	516	44	84	2	2	13
30	117	148	275	348	-	350	452	31	46	1	2	15
31	119	-	275	348	-	332	-	41	-	1	2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,234	119	6	39.8	2,450
November	4,072	148	103	136	8,080
December	6,169	303	141	199	12,240
Calendar year 1942	58,967	636	1	162	117,000
January	8,383	348	200	270	16,630
February	9,771	408	327	349	19,380
March	12,007	428	316	387	23,820
April	14,774	600	329	492	29,300
May	6,841	476	31	221	13,570
June	8,168	437	46	272	16,200
July	112	23	1	3.6	222
August	114	14	1	3.7	226
September	169	15	2	5.6	335
Water year 1942-43	71,814	600	1	197	142,500

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

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Weber-Provo diversion canal near Woodland, Utah

Location.- Water-stage recorder and sharp-crested weir, lat. 40°36'40", long. 111°18'15", in SW¼SE¼ sec. 30, T. 2 S., R. 6 E., 100 feet upstream from outlet to Provo River and 4¼ miles northwest of Woodland. Prior to Mar. 31, 1943, water-stage recorder and Parshall flume at site 100 feet upstream at different datum.

Records available.- October 1931 to September 1943.

Extremes.- Maximum daily discharge during year, 338 second-feet June 1; no water diverted from Weber River for several months.
1931-43: Maximum daily discharge, that of June 1, 1943; no water diverted from Weber River for several months during each year.

Remarks.- Records good. Canal diverts from Weber River in SW¼SW¼ sec. 21, T. 1 S., R. 6 E., and from Beaver Creek in NE¼SE¼ sec. 17, T. 2 S., R. 6 E., to Provo River for irrigation along Provo and Jordan Rivers. No diversion from Beaver Creek prior to 1943. Figures given herein represent flow reaching Provo River during periods of diversion from Weber River and Beaver Creek. Not all of flow diverted reaches Provo River due to evaporation, transpiration, and seepage losses. No diversion 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							42	298	338			
2							53	296	241			
3							100	292	221			
4							114	290	225			
5							111	278	221			
6							116	264	220			
7							118	247	220			
8							111	238	218			
9							116	225	220			
10							126	223	211			
11							126	234	209			
12							120	232	207			
13							147	226	197			
14							176	223	200			
15							202	225	200			
16							210	216	202			
17							232	206	204			
18							232	200	208			
19							236	187	206			
20							241	175	204			
21							249	168	204			
22							251	157	202			
23							272	158	202			
24							302	188	143			
25							292	194	35			
26							282	195	4			
27							268	197	-			
28							272	204	-			
29							276	204	-			
30							280	202	-			
31						31	-	206	-			

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	-	-	-	-	-
November	-	-	-	-	-
December	-	-	-	-	-
Calendar year 1942	8,717	122	-	23.9	17,290
January	-	-	-	-	-
February	-	-	-	-	-
March	31.0	31	-	1.0	61
April	5,675	302	42	189	11,260
May	6,914	298	168	223	13,710
June	5,162	338	-	172	10,240
July	-	-	-	-	-
August	-	-	-	-	-
September	-	-	-	-	-
Water year 1942-43	17,782	338	-	48.7	35,270

Time basis: Mountain war time. 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°21', long. 111°34', in SE¼ 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 1943.

Average discharge.- 31 years, 30.2 second-feet.

Extremes.- Maximum discharge during year, 65 second-feet Mar.9 (gage height, 1.46 feet); minimum, 20 second-feet July 2, 3.
1911-43: Maximum discharge observed, 123 second-feet May 27, 1922; minimum discharge, 13 second-feet several times in 1934, 1935, and Apr. 2, 1937.

Remarks.- Records good. Station below all diversions.

Cooperation.- Gage-height record and 16 discharge measurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39	38	34		32	32	33	34	36	22	27	28
2	38	38	34		32	32	34	34	34	21	27	29
3	37	38	34		32	32	34	32	32	21	28	28
4	36	37	33		32	32	34	34	32	22	31	28
5	35	38	32		38	32	34	34	30	23	32	30
6	34	38	32		32	32	34	34	30	22	32	30
7	34	38	32		32	32	34	34	30	22	32	30
8	34	38	32		33	35	34	34	28	24	32	30
9	34	38	32		33	46	33	33	28	24	30	30
10	35	39	32		32	34	33	32	29	25	30	30
11	36	38	32	a30	32	34	33	32	29	25	30	30
12	36	38	32		32	33	32	31	29	26	30	29
13	38	37	32		32	32	32	30	28	28	28	28
14	38	37	31		32	35	32	32	29	29	28	30
15	38	37	31		32	34	32	32	28	29	29	30
16	38	36	31		32	33	34	32	28	28	30	30
17	37	36	31		32	33	35	32	28	27	30	29
18	38	36	31		32	32	36	30	28	28	30	29
19	38	36	30		32	32	36	28	26	27	28	29
20	37	36	30		32	32	37	28	28	27	28	30
21	38	35	30		32	32	37	27	27	27	29	29
22	38	34	30		39	32	37	28	26	27	29	30
23	38	34	30	a35	36	33	38	26	25	26	30	30
24	38	33	36		36	34	39	24	25	28	28	31
25	38	34	32		34	34	38	25	24	26	25	32
26	38	33	31	32	34	34	35	25	24	26	25	32
27	38	34	a31	32	34	34	34	26	22	26	24	32
28	38	34	a31	32	35	34	34	26	22	26	25	31
29	38	34	a30	32	-	34	34	23	22	26	25	31
30	38	36	a30	32	-	34	34	28	22	26	26	32
31	38	-	a30	32	-	34	-	30	-	26	26	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,150	39	34	37.1	2,280
November	1,088	39	33	36.3	2,160
December	979	36	30	31.5	1,940
Calendar year 1942	12,013	57	25	32.9	23,820
January	967	-	-	31.2	1,920
February	920	39	32	32.9	1,820
March	1,038	46	32	33.5	2,060
April	1,036	39	32	34.5	2,050
May	933	34	24	30.1	1,850
June	831	36	22	27.7	1,650
July	788	29	21	25.4	1,560
August	884	32	24	28.6	1,750
September	898	32	28	29.9	1,780
Water year 1942-43	11,512	46	21	31.5	23,820

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

Time basis: Mountain war time. 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 SW¼SW¼ sec. 14, T. 1 S., R. 1 W., 300 feet downstream from diversion dam and an eighth of a mile downstream from highway bridge on Twenty-one South Street, Salt Lake City.

Records available.- December 1942 to September 1943.

Extremes (regulated).- Maximum discharge during period, 585 second-feet June 2 (gage height, 5.78 feet); minimum daily, 31 second-feet July 4.

Remarks.- Records good except those for August, which are fair. Flow regulated by head gates at diversion dam 300 feet above station. Canal was built to bypass flood water of Jordan River around Salt Lake City residential area. Several diversions below station for irrigation.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			-	70	59	60	54	163	334	65	63	79
2			-	68	53	52	77	157	528	36	54	87
3			-	88	52	50	113	144	390	36	61	78
4			-	91	46	46	116	144	266	31	58	71
5			-	74	43	54	118	203	269	41	54	74
6			-	71	46	50	128	214	221	39	74	75
7			-	73	46	44	145	205	204	44	84	77
8			-	69	46	42	163	245	205	60	89	69
9			-	64	51	44	165	227	198	51	102	66
10			-	61	48	43	175	231	180	39	115	84
11			-	60	48	42	195	178	139	74	110	86
12			e4	60	53	39	178	180	126	75	112	81
13			85	59	67	38	170	182	132	81	108	78
14			86	58	64	38	166	191	172	73	74	75
15			e2	58	61	43	164	213	211	82	66	72
16			75	59	59	44	168	218	208	112	81	72
17			76	58	56	46	160	204	164	104	79	91
18			81	54	57	55	142	211	121	110	109	86
19			79	51	55	51	139	221	103	131	104	87
20			78	48	60	52	144	216	118	147	108	90
21			78	48	54	55	148	217	100	147	94	89
22			78	52	52	58	151	192	102	143	86	94
23			77	54	51	54	174	180	92	151	74	96
24			81	67	66	50	194	177	77	140	68	96
25			e2	64	e3	47	191	162	63	125	69	100
26			78	58	99	46	186	143	69	109	74	104
27			74	57	73	43	163	174	55	69	69	108
28			74	60	65	44	148	202	50	82	68	127
29			72	60	-	53	152	220	78	69	62	153
30			71	60	-	60	168	262	87	50	72	148
31			71	61	-	60	-	292	-	50	80	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	-	-	-	-	-
November	-	-	-	-	-
December 12-31	1,562	86	71	78.1	3,100
Calendar year	-	-	-	-	-
January	1,935	91	48	62.4	3,840
February	1,613	99	43	57.6	3,200
March	1,503	60	38	48.5	2,980
April	4,555	195	54	152	9,030
May	6,168	292	143	199	12,230
June	5,062	528	50	169	10,040
July	2,566	151	31	82.8	5,090
August	2,521	115	54	81.3	5,000
September	2,691	153	66	89.7	5,340
The period	-	-	-	-	59,850

Time basis: Mountain war time. 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 SW¼NW¼ 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 1943.

Extremes.- Maximum discharge during year, 524 second-feet May 3 (gage height, 3.02 feet); minimum, 50 second-feet July 22.
1911-28, 1939-43: 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a90	92	83	a75	a72	72	112	460	179	83	80	69
2	a90	90	82	a75	a72	73	116	479	177	82	79	69
3	a88	89	82	a75	a72	72	119	479	181	82	77	68
4	a88	92	82	a75	a70	75	121	457	174	82	77	68
5	a88	89	79	a74	a70	76	128	426	170	82	76	66
6	a90	90	79	a72	a72	75	124	395	160	80	73	66
7	92	89	76	a70	a72	75	114	383	152	80	70	66
8	92	89	72	a68	a72	75	114	374	144	77	82	66
9	92	88	77	*b66	a72	82	114	351	137	77	83	66
10	95	88	76	b66	a70	90	108	304	133	76	80	66
11	108	88	79	b66	a68	89	101	293	129	75	80	64
12	106	88	77	b68	a70	86	100	293	124	75	79	62
13	100	88	76	69	*70	84	100	293	121	75	77	62
14	96	86	77	70	b72	86	101	285	117	76	76	61
15	96	86	75	72	b72	86	114	274	112	75	76	62
16	96	88	76	72	b72	80	126	264	111	73	112	62
17	95	88	75	72	72	79	137	254	106	70	117	62
18	94	88	73	b65	72	80	146	242	101	70	146	61
19	92	*88	76	b60	72	76	170	234	100	70	92	59
20	92	90	75	a65	72	75	188	229	94	72	86	59
21	90	84	73	a70	73	72	201	220	95	73	83	59
22	90	84	75	a75	77	73	225	210	92	70	82	57
23	90	88	76	a75	79	73	249	208	89	70	79	59
24	90	88	79	a72	76	76	285	208	90	68	75	59
25	89	84	79	a70	73	80	295	206	94	68	73	68
26	89	83	76	a70	72	86	301	210	90	91	73	69
27	89	84	a65	a70	72	90	301	206	89	84	72	76
28	94	84	a68	a72	70	103	323	206	88	82	72	79
29	95	83	a70	a75	-	122	374	199	88	103	70	79
30	92	84	a75	a75	-	124	435	194	82	100	70	75
31	90	-	a75	a75	-	116	-	185	-	86	69	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,878	108	88	92.8	5,710
November	2,620	92	83	87.3	5,200
December	2,358	83	65	76.1	4,680
Calendar year 1942	61,981	780	65	170	122,900
January	2,194	75	60	70.8	4,350
February	2,018	79	68	72.1	4,000
March	2,601	124	72	83.9	5,160
April	5,442	435	100	181	10,790
May	9,001	479	185	290	17,850
June	3,619	181	82	121	7,180
July	2,427	103	68	78.3	4,810
August	2,536	146	69	82.8	5,030
September	1,964	79	57	65.5	3,900
Water year 1942-43	39,658	479	57	109	78,660

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

Sevier River near Kingston, Utah

Location.- Water-stage recorder and concrete control, lat. 38°12', long. 112°12', in NE¼NW¼ 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 1943.

Average discharge.- 29 years, 151 second-feet.

Extremes.- Maximum discharge during year, 1,040 second-feet Aug. 8 (gage height, 3.09 feet); minimum, 4 second-feet Sept. 9.
1914-43: 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, that of Sept. 9, 1943.

Remarks.- Records good except those for periods of ice effect 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	144	174	167	174	163	194	357	53	17	10	32
2	72	154	174	170	170	163	198	371	94	16	59	24
3	78	154	174	167	163	160	216	366	86	15	37	23
4	78	157	174	b165	163	167	205	348	88	14	21	16
5	84	157	170	163	160	180	205	308	76	16	16	11
6	88	160	163	167	163	180	216	258	72	16	15	8
7	91	160	160	b160	167	184	216	231	68	14	13	6
8	104	160	167	*b155	170	180	205	220	62	13	266	5
9	88	160	160	b155	170	201	209	201	43	13	68	10
10	88	157	163	b150	154	262	212	194	46	12	46	18
11	107	160	167	b150	b140	254	212	151	35	11	a35	19
12	115	163	174	151	*157	224	198	112	37	12	a30	16
13	154	163	167	151	167	201	187	84	38	11	a25	16
14	132	167	167	141	170	191	177	76	41	12	27	19
15	126	167	170	144	167	191	180	66	35	8	30	17
16	129	167	167	148	167	177	198	57	34	7	35	17
17	132	170	167	148	167	174	209	55	34	7	a70	16
18	132	167	167	b135	167	187	212	59	28	6	194	17
19	135	163	163	b125	170	177	224	88	27	6	295	17
20	135	177	163	b135	180	177	243	91	22	7	177	16
21	141	163	167	b160	174	174	250	88	22	9	126	17
22	144	170	170	b170	191	174	250	84	20	10	123	17
23	144	187	170	b170	205	167	258	74	18	7	91	17
24	144	191	180	b160	194	163	266	70	18	7	a70	18
25	141	191	191	160	177	170	308	74	18	7	a50	23
26	144	177	174	177	170	177	308	63	17	8	a40	28
27	144	177	b150	174	170	180	278	66	18	8	a35	35
28	144	180	b155	170	167	194	231	57	18	7	32	46
29	148	174	b160	174	-	220	250	53	18	7	24	81
30	144	177	167	177	-	224	308	61	17	8	37	76
31	132	-	167	177	-	216	-	55	-	9	30	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	3,704	154	66	119	7,350
November	5,014	191	144	167	9,950
December	5,202	191	150	168	10,320
Calendar year 1942	74,799	748	20	205	148,400
January	4,916	177	125	159	9,750
February	4,754	205	140	170	9,430
March	5,852	262	160	189	11,610
April	6,823	308	177	227	13,530
May	4,438	371	53	143	8,800
June	1,193	94	17	39.8	2,370
July	318	17	6	10.3	631
August	2,127	295	10	68.6	4,220
September	682	81	5	22.7	1,350
Water year 1942-43	45,023	371	5	123	89,310

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for other Sevier River stations.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Piute Reservoir near Marysvale, Utah

Location.- Staff gage, lat. 38°20', long. 112°12', in NW¼ sec. 3, T. 29 S., R. 3 W. at Piute Dam, 9 miles south of Marysvale. Datum of gage is 5,900.8 feet above mean sea level.

rainage area.- 2,440 square miles.

ecords available.- March 1914 to September 1943.

Extremes.- Maximum contents during year, 74,010 acre-feet Apr. 6-8, 12 (gage height, 76.0 feet); minimum, 4,170 acre-feet Sept. 25, 26 (gage height, 30.1 feet).
1914-43: 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18,160	23,580	36,120	47,190	56,930	65,960	73,510	65,030	48,870	34,320	19,040	13,470
2	18,280	24,000	36,790	47,560	57,140	66,190	73,760	64,670	48,310	33,040	19,040	12,620
3	18,410	24,430	37,470	47,930	57,340	66,420	73,760	64,110	48,120	31,790	19,410	11,680
4	18,410	24,850	37,990	48,310	57,550	66,650	73,760	63,660	48,490	30,550	19,800	10,670
5	18,410	25,280	38,510	48,680	57,960	66,890	73,760	63,210	48,870	29,350	20,190	10,090
6	18,540	25,710	38,850	48,870	68,390	67,130	74,010	62,760	49,060	28,170	20,450	9,250
7	18,640	26,140	39,030	49,060	58,600	67,370	74,010	62,310	49,250	27,000	20,710	8,630
8	18,540	26,420	39,200	49,250	58,820	67,610	74,010	62,080	49,430	25,990	21,120	7,790
9	18,540	26,860	39,560	49,430	59,030	68,090	73,760	61,860	49,620	25,140	21,380	7,150
10	18,540	27,150	39,740	49,620	59,450	68,670	73,760	61,640	49,810	24,290	21,660	6,530
11	18,540	27,440	40,090	49,810	59,880	69,050	73,760	61,420	50,000	23,440	21,920	6,920
12	18,660	27,730	40,440	50,200	60,320	69,540	74,010	61,200	50,000	22,610	21,920	5,480
13	18,660	28,170	40,800	50,580	60,760	69,780	73,760	60,760	49,620	21,660	21,790	5,120
14	18,660	28,460	41,160	50,970	60,980	70,030	73,510	60,320	49,060	20,840	21,660	4,910
15	18,660	28,910	41,520	51,350	61,420	70,280	73,010	59,880	48,310	20,060	21,380	4,770
16	18,660	29,350	41,880	51,740	61,860	70,520	72,500	59,240	47,560	19,280	21,120	4,770
17	18,780	29,880	42,240	52,130	62,310	70,760	72,000	58,600	46,820	18,660	20,840	4,440
18	19,040	30,110	42,600	52,330	62,530	71,010	71,500	57,960	46,080	18,280	20,580	4,370
19	19,280	30,410	42,970	52,530	62,760	71,260	71,010	57,340	45,340	17,920	20,450	4,370
20	19,540	30,710	43,330	62,720	63,210	71,500	70,520	56,930	44,610	17,560	20,320	4,440
21	19,800	31,020	43,690	52,920	63,660	71,750	70,030	56,930	43,880	17,430	20,190	4,370
22	20,060	31,330	44,060	53,320	64,110	72,000	69,540	56,120	43,330	17,560	20,060	4,370
23	20,320	31,940	44,480	53,710	64,570	72,000	69,050	55,710	42,420	17,920	19,800	4,300
24	20,710	32,410	44,790	54,110	64,800	72,250	68,570	55,110	41,520	18,410	19,410	4,230
25	20,980	32,880	44,980	54,510	65,030	72,500	68,090	54,510	40,620	18,910	18,780	4,170
26	21,250	33,360	45,160	54,910	65,260	72,500	67,610	53,710	39,740	19,280	18,160	4,170
27	21,520	33,850	45,340	55,310	65,500	72,760	67,130	52,920	38,850	19,410	17,560	4,230
28	21,920	34,320	45,710	55,510	65,730	73,010	66,650	52,130	37,990	19,160	16,950	4,300
29	22,340	34,800	46,080	55,910	-	73,010	66,190	51,160	36,980	18,780	16,020	4,440
30	22,750	35,450	46,450	56,320	-	73,260	65,730	49,620	35,950	18,410	15,120	4,640
31	23,160	-	46,820	56,730	-	73,510	-	49,250	-	18,280	14,540	-

Monthly gage height and contents, water year October 1942 to September 1943

Date	Gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept.30	44.8	17,920	-
Oct. 31	48.8	23,160	+5,240
Nov. 30	57.0	35,450	+12,290
Dec. 31	63.4	46,820	+11,370
Calendar year 1942	-	-	-7,890
Jan. 31	68.5	56,730	+9,910
Feb. 28	72.6	65,730	+9,000
Mar. 31	75.8	73,510	+7,780
Apr. 30	72.6	65,730	-7,780
May 31	64.7	49,250	-16,480
June 30	57.3	35,950	-13,300
July 31	45.1	18,280	-17,670
Aug. 31	41.7	14,340	-3,940
Sept.30	30.8	4,640	-9,700
Water year 1942-43	-	-	-13,280

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

Sevier River below Piute Dam, near Marysvale, 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 Marysvale.

Drainage area.- 2,440 square miles.

Records available.- May 1911 to September 1943.

Average discharge.- 31 years (1912-43), 253 second-feet.

Extremes (regulated).- Maximum discharge during year, 702 second-feet July 4 (gage height, 2.78 feet); minimum daily, 6 second-feet Dec. 29 to Feb. 8.
1911-43: 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).

Rating table, water year 1942-43 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Feb. 23 to Apr. 6, July 22 to Sept. 30)

-0.2	5	0.6	96	2.0	440
0.0	20	.8	132	2.3	534
.2	40	1.0	176	2.6	636
.3	52	1.3	249	3.0	786
.4	65	1.6	326		

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	181	a55	a27	a6	a6	53	124	601	452	822	134	477
2	181	a55	a27	a6	a6	53	110	601	299	826	132	550
3	181	a55	a27	a6	a6	53	117	581	115	672	132	544
4	161	a50	a27	a6	a6	53	167	564	29	698	136	471
5	178	a50	a27	a6	a6	52	198	544	h12	690	174	431
6	178	a50	a27	a6	a6	52	229	547	h12	683	171	410
7	176	a50	a27	*h6	a6	52	297	531	a12	676	171	407
8	176	a45	a27	a6	h6	53	356	452	a12	668	169	459
9	176	a45	a27	a6	h7	53	266	375	a12	661	169	456
10	178	a50	a23	a6	a7	53	239	264	55	658	202	456
11	176	a50	a15	a6	*h7	53	224	239	60	650	290	452
12	178	a50		a6	a7	55	222	331	119	643	300	369
13	160	a50	a15	a6	a7	55	321	370	267	640	303	287
14	124	a65		a6	h7	53	345	375	329	632	361	290
15	136	a65		a6	he	55	401	440	404	622	515	331
16	140	a65		h6	a8	55	496	440	437	547	524	331
17	142	a65		a6	h8	55	490	410	440	496	468	326
18	142	62	a8	a6	he	56	490	401	471	471	370	264
19	142	64		a6	a8	56	490	398	471	468	337	256
20	142	65		a6	he	56	490	396	465	499	305	252
21	142	65	h8	a6	a8	57	508	393	450	483	300	252
22	142	65	a8	a6	a8	76	521	356	246	242	390	249
23	142	a50	a8	a6	39	98	521	356	577	113	396	249
24	99	a40	a8	h6	93	88	518	367	587	101	425	249
25	a75	a27	a8	a6	53	85	521	508	584	183	515	249
26	a75	a27	h8	a6	53	85	496	594	581	284	521	229
27	a75	a27	a8	a6	53	85	483	612	581	329	604	222
28	a75	a27	a7	a6	53	83	594	608	574	490	581	202
29	a75	a27	a6	a6	-	101	604	591	554	486	554	151
30	a75	a27	a6	a6	-	134	604	524	622	466	528	134
31	a60	-	*h6	a6	-	136	-	468	-	363	471	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,313	181	60	139	8,550
November	1,488	65	27	49.6	2,950
December	462	27	6	14.9	916
Calendar year 1942	127,396	1,080	6	349	252,700
January	186	6	6	6.0	369
February	498	93	6	17.8	988
March	2,104	136	52	67.9	4,170
April	11,442	604	110	381	22,690
May	14,257	612	239	460	28,280
June	9,849	622	12	328	19,540
July	15,682	698	101	512	31,500
August	10,648	604	169	343	21,120
September	9,995	550	134	333	19,820
Water year 1942-43	81,124	698	6	222	160,900

* Winter discharge measurement made on this day.
a No gage-height record; discharge interpolated or computed on basis of water commissioner's notes and records for station near Sevier.
h Computed on basis of staff-gage readings.
Time basis: Mountain war time. 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 NW¼NE¼ sec. 5, T. 26 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 1943. 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.

Extremes (regulated).- Maximum discharge during year, 718 second-feet July 5 (gage height, 2.99 feet); minimum, not determined, occurred during period of ice effect.
1911-29, 1939-43: Maximum discharge, 2,800 second-feet during last week in May 1922, computed on basis of records for station near Marysvale; 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.

Rating table, water year 1942-43, except period of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 8 to June 30, Aug. 7 to Sept. 30, May 16 to Sept. 30)

0.80	28	1.80	195
1.00	46	2.00	261
1.20	69	2.30	378
1.40	99	2.60	513
1.60	140	3.00	724

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	214	76	54	39	34	69	156	646	523	657	a150	485
2	214	78	53	38		69	133	646	557	652	a150	523
3	211	76	52	b37		68	131	652	265	663	a150	562
4	211	73	52	b36		70	138	619	169	707	a160	533
5	211	70	49	b35	b32	70	178	609	108	715	a195	475
6	211	70	b48	(c)		69	183	588	91	707	a195	426
7	208	70	b46			70	230	588	82	707	192	412
8	211	70	b48			70	302	547	79	696	195	444
9	211	67	b50	b32		73	306	457	82	690	189	466
10	214	65	54			75	241	346	83	679	186	462
11	217	77	52		*b30	75	221	276	101	674	265	462
12	214	76	45	b30	b35	73	214	314	108	666	318	452
13	214	76	46		38	73	237	374	224	663	306	321
14	169	88	44		37	72	318	395	353	663	314	306
15	163	94	44	b35	37	72	337	434	353	657	448	325
16	169	94	44		42	72	421	466	462	604	538	341
17	172	*93	b40	b30	39	72	485	452	466	542	542	341
18	169	93	b40	b25	39	76	490	426	494	499	457	318
19	169	91	b40	b25	39	75	494	426	538	a495	374	291
20	172	93	b40	b30	38	75	499	426	542	a520	341	280
21	175	b90	40	b30	40	75	504	421	538	a510	310	280
22	169	b90	b40	b35	39	76	533	395	341	a450	341	283
23	169	91	40	b42	40	98	538	374	504	a150	395	280
24	145	75	40	b42	64	105	552	374	641	a140	400	280
25	99	63	40	b40	86	101	547	471	646	a175	475	280
26	99	56	b40	b40	70	99	533	572	645	a300	518	287
27	99	56	b40	40	69	99	499	641	646	a350	562	254
28	103	55	b40	40	70	99	547	652	641	a520	593	254
29	101	54	b40	38	-	101	619	652	614	a520	578	224
30	99	55	b40	38	-	140	641	609	636	a520	562	201
31	86	-	39	36	-	150	-	557	-	a425	508	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	5,288	217	86	171	10,490
November	2,272	94	54	75.7	4,510
December	1,380	54	39	44.5	2,740
Calendar year 1942	141,025	1,150	39	386	279,700
January	1,077	-	-	34.7	2,140
February	1,174	86	-	41.9	2,330
March	2,579	150	68	83.2	5,120
April	11,227	641	131	374	22,270
May	15,400	652	276	497	30,550
June	11,533	646	79	384	22,880
July	16,916	713	140	546	35,550
August	10,907	593	150	352	21,630
September	10,848	562	201	362	21,520
Water year 1942-43	90,601	713	-	248	179,700

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for station near Marysvale.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time. 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 1943.

