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SURFACE WATER SUPPLY *of the* UNITED STATES 1938

PART 13

SNAKE RIVER BASIN

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SURFACE WATER SUPPLY OF SNAKE RIVER BASIN, 1938

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, 1938. The work was begun in 1888 in connection with special studies relating to irrigation. Measurements of stream flow have been made at about 7,800 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July 1938, 3,830 gaging stations were being maintained by the Geological Survey and cooperating organizations. Many miscellaneous discharge measurements were made at other points.

In the execution of the work many State and private organizations have cooperated, either by furnishing data or by assisting in collecting data. Acknowledgments for cooperation of the first kind are made in connection with the description of each station affected; cooperation of the second kind is acknowledged on page 8.

DEFINITION OF TERMS

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

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

"Second-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 run-off is distributed uniformly both as regards time and area.

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

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

"Second-foot-day" is the volume of water represented by a flow of 1 second-foot for 24 hours. It is equivalent to 86,400 cubic feet, 1.983471 acre-feet, or 646,317 gallons and represents a run-off of 0.0372 inches from one square mile.

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

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

EXPLANATION OF DATA

The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the gage heights and discharge

measurements in determining the daily flow. The records of stage are obtained either from direct readings on a nonrecording gage or from a water-stage recorder that gives a continuous record of the fluctuations. Measurements of discharge are made with a current meter by the general methods outlined in standard textbooks on the measurement of river discharge. Typical gaging stations, equipped with water-stage recorder and measuring cable and car, are shown on plate 1.

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

The data presented for each gaging station in the area covered by this report usually comprise a description of the station, a table showing the daily discharge of the stream, and a table of monthly and yearly discharge and run-off. Skeleton rating tables are published except for those stations whose daily discharge for the greater part of the year was determined by 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 determined from the best available maps, and information in regard to diversions that decrease the flow at the gage, artificial regulation from pondage or storage, and the accuracy of the records. Under "Average discharge" is given the average discharge for the number of years indicated. It is given only for stations for which there are 10 or more complete years of record. Information under "Extremes" gives the maximum discharge and gage height; the minimum discharge if there is little or no regulation; the minimum daily discharge if there is extensive regulation, and also the minimum discharge if useful; and the minimum gage height except when it is of no importance. Unless otherwise qualified, the maximum discharge corresponds to the crest stage, obtained by use of a water-stage recorder or a nonrecording gage read at the time of the crest. Likewise the minimum represents the lowest discharge, unless otherwise qualified. The peak discharge for the year with the time of its occurrence is given below the table of monthly discharge for some stations. Selected lower peaks are also given if the peak discharge exceeded the mean discharge for that day by more than 10 percent. This supplementary information is generally not given for stations having drainage areas of less than 10 square miles or more than 10,000 square miles.

The table of daily discharge gives, for stations equipped with nonrecording gages, the discharge in second-feet corresponding to once-daily or the mean of twice-daily readings of the gage. For flashy floods the mean daily discharge is determined from gage-height graphs based on gage readings made once or twice daily or oftener, as stated in the station description. For stations equipped with water-stage recorders the table gives the discharge corresponding to the mean daily gage height except for stations on streams subject to sudden or rapid fluctuation. For stations subject to such fluctuation the mean daily gage height may not indicate the true mean daily discharge, which must be obtained by averaging the discharge for intervals of the day or by using the discharge integrator, an instrument for obtaining the mean daily discharge from a continuous gage-height graph and containing as an essential element the rating curve of the station.

In the table of monthly discharge the column headed "Second-foot-days" gives the sum for each month of the figures for that month given in the table of daily discharge. The column headed "Maximum" gives the maximum daily discharge and not the discharge when the water surface was at crest height. Likewise, in the column headed "Minimum" the quantity



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



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

TYPICAL RIVER-MEASUREMENT STATIONS.

given is the minimum daily discharge. The column headed "Mean" is the average flow in cubic feet per second during the month.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of stream-flow data depends primarily (1) on the permanency of the stage-discharge relation and (2) on the accuracy of observation of stage, measurements of flow, and interpretation of records.

The station description gives a statement in regard to the general accuracy of the records. "Excellent" indicates that, in general, the daily records are accurate within 5 percent; "good", within 10 percent; "fair", within 15 percent; and "poor", within 20 percent or more.

The monthly means for any station may represent with high accuracy the quantity of water flowing past the gage, but the figures showing discharge per square mile and depth in inches may be subject to gross errors caused by the inclusion of large noncontributing districts in the measured drainage area, by lack of information concerning water diverted for irrigation or other use, or by inability to interpret the effect of artificial regulation of the flow of the river above the station. "Second-feet per square mile" and "run-off in inches" are therefore not computed if such errors appear probable. The computations are also omitted for stations on streams draining areas in which the annual rainfall is less than 20 inches.

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

The table of monthly discharge gives a general idea of the flow at the station. The table of daily discharge allows more detailed studies of the variation in flow. It should be borne in mind, however, that the observations in each succeeding year may be expected to throw new light on data previously published, and that greater degrees of refinement in computations and records may be warranted with increased data and use of improved equipment.

PUBLICATIONS

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

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

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

Augusta, Maine, Statehouse.
 Boston, Mass., 945 Post Office Building.
 Hartford, Conn., 203 Federal Building.
 Albany, N. Y., 526 Federal Building.
 Trenton, N. J., 228 Federal Building.
 Harrisburg, Pa., 490 Education Building.
 Charlottesville, Va., University of Virginia.
 South Charleston, W. Va., Naval Ordnance Plant.
 Asheville, N. C., 220 Post Office Building.
 Columbia, S. C., 119 United States Courthouse.
 Atlanta, Ga., Georgia School of Technology.
 Ocala, Fla., Post Office Building.
 Montgomery, Ala., 507 Post Office Building.
 Chattanooga, Tenn., 442 Post Office Building.
 Louisville, Ky., 641 Federal Building.
 Columbus, Ohio, 404 Engineering Experiment Station, Ohio State University.
 Indianapolis, Ind., 316 Federal Building.
 Urbana, Ill., 14 Post Office Annex.
 Madison, Wis., 337 N. State Capitol.
 St. Paul, Minn., 808 New Post Office Building.
 Iowa City, Iowa, 402 Hydraulic Laboratory, University of Iowa.
 St. Louis, Mo., 906 Customhouse, 1114 Market Street.
 Rolla, Mo., Missouri Geological Survey Building, Missouri School of Mines and Metallurgy.
 Topeka, Kans., 305 Federal Building.
 Fort Smith, Ark., 6 Post Office Building.
 Austin, Tex., State Highway Building.
 Santa Fe, N. Mex., 3 United States Courthouse.
 Tucson, Ariz., 210 Post Office Building.
 Denver, Colo., 230 Customhouse.
 Salt Lake City, Utah, 303 Federal Building.
 Idaho Falls, Idaho, 204 Federal Building.
 Boise, Idaho, 429 Federal Building.
 Helena, Mont., 412 Federal Building.
 Tacoma, Wash., 406 Federal Building.
 Portland, Oreg., 606 Post Office Building.
 San Francisco, Calif., 208 Federal Office Building.
 Los Angeles, Calif., G-31 Post Office and Courthouse.
 Honolulu, Hawaii, 225 Federal Building.

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

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

Stream-flow data in reports of the Geological Survey
 (A = Annual Report; B = Bulletin; W = Water-Supply Paper)

Report	Character of data	Year
10th A, pt. 2	Descriptive information only.	
11th A, pt. 2	Monthly discharge and descriptive information.....	1884 to Sept. 1890.
12th A, pt. 2	....do.....	1884 to June 30, 1891.
13th A, pt. 3	....do.....	1884 to Dec. 31, 1892.
14th A, pt. 2	Monthly discharge (long-time records, 1871-93)....	1888 to Dec. 31, 1893.
B 131.....	Descriptions, measurements, gage heights, and ratings.	1893-94.
16th A, pt. 2	Descriptive information only.	
B 140.....	Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years).	1895.
W 11.....	Gage heights (also gage heights for earlier years)	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years).	1895-96.

PUBLICATIONS

Stream-flow data in reports of the Geological Survey--Continued

Report	Character of data	Year
W 15.....	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas River.	1897.
W 16.....	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte Rivers, and western United States.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge (also some long-time records).	1897.
W 27.....	Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River.	1898.
W 28.....	Measurements, ratings, and gage heights, Arkansas River and western United States.	1898.
20th A, pt. 4	Monthly discharge (also for many earlier years)...	1898.
W 35 to 39...	Descriptions, measurements, gage heights, and ratings.	1899.
21st A, pt. 4	Monthly discharge.....	1899.
W 47 to 52...	Descriptions, measurements, gage heights, and ratings.	1900.
22d A, pt. 4.	Monthly discharge.....	1900.
W 65, 66.....	Descriptions, measurements, gage heights, and ratings.	1901.
W 75.....	Monthly discharge.....	1901.

Note.— The reports that contain records after 1901 are given in the table on page 6.

The table on the following page gives, by years and drainage basins, the numbers of the papers on surface water supply published from 1899 to 1938. The data for any particular station will, in general, be found in the reports covering the years during which the station was maintained. For example, the data from 1910 to 1920 for any station in the area covered by part 3 are published in Water-Supply papers 283, 303, 323, 353, 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 in "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.

Numbers of water-supply papers containing results of stream measurements, 1899-1938

(For basins included see p. 3)

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1899 a...	35	b 35, 36	36	36	36	c 36, 37	37	37	d 37, 38	38, e 39	38, f 39	38	38	38
1900 g...	47, h 48	49, i 49	49	49	49	49, j 50	50	50	50	51	51	51	51	51
1901 a...	55, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	65, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902 a...	82	b 82, 83	82	82, 83	82	k 83, 84	84	84	84	85	85	85	85	85
1903 a...	130	c 83, 84	84	k 85, 86	k 85, 86	k 86, 87	87	87	87	88	88	88	88	88
1904 a...	128	q 128, 28	128	128	128	k 128, 129	129	129	129	130	130	130	130	130
1905 a...	o 124, p 125, q 126	169	169	169	169	130, r 131	131	131	131	132	132	132	132	132
1906 a...	o 145, p 146, q 147	205	205	205	205	k 146, 147	148	148	148	149	149	149	149	149
1907 a...	o 180, p 181, q 182	243	243	244	245	k 180, 181	182	182	182	183	183	183	183	183
1908 a...	o 201, p 202, q 203	242	243	244	245	k 201, 202	203	203	203	204	204	204	204	204
1909 a...	281	262	263	264	265	266	267	268	268	269, 270, a 271	271	272	272	272
1910 a...	281	282	283	284	285	286	287	288	289	290	291	292	292	292
1911 a...	301	302	303	304	305	306	307	308	309	310	311	312	312	312
1912 a...	321	322	323	324	325	326	327	328	329	330	331	332	332	332
1913 a...	351	352	353	354	355	356	357	358	359	360	361	362	362	362
1914 a...	381	382	383	384	385	386	387	388	389	390	391	392	392	392
1915 a...	401	402	403	404	405	406	407	408	409	410	411	412	412	412
1916 a...	431	432	433	434	435	436	437	438	439	440	441	442	442	442
1917 a...	451	452	453	454	455	456	457	458	459	460	461	462	462	462
1918 a...	471	472	473	474	475	476	477	478	479	480	481	482	482	482
1919 a...	491	492	493	494	495	496	497	498	499	500	501	502	502	502
1920 a...	511	512	513	514	515	516	517	518	519	520	521	522	522	522
1921 a...	531	532	533	534	535	536	537	538	539	540	541	542	542	542
1922 a...	541	542	543	544	545	546	547	548	549	550	551	552	552	552
1923 a...	561	562	563	564	565	566	567	568	569	570	571	572	572	572
1924 a...	581	582	583	584	585	586	587	588	589	590	591	592	592	592
1925 a...	601	602	603	604	605	606	607	608	609	610	611	612	612	612
1926 a...	621	622	623	624	625	626	627	628	629	630	631	632	632	632
1927 a...	641	642	643	644	645	646	647	648	649	650	651	652	652	652
1928 a...	661	662	663	664	665	666	667	668	669	670	671	672	672	672
1929 a...	681	682	683	684	685	686	687	688	689	690	691	692	692	692
1930 a...	699	699	699	699	699	699	700	700	700	700	700	700	700	700
1931 a...	711	712	713	714	715	716	717	718	719	720	721	722	722	722
1932 a...	726	727	728	729	730	731	732	733	734	735	736	737	737	737
1933 a...	741	742	743	744	745	746	747	748	749	750	751	752	752	752
1934 a...	756	757	758	759	760	761	762	763	764	765	766	767	767	767
1935 a...	781	782	783	784	785	786	787	788	789	790	791	792	792	792
1936 a...	801	802	803	804	805	806	807	808	809	810	811	812	812	812
1937 a...	821	822	823	824	825	826	827	828	829	830	831	832	832	832
1938 a...	851	852	853	854	855	856	857	858	859	860	861	862	862	862
1939 a...	881	882	883	884	885	886	887	888	889	890	891	892	892	892

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

tributaries of Mississippi River from east.

from Lake Ontario and tributaries to St. Lawrence River proper.
in Hudson Bay only.

o New England rivers only.

p Hudson River to Delaware River, inclusive.

q Susquehanna River to Tackin River, inclusive.
r platte and Kansas Rivers.

s The Great Basin in California, except Truckee and Carson River Basins

Below junction with Gila River.

***Fornaciari et al., 2017** - **Journal of Management Education**

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

Reports containing compilation of discharge by States and drainage basins

Water-Supply Paper	Year ending	State or drainage basin and title
STATE		
107	1903	Alabama, Water powers of, with an appendix on stream measurements in Mississippi.
298	1912	California, Water resources of, part 1, Stream measurements in Sacramento River Basin.
299	1912	California, Water resources of, part 2, Stream measurements in San Joaquin River Basin.
300	1912	California, Water resources of, part 3, Stream measurements in the Great Basin and Pacific coast river basins.
447	1918	California, Surface water supply of the southern Pacific slope of.
597e	1927	California, Surface water supply of Sacramento River Basin.
636d	1927	California, Surface water supply of San Joaquin River Basin.
636e	1927	California, Surface water supply of Pacific slope basins in.
637a	1927	California, Surface water supply of minor San Francisco Bay, northern Pacific, and Great basins in.
74	1900	Colorado, Water resources of.
197	1905	Georgia, Water resources of.
415	1915	Massachusetts, Surface waters of.
230	1906	Nebraska, Surface water supply of.
370	1910	Oregon, Surface water supply of.
850	1937	Texas, Summary of records of surface waters of.
424	1916	Vermont, Surface waters of.
492	1919	Washington, Summary of hydrometric data in.
469	1921	Wyoming, Surface waters of, and their utilization.
DRAINAGE BASIN		
395	1914	Colorado River (Colo., Utah, etc.) and its utilization, 1916.
617	1927	Colorado River, upper (Colo., Utah), and its utilization, 1929.
517	1920	Great Salt Lake Basin, Water powers of, 1924.
618	1926	Green River (Wyo., Utah) and its utilization, 1930.
198	1906	Kennebec River Basin (Maine), Water resources of, 1907.
536	1920	Milk River. (See St. Mary and Milk Rivers.)
279	1909	New-Kanawha River Basin (W. Va., Va., N. C.), Surface water supply of, 1925.
192	1906	Penobscot River Basin (Maine), Water resources of, 1912.
358	1913	Potomac River Basin (W. Va., Va., Md., etc.), 1907.
491	1917	Rio Grande Basin (N. Mex., Tex., etc.), Water resources of, 1888-1913.
109	1904	St. Mary and Milk Rivers (Mont. and Canada), Water supply of, 1920.
		Susquehanna River Basin (Pa., Md.), Hydrography of, 1905.

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

State reports containing compilation of records of discharge

State	Year ending	Report	Issued by
Alabama....	1915	Bull. 17, Water powers of Alabama....	Geological Survey of Alabama.
Arkansas....	1928	Stream gaging report 1.....	Arkansas Geological Survey.
Georgia....	1920	Bull. 38, Water powers of Georgia....	Geological Survey of Georgia.
Illinois....	1937	Stream flow data of Illinois.....	Division of Waterways.
Do.....	1911	Water resources of Illinois.....	Rivers and Lakes Commission.
Indiana....	1927	Pub. 72, Surface water supply of Indiana.	Department of Conservation.
Do.....	a1930	Pub. 112, Surface water supply of Indiana.	Do.
Iowa.....	1932	Stream-flow records of Iowa.....	Iowa State Planning Board.
Kansas.....	b1919	Surface waters of Kansas.....	Kansas Water Commission.
Do.....	c1924	.....do.....	Do.