Average discharge.- 29 years (1914-43), 116 second-feet.

Extremes (regulated).- Maximum discharge during year, 434 second-feet Oct. 22 (gage height, 2.99 feet); minimum, 2 second-feet July 15, when reservoir gates were closed.
1914-43: 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. Extreme low flow during irrigation season represents seepage and return flow from canals. Flow regulated by dams and reservoirs above station.

Rating table, water year 1942-43 (gage height, in feet, and discharge, in second-feet)

0.6	1	1.5	61
.7	3	1.8	107
.8	5	2.2	190
1.0	14	2.5	271
1.2	29	3.0	438

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	123	143	129	143	135	149	7	9	5	7	33	3
2	92	145	129	139	133	149	40	5	12	7	31	3
3	67	147	127	133	133	149	97	5	84	6	24	4
4	55	149	125	137	131	160	88	5	183	5	24	5
5	53	133	127	135	129	141	69	7	172	4	24	5
6	60	125	125	131	129	125	62	14	154	4	24	5
7	65	125	125	129	129	120	55	28	156	3	29	4
8	74	125	129	133	131	120	49	34	145	3	37	3
9	75	123	127	133	129	125	51	51	107	3	38	3
10	95	121	127	125	121	133	74	98	81	3	41	5
11	120	125	133	127	118	127	78	118	78	3	53	4
12	127	127	133	129	125	123	74	87	59	3	41	4
13	127	127	129	129	133	120	65	50	35	3	28	4
14	141	127	127	129	121	121	50	41	34	3	22	4
15	165	129	125	133	120	120	41	18	29	3	18	4
16	172	131	125	139	120	135	39	21	24	3	14	4
17	178	137	123	137	121	139	31	13	19	5	12	4
18	231	141	123	120	123	172	32	7	13	5	19	4
19	231	135	125	105	120	169	46	5	11	5	59	4
20	205	135	131	131	118	165	62	5	10	5	69	10
21	188	129	131	125	118	74	98	4	7	5	29	20
22	286	129	131	143	120	26	76	4	5	4	15	18
23	234	135	133	141	121	28	35	4	8	4	12	15
24	178	139	135	141	129	31	25	4	7	3	10	16
25	161	137	141	137	133	71	26	4	5	3	10	16
26	154	123	133	133	154	141	26	4	5	4	10	16
27	152	125	125	131	145	149	27	4	7	4	8	23
28	149	131	125	139	145	163	20	4	19	4	3	28
29	154	129	139	137	-	165	14	4	21	4	3	32
30	149	131	143	139	-	145	13	3	10	4	3	34
31	145	-	143	141	-	107	-	3	-	9	3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	4,426	286	53	143	8,780
November	3,958	149	121	132	7,850
December	4,023	143	123	130	7,980
Calendar year 1942	73,461	777	3	201	145,700
January	4,124	143	105	133	8,180
February	3,584	154	118	128	7,110
March	3,667	172	26	125	7,270
April	1,470	98	7	49.0	2,920
May	663	118	3	21.4	1,320
June	1,505	183	5	50.2	2,990
July	131	9	3	4.2	260
August	746	69	3	24.1	1,480
September	304	34	3	10.1	603
Water year 1942-43	28,801	286	3	78.9	57,120

Time basis: Mountain war time. 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. 1 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 1943.

Average discharge.- 26 years, 226 second-feet.

Extremes (regulated).- Maximum discharge during year, 434 second-feet Mar. 10 (gage height, 2.83 feet); minimum, 19 second-feet June 29 (gage height, 0.95 foot).
1917-43: Maximum discharge, 2,620 second-feet June 1, 1922 (gage height, 5.68 feet, present datum); minimum daily discharge, 8 second-feet July 13-17, Sept. 6, 1934.

Remarks.- Records good except those for period of ice effect, 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	125	277	290	285	297	274	225	113	72	44	99	51
2	191	277	287	287	279	272	162	119	246	40	86	49
3	179	277	287	279	282	272	158	123	293	40	95	46
4	168	277	285	264	269	277	189	121	277	42	91	43
5	170	277	282	264	277	290	194	129	363	44	97	46
6	170	274	268	264	272	293	168	137	349	43	131	49
7	174	272	274	256	277	290	151	121	320	49	160	49
8	179	272	266	254	279	279	147	119	309	54	230	51
9	189	259	269	254	274	269	141	137	285	49	181	51
10	200	251	285	251	261	386	139	160	230	43	149	54
11	234	254	282	246	254	317	145	185	191	36	149	67
12	261	261	279	249	261	297	155	196	141	31	160	69
13	272	274	277	251	269	261	155	170	145	36	155	70
14	279	272	272	251	272	256	155	155	139	31	107	81
15	290	272	264	256	261	254	129	111	127	28	87	91
16	306	274	266	261	259	249	129	95	107	30	83	79
17	320	290	266	261	261	254	129	93	89	69	87	79
18	320	290	266	b240	264	329	119	91	93	74	89	91
19	340	287	264	b220	264	360	117	68	87	77	113	97
20	375	290	264	246	259	349	123	66	83	83	158	111
21	343	304	272	259	261	329	131	64	70	99	137	131
22	326	304	272	269	269	259	158	64	61	99	95	131
23	383	304	279	287	285	216	147	64	59	68	83	131
24	354	320	285	296	269	218	137	66	64	61	77	129
25	312	326	293	285	272	220	125	66	61	52	57	127
26	304	301	290	277	269	251	119	66	54	42	52	135
27	285	277	274	279	282	306	107	68	52	43	52	139
28	282	290	266	277	279	331	95	70	49	48	52	137
29	287	282	279	282	-	360	99	68	38	48	54	145
30	287	285	285	287	-	312	113	64	44	59	56	139
31	279	-	285	290	-	272	-	63	-	115	54	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	8,184	383	125	264	16,230
November	8,470	326	251	282	16,800
December	8,574	293	264	277	17,010
Calendar year 1942	139,493	1,050	74	382	276,700
January	8,227	296	220	265	16,320
February	7,667	287	254	270	15,010
March	8,892	386	216	287	17,640
April	4,199	225	95	140	8,330
May	3,212	196	63	104	6,370
June	4,536	363	38	151	9,000
July	1,667	115	28	53.8	3,310
August	3,255	230	52	105	6,460
September	2,638	146	43	87.9	5,230
Water year 1942-43	69,421	386	28	190	137,700

b Stage-discharge relation affected by ice.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Sevier Bridge Reservoir near Juab, Utah

Location.- Staff gage, lat. 39°22', long. 112°02', in NW¼ sec. 1, T. 17 S., R. 2 W., at Sevier Bridge Dam, 13 miles southwest of Juab.

Drainage area.- 5,120 square miles.

Records available.- January 1914 to September 1943.

Extremes.- Maximum contents during year, 221,500 acre-feet Apr. 4-9, 12 (gage height, 78.60 feet); minimum, not determined, occurred during period of no gage-height record. 1914-43: 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 except July 16 to Sept. 30; contents are as of that time.

Contents, in acre-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	123,700	138,600	155,900	172,600	189,000	204,800	220,500	200,600	154,100	142,200		
2	124,000	139,200	156,300	173,400	189,400	205,300	221,000	199,300	153,000	140,200		
3	124,500	139,500	157,100	173,800	189,800	205,800	221,000	198,300	153,400	137,200		
4	124,800	140,200	157,800	174,600	190,300	206,700	221,500	196,500	154,100	134,400		
5	124,800	141,100	158,600	175,000	190,800	207,200	221,500	195,200	154,900	133,100		
6	125,100	141,800	159,000	175,400	191,200	207,700	221,500	192,900	156,800	131,900		
7	125,400	142,600	159,300	175,800	191,600	208,200	221,500	191,200	157,100	130,100		
8	125,700	143,200	159,700	176,200	192,400	208,200	221,500	189,400	157,800	128,800		
9	126,000	143,500	160,100	176,600	192,900	208,700	221,500	188,500	158,600	127,400		
10	126,000	143,500	160,800	177,400	193,400	209,200	221,000	187,600	158,600	126,000		
11	126,200	143,800	161,600	177,800	194,200	209,600	221,000	185,900	159,000	124,800		
12	126,500	144,200	162,300	178,300	194,700	210,600	221,500	184,200	159,000	123,100		
13	126,800	144,600	162,700	178,700	195,200	211,100	221,000	182,500	158,600	122,000		
14	127,400	145,200	163,100	179,500	195,600	211,100	220,500	181,600	159,000	120,400		
15	127,700	145,600	163,500	179,900	196,000	212,000	219,500	179,900	159,300	118,800		
16	128,300	146,000	164,300	180,400	196,500	212,500	219,000	177,800	159,700	-		
17	129,500	146,600	164,700	180,800	196,900	212,500	218,500	176,600	159,700	-		
18	130,100	147,400	165,400	181,200	197,400	212,500	218,000	175,000	160,100	-		
19	130,700	148,000	165,800	181,600	197,800	213,500	217,000	173,800	160,100	-		
20	131,300	148,700	166,200	181,600	198,300	214,500	215,900	172,600	159,700	-		
21	131,900	149,400	166,600	182,000	199,300	215,400	215,400	171,400	158,600	-		
22	132,500	150,200	167,400	182,500	200,200	215,400	214,500	169,800	158,200	-		
23	133,100	150,800	167,800	183,300	200,600	215,400	214,000	169,000	157,100	-		
24	133,800	151,200	168,600	183,900	201,100	215,900	213,000	167,400	154,500	-		
25	134,700	152,000	169,400	184,200	202,100	217,000	212,500	166,600	152,000	-		
26	135,300	152,700	169,800	184,600	203,000	217,500	211,600	165,400	150,500	-		
27	136,000	153,400	170,100	185,000	203,900	218,000	210,100	163,900	148,400	-		
28	136,600	154,100	170,500	185,900	204,400	218,500	208,200	155,800	147,400	-		
29	136,900	154,900	170,900	186,300	-	219,000	205,800	154,500	144,900	-		
30	137,600	155,200	171,400	187,100	-	219,500	203,900	153,000	143,500	-		
31	138,200	-	171,800	188,500	-	220,000	-	153,400	-	-		

Monthly gage height and contents, water year October 1942 to September 1943

Date	Gage height (feet)	Contents (acre-feet)	Change in contents (during month) (acre-feet)
Oct. 1	66.10	123,700	+14,900
Nov. 1	68.55	138,600	+17,300
Dec. 1	71.05	155,900	+16,700
Calendar year 1942	-	-	+45,800
Jan. 1	73.20	172,600	+16,400
Feb. 1	75.15	189,000	+15,800
Mar. 1	76.90	204,800	+15,700
Apr. 1	76.50	220,500	-19,900
May 1	76.45	200,600	-46,500
June 1	70.80	154,100	-11,900
July 1	69.10	142,200	-35,000
Aug. 1	-	a107,200	-19,450
Sept. 1	-	a87,750	-2,050
Oct. 1	57.05	85,700	-
Water year 1942-43	-	-	-38,000

a No gage-height record; contents computed on basis of inflow and outflow records.

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

Sevier River near Juab, Utah

Location.- Water-stage recorder, lat. 39°22', long. 112°02', in NE¼ 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 1943.

Average discharge.- 32 years, 253 second-feet.

Extremes (regulated).- Maximum discharge during year, 1,110 second-feet July 2 (gage height, 4.97 feet); minimum daily, 3 second-feet Oct. 23-26 but may have been less during period of no gage-height record.
1911-43: Maximum discharge, 2,140 second-feet June 2, 1922 (gage height, 8.50 feet); practically no flow at times when reservoir gates are 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	8					93	963	953	920	249	514
2	18	8					93	920	917	976	231	517
3	18	8					93	917	842	1,090	229	443
4	31	8					93	930	129	1,070	212	341
5	47	8					93	960	5	891	298	260
6	47	8					93	963	5	856	477	201
7	47	8					93	960	5	827	548	201
8	47	8					93	917	5	805	536	138
9	40	8					114	847	5	773	524	69
10	40	8					174	847	6	744	422	69
						8						
11	40	8					174	840	8	770	395	69
12	38	8					174	834	8	802	257	69
13	38	8		(*)			356	831	8	789	249	69
14	31	8					477	824	9	754	243	69
15	13	8					386	840	9	706	292	69
16	18	8	8	8	8		386	850	47	770	350	69
17	18	8					386	792	83	552	404	69
18	16	8					480	783	81	527	443	69
19	15	8					570	779	81	362	530	56
20	15	8					567	738	229	260	496	42
21	15	8					567	696	558	266	455	42
22	9	8					567	648	799	226	452	42
23	3	*8					567	598	792	217	452	24
24	3	8				(*)	614	589	666	209	477	6
25	3	8				10	715	620	917	347	520	6
26	3	8					757	589	920	425	520	6
27	6	8					818	570	943	410	520	6
28	6	8					898	754	950	431	520	6
29	6	8			-		1,000	924	934	499	517	5
30	6	8			-	40	1,000	947	930	428	520	5
31	8	-			-	93	-	960	-	368	517	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	668	47	3	21.5	1,320
November	240	8	8	8.0	476
December	248	-	-	8	492
Calendar year 1942	100,600	1,170	-	276	199,600
January	248	-	-	8	492
February	224	-	-	8	444
March	383	93	-	12.4	760
April	12,491	1,000	93	416	24,780
May	25,230	963	570	814	50,040
June	11,844	953	6	395	23,490
July	19,070	1,090	209	615	37,820
August	12,865	548	212	415	25,500
September	3,551	517	5	118	7,040
Water year 1942-43	87,052	1,090	-	238	172,700

* Winter discharge measurement made on this day.
Note.- No gage-height record Nov. 26 to Apr. 8, Sept. 5, 6, 9-18, 23, 24; discharge computed on basis of 5 discharge measurements and observer's notes of gate changes at Sevier Bridge Reservoir.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Sevier River near Lynndyl, Utah

Location.- Water-stage recorder, lat. 39°29', long. 112°24', in SE¼ sec. 27, T. 15 S., R. 5 W., 1⅛ miles downstream from highway bridge and 3⅛ miles southwest of Lynndyl. Former gage at same site and datum.

Drainage area.- 6,270 square miles.

Records available.- April 1914 to October 1919. November 1942 to September 1943.

Extremes (regulated).- Maximum discharge during year, 873 second-feet June 3 (gage height, 5.96 feet); minimum recorded, 14 second-feet Mar. 2, but may have been less during period of ice effect.
1914-19, 1942-43: Maximum daily discharge, 1,820 second-feet June 9, 1914, based on records at Leamington; minimum recorded that of Mar. 2, 1943.

Remarks.- Records good except those for periods of ice effect or no gage-height record, which are fair. Flow regulated by Sevier Bridge Reservoir and several diversions for irrigation between reservoir and station.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			35	18		15	57	720	670	636	437	314
2			33	18		17	98	709	729	628	369	324
3			30	17		35	190	648	827	617	302	332
4			28			41	128	617	821	692	290	376
5			27			45	128	608	516	760	285	369
6			26			47	131	634	198	692	283	332
7			26			48	134	645	134	597	329	276
8			26		b15	48	130	648	113	570	414	230
9			26			48	122	645	100	551	435	210
10			25			48	122	600	90	541	427	164
11			24			48	147	573	84	514	409	104
12			23			48	194	570	79	492	344	67
13			23			48	196	568	77	527	324	51
14			22			48	220	568	74	549	243	43
15			22		*17	48	440	565	71	535	210	37
16			22		16	48	392	560	68	557	204	36
17			23	b15	16	48	374	581	66	524	238	48
18			24		16	49	376	586	92	432	352	74
19			24		16	50	404	562	119	487	417	105
20			24		16	49	514	560	118	458	386	115
21			25		16	48	532	554	124	304	354	a110
22			26		16	48	535	511	364	300	324	a100
23			24		16	48	535	482	648	278	300	a95
24			23		16	48	535	430	715	269	292	a90
25			22		16	47	546	394	737	263	288	85
26			22		16	47	608	394	687	269	285	70
27			20		16	46	589	409	678	324	295	67
28			21		16	46	595	359	681	336	304	70
29			21		-	46	597	366	678	344	307	69
30		35	20		-	46	690	554	659	412	312	65
31		-	19		-	46	-	628	-	469	314	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	-	-	-	-	-
November	-	-	-	-	-
December	756	35	19	24.4	1,500
Calendar year	-	-	-	-	-
January	473	-	-	15.3	938
February	435	-	-	15.5	863
March	1,392	50	15	44.9	2,760
April	10,259	690	57	342	20,350
May	17,248	720	359	556	34,210
June	11,017	827	66	367	21,850
July	14,927	760	263	482	29,610
August	10,073	437	204	325	19,980
September	4,428	376	36	148	8,780
The period	-	-	-	-	140,800

* Winter discharge measurement made on this day.
a No gage-height record. Discharge computed on basis of precipitation records and records for station at Juab.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time. 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 SW¼NW¼ 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 1943. May to September 1912 at site 2½ miles downstream, below all diversions.

Average discharge.- 30 years, 90.3 second-feet.

Extremes (regulated).- Maximum daily discharge during year, 321 second-feet July 22 to Aug. 2; minimum daily, 12 second-feet Jan. 19.
1913-43: 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 1942-43, except period of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 21 to Dec. 5, May 2 to June 10)

0.40	8	1.20	66	2.0	212
.60	15	1.40	95	2.2	261
.80	26	1.6	130	2.5	350
1.00	42	1.8	169		

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	186	60	58	b16	b15	19	18	27	56	49	a321	46
2	167	58	58	b16	b15	19	18	42	63	46	321	46
3	38	54	58	b16	b15	19	18	45	60	45	280	45
4	35	57	61	b16	b15	20	19	50	57	44	222	45
5	34	57	57	b15	b15	20	22	57	58	46	219	45
6	33	56	a23	b14	b15	20	20	53	53	87	217	44
7	32	58	a16	b14	b15	21	20	53	52	175	217	44
8	32	58	a16	*b14	15	21	20	62	49	180	222	45
9	32	60	a16	b14	16	22	21	66	49	182	217	45
10	32	57	a16	b14	b15	29	21	65	49	180	212	44
11	32	57	a16	b14	*b14	27	21	62	50	176	208	42
12	33	a58	b16	b14	b15	24	20	61	50	a175	212	68
13	35	a58	b16	b14	b16	22	20	60	50	a175	210	192
14	35	a59	b16	b15	b17	21	19	58	51	a176	210	205
15	35	a59	b16	b16	19	21	19	58	52	a175	175	208
16	35	a60	b16	b16	19	20	20	61	50	a175	104	208
17	36	a60	b16	b16	19	20	21	61	51	a175	105	208
18	37	*61	b16	b14	19	21	23	60	49	a175	100	205
19	36	60	b16	b12	19	22	22	60	46	a175	98	203
20	36	66	b16	b13	19	22	21	56	49	a175	95	203
21	52	54	b16	b14	19	21	21	56	48	a205	94	203
22	57	60	b16	b15	19	21	21	57	48	a321	94	197
23	54	57	16	b15	19	21	22	58	48	a321	92	190
24	58	63	16	b15	20	20	22	57	48	a321	92	147
25	60	67	17	b15	20	20	22	54	48	a321	86	151
26	58	58	16	b15	19	19	22	53	46	a321	48	159
27	58	60	b14	b15	19	19	20	54	48	a321	48	155
28	60	61	b15	15	20	19	24	54	48	a321	46	155
29	62	60	b16	14	-	19	24	53	49	a321	49	136
30	62	60	b16	15	-	19	22	53	48	a321	49	40
31	61	-	b16	14	-	19	-	53	-	a321	48	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,613	186	32	52.0	3,200
November	1,773	67	54	59.1	3,520
December	713	61	14	23.0	1,410
Calendar year 1942	47,590	610	12	130	94,400
January	455	16	12	14.7	902
February	482	20	14	17.2	956
March	647	29	19	20.9	1,280
April	623	24	18	20.8	1,240
May	1,719	66	27	55.5	3,410
June	1,521	63	46	50.7	3,020
July	6,199	321	44	200	12,300
August	4,711	321	46	152	9,340
September	3,724	208	40	124	7,390
Water year 1942-43	24,180	321	12	66.2	47,970

e Winter discharge measurement made on this day.
a No gage-height record; discharge interpolated or computed on basis of water commissioner's notes of changes at Otter Creek Reservoir.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time. 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 SE¼NE¼ 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 1943 in reports of Geological Survey. April 1934 to September 1943 in reports of Sevier River water commissioner.

Extremes.- Maximum discharge during year, 180 second-feet Aug. 10 (gage height, 2.27 feet); minimum daily, 1 second-foot Sept. 5, 6, 11-13, 15-17.
1912-19, 1940-43: 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 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	4	12	a12	12	16	31	71	48	18	11	2
2	3	3	11	a12	b10	16	34	92	100	16	15	2
3	3	3	11	a12	b10	15	40	90	64	16	10	2
4	2	4	11	a12	12	18	36	86	61	16	8	2
5	2	3	10	a11	b10	18	39	81	53	14	7	1
6	3	4	8	a10	12	16	33	63	47	12	17	1
7	3	5	11	*b10	13	18	26	56	48	12	14	2
8	3	5	11	b10	12	18	25	53	50	12	12	2
9	3	5	11	b10	10	31	24	52	55	11	12	2
10	3	5	12	b10	9	31	22	50	53	10	19	2
11	4	5	12	b10	*b10	26	21	42	58	8	14	1
12	5	4	11	b10	b12	23	20	36	56	8	8	1
13	5	4	12	b10	14	23	18	32	52	7	6	1
14	5	5	12	b10	14	23	18	30	47	5	5	2
15	7	4	10	b10	14	24	20	29	44	5	4	1
16	9	4	8	b10	14	18	23	29	36	5	7	1
17	9	*7	8	b10	15	25	36	31	34	4	9	1
18	9	12	10	b8	15	21	40	36	37	4	8	2
19	9	13	12	b8	15	16	45	33	42	5	7	2
20	9	12	11	b8	16	24	47	32	40	5	7	2
21	7	10	14	b10	18	18	47	30	36	7	7	2
22	4	10	12	b11	25	23	48	28	33	8	6	2
23	4	12	16	12	23	21	56	27	32	7	4	2
24	4	15	14	13	18	20	66	31	33	6	4	2
25	4	16	14	13	16	23	66	42	33	8	3	2
26	4	11	12	12	16	*29	63	48	30	9	3	2
27	4	14	10	12	16	30	58	53	27	10	2	3
28	4	12	12	12	16	32	58	60	26	9	2	4
29	3	12	b12	13	-	42	60	50	23	6	2	3
30	3	13	a12	13	-	39	68	47	20	6	2	2
31	3	-	a12	13	-	31	-	48	-	8	2	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	143	9	2	4.6	284
November	236	16	3	7.9	468
December	354	16	8	11.4	702
Calendar year 1942	15,310	287	2	41.9	30,360
January	335	13	6	10.8	664
February	397	25	9	14.2	787
March	728	42	15	23.5	1,440
April	1,188	68	18	39.6	2,360
May	1,488	92	27	48.0	2,950
June	1,318	100	20	43.9	2,610
July	277	18	4	8.9	549
August	237	19	2	7.6	470
September	56	4	1	1.9	111
Water year 1942-43	6,757	100	1	18.5	13,400

e Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of weather records and records for upper Sevier River stations.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Beaver River near Beaver, Utah

Location.- Water-stage recorder, lat. 38°17', long. 112°34', in SW¼SW¼ sec. 17, T. 29 S., R. 6 W., at Fishlake National Forest boundary, three-quarters of a mile downstream from Bakers Canyon and 4½ miles east of Beaver.

Drainage area.- 82 square miles.

Records available.- June to September 1906; March 1914 to September 1943.

Average discharge.- 29 years (1914-43), 56.2 second-feet.

Extremes.- Maximum discharge during year, 540 second-feet May 1 (gage height, 3.92 feet); minimum recorded, 12 second-feet Oct. 31, but may have been less during periods of ice effect.

1914-43: 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. Some regulation by power plants and several small reservoirs.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	23	23	22	20	b20	24	39	321	96	57	56	25
2	21	24	23	20	b20	23	51	321	136	56	46	25
3	24	24	22	b20	b20	26	59	291	111	57	35	24
4	23	24	b21	b19	b20	25	60	250	105	52	34	23
5	26	21	b20	b19	b21	25	70	206	98	51	52	24
6	26	b20	b19	b20	b22	23	60	203	105	42	53	24
7	24	22	b19	b20	21	24	54	186	102	42	38	24
8	24	22	b20	b20	b20	26	54	160	98	40	40	24
9	22	25	b20	b20	b18	34	45	136	96	39	34	24
10	26	23	b21	b19	b17	34	39	134	95	38	38	24
11	29	21	21	19	b18	31	39	140	93	32	57	24
12	26	21	22	*b20	b22	28	35	140	85	35	47	24
13	28	21	22	b20	24	28	35	136	82	33	36	24
14	27	21	21	20	24	28	56	129	78	33	35	24
15	27	23	21	21	*26	27	69	117	76	33	34	24
16	28	24	21	20	26	*27	82	107	70	34	37	25
17	24	24	21	b18	27	26	91	100	69	34	38	24
18	25	24	20	b16	26	b24	107	95	65	31	34	24
19	26	24	21	b15	27	b22	119	91	64	31	36	21
20	21	23	20	b18	26	b20	123	93	64	32	31	24
21	23	22	20	b20	28	b20	160	86	72	35	29	24
22	24	b20	21	21	28	b21	172	90	72	34	25	23
23	21	*b22	20	21	27	21	224	100	57	31	27	23
24	23	24	20	21	25	24	233	109	69	31	26	21
25	20	24	20	b20	26	25	192	111	68	30	27	22
26	22	23	b19	b20	25	28	186	111	63	30	27	26
27	24	22	b17	20	25	28	203	111	61	30	26	26
28	26	22	b19	21	24	33	243	111	61	29	27	28
29	24	22	20	20	-	44	302	102	59	31	27	25
30	24	24	21	20	-	41	317	100	57	32	27	24
31	23	-	20	20	-	37	-	95	-	34	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	754	29	20	24.3	1,500
November	679	25	20	22.6	1,350
December	634	23	17	20.5	1,260
Calendar year 1942	23,010	540	17	63.0	45,660
January	608	21	15	19.6	1,210
February	654	28	17	23.4	1,300
March	849	44	20	27.4	1,680
April	3,512	317	35	117	6,970
May	4,484	321	86	145	8,890
June	2,429	138	57	81.0	4,820
July	1,151	58	29	37.1	2,280
August	1,108	57	25	35.7	2,200
September	721	28	21	24.0	1,430
Water year 1942-43	17,583	321	15	48.2	34,890

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

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Beaver River at Adamsville, Utah

Location.- Water-stage recorder, lat. 38°16', long. 112°48', in S½ 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 1943.

Average discharge.- 27 years (1914-36, 1938-43), 37.9 second-feet.

Extremes.- Maximum discharge during year, 234 second-feet May 2 (gage height, 2.02 feet); minimum daily, 1 second-foot July 10, 14, 15, 19.
1913-36, 1937-43: Maximum discharge, 1,090 second-feet July 28, 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 no gage-height record, and those for Nov. 21, 22, Dec. 6, 26-28, Jan. 17-21, Feb. 4, 9-12, 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	44	44	44	43	41	48	146	11	3	16	5
2	14	51	44	44	43	40	43	172	112	3	16	6
3	13	51	44	42	41	40	49	162	48	3	12	6
4	13	56	44	b45	b40	49	49	127	46	3	11	8
5	14	54	42	b42	41	58	60	112	38	3	10	6
6	13	52	b38	b44	43	51	56	77	36	4	28	6
7	12	51	41	b44	38	69	48	a60	31	3	15	7
8	9	49	41	b44	38	54	48	a50	25	2	10	6
9	10	49	42	42	b36	69	49	a40	24	2	10	4
10	13	47	44	b44	b32	75	46	32	23	1	14	4
11	17	47	44	b42	b35	84	51	22	22	2	14	4
12	16	44	44	b39	b40	58	a47	20	13	2	14	4
13	25	45	45	*b42	41	51	a44	17	12	2	11	4
14	31	45	44	b39	38	48	41	13	14	1	11	4
15	34	47	44	34	38	49	41	8	13	1	14	4
16	36	51	44	36	*38	*44	37	4	14	2	15	6
17	33	52	41	b34	40	46	40	5	13	2	44	5
18	31	51	42	b32	38	56	40	4	11	2	43	4
19	31	49	41	b30	40	58	34	4	8	1	54	4
20	30	54	44	b35	40	58	28	6	7	5	30	4
21	31	b52	42	b40	40	56	28	a5	7	11	23	4
22	30	*b50	44	46	44	62	18	a5	7	11	22	4
23	30	52	44	46	58	62	23	a4	7	7	17	3
24	30	54	45	46	54	48	64	4	6	7	15	4
25	28	54	47	48	48	48	34	4	7	8	12	6
26	27	47	b45	44	44	48	23	10	7	8	a10	11
27	27	47	b40	44	43	48	21	a10	5	5	a8	22
28	31	47	b45	43	41	48	37	a10	4	3	7	17
29	36	47	49	38	-	56	65	10	4	8	5	15
30	36	47	47	41	-	60	151	9	4	9	5	15
31	42	-	44	44	-	56	-	11	-	16	6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	760	42	9	24.5	1,510
November	1,486	56	44	49.5	2,950
December	1,349	49	38	43.5	2,680
Calendar year 1942	16,563	389	4	45.4	32,850
January	1,278	48	30	41.2	2,530
February	1,155	58	32	41.2	2,290
March	1,690	84	40	54.5	3,350
April	1,363	151	18	48.4	2,700
May	1,163	172	4	37.5	2,310
June	579	112	4	19.3	1,150
July	140	16	1	4.5	278
August	522	54	5	16.8	1,040
September	202	22	3	6.7	401
Water year 1942-43	11,687	172	1	32.0	23,190

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of records for station near Beaver, or interpolated.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time. 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 1943.

Extremes.- Maximum contents observed during year, 23,370 acre-feet Apr. 17 (gage height, 51.5 feet); minimum observed, 8,470 acre-feet Sept. 30 (gage height, 33.2 feet).
1937-43: Maximum contents observed, 23,590 acre-feet June 18, 1941 (gage height, 51.3 feet); 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,150	-	-	16,910	-	-	-	-	19,550	-	-	-
2	-	-	-	-	-	-	-	-	-	-	12,380	-
3	-	-	-	-	-	-	22,710	22,930	-	-	-	-
4	-	-	-	-	-	-	-	-	19,650	16,260	-	9,180
5	-	12,620	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	18,990	20,500	22,820	22,820	-	15,940	-	-
7	-	-	-	-	-	-	-	-	19,360	-	12,160	-
8	11,220	-	-	-	-	-	-	22,820	-	-	-	8,910
9	-	12,950	-	17,190	-	-	22,930	-	-	-	-	-
10	-	-	-	-	-	20,880	-	22,380	-	15,290	-	-
11	-	-	-	-	19,180	-	-	-	19,080	-	11,690	8,800
12	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	21,180	-	-	-	14,720	-	-
14	-	13,350	15,530	17,470	-	-	23,260	22,050	-	-	11,280	-
15	11,350	-	-	-	-	-	-	-	18,700	14,320	-	8,640
16	-	-	-	-	19,460	21,390	-	-	-	-	-	-
17	-	-	-	-	-	-	23,370	-	-	14,080	-	-
18	-	-	-	-	-	-	-	21,390	-	-	11,080	8,580
19	-	-	15,860	17,760	-	21,610	-	-	18,230	-	-	-
20	-	-	-	-	-	-	-	21,060	-	-	-	-
21	-	14,000	-	-	-	-	23,260	-	-	13,430	10,810	-
22	-	-	-	-	-	-	-	-	17,850	-	-	8,420
23	-	-	16,260	-	-	21,940	-	-	-	13,270	-	-
24	11,690	-	-	-	-	-	23,150	20,690	-	-	-	-
25	-	-	-	18,140	19,930	-	-	-	-	-	10,540	9,590
26	-	-	-	-	-	-	-	-	17,380	13,030	-	-
27	-	-	-	-	-	22,160	22,930	-	-	-	-	-
28	-	-	16,530	-	20,120	-	-	20,210	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-
30	-	14,640	-	18,420	-	-	22,710	-	16,810	-	9,790	8,470
31	12,030	-	16,810	-	-	22,490	-	-	-	12,540	9,660	-

Monthly gage height and contents, water year October 1942 to September 1943

Date	Gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept.30	37.3	11,150	-
Oct. 31	38.6	12,030	+880
Nov. 30	41.9	14,640	+2,610
Dec. 31	44.5	16,810	+2,170
Calendar year 1942	-	-	-2,370
Jan. 31	46.2	18,420	+1,610
Feb. 28	48.0	20,120	+1,700
Mar. 31	50.3	22,490	+2,370
Apr. 30	50.5	22,170	+220
May 31	-	a19,720	-2,990
June 30	44.5	16,810	-2,910
July 31	39.3	12,540	-4,270
Aug. 31	35.1	9,660	-2,880
Sept.30	33.2	8,470	-1,190
Water year 1942-43	-	-	-2,680

a No gage-height record; contents interpolated.
Time basis: Mountain war time. 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 NW¼ sec. 11, T. 30 S., R. 9 W., half a mile downstream from Rockyford Dam and 4¾ miles east of Minersville.

Drainage area.- 512 square miles.

Records available.- December 1913 to September 1943.

Average discharge.- 28 years (1914-36, 1937-43) 39.7 second-feet.

Extremes (regulated).- Maximum discharge during year, 109 second-feet May 7 (gage height, 1.66 feet); minimum observed, 8 second-feet Nov. 22.
1913-43: 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) and affected by several diversions above reservoir for irrigation and municipal supply.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	17	9	9	10	10	11	12	91	93	74	45	72
2	16	9	9	10	10	11	12	91	94	73	46	68
3	16	9	9	10	11	11	12	93	94	72	40	67
4	16	9	9	10	11	11	12	94	96	70	40	66
5	16	9	9	10	11	11	12	94	93	61	58	66
6	16	9	9	10	11	11	12	94	84	64	72	50
7	16	9	9	11	11	11	12	96	82	76	82	32
8	16	9	9	11	11	12	13	94	79	74	88	32
9	16	9	9	11	11	12	13	93	73	79	88	31
10	17	9	9	11	11	12	14	91	76	81	89	30
11	16	9	9	11	11	12	14	86	74	82	91	31
12	16	9	9	10	11	12	13	86	73	81	93	31
13	16	9	9	*10	11	12	13	84	73	81	91	31
14	16	9	9	10	11	12	14	81	74	81	86	31
15	15	9	9	11	11	13	15	81	72	78	86	31
16	14	9	9	11	11	*13	16	78	72	78	86	29
17	14	9	9	11	11	13	32	73	72	79	88	28
18	14	9	9	11	11	12	39	72	70	76	84	27
19	14	9	9	11	11	12	40	72	72	76	84	26
20	14	9	9	11	11	12	42	73	74	76	84	27
21	14	8	9	11	11	12	42	73	74	72	84	26
22	14	*8	9	11	11	12	49	76	74	70	82	24
23	14	8	9	11	11	12	49	76	74	70	79	24
24	14	8	9	11	11	11	46	76	76	70	78	24
25	14	8	9	10	11	10	49	74	74	70	76	25
26	13	8	10	10	11	9	66	73	73	72	76	26
27	12	9	10	10	11	9	73	79	68	72	76	26
28	11	9	10	10	11	10	82	86	74	72	76	23
29	11	9	10	10	-	10	86	91	78	66	76	22
30	10	9	10	10	-	11	91	93	78	46	74	19
31	9	-	10	10	-	12	-	93	-	46	74	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	447	17	9	14.4	887
November	264	9	8	8.8	524
December	285	10	9	9.2	565
Calendar year 1942	19,009	309	8	52.1	37,700
January	325	11	10	10.5	645
February	306	11	10	10.9	607
March	354	15	9	11.4	702
April	995	91	12	33.2	1,970
May	2,607	96	72	84.1	5,170
June	2,333	96	68	77.8	4,630
July	2,238	82	46	72.2	4,440
August	2,375	93	40	76.6	4,710
September	1,045	72	19	34.8	2,070
Water year 1942-43	13,574	96	8	37.2	26,920

* Winter discharge measurement made on this day.
Note.- Water-stage recorder not operating Oct. 25 to Apr. 5; discharge computed on basis of gage readings made about once a week and 3 discharge measurements.
Time basis: Mountain war time. To convert war time to standard time, subtract 1 hour.

Coal Creek near Cedar City, Utah

Location.- Water-stage recorder, lat. 37°40'25", long. 113°02'10", in NE¼ sec. 13, T. 36 S., R. 11 W., at flood control dam, 1¼ miles southeast of Cedar City and 3¼ miles downstream from South Creek.
Drainage area.- 92 square miles.
Records available.- May 1935 to September 1943. May 1915 to November 1919 at approximately same site, but records do not include flow of power canal operated during this period (abandoned since 1919). Records equivalent if flow of power canal is added to those obtained at former site.
Extremes.- Maximum discharge during year, 1,250 second-feet July 29 (gage height, 3.75 feet), from rating curve extended by broad-crested weir formula; minimum not determined (occurred during period of ice effect).
1935-43: Maximum discharge observed, 2,910 second-feet July 9, 1936 (gage height, 6.4 feet), from rating curve extended by broad-crested weir formula; minimum observed, 4 second-feet Dec. 15, 1935, but may have been less during periods of ice effect.
Remarks.- Records fair except those for periods of ice effect or no gage-height record, which are poor. No diversions above station for irrigation.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	10				10	35	298	32	18	17	8
2	12	11				12	42	210	35	18	17	8
3	10	11				10	38	200	33	18	15	8
4	11	b10				11	44	200	32	17	16	8
5	11	b9			b10	10	*45	226	32	17	17	7
6	11	b9				10	34	186	30	17	17	7
7	11	b10				11	26	177	30	16	17	8
8	11	b10				12	23	143	30	15	15	7
9	12	b10			b8	15	22	116	28	14	14	7
10	12	b10			b8	14	18	106	28	14	14	8
11	18	b9			*b8	b8	14	18	104	26	14	a14	7
12	14	b9			b9	b9	15	17	101	27	14	13	8
13	15	b9			b10	b10	14	26	92	27	14	13	8
14	14	b10			b12	b13	37	61	25	15	12	8
15	14	b10	b9		*b13	a12	52	64	25	15	24	8
16	14	b10			b15	b12	61	52	25	14	35	8
17	13	b10			16	b11	76	44	24	14	28	8
18	12	b10			14	b10	106	40	23	14	a22	8
19	12	b10			15	b10	137	40	22	11	a18	8
20	11	b9			14	b11	162	44	22	12	a14	a8
21	11	*b8			12	b12	183	40	21	14	a12	a8
22	11	b9			12	a13	214	41	21	14	a11	a8
23	11	b10			a11	a15	162	52	21	13	a10	8
24	11	b11			9	a18	162	55	21	13	a9	8
25	11	b11			10	21	127	52	21	14	a8	14
26	10	b10			b10	10	20	119	50	21	15	a8	10
27	10	b10			10	10	24	134	42	21	30	a8	15
28	10	b10			12	45	174	38	21	16	a8	14
29	10	b10			-	42	186	33	20	53	8	12
30	10	b10			-	25	226	32	19	a20	8	12
31	10	-			-	25	-	32	-	a17	8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	365	18	10	11.8	724
November	295	11	8	9.8	585
December	279	-	-	9	553
Calendar year 1942	15,811	367	-	43.3	31,360
January	266	-	-	8.6	528
February	308	16	-	11.0	611
March	497	45	10	16.0	986
April	2,706	226	18	90.2	5,370
May	2,991	298	32	96.5	5,930
June	763	35	19	25.4	1,510
July	520	53	11	16.8	1,030
August	450	35	8	14.5	893
September	264	15	7	8.8	524
Water year 1942-43	9,704	298	-	26.6	19,240

* Winter discharge measurement made on this day.
a No gage-height record; discharge interpolated or computed on basis of weather records and records for Virgin River near Virgin.
b Stage-discharge relation affected by ice.
Time basis: Mountain war time. 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°26'55", long. 116°02'20", in NW¼ 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 1943. 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 Sea, Calif., water year October 1942 to September 1943

Oct. 1..... 241.7	Mar. 1..... 240.7	Aug. 2..... 241.2
Nov. 2..... 241.7	Apr. 1..... 240.4	Sept. 1..... 241.5
Dec. 1..... 241.6	May 1..... 240.4	Sept.27..... 241.6
Jan. 2..... 241.3	June 1..... 240.7	Oct. 1..... 241.6
Feb. 1..... 241.0	July 1..... 241.0	

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 SE¼ sec. 18, T. 3 N., R. 3 W., half a 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 1943.
Average discharge.- 13 years (1930-43), 72.8 second-feet.
Extremes.- Maximum discharge during year, 19,000 second-feet Jan. 23 (gage height, 11.30 feet), by slope-area method; minimum daily, 1.0 second-foot Oct. 1, 2.
1929-43: 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, except those for periods of doubtful gage-height record, which are fair. Flow regulated by Lake Arrowhead. Hesperia Water Co.'s canal diverts about 2 miles above station.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0	3.9	7	7.5	128	264	172	136	40	18	d6	5.5
2	1.0	3.6	6.5	7.5	108	365	185	122	40	18	d6	5.5
3	1.1	3.5	7	6.5	93	474	185	118	39	18	d6	5.5
4	1.1	3.4	12	5.5	78	2,660	189	108	39	18	d5.5	5.5
5	1.1	3.4	15	7.5	74	1,870	185	105	39	17	d5.5	6
6	1.2	3.4	12	6.5	74	856	288	99	38	16	d5.5	6
7	1.3	3.4	8	7.5	76	723	326	93	36	15	d5.5	6
8	1.4	3.4	7.5	7	99	535	224	91	34	14	d5.5	6
9	1.6	3.4	7.5	6.5	93	584	240	83	32	14	d5.5	6
10	1.6	3.4	7.5	7	76	544	204	78	31	13	d5.5	6
11	1.6	3.4	8	6.5	74	568	194	74	31	12	d5	6
12	1.7	3.6	8	6	86	410	204	69	32	12	d5	6
13	1.7	3.6	8	6	91	425	209	65	35	11	d5	6
14	1.8	3.6	8	7	96	313	214	63	34	11	d5	6
15	2.3	3.6	8	7	105	294	209	63	32	12	d5	6.5
16	3.6	3.6	8	7.5	108	264	209	63	30	11	d5	6.5
17	2.1	3.8	8	7.5	102	252	209	61	29	9.5	d4.9	6.5
18	2.1	3.9	8.5	7	96	288	214	61	26	d10	d4.8	6.5
19	2.2	4.2	8.5	6	93	294	225	59	25	10	d4.8	6.5
20	2.3	10	8	7	102	246	209	56	24	10	d4.8	6
21	2.3	9.5	8	8.5	1,000	230	199	54	23	d9.5	d4.7	6
22	2.3	7	7	2,360	1,770	220	199	51	22	d9	d4.7	6
23	2.4	6.5	7.5	7,850	1,370	189	199	49	22	d8.5	d4.7	6
24	2.6	6	8	1,070	787	165	194	47	22	d8	d4.6	6.5
25	2.7	6	21	532	484	185	185	46	21	d7.5	d4.6	7
26	2.8	6	20	371	496	199	163	44	22	d7	4.5	7
27	2.8	6.5	13	440	381	209	150	44	20	d6.5	4.5	6.5
28	3.4	6.5	10	270	258	214	150	43	20	d6	4.7	6
29	4.4	7	9	176	-	214	150	42	19	d6	4.8	6.5
30	4.4	6.5	8.5	150	-	209	139	42	18	d6	5	6.5
31	4.1	-	8	159	-	180	-	40	-	d6	5.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	68.0	4.4	1.0	2.19	135
November	145.6	10	3.4	4.85	289
December	291.0	21	6.5	9.39	577
Calendar year 1942	7,716.5	214	.7	21.1	15,320
January	13,523.0	7,850	5.5	436	26,820
February	8,398	1,770	74	300	16,660
March	14,463	2,660	180	467	28,690
April	6,022	326	139	201	11,940
May	2,169	136	40	70.0	4,300
June	875	40	18	29.2	1,740
July	349.5	18	6	11.3	693
August	158.1	6	4.5	5.10	314
September	184.5	7	5.5	6.15	366
Water year 1942-43	46,646.7	7,850	1.0	128	92,520

Peak discharge.- Jan. 23 (5 a.m.) 19,000 sec.-ft.; Feb. 22 (9 p.m.) 3,690 sec.-ft.; Mar. 4 (4:30 a.m.) 3,260 sec.-ft.
d Gage-height record doubtful; discharge interpolated.
Time basis: Pacific war time. 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 SW¼SE¼ 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 1943. February 1899 to July 1906, November 1930 to September 1936 at site 3 miles upstream.

Extremes.- Maximum discharge during year, 32,000 second-feet Jan. 23 (gage height, 13.0 feet), float measurement; maximum gage height, 14.0 feet Jan. 23; minimum daily discharge, 10 second-feet July 13, 26.
1930-43: Maximum discharge, 70,600 second-feet Mar. 2, 1938 (gage height, 16.70 feet), by slope-area method; minimum, 9 second-feet July 28, 1942.

Remarks.- Records good. Storage at Lake Arrowhead and Lake Gregory. Diversions for irrigation from Deep Creek by Hesperia Water Co. and from Mojave River at Victorville.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	39	46	46	150	350	224	102	17	21	11	13
2	25	41	46	46	130	350	224	102	21	21	13	13
3	24	43	48	48	110	430	210	78	21	23	13	15
4	25	40	46	46	98	3,980	224	74	21	26	17	17
5	27	41	46	48	90	2,770	203	74	21	23	21	17
6	26	41	46	44	84	1,400	349	74	21	15	23	19
7	27	43	46	46	78	950	438	62	21	13	23	15
8	28	44	45	45	78	760	338	58	21	13	21	15
9	24	43	45	45	85	910	384	54	21	15	26	17
10	25	39	45	45	70	890	310	41	19	15	26	19
11	26	39	44	44	62	950	254	35	19	15	19	21
12	26	37	44	44	65	612	290	29	26	13	15	19
13	25	41	44	43	67	600	290	23	23	10	19	21
14	25	40	41	43	70	360	246	29	25	12	17	19
15	24	37	40	43	72	300	246	23	32	12	15	19
16	25	39	41	43	75	290	238	19	29	13	13	19
17	26	43	43	41	72	310	238	19	26	13	14	19
18	29	45	44	41	70	338	263	19	26	15	14	19
19	31	45	44	39	69	426	281	17	29	15	13	21
20	34	44	43	41	74	330	263	19	29	11	13	23
21	36	44	44	43	300	290	246	21	26	13	11	26
22	31	45	44	57	2,070	272	238	21	26	15	12	26
23	35	46	45	12,200	3,360	263	231	23	21	13	13	29
24	34	46	46	2,500	1,600	224	210	19	17	13	15	29
25	34	48	46	860	800	238	182	21	17	11	13	50
26	36	48	46	500	600	238	168	17	21	10	15	29
27	36	46	45	350	580	254	149	19	25	11	17	32
28	36	46	45	270	400	281	127	23	21	15	19	29
29	36	45	44	230	-	263	122	17	23	13	17	32
30	35	45	45	200	-	272	112	15	21	13	17	35
31	34	-	45	200	-	246	-	17	-	11	17	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	910	36	24	29.4	1,800
November	1,283	48	37	42.8	2,540
December	1,382	48	40	44.6	2,740
Calendar year 1942	12,402	56	12	34.0	24,590
January	18,291	12,200	39	590	36,280
February	11,379	3,360	62	406	22,570
March	20,147	3,980	224	650	39,960
April	7,298	438	112	243	14,480
May	1,164	102	15	37.5	2,310
June	682	32	17	22.7	1,350
July	452	26	10	14.6	897
August	512	28	11	16.5	1,020
September	677	50	13	22.6	1,340
Water year 1942-43	64,177	12,200	10	176	127,300

Peak discharge.- Jan. 23 (7:30 a.m.) 32,000 sec.-ft.; Feb. 23 (1 a.m.) 8,100 sec.-ft.; Mar. 4 (12 m.) 5,650 sec.-ft.; Apr. 9 (10 a.m.) 462 sec.-ft.

Note.- No gage-height record Dec. 6-9, Jan. 24 to Feb. 21, Feb. 24 to Mar. 3, Mar. 6-8; discharge interpolated or computed on basis of 9 discharge measurements, weather records, and records for Deep Creek and West Fork of Mojave River near Hesperia.

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

Mojave River at Barstow, Calif.

Location.- Water-stage recorder, lat. 34°54'25", long. 117°01'20", in SW¼SE¼ sec. 31, T. 10 N., R. 1 W., on U. S. Highway 91 at Barstow. Altitude of gage, about 2,090 feet.

Records available.- October 1930 to September 1943.

Average discharge.- 13 years, 50.1 second-feet.

Extremes.- Maximum discharge during year, 26,000 second-feet Jan. 23 (gage height, 7.0 feet); no flow for several months.
1930-43: 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 fair except those for periods of no gage-height record, which are poor. Storage and many diversions above station.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				0	105	300	138	57				
2				0	72	280	128	45				
3				0	41	280	128	43				
4				0	33	2,540	113	22				
5				0	19	3,190	109	12				
6				0	13	1,600	118	6				
7				0	9.5	1,000	211	3.0				
8				0	7.5	750	246	2.0				
9				0	9	700	143	1.0				
10				0	9	800	192	.5				
11				0	9	850	180	.2				
12				0	6.5	850	158	.1				
13				0	6	600	174					
14				0	6.5	450	168					
15				0	6.5	300	148	e.02				
16				0	6.5	250	143					
17				0	6.5	250	138					
18				0	6.5	280	138					
19				0	5	400	138					
20				0	4.5	355	123	0				
21				0	7.5	335	123	0				
22				0	476	335	113	0				
23				7,380	2,660	278	109	0				
24				4,160	1,510	269	105	0				
25				1,500	1,180	239	105	0				
26				800	700	225	79	0				
27				530	550	211	76	0				
28				390	400	204	66	0				
29				232	-	180	60	0				
30				158	-	166	63	0				
31				109	-	148	-	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 1942	51	-	0	.140	101
January	15,259	7,380	0	492	30,270
February	7,865.0	2,660	4.5	281	15,600
March	18,617	3,190	148	601	36,930
April	3,933	246	60	131	7,800
May	191.94	57	0	6.19	381
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 1942-43	45,865.94	7,380	0	126	90,980

e Daily discharge less than 0.1 second-foot.

Note.- No gage-height record Jan. 25-28, Feb. 28 to Mar. 3, Mar. 6-19, May 4-19; doubtful gage-height record Feb. 26, 27; discharge computed on basis of 2 discharge measurements, 1 field estimate of flow, and records for Mojave River near Victorville, Deep Creek and West Fork Mojave River near Hesperia.

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

West Fork Mojave River near Hesperia, Calif.

Location.- Water-stage recorder, lat. 34°20'20", long. 117°14'35", in SE¼ sec. 13, T. 3 N., R. 4 W., at highway bridge, half a mile 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 1943.

Average discharge.- 13 years, 36.6 second-feet.

Extremes.- Maximum discharge during year, 23,000 second-feet Jan. 23 (gage height, 16.1 feet), by slope-area method; no flow several months.
1930-43: Maximum discharge, 26,100 second-feet Mar. 2, 1938, by slope-area method; no flow during several months of each year.

Remarks.- Records good, except those for periods of no gage-height record, which are fair. Storage by Lake Gregory above station. Water diverted from Lake Gregory by Crest Forest County Water District for domestic use and fire protection.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			0	0.01	f136	164	a71	32	3.9			
2			0	0	a116	149	a69	30	4.8			
3			0	0	a95	598	66	30	4.8			
4			0	.02	a80	1,920	.62	30	4.8			
5			0	.2	70	992	79	30	3.9			
6			0	.3	62	529	194	30	2.7	e0.03		
7			0	.3	60	361	134	30	1.9			
8			0	.1	90	353	189	30	1.0			
9			0		80	395	228	28	.7			
10			0		58	353	164	26	.2			
11			0		52	285	143	26	.04	0		
12			0		50	227	161	24	.4	0		
13			0		46	190	136	18	1.0	0		
14			0		46	178	122	22	1.0	0		
15			0	e.01	48	164	112	20	.4	0		
16			0		40	155	105	18		0		
17			0		40	140	96	18		0		
18			0		40	155	88	16		0		
19			0		36	138	82	11		0		
20			0		32	127	76	9.5		0		
21			0		700	120	78	7.5	e.03	0		
22			0	2,010	1,820	124	72	6.5		0		
23			0	a6,000	1,110	112	54	5.5		0		
24			.1	a790	606	100	50	4.8		0		
25			.1	a322	285	96	46	3.0		0		
26			.1	f215	221	92	42	2.4	.1	0		
27			.1	407	200	86	42	2.4		0		
28				210	182	86	40	2.1	e.03	0		
29			e.02	152	-	f80	42	3.0		0		
30				164	-	a77	38	3.0		0		
31				186	-	a74	-	3.0		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	.48	.1	0	.015	1.0
Calendar year 1942	2,834.54	108	0	7.77	5,620
January	10,457.06	6,000	0	337	20,740
February	6,394	1,820	32	228	12,680
March	8,640	1,920	74	279	17,140
April	2,881	228	38	96.0	5,710
May	521.7	32	2.1	16.8	1,030
June	32.06	4.8	-	1.07	64
July	.30	-	0	.010	.6
August	0	0	0	0	0
September	0	0	0	0	0
Water year 1942-43	28,926.60	6,000	0	79.2	67,370

Peak discharge.- Jan. 23 (2 a.m.) 23,000 sec.-ft.; Feb. 22 (9 p.m.) 6,710 sec.-ft.; Mar. 4 (8:30 a.m.) 3,240 sec.-ft.

a No gage-height record; discharge computed on basis of recession curves and records for Deep Creek near Hesperia.

e Daily discharge less than 0.1 second-foot.

f Computed on basis of partly estimated gage-height record.