State reports containing compilation of records of discharge--Continued

State	Year ending	Report	Issued by
Kansas.....	d1928	Surface waters of Kansas.....	Kansas State Board of Agriculture.
Do.....	e1935	Stream-flow data of Kansas.....	Do.
Kentucky...	1920	Surface waters of Kentucky.....	Kentucky Geological Survey.
Minnesota..	1912	Water resources investigation of Minnesota.	State Drainage Commission.
Missouri...	1926	Reports of Bureau of Geology and Mines, Vol. 20, 2d series, Water Resources of Missouri.	Missouri Bureau of Geology and Mines.
Nebraska...	1914	1st hydrographic report.....	Bureau of Water Power, Irrigation and Drainage.
Do.....	f1928	2d hydrographic report.....	Do.
New Jersey.	1928	Bull. 33, Surface water supply of New Jersey.	Department of Conservation and Development.
Do.....	E1934	Special Report 5, Surface water supply of New Jersey.	State Water Policy Commission.
New Mexico.	1925	Surface water supply of New Mexico....	Office of the State Engineer.
North Carolina.	1923	Bull. 34, Discharge records of North Carolina streams.	Department of Conservation and Development.
Do.....	h1936	Bull. 39, Discharge records of North Carolina streams.	Do.
Oregon.....	1914	Bull. 4, Water resources of the State of Oregon.	Office of the State Engineer.
Do.....	i1924	Bull. 7, Water resources of the State of Oregon.	Do.
Do.....	j1930	Bull. 8, Water resources of the State of Oregon.	Do.
Do.....	k1936	Bull. 9, Water resources of the State of Oregon.	Do.
Pennsylvania	1911	Report of Water Supply Commission of Pennsylvania.	Water Supply Commission of Pennsylvania.
Do.....	l1932	Stream-flow records of Pennsylvania...	Department of Forests and Waters.
Tennessee..	1924	Bull. 34, Water resources of Tennessee.	Department of Education.
Do.....	m1930	Bull. 40, Surface waters of Tennessee.	Do.
Utah.....	1905	5th Biennial Report, State Engineer...	Office of the State Engineer.
Virginia...	1927	Bull. 31, Water resources of Virginia.	Conservation and Development Commission.
Washington.	1933	Bull. 5, Monthly and yearly summaries of hydrometric data.	Department of Conservation and Development.
Wisconsin..	1914	1st report of Railroad Commission of Wisconsin to Legislature on water powers.	Railroad Commission of Wisconsin.
Do.....	n1923	2d report of Railroad Commission of Wisconsin to Legislature on water powers.	Do.

a Includes records for the years 1927-30.

b Includes records for the years 1895-1919.

c Includes records for the years 1919-24.

d Includes records for the years 1924-28.

e Includes records for the years 1928-35.

f Includes records for the years 1914-28.

g Includes records for the years 1928-34.

h Includes records for the years 1889-1936; records of daily and monthly discharge are not included.

i Includes records for the years 1914-24.

j Includes records for the years 1924-30.

k Includes records for the years 1930-36.

l Includes records for the years 1928-32.

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

n Includes records for the years 1914-23.

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

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

The table on the following page 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 1937 to September 1938 by agencies other than the Geological Survey. The records for these stations are not contained in the publications of the Geological Survey.

Records of discharge collected by agencies other than the Geological Survey

Stream	Location	Period	Operated by
American Falls Reservoir, inflow to.	Near American Falls, Idaho.....	1927-28, 1932-38	Idaho Water District No. 36.
Antelope Reservoir...	Sec. 32, T. 30 S., R. 45 E., near Danner, Oreg.	1925-27, 1930, 1932-38	State engineer.
Bully Creek.....	SW $\frac{1}{4}$ sec. 33, T. 18 S., R. 44 E., 5 miles southwest of Vale, Oreg.	1933-38	Do.
Do.....	At mouth, near Vale, Oreg.....	1938	Do.
Burnt River, North Fork of.	SE $\frac{1}{4}$ sec. 24, T. 11 S., R. 36 E., near Unity, Oreg.	1938	Do.
Burnt River, South Fork of.	SW $\frac{1}{4}$ sec. 27, T. 13 S., 36 E., near Unity, Oreg.	*1938	Do.
Grande Ronde River...	Below Chicken Creek, near Starkey, Idaho.	1936-38	Do.
Do.....	NW $\frac{1}{4}$ sec. 12, T. 3 S., R. 36 E., at lower reservoir site near La Grande, Oreg.	1937-38	Do.
Indian Creek.....	SE $\frac{1}{4}$ sec. 33, T. 1 S., R. 40 E., above North Indian Creek, near Imbler, Oreg.	1938	Do.
Island Park Reservoir inflow to.	Near Island Park, Idaho.....	1935-38	U. S. Bureau of Reclamation.
Jack Creek.....	SE $\frac{1}{4}$ sec. 25, T., 30 S., R. 44 E., 3 miles southeast of Danner, Oreg.	1925, 1930, 1932-38	State engineer.
Jordan Creek.....	9 miles west of Jordan Valley, Oreg...	*1930, 1932-38	Do.
Little Indian Creek...	NE $\frac{1}{4}$ sec. 32, T. 1 S., R. 40 E., 9 miles northeast of Imbler, Oreg.	1938	Do.
Little Minam River...	SE $\frac{1}{4}$ sec. 27, T. 3 S., R. 41 E., 10 miles east of Cove, Oreg.	1938	Do.
Malheur River.....	At Vale, Oreg.....	*1937-38	Do.
Do.....	Below Nevada Dam, near Vale, Oreg.....	*1934, 1936-38	Do.
Do.....	SW $\frac{1}{4}$ sec. 32, T. 20 S., R. 41 E., near Namorf, Oreg.	*1931-38	Do.
Malheur River, North Fork of.	At Juntura, Oreg.....	*1926-32, 1935-38	Do.
Pine Creek.....	NW $\frac{1}{4}$ sec. 26, T. 8 S., R. 38 E., near Baker, Oreg.	*1929, 1930, 1938	Do.
Teton Basin, inflow to.	Teton Basin, Idaho.....	1934-38	Idaho Water District No. 36.
Teton River.....	Near Driggs, Idaho.....	1935-38	U. S. Bureau of Reclamation.
Wallowa Lake Reser- voir.	At outlet, near Joseph, Oreg.....	*1925-38	State engineer.
Wallowa River.....	Below Wallowa Lake, Oreg.....	*1926-38	Do.

*Records for some earlier years published in water-supply papers of the Geological Survey.
 Note.—Records for stations in the above table operated by the State engineer of Oregon are published in the following State engineer bulletins: Those for 1915-24, in Bulletin 7; those for 1925-30, in Bulletin 8; those for 1931-36 (including some to December 1936), in Bulletin 9. (Records for 1937-38 have not been published.) Records for stations operated by the Idaho Water District No. 36 are published in the annual reports of that organization. Records for stations operated by the Bureau of Reclamation have not been published.

COOPERATION

The work was done under cooperative agreements with the several States as follows:

In Idaho, with the Department of Reclamation, R. W. Faris, commissioner, and the State Water Conservation Board, N. V. Sharp, chairman; in Oregon, with the State engineer, Charles E. Stricklin; in Washington, with the State Department of Conservation and Development, John Brooke Fink, director, and C. J. Bartholet, supervisor of hydraulics; in Wyoming, with the State engineer, John B. Quinn.

Acknowledgments for financial assistance in collecting the records published herein are due also to the Corps of Engineers, United States Army; the Office of Indian Affairs and the Bureau of Reclamation, United States Department of the Interior; the Weather Bureau, the Soil Conservation Service, and the Forest Service, United States Department of Agriculture.

Assistance in collecting records was also rendered by the following municipalities, organizations, corporations, and individuals: In Idaho, by the city of Pocatello, Idaho Power Co., Weiser Irrigation District, Lake Irrigation District, Washington Water Power Co., Board of Control for Boise Project, Yellow Pine Co., Mesa Orchards Co., Idaho Water District No. 38, North Side Canal Co., Jackson Hole Light and Power Co., Utah Power & Light Co., and watermasters for Big Lost, Little Lost, Big Wood, Little Wood, Boise, Lake

Fork of Payette, and Weiser Rivers and Mud Lake. In Oregon, by the Warm Springs Irrigation District, Malheur, Baker, Union, and Wallowa Counties, Eastern Oregon Light & Power Co., and Inland Power & Light Co.

Funds for construction, repairs, and improvement of gaging stations were allocated to the Geological Survey by the Federal Emergency Administration of Public Works.

DIVISION OF WORK

The data for Snake River at and above Milner, Idaho, for stations on tributaries that enter Snake River above Idaho Falls (except those in the Salt River Basin in Wyoming), and for Blackfoot River near Blackfoot, Idaho, were collected and prepared for publication under the supervision of Lynn Crandall, district engineer. For all other stations in Idaho, and for Snake River at Oxbow, Oreg., and Salmon Falls Creek near San Jacinto, Nev., the data were collected and prepared for publication under the supervision of T. R. Newell, district engineer.

For all other stations in the several States the data were collected and prepared for publication under the supervision of district engineers as follows: In Oregon, G. H. Canfield, the work being done in collaboration with Charles E. Stricklin, State engineer; in Washington, G. L. Parker; in Wyoming, Robert Follansbee; and in Nevada, A. B. Purton.

SNAKE RIVER MAIN STEM

Jackson Lake at Moran, Wyo.

Location.— Staff gage, lat. 43°51', long. 110°35', in sec. 18, T. 45 N., R. 114 W., at Moran, a short distance above lake outlet. Zero of gage is 6,700 feet above mean sea level.

Records available.— July 1908 to September 1938. Records for 1908 and 1910 fragmentary.

Remarks.— Jackson Lake impounds water for irrigation of lands in Snake River Valley in Idaho. It has a capacity of 847,000 acre-feet between elevations 6,730 and 6,769 feet, above mean sea level. Gage-height record and capacity table furnished by Bureau of Reclamation.

Contents, in acre-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	232,020	246,960	267,480	297,810	325,620	349,920	383,600	437,360	663,660	851,070	720,090	517,240
2	232,220	247,580	268,110	298,240	327,120	351,010	384,480	445,950	667,260	860,060	713,700	513,750
3	232,220	248,000	268,740	298,660	328,200	352,110	385,150	449,180	692,370	880,560	707,810	511,800
4	232,220	248,620	269,370	299,300	329,290	353,210	385,810	452,820	708,540	849,130	700,440	507,940
5	232,430	249,030	270,000	299,930	330,370	354,300	386,920	457,370	726,760	849,130	689,690	504,240
6	232,430	249,650	270,630	300,570	331,460	355,180	388,030	460,330	743,810	849,130	679,940	501,010
7	232,430	250,070	271,250	301,210	332,330	356,060	388,910	463,080	763,220	848,110	670,440	496,620
8	232,220	250,690	271,880	301,840	333,200	356,710	389,580	465,820	778,710	847,480	661,480	492,240
9	232,220	251,100	272,510	302,690	334,060	357,370	390,460	469,580	792,000	849,020	652,520	487,160
10	232,220	251,510	273,140	303,540	335,150	358,260	391,130	471,320	807,130	851,070	642,870	483,010
11	232,430	251,930	273,230	304,600	336,230	359,350	391,790	474,300	819,000	850,120	633,730	479,340
12	232,220	252,340	273,000	305,660	337,320	360,220	392,460	478,200	831,450	850,120	625,520	475,450
13	232,220	252,750	281,510	306,960	338,190	361,100	393,120	482,780	844,930	849,700	620,060	472,240
14	232,020	253,370	282,660	308,240	339,060	361,760	394,020	487,620	852,100	847,000	615,610	469,490
15	232,220	253,990	283,610	309,310	339,920	362,420	394,910	494,550	833,120	843,120	606,200	466,970
16	233,660	254,820	284,870	310,380	340,790	363,290	395,810	500,780	853,640	840,160	599,760	464,450
17	234,880	255,650	286,150	311,450	341,440	364,390	396,700	508,870	864,150	839,060	594,060	460,780
18	236,300	257,100	287,210	313,170	342,090	365,270	397,820	517,240	864,920	834,250	588,850	456,920
19	237,530	257,920	288,060	314,670	342,740	366,920	399,610	523,250	864,150	829,410	583,390	451,910
20	238,340	258,960	288,690	315,320	343,610	368,120	402,290	529,790	862,350	823,050	576,510	447,360
21	239,160	260,400	289,530	315,960	344,480	370,510	404,530	534,470	852,870	815,460	569,450	443,270
22	239,970	261,640	290,180	316,820	345,130	371,640	406,320	539,150	855,170	806,170	562,380	436,910
23	240,790	262,260	291,030	318,110	345,780	372,960	409,460	545,940	855,940	797,020	556,020	430,600
24	241,610	262,880	291,870	319,180	346,430	375,180	411,910	553,190	856,680	787,990	549,680	424,730
25	242,420	263,600	292,610	320,040	347,080	377,400	414,140	562,380	854,660	778,960	543,830	418,870
26	243,240	264,340	293,360	320,680	347,740	379,610	417,060	574,160	854,150	770,690	538,680	413,020
27	243,860	264,970	293,990	321,330	348,390	380,270	420,220	586,480	853,120	762,470	534,000	407,880
28	244,480	265,600	294,640	321,750	349,040	380,940	423,160	603,340	852,350	745,500	531,190	402,960
29	245,100	266,230	295,690	322,400	-	381,600	426,540	620,770	851,840	745,300	527,470	399,580
30	246,720	266,860	296,330	323,260	-	382,270	430,600	635,660	851,330	736,400	524,910	396,710
31	246,340	-	296,960	324,330	-	382,930	-	649,620	-	727,490	521,190	-

SNAKE RIVER MAIN STEM

Snake River near Moran, Wyo.

Location.- Water-stage recorder, lat. $43^{\circ}51'$, long. $110^{\circ}34'$, in sec. 17, T. 45 N., R. 114 W., $1\frac{1}{2}$ miles east of Moran and Jackson Lake Dam and $3\frac{1}{2}$ miles upstream from Pacific Creek.

Drainage area.- 820 square miles.

Records available.- September 1903 to September 1938.

Average discharge.- 35 years (1,430 second-feet).

Extremes.- Maximum daily discharge during year, 7,450 second-feet June 18 (gage height, 7.00 feet); minimum daily, 30 second-feet Jan. 25-31 (gage height, 0.17 foot).
1903-38: Maximum discharge, 15,100 second-feet June 12, 1918 (gage height, 10.41 feet); practically no flow for a few days in 1907 and 1909.

Remarks.- Records excellent except those for period when gates were closed at dam, Oct. 15 to June 6, which were computed on basis of staff-gage readings made once or twice a week and interpolations on intervening days and are good. Flow controlled by operation of outlet gates at Jackson Lake.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	250	34	32	33	31	35	36	100	128	4,830	4,290	2,820
2	250	34	32	33	31	35	36	98	140	4,500	4,270	2,490
3	323	34	31	33	31	35	35	94	160	4,260	4,590	2,460
4	336	34	31	32	31	36	36	90	160	3,980	5,850	2,470
5	336	34	31	32	31	36	35	88	160	3,800	6,390	2,460
6	336	34	31	31	32	36	34	87	160	3,790	6,230	2,790
7	336	34	31	31	32	35	34	82	1,710	3,480	5,680	3,300
8	314	34	31	31	33	35	34	76	2,480	2,460	5,330	3,400
9	292	34	31	31	33	35	35	68	991	1,710	6,080	3,050
10	292	34	31	31	34	35	36	58	160	2,310	6,100	2,720
11	292	34	31	31	34	34	37	48	160	2,520	5,240	2,580
12	292	34	32	31	34	34	38	47	160	2,720	4,560	2,450
13	292	34	32	31	34	34	40	46	2,370	3,340	4,430	2,240
14	271	34	33	31	34	34	41	47	5,890	3,960	4,420	1,970
15	250	35	33	31	34	34	42	47	7,130	3,960	4,300	1,990
16	124	35	34	31	34	34	44	48	7,130	3,870	3,930	2,290
17	48	36	34	31	34	34	47	50	7,230	3,790	3,630	2,720
18	40	36	34	31	34	34	49	51	7,450	3,900	3,470	3,130
19	37	36	33	31	34	34	52	54	7,210	4,960	3,930	3,120
20	34	36	33	31	34	35	55	57	6,430	5,690	4,220	2,810
21	34	36	33	31	34	35	58	58	6,430	6,170	4,290	3,350
22	34	36	32	31	34	35	61	60	6,680	6,530	4,500	4,300
23	34	36	32	31	34	35	66	61	6,660	6,870	4,420	3,660
24	34	36	32	31	34	36	71	59	6,660	6,660	4,300	3,580
25	34	34	32	30	34	36	77	57	6,620	6,320	4,030	3,360
26	34	34	33	30	34	36	82	59	6,620	5,760	3,460	3,210
27	34	34	33	30	34	36	87	61	6,150	5,530	2,630	3,250
28	34	33	33	30	34	36	96	73	5,630	6,060	2,390	2,810
29	34	33	34	30	-	36	104	85	5,360	6,120	2,640	1,200
30	34	33	34	30	-	36	102	98	5,050	6,100	2,870	602
31	34	-	34	30	-	36	-	113	-	5,530	3,160	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						5,119	336	34	165.0	10,150		
November.....						1,032	36	33	34.4	2,060		
December.....						1,003	34	31	32.4	1,990		
Calendar year 1937.....						462,621	7,610	23	1,267	917,500		
January.....						962	33	30	31.0	1,910		
February.....						931	34	31	33.2	1,850		
March.....						1,087	36	34	35.1	2,160		
April.....						1,599	104	34	55.3	3,170		
May.....						2,120	113	46	68.4	4,200		
June.....						119,259	7,450	128	3,975	236,500		
July.....						141,580	6,870	1,710	4,567	280,800		
August.....						136,330	6,390	2,390	4,378	270,400		
September.....						82,602	4,300	602	2,733	163,800		
Water year 1937-38.....						493,624	7,450	30	1,352	979,000		

Snake River above Greys River, near Alpine, Wyo.

Location.- Water-stage recorder, lat. 43°11', long. 111°00', in SW $\frac{1}{4}$ sec. 21, T. 37 N., R. 118 W. (revised), three-quarters of a mile upstream from Greys River and 2 $\frac{1}{2}$ miles east of Alpine, Wyo.

Records available.- March 1937 to September 1938.

Extremes.- Maximum discharge during year, 18,600 second-feet June 23 (gage height, 8.73 feet); minimum, 898 second-feet January 5 (gage height, 0.30 foot), caused by ice jam upstream.

1937-38: Maximum and minimum discharges, those of 1938.

Remarks.- Records good except those for periods of missing gage heights, Jan. 6-31, July 10-12, 31, Aug. 21-22, Sept. 9-12 (computed on basis of records for station near Heise) and Feb. 1 to Apr. 4 (computed on basis of staff-gage readings made three times a week, and records for station near Heise), which are fair. Flow regulated by storage in Jackson Lake.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,760	1,360	1,210	1,140	1,090	1,070	1,060	7,230	11,600	14,700	8,000	5,220
2	1,740	1,360	1,180	1,050	1,090	1,090	1,050	6,240	11,400	14,000	7,100	4,800
3	1,720	1,340	1,180	1,040	1,100	1,100	1,060	5,560	12,100	13,100	7,020	4,560
4	1,760	1,320	1,140	982	1,100	1,100	1,120	5,000	12,700	12,500	7,440	4,490
5	1,800	1,310	1,200	1,050	1,080	1,100	1,180	4,560	13,400	11,900	8,550	4,430
6	1,830	1,310	1,190	1,100	1,070	1,090	1,150	4,130	14,000	11,500	8,630	4,360
7	1,820	1,290	1,240		1,060	1,090	1,100	3,810	14,500	10,900	8,290	4,740
8	1,800	1,280	1,290		1,080	1,040	1,100	3,610	16,200	9,940	7,940	5,100
9	1,780	1,270	1,250		1,120	1,040	1,100	3,520	16,200	8,630	8,110	5,260
10	1,750	1,280	1,260		1,120	1,060	1,150	3,610	13,300	8,370	8,170	4,940
11	1,740	1,290	1,320		1,120	1,090	1,190	3,840	11,000	8,460	8,050	4,560
12	1,730	1,290	1,710		1,120	1,110	1,220	4,540	10,400	8,050	7,330	4,450
13	1,710	1,290	1,680		1,090	1,130	1,240	5,020	10,700	7,710	6,800	4,300
14	1,710	1,290	1,620		1,060	1,150	1,340	5,560	13,900	7,800	6,650	4,080
15	1,790	1,310	1,460		1,060	1,150	1,730	6,150	16,100	8,370	6,630	3,830
16	1,830	1,300	1,390	1,100	1,070	1,290	2,110	6,630	17,000	9,340	6,410	3,810
17	1,780	1,340	1,360		1,040	1,290	2,170	8,020	17,400	9,160	6,100	4,030
18	1,710	1,350	1,350		1,010	1,260	2,560	8,200	18,200	8,690	5,770	4,470
19	1,640	1,240	1,310		1,010	1,260	4,180	7,360	18,200	8,690	5,650	4,840
20	1,560	1,290	1,280		1,040	1,260	4,160	6,410	16,600	9,620	6,000	4,660
21	1,520	1,330	1,160		1,060	1,120	3,890	5,790	16,300	10,000	6,200	4,450
22	1,490	1,360	1,160		1,060	1,110	3,890	5,860	17,800	10,400	6,250	5,140
23	1,480	1,370	1,180		1,070	1,100	4,080	6,340	18,400	10,600	6,320	5,560
24	1,450	1,360	1,160		1,060	1,120	4,800	7,100	17,400	10,400	6,200	5,180
25	1,430	1,390	1,110		1,060	1,130	4,840	8,200	16,500	10,300	6,120	5,060
26	1,390	1,310	1,140	1,100	1,060	1,080	4,880	9,680	16,900	9,750	5,930	4,860
27	1,410	1,310	1,150		1,050	1,060	5,370	11,400	17,100	8,900	5,480	4,740
28	1,400	1,270	1,140		1,050	1,090	6,000	12,900	16,400	9,160	4,600	4,700
29	1,380	1,240	1,140		-	1,100	6,290	13,600	15,900	9,190	4,490	5,160
30	1,380	1,180	1,160		-	1,100	6,770	13,400	15,600	9,190	4,680	3,040
31	1,370	-	1,150		-	1,080	-	12,500	-	6,900	4,980	-
Month					Second-foot-days		Maximum	Minimum	Mean		Run-off in acre-feet	
October.....					50,660		1,830	1,370	1,634		100,500	
November.....					39,230		1,390	1,180	1,308		77,810	
December.....					39,270		1,710	1,110	1,267		77,890	
Calendar year												
January.....					33,862		-	982	1,092		67,160	
February.....					30,000		1,120	1,010	1,071		59,500	
March.....					34,840		1,290	1,040	1,124		69,100	
April.....					84,080		6,770	1,050	2,803		166,800	
May.....					215,570		13,600	3,520	6,954		427,600	
June.....					453,200		18,400	10,400	15,110		898,900	
July.....					308,220		14,700	7,710	9,945		611,300	
August.....					205,870		8,630	4,490	6,641		408,300	
September.....					138,820		5,560	3,040	4,627		275,300	
Water year 1937-38.....					1,633,622		18,400	982	4,476		3,240,000	

Snake River near Heise, Idaho

Location.- Water-stage recorder, lat. $43^{\circ}37'$, long. $111^{\circ}40'$, in sec. 5, T. 3 N., R. 41 E., 3 miles upstream from Heise and 23 miles upstream from Henrys Fork. Zero of gage is 5,014.90 feet above mean sea level.

Drainage area.- 5,740 square miles.

Records available.- September 1910 to September 1938 except for winters of 1914-24.

Average discharge.- 28 years (1910-38), 6,860 second-feet.

Extremes.- Maximum discharge during year, 23,100 second-feet June 9 (gage height, 7.70 feet); minimum, 1,940 second-feet Feb. 19 (gage height, 1.57 feet).

1910-38: Maximum discharge, about 60,000 second-feet May 19, 1927, result of washing out of a landslide on Gros Ventre River (gage height, about 16.0 feet, present datum); minimum, 1,210 second-feet Jan. 22, 1935 (gage height, 1.15 feet).

Remarks.- Records excellent except those for periods of ice effect, Dec. 22 to Jan. 7, Jan. 9, 26, 27, 30, which were estimated and are fair. Station is above all irrigation diversions from main river except Riley ditch (capacity about 30 second-feet), which diverts 1 mile upstream from station. About 105,000 acres irrigated by diversions from tributaries above station in both Wyoming and Idaho. Flow regulated by storage in Jackson Lake.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,000	2,580	2,150	2,050	2,100	2,030	2,180	16,100	19,400	18,800	11,000	7,260
2	2,950	2,550	2,220		2,120	2,120	2,140	15,100	18,500	17,800	9,580	7,020
3	2,910	2,530	2,330		2,100	2,160	2,100	15,000	19,100	17,700	9,220	6,500
4	2,910	2,520	2,270		2,120	2,180	2,150	11,700	19,700	16,600	9,220	6,470
5	2,960	2,490	2,240		2,140	2,140	2,220	10,600	20,500	16,200	10,100	6,530
6	3,000	2,490	2,220	2,260	2,100	2,090	2,270	9,650	20,800	15,800	10,600	6,220
7	2,980	2,530	2,220		2,060	2,090	2,210	9,870	21,100	15,400	10,400	6,190
8	2,960	2,550	2,220		2,010	2,060	2,150	8,240	22,000	14,600	10,100	6,790
9	2,930	2,520	2,100		2,140	2,010	2,270	7,870	22,600	13,100	10,000	7,080
10	2,910	2,490	2,210		2,160	2,020	2,440	7,960	20,200	12,100	10,100	7,050
11	2,900	2,470	2,600	2,180	2,160	2,050	2,550	8,330	16,600	11,800	10,200	6,500
12	2,880	2,450	3,810		2,160	2,080	2,550	9,320	15,500	11,700	9,650	6,530
13	2,860	2,470	3,670		2,150	2,160	2,980	10,100	15,600	11,200	8,870	6,110
14	2,850	2,500	3,120		2,150	2,090	2,460	12,800	17,600	11,200	8,770	5,950
15	3,020	2,530	2,680		2,160	2,090	3,920	13,000	20,000	12,100	8,710	5,550
16	3,100	2,560	2,800	2,300	2,100	2,220	4,760	13,500	21,500	12,400	8,610	5,420
17	3,160	2,560	2,730		2,020	2,440	5,220	15,500	22,000	12,200	8,240	5,470
18	3,180	2,680	2,630		1,950	2,440	6,530	16,200	22,600	11,600	7,900	5,760
19	3,100	2,550	2,600		1,940	2,380	9,840	15,100	22,500	11,200	7,590	6,170
20	2,950	2,570	2,470		2,400	2,420	11,100	13,400	21,500	11,700	7,770	6,580
21	2,860	2,550	2,280	2,120	2,010	2,450	10,100	12,200	20,500	12,200	8,020	5,950
22	2,810	2,660		2,210	2,010	2,380	9,550	12,100	21,400	12,400	7,960	6,030
23	2,760	2,710		2,260	2,020	2,330	10,300	12,500	22,500	12,400	8,140	7,440
24	2,750	2,610		2,210	2,010	2,390	10,700	15,500	22,200	12,700	8,140	6,760
25	2,710	2,570		2,150	1,990	2,380	11,300	14,700	21,100	12,700	8,080	6,620
26	2,680	2,550	2,150	2,140	1,990	2,280	12,300	16,500	20,900	12,500	8,050	6,500
27	2,580	2,530		2,150	1,990	2,260	11,700	18,900	21,000	11,700	7,710	6,500
28	2,660	2,420		2,120	1,990	2,280	11,500	20,600	20,700	11,200	6,990	6,250
29	2,630	2,450		2,200	-	2,300	12,100	21,500	19,500	11,500	6,420	5,170
30	2,610	2,390		2,120	-	2,270	13,700	21,600	19,600	11,400	6,560	5,170
31	2,600	-	-	2,050	-	2,220	-	20,300	-	11,300	6,670	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				89,240		3,180	2,600	2,279	177,000			
November.....				76,510		2,960	2,590	2,550	151,800			
December.....				75,270		3,310	2,100	2,428	149,300			
Calendar year 1937.....				1,975,120		17,400	1,960	5,411	3,918,000			
January.....				66,530		2,500	2,010	2,146	132,000			
February.....				57,830		2,160	1,940	2,085	114,700			
March.....				69,040		2,450	2,010	2,227	135,200			
April.....				138,430		13,700	2,100	6,281	375,700			
May.....				420,040		21,600	7,870	13,550	833,100			
June.....				608,600		22,600	15,500	20,290	1,207,000			
July.....				407,200		18,800	11,200	13,140	807,700			
August.....				269,370		11,000	6,420	8,889	553,300			
September.....				189,270		7,440	5,170	6,324	376,300			
Water year 1937-38.....				2,517,770		22,600	1,940	6,898	4,994,000			

Diversions from Snake River between Heise and
Shelley gaging stations, Idaho

Between Heise and Shelley gaging stations 47 canals divert water from Snake River for irrigation; of these, 36 divert above mouth of Henrys Fork and 11 divert below. Most of the canals are equipped with staff gages, which are read once daily; a few have water-stage recorders. Records showing combined discharge of all the canals for each irrigation season from 1919 to 1938 are available.

Records good except those for May, which are fair.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Jul-	Aug.	Sept.
1								570	7,380	5,700	8,450	5,780
2								631	7,570	4,150	8,280	5,760
3								582	7,840	3,360	8,150	5,500
4								697	7,870	3,200	8,200	5,360
5								694	8,190	3,070	8,300	5,380
6								774	8,400	3,000	8,310	5,490
7								823	8,800	3,310	8,080	5,570
8								843	9,230	4,420	7,510	6,030
9								930	9,360	4,370	7,340	6,310
10								1,180	9,170	4,780	7,300	6,310
11								1,890	8,690	5,920	7,570	6,150
12								2,560	8,690	7,650	7,530	6,180
13								3,410	8,860	8,620	7,520	6,070
14								3,770	8,740	8,980	7,380	6,050
15								4,200	8,390	9,300	7,370	6,140
16								4,460	8,200	9,280	7,230	6,140
17								4,620	8,210	9,080	7,110	6,210
18								4,300	7,960	9,040	6,900	6,080
19								4,120	7,820	9,050	6,560	6,150
20								4,040	7,960	9,230	6,660	6,380
21								4,290	8,200	9,230	6,520	6,260
22								4,550	8,650	9,160	6,500	6,150
23								4,940	8,720	9,090	6,920	6,200
24								5,250	8,240	8,730	7,030	6,140
25								5,980	7,710	8,680	6,930	6,090
26								6,600	7,300	8,510	6,670	6,000
27								6,970	6,840	8,590	6,170	5,910
28								7,160	6,570	8,510	5,860	5,840
29								7,250	6,480	8,630	5,670	5,840
30								7,160	6,270	8,520	5,510	5,750
31								7,240	-	8,470	5,860	-
Month								Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....								112,484	7,250	570	3,629	223,100
June.....								242,320	9,360	6,270	8,077	490,600
July.....								221,630	9,300	3,000	7,149	439,600
August.....								221,390	8,450	5,570	7,142	439,100
September.....								179,220	6,380	5,360	5,974	355,500
The period.....												1,936,000

Snake River near Shelley, Idaho

Location.- Water-stage recorder, lat. $43^{\circ}25'$, long. $112^{\circ}08'$, in sec. 17, T. 1 N., R. 37 E., a quarter of a mile upstream from Woodville Highway bridge and 3 miles north of Shelley.

Records available.- March 1915 to September 1938.

Extremes.- Maximum daily discharge during year, 20,600 second-feet July 4 (gage height, 10.78 feet); minimum daily discharge, 906 second-feet Oct. 4 (gage height, 3.94 feet). 1915-38: Maximum discharge, 47,200 second-feet June 17, 1918 (gage height, 16.97 feet); minimum, 288 second-feet Nov. 5, 1934 (gage height, 2.22 feet).

Greatest discharge known, slightly in excess of 70,000 second-feet (estimated), occurred June 6, 1894, at former station at Eagle Rock (now Idaho Falls).

Remarks.- Records excellent except those for periods of ice effect Nov. 21-23, Dec. 20-21, Dec. 24 to Jan. 14, Jan. 17-21, Jan. 24-31, Feb. 14, 16-24, which were computed on basis of one discharge measurement and comparison with records for station at Clough ranch, and are good. Flow regulated by storage in Jackson Lake. Numerous irrigation diversions above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,170	1,980	2,380	2,950	2,220	2,360	2,920	16,300	18,100	18,500	4,190	2,800
2	1,030	1,930	2,260	2,480	2,660	2,610	2,830	19,200	16,900	19,500	3,800	3,250
3	966	1,840	2,220	2,520	2,560	2,710	2,730	19,700	16,100	20,300	2,630	3,130
4	906	1,900	2,340	2,350	2,480	3,090	2,700	18,400	16,100	20,600	2,300	2,980
5	930	1,900	2,470	2,320	2,630	2,910	2,750	16,600	16,500	20,000	2,300	2,960
6	930	2,010	2,560	2,200	2,910	2,800	2,750	14,800	16,600	19,300	2,780	2,820
7	930	2,010	2,530	2,200	2,760	2,780	2,660	13,100	16,600	18,700	3,290	2,610
8	1,050	2,020	2,330	2,350	2,550	2,700	2,610	11,500	16,400	17,100	3,420	2,470
9	1,130	2,130	2,580	2,610	2,610	2,680	2,630	10,400	17,500	15,600	3,710	2,450
10	1,110	2,260	2,650	2,540	2,800	2,990	2,610	9,720	17,700	13,800	3,970	2,590
11	1,250	2,260	2,730	2,550	2,940	2,630	2,750	9,080	15,600	11,300	4,240	2,660
12	1,190	2,240	3,090	2,550	2,950	2,610	2,850	9,290	12,500	9,120	3,990	2,440
13	1,120	2,130	4,390	2,580	3,070	2,730	2,870	9,930	10,800	6,930	3,460	2,230
14	1,350	2,130	4,550	2,730	2,890	2,890	3,450	10,500	11,000	5,270	3,060	1,990
15	1,580	2,250	4,140	2,910	2,700	3,090	3,820	12,200	13,600	4,800	3,090	1,840
16	1,520	2,320	3,750	2,660	2,670	3,040	4,420	13,200	16,500	5,120	3,130	1,570
17	1,720	2,300	3,620	2,840	2,390	3,000	5,270	14,500	17,800	5,060	3,210	1,240
18	1,980	2,300	3,500	2,870	2,300	3,020	5,890	16,600	18,400	4,830	2,920	1,100
19	2,170	2,340	3,370	2,780	2,240	3,090	7,560	17,700	19,200	4,040	2,590	1,270
20	2,270	2,330	3,210	2,660	2,460	3,070	10,800	16,600	19,200	5,570	2,640	1,510
21	2,130	2,380	3,050	2,720	2,780	3,250	11,900	14,500	17,500	3,900	2,910	1,710
22	2,010	2,550	2,890	2,300	2,650	3,440	11,600	12,600	16,200	4,190	3,230	1,670
23	1,920	2,750	2,960	2,470	2,640	3,170	11,200	11,500	17,100	4,340	3,110	1,690
24	1,890	2,850	2,450	2,360	2,520	3,310	11,500	11,200	18,900	4,690	2,910	2,390
25	2,050	2,760	2,100	1,960	2,330	3,330	12,000	11,800	19,200	5,270	2,830	2,360
26	2,240	2,890	2,300	1,910	2,360	3,290	12,900	12,800	18,700	5,490	2,910	2,380
27	2,130	2,780	2,630	1,920	2,320	3,130	13,900	14,100	18,800	5,240	3,070	2,200
28	1,900	2,680	2,840	2,140	2,400	3,020	13,800	15,800	19,200	4,470	3,270	2,100
29	1,940	2,510	3,150	2,250	-	3,040	13,700	17,700	19,900	4,240	3,020	2,060
30	1,870	2,340	3,000	2,420	-	3,020	14,200	16,900	18,100	4,290	2,760	2,100
31	1,850	-	2,940	2,720	-	2,960	-	19,200	-	4,340	2,750	-
Month												
				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				48,062	2,270	906	1,550	95,330				
November.....				88,950	2,890	1,840	2,298	136,800				
December.....				91,180	4,550	2,220	2,941	180,900				
Calendar year 1937.....												
January.....				75,820	2,950	1,910	2,478	152,400				
February.....				72,840	3,070	2,220	2,601	144,500				
March.....				90,940	3,440	2,360	2,934	180,400				
April.....				203,540	14,200	2,610	6,785	403,700				
May.....				439,420	19,700	9,080	14,170	871,600				
June.....				505,200	29,200	10,800	16,340	1,002,000				
July.....				293,890	20,600	3,570	9,480	582,900				
August.....				97,490	4,240	2,300	3,145	193,400				
September.....				65,570	3,250	1,100	2,819	132,000				
Water year 1937-38.....				2,054,902	20,600	906	5,630	4,076,000				

Diversions from Snake River between Shelley and
Clough ranch gaging stations, Idaho

Between Shelley and Clough ranch 13 canals divert water from Snake River for irrigation. The two largest of these are equipped with recorders, the others with staff gages, which are read once daily. Records showing combined discharge of these canals during each irrigation season from 1919 to 1938 are available.