Time basis: Pacific war time. 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., 1¾ 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 1943.

Average discharge.- 19 years (1923-37, 1938-43), 16.0 second-feet.

Extremes.- Maximum discharge during year, 3,000 second-feet Jan. 23, by slope-area method (gage height, 7.03 feet); minimum, 3.2 second-feet Oct. 16, 17.
1923-43: 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 no gage-height record, which are fair. No diversions above station.

Cooperation.- Twelve discharge measurements furnished by Los Angeles County Flood Control District, through H. E. Hedger, chief engineer, and M. E. Salsbury, acting chief engineer during the war emergency.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.1	4.1	3.9	4.1	53	49	67	73	50	26	17	11
2	4.1	4.1	3.9	4.1	46	44	67	73	49	26	17	11
3	4.1	4.1	3.9	4.1	43	183	67	73	49	26	17	11
4	3.9	4.1	3.9	3.9	38	456	67	73	47	24	17	12
5	3.9	4.1	3.9	3.9	34	252	69	73	46	24	17	12
6	4.1	4.1	3.9	3.9	36	204	71	73	44	24	17	12
7	4.1	4.1	3.9	3.6	36	141	64	75	42	23	17	11
8	4.1	4.1	3.9	3.6	46	119	66	75	41	23	16	12
9	3.9	4.1	3.9	3.6	41	128	64	69	41	23	16	12
10	3.9	4.1	3.9	3.6	38	128	60	67	39	23	16	11
11	3.9	4.1	3.9	3.6	34	119	62	67	39	23	16	11
12	3.9	4.1	3.9	3.6	34	111	69	67	41	22	16	11
13	3.6	4.1	3.9	3.6	33	102	64	67	39	22	15	11
14	3.6	4.1	3.9	3.6	33	97	64	67	39	22	15	11
15	3.6	4.1	3.9	3.6	34	89	64	64	38	22	14	11
16	3.6	4.4	3.9	3.6	34	85	64	62	36	22	14	11
17	3.6	4.8	3.9	3.6	34	81	64	60	34	22	14	10
18	3.9	4.4	3.9	3.9	33	81	69	56	33	22	14	10
19	3.9	4.4	3.9	3.9	33	81	73	54	33	20	14	10
20	3.9	4.8	3.9	3.9	36	79	71	54	32	20	14	10
21	3.9	4.4	3.9	4.4	117	77	71	54	32	20	14	9
22	3.9	4.1	3.9	700	164	75	73	54	30	20	14	9
23	3.9	3.9	3.9	1,380	153	69	73	54	30	20	14	9
24	3.9	3.9	3.9	664	122	69	77	56	30	19	13	9
25	4.1	3.9	4.1	f366	86	69	75	58	32	19	13	9
26	3.9	3.9	4.1	a146	72	69	71	56	30	19	12	9
27	3.9	3.9	4.1	a76	60	71	69	54	30	18	12	9
28	4.1	3.9	4.1	f58	53	71	73	54	28	18	11	9
29	4.1	3.9	4.1	43	-	71	77	54	27	18	11	9
30	4.1	3.9	4.1	41	-	71	73	52	26	18	11	9
31	4.1	-	4.1	59	-	69	-	50	-	17	11	-

Month	Second-feet-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	121.6	4.1	3.6	3.92	241
November	124.0	4.8	3.9	4.13	246
December	122.3	4.1	3.9	3.95	243
Calendar year 1942	2,817.2	24	3.6	7.72	5,590
January	3,612.7	1,380	3.6	117	7,170
February	1,576	164	33	56.3	3,130
March	3,410	456	44	110	6,760
April	2,058	77	60	68.6	4,080
May	1,938	75	50	62.5	3,840
June	1,107	50	26	36.9	2,200
July	665	26	17	21.5	1,320
August	449	17	11	14.5	891
September	311	12	9	10.4	617
Water year 1942-43	15,494.6	1,380	3.6	42.5	30,740

Peak discharge.- Jan. 23 (3 a.m.) 3,000 sec.-ft.; Jan. 24 (11 p.m.) 966 sec.-ft.; Feb. 22 (7 p.m.) 210 sec.-ft.; Mar. 3 (12 p.m.) 713 sec.-ft.

a No gage-height record; discharge computed on basis of 2 discharge measurements and discharge recession curve.

f Computed on basis of partly estimated gage-height record.

Time basis: Pacific war time. 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", about a quarter of a 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 1943(1937-38 and 1938-39 incomplete).

Average discharge.- 11 years (1930-37, 1939-43), 22.1 second-feet.

Extremes.- Maximum discharge during year, 5,700 second-feet (estimated) Jan. 23 (gage height, 8.0 feet); no flow Oct. 1 to Nov. 11.
1930-43: Maximum discharge, 17,000 second-feet (estimated) Mar. 2, 1938; no flow part of each year.

Cooperation.- Records furnished by Los Angeles County Flood Control District, through H. E. Hedger, chief engineer, and M. E. Salsbury, acting chief engineer during the war emergency.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	1.0	1.5	157	70	75	41	11	4.2	1.0	0.9
2		0	1.0	1.5	112	60	74	40	11	4.4	1.1	.9
3		0	1.0	1.5	90	208	73	38	10	4.4	1.3	.8
4		0	1.0	1.6	75	1,610	73	37	11	4.4	1.4	.8
5		0	1.0	1.6	66	788	72	35	11	3.8	1.6	.8
6		0	1.0	1.6	70	400	71	34	10	3.4	1.6	.8
7		0	1.1	1.6	70	224	70	33	10	3.2	1.5	.8
8		0	1.2	1.6	90	150	70	32	9.5	3.0	1.4	.8
9		0	1.2	1.5	82	160	69	30	9	2.9	1.3	.9
10		0	1.2	1.6	74	160	68	28	9	2.8	1.1	.9
11		0	1.2	1.5	67	148	67	26	9	2.6	1.0	.9
12		.2	1.2	1.6	62	134	66	25	9	2.6	1.0	.8
13		.4	1.1	1.5	57	122	65	24	9.5	2.4	1.0	.8
14		.4	1.0	1.4	53	112	64	22	9.5	2.4	1.0	.8
15		.5	1.0	1.3	50	102	63	20	8.5	2.4	1.0	.8
16		.5	1.0	1.3	47	93	62	19	7.5	2.4	1.0	.8
17		.6	1.0	1.3	45	85	61	18	7	2.3	.9	.8
18		.6	1.1	1.4	43	85	60	17	6.5	2.1	.9	.8
19		.6	1.2	1.3	42	85	58	16	6	2.0	.8	.8
20		.7	1.2	1.2	41	84	56	15	6	2.0	.8	.9
21		.8	1.2	1.3	329	83	55	14	6	1.9	.8	.9
22		.8	1.2	1,400	655	82	53	13	5.5	1.9	.8	.8
23		.8	1.2	2,730	590	82	51	12	5.5	1.9	.9	.9
24		.9	1.4	536	340	81	50	11	5	1.8	.8	1.0
25		1.0	1.9	240	220	80	49	11	5	1.8	.8	1.0
26		1.0	2.3	153	150	79	48	11	4.8	1.5	.8	1.0
27		1.1	2.1	110	110	79	46	11	4.6	1.4	.8	1.0
28		1.1	1.8	86	85	78	45	11	4.4	1.4	.8	1.0
29		1.1	1.7	72	-	77	44	11	4.2	1.3	.8	1.0
30		1.0	1.6	62	-	76	42	10	4.2	1.2	.8	1.0
31		-	1.6	126	-	76	-	11	-	1.1	.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	0	0	0	0	0
November	14.1	1.1	0	.47	28
December	39.7	2.3	1.0	1.28	79
Calendar year 1942	2,014.7	55	0	5.52	4,000
January	5,545.8	2,730	1.2	179	11,000
February	3,972	655	41	138	7,680
March	5,753	1,610	60	186	11,410
April	1,820	75	42	60.7	3,610
May	676	41	10	21.8	1,340
June	229.2	11	4.2	7.64	455
July	76.9	4.4	1.1	2.48	153
August	31.6	1.6	.8	1.02	63
September	26.2	1.0	.8	.87	52
Water year 1942-43	18,084.5	2,730	0	49.5	35,870

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

Mono Lake near Mono Lake, Calif.

Location.- Staff gage, lat. 38°00', long. 119°08', in NE¼ 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 1943; those prior to September 1934 are published in Water-Supply Paper 765.

Extremes.- 1912-43: 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 1942 to September 1943

Oct. 2	26.8	Apr. 1	27.4
5	26.8	12	27.4
15	26.8	20	27.4
19	26.7	29	27.4
30	26.6		
		May 7	27.5
Nov. 2	26.6	14	27.5
10	26.5	19	27.5
20	26.4	24	27.5
25	26.4		
		June 4	27.5
Dec. 3	26.5	7	27.6
10	26.4	14	27.6
15	26.4	24	27.6
25	26.5		
29	26.5	July 3	27.6
		6	27.6
Jan. 4	26.5	12	27.7
11	26.5	19	27.7
18	26.5	26	27.8
26	26.8		
		Aug. 2	27.8
Feb. 3	27.0	9	27.8
10	27.1	16	27.8
15	27.1	23	27.7
24	27.2		
		Sept. 2	27.6
Mar. 4	27.2	7	27.6
8	27.2	13	27.5
16	27.2	20	27.4
23	27.3	27	27.4

WALKER LAKE BASIN

Walker Lake near Hawthorne, Nev.

Location.- Bench mark at United States naval depot, lat. 38°35', long. 118°42', in NE¼NE¼ sec. 2, T. 8 N., R. 29 E., 6 miles northwest of Hawthorne. Bench mark is 4,053.41 feet above mean sea level, adjustment of 1912.

Records available.- August 1928 to September 1943. Occasional readings prior to August 1928.

Extremes.- 1928-43: Maximum elevation observed, 4,051.8 feet Mar. 13, 1928 (Indian Service); minimum observed, 4,017.5 feet Jan. 11, 1943.
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.

Elevations, in feet, above mean sea level, water year October 1942 to September 1943

Oct. 6	4,018.3	Apr. 3	4,018.1
Nov. 9	4,017.9	May 1	4,018.3
Dec. 7	4,017.6	June 7	4,018.5
Jan. 11	4,017.5	July 10	4,018.7
Feb. 10	4,017.8	Aug. 4	4,018.4
Mar. 11	4,017.9	Sept. 6	4,017.8

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

Bridgeport Reservoir near Bridgeport, Calif.

Location.- Float gage or reference point, lat. 38°19'30", long. 119°12'50", at Bridgeport Dam on East Walker River, in SE¼ sec. 34, T. 6 N., R. 25 E., 4½ miles north of Bridgeport. Datum of gage is at mean sea level.

Drainage area.- 362 square miles.

Records available.- October 1931 to September 1943 in reports of Geological Survey. March 1926 to September 1943 in files of Walker River Irrigation District.

Extremes.- Maximum contents during year, 43,670 acre-feet Jan. 22 (elevation, 6,460.40 feet); minimum, 24,880 acre-feet Sept. 29, 30 (elevation, 6,453.10 feet).
1926-43: 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 reading made about 8 a.m. daily.

Cooperation.- Elevations and capacity table furnished by Walker River Irrigation District.

Contents, in acre-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28,820	28,470	33,480	38,710	42,020	42,460	42,920	42,920	43,070	41,140	41,290	31,450
2	28,820	28,580	33,730	38,980	42,170	42,460	42,760	43,070	43,070	41,440	41,140	31,330
3	28,700	28,820	34,110	39,120	42,320	42,460	42,610	43,070	43,070	41,730	40,710	31,090
4	28,580	29,040	34,380	29,260	42,460	42,460	42,610	43,220	43,070	41,880	40,420	30,850
5	28,580	28,930	34,640	39,400	42,760	42,610	42,610	43,070	42,920	42,170	40,120	30,610
6	28,470	28,930	34,770	39,540	42,760	42,610	42,760	42,920	42,760	42,320	39,680	30,240
7	28,470	28,930	34,770	39,680	43,070	42,760	42,920	43,070	42,460	42,610	39,260	29,880
8	28,470	29,160	34,900	39,680	43,070	42,760	43,220	43,070	42,320	42,920	38,710	29,520
9	28,470	29,400	34,900	39,830	43,070	42,760	43,220	43,070	42,170	43,070	38,290	29,280
10	28,360	29,520	35,040	39,830	42,760	42,760	43,070	43,070	42,170	43,220	37,590	29,040
11	28,360	29,640	35,170	39,980	42,760	42,760	43,070	43,070	42,170	43,220	37,460	28,580
12	28,360	29,760	35,300	40,120	42,460	42,920	43,070	43,070	42,320	43,220	37,040	28,360
13	28,360	29,880	35,440	40,120	42,460	42,920	42,920	42,920	42,320	43,220	36,630	28,010
14	28,360	30,000	35,440	40,270	42,460	42,760	42,920	42,920	42,320	43,070	36,360	27,900
15	28,360	30,120	35,570	40,420	42,460	43,070	42,920	42,760	42,170	43,070	36,230	27,440
16	28,360	30,240	35,830	40,560	42,460	42,760	42,920	42,460	42,020	43,070	36,100	27,200
17	-	30,360	35,960	40,710	42,610	42,760	43,220	42,320	42,020	43,070	35,830	26,980
18	28,470	30,610	36,100	40,710	42,760	42,760	43,070	42,170	41,880	42,920	35,570	26,750
19	28,580	30,850	36,230	40,860	42,760	42,920	43,070	41,880	42,020	42,920	35,170	26,530
20	28,580	30,850	36,360	41,000	42,760	42,920	43,220	41,880	42,320	42,760	34,900	26,420
21	28,700	30,970	36,500	41,290	42,760	42,760	43,220	41,580	42,320	42,760	34,610	26,310
22	28,700	31,210	36,500	43,670	42,920	42,920	43,220	41,730	42,320	42,760	34,110	26,200
23	28,700	31,330	36,630	43,070	42,920	42,920	43,220	41,290	42,320	42,610	33,750	25,980
24	28,820	31,570	36,900	42,760	42,760	42,920	43,220	41,290	42,170	42,440	33,350	25,540
25	28,700	31,820	37,180	42,170	42,760	42,920	43,070	41,580	42,020	42,320	32,960	25,320
26	28,820	32,080	-	41,580	42,610	42,760	43,070	41,730	41,730	42,170	32,590	25,210
27	28,700	32,330	37,590	41,580	42,610	42,760	42,920	42,020	41,580	42,170	32,330	25,100
28	28,580	32,720	37,730	41,730	42,460	42,920	42,760	42,460	41,290	42,020	32,080	24,990
29	28,470	32,970	37,870	41,730	-	42,920	42,760	43,070	41,290	42,020	31,820	24,880
30	28,470	33,220	38,150	41,730	-	43,220	42,920	43,070	41,140	42,020	31,700	24,880
31	28,470	-	38,430	42,020	-	43,070	-	43,070	-	41,880	31,570	-

Monthly elevation and contents, water year October 1942 to September 1943

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Oct. 1	6,454.85	28,820	-360
Nov. 1	6,454.70	28,470	+5,010
Dec. 1	6,456.75	33,480	+5,230
Calendar year 1942	-	-	-2,000
Jan. 1	6,458.70	38,710	+3,310
Feb. 1	6,459.85	42,020	+440
Mar. 1	6,460.00	42,460	+460
Apr. 1	6,460.15	42,920	0
May 1	6,460.15	42,920	+150
June 1	6,460.20	43,070	-1,930
July 1	6,459.55	41,140	+150
Aug. 1	6,459.60	41,290	-9,840
Sept.1	6,455.95	31,450	-6,350
Oct. 1	6,453.20	25,100	-
Water year 1942-43	-	-	-3,720

Time basis: Pacific war time. 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 SW¼NE¼ sec. 34, T. 6 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 1943. July 1911 to September 1914 at site 1¼ miles upstream (gage heights only).

Average discharge.- 20 years (1922-24, 1925-43), 128 second-feet.

Extremes (regulated).- Maximum discharge during year, 1,240 second-feet Jan. 22 (gage height, 4.5 feet); minimum daily, 4 second-feet many days November to January.
1921-43: Maximum discharge, that of Jan. 22, 1943; minimum observed, 2 second-feet many days when reservoir gates were closed.

Remarks.- Records good. Diversions for irrigation of meadow and pasture lands near Bridgeport. Flow regulated by Bridgeport Reservoir (see preceding page).

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	91	36	4	5	14	97	205	196	638	293	357	189
2	84	26	4	5	28	76	95	214	656	274	354	186
3	67	27	4	5	51	66	79	240	645	250	353	186
4	60	23	4	5	84	69	96	274	656	253	319	186
5	56	20	4	5	104	72	115	274	603	255	319	205
6	56	20	4	5	135	76	207	274	554	263	336	212
7	56	14	4	5	162	89	326	285	510	274	351	220
8	56	9	4	5	162	102	240	288	435	293	351	222
9	52	9	5	5	158	110	200	296	429	330	351	222
10	48	9	5	5	156	184	191	288	435	366	351	222
11	48	9	5	4	156	207	184	282	445	397	348	220
12	48	9	5	4	139	193	177	277	445	360	313	220
13	44	9	5	4	121	177	176	296	441	363	274	220
14	37	9	5	4	112	147	171	296	432	357	277	220
15	37	9	5	4	104	113	191	277	429	425	277	220
16	37	9	5	4	106	119	220	269	429	363	277	182
17	37	9	5	4	106	123	212	263	429	348	277	166
18	37	9	5	4	129	133	207	261	435	330	277	166
19	37	28	5	4	160	137	207	258	448	305	296	166
20	37	66	5	4	173	137	220	272	454	293	307	166
21	37	112	5	461	198	121	212	285	467	291	305	164
22	52	106	6	1,160	212	112	212	288	457	277	305	164
23	79	4	6	896	212	116	196	291	438	269	305	164
24	91	4	6	628	210	113	191	274	409	245	285	164
25	91	4	6	524	193	113	180	269	366	250	274	164
26	91	4	6	380	184	113	162	269	333	248	250	137
27	91	4	6	128	158	116	135	296	328	274	240	125
28	91	4	5	27	121	129	154	330	326	293	207	125
29	91	4	5	9	-	227	212	474	328	291	191	125
30	91	4	5	6	-	258	214	624	313	310	191	104
31	72	-	5	6	-	227	-	638	-	342	191	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,902	91	37	61.4	3,770
November	609	112	4	20.3	1,210
December	153	6	4	4.9	303
Calendar year 1942	73,123	620	4	200	145,000
January	4,315	1,160	4	139	8,560
February	3,850	212	14	138	7,640
March	4,070	288	66	131	8,070
April	5,586	325	79	186	11,080
May	9,418	638	196	304	18,680
June	13,712	656	313	457	27,200
July	9,482	425	245	306	18,810
August	9,089	367	191	293	18,030
September	5,432	222	104	181	10,770
Water year 1942-43	67,618	1,160	4	185	134,100

Note.- Discharge Sept. 2-30 computed on basis of once-daily staff-gage readings.
Time basis: Pacific war time. 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 1943. October 1902 to July 1908 at site 9½ miles downstream; March 1909 to August 1910, June 1915 to March 1938 at site 10 miles downstream, published as West Walker River near Coleville, Calif.
Extremes.- Maximum discharge during year, 2,110 second-feet June 1 (gage height, 5.15 feet); minimum recorded, 18 second-feet Nov. 4 but may have been less during periods of ice effect.
1938-43: 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.

Rating table, water year 1942-43, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Jan. 21 to May 25)

1.0	24	2.0	177	4.0	1,100
1.2	42	2.3	255	4.5	1,490
1.4	67	2.6	353	5.0	1,960
1.6	97	3.0	520	5.2	2,160
1.8	134	3.5	780		

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	49	42	63	67	b82	87	264	894	2,010	792	295	81
2	48	42	64	59	b82	87	305	965	1,370	708	287	95
3	48	43	67	b55	b82	91	332	852	946	758	233	99
4	47	39	59	b58	b80	97	361	810	758	810	206	101
5	46	44	50	b60	b80	111	376	828	639	804	194	92
6	46	44	58	b58	b80	115	372	958	639	876	184	91
7	46	46	66	b62	b75	113	346	1,000	763	810	187	89
8	44	47	60	b55	b70	134	357	882	932	735	177	87
9	46	46	63	b54	b75	191	308	735	1,050	735	166	86
10	46	42	59	b54	b74	197	276	792	1,110	675	153	84
11	50	42	*59	b52	b74	159	247	816	1,110	660	151	80
12	55	43	58	b62	b75	157	235	719	864	654	144	78
13	50	43	55	b52	b76	157	258	675	763	634	144	77
14	50	46	55	b55	78	157	368	523	758	634	147	74
15	52	49	52	b55	80	142	412	563	828	644	144	71
16	52	40	52	53	81	136	412	506	959	573	138	67
17	48	104	52	45	81	136	466	471	1,130	525	132	64
18	48	214	49	b40	84	134	520	428	1,280	502	117	67
19	47	115	50	b45	87	126	563	458	1,310	484	110	66
20	46	83	48	64	89	124	554	644	1,160	449	104	63
21	46	83	53	658	95	126	593	702	1,110	424	99	62
22	46	83	58	222	*95	126	681	834	846	432	94	62
23	46	77	101	153	94	126	758	1,090	708	403	92	59
24	46	77	101	123	94	136	780	1,360	639	387	92	59
25	43	73	74	117	91	157	719	1,520	603	383	92	60
26	43	67	b65	111	91	187	563	1,570	608	380	91	63
27	42	71	b70	102	91	214	558	1,670	623	353	89	62
28	41	67	78	99	87	255	926	1,740	692	339	89	57
29	40	65	74	97	-	288	639	1,530	763	328	86	53
30	43	66	75	94	-	249	593	1,280	774	325	86	52
31	45	-	71	94	-	244	-	1,530	-	315	81	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,442	55	40	46.5	2,860
November	1,944	214	39	64.8	3,860
December	1,957	101	48	63.1	3,880
Calendar year 1942	119,254	1,630	39	327	236,500
January	2,956	658	40	95.4	5,860
February	2,323	95	70	83.0	4,610
March	4,749	288	87	153	9,420
April	14,142	926	236	471	28,050
May	29,145	1,740	428	940	57,810
June	27,745	2,010	603	925	55,030
July	17,525	876	315	565	34,760
August	4,384	295	81	141	8,700
September	2,801	101	52	73.4	4,570
Water year 1942-43	110,513	2,010	39	303	219,200

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Time basis: Pacific war time. 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 1943.

Extremes.- Maximum contents observed during year, 60,080 acre-feet June 30, July 1 (elevation, 5,005.28 feet); minimum observed, 26,430 acre-feet Oct. 31 (elevation, 4,988.54 feet).

1931-43: 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 feet).

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 earthfill, 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	-	-	39,970	-	-	-	-	-	60,080	57,340	38,230
2	30,430	-	-	-	-	-	59,530	-	58,980	60,040	56,640	37,750
3	-	-	-	-	-	-	-	-	58,750	60,040	56,180	37,260
4	-	-	34,140	-	-	-	-	-	58,980	60,010	-	36,690
5	-	-	-	-	51,720	58,200	-	-	-	60,010	54,690	36,290
6	-	26,760	-	-	-	-	-	-	-	59,940	54,130	35,750
7	-	-	-	-	-	-	-	59,320	-	59,920	53,460	35,110
8	-	-	-	41,470	-	-	-	-	-	-	52,690	34,640
9	29,670	-	-	-	-	-	59,480	-	-	60,010	52,030	34,160
10	-	-	-	-	-	-	-	-	-	60,040	51,700	33,630
11	-	-	35,430	-	-	59,440	-	-	59,720	60,060	51,040	33,160
12	-	-	-	-	53,510	-	-	-	59,670	-	50,500	32,660
13	-	27,120	-	-	-	-	-	-	-	60,060	50,220	32,190
14	-	-	-	-	-	-	-	59,510	-	60,060	49,680	31,730
15	-	-	-	42,690	-	-	-	-	-	60,060	49,140	31,400
16	29,090	-	-	-	-	-	59,440	-	-	60,010	48,710	31,080
17	-	-	-	-	-	-	-	-	-	60,010	48,110	30,730
18	-	-	36,750	-	-	-	-	-	59,720	60,010	47,470	30,380
19	-	-	-	-	55,130	59,260	-	-	59,900	60,010	46,350	30,040
20	-	29,850	-	-	-	-	-	-	59,850	60,010	45,410	29,670
21	-	-	-	-	-	-	-	58,300	-	60,040	44,660	29,320
22	-	-	-	45,070	-	-	-	58,320	-	60,040	43,830	29,010
23	28,530	-	-	-	-	-	59,530	58,480	-	60,040	43,020	28,730
24	-	-	-	-	-	-	-	-	-	60,040	43,170	28,380
25	-	-	38,430	-	-	59,440	-	-	59,690	60,010	41,740	28,060
26	-	-	-	-	57,050	-	-	-	59,880	60,010	41,150	-
27	-	32,070	-	-	-	-	59,440	-	60,010	59,990	40,510	27,060
28	-	-	-	-	57,750	-	-	59,900	59,900	59,940	40,120	26,850
29	-	-	-	49,530	-	-	-	-	60,010	59,780	-	26,710
30	28,200	32,960	-	-	-	-	59,320	-	60,080	58,980	39,110	26,610
31	26,430	-	39,870	49,850	-	59,530	-	59,670	-	58,020	38,660	-

Monthly elevation and contents, water year October 1942 to September 1943

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30	4,991.02	30,760	-
Oct. 31	4,985.54	26,430	-4,330
Nov. 30	4,992.25	32,960	+6,530
Dec. 31	4,995.90	39,870	+6,910
Calendar year 1942	-	-	-6,670
Jan. 31	5,000.70	49,850	+9,980
Feb. 28	5,004.26	57,750	+7,900
Mar. 31	5,005.04	59,530	+1,780
Apr. 30	5,004.95	59,320	-210
May 31	5,005.10	59,670	+350
June 30	5,005.28	60,080	+410
July 31	5,004.38	58,020	-2,060
Aug. 31	4,995.29	38,660	-19,360
Sept. 30	4,988.64	26,610	-12,050
Water year 1942-43	-	-	-4,150

Time basis: Pacific war time. 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 1943. 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 1908 to December 1910 at site 2 miles upstream.
Average discharge.- 12 years (1911-14, 1925-28, 1935-37, 1939-43), 354 second-feet.
Extremes.- Maximum discharge during year, 6,800 second-feet Jan. 21 (gage height, 6.86 feet); minimum, 60 second-feet Oct. 30, Nov. 5.
1890-93, 1900-1906, 1908-10, 1917, 1924-29, 1935-37, 1939-43. Maximum discharge, 12,000 second-feet Dec. 11, 1937 (gage 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. Station is above all diversions in Carson Valley. Diversions above station for irrigation. Flow regulated by several small reservoirs (total capacity, about 5,000 acre-feet).