Records good.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								880	3,190	2,840	3,570	2,180
2								906	3,220	2,270	3,540	2,240
3								888	3,340	1,640	2,360	2,560
4								1,100	3,470	1,500	2,000	2,500
5								1,140	3,590	1,500	1,960	2,570
6								1,190	3,680	1,510	2,190	2,620
7								1,250	3,850	1,560	3,040	2,550
8								1,340	3,920	1,910	3,010	2,290
9								1,460	3,920	2,230	2,960	2,160
10								1,660	4,050	2,620	3,100	2,170
11								1,900	3,910	3,260	2,940	2,160
12								2,010	3,790	3,660	2,690	1,660
13								2,150	3,700	3,680	2,640	1,570
14								2,440	3,720	3,660	2,210	1,760
15								2,600	3,570	3,580	2,160	1,750
16								2,530	3,250	3,680	2,120	1,230
17								2,440	3,370	3,720	2,100	1,190
18								2,440	3,300	3,620	2,490	1,180
19								2,440	3,320	3,630	2,500	1,210
20								2,280	3,250	3,430	2,400	1,350
21								2,260	3,020	3,520	2,360	1,340
22								2,590	3,010	3,710	2,350	988
23								2,550	2,800	3,730	2,340	797
24								2,760	2,460	3,600	2,340	1,350
25								2,940	2,590	3,520	2,280	1,980
26								3,150	2,730	3,510	2,310	1,970
27								3,310	3,090	3,500	2,320	2,030
28								3,310	3,090	3,490	2,280	2,060
29								3,200	3,110	3,510	2,270	2,060
30								3,060	3,080	3,540	1,900	2,070
31								3,120	-	3,560	2,060	-
Month								Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....								67,114	3,310	880	2,165	133,100
June.....								100,190	4,050	2,460	3,340	198,700
July.....								94,690	3,750	1,500	3,055	187,800
August.....								76,790	3,570	1,900	2,477	152,300
September.....								55,405	2,620	797	1,847	103,900
The period.....												781,800

SNAKE RIVER MAIN STEM

Snake River at Clough ranch, near Blackfoot, Idaho

Location.- Water-stage recorder, lat. 43°07', long. 112°31', in sec. 31, T. 3 S., R. 34 E., a quarter of a mile downstream from Blackfoot River and 14 miles southwest of Blackfoot.

Drainage area.- 11,700 square miles.

Records available.- June 1910 to September 1938.

Extremes.- Maximum daily discharge during year, 19,300 second-feet July 4 (gage height, 9.58 feet); minimum daily, 157 second-feet Sept. 20 (gage height, 0.67 foot). 1910-38: Maximum discharge, 48,200 second-feet June 18, 1918 (gage height, 14.80 feet); minimum, 111 second-feet Nov. 10, 1934 (gage height, 0.80 foot). Late in summer of 1905 there was no flow in Snake River for a distance of 10 miles in vicinity of Blackfoot. On Aug. 3, 1905, discharge of Snake River just below mouth of Blackfoot River was 39 second-feet, supplied by ground-water inflow a short distance upstream.

Remarks.- Records excellent. Discharge for periods of missing gage heights, Oct. 10-12, Dec. 3, interpolated and June 12-14 computed on basis of records for station near Shelley. Flow regulated by storage in Jackson Lake and Blackfoot-Marsh Reservoirs. Many irrigation diversions above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	206	938	2,380	2,740	2,520	2,400	2,630	14,200	15,300	15,500	782	719
2	193	1,020	2,240	2,750	2,320	2,630	2,590	16,500	14,300	16,800	642	835
3	181	964	2,260	2,280	2,480	2,770	2,530	18,200	13,000	18,400	417	874
4	163	972	2,280	2,320	2,520	3,080	2,410	17,600	12,600	19,300	400	664
5	163	1,050	2,300	2,150	2,400	3,100	2,420	16,000	12,500	18,900	304	590
6	175	1,080	2,520	2,120	2,470	2,850	2,410	14,300	12,800	18,200	256	444
7	187	1,180	2,360	2,000	2,520	2,740	2,350	12,700	12,500	17,400	360	288
8	230	1,150	2,400	2,000	2,520	2,590	2,350	11,200	12,300	16,300	276	190
9	253	1,180	2,040	2,150	2,520	2,530	2,360	9,990	12,600	14,500	462	166
10	280	1,270	2,290	2,410	2,530	2,340	2,280	8,740	13,700	12,500	754	238
11	310	1,340	2,690	2,340	3,060	2,360	2,410	7,770	13,000	9,370	1,010	434
12	340	1,380	2,880	2,350	3,100	2,440	2,580	7,290	10,000	6,320	1,230	576
13	370	1,440	3,090	2,350	2,930	2,580	2,550	7,560	7,300	4,100	1,140	761
14	370	1,350	4,600	2,380	2,650	2,720	3,060	7,870	7,600	2,230	1,010	516
15	510	1,490	4,510	2,530	2,690	2,930	3,440	8,930	10,200	1,340	906	280
16	558	1,890	3,960	2,740	2,590	2,990	3,730	10,000	11,900	1,270	990	193
17	805	1,940	3,730	2,750	2,470	2,880	4,490	11,200	13,800	1,370	922	178
18	1,080	2,060	3,590	2,640	2,190	2,950	5,450	13,000	14,500	1,370	596	187
19	1,300	2,090	3,370	2,670	2,100	3,040	6,390	15,200	15,500	947	350	160
20	1,480	2,290	3,200	2,580	2,040	2,990	8,740	15,400	16,100	474	238	157
21	1,460	2,320	3,030	2,460	2,260	2,980	11,200	13,800	15,600	234	268	245
22	1,330	2,530	2,980	2,520	2,590	3,150	11,400	11,700	13,700	220	719	534
23	1,210	2,750	2,900	2,200	2,460	3,160	10,800	10,100	13,900	375	812	768
24	1,140	2,800	2,580	2,240	2,440	3,100	11,000	9,050	15,600	664	726	663
25	1,140	2,740	2,150	2,160	2,340	3,160	11,400	8,790	16,600	1,250	635	609
26	1,210	2,770	1,900	1,760	2,410	3,080	12,000	9,400	16,200	1,710	596	492
27	1,310	2,710	2,100	1,710	2,350	2,900	13,100	10,300	15,700	1,700	684	439
28	1,090	2,560	2,460	1,720	2,380	2,790	13,200	11,700	15,900	1,320	856	272
29	1,020	2,440	2,640	1,940	-	2,740	13,000	13,600	15,900	768	998	175
30	998	2,410	2,950	2,050	-	2,740	13,000	15,200	15,300	691	998	175
31	938	-	2,800	2,220	-	2,690	-	16,000	-	790	828	-
Month						Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet	
October.....						22,000		1,480	163	71.0	43,640	
November.....						54,084		2,800	938	1,603	107,300	
December.....						88,490		4,800	1,900	2,855	176,500	
Calendar year 1937.....						866,558		12,400	163	2,374	1,718,000	
January.....						71,230		2,750	1,710	2,298	141,300	
February.....						70,540		3,100	2,040	2,512	139,500	
March.....						87,400		3,160	2,340	2,819	175,400	
April.....						187,270		13,200	2,280	6,242	371,400	
May.....						375,290		18,200	7,290	12,040	740,400	
June.....						405,900		16,600	7,300	13,530	805,100	
July.....						205,333		19,300	220	6,656	409,300	
August.....						21,167		1,230	238	683	41,980	
September.....						12,842		874	157	428	25,470	
Water year 1937-38.....						1,600,346		19,300	157	4,385	3,174,000	

American Falls Reservoir at American Falls, Idaho

Location.- Water-stage recorder, lat. 42°49', long. 112°53', in sec. 30, T. 7 S., R. 31 E., at outlet gates of reservoir at American Falls.

Records available.- March 1926 to September 1936.

Remarks.- American Falls Reservoir impounds water for the supplemental irrigation of lands primarily irrigated by several canals diverting from Snake River at Minidoka and Milner Dam. It has a capacity of 1,700,000 acre-feet between elevations 4,295.70 and 4,354.50 feet, respectively, above mean sea level, and the area of its water surface at the latter elevation is 56,000 acres. Gage-height record and capacity table furnished by Bureau of Reclamation.

Contents, in acre-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	412,920	478,720	682,330	959,740	1,200,270	1,438,260	1,705,040	1,705,720	1,712,900	1,715,750	1,405,340	948,060
2	413,440	485,320	688,820	968,510	1,209,710	1,449,050	1,702,290	1,713,770	1,706,100	1,717,830	1,392,140	956,540
3	415,740	488,810	695,310	976,600	1,217,380	1,458,880	1,701,120	1,719,170	1,704,460	1,721,450	1,350,940	912,710
4	416,790	490,230	702,890	983,110	1,226,020	1,467,250	1,703,360	1,713,470	1,702,800	1,722,080	1,334,120	902,170
5	419,940	494,380	708,980	991,680	1,232,280	1,477,700	1,705,560	1,713,470	1,702,800	1,722,080	1,334,120	902,170
6	421,260	500,000	716,150	998,550	1,239,920	1,489,220	1,705,720	1,706,160	1,706,150	1,721,450	1,316,790	898,420
7	422,570	504,840	723,180	1,005,850	1,246,560	1,499,170	1,708,960	1,710,080	1,712,900	1,718,600	1,300,540	878,220
8	422,830	510,540	731,260	1,013,140	1,256,710	1,509,120	1,711,200	1,712,900	1,712,900	1,712,900	1,284,860	866,820
9	424,150	516,240	738,280	1,020,010	1,266,450	1,514,440	1,710,640	1,712,330	1,715,750	1,707,280	1,268,880	846,940
10	426,200	521,080	745,900	1,025,590	1,274,730	1,523,490	1,708,960	1,708,400	1,726,580	1,705,600	1,256,750	837,750
11	428,250	525,850	750,870	1,030,850	1,284,980	1,533,080	1,710,080	1,702,800	1,721,450	1,701,150	1,241,840	825,940
12	427,560	528,280	764,570	1,038,780	1,293,230	1,541,600	1,706,720	1,703,580	1,710,080	1,700,560	1,227,530	811,590
13	428,680	532,990	774,350	1,046,700	1,302,970	1,549,050	1,705,720	1,703,580	1,702,240	1,697,760	1,209,230	804,020
14	429,380	536,210	783,380	1,053,940	1,312,830	1,557,570	1,706,720	1,708,400	1,698,880	1,689,350	1,194,880	794,010
15	430,980	540,810	800,280	1,060,460	1,322,240	1,568,590	1,707,840	1,711,200	1,698,440	1,676,900	1,181,910	784,810
16	432,280	545,300	815,620	1,072,270	1,332,140	1,578,780	1,708,960	1,714,610	1,701,120	1,662,020	1,166,840	776,150
17	433,610	552,640	828,600	1,082,190	1,341,540	1,584,640	1,712,330	1,713,050	1,707,840	1,649,310	1,151,060	767,140
18	437,020	560,750	838,510	1,095,270	1,350,480	1,596,050	1,714,610	1,723,440	1,718,980	1,635,850	1,132,160	758,840
19	440,870	569,220	850,330	1,105,640	1,357,430	1,606,560	1,715,750	1,723,440	1,722,080	1,623,210	1,116,660	750,220
20	446,050	578,610	859,060	1,115,110	1,365,000	1,616,070	1,715,750	1,723,440	1,722,080	1,605,120	1,106,640	745,560
21	452,760	587,790	868,420	1,122,940	1,372,560	1,623,330	1,717,470	1,712,330	1,707,280	1,584,640	1,089,410	736,880
22	456,230	596,040	876,650	1,129,930	1,380,650	1,638,260	1,713,470	1,709,520	1,701,680	1,566,710	1,074,880	731,260
23	457,800	602,330	882,540	1,137,380	1,389,270	1,653,750	1,710,640	1,703,360	1,699,440	1,549,050	1,062,990	726,980
24	459,340	608,540	889,240	1,145,380	1,397,570	1,667,780	1,705,160	1,703,360	1,700,560	1,530,460	1,051,100	721,080
25	460,680	622,470	900,860	1,152,440	1,405,340	1,674,780	1,705,040	1,703,360	1,701,680	1,516,040	1,037,010	714,440
26	464,090	638,460	909,450	1,159,820	1,413,050	1,685,450	1,713,470	1,708,400	1,705,600	1,499,170	1,023,020	709,320
27	467,320	647,480	917,540	1,165,900	1,421,790	1,698,730	1,719,170	1,711,200	1,710,080	1,483,980	1,011,000	706,510
28	470,320	656,420	925,520	1,172,020	1,430,020	1,698,560	1,715,750	1,713,050	1,712,900	1,450,370	997,260	697,710
29	473,360	666,050	933,710	1,177,670	-	1,698,400	1,708,400	1,713,050	1,712,900	1,438,760	979,850	688,550
30	476,350	674,990	940,990	1,186,150	-	1,700,000	1,708,400	1,719,170	1,713,050	1,421,790	960,160	681,250
31	477,910	675,350	950,150	1,186,150	-	1,700,000	1,713,470	1,719,170	1,713,050	1,421,790	960,160	-

SNAKE RIVER MAIN STEM

Snake River at Neeley, Idaho

Location.- Water-stage recorder, lat. 42°45', long. 112°54', in sec. 31, T. 7 S., R. 31 E., about 1 mile downstream from American Falls Dam. The following records show flow at site of former gage, 3 miles downstream and half a mile north of Neeley, in sec. 11, T. 8 S., R. 30 E. To obtain discharge at site of former gage, 40 second-feet has been added to discharge measurements made at present site. 40 second-feet has been added to discharge measurements made at site of recorder to give discharge at site of former gage.

Records available.- March 1906 to September 1933.

Extremes.- Maximum daily discharge during year, 24,700 second-feet May 5 (gate height, 8.40 feet); minimum discharge, 243 second-feet Nov. 16-18 (crest gage height not known, but was slightly above 1.18 feet).
1906-33: Maximum discharge, slightly above 48,400 second-feet June 20, 1918 (gate height, 13.5 feet at former site of gage, 3 miles downstream); minimum, 124 second-feet several days during November and December 1932 (gate height, 0.50 foot).

Remarks.- Records excellent. Flow regulated by operation of gates at American Falls Dam. About 700,000 acres of land irrigated by diversion from river and its tributaries above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,920	1,910	1,480	1,110	872	720	5,960	14,900	20,800	22,300	11,700	9,550
2	1,930	1,930	1,500	1,110	863	720	6,080	15,000	18,300	19,000	11,900	9,220
3	1,890	1,890	1,520	1,110	863	728	6,080	18,200	16,500	16,800	11,800	9,170
4	1,890	1,660	1,520	1,120	863	728	4,910	23,100	16,400	19,500	11,700	9,130
5	2,320	1,430	1,530	1,120	863	720	4,140	24,700	14,600	21,400	11,500	9,220
6	2,350	1,320	1,530	1,120	892	720	4,140	17,900	11,700	22,000	11,300	9,500
7	2,350	1,330	1,530	1,120	872	728	4,170	14,000	11,400	22,300	11,100	9,630
8	2,350	1,350	1,530	1,140	863	612	4,170	14,100	11,400	22,200	10,800	9,590
9	2,390	1,320	1,530	1,170	872	518	4,870	14,100	11,400	19,100	10,700	9,550
10	2,390	1,490	1,260	1,170	872	518	5,280	14,000	14,600	16,400	10,500	9,260
11	2,410	1,570	1,130	1,180	872	512	5,320	13,800	19,200	13,500	10,500	9,090
12	2,410	1,790	1,050	1,150	854	512	5,250	9,170	16,400	9,550	10,500	8,930
13	2,420	2,270	700	854	854	518	5,250	8,720	12,300	10,500	10,800	8,760
14	2,420	2,310	314	680	863	634	5,220	9,170	11,300	11,300	11,100	8,400
15	2,420	2,310	256	696	863	772	5,280	10,200	11,500	11,300	11,200	7,800
16	2,430	1,810	552	621	863	780	5,360	11,000	11,300	11,100	11,200	7,130
17	2,460	1,770	910	339	863	772	5,460	11,300	11,500	11,100	11,100	6,820
18	2,420	1,140	1,250	339	863	780	8,160	14,000	13,000	11,500	11,100	6,280
19	2,440	704	1,460	471	844	754	9,670	21,100	17,600	11,900	11,100	6,780
20	2,420	598	1,230	695	834	772	9,710	20,800	19,900	11,800	10,800	6,520
21	2,420	598	1,060	1,090	844	772	13,000	16,900	19,700	11,800	10,700	6,040
22	2,420	400	1,110	1,190	854	772	15,900	16,900	19,600	11,800	10,200	5,890
23	2,420	262	1,100	1,170	854	789	16,800	14,300	19,500	11,700	9,970	6,260
24	2,440	262	1,110	1,260	844	772	15,500	11,200	17,700	11,700	9,800	6,480
25	2,440	361	1,110	1,400	844	772	11,400	10,100	16,600	11,700	9,930	6,480
26	2,440	627	1,120	1,400	763	1,270	10,500	10,100	16,700	11,700	10,300	6,440
27	2,440	627	1,120	1,280	704	2,770	15,800	10,200	16,700	11,700	10,400	6,440
28	2,440	634	1,110	990	704	2,850	18,000	11,100	16,800	11,700	10,400	6,410
29	2,440	1,130	1,110	844	-	2,800	17,900	12,900	16,900	11,700	10,100	6,000
30	2,460	1,480	1,120	854	-	2,800	16,700	17,400	18,200	11,600	9,840	4,870
31	2,330	-	1,110	872	-	4,800	-	20,900	-	11,600	9,760	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	72,740	2,480	1,890	2,346	144,500
November.....	38,303	2,310	262	1,277	75,970
December.....	35,982	1,530	256	1,161	71,970
Calendar year 1937.....	1,953,247	15,800	250	5,351	3,874,000
January.....	30,635	1,400	339	988	60,760
February.....	23,679	892	704	846	46,970
March.....	34,695	4,000	512	1,119	66,900
April.....	265,980	18,000	4,140	8,366	527,600
May.....	451,260	24,700	8,720	14,560	895,100
June.....	467,000	20,800	11,300	15,570	926,500
July.....	443,250	22,500	9,550	14,300	879,200
August.....	333,900	11,900	9,760	10,770	662,500
September.....	232,140	9,630	4,870	7,738	460,400
Water year 1937-38.....	2,429,554	24,700	256	6,656	4,819,000

Lake Walcott near Minidoka, Idaho

Location.- Hook gage, lat. 42°40', long. 113°29', in sec. 1, T. 9 S., R. 25 E., in backwater formed by Minidoka Dam, 6 miles southeast of Minidoka. Zero of gage is 4,150.48 feet above mean sea level.

Records available.- April 1909 to September 1938.

Remarks.- Area of water surface of Lake Walcott is 11,900 acres at gage height 45.13 feet; capacity, 96,700 acre-feet between gage heights 36.00 and 45.13 feet. Water is used for irrigation of lands on Minidoka Project of Bureau of Reclamation. Water stored below gage height 36 feet cannot be withdrawn for irrigation through canals that divert from lake. Gage-height record and capacity table furnished by Bureau of Reclamation.

Contents, in acre-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Jul.	Aug.	Sept.
1	49,310	65,010	60,740	67,100	66,110	65,460	87,270	87,030	96,390	99,520	94,250	94,720
2	45,030	65,560	61,280	67,100	66,110	66,110	90,990	87,500	95,790	99,760	93,550	94,950
3	41,440	66,770	61,500	67,210	65,670	64,690	91,570	87,850	95,670	99,040	95,180	94,950
4	38,720	67,430	62,180	67,430	65,890	64,800	91,690	88,780	95,670	98,920	95,550	94,840
5	37,160	67,430	62,600	67,430	65,560	65,560	90,290	90,290	95,430	99,520	96,510	94,140
6	35,600	66,550	63,260	67,430	65,450	65,560	89,830	89,600	95,430	98,680	96,870	93,440
7	34,780	65,010	64,140	67,650	65,450	65,670	89,600	89,600	96,630	98,680	97,110	94,020
8	34,150	64,030	64,360	67,650	65,010	65,560	89,010	89,480	96,630	98,560	96,670	93,320
9	33,950	63,700	64,800	67,650	65,450	65,230	88,660	89,480	96,160	98,320	96,910	92,860
10	34,360	63,260	65,450	67,650	65,010	64,800	89,830	90,180	97,350	97,350	95,910	92,860
11	34,570	61,720	66,330	67,540	65,230	63,920	89,360	92,390	97,590	97,110	95,430	92,860
12	35,810	62,710	66,550	67,870	64,250	63,480	89,130	95,670	98,080	97,590	94,950	93,320
13	36,430	63,040	66,660	67,870	65,120	62,800	89,760	95,320	97,110	95,670	94,020	94,490
14	37,060	63,490	66,550	67,210	64,900	61,500	88,580	95,550	97,230	94,490	93,790	95,790
15	37,680	64,030	65,450	66,330	65,010	62,160	88,660	93,790	96,200	94,490	94,720	96,270
16	38,920	65,120	64,900	66,330	65,230	62,380	88,430	94,490	97,720	95,430	95,180	95,910
17	40,170	65,340	64,580	66,110	65,450	61,500	88,430	94,720	97,590	95,670	95,550	94,490
18	40,590	65,890	63,810	65,890	65,670	61,940	88,780	96,870	98,800	95,310	95,310	93,090
19	43,240	65,230	65,340	65,230	65,670	61,940	89,600	96,800	99,040	94,600	95,430	91,690
20	44,290	64,690	65,890	65,120	65,890	62,600	89,600	96,560	99,760	94,720	96,390	90,760
21	46,510	63,920	66,000	65,120	65,890	60,310	89,830	97,470	98,600	95,430	96,630	89,830
22	48,730	63,700	66,110	65,670	65,690	61,940	88,310	97,470	98,440	96,150	96,670	88,430
23	50,100	62,490	65,450	64,470	66,000	61,610	87,620	96,990	98,560	96,390	96,630	87,030
24	51,600	61,060	66,110	65,890	66,110	61,280	86,570	96,270	98,560	96,030	96,150	85,640
25	53,970	60,310	66,000	66,220	66,330	61,940	86,330	96,390	98,800	95,180	95,180	84,700
26	56,330	58,050	66,110	66,770	66,770	62,160	85,750	96,390	98,320	94,490	94,840	83,660
27	58,270	59,020	66,110	67,100	66,550	64,580	87,030	95,670	98,080	94,490	94,950	82,520
28	59,880	57,950	66,330	67,210	66,330	65,230	86,200	94,490	98,680	94,250	95,180	81,280
29	61,500	58,700	66,770	66,330	-	70,730	87,960	96,150	98,800	94,720	95,670	80,380
30	62,600	60,100	66,770	66,440	-	74,290	87,620	96,870	99,040	94,600	95,430	79,480
31	62,710	-	66,990	66,330	-	79,260	-	96,390	-	94,250	94,720	-

Snake River near Minidoka, Idaho

Location.- Water-stage recorder, lat. 42°40', long. 113°30', in sec. 2, T. 9 S., R. 25 E., 1 mile downstream from Minidoka Dam and 6 miles southeast of Minidoka.

Records available.- April 1910 to September 1938. August 1895 to December 1899 and May 1901 to December 1910 at site at Montgomery Ferry, 6 miles downstream.

Extreme.- Maximum discharge during year, 22,300 second-feet May 5 (gage height, 11.70 feet); minimum, 405 second-feet Nov. 28 (gage height, 2.77 feet).
1910-38: Maximum discharge, 45,900 second-feet June 21, 1918 (gage height, 16.02 feet); minimum, 59 second-feet Nov. 18, 1938 (gage height, 1.58 feet).

Remarks.- Records good. Flow regulated by storage at American Falls and La'e Walcott reservoirs and by diversions 1 mile upstream for irrigation on Minidoka Project.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,110	705	866	1,220	1,050	1,040	2,320	12,500	17,800	20,200	8,440	7,090
2	2,110	789	898	1,150	1,050	1,180	4,710	12,500	16,300	19,400	8,610	6,900
3	2,110	842	1,010	1,120	978	1,020	5,420	14,300	12,800	16,200	8,420	6,850
4	2,110	1,010	1,010	1,140	994	890	5,460	19,700	12,600	17,800	8,360	6,960
5	2,070	1,110	1,000	1,170	994	842	4,670	22,300	12,100	20,700	8,340	7,070
6	2,040	906	1,020	1,150	1,000	1,040	4,420	17,700	8,690	21,400	8,340	7,090
7	2,040	1,500	1,120	1,170	986	747	4,310	11,800	8,090	21,700	8,230	7,200
8	2,010	1,180	1,280	1,170	986	858	4,270	11,800	8,060	21,800	8,310	7,340
9	1,450	970	1,260	1,170	1,050	805	4,050	11,300	8,510	20,200	8,200	7,360
10	1,410	954	1,020	1,190	978	946	4,960	10,800	10,500	15,900	7,930	7,230
11	1,520	970	954	1,210	1,050	1,030	5,300	8,900	15,510	12,500	7,740	6,980
12	1,240	1,030	930	1,180	994	1,030	5,100	9,640	14,400	8,200	7,820	6,580
13	1,220	1,430	850	1,140	1,000	1,040	4,990	9,180	10,000	8,090	8,010	6,090
14	986	1,440	775	1,150	938	1,030	4,990	6,350	8,530	8,440	8,170	6,140
15	898	1,280	740	1,040	866	1,000	4,920	6,960	8,720	7,950	8,200	6,140
16	1,030	1,180	850	970	890	1,010	4,850	7,550	8,690	7,850	8,170	6,010
17	1,400	1,200	1,040	754	914	1,050	4,870	7,690	8,780	7,960	8,090	5,880
18	1,530	1,060	1,150	719	938	1,020	6,470	10,000	10,500	8,420	8,150	5,880
19	1,180	803	1,200	733	914	1,010	8,860	16,900	14,500	8,720	8,170	5,780
20	1,020	568	1,180	789	930	1,070	8,920	19,800	17,600	8,560	7,960	5,440
21	914	562	1,150	1,000	922	1,070	11,000	14,600	15,100	8,170	7,770	5,010
22	1,000	610	1,190	1,080	914	1,030	14,700	14,500	18,100	8,120	7,630	4,830
23	1,050	545	1,160	1,110	906	1,040	16,000	12,600	17,800	8,390	7,500	4,990
24	954	520	1,160	1,180	898	1,030	14,300	9,240	16,900	8,580	7,440	5,200
25	826	505	1,180	1,220	914	986	11,000	7,710	14,900	8,860	7,360	5,200
26	747	719	1,180	1,230	906	994	7,800	7,610	14,800	8,690	7,520	5,250
27	842	455	1,110	1,210	906	866	12,400	7,420	14,800	8,670	7,610	5,390
28	954	405	1,070	1,150	866	1,110	15,900	7,880	14,800	8,580	7,630	5,370
29	1,180	525	1,070	1,090	-	1,070	15,800	9,320	14,600	8,530	7,550	4,710
30	1,350	733	1,090	1,070	-	1,110	15,200	13,400	15,100	8,470	7,440	3,800
31	1,030	-	1,100	1,050	-	1,150	-	17,800	-	8,470	7,310	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							41,881	2,110	747	1,351	83,070	
November.....							26,506	1,500	405	884	52,570	
December.....							32,583	1,290	740	1,051	64,630	
Calendar year 1937.....							1,539,525	13,400	405	4,218	3,053,000	
January.....							33,705	1,230	719	1,087	66,850	
February.....							26,792	1,050	866	957	53,140	
March.....							31,232	1,180	747	1,007	61,950	
April.....							237,990	16,000	2,320	7,933	472,000	
May.....							369,750	22,300	6,350	11,930	735,400	
June.....							392,580	18,100	8,060	13,080	778,500	
July.....							375,390	21,800	7,850	12,110	744,600	
August.....							246,420	8,610	7,310	7,949	495,000	
September.....							151,760	7,560	5,800	6,059	360,600	
Water year 1937-38.....							1,996,589	22,300	405	5,470	3,960,000	

Snake River at Milner, Idaho

Location.- Water-stage recorder, lat. 42°32', long. 114°01', in sec. 28, T. 10 S., R. 21 E., at Milner, a quarter of a mile downstream from Milner Dam.

Records available.- May 1909 to September 1938.

Extremes.- Maximum discharge during year, 20,800 second-feet May 5 (gauge height, 19.2 feet); minimum, 5 second-feet July 23-24 (minimum gauge height, 1.31 feet July 23).
1909-1938: Maximum discharge, 44,400 second-feet June 12, 1909 (gauge height, 20.10 feet, old gage); minimum, 2 second-feet March 17-28, 1938 (gauge height, 1.18).

Remarks.- Records good. Flow regulated by operation of American Falls and Lake Walcott Reservoirs and by diversions for irrigation at Milner Dam, just above station. Station is below all irrigation diversions from upper Snake River. Flow includes some stored water used downstream by Idaho Power Co.

Rating table, water year 1937-38 (gauge height, in feet, and discharge, in second-feet)
(Shifting-control method used July 14 to Sept.30)

1.5	4	4.0	394	12.0	7,950
1.7	20	5.0	839	14.0	17,740
2.1	43	6.0	1,555	16.0	13,950
2.5	81	7.5	2,920	18.0	17,880
3.0	146	9.0	4,460	19.0	20,300
3.5	251	10.5	6,105		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	246	288	290	365	315	172	635	8,940	11,100	12,000	9	9
2	254	296	290	365	274	172	2,310	7,200	10,000	14,300	8	9
3	254	296	293	378	274	172	4,120	7,640	5,760	9,890	9	7
4	256	293	293	350	274	171	4,270	13,600	4,990	10,600	9	7
5	256	293	293	356	274	171	3,840	17,700	4,750	15,000	9	7
6	256	296	299	365	274	171	3,300	15,400	2,090	16,400	9	7
7	256	290	341	368	277	171	3,420	5,990	458	16,400	9	7
8	256	290	341	362	274	171	3,270	5,650	108	16,200	18	7
9	256	290	341	359	274	182	3,190	4,990	123	14,900	11	8
10	256	290	341	356	274	169	4,510	4,510	2,060	8,870	12	8
11	256	288	321	353	277	171	4,880	3,060	7,260	6,160	10	11
12	256	288	322	352	277	171	4,520	110	7,750	962	9	13
13	256	288	288	375	151	169	4,200	130	3,160	56	9	11
14	256	290	310	365	167	169	3,350	43	1,060	29	9	8
15	256	290	338	356	167	172	2,390	11	1,100	25	9	8
16	256	293	338	362	167	171	2,680	12	1,480	877	9	9
17	251	293	338	362	167	169	2,790	15	1,420	18	9	9
18	249	293	338	359	165	171	3,380	1,610	2,720	12	9	9
19	251	293	338	353	171	169	6,760	8,600	6,100	6	9	9
20	249	293	338	353	167	169	7,660	14,300	10,700	8	9	9
21	249	293	338	356	167	167	8,100	9,600	11,100	11	9	9
22	256	290	338	356	167	172	12,700	8,080	11,700	7	9	9
23	288	290	335	344	167	172	14,700	7,320	11,000	5	9	9
24	288	288	341	356	180	169	13,100	3,470	10,700	5	7	8
25	290	290	341	362	167	171	9,100	950	8,080	6	7	8
26	293	285	341	362	167	171	4,140	863	7,760	8	7	103
27	293	288	338	362	169	171	7,080	277	7,450	8	6	282
28	290	286	338	362	171	163	12,100	384	7,450	9	7	280
29	288	290	347	356	-	165	11,600	1,110	7,200	9	7	280
30	288	293	362	356	-	169	10,900	3,960	7,390	9	9	274
31	296	-	362	359	-	171	-	10,400	-	9	11	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						8,193	293	246	264	16,250		
November.....						8,726	296	295	291	17,310		
December.....						10,132	362	282	327	20,100		
Calendar year 1937.....						267,150	5,860	7	732	529,900		
January.....						11,155	378	344	360	22,130		
February.....						5,960	315	151	213	11,820		
March.....						5,284	182	163	170	10,480		
April.....						179,495	14,700	635	5,983	356,000		
May.....						165,957	17,700	11	5,353	329,200		
June.....						174,029	11,700	108	5,801	345,200		
July.....						142,799	16,400	5	4,606	283,200		
August.....						281	18	6	9.1	557		
September.....						1,454	282	7	47.8	2,840		
Water year 1937-38.....						713,445	17,700	5	1,955	1,415,000		

Snake River near Kimberly, Idaho

Location.— Water-stage recorder, lat. 42°36', long. 114°22', in NW¼ sec. 4, T. 10 S., R. 18 E., 1,200 feet downstream from Twin Falls power plant, 2½ miles upstream from Shoshone Falls, and 4 miles north of Kimberly. Prior to Aug. 31, 1938, water-stage recorder at site 2,000 feet downstream, at different datum.

Records available.— July 1923 to September 1938.

Average discharge.— 15 years, 2,340 second-feet.

Extremes.— Maximum discharge during year, 21,600 second-feet May 5 (gage height, 13.92 feet, former site and datum); minimum, undetermined leakage through Twin Falls power plant.

1923-38: Maximum discharge, 27,200 second-feet July 4, 1927 (gage height, 14.76 feet, former site and datum); minimum, undetermined leakage through Twin Falls power plant, at times since Nov. 23, 1935.

Remarks.— Records good except those for periods of missing or incomplete gage-height record, Oct. 17-27, Nov. 9-11, May 11-21, 24-30, June 6-11, 13-19, July 12 to Aug. 31 (computed on basis of records for Snake River at Milner and at Twin Falls) and those for Dec. 14, Mar. 2, 3, 16, Apr. 21 (computed on basis of partial gage-height record) which are fair. Practically entire flow is diverted at Milner during irrigation season; no diversions between Milner and Kimberly. Regulation by operation of Twin Falls power plant.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	689	639	610	575	713	482	552	9,850	11,500	11,500		464
2	689	700	668	758	674	506	2,160	7,530	10,600	16,200		471
3	682	792	672	730	627	485	4,260	7,530	6,700	10,900		420
4	653	810	672	727	612	531	4,720	13,200	5,390	10,600		438
5	684	713	521	695	614	596	4,720	18,500	5,220	16,600		518
6	658	701	753	663	608	386	3,560	17,600		17,200		457
7	641	616	677	710	611	548	4,260	7,110		17,600		492
8	654	705	742	732	604	512	3,830	6,110		16,300		483
9	660		661	715	615	474	3,970	5,560	2,200	16,400		497
10	659	700	709	702	609	432	4,880	5,060		10,400		474
11	682		741	716	611	456	5,730		8,420	7,750		449
12	661	680	713	721	591	492	5,380					569
13	665	685	701	612	512	526	4,880			454		
14	660	614	621	706	517	516	4,260			468		
15	716	732	679	688	530	437	2,940			434		
16	721	659	689	715	440	485	3,060	3,800	2,700		503	
17		716	712	728	505	485	3,300				522	
18		641	710	709	482	470	3,560			425		
19		706	692	705	526	476	7,090			471		
20		694	701	656	509	496	8,410		10,900	455		
21	710	645	691	688	470	490	8,250		11,200	450	462	
22		679	700	680	489	453	12,800		12,200		479	
23		650	729	724	484	501	16,200		11,500		463	
24		692	512	678	507	497	14,000		11,500		471	
25		555	665	667	471	600	10,400		8,660		465	
26		716	792	694	488	390	4,900		8,190		493	
27		699	695	688	484	476	6,500	1,900	7,750		630	
28	717	655	665	692	482	501	12,200		7,970		664	
29		725	636	665	706	466	11,800		7,530		726	
30		538	668	680	694	558	11,200		7,750		780	
31		632	695	715	525	525	-	10,600	-			-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						21,196	-	-	684	42,040		
November.....						20,498	810	555	683	40,660		
December.....						21,100	792	512	681	41,850		
Calendar year 1937.....						401,473	6,290	206	1,170	796,800		
January.....						21,678	758	575	698	43,000		
February.....						15,365	713	440	549	30,580		
March.....						15,237	600	386	492	30,280		
April.....						192,772	16,200	652	6,466	382,400		
May.....						180,580	18,500	-	5,618	357,700		
June.....						185,070	12,200	-	6,169	367,100		
July.....						168,950	17,600	-	5,177	315,300		
August.....						12,400	-	-	400	24,600		
September.....						16,095	780	420	573	29,940		
Water year 1937-38.....						659,741	18,500	-	2,356	1,705,000		

Snake River near Twin Falls, Idaho

Location.— Water-stage recorder, lat. 42°36', long. 114°29', in SW¼SW¼ sec. 33, T. 9 S., R. 17 E., at Perrine Bridge, 4 miles north of the city of Twin Falls, and 4 miles downstream from Shoshone Falls. Outlet of Blue Lakes enters Snake River 200 feet below gage.