Rating table, water year 1942-43 (gage height, in feet, and discharge, in second-feet)

0.9	64	1.8	301	3.2	1,110	5.5	3,980
1.0	82	2.0	380	3.6	1,460	6.0	4,920
1.2	124	2.3	520	4.0	1,870	6.5	5,980
1.4	174	2.6	685	4.5	2,470	7.0	7,120
1.6	233	2.9	880	5.0	3,170		

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	98	78	151	185	196	227	560	1,890	2,540	655	191	88
2	94	78	158	180	211	227	679	2,180	1,940	625	182	86
3	96	82	196	161	199	227	745	1,710	1,370	614	171	82
4	98	86	161	156	202	230	771	1,540	1,140	631	164	78
5	98	77	136	166	214	250	810	1,500	982	614	177	86
6	98	80	131	153	208	266	764	1,590	887	637	182	100
7	96	82	117	138	236	256	709	1,640	922	608	174	106
8	94	86	146	146	214	316	784	1,460	1,040	560	169	104
9	80	86	143	136	191	565	649	1,230	1,150	545	164	102
10	77	84	136	138	191	1,010	581	1,320	1,170	515	156	109
11	78	78	131	138	199	625	525	1,360	1,240	515	153	113
12	94	84	129	134	202	496	510	1,230	1,060	496	148	102
13	88	84	136	151	205	471	560	1,130	894	462	138	104
14	86	86	134	141	214	466	784	1,020	873	448	136	102
15	86	113	129	138	230	402	859	936	887	433	141	102
16	86	92	122	136	243	364	966	831	958	415	141	98
17	84	180	124	117	246	360	1,080	810	1,040	384	143	98
18	82	805	122	96	253	355	1,130	721	1,150	368	141	102
19	82	420	120	117	253	328	1,180	771	1,180	339	136	102
20	80	221	124	196	273	312	1,140	784	1,080	324	129	100
21	80	180	111	3,190	280	320	1,190	966	982	331	120	98
22	78	180	126	1,040	294	509	1,440	1,130	831	316	115	96
23	78	174	230	870	270	294	1,670	1,430	727	301	106	94
24	78	182	476	438	256	305	1,730	1,700	667	284	102	94
25	78	180	266	343	256	351	1,540	1,880	625	276	109	94
26	78	166	188	301	240	420	1,170	1,940	608	263	122	80
27	78	166	221	273	230	496	1,140	2,000	598	246	115	71
28	78	166	230	246	227	598	1,990	2,150	620	236	122	71
29	77	156	236	243	-	745	1,410	1,880	649	221	120	68
30	77	156	205	243	-	598	1,260	1,560	643	211	120	66
31	78	-	196	224	-	520	-	1,630	-	202	109	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,635	98	77	85.0	5,230
November	4,688	805	77	156	9,300
December	5,231	476	111	169	10,380
Calendar year 1942	175,002	2,550	77	479	347,100
January	10,308	3,190	96	333	20,450
February	6,433	294	191	230	12,760
March	12,709	1,010	227	410	25,210
April	30,316	1,990	510	1,011	60,130
May	43,899	2,180	721	1,416	87,070
June	30,453	2,540	608	1,015	60,400
July	13,075	655	202	422	25,930
August	4,396	191	102	142	8,720
September	2,796	113	66	93.2	5,550
Water year 1942-43	166,939	3,190	66	457	331,100

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

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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, 2¼ miles upstream from bridge on road to Mexican Dam, and 5 miles southeast of Carson City.

Records available.- May 1939 to September 1943.

Extremes.- Maximum discharge during year, 8,500 second-feet Jan. 22 (gage height, 8.40 feet), by slope-area method; minimum, 26 second-feet Aug. 23.
1939-43: Maximum discharge, that of Jan. 22, 1943; minimum daily, 4 second-feet (estimated) Aug. 17, 1939.

Remarks.- Records good except those for period of ice effect, 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	101	297	355	540	429	803	1,730	1,940	376	54	34
2	50	104	286	339	495	411	567	2,100	2,560	457	57	35
3	50	112	308	312	457	411	1,020	2,440	2,410	485	50	32
4	52	129	335	275	452	429	1,090	2,100	1,660	495	45	33
5	62	134	290	301	457	429	1,130	1,890	1,380	510	44	33
6	65	127	261	294	443	443	1,170	1,770	1,210	515	63	29
7	63	127	244	275	452	443	1,140	1,820	1,120	476	53	37
8	55	129	235	265	485	438	1,090	1,810	1,060	411	46	44
9	54	131	272	265	438	601	1,090	1,620	1,070	402	58	40
10	59	141	279	258	406	1,830	942	1,510	1,090	359	58	34
11	73	143	261	258	411	2,690	838	1,520	1,120	355	59	34
12	73	146	251	255	406	1,320	762	1,460	1,140	347	50	35
13	75	148	251	251	402	942	768	1,320	1,010	339	45	31
14	77	148	258	251	402	845	935	1,200	928	332	49	34
15	82	164	251	255	411	775	1,090	1,100	838	282	42	39
16	86	200	244	255	424	690	1,180	958	796	244	33	40
17	95	238	241	235	429	659	1,330	905	817	192	30	43
18	97	1,040	244	b200	434	735	1,450	838	890	156	33	36
19	95	1,710	235	b180	447	762	1,520	735	988	141	33	34
20	97	782	231	308	457	672	1,520	755	1,020	118	29	37
21	97	447	235	1,360	471	618	1,490	789	950	99	28	41
22	89	376	228	5,590	462	630	1,600	882	838	110	28	37
23	82	355	320	6,200	457	589	1,840	1,090	755	129	27	40
24	86	335	782	3,060	438	557	2,050	1,440	659	180	41	39
25	87	339	775	1,210	452	562	2,120	1,740	606	148	47	44
26	84	332	462	852	485	612	1,920	1,900	567	118	40	46
27	87	316	385	735	476	703	1,470	1,960	535	114	36	43
28	87	339	406	630	471	789	1,470	2,070	520	103	38	41
29	89	328	471	578	-	950	2,160	2,150	480	84	36	43
30	95	305	415	612	-	1,020	1,920	1,980	434	79	33	42
31	101	-	376	612	-	860	-	1,790	-	69	31	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	2,394	101	50	77.2	4,750
November	9,426	1,710	101	314	18,700
December	10,129	782	228	327	20,090
Calendar year 1942	214,421	4,650	27	587	425,300
January	26,826	6,200	180	865	53,210
February	12,560	540	402	449	24,910
March	23,844	2,690	411	769	47,290
April	39,475	2,160	567	1,316	78,300
May	47,372	2,440	735	1,528	93,960
June	31,391	2,560	434	1,046	62,260
July	8,225	515	69	265	15,310
August	1,316	63	27	42.5	2,610
September	1,130	46	29	37.7	2,240
Water year 1942-43	214,088	6,200	27	587	424,600

b Stage-discharge relation affected by ice.
Time basis: Pacific war time. 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 SE¼ sec. 32, T. 17 N., R. 24 E., 2 miles west of Fort Churchill and 6 miles east of Clifton.

Drainage area.- 1,450 square miles.

Records available.- January 1934 to September 1943. April 1911 to December 1933 at site 8 miles upstream.

Average discharge.- 32 years (1911-43), 370 second-feet.

Extremes.- Maximum discharge during year, 6,300 second-feet Jan. 24; no flow Oct. 1-14, Aug. 1 to Sept. 30.
1911-43: Maximum discharge, that of Jan. 24, 1943; no flow during some periods in nearly every year since 1923.

Remarks.- Records good. 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	97	335	405	694	520	894	1,650	1,640	445		
2	0	100	330	385	618	500	862	1,720	1,910	480		
3	0	105	320	365	574	485	926	2,110	2,290	545		
4	0	108	340	335	545	490	1,020	2,110	1,990	515		
5	0	110	360	310	530	495	1,060	1,860	1,430	495		
6	0	113	325	320	535	495	1,110	1,730	1,260	475		
7	0	115	300	320	530	505	1,150	1,660	1,110	475		
8	0	118	295	305	545	500	1,120	1,720	1,020	455		
9	0	120	265	295	555	530	1,050	1,640	975	420		
10	0	125	295	290	515	1,160	1,020	1,430	975	400		
11	0	134	300	285	490	1,910	942	1,390	983	380		
12	0	137	285	285	495	2,110	800	1,380	1,060	365		
13	0	146	275	285	490	1,210	735	1,260	1,020	345		
14	0	149	270	270	485	975	756	1,230	918	330		
15	55	170	270	270	486	878	934	1,050	870	320		
16	57	202	265	275	490	800	1,020	942	800	290		
17	58	238	260	275	500	735	1,110	854	749	255		
18	65	330	255	231	505	728	1,230	815	771	220		
19	73	950	255	260	510	778	1,320	735	830	170		
20	74	1,300	248	238	515	778	1,380	680	862	131		
21	76	830	245	653	530	708	1,400	673	870	120		
22	76	480	245	1,830	535	666	1,390	708	815	97		
23	76	430	248	3,920	530	666	1,560	793	756	89		
24	75	405	345	4,200	520	625	1,760	1,060	680	61		
25	76	385	756	2,320	510	593	1,930	1,380	605	81		
26	78	380	673	1,100	520	605	1,950	1,640	560	84		
27	90	370	470	958	555	646	1,700	1,740	511	79		
28	92	355	425	862	545	708	1,340	1,810	510	73		
29	92	370	465	756	-	793	1,590	1,940	505	70		
30	94	355	475	722	-	910	1,990	1,970	505	68		
31	94	-	440	728	-	1,010	-	1,820	-	60		

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,303	94	0	42.0	2,580
November	9,227	1,300	97	308	18,300
December	10,635	756	245	343	21,090
Calendar year 1942	202,479	3,730	0	555	401,600
January	24,053	4,200	231	776	47,710
February	14,851	694	485	530	29,460
March	24,512	2,110	485	791	48,620
April	37,049	1,990	735	1,235	73,490
May	43,500	2,110	673	1,403	86,280
June	29,760	2,290	505	993	59,070
July	8,413	545	60	271	16,690
August	0	0	0	0	0
September	0	0	0	0	0
Water year 1942-43	203,323	4,200	0	557	403,300

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

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 5¾ miles downstream from Willow Creek.
Drainage area.- 68 square miles.
Records available.- October 1900 to May 1907, 1910-11 (fragmentary), and October 1938 to September 1943. April 1890 to March 1892, June 1907 to September 1920, at site 0.7 mile downstream and below three diversions for irrigation.
Average discharge.- 20 years (1901-3, 1905-15, 1916-20, 1939-43), 137 second-feet.
Extremes.- Maximum discharge during year, 1,290 second-feet Apr. 28 (gage height, 5.93 feet); minimum discharge recorded, 14 second-feet Nov. 5, but may have been less during period of ice effect.
1900-20, 1938-43: Maximum discharge, 1,570 second-feet May 9, 10, 1906 (gage height, 6.8 feet, datum then in use); minimum (1900-1907, 1938-43) 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 except those for periods of ice effect or no gage-height record, which are fair. One small diversion above station for irrigation. Flow slightly regulated by several small reservoirs of unknown capacities.

Rating table, water year 1942-43, except period of ice effect
(gage height, in feet, and discharge, in second-feet)

0.8	15	1.6	59	2.5	157	4.0	465
1.0	22	1.8	77	2.8	201	4.5	621
1.2	31	2.0	97	3.2	271	5.0	810
1.4	44	2.2	119	3.6	359	5.5	1,050

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	24	56	60	66	57	165	660	618	138	46	61
2	24	24	86	57	66	57	215	660	407	132	45	61
3	24	26	76	44	64	58	238	536	306	129	50	57
4	24	25	57	50	64	58	265	506	275	125	61	53
5	24	24	45	51	64	60	273	485	241	120	80	48
6	24	24	39	45	63	60	227	491	222	123	80	29
7	24	26	38	40	60	60	245	480	226	119	76	26
8	24	28	45	45	56	65	273	426	241	110	69	28
9	31	28	45	40	59	104	204	379	256	106	39	28
10	36	26	41	41	57	119	176	392	250	100	36	25
11	31	25	40	40	57	104	165	387	263	99	36	24
12	27	25	38	39	57	95	204	354	238	96	39	24
13	25	25	43	38	57	98	299	324	203	92	45	24
14	25	28	43	40	59	94	374	295	192	89	43	25
15	25	32	39	39	60	87	379	265	190	88	33	36
16	25	27	38	37	69	82	421	238	200	84	30	49
17	24	40	38	30	62	81	457	224	212	81	39	47
18	24	170	38	b25	62	76	451	211	232	78	47	45
19	24	82	36	b26	62	72	468	219	234	70	52	30
20	24	58	37	34	64	72	432	219	211	75	57	23
21	24	53	31	158	65	72	506	250	196	87	53	23
22	24	53	42	143	65	70	568	273	171	78	45	22
23	24	53	99	93	64	69	614	314	153	71	40	22
24	24	64	132	89	62	74	611	359	143	67	43	22
25	24	57	77	88	61	90	603	406	135	65	43	23
26	24	48	62	93	59	110	410	434	131	63	39	23
27	24	72	73	89	57	138	410	448	126	60	36	22
28	24	62	85	83	57	172	910	465	131	57	34	21
29	24	a60	72	76	-	192	506	402	134	55	28	30
30	24	a58	65	71	-	149	468	352	134	53	42	30
31	24	-	64	68	-	136	-	424	-	53	56	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	777	36	24	25.1	1,540
November	1,347	170	24	44.9	2,670
December	1,720	132	31	55.5	3,410
Calendar year 1942	52,891	990	24	145	104,900
January	1,876	158	25	60.5	3,720
February	1,711	66	56	61.1	3,390
March	2,831	192	57	91.3	5,620
April	11,437	910	165	381	22,680
May	11,877	660	211	383	23,560
June	6,671	618	126	222	13,230
July	2,763	138	53	89.1	5,480
August	1,462	80	28	47.2	2,900
September	981	61	21	32.7	1,950
Water year 1942-43	45,453	910	21	126	90,150

a No gage-height record; discharge interpolated.
b Stage-discharge relation affected by ice.
Time basis: Pacific war time. 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 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 1943.
Average discharge.- 35 years (1903-6, 1911-43), 351 second-feet.
Extremes.- Maximum discharge during year, 6,250 second-feet Feb. 26 (gage height, 9.92 feet); minimum daily, 19 second-feet Sept. 19.
1902-6, 1911-43: Maximum discharge, that of Feb. 26, 1943; minimum, 2 second-feet Aug. 25-28, 1931.
Remarks.- Records good. Diversion above station for irrigation of about 150,000 acres of hay and pasture lands.

Rating tables, water year 1942-43 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Jan. 29 to Feb. 25)

Oct. 1 to Feb. 25						Feb. 26 to Sept. 30					
2.0	23	3.6	434	6.5	2,500	1.7	12	3.3	402	6.0	2,230
2.2	44	4.0	633	7.0	2,950	1.9	29	3.6	534	6.5	2,690
2.4	74	4.5	933	7.5	3,400	2.1	55	4.0	734	7.0	3,190
2.7	134	5.0	1,280	8.0	3,800	2.4	110	4.5	1,040	8.0	4,200
3.0	212	5.5	1,650			2.7	187	5.0	1,400	9.0	5,250
3.3	313	6.0	2,050			3.0	286	5.5	1,800	10.0	6,340

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	47	284	359	639	2,770	2,230	1,960	1,110	844	136	25
2	30	38	270	379	480	2,420	2,390	1,930	1,320	808	124	24
3	30	42	243	355	434	2,280	2,280	1,960	1,700	802	112	23
4	30	44	212	313	404	2,180	2,160	2,000	1,710	751	102	22
5	30	47	176	295	400	2,100	2,240	2,000	1,780	718	89	21
6	31	51	161	284	395	1,870	2,410	1,940	2,200	702	84	21
7	32	51	158	270	430	1,660	2,390	1,940	2,380	692	80	21
8	33	54	153	234	490	1,710	2,420	2,000	2,230	656	76	21
9	37	57	163	215	400	2,190	2,710	2,020	1,940	515	73	21
10	33	57	181	209	299	2,000	2,840	1,980	1,740	572	68	20
11	34	60	179	209	295	2,050	3,040	1,870	1,660	539	66	19
12	40	60	176	206	347	3,160	3,360	1,770	1,590	497	66	19
13	43	60	176	212	351	2,870	3,340	1,640	1,580	457	63	19
14	42	60	179	206	379	2,320	3,090	1,500	1,580	427	60	20
15	43	76	181	212	400	2,180	2,810	1,380	1,560	394	58	20
16	43	79	184	221	434	2,280	2,530	1,310	1,540	362	54	20
17	42	83	187	158	548	2,150	2,380	1,240	1,620	335	52	20
18	42	94	187	123	718	1,940	2,320	1,160	1,740	312	49	20
19	42	119	176	163	882	1,610	2,270	1,090	1,810	286	47	19
20	44	132	166	187	1,100	1,380	2,290	1,030	1,660	272	44	20
21	46	132	163	195	1,300	1,270	2,360	988	1,480	265	41	20
22	47	114	168	1,250	1,830	1,190	2,400	936	1,340	262	39	20
23	48	127	195	1,280	2,770	1,100	2,390	874	1,260	258	36	21
24	47	132	306	933	2,910	1,050	2,340	808	1,190	254	34	22
25	44	141	400	844	3,720	1,050	2,320	773	1,140	241	31	23
26	44	146	324	1,070	5,790	1,120	2,310	768	1,100	228	30	25
27	40	148	270	1,890	4,260	1,200	2,270	779	1,050	206	29	25
28	45	166	299	1,380	3,230	1,340	2,180	802	994	190	28	24
29	48	158	336	1,080	-	1,580	2,130	850	956	173	26	26
30	48	212	359	1,010	-	1,780	2,060	898	892	162	25	25
31	47	-	351	795	-	1,960	-	982	-	149	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,234	48	30	39.8	2,450
November	2,787	212	38	92.9	5,530
December	6,963	400	153	225	13,810
Calendar year 1942	278,870	3,990	27	764	553,000
January	17,337	1,890	123	559	34,390
February	35,629	5,790	295	1,272	70,670
March	57,700	3,160	1,050	1,861	114,400
April	74,260	3,360	2,060	2,475	147,300
May	43,178	2,020	768	1,393	85,640
June	45,852	2,380	892	1,528	90,950
July	13,429	844	149	433	26,640
August	1,847	156	25	59.6	3,650
September	646	26	19	21.5	1,280
Water year 1942-43	300,862	5,790	19	824	596,700

Note.- Discharge computed from graph based on once-daily gage readings Nov. 6 to Dec. 6.
Time basis: Pacific war time. To convert war time to standard time, subtract 1 hour.

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 1943.

Extremes.- 1941-42: Maximum contents during water year, 179,100 acre-feet July 18 to Aug. 8 (elevation, 4,133.00 feet); minimum, 26,470 acre-feet Oct. 16, 17 (elevation, 4,110.73 feet).

1942-43: Maximum contents during water year, 179,100 acre-feet Mar. 29 to Apr. 17 (elevation, 4,133.00 feet); minimum, 145,700 acre-feet Sept. 29, 30 (elevation, 4,129.77 feet).

1936-43: Maximum contents, that of July 18 to Aug. 8, 1942, Mar. 29 to Apr. 17, 1943; 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 (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.

Cooperation.- Records furnished by Pershing County Water Conservation District of Nevada.

Contents, in acre-feet, 1941-43

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27,180	26,700	26,920	35,850	45,560	62,310	81,900	117,000	158,000	160,800	179,100	169,700
2	27,360	26,810	26,920	36,330	45,970	62,810	82,870	118,500	158,000	161,700	179,100	169,600
3	26,920	26,810	26,970	36,610	46,380	63,560	84,050	121,000	157,800	162,500	179,100	169,500
4	26,810	26,810	27,180	36,890	46,840	63,860	85,080	123,700	157,800	163,200	179,100	169,300
5	26,700	26,810	27,320	37,060	47,430	64,200	86,050	126,600	158,300	164,100	179,100	169,000
6	26,600	26,810	27,470	37,380	47,980	64,990	87,190	129,200	158,000	165,100	179,100	168,800
7	26,550	26,810	27,720	37,760	48,570	65,110	88,270	131,700	158,500	166,600	179,100	168,600
8	26,550	26,810	27,720	38,100	49,150	65,420	89,200	134,200	157,800	168,400	179,100	168,400
9	26,550	26,810	27,920	38,410	49,670	65,760	90,750	136,500	155,800	170,000	178,800	167,700
10	26,600	26,810	28,120	38,690	50,190	66,160	91,760	138,600	157,000	171,600	178,200	167,700
11	26,520	26,810	28,460	38,930	50,870	66,490	92,770	140,700	156,800	172,700	178,000	168,600
12	26,520	26,810	28,750	39,180	51,560	66,880	93,700	142,300	156,800	173,300	177,600	167,400
13	26,650	26,810	28,890	39,420	52,390	67,220	94,570	144,400	156,800	174,700	177,300	166,800
14	26,600	26,810	29,230	39,660	52,970	67,750	95,620	146,300	155,800	176,400	176,900	166,800
15	26,520	26,810	29,800	39,870	53,440	68,410	96,510	149,300	156,000	177,400	176,700	166,800
16	26,470	26,810	30,090	40,140	54,130	68,410	97,560	150,700	156,000	178,000	175,900	166,700
17	26,470	26,810	30,640	40,410	55,050	69,080	98,210	152,300	156,800	178,400	175,700	167,200
18	26,520	26,810	30,940	40,720	55,940	70,210	99,750	155,200	156,800	179,100	175,400	165,500
19	26,600	26,810	31,400	40,990	56,320	70,740	100,200	154,300	156,800	179,100	175,000	165,400
20	26,920	26,810	31,860	41,260	56,960	71,270	101,100	156,000	156,800	179,100	174,300	165,200
21	26,650	26,810	32,260	41,530	57,520	72,060	101,900	157,200	158,000	179,100	174,300	165,100
22	26,730	26,810	32,650	41,840	58,050	72,910	103,400	157,800	158,200	179,100	173,200	164,900
23	26,650	26,810	32,960	42,150	58,630	73,740	103,600	158,100	158,300	179,100	172,500	163,700
24	26,650	26,810	33,530	42,460	59,200	75,230	103,900	158,500	158,300	179,100	172,100	164,000
25	26,570	26,810	33,990	42,730	59,890	75,580	106,000	158,700	158,000	179,100	171,000	163,700
26	26,700	26,810	34,640	43,110	60,510	76,580	106,700	158,700	158,200	179,100	170,400	163,300
27	26,700	26,810	34,710	43,500	61,190	77,480	107,600	158,700	158,300	179,100	170,000	163,700
28	26,700	26,840	34,970	43,970	61,690	78,450	109,300	157,800	158,500	179,100	169,900	163,400
29	26,920	26,860	35,160	44,390	-	79,170	111,500	156,800	158,700	179,100	171,600	163,400
30	26,700	26,900	35,520	44,790	-	80,130	113,700	158,000	159,800	179,100	169,700	163,400
31	26,650	-	35,880	45,160	-	81,090	-	158,000	-	179,100	169,700	-

Contents, in acre-feet, of Rye Patch Reservoir near Rye Patch, Nev., 1941-43--Continued

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	163,400	158,900	156,500	159,100	171,200	172,000	179,100	175,900	159,900	171,300	167,800	153,400
2	163,400	158,900	156,500	159,400	171,700	171,700	179,100	175,900	160,400	171,600	167,000	153,200
3	163,400	158,000	156,500	159,600	172,800	170,400	179,100	175,700	160,800	172,200	166,200	153,000
4	162,700	158,000	156,500	159,800	173,700	170,500	179,100	176,300	161,200	173,200	165,500	152,800
5	162,400	158,500	156,500	160,000	174,500	169,200	179,100	175,300	161,300	173,700	164,600	152,600
6	162,200	158,600	156,500	160,300	175,000	169,900	179,100	175,300	161,400	174,100	163,600	152,400
7	162,100	158,900	156,500	160,600	175,800	169,500	179,100	174,800	161,300	174,300	162,800	152,200
8	162,000	158,900	156,600	160,700	175,900	169,100	179,100	174,000	161,700	174,300	162,000	151,500
9	162,000	158,500	156,500	160,800	177,100	169,900	179,100	173,000	161,300	174,400	161,100	151,200
10	160,900	158,500	156,500	161,000	177,500	169,100	179,100	172,200	161,700	175,000	160,500	150,500
11	160,900	158,300	156,500	161,300	178,200	169,100	179,100	172,500	163,000	175,300	160,500	150,300
12	161,700	158,200	156,800	161,700	178,200	169,400	179,100	171,100	163,700	175,500	160,100	149,900
13	159,600	158,200	156,800	161,900	178,000	169,000	179,100	170,400	164,400	175,300	159,800	149,600
14	160,100	158,000	156,800	162,200	177,800	169,300	179,100	169,500	164,800	175,300	159,600	149,300
15	160,100	156,500	156,800	162,400	177,400	170,100	179,100	168,600	165,300	175,300	159,100	149,200
16	160,600	156,400	156,800	162,700	177,100	171,000	179,100	168,200	165,800	175,300	158,500	148,900
17	160,600	156,500	156,800	163,000	176,960	172,000	179,100	168,000	165,800	175,300	158,000	148,500
18	160,600	156,500	156,800	163,400	176,500	172,600	178,500	167,700	165,300	175,300	157,600	148,200
19	160,600	157,200	156,800	163,200	176,200	173,100	177,400	167,500	165,800	174,400	157,200	147,900
20	160,600	156,800	156,800	163,200	175,800	174,000	176,600	166,900	166,300	174,200	156,800	147,600
21	160,600	156,800	156,900	161,700	175,100	175,200	175,900	166,400	166,800	173,900	156,200	147,600
22	160,600	156,700	156,900	163,700	174,600	174,800	175,900	166,200	167,400	173,900	156,400	147,600
23	160,600	156,500	157,500	165,800	174,600	175,400	174,700	165,600	167,400	173,300	156,000	147,090
24	160,100	156,500	159,600	167,200	175,400	176,000	174,800	164,800	167,900	172,900	155,700	146,600
25	160,100	156,500	160,100	167,700	174,300	176,700	173,900	163,300	168,100	172,500	155,400	146,200
26	159,600	156,500	160,600	168,000	173,600	176,800	174,600	162,700	168,900	171,900	155,200	146,000
27	159,100	156,500	159,600	168,400	173,400	177,300	174,300	161,700	170,000	171,400	155,000	145,800
28	159,100	156,500	158,500	168,900	172,900	178,800	174,200	160,900	171,100	170,900	154,800	145,800
29	159,100	156,500	158,600	169,500	-	179,100	176,300	159,500	170,000	169,100	154,600	145,700
30	158,900	156,500	158,800	171,100	-	179,100	175,700	159,100	170,500	168,600	154,400	145,700
31	158,900	-	158,800	170,600	-	179,100	-	159,300	-	168,400	153,900	-

Monthly elevation and contents, 1941-43

Date	Elevation (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Oct. 1, 1941	4,111.00	27,180	-480
Nov. 1	4,110.82	26,700	+220
Dec. 1	4,110.90	26,920	+8,930
Calendar year 1941	-	-	+29,500
Jan. 1, 1942	4,113.86	35,850	+9,710
Feb. 1	4,116.42	45,560	+16,750
Mar. 1	4,119.50	62,310	+19,590
Apr. 1	4,122.38	81,900	+35,050
May 1	4,126.70	117,000	+41,000
June 1	4,131.00	158,000	+2,800
July 1	4,131.27	160,800	+18,300
Aug. 1	4,133.00	179,100	-9,400
Sept. 1	4,132.12	169,700	-6,300
Oct. 1	4,131.52	163,400	-
Water year 1941-42	-	-	+136,200
Oct. 1, 1942	4,131.52	163,400	-4,500
Nov. 1	4,131.08	158,900	-2,400
Dec. 1	4,130.85	156,500	+2,600
Calendar year 1942	-	-	+123,200
Jan. 1, 1943	4,131.10	159,100	+12,100
Feb. 1	4,132.26	171,200	+800
Mar. 1	4,132.34	172,000	+7,100
Apr. 1	4,133.00	179,100	-3,200
May 1	4,132.70	175,900	-16,000
June 1	4,131.18	159,900	+11,400
July 1	4,132.27	171,300	-3,500
Aug. 1	4,131.94	167,800	-14,400
Sept. 1	4,130.54	153,400	-7,700
Oct. 1	4,129.77	145,700	-
Water year 1942-43	-	-	-17,700

Time basis: Pacific standard time prior to 2 a.m., Feb. 9, 1942; Pacific war 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 1943.