Records available.— September 1911 to June 1917 and May 1919 to September 1938.

Average discharge.— 24 years (1911-16, 1919-38), 3,970 second-feet.

Extremes.— Maximum discharge during year, 21,900 second-feet May 5 (gage height, 11.42 feet); minimum 326 second-feet (estimated) May 16 (gage height, 1.81 feet).
1911-17; 1919-38: Maximum discharge, 32,200 second-feet June 10, 1914 (gage height, 13.3 feet); minimum, 250 second-feet (estimated) Apr. 16, 1938.

Remarks.— Records good. Discharge for period of missing gage-heights, July 5-19, computed on basis of records for stations at Milner and near Kimberly. No diversion except by small ranch ditches between this station and the one at Milner, where practically the entire flow is diverted during irrigation season.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	936	894	854	815	870	652	652	11,100	12,500	11,800	584	659
2	927	886	870	944	910	715	1,670	8,390	11,600	15,500	620	706
3	927	936	870	927	778	590	4,740	8,140	7,640	11,500	578	678
4	927	1,000	846	918	778	538	5,160	14,000	5,680	11,100	566	614
5	878	995	800	978	762	652	5,360	19,400	5,570	15,500	572	659
6	918	961	846	918	755	640	3,860	19,400	3,960	17,500	584	727
7	327	862	1,010	886	748	626	4,640	8,390	1,480	17,500	602	699
8	927	835	870	918	762	741	4,060	6,460	838	17,000	580	720
9	927	894	886	927	748	666	4,240	6,230	678	16,500	594	706
10	918	894	902	918	756	590	5,460	5,460	635	10,500	549	699
11	918	886	927	952	762	572	6,460	4,440	6,100	8,000	584	640
12	918	886	1,000	894	748	578	5,790	1,740	9,170	9,170	584	713
13	910	862	952	910	727	652	5,460	778	5,260	5,260	554	748
14	854	862	846	927	640	685	4,840	678	2,140	2,140	554	692
15	918	846	862	862	640	659	3,320	428	1,410	1,410	560	692
16	936	862	902	862	678	596	3,070	366	1,550	1,550	596	699
17	936	970	902	936	590	608	3,500	419	1,870	1,870	608	692
18	952	918	894	902	640	620	3,680	495	1,940	1,940	602	633
19	936	910	944	936	646	640	7,160	6,590	5,460	5,460	584	678
20	944	918	927	918	659	620	9,170	15,300	11,500	11,500	596	706
21	936	910	886	862	672	646	8,910	12,200	12,200	495	560	706
22	862	902	902	822	602	640	14,000	8,910	13,400	495	620	692
23	870	886	918	862	652	635	15,900	8,910	12,500	666	635	666
24	944	894	878	878	640	659	15,300	4,740	12,500	700	602	640
25	927	762	741	862	666	706	11,600	2,340	9,700	495	640	602
26	927	870	910	870	596	640	5,790	1,260	8,910	640	640	692
27	927	878	970	870	646	620	6,920	1,180	8,390	633	640	706
28	936	995	894	854	633	566	13,100	838	8,390	564	560	808
29	927	894	886	878	-	590	13,400	1,090	7,890	660	620	910
30	936	894	862	838	-	635	12,500	3,410	8,140	635	692	952
31	866	-	927	838	-	652	-	10,900	-	532	608	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						28,512	952	854	920	56,650		
November.....						26,965	1,000	762	899	53,480		
December.....						27,776	1,010	741	896	55,090		
Calendar year 1937.....						485,605	6,690	390	1,330	963,200		
January.....						27,682	978	815	893	54,910		
February.....						19,703	910	590	704	39,080		
March.....						19,623	741	538	633	38,920		
April.....						209,282	15,900	652	6,976	415,100		
May.....						194,002	19,400	396	6,258	394,900		
June.....						198,999	13,400	633	6,635	394,700		
July.....						166,725	17,500	495	5,378	330,700		
August.....						18,436	692	649	595	36,570		
September.....						21,141	952	602	705	41,630		
Water year 1937-38.....						958,846	19,400	386	2,627	1,902,000		

SNAKE RIVER MAIN STEM

Snake River near Hagerman, Idaho

Location.— Water-stage recorder, lat. 42°46', long. 114°53', in NW¼ sec. 1, T. 8 S., R. 13 E., just upstream from Upper Salmon Falls, an eighth of a mile upstream from Owsley Bridge, and 4 miles south of Hagerman. Big Wood River enters 11 miles downstream. Zero of gage is 2,873.46 feet above mean sea level.

Records available.— August 1912 to June 1917, July 1919 to September 1938.

Average discharge.— 22 years (1912-15, 1919-38), 8,150 second-feet.

Extremes.— Maximum daily discharge during year, 22,300 second-feet May 6; maximum gage height, 7.37 feet July 2; minimum daily discharge, 5,000 second-feet May 16-18; minimum gage height, 3.62 feet May 29.

1912-17, 1919-38: Maximum discharge, 35,100 second-feet June 10, 1914; maximum gage height, 9.12 feet June 7, 1938; minimum discharge, 4,030 second-feet July 15 to Aug. 2, 1915 (gage height, 3.1 feet). Data in 1916 and 1917 insufficient for determination of maximum and minimum discharge.

Remarks.— Records good. Because of changes in gates and flashboards at Upper Salmon Falls, discharge for Nov. 10, Apr. 4-11, Apr. 17 to May 9, and May 11 to July 12 were computed on basis of records for Snake River below Lower Salmon Falls. Practically entire flow at Milner diverted during irrigation season; only minor diversions below Milner.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6,420	6,080	6,080	6,080	6,080	5,550	5,550	15,300	16,300	14,300	5,550	5,900
2	6,250	6,080	6,080	6,080	6,080	5,550	5,550	14,100	16,100	19,300	5,720	5,900
3	6,250	6,080	6,080	6,080	5,900	5,720	7,820	12,100	13,800	18,600	5,720	5,900
4	6,250	6,250	6,080	6,080	5,720	5,550	9,500	15,500	10,500	15,900	5,720	5,900
5	6,250	6,080	6,080	6,080	5,720	5,550	9,800	19,500	10,300	18,500	5,720	5,900
6	6,250	6,080	6,080	6,080	5,720	5,550	8,700	22,300	9,800	21,700	5,550	6,080
7	6,250	6,080	6,250	6,080	5,900	5,380	8,700	16,100	7,500	21,700	5,720	6,080
8	6,250	5,900	6,250	5,900	5,900	5,550	8,700	11,100	6,100	21,500	5,720	6,080
9	6,250	5,900	6,250	6,080	5,720	5,550	8,700	10,800	5,700	20,300	5,720	6,080
10	6,250	6,100	6,250	6,080	5,720	5,550	8,700	9,990	5,600	18,100	5,720	6,080
11	6,250	6,250	6,420	6,080	5,720	5,380	10,500	9,100	6,900	13,900	5,720	6,080
12	6,250	6,080	6,420	6,080	5,720	5,380	10,200	7,900	13,300	10,500	5,550	6,080
13	6,250	6,080	6,420	6,080	5,720	5,550	9,800	5,900	12,100	6,800	5,550	6,080
14	6,250	5,900	6,250	6,080	5,550	5,550	9,000	5,300	6,300	6,080	5,550	6,080
15	6,250	5,900	6,250	6,080	5,720	5,550	8,000	5,300	6,900	5,720	5,550	6,080
16	6,250	5,900	6,250	6,080	5,550	5,380	7,300	5,000	6,500	5,550	5,550	6,080
17	6,250	6,080	6,250	6,080	5,550	5,380	8,100	5,000	6,900	5,550	5,720	6,080
18	6,420	6,080	6,250	6,080	5,550	5,380	8,100	5,000	7,100	5,720	5,720	6,080
19	6,420	6,250	6,250	5,900	5,720	5,550	9,500	7,300	5,500	5,720	5,720	6,080
20	6,420	6,420	6,080	5,900	5,720	5,720	13,100	17,500	14,100	5,550	5,720	6,250
21	6,420	6,250	6,080	5,900	5,720	5,380	12,800	18,300	16,500	5,380	5,720	6,250
22	6,250	6,250	6,080	5,900	5,720	5,550	15,500	13,800	17,300	5,380	5,720	6,080
23	6,080	6,250	6,080	5,900	5,550	5,550	18,300	13,800	17,100	5,380	5,900	6,080
24	6,080	6,250	6,080	5,900	5,550	5,550	19,100	11,800	16,800	5,550	5,900	6,080
25	6,080	6,080	5,900	5,720	5,550	5,550	16,800	8,300	15,500	5,380	5,900	6,080
26	6,080	6,080	5,900	5,900	5,550	5,550	12,300	6,500	13,500	5,380	5,900	6,080
27	6,080	6,080	6,080	5,900	5,550	5,550	10,100	6,300	13,300	5,720	5,900	6,250
28	6,080	6,250	6,080	5,900	5,550	5,550	14,500	5,900	13,300	5,550	5,900	6,250
29	6,080	6,080	6,080	6,080	-	5,550	16,800	5,700	13,100	5,550	5,720	6,420
30	6,080	6,080	6,250	6,080	-	5,380	16,500	6,900	13,100	5,550	5,900	6,420
31	6,080	-	6,250	6,080	-	5,550	-	12,100	-	5,550	5,900	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	193,070	6,420	6,080	6.228	382,900
November.....	183,220	6,420	5,900	6.107	363,400
December.....	191,180	6,420	5,900	6.167	379,200
Calendar year 1937.....	2,281,640	10,900	4,680	6.251	4,526,000
January.....	186,320	6,080	5,720	6.010	369,600
February.....	159,720	6,080	5,550	5.704	318,800
March.....	370,860	5,720	5,380	5.512	339,900
April.....	328,020	19,100	5,550	10.930	650,600
May.....	329,490	22,300	5,000	10.630	653,500
June.....	341,700	17,300	5,500	11.390	677,800
July.....	320,860	21,700	5,380	10.560	634,400
August.....	177,570	5,900	5,550	3.728	352,200
September.....	182,860	6,420	5,900	6.096	362,700
Water year 1937-38.....	2,764,870	22,300	5,000	7.575	5,484,000

Snake River below Lower Salmon Falls, near Hagerman, Idaho

Location.— Water-stage recorder, lat. 42°51'38", long. 114°54'42", in lot 3, sec. 2, T. 7 S., R. 13 E., half a mile downstream from Lower Salmon Falls power plant, one mile upstream from Big Wood (Malad) River, and 3½ miles north of Hagerman.

Records available.— November 1937 to September 1938.

Extremes.— Maximum discharge during period, 23,800 second-feet May 6 (gage height, 13.93 feet); minimum, about 3,800 second-feet Mar. 28, 29 (gage height, 5.40 feet), from rating curve extended below 6,000 second-feet.

Remarks.— Records excellent. Flow regulated by operation of Lower Salmon Falls power plant. Practically entire flow at Milner diverted during irrigation season; only minor diversions below Milner.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

6.20	5,200	9.00	11,050	12.00	18,560
6.60	6,000	9.40	12,050	12.50	19,800
7.00	6,800	9.80	13,050	13.00	21,050
7.40	7,600	10.20	14,050	13.50	22,550
7.80	8,400	10.60	15,050	14.00	24,050
8.20	9,200	11.00	16,050		
8.60	10,050	11.50	17,050		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	6,800	6,800	6,400	6,000	6,000	15,800	16,800	14,800	6,200	6,400	6,400
2	-	6,800	6,800	6,400	6,000	6,000	5,800	14,600	16,800	19,800	6,200	6,400
3	-	6,800	6,800	6,400	6,200	6,200	8,000	12,600	14,300	19,000	6,200	6,400
4	-	6,800	6,800	6,200	5,800	10,000	16,000	11,000	16,300	6,200	6,400	6,400
5	6,800	6,800	6,600	6,200	6,000	10,300	20,300	10,800	19,000	6,200	6,400	6,400
6	6,600	6,600	6,600	6,200	6,000	9,200	22,800	10,300	22,200	6,200	6,400	6,400
7	6,600	6,800	6,800	6,200	6,000	9,200	16,600	8,000	22,200	6,200	6,600	6,600
8	6,600	6,800	6,800	6,200	6,000	9,200	11,600	6,600	22,000	6,200	6,600	6,600
9	6,600	6,800	6,800	6,400	6,200	6,000	9,200	11,300	20,800	6,200	6,600	6,600
10	6,600	7,000	6,800	6,200	6,000	9,200	10,600	6,000	18,600	6,200	6,600	6,600
11	6,800	7,000	6,800	6,200	5,800	11,000	9,600	7,400	14,300	6,200	6,600	6,600
12	6,800	6,800	6,800	6,200	6,000	10,800	8,400	13,800	11,000	6,200	6,600	6,600
13	6,800	7,000	6,400	6,200	6,000	10,300	6,400	12,600	7,200	6,200	6,600	6,600
14	6,800	6,800	6,800	6,000	6,000	9,600	5,800	8,800	6,600	6,200	6,600	6,600
15	6,400	6,800	6,800	6,000	6,000	8,800	5,800	7,400	6,200	6,200	6,600	6,600
16	6,400	6,800	6,800	6,000	6,000	8,000	5,600	7,000	6,000	6,200	6,600	6,600
17	6,600	6,800	6,800	6,000	5,800	8,600	5,200	7,400	6,000	6,200	6,800	6,800
18	6,600	6,800	6,800	6,000	6,000	8,600	5,600	7,600	6,200	6,200	6,800	6,800
19	6,800	6,800	6,800	6,000	6,000	10,000	7,800	9,000	6,200	6,200	6,800	6,800
20	7,000	6,600	6,600	6,000	6,200	13,600	18,000	14,600	6,000	6,200	6,800	6,800
21	6,800	6,800	6,400	6,200	6,000	13,300	18,800	17,000	6,000	6,400	6,800	6,800
22	6,800	6,800	6,400	6,200	6,000	16,000	14,300	17,800	5,800	6,400	6,800	6,800
23	6,800	6,800	6,400	6,000	6,000	18,800	14,300	17,600	5,800	6,400	6,800	6,800
24	6,800	6,800	6,400	6,000	6,000	19,600	12,000	17,300	6,000	6,400	6,800	6,800
25	6,800	6,400	6,200	6,000	6,000	17,300	8,800	16,000	6,000	6,400	6,800	6,800
26	6,600	6,400	5,200	6,000	6,000	12,800	7,000	14,000	5,800	6,400	6,800	6,800
27	6,800	6,600	6,400	6,000	6,000	5,800	10,600	6,800	13,800	6,000	6,400	6,800
28	6,800	6,600	6,400	6,000	5,800	15,000	6,400	13,800	6,000	6,400	6,800	6,800
29	6,800	6,600	6,400	-	5,800	17,300	6,200	13,600	6,000	6,400	7,000	7,000
30	6,600	6,600	6,400	-	6,000	17,000	7,400	13,600	6,000	6,400	7,200	7,200
31	-	6,600	6,400	-	5,800	-	12,600	-	6,200	6,400	-	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					-	-	-	-	-			
November 5-30.....					174,000	7,000	6,400	6,692	345,100			
December.....					208,000	7,000	6,400	6,710	412,600			
Calendar year.....												
January.....					201,600	6,600	6,200	6,503	399,900			
February.....					171,600	6,400	6,000	6,129	340,400			
March.....					185,000	6,200	5,800	5,968	366,900			
April.....					343,100	19,600	5,800	11,440	680,500			
May.....					345,000	22,800	5,200	11,130	684,300			
June.....					356,700	17,800	6,000	11,890	707,800			
July.....					356,000	22,200	5,800	10,840	666,400			
August.....					194,400	6,400	6,200	6,271	385,600			
September.....					199,400	7,200	6,400	6,647	395,500			
The period.....									5,385,000			

Snake River at King Hill, Idaho

Location.— Water-stage recorder, lat. 43°00', long. 115°11', in SW¼ sec. 7, T. 5 S., R. 11 E., 300 feet east of railroad station at King Hill and 20 miles downstream from Big Wood River.

Records available.— May 1909 to September 1938.

Average discharge.— 29 years, 10,790 second-feet.

Extremes.— Maximum discharge during year, 27,800 second-feet May 6 (gage height, 11.94 feet); minimum, 6,550 second-feet July 25 (gage height, 5.48 feet).

1909-38: Maximum discharge, 47,200 second-feet June 22, 1918 (gage height, 16.3 feet); minimum, 4,760 second-feet July 7-9, Aug. 15, 16, 1910 (gage height, 4.5 feet).