Average discharge.- 35 years (1896-1903, 1904-9, 1910-18, 1923-26, 1927-32, 1936-43), 130 second-feet.

Extremes.- Maximum discharge during year, 1,080 second-feet June 2 (gage height, 4.55 feet); minimum daily, 1 second-foot Sept. 16-25.
1896-1922, 1923-32, 1936-43: 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 periods of ice effect or doubtful or no gage-height record, which are fair. Many diversions above station for irrigation. Station is below all diversions except those of Hunter & Banks Ranch, 3 miles downstream.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	17	70	67	b40	152	199	293	668	252	29	3
2	4	17	60	66	b40	136	216	331	938	267	24	3
3	5	16	50	55	b40	127	231	378	704	249	23	3
4	5	17	40	48	b42	125	249	417	542	216	22	2
5	5	18	40	b45	b43	158	267	409	440	205	18	2
6	5	18	*38	b45	b45	136	267	378	390	194	15	d2
7	5	19	37	b45	b45	141	271	345	341	183	16	d2
8	5	19	39	b43	b43	219	303	300	287	172	15	d2
9	5	20	37	b42	b40	352	374	255	277	165	12	d2
10	5	20	34	b40	b35	500	374	222	280	152	8	d2
11	6	21	40	b40	b45	296	341	202	296	138	6	d2
12	15	22	39	b40	b60	243	320	188	367	123	6	d2
13	18	23	38	b40	b80	219	300	170	452	116	7	d2
14	14	24	40	b42	b100	197	290	148	476	106	6	d2
15	13	25	42	b45	*b120	178	310	150	420	93	5	d2
16	12	26	42	b45	b150	150	327	162	338	77	5	d1
17	13	28	42	b35	b175	150	352	158	300	70	5	d1
18	14	30	38	b30	b225	143	374	152	303	66	5	d1
19	15	35	b38	b35	b275	138	405	138	345	56	5	d1
20	16	40	b38	48	b325	123	424	121	359	60	4	d1
21	15	40	38	77	b350	119	417	119	356	66	4	d1
22	14	35	37	222	b500	119	397	121	349	82	4	d1
23	14	36	61	228	444	110	382	134	334	75	4	d1
24	14	58	150	104	271	108	382	202	315	56	4	d1
25	14	40	108	b90	208	112	395	287	287	52	4	d1
26	14	43	b60	b70	178	123	393	352	271	42	4	2
27	15	46	b55	54	165	134	363	420	264	40	3	4
28	16	50	b65	b52	*158	158	341	460	274	41	3	4
29	17	45	b70	b50	-	188	310	480	258	37	3	4
30	17	60	62	50	-	208	274	488	261	33	3	3
31	17	-	60	b40	-	199	-	468	-	32	3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	351	18	4	11.3	696
November	888	60	16	29.6	1,760
December	1,608	150	34	51.9	3,190
Calendar year 1942	86,642	1,420	3	237	171,700
January	1,933	228	30	62.4	3,830
February	4,242	500	35	152	8,410
March	5,261	352	108	170	10,440
April	9,846	424	199	328	19,530
May	8,448	488	119	273	16,760
June	11,490	938	258	383	22,790
July	5,516	267	32	113	6,970
August	275	29	3	8.9	545
September	60	4	1	2.0	119
Water year 1942-43	47,918	938	1	131	95,040

* Winter discharge measurement made on this day.
b Stage-discharge relation affected by ice.
d Doubtful gage-height record; discharge interpolated.
Note.- No gage-height record Nov. 3 to Dec. 5; discharge computed on basis of records for Humboldt River at Palisade.
Time basis: Pacific war time. 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 of Little Humboldt River and 25 miles east of Paradise Valley.

Records available.- October 1941 to September 1943.

Extremes.- 1941-42: Maximum discharge during water year, 244 second-feet Apr. 5 (gage height, 6.46 feet); minimum, no flow Aug. 9-26.
1942-43: Maximum discharge during water year, 4,000 second-feet about Jan. 22 (gage height, 14.4 feet, from floodmarks), by slope-area method; minimum daily, 1 second-foot many days in August and September.

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

Rating tables, Oct. 1, 1941 to Sept. 30, 1943 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 1-6, 1942, and June 3 to July 31, 1943)

Oct. 1, 1941 to Sept. 30, 1942

0.2	0.3	1.6	23	0.3	0.6	1.3	18	5.0	168
.4	1.3	2.5	50	.4	1.1	1.6	26	6.0	234
.6	3	3.0	67	.6	3.0	2.0	38	7.0	310
.8	5	4.0	105	.8	6.1	3.0	73	8.7	479
1.0	9	5.0	143	1.0	10.6	4.0	116		
1.3	16	6.5	218						

Oct. 1, 1942 to Sept. 30, 1943

Discharge, in second-feet, 1941-43

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			a5			7	143	49	71	16	1	2
2			a6			7	174	48	65	15	1	2
3			7			6	166	43	62	15	1	2
4			7			6	185	41	64	14	1	2
5			6			7	218	40	69	13	1	2
6					a11	18	141	38	66	12	1	2
7						20	115	40	65	11	1	2
8						18	123	41	68	11	1	2
9						44	129	43	65	10	0	2
10		a5				72	130	47	56	10	0	2
11						93	120	50	49	9	0	3
12					h11	120	117	61	46	8	0	2
13					a9	72	121	70	45	8	0	3
14					a7	51	111	69	42	8	0	3
15					a6	36	107	72	40	8	0	3
16	a3			a5	a5	28	89	91	36	7	0	3
17					a5	23	84	110	35	7	0	3
18					a5	22	81	101	32	6	0	3
19			a5		a5	22	70	91	29	5	0	3
20					a5	17	64	85	28	4	0	3
21		5			5	18	62	85	26	4	0	3
22					5	32	62	86	24	3	0	3
23					5	44	62	98	23	3	0	3
24					6	39	58	106	21	3	0	3
25					6	38	53	103	20	2	0	3
26		a6			6	22	50	106	20	2	1	3
27					6	17	49	111	21	2	1	3
28					7	22	54	99	22	2	2	2
29					-	45	56	87	21	1	2	2
30					-	72	52	81	18	1	2	3
31		-			-	105	-	75	-	1	2	-

a No gage-height record; discharge computed on basis of discharge measurements on Nov. 21 and weather records.
h Discharge computed from staff-gage reading.

Discharge, in second-feet, of Little Humboldt River at Chimney dam Site, near Paradise Valley, Nev., 1941-43--Continued

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	4	10	44	85	80	182	115	50	12	3	1
2	3	4	14	36	80	77	192	111	72	13	2	1
3	3	4	12	17	75	70	226	114	94	14	2	1
4	3	4	10	15	70	65	222	120	94	14	3	2
5	3	4	7	12	70	84	219	118	86	14	3	2
6	3	4	7	15	65	97	220	113	83	13	2	2
7	3	4	6	15	65	71	218	106	81	12	2	2
8	3	4	6	14	60	81	239	98	75	10	2	2
9	3	4	7	9	60	207	242	86	71	11	2	2
10	3	4	8	8	60	255	209	79	67	10	2	1
11	3	4	8	7	55	158	177	72	67	10	2	1
12	3	4	7	6	55	144	151	68	67	11	2	1
13	3	4	8	6	60	136	147	66	79	11	2	1
14	3	4	8	7	70	158	150	62	74	10	2	1
15	4	4	9	8	100	131	167	60	62	10	2	1
16	3	4	8	9	150	96	175	63	54	9	2	1
17	3	5	6	7	200	86	176	65	48	8	2	1
18	4	9	6	4	250	79	165	57	42	8	1	2
19	4	14	5	5	304	64	162	50	37	8	1	2
20	3	8	5	10	354	61	160	50	34	7	1	2
21	3	6	5	1,000	360	53	151	43	32	8	1	2
22	4	5	6	2,500	322	52	138	37	27	6	1	2
23	4	5	8	1,500	471	51	130	37	24	9	1	2
24	4	7	31	700	348	62	124	35	23	11	1	2
25	3	8	38	400	172	91	126	40	22	9	1	2
26	4	6	18	300	105	141	123	42	20	5	1	2
27	4	7	16	200	94	193	120	41	18	4	1	2
28	4	7	14	150	86	272	122	40	17	4	1	3
29	4	7	34	125	-	291	132	40	16	3	1	2
30	4	9	37	100	-	284	125	39	13	3	1	2
31	3	-	38	90	-	230	-	40	-	3	1	-

Note.- No gage-height record Jan. 10 to Feb. 18; discharge computed on basis of slope-area measurement for flood peak of Jan. 22, weather records, and records for Martin Creek near Paradise Valley.

Monthly discharge, in second-feet, 1941-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1941	93	-	-	3	184
November	150	-	-	5	298
December	161	-	-	5.2	319
Calendar year	-	-	-	-	-
January 1942	155	-	-	5	307
February	225	-	-	8.0	446
March	1,143	120	6	36.9	2,270
April	3,046	218	49	102	6,040
May	2,267	111	38	73.1	4,500
June	1,249	71	18	41.6	2,480
July	221	16	1	7.1	438
August	18	2	0	.6	36
September	77	3	2	2.6	153
Water year 1941-42	8,805	218	0	24.1	17,470
October 1942	104	4	3	3.4	206
November	167	14	4	5.6	331
December	402	38	5	13.0	797
Calendar year 1942	9,017	199	0	24.7	17,890
January 1943	7,319	2,500	4	236	14,520
February	4,246	471	55	152	8,420
March	3,920	291	51	126	7,780
April	5,090	242	120	170	10,100
May	2,107	120	35	70.0	4,180
June	1,549	94	13	51.6	3,070
July	282	14	3	9.7	559
August	51	3	1	1.6	101
September	50	3	1	1.7	99
Water year 1942-43	25,287	2,500	1	69.3	50,160

Time basis: Pacific standard time, prior to 2 a.m., Feb. 9, 1942; Pacific war 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 NW¼SW¼ sec. 12, T. 42 N., R. 40 E., 0.6 mile upstream from Humboldt County Fish Hatchery and 7 miles northeast of Paradise Valley. Prior to Feb. 25, 1943 at site 90 feet downstream at datum 0.53 foot lower.

Drainage area.- 172 square miles.

Records available.- October 1921 to September 1943.

Average discharge.- 21 years (1921-26, 1927-43), 27.4 second-feet.

Extremes.- Maximum discharge during year, 9,000 second-feet Jan. 21 (gage height, 11.1 feet), by slope-area method; minimum, 4 second-feet Jan. 18.
1921-43: Maximum discharge, that of Jan. 21, 1942; minimum, 2 second-feet Sept. 1-9, 1928.

Remarks.- Records good except those above 500 second-feet and those for period of no gage-height record, which are poor. No diversion above station.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	8	18	50	48	91	142	151	107	31	7	6
2	7	8	33	33	46	82	177	154	100	32	7	6
3	7	10	20	16	45	75	174	157	91	29	7	6
4	7	9	13	19	44	87	170	164	97	27	7	6
5	7	9	11	22	42	93	183	157	87	25	7	6
6	7	8	12	21	40	71	170	154	100	24	7	6
7	7	8	12	14	38	76	194	140	95	23	7	6
8	7	8	12	13	36	216	205	120	91	22	7	6
9	7	8	13	14	34	180	174	110	89	20	7	6
10	7	8	12	13	30	110	140	102	89	19	7	6
11	7	8	11	13	40	100	120	100	95	18	7	6
12	7	8	10	12	50	98	118	93	102	18	7	6
13	7	8	12	12	60	112	134	89	112	17	7	7
14	7	9	11	14	80	102	160	84	91	16	7	7
15	8	10	11	16	100	73	167	86	82	15	7	7
16	8	10	10	12	150	67	174	82	76	15	7	7
17	8	12	8	10	200	67	174	75	73	15	7	7
18	8	18	10	6	234	50	180	69	71	13	7	7
19	8	17	10	7	272	53	183	66	67	13	7	7
20	8	11	8	18	232	43	167	62	62	13	7	7
21	8	9	10	2,500	176	46	154	60	56	14	6	7
22	8	11	12	492	483	47	151	64	53	14	6	7
23	8	11	14	368	259	53	154	75	48	13	6	7
24	8	16	28	250	134	71	160	84	45	11	6	7
25	8	18	16	175	101	98	154	87	42	10	6	7
26	8	13	6	130	95	125	137	89	40	9	6	7
27	8	16	14	110	98	183	125	87	37	9	6	7
28	8	20	57	90	93	194	167	84	35	8	6	7
29	8	19	47	70	-	197	151	82	33	8	6	7
30	8	26	34	60	-	167	146	78	32	8	6	7
31	8	-	78	50	-	137	-	87	-	8	6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	233	8	6	7.5	462
November	354	26	8	11.8	702
December	573	78	6	18.5	1,140
Calendar year 1942	13,475	206	5	36.9	26,720
January	4,629	2,500	5	149	9,180
February	3,260	483	30	116	6,470
March	3,164	216	43	102	6,280
April	4,804	205	118	160	9,530
May	3,092	164	60	99.7	6,130
June	2,188	112	32	72.9	4,340
July	517	32	8	16.7	1,030
August	206	7	6	6.6	409
September	198	7	6	6.6	393
Water year 1942-43	23,218	2,500	5	63.6	46,070

Note.- No gage-height record Jan. 24 to Feb. 17; discharge computed on basis of weather records and records for Owyhee River near Owyhee.
Time basis: Pacific war time. To convert war time to standard time, subtract 1 hour.

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. 296 B, 150 feet southwest of milepost 297, 6 miles west of Nixon and 11.5 miles south along Southern Pacific Railroad from station at Sutcliffe. 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 1943. Elevations prior to January 1934 referred to adjustment of 1912, datum of which is 0.57 foot above that of datum of 1929.
Extremes.- 1926-43: Maximum elevation observed, 3,847.35 feet, datum of 1929, June 1926; minimum observed, 3,815.10 feet Dec. 9, 1941.
Remarks.- Elevations determined by spirit leveling.
Cooperation.- Records furnished by Office of Indian Affairs.

Elevation, in feet, above mean sea level, water year 1942-43

Oct. 15	3,816.83	Feb. 16	3,818.00	June 17	3,821.64
Nov. 20	3,816.33	Mar. 16	3,818.25	July 28	3,821.21
Dec. 10	3,816.46	Apr. 22	3,820.64	Aug. 21	3,820.69
Jan. 13	3,816.58	May 20	3,821.47	Sept. 7	3,820.37

Lake Tahoe at Tahoe, Calif.

Location.- Staff gage, lat. 39°09'55", long. 120°08'25", in NW¼ sec. 7, T. 15 N., R. 17 E., at Tahoe, near outlet of lake. Datum of gage is 6,219.01 feet above mean sea level, datum of 1929, or 6,220.0 feet above mean sea level, datum of Bureau of Reclamation. Elevations given herein are referred to datum of 1929.
Drainage area.- 519 square miles (including water surface of lake, which is 193 square miles).
Records available.- 1900 to September 1943.
Extremes.- Maximum gage height during year, 9.02 feet July 2, 3, 6-9, 12, 13; minimum, 7.24 feet Nov. 14.
1900-1943: Maximum stage, 11.26 feet July 14, 15, 17, 18, 1907; minimum 1.74 feet Dec. 26, 1934.
Remarks.- Lake levels maintained by concrete regulator dam with 17 gates; storage began about 1874. Capacity, 1,028,000 acre-feet between elevations 6,222.01 feet (natural rim of lake at outlet) and 6,230.27 feet (highest stage recorded, July 14, 15, 17, 18, 1907). Increase in capacity in the range indicated, about 125,000 acre-feet per foot of rise. Sill of outlet gates is at elevation 6,218.01 feet. Water is used for irrigation in State of Nevada and for power development. Gage read once daily.
Cooperation.- Records furnished by H. C. Dukes, Federal Court Watermaster.

Gage height, in feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.78	7.36	7.73	7.96	8.54	8.07	8.20	8.36	8.77	8.98	8.90	8.26
2	7.77	7.34	7.75	7.96	8.52	8.06	8.20	8.38	8.84	9.02	8.88	8.24
3	7.75	7.36	7.74	7.97	8.51	8.05	8.20	8.40	8.87	9.02	8.85	8.22
4	7.73	7.37	7.74	7.97	8.49	8.06	8.20	8.42	8.88	9.01	8.83	8.21
5	7.72	7.35	7.73	7.96	8.46	8.06	8.19	8.44	8.88	9.01	8.79	8.20
6	7.71	7.34	7.72	7.95	8.43	8 05	8.19	8.45	8.89	9.02	8.76	8.19
7	7.70	7.33	7.74	7.93	8.41	8.06	8.21	8.45	8.90	9.02	8.74	8.18
8	7.69	7.32	7.73	7.91	8.44	8.08	8.21	8.43	8.91	9.02	8.72	8.18
9	7.69	7.31	7.72	7.91	8.44	8.12	8.21	8.43	8.91	9.02	8.71	8.17
10	7.68	7.29	7.71	7.92	8.42	8.27	8.21	8.42	8.91	9.01	8.70	8.16
11	7.67	7.27	7.70	7.93	8.39	8.32	8.19	8.42	8.92	9.01	8.68	8.13
12	7.65	7.26	7.70	7.93	8.36	8.31	8.17	8.44	8.93	9.02	8.66	8.11
13	7.63	7.25	7.69	7.93	8.33	8.28	8.18	8.46	8.93	9.02	8.66	8.10
14	7.61	7.24	7.68	7.92	8.30	8.27	8.18	8.45	8.93	9.01	8.65	8.09
15	7.60	7.28	7.68	7.92	8.27	8.27	8.18	8.44	8.94	9.00	8.63	8.08
16	7.58	7.30	7.68	7.92	8.25	8.25	8.18	8.44	8.96	8.99	8.61	8.07
17	7.56	7.26	7.69	7.91	8.23	8.23	8.19	8.45	8.97	8.99	8.60	8.05
18	7.54	7.58	7.70	7.91	8.21	8.26	8.20	8.45	8.98	8.98	8.58	8.02
19	7.53	7.67	7.70	7.90	8.19	8.23	8.20	8.46	8.98	8.98	8.56	7.99
20	7.51	7.69	7.70	7.91	8.17	8.21	8.20	8.47	8.99	8.97	8.54	7.98
21	7.50	7.71	7.70	8.10	8.14	8.20	8.20	8.50	8.99	8.98	8.51	7.97
22	7.49	7.73	7.71	8.35	8.12	8.21	8.21	8.52	8.98	8.97	8.48	7.96
23	7.49	7.74	7.75	8.50	8.10	8.20	8.21	8.53	8.98	8.97	8.45	7.95
24	7.48	7.73	7.83	8.57	8.09	8.18	8.22	8.54	8.97	8.96	8.42	7.94
25	7.47	7.71	7.89	8.59	8.13	8.17	8.22	8.57	8.97	8.95	8.39	7.92
26	7.46	7.70	7.89	8.58	8.11	8.18	8.23	8.60	8.97	8.94	8.37	7.90
27	7.45	7.72	7.90	8.57	8.10	8.17	8.23	8.64	8.96	8.94	8.36	7.88
28	7.43	7.75	7.90	8.56	8.09	8.17	8.33	8.66	8.97	8.93	8.35	7.86
29	7.40	7.75	7.94	8.54	-	8.16	8.37	8.68	8.97	8.93	8.33	7.84
30	7.38	7.74	7.96	8.57	-	8.20	8.36	8.69	8.98	8.92	8.31	7.83
31	7.37	-	7.96	8.55	-	8.19	-	8.72	-	8.91	8.28	-

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

Truckee River at Tahoe, Calif.

Location.- Water-stage recorder, lat. 39°09'55", long. 120°08'45", in NW¼ sec. 7, T. 15 N., R. 17 E., at Tahoe, just below dam at outlet of Lake Tahoe. Datum of gage is 6,219.01 feet above mean sea level, datum of 1929.

Drainage area.- 519 square miles.

Records available.- July 1895 to February 1896, June 1900 to September 1943.

Average discharge.- 43 years (1900-1943), 248 second-feet.

Extremes.- Maximum daily discharge during year, 1,819 second-feet (regulated) Jan. 30; no flow Nov. 19-22.
1895-96; 1900-1943: Maximum daily discharge, that of Jan. 30 1943; no flow during parts of 1900, 1901, 1914, 1918-43.

Remarks.- Flow regulated by Lake Tahoe and occasionally by pumping from the lake.

Cooperation.- Record of daily discharge furnished by H. C. Dukes, Federal Court Watermaster.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	352	176	101	28	1,803	1,051	628	946	61	56	457	471
2	234	176	101	28	1,782	1,051	628	946	61	157	462	471
3	176	176	101	28	1,766	628	628	946	261	255	471	336
4	176	176	101	28	1,750	407	628	946	624	258	471	269
5	176	176	101	28	1,739	407	628	946	624	258	471	269
6	176	176	101	28	1,729	407	628	1,176	624	258	471	269
7	176	176	101	28	1,713	407	923	1,245	624	258	471	269
8	176	176	101	28	1,734	407	1,245	1,245	634	258	471	269
9	176	176	101	28	1,734	407	1,071	1,245	634	283	471	275
10	176	176	101	28	1,718	634	946	1,245	45	299	471	310
11	176	176	101	28	1,708	1,361	946	660	29	313	471	341
12	176	176	101	28	1,692	1,623	946	309	29	321	471	367
13	176	176	101	28	1,682	1,338	946	309	29	299	471	388
14	176	176	101	79	1,671	1,245	946	177	16	256	471	416
15	176	176	101	104	1,661	1,245	946	104	7	263	472	425
16	176	176	101	104	1,650	1,245	946	104	7	276	471	430
17	176	176	51	104	1,645	1,245	946	104	7	276	471	442
18	176	88	26	104	1,635	1,245	946	104	5	276	471	442
19	176	0	26	104	1,624	1,245	946	71	5	276	471	439
20	176	0	26	104	1,619	1,245	946	52	5	276	471	439
21	176	0	26	104	1,609	1,245	946	52	5	276	471	448
22	176	0	26	104	1,599	1,245	946	52	5	276	471	448
23	176	61	26	320	841	1,116	946	56	5	280	471	448
24	176	101	26	844	660	1,051	946	56	5	286	471	448
25	176	101	26	982	1,220	928	946	56	5	295	471	448
26	176	101	26	1,213	1,341	628	946	60	5	316	371	448
27	176	101	26	1,616	1,172	628	946	60	5	346	471	448
28	176	101	26	1,736	1,051	628	946	62	5	356	471	454
29	176	101	26	1,806	-	628	946	62	5	391	471	459
30	176	101	26	1,819	-	628	946	62	5	426	471	447
31	176	-	26	1,813	-	628	-	62	-	445	471	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	5,690	352	76	184	11,290
November	3,548	176	0	128	7,630
December	2,031	101	26	65.5	4,030
Calendar year 1942	132,718	1,413	0	364	263,200
January	13,424	1,819	28	433	26,630
February	43,545	1,803	60	1,555	86,380
March	28,090	1,623	407	906	55,720
April	26,873	1,245	125	896	53,300
May	13,520	1,245	52	436	26,820
June	6,598	632	56	220	13,090
July	8,868	445	56	286	17,590
August	14,575	471	157	470	28,920
September	11,833	471	269	394	23,470
Water year 1942-43	178,901	1,819	0	490	354,900

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

Truckee River at Farad, Calif.

Location.- Water-stage recorder, lat. 39°26', long. 120°02', in NE¼ sec. 12, T. 18 N., R. 17 E., 0.5 mile downstream from Farad power plant, 3 miles downstream from Bronco Creek, and 3½ miles north of Iceland. Altitude of gage, about 5,200 feet (from topographic map).

Drainage area.- 940 square miles.

Records available.- January 1938 to September 1943. September 1899 to August 1912 at Nevada-California State line, 5 miles downstream. August 1912 to December 1937 at Iceland, 3½ miles upstream.

Average discharge.- 31 years (1912-43), 678 second-feet.

Extremes.- Maximum discharge during year, 6,260 second-feet Jan. 22 (gage height, 7.40 feet); minimum, 358 second-feet Dec. 8.
1938-43: Maximum daily discharge, 6,770 second-feet May 15, 1938; minimum daily, 290 second-feet Nov. 16, 1939.

Remarks.- Flow regulated by Lakes Tahoe, Donner, Independence, and Weber, and since December 1938 by Boca Reservoir.

Cooperation.- Record of daily discharge furnished by H. C. Dukes, Federal Court Watermaster.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	430	418	474	705	2,159	1,526	2,259	3,185	1,779	563	555	524
2	416	416	562	681	2,159	1,528	2,445	3,333	1,736	597	558	524
3	412	464	571	638	2,340	965	2,498	3,137	1,456	627	563	529
4	414	423	474	620	2,655	882	2,606	3,185	1,762	622	558	531
5	418	414	437	620	2,650	927	2,673	3,064	1,573	610	565	521
6	414	412	426	558	2,628	977	2,552	3,185	1,473	627	555	510
7	413	420	402	500	2,595	983	2,684	3,246	1,451	642	563	517
8	413	420	383	504	2,541	1,173	2,796	2,970	1,534	617	555	515
9	410	416	416	504	2,550	1,511	2,830	2,552	1,589	632	550	496
10	412	412	435	485	2,498	1,636	3,005	2,533	1,534	582	548	496
11	420	412	430	481	2,498	2,310	3,246	2,244	1,328	582	548	496
12	420	412	428	472	2,498	2,520	2,807	1,473	1,213	597	543	510
13	416	414	433	470	2,487	2,496	2,842	1,280	1,118	617	543	522
14	418	420	430	474	2,498	2,351	2,946	1,149	998	572	541	539
15	419	466	431	470	2,509	2,208	2,888	963	798	555	538	548
16	416	430	433	444	2,520	2,139	3,064	923	819	568	534	534
17	412	588	437	448	2,530	2,159	3,064	890	868	563	534	550
18	410	1,173	481	489	2,540	2,340	3,029	868	857	580	533	541
19	414	500	474	575	2,509	2,289	3,005	918	857	565	533	534
20	416	462	477	606	2,530	2,269	2,946	865	803	565	534	531
21	416	451	470	2,238	2,535	2,249	3,064	958	750	568	524	534
22	416	433	493	3,424	2,520	2,238	3,371	1,033	657	563	531	531
23	416	425	746	1,250	2,392	2,208	3,384	1,213	587	553	529	529
24	416	455	1,316	1,479	1,040	2,139	3,333	1,314	553	541	529	526
25	416	455	767	1,471	1,594	2,207	2,933	1,414	572	541	529	525
26	416	414	629	1,520	1,819	2,090	2,740	1,458	548	548	526	522
27	414	520	700	1,901	1,722	2,238	2,993	1,573	563	555	525	516
28	414	508	1,002	2,110	1,569	2,320	3,283	1,573	617	550	524	515
29	418	466	894	2,259	-	2,498	2,911	1,385	597	553	524	529
30	418	470	782	2,259	-	2,392	2,923	1,267	568	550	524	524
31	416	-	746	2,218	-	2,269	-	1,342	-	555	524	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	12,891	430	410	416	25,570
November	14,087	1,173	412	470	27,940
December	17,579	1,316	383	567	34,870
Calendar year 1942	377,441	3,246	383	1,034	748,600
January	32,873	3,424	444	1,060	66,200
February	65,085	2,655	1,040	2,324	129,100
March	60,041	2,520	882	1,937	119,100
April	87,120	3,384	2,259	2,904	172,800
May	56,493	3,333	965	1,822	112,100
June	31,560	1,779	548	1,052	62,600
July	17,960	642	541	579	35,620
August	16,730	563	524	540	33,180
September	15,719	550	496	524	31,180
Water year 1942-43	428,138	3,424	383	1,173	849,300

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

Donner Creek near Truckee, Calif.

Location.- Water-stage recorder, lat. 39°19'15", long. 120°12'10", in SE¼ sec. 16, T. 17 N., R. 16 E., 1 mile downstream from Cold Creek, 1¼ miles southwest of Truckee, and 2 miles downstream from Donner Lake. Altitude of gage, about 5,800 feet (from topographic map).

Drainage area.- 30 square miles.

Records available.- October 1902 to September 1915, March 1928 to September 1943.

Average discharge.- 14 years (1928-35, 1936-43), 64.5 second-feet.

Extremes.- 1941-42: Maximum discharge during water year, 519 second-feet Apr. 25, May 25 (gage height, 3.34 feet); minimum, 3 second-feet Oct. 1-7, 22-31.
1942-43: Maximum discharge during water year, 463 second-feet May 1 (gage height, 3.18 feet); minimum, 3 second-feet Aug. 18 to Sept. 2.
1902-15; 1928-43: Maximum discharge, 1,800 second-feet Dec. 11, 1937 (gage height, 6.2 feet on outside gage); minimum, less than 1 second-foot during many summers.

Remarks.- Flow regulated by Donner Lake.

Cooperation.- Record of daily discharge furnished by H. S. Dukes, Federal Court Watermaster.

Discharge, in second-feet, 1941-43
1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	15	10	74	127	45	85	75	320	87	6	4
2	3	36	30	68	124	45	99	71	326	82	6	4
3	3	18	85	62	122	46	145	71	329	70	6	4
4	3	10	45	56	117	47	162	70	364	65	6	4
5	3	6	21	53	119	50	151	75	394	50	5	4
6	3	4	18	49	122	50	151	85	391	43	5	4
7	3	4	14	81	119	51	160	103	357	34	5	4
8	49	4	12	82	109	53	172	120	329	22	5	4
9	92	4	11	70	101	57	185	124	357	41	5	4
10	90	4	10	63	95	61	200	108	348	94	4	4
11	87	4	9	61	88	67	215	91	335	94	4	4
12	85	4	8	89	85	73	230	217	313	83	4	4
13	84	4	8	56	81	78	259	310	304	63	4	4
14	81	4	9	55	76	87	243	301	253	18	5	4
15	79	4	63	53	73	66	225	295	253	17	5	4
16	77	15	160	53	70	65	217	281	227	16	5	4
17	75	32	191	51	67	63	200	281	212	14	5	4
18	72	20	215	50	65	62	191	267	212	14	4	4
19	71	10	230	48	62	60	191	248	198	14	4	4
20	35	6	217	48	60	57	198	290	183	13	4	4
21	5	6	200	47	59	59	200	304	178	13	4	4
22	3	6	183	49	56	60	220	320	172	12	4	4
23	3	6	168	51	55	60	220	320	133	11	4	4
24	3	6	152	68	52	60	210	398	117	28	4	4
25	3	6	136	108	51	57	215	474	101	94	4	4
26	3	6	124	172	49	56	210	408	87	10	4	4
27	3	6	112	208	47	56	173	364	85	10	4	4
28	3	6	108	166	46	59	93	335	81	9	4	4
29	3	6	100	149	-	62	85	313	82	9	4	4
30	3	12	91	142	-	68	82	298	83	8	4	4
31	3	-	82	133	-	70	-	298	-	7	4	-

Note.- No gage-height record Nov. 5 to Dec. 4; discharge estimated.

Discharge, in second-feet, of Donner Creek near Truckee, Calif., 1941-43--Continued

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	4	83	73	175	52	150	401	298	39	9	3
2	4	4	99	85	170	33	168	394	259	39	8	3
3	4	4	83	84	180	34	185	381	215	43	8	116
4	4	4	83	83	170	36	194	374	164	42	7	208
5	4	4	82	82	162	41	210	354	130	41	7	205
6	4	4	81	80	151	44	225	348	101	41	6	203
7	4	4	81	80	138	43	230	295	87	38	6	196
8	4	4	43	80	133	62	245	248	93	32	6	190
9	4	4	14	79	130	101	225	166	97	31	6	172
10	4	4	14	78	127	99	212	133	106	30	5	152
11	4	4	13	72	119	88	208	128	120	28	5	128
12	4	4	12	70	91	82	183	119	109	26	5	116
13	4	4	13	70	78	83	156	109	95	24	4	103
14	4	4	14	70	78	86	166	109	78	21	4	85
15	4	4	13	50	77	95	191	130	67	19	4	75
16	4	4	13	29	77	109	230	143	69	18	4	67
17	4	32	13	25	78	106	275	142	81	16	4	61
18	4	73	12	36	77	101	290	145	94	16	3	56
19	4	52	12	29	78	103	295	149	94	14	3	50
20	4	98	11	32	76	105	284	156	78	13	3	46
21	4	95	9	379	66	106	320	168	69	37	3	41
22	4	92	11	210	67	103	329	191	59	63	3	36
23	4	89	74	187	86	103	341	210	51	62	3	34
24	4	88	88	160	65	108	357	215	48	61	3	31
25	4	87	65	151	63	116	323	225	44	61	3	28
26	4	87	53	148	62	122	301	232	42	59	3	24
27	4	87	57	145	61	133	292	248	41	59	3	23
28	4	87	94	168	60	143	377	232	41	57	3	25
29	4	85	93	189	-	152	320	176	40	34	3	21
30	4	85	86	187	-	149	335	189	39	10	3	18
31	4	-	78	180	-	149	-	222	-	9	3	-

Monthly discharge, in second-feet, 1941-43

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1941	1,033	92	3	33.3	2,050
November	274	36	4	9.1	543
December	2,822	230	8	91.0	5,600
Calendar year 1941	27,648	516	3	75.7	54,840
January 1942	2,485	208	47	80.2	4,930
February	2,297	127	46	82.0	4,560
March	1,830	78	45	59.0	3,630
April	5,387	259	82	180	10,680
May	7,315	474	70	236	14,510
June	7,124	394	81	237	14,130
July	1,145	94	7	36.9	2,270
August	141	6	4	4.5	280
September	120	4	4	4.0	238
Water year 1941-42	31,973	474	3	87.6	63,420
October 1942	124	4	4	4.0	246
November	1,201	98	4	40.0	2,380
December	1,497	99	9	48.3	2,970
Calendar year 1942	30,666	474	4	84.0	60,820
January 1943	3,391	379	25	109	6,730
February	2,874	180	60	103	5,700
March	2,886	152	33	93.1	5,720
April	7,617	377	150	254	15,110
May	6,732	401	109	217	13,350
June	2,909	298	39	97.0	5,770
July	1,083	63	9	34.9	2,150
August	140	9	3	4.5	278
September	2,514	208	3	83.8	4,990
Water year 1942-43	32,968	401	3	90.3	66,390

Time basis: Pacific standard time prior to 2 a.m., Feb. 9, 1942; Pacific war 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 SW¼NW¼ sec. 36, T. 40 S., R. 23 E., a quarter of a mile downstream from Twelvemile Creek and 10 miles southwest of Adel.

Records available.- September 1940 to September 1943. March 1910 to July 1916, December 1917 to September 1919, March 1921 to June 1922, at site 1½ miles downstream, in sec. 24.

Extremes.- Maximum discharge during year, 3,000 second-feet Dec. 27 (gage height, 4.28 feet), from rating curve extended above 400 second-feet by logarithmic plotting; minimum recorded, 2.0 second-feet Dec. 16, 18, but may have been less during periods of ice effect.

1910-16, 1917-19, 1921-22, 1940-43: Maximum discharge, that of Dec. 27, 1942; minimum, 0.9 second-foot Aug. 19, 23, 24, 1942.

Remarks.- Records good except those above 1,000 second-feet and those for periods of ice effect or no gage-height record, which are poor. Many diversions above station for irrigation; no regulation.

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.5	3.6	18	379	a12	110	276	98	247	35	a4.5	3.5
2	2.5	3.2	26	112	a13	*24	328	103	170	37	a4.5	3.5
3	2.5	3.6	15	83	a13	90	272	121	135	30	a4.5	3.5
4	2.5	3.9	b9.0	46	14	100	215	130	113	28	a4.2	3.3
5	2.5	3.9	8.4	39	b14	134	170	121	112	30	a4.0	3.3
6	2.5	3.6	9.6	*26	13	160	161	122	98	24	a3.7	3.3
7	2.5	3.6	8.4	b19	13	279	150	114	87	23	a3.6	3.3
8	2.5	3.6	7.2	b16	12	1,140	145	97	82	22	a3.6	3.2
9	2.6	3.6	8.4	b13	b11	1,710	131	98	86	20	a3.4	3.2
10	2.8	3.2	8.4	b12	b12	1,420	a120	103	87	19	a3.4	3.2
11	3.2	3.2	b6.5	11	12	1,220	a105	92	84	18	a3.3	3.0
12	3.9	3.2	b6.0	b11	b12	965	108	87	78	18	3.2	3.2
13	3.9	3.6	6.0	b12	12	1,520	114	86	70	16	3.0	3.3
14	4.2	3.9	6.6	*11	b13	1,020	122	80	62	15	2.8	3.3
15	4.2	5.3	6.0	12	14	606	130	80	58	15	2.8	3.2
16	4.2	5.3	6.0	b11	15	198	141	72	55	13	2.6	3.2
17	4.2	3.9	b5.3	b9.5	17	127	141	66	56	12	2.8	3.2
18	4.2	6.0	b5.3	a8.0	20	77	146	66	63	12	3.0	3.2
19	4.2	4.6	b5.3	a15	23	59	157	70	62	11	2.8	3.5
20	3.9	4.6	5.3	a20	31	46	133	75	55	11	2.8	3.3
21	3.6	4.6	5.0	160	42	63	131	81	50	12	3.0	3.5
22	3.9	4.6	4.6	81	83	108	124	84	45	12	3.2	3.5
23	3.6	5.6	5.3	73	120	299	133	98	41	12	3.2	3.5
24	3.6	17	51	b76	112	422	122	108	38	9.5	3.8	3.8
25	3.6	10	23	73	85	624	121	110	35	9.0	4.0	3.8
26	3.2	8.4	48	51	86	1,910	102	115	33	a8.2	3.5	4.0
27	3.6	56	808	31	104	1,430	100	119	31	a7.4	3.3	4.0
28	3.6	37	1,320	19	123	828	141	121	30	a6.6	3.2	4.5
29	3.6	26	201	22	-	587	112	117	32	a5.8	3.2	4.5
30	3.6	53	108	18	-	308	105	128	34	a5.3	3.5	4.5
31	3.6	-	522	a12	-	276	-	176	-	a5.0	3.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	105.2	4.2	2.5	3.39	209
November	301.6	56	3.2	10.1	598
December	3,270.6	1,320	4.6	106	6,490
Calendar year 1942	21,402.7	1,320	1.1	58.6	42,460
January	1,481.5	379	8.0	47.8	2,940
February	1,051	123	11	37.5	2,080
March	17,924	1,910	46	578	35,550
April	4,434	328	100	148	8,790
May	3,137	175	66	101	6,220
June	2,259	247	30	75.3	4,480
July	501.8	37	5.0	16.2	995
August	105.9	4.5	2.6	3.42	210
September	105.3	4.5	3.0	3.51	209
Water year 1942-43	34,676.9	1,910	2.5	95.0	68,770

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of notes by watermaster, weather records, and records for Deep Creek above Adel.
b Stage-discharge relation affected by ice.
Time basis: Pacific war time. To convert war time to standard time, subtract 1 hour.

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Deep Creek above Adel, Oreg.

Location.- Water-stage recorder, lat. 42°11', long. 119°59', in E½ 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 (river-profile survey).
Drainage area.- 249 square miles.
Records available.- September 1922 to September 1923 and October 1932 to September 1943, in reports of Geological Survey. September 1922 to September 1923 and October 1929 to September 1936, in reports of State engineer.
Average discharge.- 15 years (1922-23, 1929-43), 101 second-feet.
Extremes.- Maximum discharge during year, 1,760 second-feet June 1 (gage height, 5.43 feet), from rating curve extended above 1,200 second-feet on basis of velocity-area studies; minimum, 8 second-feet Nov. 20 (gage height, 0.40 foot).
1922-23, 1932-43: 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 1942-43, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

0.5	12	2.0	190	4.0	890
.7	22	2.4	284	4.4	1,120
1.0	43	2.8	389	4.8	1,360
1.3	73	3.2	515	5.3	1,680
1.6	113	3.6	690		

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	17	157	495	b48	a160	750	690	1,620	167	24	18
2	12	a17	213	242	b50	*145	850	618	1,610	163	24	17
3	13	a18	94	165	b52	153	923	640	1,110	155	24	17
4	14	a21	92	175	53	186	962	720	984	153	23	18
5	14	a21	101	b130	b51	226	928	690	810	138	22	17
6	13	a18	78	*b90	49	222	918	650	655	120	21	17
7	13	a20	69	b70	49	283	901	608	555	108	20	17
8	13	a21	43	b70	49	929	928	527	494	101	20	17
9	13	a19	25	b65	b40	994	760	501	461	93	19	17
10	13	a18	35	b63	b43	785	608	504	451	92	19	18
11	15	a18	51	b60	b45	755	547	470	448	85	19	18
12	18	a19	46	b56	b45	631	631	448	436	80	18	18
13	17	a21	43	b62	b45	810	715	426	392	75	18	19
14	17	24	b40	b66	b47	631	800	403	362	81	17	18
15	18	37	b37	62	b50	426	970	411	336	62	17	18
16	17	25	b37	b54	b52	341	967	432	320	59	17	18
17	17	21	b36	b45	55	305	956	395	313	55	17	18
18	16	19	b36	b25	63	249	940	346	315	50	17	19
19	16	22	b36	b35	71	225	880	328	313	48	17	18
20	16	20	37	b70	86	207	830	326	297	48	18	19
21	16	23	38	209	116	209	840	344	274	51	18	19
22	16	23	35	143	171	234	845	354	256	55	18	19
23	16	34	33	90	194	305	745	392	229	54	18	19
24	16	239	40	97	192	346	750	426	216	47	18	19
25	16	107	41	b90	a160	423	725	448	209	41	19	19
26	16	81	73	83	a160	1,000	636	464	196	37	18	19
27	18	209	211	75	a170	1,380	595	467	186	34	18	19
28	19	153	850	64	a180	1,300	785	474	175	32	18	20
29	18	157	362	65	-	1,230	745	461	173	30	17	19
30	18	313	244	62	-	875	640	487	186	28	18	19
31	18	-	442	b45	-	825	-	906	-	27	18	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	464	19	12	15.6	960
November	1,755	313	17	58.5	3,480
December	3,675	850	25	119	7,290
Calendar year 1942	56,791.2	860	9.4	156	112,700
January	3,123	495	25	101	6,190
February	2,386	194	40	85.2	4,730
March	16,790	1,380	145	542	33,300
April	23,970	967	547	799	47,540
May	15,356	906	326	495	30,460
June	14,282	1,620	173	476	28,330
July	2,369	167	27	76.4	4,700
August	589	24	17	19.0	1,170
September	547	20	17	18.2	1,080
Water year 1942-43	85,326	1,620	12	234	169,200

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of notes by watermaster, weather records, and records for Chewaucan River near Paisley.
b Stage-discharge relation affected by ice.
Time basis: Pacific war time. 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 SW¼ sec. 27, T. 33 S., R. 18 E., at bridge 20 feet downstream from 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 2½ 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 1943. January 1905 to December 1907, 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.- 33 years (1905-7, 1909-21, 1924-43), 133 second-feet.
Extremes.- Maximum discharge during year, 1,300 second-feet June 1 (gage height, 4.65 feet); minimum, 5.5 second-feet (regulated) Oct. 15 (gage height, 1.14 feet); minimum daily, 23 second-feet Nov. 17.
1905-07, 1909-21, 1924-43: 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, 1927, Dec. 12, 1932 (frozen); minimum daily discharge not determined.
Remarks.- Records good except those for periods of ice effect or no gage-height record, which are poor. Some regulation at low flow by power plant above station. About 160 acres is irrigated above station.

Rating table, water year 1942-43, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

1.5	18	2.3	113	3.5	535
1.7	34	2.6	182	3.8	705
1.9	55	2.9	275	4.2	970
2.1	80	3.2	390	4.5	1,180

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	36	151	350	76	148	552	753	1,170	196	54	40
2	30	36	231	240	74	154	606	669	1,030	199	55	38
3	31	43	97	129	84	164	705	729	879	190	56	37
4	30	42	65	151	80	174	717	784	798	179	54	36
5	30	37	71	149	b7e	174	784	772	699	169	52	36
6	30	33	68	109	77	174	747	729	606	159	52	36
7	30	47	63	95	75	202	778	723	552	149	51	36
8	30	52	65	97	b70	418	865	657	520	140	50	35
9	30	40	75	92	b58	530	693	657	505	135	48	36
10	30	37	72	89	b61	450	628	675	500	127	48	36
11	33	36	63	84	67	430	584	634	495	119	47	36
12	35	42	61	77	71	426	681	590	480	113	46	42
13	35	47	70	88	75	525	747	579	430	108	44	40
14	35	59	62	100	80	412	844	535	399	99	42	37
15	35	90	53	92	83	286	928	546	366	95	40	37
16	36	41	53	84	79	244	998	500	350	92	41	36
17	36	23	52	61	92	237	1,000	455	346	88	39	36
18	35	53	52	32	116	202	1,030	440	350	83	39	36
19	35	50	52	b40	127	190	1,000	430	346	82	40	36
20	33	37	61	52	144	188	921	430	318	79	39	38
21	33	52	76	97	161	210	921	465	303	82	39	38
22	33	70	60	154	196	225	837	485	300	82	41	37
23	33	80	57	106	*174	264	865	557	272	102	42	41
24	33	156	67	a110	161	322	824	623	261	84	44	39
25	33	83	60	a116	140	394	784	681	250	76	45	38
26	33	80	29	a105	138	768	699	717	225	70	42	38
27	35	144	108	a95	133	824	699	717	210	67	40	38
28	38	100	207	88	133	830	747	711	204	62	39	38
29	36	126	123	84	-	865	645	693	204	60	38	38
30	37	237	*133	77	-	634	693	699	213	59	41	37
31	36	-	229	70	-	546	-	949	-	56	42	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,029	38	30	33.2	2,040
November	2,009	237	23	67.0	3,980
December	2,686	231	29	86.6	5,330
Calendar year 1942	54,993	688	23	151	109,100
January	3,312	350	32	107	6,570
February	2,902	196	58	104	5,760
March	11,604	865	142	374	23,020
April	23,522	1,030	552	784	46,660
May	19,584	949	430	632	38,840
June	13,581	1,170	204	453	26,940
July	3,401	199	56	110	6,750
August	1,389	55	38	44.8	2,760
September	1,122	42	35	37.4	2,230
Water year 1942-43	86,141	1,170	23	236	170,900

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of weather records and records for Deep Creek above Adel.
b Stage-discharge relation affected by ice.
Time basis: Pacific war time. 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 SW¼ sec. 28, T. 28 S., R. 14 E., 1½ miles downstream from diversion dam of Silver Lake Irrigation District, 1½ miles southwest of Silver Lake post office, and 3 miles upstream from Bridge Creek. Datum of gage is 4,361.28 feet above mean sea level, datum of 1929.
Drainage area.- 221 square miles.
Records available.- December 1904 to March 1907, January 1909 to September 1943.
Average discharge.- 31 years (1905-6, 1909-27, 1929-41), including Silver Lake Irrigation District canal, 25.2 second-feet.
Extremes.- Maximum discharge during year, 550 second-feet Apr. 15 (gage height, 5.95 feet); minimum, 1.5 second-feet Oct. 18-21.
1904-7, 1909-43: 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 good except those for Oct. 1 to Dec. 12, which are fair, and those for Dec. 26, 27, Jan. 7-13, 17, 18, and periods of no gage-height record, which are poor. Flow regulated by reservoir (capacity, 800 acre-feet) above diversion dam 1½ 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 record of diversion above station by Silver Lake Irrigation District canal was obtained during year except miscellaneous discharge measurements (see p. 181).

Rating table, water year 1942-43, except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 13 to Dec. 12, Aug. 14 to Sept. 30)

1.6	1.5	2.2	29	4.0	228
1.7	3.4	2.4	45	4.5	302
1.8	6.7	2.7	72	5.9	541
1.9	11.2	3.0	102		
2.0	16.5	3.5	160		

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.0	2.4	10	11	a6.4	b21	115	a250	59	43	21	4.4
2	9.0	2.4	12	15	a6.7	b21	146	a230	62	43	21	4.4
3	9.4	2.4	11	b15	a7.0	b21	154	a240	60	47	21	4.1
4	9.4	2.4	b8.5	14	a7.2	21	137	a260	60	51	21	4.1
5	9.4	2.3	7.2	14	a7.0	21	147	a240	64	58	20	4.1
6	9.4	2.3	6.0	b12	a6.8	21	145	207	58	59	20	7.6
7	9.4	2.6	5.7	b12	a6.6	21	145	186	53	58	20	8.0
8	9.4	2.6	5.7	b11	a6.4	21	140	170	48	58	20	9.0
9	9.4	2.4	5.4	b10	a6.3	22	121	a160	50	52	20	10
10	9.4	2.4	5.4	b10	a6.2	b23	231	a150	49	48	20	11
11	9.4	2.4	5.4	*b9.8	6.4	27	260	a140	47	49	20	13
12	9.4	2.4	5.0	b9.6	6.4	32	364	a130	47	48	19	17
13	6.5	2.4	5.4	b11	b6.4	42	437	a120	47	48	11	18
14	6.7	2.6	5.4	10	b6.4	52	494	a116	46	48	4.4	18
15	2.6	2.8	5.4	9.4	6.4	b39	530	a115	45	48	3.7	18
16	1.9	2.6	4.7	b8.5	6.4	b36	519	a110	46	51	3.4	16
17	1.7	3.0	4.4	b7.6	6.7	35	489	a100	47	53	3.2	19
18	1.5	2.6	b4.4	b6.4	7.2	b33	460	a88	47	52	3.0	19
19	1.5	2.6	*4.4	12	7.6	b33	437	80	45	51	3.0	20
20	1.5	b3.4	4.4	16	7.6	b36	397	73	45	52	3.0	20
21	1.5	3.0	4.4	30	e.5	35	364	68	45	53	6.0	20
22	2.4	2.6	4.4	17	9.6	35	324	66	45	53	6.4	20
23	2.8	2.8	4.4	16	13	34	298	65	45	37	6.4	20
24	2.6	2.6	4.4	21	23	36	262	66	45	26	6.0	18
25	2.6	2.8	b4.7	26	b22	37	254	66	43	34	5.7	9.6
26	2.8	2.8	b5.4	24	b22	86	248	64	43	34	5.4	9.4
27	2.8	3.0	b5.0	8.5	b22	151	246	61	43	31	5.0	9.4
28	2.6	4.1	5.0	8.0	b22	172	248	57	43	28	5.0	9.4
29	2.6	5.4	b5.7	7.6	-	208	251	53	42	25	4.7	9.4
30	2.6	7.6	5.7	b7.2	-	140	246	50	43	21	4.7	9.0
31	2.6	-	6.0	a5.8	-	109	-	55	-	21	4.7	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	166.2	9.4	1.5	5.36	330
November	86.1	7.6	2.3	2.94	175
December	180.9	12	4.4	5.84	359
Calendar year 1942	5,571.9	49	1.5	15.3	11,040
January	395.4	30	5.8	12.8	784
February	276.1	23	5.8	9.86	548
March	1,619	208	21	52.2	3,210
April	8,609	530	115	287	17,080
May	3,836	260	50	124	7,610
June	1,462	64	42	48.7	2,900
July	1,380	59	21	44.5	2,740
August	337.7	21	3.0	10.9	670
September	381.1	20	4.1	12.7	756
Water year 1942-43	18,731.5	530	1.5	51.3	37,160

* Winter discharge measurement made on this day.
a No gage-height record; discharge computed on basis of 1 discharge measurement, notes by watermaster, weather records, and records for Deep Creek near Adel and Chewaucan River near Paisley.
b Stage-discharge relation affected by ice.
Time basis: Pacific war time. 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 NW¼ 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.- 934 square miles.
Records available.- May 1903 to July 1906, December 1908 to September 1943.
Average discharge.- 30 years (1903-5, 1909-12, 1917-21, 1922-43), 145 second-feet.
Extremes.- Maximum discharge during year, 3,830 second-feet Apr. 8 (gage height, 14.70 feet); minimum, 5 second-feet Sept. 27.
1903-6, 1908-43: 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 periods of shifting control, which are fair, and those for periods of ice effect, which are poor. Small areas on Silvies River above station are irrigated with flood water.