Remarks.— Records excellent. Discharge for June 19, 21, Sept. 2-4, 6, 7 interpolated; that for June 20, Sept. 5, 6, 9 computed on basis of once-daily star gage reading. Practically entire flow at Milner diverted during irrigation season, so that flow at King Hill is derived largely from springs and from seepage entering below Milner.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,230	8,230	8,230	7,980	7,980	8,230	7,490	19,500	19,100	16,000	7,250	7,730
2	8,230	8,230	8,230	7,980	7,980	8,740	7,490	18,800	19,100	21,400	7,250	7,730
3	8,230	8,230	8,230	8,230	7,980	9,260	9,000	17,000	17,700	22,200	7,490	7,730
4	8,230	8,230	8,230	7,980	7,730	8,480	12,100	19,500	14,300	18,800	7,490	7,730
5	8,230	8,230	8,230	7,980	7,730	7,730	13,000	24,100	14,000	21,000	7,490	7,730
6	8,230	8,230	8,230	7,980	7,730	7,730	12,100	27,000	13,600	25,300	7,490	7,810
7	8,230	8,230	8,230	7,980	7,730	7,730	11,200	22,200	11,800	25,300	7,490	7,900
8	8,230	7,980	8,230	7,980	7,730	7,730	11,500	14,600	9,800	25,300	7,490	7,980
9	8,230	7,980	8,230	7,980	7,730	7,730	11,200	14,600	9,530	24,500	7,490	7,980
10	8,230	8,230	8,480	8,230	7,730	7,730	11,200	14,600	9,260	21,800	7,490	7,980
11	8,480	8,230	9,800	8,230	7,730	7,730	12,700	13,000	9,000	16,600	7,490	7,980
12	8,480	8,230	10,400	8,230	7,730	7,730	12,700	15,500	15,300	14,000	7,490	7,980
13	8,230	8,230	9,000	7,980	7,730	8,480	12,400	9,260	15,300	9,260	7,250	7,980
14	8,480	7,980	8,480	7,980	7,490	8,740	11,800	8,230	11,800	7,980	7,250	7,980
15	8,230	7,980	8,480	8,230	7,730	7,980	11,200	8,230	9,530	7,490	7,250	7,980
16	8,480	7,980	8,480	8,230	7,730	8,230	10,400	8,230	9,000	7,250	7,250	7,980
17	8,480	7,980	8,480	8,230	7,490	8,230	10,600	8,230	9,260	7,250	7,490	7,980
18	8,480	8,230	8,230	8,230	7,490	7,980	10,900	8,480	10,900	7,730	7,730	7,980
19	8,480	8,230	8,230	7,980	7,490	8,230	11,600	9,260	14,100	7,490	7,730	7,980
20	8,480	8,480	8,230	7,980	7,730	9,530	14,900	19,900	17,300	7,250	7,490	7,980
21	8,740	8,480	8,230	7,980	7,730	8,230	16,000	22,900	18,400	7,250	7,490	8,230
22	8,480	8,480	8,230	7,980	7,730	7,730	19,500	17,700	19,500	7,250	7,490	8,230
23	8,480	8,480	8,230	7,980	7,730	7,980	23,700	17,000	19,100	7,010	7,490	7,980
24	8,230	8,480	7,980	7,980	7,730	8,230	24,900	15,300	18,800	7,250	7,730	7,980
25	8,230	8,230	7,980	7,730	7,730	8,230	22,900	11,800	18,000	7,490	7,730	7,980
26	8,230	8,230	7,730	7,730	7,730	7,980	18,400	9,800	16,000	7,490	7,730	7,980
27	8,230	8,230	7,980	7,730	7,730	7,980	14,600	9,260	15,600	7,250	7,730	8,230
28	8,230	8,230	7,980	7,980	7,730	8,230	18,400	9,260	15,600	7,490	7,730	8,230
29	8,230	8,230	7,980	7,980	-	7,730	21,400	9,000	15,600	7,250	7,730	8,230
30	8,230	8,230	7,980	7,980	-	7,490	20,600	9,800	15,300	7,250	7,730	8,480
31	8,230	-	7,980	7,980	-	7,490	-	14,000	-	7,490	7,730	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						258,140	8,740	8,230	8,327	512,000		
November.....						246,650	8,480	7,980	8,222	489,200		
December.....						258,640	10,400	7,730	8,343	513,000		
Calendar year 1937.....						2,975,990	12,400	6,550	8,153	5,903,000		
January.....						248,630	8,230	7,730	8,020	493,200		
February.....						216,230	7,980	7,490	7,722	428,900		
March.....						251,250	9,550	7,490	8,108	498,500		
April.....						426,090	24,900	7,490	14,200	845,100		
May.....						442,040	27,000	8,230	14,260	876,800		
June.....						431,880	19,500	9,000	14,400	856,600		
July.....						394,370	25,300	7,010	12,720	782,200		
August.....						233,150	7,730	7,250	7,521	462,400		
September.....						239,650	8,480	7,730	7,988	475,500		
Water year 1937-38.....						3,646,710	27,000	7,010	9,991	7,253,000		

Snake River near Murphy, Idaho

Location.- Water-stage recorder, lat. 43°18', long. 116°26', in NE¼ sec. 35, T. 1 S., R. 1 W., 4¼ miles downstream from Swan Falls power plant and 7¾ miles northeast of Murphy.

Drainage area.- 41,900 square miles.

Records available.- August to October 1912, August 1913 to September 1938.

Average discharge.- 25 years (1913-38), 10,820 second-feet.

Extremes.- Maximum discharge during year, 28,200 second-feet May 7 (gage height, 10.08 feet); minimum, 6,000 second-feet July 31 (gage height, 3.31 feet).

1912-38: Maximum discharge, 47,300 second-feet June 22, 1918 (gage height, 13.95 feet, former site and datum); minimum discharge observed, 3,950 second-feet (discharge measurement) July 20, 1934, when stage was below inlet pipe.

Remarks.- Records excellent. Large diurnal fluctuations of short duration are caused by operation of gates and power plant at dam. Several diversions by pumping between this station and the one at King Hill.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8,460	8,750	8,750	8,750	8,460	8,170	8,460	22,600	16,300	16,000	7,330	7,890
2	8,460	8,750	8,750	8,460	8,170	8,750	8,170	21,800	20,500	17,000	7,330	7,610
3	8,750	8,750	8,750	8,460	8,460	9,330	8,460	21,600	20,500	22,300	7,330	7,750
4	8,460	8,460	8,750	8,750	8,460	9,330	9,330	19,400	18,700	22,300	7,470	7,890
5	8,460	8,750	8,750	8,750	8,170	9,330	13,000	21,900	15,700	19,400	7,470	7,610
6	8,460	8,750	8,460	8,750	8,170	8,460	14,000	25,900	15,300	21,900	7,470	7,610
7	8,460	8,750	8,460	8,460	8,030	8,170	13,400	27,800	15,000	26,800	7,610	7,750
8	8,460	8,750	8,750	8,460	8,170	8,460	12,400	21,900	13,000	25,900	7,470	8,030
9	8,460	8,460	8,750	8,460	8,170	8,170	12,400	16,000	11,200	25,600	7,470	7,750
10	8,460	8,460	8,750	8,460	8,030	8,170	12,400	15,700	10,500	24,400	7,470	7,890
11	8,460	8,460	9,040	8,460	8,170	8,170	12,700	15,300	10,500	21,600	7,610	7,890
12	8,750	8,460	10,500	8,460	8,170	8,170	14,300	14,000	10,500	17,000	7,330	7,890
13	8,750	8,750	10,800	8,460	8,460	8,170	14,300	12,700	17,000	14,000	7,610	8,030
14	8,750	8,750	9,630	8,460	8,170	8,750	14,300	10,800	16,300	9,930	7,330	7,890
15	8,750	8,750	9,040	8,460	8,030	9,330	13,400	9,930	12,700	8,460	7,200	8,030
16	8,750	8,750	9,040	8,460	8,030	8,750	12,700	9,930	10,500	8,030	7,470	8,030
17	8,750	8,460	9,040	8,750	8,030	8,750	11,800	10,200	9,930	7,610	7,470	8,030
18	8,750	8,460	9,040	8,750	8,030	8,750	12,400	10,500	9,630	7,610	7,470	8,170
19	8,750	8,750	8,750	8,750	7,750	8,750	13,400	10,800	10,200	7,890	7,610	8,170
20	8,750	9,040	8,750	8,460	7,750	9,330	15,300	12,100	10,800	7,890	7,890	8,170
21	8,750	9,330	8,750	8,460	8,030	10,500	18,700	22,500	16,000	7,330	7,610	8,170
22	9,040	9,330	8,750	8,460	8,170	9,040	19,100	23,700	19,100	7,200	7,470	8,170
23	9,040	8,750	8,460	8,460	8,030	8,750	23,400	19,100	19,800	7,200	7,610	8,170
24	8,750	8,750	8,750	8,460	8,030	9,330	26,300	18,000	19,800	7,470	7,610	8,170
25	8,750	8,750	8,750	8,170	7,890	9,630	27,000	16,300	19,400	7,330	7,750	8,170
26	8,750	8,750	8,460	8,170	8,030	9,330	24,800	13,400	18,700	7,610	7,610	8,170
27	8,460	8,460	8,460	8,030	8,030	9,040	21,200	11,200	16,700	7,610	7,610	8,170
28	8,750	8,750	8,460	8,170	7,890	9,040	17,400	11,200	16,000	7,330	7,890	8,170
29	8,460	8,750	8,750	8,170	-	9,330	20,800	11,200	16,300	7,470	7,890	8,170
30	8,750	8,750	8,460	8,460	-	8,750	23,000	10,800	16,300	7,470	7,470	8,460
31	8,750	-	8,460	8,460	-	8,460	-	11,500	-	7,610	7,610	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	268,350					9,040	8,460	8,656	532,300			
November.....	261,630					9,330	8,460	8,721	518,900			
December.....	275,060					10,800	8,460	8,973	545,600			
Calendar year 1937.....	3,110,740					13,400	6,520	8,523	6,170,000			
January.....	262,700					8,750	8,030	8,474	521,100			
February.....	226,980					8,460	7,750	8,106	450,200			
March.....	275,060					10,500	8,170	8,873	545,600			
April.....	468,920					27,000	8,170	15,630	930,100			
May.....	499,660					27,800	9,930	16,120	991,100			
June.....	452,860					20,500	9,630	15,100	898,200			
July.....	412,050					25,900	7,200	13,290	817,300			
August.....	233,540					7,890	7,200	7,534	463,200			
September.....	240,070					8,460	7,610	8,002	478,200			
Water year 1937-38.....	3,876,880					27,800	7,200	10,670	7,690,000			

Snake River at Weiser, Idaho

Location.- Water-stage recorder, lat. 44°15', long. 116°59', in sec. 31, T. 11 N., R. 5 W., a third of a mile upstream from wagon bridge at Weiser. Zero of gage is 2,087.22 feet above sea level.

Records available.- October 1910 to September 1938. Fragmentary gage-height record obtained by U. S. Weather Bureau since 1895.

Average discharge.- 27 years (1911-38), 17,600 second-feet.

Extremes.- Maximum discharge during year, 67,200 second-feet May 3 (gage height, 12.25 feet); minimum, 8,510 second-feet Aug. 13 (gage height, 2.66 feet).

1910-38: Maximum discharge, 83,100 second-feet May 23, 1921 (gage height, 13.60 feet); minimum, 5,100 second-feet Aug. 5, 1924 (gage height, 1.35 feet).

Maximum stage known, 15.7 feet on old Weather Bureau gage (discharge, about 100,000 second-feet) Mar. 3, 1910.

Flood of June 1894 was considerably higher than flood of 1910.

Remarks.- Records excellent. Flow regulated by storage reservoirs above station and by operation of Swan Falls power plant. Some diversions for irrigation below Murphy. Gage-height record collected in cooperation with U. S. Weather Bureau.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Jul.	Aug.	Sept.
1	9,970	11,100	11,900	12,700	12,300	14,000	23,300	58,300	41,600	28,300	9,780	9,230
2	10,200	11,500	11,500	12,700	13,100	16,700	19,600	64,700	44,500	28,900	9,420	9,230
3	9,970	11,500	11,100	12,700	13,100	20,600	18,700	67,200	49,000	28,900	9,230	9,230
4	10,200	11,500	11,100	12,300	13,100	19,600	17,200	64,700	49,700	35,100	9,420	9,230
5	10,200	11,100	11,500	12,300	14,000	18,600	20,600	58,300	48,200	34,400	9,230	9,420
6	9,780	11,100	13,100	11,900	13,600	17,200	26,000	54,300	46,000	31,300	9,050	9,420
7	9,970	11,100	12,700	11,900	14,800	15,800	30,700	52,800	45,200	31,300	8,870	9,420
8	9,970	11,100	12,300	11,500	14,800	14,800	31,300	52,000	45,200	33,700	8,870	9,600
9	10,200	11,100	12,300	11,500	14,400	14,800	30,100	46,000	42,300	33,100	8,870	10,200
10	10,200	11,100	12,300	10,500	14,800	14,400	31,900	38,900	38,900	31,900	9,050	10,200
11	10,200	11,100	18,100	10,400	15,800	14,000	33,100	36,900	35,600	30,700	8,870	10,200
12	9,970	11,100	24,900	10,400	19,100	14,000	36,300	36,300	32,500	27,200	9,050	10,400
13	10,200	11,500	28,900	10,400	18,600	16,700	38,900	34,400	34,400	22,200	8,690	10,200
14	10,400	11,500	23,800	10,400	16,200	22,700	38,200	33,100	36,300	19,100	9,050	10,500
15	10,400	11,500	20,100	11,100	15,300	22,200	38,900	31,900	34,400	14,400	8,670	10,500
16	10,400	11,500	18,600	11,500	14,400	27,700	38,200	31,900	30,700	12,700	9,050	10,500
17	10,500	11,900	19,600	12,300	15,800	33,100	38,900	32,500	29,500	12,300	9,050	10,400
18	10,700	11,500	17,600	13,100	12,700	29,500	40,900	33,700	28,900	11,500	9,050	10,400
19	11,500	11,900	16,200	13,600	13,100	28,300	47,500	34,400	28,300	11,500	8,690	10,500
20	11,900	13,100	14,800	13,600	12,700	28,900	51,200	33,100	27,200	11,100	8,870	10,500
21	11,900	14,400	14,000	13,600	12,300	26,600	50,500	32,500	26,600	10,700	9,230	10,400
22	11,500	14,800	13,600	14,400	10,700	27,700	52,800	40,900	30,700	10,400	9,050	10,500
23	11,900	14,000	13,600	16,700	10,700	24,900	55,100	42,300	34,400	9,780	9,050	10,500
24	11,500	13,100	13,100	15,300	10,700	28,600	59,100	38,200	34,400	9,780	9,050	10,500
25	11,500	13,100	12,700	14,400	11,100	29,500	62,300	37,600	33,700	9,780	8,870	10,400
26	11,500	13,600	12,700	13,600	11,500	30,100	64,700	38,200	32,500	9,600	9,050	10,400
27	11,500	13,100	12,700	13,600	11,900	28,900	62,300	38,900	31,300	9,780	9,050	10,500
28	11,500	12,300	13,100	13,100	13,600	29,500	55,100	40,900	28,900	9,780	9,230	10,500
29	11,500	12,300	13,100	13,100	-	28,900	49,700	44,500	27,200	9,970	9,420	10,700
30	11,500	11,900	13,100	13,100	-	27,200	52,000	46,000	27,200	9,780	9,050	11,100
31	11,500	-	13,100	13,100	-	26,000	-	45,800	-	9,780	9,230	-
Month						Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet	
October.....						334,130		11,900	9,780	10,780	662,700	
November.....						361,400		14,800	11,100	12,050	716,600	
December.....						466,200		28,900	11,100	15,040	924,700	
Calendar year 1937.....						4,561,340		35,000	7,300	12,500	9,047,000	
January.....						380,800		16,700	10,400	12,610	775,100	
February.....						362,000		19,100	10,700	13,640	787,700	
March.....						709,500		33,100	14,000	22,890	1,407,000	
April.....						1,213,100		64,700	16,700	40,440	2,406,000	
May.....						1,339,200		67,200	31,900	43,200	2,686,000	
June.....						1,075,300		49,700	26,600	35,840	2,133,000	
July.....						598,730		34,400	9,600	19,250	1,184,000	
August.....						281,310		9,780	8,690	9,075	558,000	
September.....						304,780		11,100	9,230	10,160	604,500	
Water year 1937-38.....						7,454,450		67,200	8,690	20,420	14,790,000	

Snake River at Oxbow, Oreg.

Location.— Water-stage recorder, lat. 44°57', long. 116°51', in NW¼ sec. 16, T. 7 S., R. 48 E., at Oxbow, five-eighths of a mile upstream from intake of diversion tunnel for Oxbow power plant.

Records available.— May 1923 to September 1938.

Average discharge.— 15 years, 15,860 second-feet.

Extremes.— Maximum discharge during year, 72,800 second-feet May 4 (gage height, 20.25 feet); minimum, 6,740 second-feet Aug. 14 (gage height, 7.84 feet).
1923-38: Maximum discharge, that of May 4, 1938; minimum, 4,690 second-feet Aug. 6, 1924 (gage height, 6.30 feet).