Rating tables, water year 1942-43, except periods of ice effect or shifting control (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 8						Apr. 9 to Sept. 30					
1.1	15	3.0	157	10.0	1,000	0.7	6.9	2.0	72	6.0	448
1.3	25	4.0	253	12.0	1,450	.9	12	2.5	107	8.0	685
1.6	43	5.0	353	14.0	2,910	1.1	19	3.0	147	10.0	1,000
2.0	71	6.0	455			1.3	29	4.0	236	12.0	1,450
2.5	112	8.0	663			1.6	46	5.0	338	14.0	2,910

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	22	101	165	90	*185	2,100	1,370	357	106	34	15
2	14	24	105	201	100	190	2,300	1,350	390	82	30	15
3	14	27	93	169	110	185	2,460	1,260	393	80	30	15
4	14	28	81	130	105	185	2,860	1,220	397	79	30	15
5	15	28	76	140	110	195	3,020	1,140	373	84	30	16
6	15	29	85	145	115	190	3,080	1,080	334	91	28	15
7	14	31	85	150	*125	195	3,170	1,040	299	93	28	15
8	14	38	81	115	130	296	3,420	972	283	82	26	14
9	14	41	76	110	115	360	3,320	914	263	76	24	14
10	14	33	74	105	110	384	2,990	852	250	71	25	14
11	15	29	73	105	125	412	2,290	760	225	66	23	12
12	15	31	68	105	125	452	2,030	708	204	61	23	12
13	16	36	70	100	125	485	2,070	674	196	57	22	12
14	16	37	*74	105	123	534	2,280	650	194	53	20	12
15	16	36	75	120	130	482	2,390	616	190	49	19	11
16	17	37	70	133	130	457	2,440	588	186	45	17	11
17	17	37	64	126	135	402	2,380	555	170	42	16	11
18	17	39	64	80	135	352	2,180	624	148	40	15	10
19	17	40	62	84	140	346	2,010	484	166	62	15	10
20	17	36	61	90	140	280	1,880	441	170	39	14	10
21	17	32	58	136	145	278	1,850	412	188	48	14	11
22	17	34	65	159	160	299	1,820	391	207	44	15	11
23	17	37	67	120	175	331	1,650	383	209	44	16	12
24	17	40	71	*105	185	427	1,460	369	192	45	16	12
25	17	41	74	100	18)	516	1,330	350	176	44	15	10
26	16	50	69	105	175	822	1,320	329	153	48	15	10
27	18	46	73	110	180	1,370	1,290	311	144	51	14	6
28	18	66	80	110	185	1,950	1,350	288	136	48	13	8
29	20	63	77	105	-	1,950	1,390	277	128	44	13	9
30	21	101	87	100	-	1,910	1,340	272	117	40	13	9
31	21	-	105	90	-	1,800	-	298	-	37	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	503	21	13	16.2	998
November	1,159	101	22	38.6	2,300
December	2,354	105	58	75.9	4,670
Calendar year 1942	81,388	1,940	8	223	161,500
January	3,698	201	80	119	7,330
February	3,805	185	90	136	7,550
March	18,200	1,950	185	587	36,100
April	65,470	3,420	1,290	2,182	129,900
May	20,855	1,370	272	673	41,370
June	6,836	397	117	228	13,560
July	1,842	106	37	59.4	3,650
August	627	34	13	20.2	1,240
September	357	16	6	11.9	708
Water year 1942-43	125,706	3,420	6	344	249,400

* Winter discharge measurement made on this day.
Note.- Stage-discharge relation affected by ice Nov. 12, Jan. 4-15, 18-20, Jan. 23 to Mar. 7. Shifting-control method used Oct. 1-26.
Time basis: Pacific war time. 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 NW¼ sec. 20, T. 32 S., R. 32½ E., 1½ miles upstream from upper diversions for Malheur Migratory Waterfowl Refuge, 2 miles downstream from Fish Creek, and 3½ miles southeast of Frenchglen.

Drainage area.- 180 square miles.

Records available.- December 1937 to September 1943. January 1909 to November 1910, fragmentary records at sites downstream, below several irrigation diversions. May 1910 to September 1921 at site 1½ miles downstream, in SW¼ sec. 8, above diversions, published as Donner und Blitzen River near Diamond. July 1929 to September 1930 in reports of State engineer.

Average discharge.- 13 years (1911-13, 1914-16, 1917-21, 1938-43), 131 second-feet.

Extremes.- Maximum discharge during year, 1,370 second-feet Jan. 21 (gage height, 4.69 feet), from rating curve extended above 700 second-feet by velocity-area studies and logarithmic plotting; minimum, 18 second-feet Jan. 18 (gage height, 1.83 feet).

1909-21, 1937-43: Maximum discharge, 2,870 second-feet May 5, 1942 (gage height, 5.85 feet), from rating curve extended above 700 second-feet by velocity-area studies and logarithmic plotting; minimum, 8 second-feet Jan. 14, 1940, caused by ice jams upstream.

Remarks.- Records good except those for Dec. 1 to Feb. 15, which are fair. No regulation or diversion above station.

Cooperation.- Water-stage recorder inspected by employee of Fish and Wildlife Service.

Rating table, water year 1942-43, except periods of ice effect
(gage height, in feet, and discharge, in second-feet)

1.9	21	3.0	205
2.1	35	3.3	325
2.3	55	3.6	485
2.5	82	4.0	740
2.7	120	4.4	1,070

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	47	93	386	b55	160	205	276	698	284	64	52
2	46	46	145	236	61	166	280	557	268	80	51	
3	46	48	62	104	59	154	307	335	533	252	79	51
4	46	47	65	106	60	211	302	392	595	248	76	51
5	46	48	b57	86	55	196	29e	370	509	230	74	51
6	45	47	61	79	60	148	325	335	456	240	72	50
7	45	54	65	63	59	190	360	302	414	230	68	48
8	45	57	66	70	59	362	397	264	402	219	67	47
9	45	48	65	67	53	458	289	252	424	212	66	46
10	45	47	63	62	60	277	246	268	446	187	63	45
11	51	47	59	57	57	233	233	233	430	178	63	46
12	52	51	61	54	57	199	268	219	375	154	62	47
13	48	50	80	66	61	219	320	212	340	138	62	48
14	48	50	87	70	67	196	365	199	312	135	60	47
15	50	54	72	70	6e	138	392	206	280	148	59	46
16	48	48	67	59	73	125	419	193	284	132	57	45
17	47	51	65	b45	95	125	397	187	325	125	56	45
18	47	54	60	b24	135	108	392	190	436	122	56	46
19	47	48	59	b52	229	102	365	190	402	128	55	47
20	47	41	61	84	421	89	312	196	312	135	55	47
21	47	43	60	401	539	93	302	205	272	138	54	46
22	46	56	63	198	664	91	268	240	233	132	54	46
23	46	59	116	93	345	98	266	350	212	118	55	46
24	47	73	371	73	196	114	276	430	205	118	56	45
25	46	54	134	73	145	112	276	463	212	110	59	45
26	46	57	68	67	142	178	248	466	216	110	55	45
27	47	60	353	66	157	233	244	468	230	102	53	45
28	45	59	535	65	157	256	307	485	233	96	53	45
29	46	110	164	63	-	268	264	474	268	89	52	45
30	47	130	161	62	-	233	252	468	298	96	54	45
31	47	-	370	b45	-	202	-	618	-	86	55	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,450	52	45	46.8	2,880
November	1,684	130	41	56.1	3,340
December	3,828	535	57	123	7,590
Calendar year 1942	61,561	1,010	23	169	122,100
January	3,046	401	24	98.3	6,040
February	4,189	664	53	150	8,310
March	6,214	862	89	200	12,330
April	9,159	419	205	305	18,170
May	9,767	618	187	315	19,370
June	10,909	698	205	364	21,640
July	4,950	284	86	160	9,820
August	1,914	84	52	61.7	3,800
September	1,409	52	45	47.0	2,790
Water year 1942-43	58,519	862	24	160	116,100

b Stage-discharge relation affected by ice.

Time basis: Pacific war time. 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, 1¼ 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). Auxiliary staff gage at bridge at Sodhouse Lane; datum of gage is 4,091.17 feet above mean sea level, datum of 1929.

Records available.- February 1938 to September 1943. 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, 522 second-feet Feb. 25 (gage height, 5.55 feet); minimum recorded, 11 second-feet May 22 (gage height, 0.41 foot).

1916-19, 1921-22, 1937-43: 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 good except those for periods of ice effect, no gage-height record, or shifting control, which are poor. 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.

Rating table, water year 1942-43, except periods of ice effect or shifting control
(gage height, in feet, and discharge, in second-feet)

0.4	11	1.3	61	3.0	215
.6	20	1.6	82	3.8	305
.8	30	2.0	114	4.6	401
1.0	42	2.5	161	5.6	528

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	64	175	333	b130	333	252	175	184	140	58	
2	14	59	167	363	b155	300	251	153	254	114	56	
3	16	61	162	379	b150	301	254	156	319	111	53	
4	16	59	158	336	142	288	261	150	391	180	53	
5	18	60	143	307	144	295	251	148	396	193	52	
6	32	60	122	242	149	300	251	139	399	174	51	
7	26	63	129	204	157	297	258	133	406	173	50	
8	25	69	155	143	164	300	263	127	426	168		
9	28	74	136	163	b145	348	266	128	431	158		
10	27	77	131	b165	145	429	276	134	420	148		
11	24	99	131	b150	149	473	283	132	385	147		
12	22	80	128	b135	155	481	271	132	306	148		
13	22	76	126	b125	164	454	267	137	292	142		a45
14	22	78	99	b140	173	412	263	92	285	139		
15	25	82	152	b150	180	389	269	63	277	173		
16	35	78	147	143	178	322	274	57	259	167		
17	38	79	140	b110	178	292	291	55	245	156		
18	36	106	135	b100	191	263	342	55	233	144		
19	36	99	129	b120	223	235	346	40	230	139	a40	
20	37	92	123	b130	255	217	342	32	238	130		
21	37	82	119	159	306	201	336	28	242	127		
22	41	72	119	218	395	194	331	18	228	149		
23	45	87	104	b310	459	184	329	15	190	68		
24	47	97	166	b275	502	182	319	19	169	94		
25	48	107	241	b220	522	180	254	42	164	121		44
26	49	108	235	b175	501	190	238	47	129	113		44
27	50	103	175	171	440	198	239	58	124	103		43
28	50	104	257	161	369	220	237	51	125	92		43
29	52	107	377	154	-	234	240	56	110	87		41
30	53	126	409	b135	-	242	250	123	87	64		34
31	65	-	361	b125	-	250	-	162	-	57		-

Month	Second-feet-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	1,049	65	13	33.8	2,080
November	2,508	126	59	83.6	4,970
December	5,371	409	99	173	10,650
Calendar year 1942	65,791	800	12	180	130,500
January	6,041	379	100	195	11,980
February	6,821	522	130	244	13,530
March	9,004	481	180	290	17,860
April	8,306	346	237	277	16,470
May	2,857	175	15	92.2	5,670
June	7,944	431	87	265	15,760
July	4,119	193	57	133	8,170
August	1,333	-	-	43.0	2,640
September	1,329	-	-	44.3	2,640
Water year 1942-43	56,682	522	-	155	112,400

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

b Stage-discharge relation affected by ice.

Note.- Shifting-control method used May 24 to July 5.

Time basis: Pacific war time. 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 NW¼ sec. 33, T. 31 S., R. 32½ E., at mouth of canyon, 1,000 feet upstream from road crossing and 3½ miles northeast of Frenchglen.

Records available.- March 1911 to September 1916, December 1937 to September 1943.

Extremes.- Maximum discharge during year, 332 second-feet Feb. 22 (gage height, 2.55 feet), from rating curve extended above 55 second-feet by logarithmic plotting; minimum, 13 second-feet Jan. 9-21, 29-31, Feb. 1-7, 10-12 (gage height, 1.07 feet).
1911-16, 1937-43: Maximum discharge, that of Feb. 22, 1943; minimum observed, 7 second-feet Feb. 24, 25, 1912, Dec. 30, 1937 to Jan. 4, 1938.

Remarks.- Records good except those above 60 second-feet, which are fair. No diversion or regulation above station. Low 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 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	14	15	17	13	19	27	26	22	16	16	16
2	15	14	15	17	13	19	29	25	26	16	16	16
3	15	14	15	16	13	17	32	25	36	16	16	16
4	15	14	14	15	13	16	32	26	60	16	16	16
5	14	14	14	14	13	19	32	25	61	16	16	16
6	14	14	14	14	13	17	32	25	43	16	16	16
7	14	14	14	14	14	17	32	23	33	16	16	16
8	14	14	14	14	14	32	46	22	29	16	16	16
9	14	14	14	13	14	33	34	21	27	16	16	15
10	14	14	14	13	13	26	29	21	26	16	16	15
11	14	14	14	13	13	23	28	20	24	16	16	15
12	14	14	14	13	13	20	28	20	23	16	16	15
13	14	14	14	13	14	21	31	20	23	16	16	15
14	14	14	14	13	14	22	33	20	22	16	16	15
15	14	14	14	13	14	19	35	20	21	16	16	15
16	14	14	14	13	14	19	36	19	20	16	16	15
17	14	14	14	13	14	19	35	19	19	16	16	15
18	14	14	14	13	17	18	34	20	19	16	16	15
19	14	14	14	13	23	17	34	19	19	16	16	15
20	14	14	14	13	41	16	31	18	18	16	16	15
21	14	14	14	17	39	16	30	18	17	16	16	15
22	14	14	14	16	101	16	28	17	17	16	16	15
23	14	14	14	14	34	16	28	17	17	16	16	15
24	14	14	26	14	22	16	27	17	17	16	16	15
25	14	14	16	14	19	18	27	17	17	16	16	15
26	14	14	14	14	16	26	26	17	17	16	16	15
27	14	14	33	14	19	33	26	17	17	16	16	15
28	14	15	23	14	19	31	34	16	17	16	16	15
29	14	15	17	13	-	30	28	16	16	16	16	15
30	14	15	16	13	-	27	26	17	16	16	16	15
31	14	-	17	13	-	26	-	19	-	16	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	438	15	14	14.1	869
November	423	15	14	14.1	839
December	487	33	14	15.7	966
Calendar year 1942	7,006.5	86	9.7	19.2	13,900
January	432	17	13	13.9	857
February	581	101	13	20.8	1,150
March	666	33	16	21.5	1,320
April	930	46	26	31.0	1,840
May	622	26	16	20.1	1,230
June	739	61	16	24.6	1,470
July	496	16	16	16.0	984
August	496	16	16	16.0	984
September	458	16	15	15.3	908
Water year 1942-43	6,768	101	13	18.5	13,420

Note.- No gage-height record Oct. 27 to Dec. 12; discharge computed on basis of recorded range in stage and records for Donner und Blitzen River near Frenchglen.
Time basis: Pacific war time. To convert war time to standard time, subtract 1 hour.

Trout Creek near Denio, Oreg.

Location.- Water-stage recorder, lat. 42°10', long. 118°28', in SW¼ sec. 26, T. 39 S., R. 36 E., 0.4 mile upstream from bridge at mouth of canyon, 5 miles east of Trout Creek Ranch, and 14 miles northeast of Denio. Datum of gage is 4,351.59 feet above mean sea level, datum of 1929.

Records available.- March 1911 to March 1912, April 1922 to November 1923, April 1925 to September 1943.

Average discharge.- 12 years (1922-23, 1932-43), 13.9 second-feet.

Discharge.- Maximum discharge during year, 112 second-feet Apr. 18 (gage height, 3.21 feet); minimum, 1.9 second-feet Dec. 4.
1911-12, 1922-23, 1925-43: Maximum discharge, 343 second-feet Aug. 1, 1933, from rating curve extended above 125 second-feet; probably no flow at times.
Maximum stage known, 6.0 feet (caused by cloudburst), sometime between 1922 and 1932.

Remarks.- Records good except those for November to February, which are fair. Small diversions above and large diversions below station for irrigation.

Rating tables, water year 1942-43 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 19-21)

Oct. 1 to Apr. 18				Apr. 19 to Sept. 30			
1.7	4.4	2.4	34	1.7	4.1	2.5	37
1.8	6.3	2.6	52	1.8	6.3	2.7	52
2.0	11.5	2.8	70	1.9	9.2	2.9	70
2.2	19.5	3.0	90	2.1	16.5	3.1	92
				2.3	26		

Discharge, in second-feet, water year October 1942 to September 1943

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	5.9	8.7	10	6.1	20	48	73	59	24	4.3	4.3
2	3.3	5.9	8.7	11	8.7	19	55	66	57	23	4.3	4.1
3	3.6	6.5	7.3	6.8	8.2	18	64	68	54	26	5.0	4.3
4	3.8	7.3	4.4	9.8	9.5	19	64	84	57	24	5.4	4.3
5	3.6	6.8	5.2	10	8.5	18	64	79	62	22	5.2	4.1
6	3.8	6.3	5.9	9.3	9.3	18	63	70	59	21	5.0	4.1
7	3.8	6.5	7.5	7.7	9.3	18	73	64	59	20	4.8	3.8
8	3.8	6.8	8.0	9.0	8.2	29	83	56	59	19	4.8	3.8
9	3.3	6.8	8.2	8.2	4.6	31	78	50	59	18	5.0	3.4
10	3.3	6.1	7.7	7.3	7.3	29	69	48	58	17	4.8	3.4
11	4.8	5.5	7.5	7.7	10	28	62	46	56	16	4.8	3.3
12	6.3	5.9	7.0	7.3	9.0	28	67	43	56	16	4.3	3.3
13	5.7	6.1	7.5	8.7	8.7	29	75	41	50	15	4.1	3.5
14	5.4	6.1	7.7	10	9.0	31	85	40	46	17	4.0	3.4
15	5.7	6.3	7.0	9.0	9.5	28	91	43	48	15	4.0	3.3
16	5.7	6.5	7.0	6.3	11	27	99	41	46	14	3.7	2.8
17	5.7	6.5	6.3	5.5	12	26	99	36	42	13	3.3	2.8
18	5.7	8.5	6.5	4.8	14	23	103	33	39	11	3.4	3.1
19	5.9	7.7	5.9	6.3	16	22	100	30	38	9.9	3.4	3.5
20	5.9	6.1	7.0	10	19	19	86	31	35	9.5	3.4	3.8
21	5.9	4.4	7.0	15	21	20	79	30	32	11	3.4	4.6
22	5.5	7.7	7.0	13	41	19	69	33	33	11	3.5	4.5
23	5.2	8.0	8.2	11	33	18	71	38	31	9.5	3.8	4.8
24	5.2	7.5	9.5	8.7	28	18	78	40	31	7.5	4.0	4.3
25	5.2	7.0	8.5	7.7	26	20	73	40	30	6.6	4.5	4.1
26	5.4	6.3	4.1	9.0	24	23	63	41	28	5.4	4.3	4.1
27	4.8	7.5	9.3	8.7	22	33	56	39	27	4.8	4.0	3.8
28	5.5	7.7	11	9.3	21	42	68	38	24	5.0	3.8	4.0
29	5.5	8.0	11	9.0	-	64	82	37	22	5.0	3.7	3.8
30	5.2	10	10	8.7	-	56	59	42	24	4.8	3.8	4.1
31	5.4	-	10	4.6	-	52	-	52	-	4.8	4.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	150.7	6.3	2.8	4.86	299
November	204.2	10	4.4	6.81	405
December	236.6	11	4.1	7.63	469
Calendar year 1942	7,952.6	196	1.0	21.8	15,770
January	269.4	15	4.6	8.69	534
February	413.9	41	4.6	14.8	821
March	835	56	18	26.9	1,660
April	2,205	103	48	73.5	4,370
May	1,472	84	30	47.5	2,920
June	1,319	62	22	44.0	2,620
July	425.8	26	4.8	13.7	845
August	130.3	5.4	3.3	4.20	258
September	114.1	4.8	2.8	3.80	226
Water year 1942-43	7,776.0	103	2.8	21.3	15,430

Time basis: Pacific war time. 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 1942 to September 1943

Great Salt Lake Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
May 22	Bear River	Great Salt Lake	NE¼ sec. 34, T. 13 S., R. 44 E., below Stewart Dam and 2⅝ miles northwest of Dingle, Idaho	22.2
23	....do	....do	SE¼ sec. 31, T. 12 S., R. 44 E., at Bern Bridge, ⅝ mile below confluence with Bear Lake Outlet Canal and 2⅝ miles northwest of Montpelier, Idaho.	532
23	....do	....do	Sec. 7, T. 12 S., R. 44 E., at Pescadero siding on Union Pacific Railroad, 6 miles northwest of Montpelier, Idaho.	588
19	....do	....do	NE¼ sec. 1, T. 10 S., R. 40 E., below Grace Dam, at Grace, Idaho.	21.4
18	....do	....do	Sec. 26, T. 13 S., R. 40 E., immediately below junction of Oneida tailrace with river and 3⅜ miles northwest of Mink Creek, Idaho.	935
18	....do	....do	....do	2,570
18	....do	....do	....do	71.2
Oct. 31	Thomas Fork	Bear River	In sec. 10, T. 14 S., R. 46 E., near crossing of U. S. Highway 30, below diversions, 3/8 mile above mouth, and 1½ miles west of Border, Wyo.	16.9
Dec. 11	....do	....do	....do	22.2
Jan. 27	....do	....do	....do	18.7
Apr. 13	....do	....do	....do	224
May 8	....do	....do	....do	*525
June 18	....do	....do	....do	142
Oct. 31	Dry Creek	Thomas Fork	SE¼ sec. 3, T. 12 S., R. 46 E., at road crossing, 3 miles north of Geneva, Idaho.	.29
Dec. 10	Preuss Creek	....do	Near west line of sec. 10, T. 12 S., R. 46 E., 2⅝ miles northwest of Geneva, Idaho.	1.57
May 22	Dingle Inlet Canal	Bear River	NW¼ sec. 13, T. 14 S., R. 44 E., 1 mile south of Dingle, Idaho.	†3
22	Rainbow Inlet Canal	....do	Sec. 10, T. 14 S., R. 44 E., 1⅛ miles west of Dingle, Idaho.	647
24	Bear Lake Outlet Canal.	....do	Sec. 17, T. 14 S., R. 44 E., 1,000 feet below dike and 3½ miles southeast of Paris, Idaho.	360
21	Paris Creek	Bear Lake Outlet Canal.	Sec. 13, T. 14 S., R. 42 E., 50 feet below power-canal diversion, 600 feet below Paris Creek spring, and 6 miles southwest of Paris, Idaho.	29.1
21	Paris power canal	Paris Creek	Sec. 13, T. 14 S., R. 42 E., at head of canal, 6 miles southwest of Paris, Idaho.	39.5
19	Last Chance Canal	Bear River	Sec. 30, T. 9 S., R. 41 E., immediately above entrance of tunnel and 1⅛ miles north of Grace, Idaho.	295
19	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
19	Tanner "B" Canal	....do	Sec. 1, T. 10 S., R. 40 E., 200 feet below canal heading and 1 mile north of Grace, Idaho.	†.3
Nov. 2	Gwenford Mill ditch	Malad River	In sec. 11, T. 15 S., R. 35 E., 3/8 mile below point of diversion, 250 feet northeast of gaging station on Malad River near Samaria, and 1⅛ miles north of Samaria, Idaho.	.18
Dec. 15	....do	....do	....do	0
Jan. 31	....do	....do	....do	0
Feb. 2	....do	....do	....do	0
Mar. 27	....do	....do	....do	0
Apr. 8	....do	....do	....do	0
May 11	....do	....do	....do	3.77
June 20	....do	....do	....do	2.62
July 31	....do	....do	....do	2.21
Sept.18	....do	....do	....do	1.29
Oct. 26	Causey (Dry Bread) Creek	South Fork Ogden River.	SW¼ sec. 23, T. 7 N., R. 3 E., 3,000 feet above Camp Kiesel, 3,300 feet above mouth of Bear Wallow Canyon, and 11 miles northeast of Huntsville, Utah.	9.4
26	....do	....do	NW¼ sec. 26, T. 7 N., R. 3 E., at Camp Kiesel, 400 feet above mouth of Bear Wallow Canyon and 11 miles northeast of Huntsville, Utah.	11.9

* Discharge includes flow of 45 second-feet (estimated) in side channel.
† Estimated.

Mojave River Basin

Nov. 25	Van Dyke ditch	Mojave River	At Daggett, Calif.	2.0

Miscellaneous discharge measurements in the Great Basin during water year October 1942 to September 1943--Continued

Antelope Valley Basin

Date	Stream	Tributary to or diverting from--	Locality	Discharge (sec.-ft.)
Jan. 27	Punchbowl Creek	Rock Creek	At mouth, near Valyermo, Calif.	9.6
Feb. 3	....do	....do	....do	†3
12	....do	....do	....do	†2
23	....do	....do	....do	22.7
May 31	....do	....do	....do	†.4

† Estimated.

Warner Lakes Basin

May 18	Inlet to Flagstaff Lake.	Warner Lakes	SE¼SW¼ sec. 5, T. 35 S., R. 25 E., at Flagstaff Bridge, near Plush, Oreg.	521
June 25	....do	....do	....do	408

Silver Lake Basin

June 27	Silver Lake Irrigation District Canal.	Silver Creek	Gaging station at intake, near Silver Lake, Oreg.	8.2

Malheur and Harney Lakes Basin

Feb. 28	Malheur Lake Outlet	Mud Lake	SE¼ sec. 26, T. 26 S., R. 31 E., at highway bridge at Narrows, Oreg.	119
May 5	....do	....do	....do	841
June 23	....do	....do	....do	178
24	Mud Lake Outlet	Harney Lake	Sec. 18, T. 27 S., R. 30 E., at Sand Gap, 6 miles southwest of Narrows, Oreg.	147
Aug. 7	....do	....do	About 2 miles upstream from Sand Gap, Oreg.	†20
June 18	Silver Creek	Harney Lake	Sec. 24, T. 22 S., R. 25 E., near Suntex, Oreg.	18.8

† Estimated.

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