Remarks.— Records excellent. Flow regulated by irrigation and operation of power plants above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,200	11,500	11,800	13,300	13,300	15,200	27,200	61,200	44,600	27,600	9,890	9,290
2	10,200	11,200	11,500	13,300	13,300	16,800	24,300	66,300	44,600	28,600	9,580	9,290
3	10,200	11,500	11,200	12,900	13,300	21,600	20,200	71,500	49,400	28,100	9,580	9,290
4	10,200	11,500	11,200	12,900	13,700	22,900	18,900	71,500	51,200	30,600	9,580	9,290
5	10,200	11,500	11,200	12,600	13,700	20,700	21,100	65,000	51,200	34,900	9,580	9,290
6	10,200	11,200	11,800	12,600	14,400	20,200	25,700	58,600	49,400	32,700	9,290	9,290
7	10,200	11,200	12,900	12,200	14,400	18,500	30,600	56,100	47,600	30,100	9,290	9,290
8	10,200	11,200	12,200	12,200	15,600	17,200	34,300	54,900	47,600	32,700	9,010	9,560
9	10,200	11,200	12,200	11,800	15,600	16,800	33,200	51,900	46,400	33,200	9,010	9,890
10	10,200	11,500	12,600	11,800	15,600	16,400	33,200	43,400	42,200	32,200	9,010	10,500
11	10,200	11,200	13,700	10,500	16,400	16,400	34,900	38,800	38,800	30,600	9,010	10,200
12	10,200	11,200	24,300	10,500	19,400	16,400	37,100	38,800	35,400	28,600	9,010	10,500
13	9,890	11,200	27,600	10,500	21,100	18,100	39,900	37,600	33,200	24,300	9,010	10,500
14	10,200	11,500	28,100	10,500	18,900	23,400	41,100	36,000	34,300	20,700	8,740	10,500
15	10,200	11,500	22,500	10,800	17,200	25,700	41,100	35,400	37,100	17,200	9,010	10,500
16	10,500	11,500	20,700	11,500	16,000	28,100	41,700	33,800	33,800	14,000	9,010	10,500
17	10,500	11,500	19,400	12,200	14,800	34,900	41,700	34,300	31,700	12,900	9,010	10,800
18	10,800	11,800	18,900	12,600	14,000	36,400	43,400	34,900	30,600	12,600	9,010	10,800
19	11,200	11,800	17,700	13,700	13,800	31,700	48,200	36,000	30,100	11,800	9,010	10,500
20	11,800	12,600	16,400	13,700	13,800	31,700	54,300	36,000	29,100	11,500	9,010	10,500
21	11,800	14,000	15,200	14,000	13,300	30,600	54,900	34,300	28,100	11,200	9,290	10,500
22	11,800	14,800	14,400	14,000	12,600	29,100	56,100	37,100	28,600	11,200	9,290	10,500
23	11,800	14,800	14,000	16,400	11,500	29,600	59,300	44,600	33,200	10,500	9,290	10,500
24	11,800	13,300	13,700	16,800	11,800	27,600	61,800	42,200	34,900	9,890	9,290	10,500
25	11,800	13,300	13,300	15,200	12,200	30,600	66,300	39,900	35,400	9,890	9,290	10,500
26	11,200	13,300	13,300	14,800	12,600	32,700	69,600	40,500	33,800	9,890	9,290	10,500
27	11,500	13,700	13,300	14,000	12,900	32,700	69,600	41,100	32,700	9,890	9,290	10,500
28	11,500	12,900	13,300	13,700	13,700	31,100	63,100	42,800	31,100	9,890	9,290	10,500
29	11,500	12,600	13,700	13,300	-	31,700	56,800	45,800	28,600	9,890	9,290	10,500
30	11,500	12,200	13,300	13,700	-	30,100	54,300	46,200	27,600	9,890	9,290	10,500
31	11,200	-	13,700	13,700	-	28,600	-	47,600	-	9,890	9,290	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						334,980	11,800	9,890	10,900	664,200		
November.....						354,200	14,800	11,200	12,140	722,400		
December.....						479,100	28,100	11,200	15,450	950,300		
Calendar year 1937.....						4,746,320	33,800	7,230	13,000	9,414,000		
January.....						401,700	16,800	10,500	12,960	796,800		
February.....						408,600	21,100	11,500	14,590	810,400		
March.....						782,500	35,400	15,200	25,240	1,552,000		
April.....						1,303,900	69,600	18,900	43,450	2,586,000		
May.....						1,426,000	71,500	33,800	46,000	2,628,000		
June.....						1,122,300	51,200	27,600	37,410	2,226,000		
July.....						606,840	34,900	9,890	19,580	1,204,000		
August.....						285,830	9,890	8,740	9,220	566,900		
September.....						305,290	10,800	9,290	10,180	605,500		
Water year 1937-38.....						7,821,140	71,500	8,740	21,430	15,510,000		

Snake River near Clarkston, Wash.

Location.— Water-stage recorder, lat. 46°25'30", long. 117°10'30", in lot 1, sec. 16, T. 11 N., R. 45 E., 2 miles upstream from Alpowa Creek, 7 miles below Clarkston, and 134 miles upstream from mouth. Zero of gage is 670 feet above mean sea level (benchmark of Corps of Engineers, U. S. Army).

Drainage area.— 103,200 square miles.

Records available.— October 1915 to September 1922 and August 1928 to September 1935 (at site at Riparia, 66 miles downstream) and October 1935 to September 1938 in reports of Geological Survey. October 1909 to September 1933 (at former site) in State Water-Supply Bulletin 5. All records equivalent.

Average discharge.— 29 years (1909-38), 48,320 second-feet.

Extremes.— Maximum discharge during year, 219,000 second-feet May 29, 30 (gage height, 32.44 feet); minimum, 14,100 second-feet Oct. 1 (gage height, 9.34 feet).

1909-38: Maximum discharge observed, 270,000 second-feet May 20, 1921 (gage height, 19.0 feet, at former site); maximum gage height known, 24.7 feet, at former site, June 5, 1894 (discharge, about 400,000 second-feet); minimum discharge, possibly as low as 9,000 second-feet sometime during period of ice effect, Jan. 6 to Feb. 20, 1937.

Remarks.— Records excellent except those for period of missing gage heights, Dec. 7-14, which were computed on basis of recorded range of stage, and records for Clearwater River at Spalding, Idaho, and are fair. Small diversions by pumping between this station and the one at Oxbow. Considerable diurnal fluctuation as a result of pondage for power on Clearwater River at Lewiston.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

9.0	13,000	18.0	60,500
10.0	16,300	20.0	77,500
11.0	20,000	22.0	96,000
12.0	24,500	25.0	127,000
13.0	29,500	28.0	162,000
14.0	34,800	31.0	200,000
16.0	46,700	33.0	226,000

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15,200	17,400	22,000	26,900	24,200	32,100	50,100	168,000	178,000	72,800	22,900	16,800
2	15,400	17,600	20,200	25,300	25,700	36,200	47,000	179,000	171,000	73,500	22,200	17,100
3	15,900	17,400	18,700	23,600	26,500	40,900	44,200	174,000	174,000	72,700	21,700	17,100
4	16,400	17,400	18,400	22,100	26,500	47,100	42,000	161,000	179,000	70,600	21,100	16,900
5	16,300	17,400	18,900	20,900	26,000	46,600	43,000	146,000	178,000	74,400	20,700	16,900
6	16,200	*17,600	19,000	20,300	25,700	44,600	47,800	131,000	179,000	75,500	20,500	16,700
7	16,000	*17,700	18,500	20,500	26,900	42,700	54,100	119,000	175,000	75,200	19,800	17,000
8	15,700	*17,900	18,000	20,200	27,700	39,900	58,800	112,000	170,000	70,900	19,400	17,600
9	15,900	*18,100	17,500	20,500	28,500	38,000	63,900	109,000	160,000	71,300	18,900	18,100
10	*15,900	*18,200	17,000	20,700	27,800	38,000	65,900	106,000	145,000	64,800	18,900	19,400
11	*15,900	18,400	20,000	21,100	28,400	38,000	67,900	100,000	127,000	61,900	18,700	19,100
12	*15,900	17,900	24,000	20,800	31,500	39,600	72,700	102,000	118,000	58,800	18,500	18,400
13	*15,900	18,100	32,000	20,700	35,100	44,400	79,600	107,000	114,000	55,100	18,100	18,300
14	*15,900	18,400	55,000	20,800	35,800	52,500	83,100	114,000	114,000	49,000	18,100	18,100
15	*15,900	19,200	48,800	25,000	32,600	60,300	85,700	120,000	114,000	44,700	18,700	17,700
16	*15,900	19,800	42,000	29,700	30,500	66,400	86,300	128,000	112,000	40,900	19,100	17,800
17	15,900	19,200	39,400	29,000	28,600	78,100	105,000	133,000	111,000	38,100	19,100	17,600
18	17,500	18,500	37,800	28,400	28,700	72,000	158,000	135,000	112,000	36,400	18,500	17,600
19	18,100	18,700	36,400	28,200	25,400	76,000	201,000	131,000	105,000	34,400	18,500	17,300
20	18,100	18,600	33,300	28,300	24,900	69,800	168,000	125,000	94,700	32,500	18,200	17,300
21	18,200	20,100	30,700	27,700	25,000	64,600	151,000	116,000	89,900	30,800	19,400	17,200
22	18,400	25,600	28,600	29,500	24,700	58,200	138,000	114,000	90,600	29,600	17,900	17,100
23	18,200	24,900	26,900	32,800	24,400	55,300	135,000	124,000	94,400	28,400	18,000	16,900
24	17,800	24,100	25,300	33,000	23,700	53,800	134,000	139,000	95,800	27,000	17,700	16,900
25	17,700	24,000	24,000	31,400	25,000	54,200	158,000	152,000	93,500	26,000	17,700	16,900
26	17,600	25,000	22,900	28,800	26,200	57,500	152,000	168,000	92,800	25,300	17,700	16,700
27	17,400	25,900	23,400	26,500	27,500	58,100	154,000	182,000	89,200	24,700	17,700	16,700
28	17,400	25,000	24,100	24,800	29,200	58,900	150,000	201,000	87,200	24,000	17,600	16,700
29	17,500	25,700	25,900	24,600	-	58,900	145,000	214,000	82,800	24,200	17,800	16,700
30	17,400	25,600	27,200	24,500	-	57,200	151,000	210,000	76,700	23,400	17,500	16,900
31	17,300	-	28,000	23,300	-	53,300	-	193,000	-	23,600	17,400	-

	Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October		518,800	18,400	15,200	16,740	1,029,000
November		605,600	25,900	17,400	20,190	1,201,000
December		843,900	55,000	17,000	27,220	1,674,000
Calendar year 1937		11,466,300	110,000	9,100	31,410	22,740,000
January		779,900	33,000	20,200	25,160	1,547,000
February		770,600	35,800	23,700	27,520	1,528,000
March		1,639,200	78,100	32,100	52,880	3,251,000
April		3,068,100	201,000	42,000	102,300	6,085,000
May		4,411,000	214,000	100,000	142,300	8,749,000
June		3,721,600	179,000	76,700	124,100	7,582,000
July		1,461,300	75,500	23,600	47,140	2,898,000
August		586,800	22,900	17,400	18,930	1,164,000
September		521,500	19,400	16,700	17,380	1,034,000
Water year 1937-38		18,928,300	214,000	15,200	51,860	37,540,000

*Gage height missing; discharge interpolated.

Flat Creek near Jackson, Wyo.

Location.- Staff gage, lat. 45°33', long. 110°37', in SW $\frac{1}{4}$ sec. 35, T. 42 N., R. 115 W., just below power plant of Jackson Hole Light & Power Co., 9 miles northeast of Jackson. Prior to August 19 staff gage at site 300 feet upstream at different datum.

Records available.- June 1933 to September 1938, except for winters.

Extremes.- Maximum discharge observed during year, 271 second-feet June 23 (gage height, 5.12 feet, former site and datum); minimum not determined.
1933-38: Maximum discharge observed, 438 second-feet June 15, 1935 (gage height, 3.48 feet, former site and datum); minimum observed, 7 second-feet April 15-18, 1935 (gage height, 1.06 feet, former site and datum).

Remarks.- Records good except those for period of missing gage heights, Apr. 1-13 (estimated), and those for period of infrequent gage readings, Apr. 14 to June 13 (interpolated between gage readings), which are poor. No regulation.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	21						*22	147	214	81	44
2	22	21						23	*148	202	74	42
3	23	20						*24	150	198	73	42
4	22	20						25	*175	194	74	42
5	22	20						*25	*200	182	72	40
6	22	20						*26	230	177	67	40
7	22	21					16	26	*228	167	63	40
8	21	21						*26	*226	164	64	39
9	21	21						27	*224	157	61	39
10	21	21						*27	*222	151	61	40
11	21	20						28	*220	147	59	40
12	21	21						28	*218	146	56	40
13	20	21						*29	*216	140	55	38
14	20	21					18	*30	214	140	53	38
15	20	22					*18	*30	213	136	53	37
16	20	21					*19	*31	214	133	53	37
17	21	22					*19	*32	219	128	51	37
18	21	23					*19	*32	224	128	53	36
19	21	22					*20	32	230	123	51	37
20	21	22					*20	33	231	119	51	37
21	21	23					21	36	234	114	50	34
22	21	23					*21	*37	252	109	49	34
23	21	22					*21	38	271	105	49	34
24	20	22					*22	*39	260	97	48	34
25	20	22					*22	40	244	96	48	34
26	21	22					22	*60	236	95	48	35
27	22	21					*22	*80	242	91	49	35
28	22	21					22	*100	242	87	49	31
29	22	21					22	*120	234	83	46	32
30	22	22					*22	135	230	52	46	32
31	21	-					-	*140	-	81	49	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							657	23	20	21.2	1,300	
November.....							640	23	20	21.3	1,270	
December.....							-	-	-	-	-	
Calendar year												
January.....							-	-	-	-	-	
February.....							-	-	-	-	-	
March.....							-	-	-	-	-	
April.....							558	22	16	18.6	1,110	
May.....							1,379	140	22	44.5	2,740	
June.....							6,594	271	147	220	13,080	
July.....							4,186	214	61	135	8,300	
August.....							1,756	81	46	56.6	3,460	
September.....							1,118	44	31	37.3	2,220	
Water year												

*Discharge interpolated.

GREYS RIVER BASIN

Greys River near Alpine, Wyo.

Location.- Water-stage recorder, lat. 43°09', long. 111°00', in sec. 33, T. 37 N., R. 118 W., 1½ miles upstream from mouth and 5 miles southeast of Alpine.

Records available.- July 1917 to September 1918. March 1937 to September 1938.

Extremes.- Maximum discharge during year, 3,160 second-feet May 29 (gage height, 3.45 feet); minimum, 156 second-feet Feb. 17 (gage height, 0.37 foot).
1917-18, 1937-38: Maximum discharge observed, 5,200 second-feet June 14, 1918 (gage height, 4.65 feet, old gage); minimum discharge, that of 1938.

Remarks.- Records excellent except those for period of ice effect, Dec. 16 to Feb. 26, which were computed on basis of gage heights and weather records and are good. Diversions for irrigation above station.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Mar. 31)

0.3	150	1.6	850
.5	220	1.9	1,110
.7	304	2.2	1,450
.9	403	2.6	1,930
1.1	512	3.0	2,490
1.3	636	3.5	3,230

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	247	237	169	179	*190	179	183	2,450	2,550	1,330	594	484
2	247	233	159	192	*190	182	170	2,010	2,590	1,290	512	430
3	247	230	170	195	188	182	187	1,680	2,590	1,220	506	406
4	247	227	182	176	195	179	194	1,440	2,640	1,140	501	419
5	247	217	176	170	192	176	194	1,250	2,690	1,100	484	398
6	244	227	185	176	185	179	187	1,120	2,660	1,170	484	363
7	240	235	176	*176	185	179	176	1,040	2,680	1,060	464	372
8	240	224	173	204	185	187	187	966	2,580	994	473	378
9	240	220	176	198	185	187	209	957	2,460	957	473	403
10	240	220	185	204	188	176	244	1,000	2,210	922	462	398
11	240	210	334	204	185	176	232	1,130	2,040	882	451	378
12	240	217	516	198	182	179	244	1,390	2,040	842	445	363
13	240	204	360	198	176	182	291	1,660	2,010	812	445	372
14	244	204	292	195	170	182	328	1,990	1,920	842	456	362
15	269	204	284	204	173	182	424	2,130	1,810	906	445	347
16	265	198	276	204	173	185	591	2,310	1,830	882	455	342
17	280	204	262	198	166	201	670	2,590	1,860	805	424	333
18	342	198	251	195		188	1,050	2,380	1,930	761	424	333
19	264	176	240	179		198	1,900	2,000	1,750	732	424	328
20	272	217	*224	167		198	1,740	1,790	1,650	711	408	328
21	265	227	207	176		192	1,450	1,710	1,700	704	408	328
22	262	214	210	207	184	182	1,540	1,770	1,770	685	403	323
23	258	192	*200	204		192	1,740	1,940	1,710	643	398	318
24	254	210	*190	179		192	1,770	2,110	1,650	630	398	314
25	251	188	188	176		182	1,920	2,250	1,540	623	398	314
26	247	214	188	170		170	1,900	2,560	1,500	617	424	314
27	244	182	198	179	179	179	1,830	2,750	1,480	591	430	314
28	244	195	192	185	173	195	1,920	2,880	1,380	585	405	309
29	240	195	179	*195	-	195	2,140	2,920	1,410	566	406	309
30	240	164	195	*195	-	188	2,380	2,720	1,380	554	424	309
31	237	-	187	195	-	176	-	2,600	-	536	430	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	7,857					342	237	253	15,580			
November.....	6,281					237	164	209	12,460			
December.....	6,914					516	159	223	13,710			
Calendar year												
January.....	5,883					207	167	190	11,670			
February.....	5,106					195	166	182	10,130			
March.....	5,680					201	167	183	11,270			
April.....	27,991					2,390	170	933	55,520			
May.....	59,473					2,920	957	1,918	118,000			
June.....	60,000					2,690	1,390	2,000	119,000			
July.....	26,060					1,350	841	941	51,690			
August.....	13,789					524	398	445	27,350			
September.....	10,711					484	308	357	21,240			
Water year 1937-38	235,745					2,920	156	646	467,600			

*Discharge estimated.

Salt River near Smoot, Wyo.

Location.- Water-stage recorder, lat. 42°36', long. 110°55', in sec. 7, T. 30 N., R. 118 W., 1½ miles south of Smoot and 1½ miles upstream from Willow Creek.

Drainage area.- 59.4 square miles.

Records available.- June 1932 to September 1938.

Extremes.- Maximum discharge during year, 280 second-feet May 2 (gage height, 2.90 feet); minimum daily discharge, 4.8 second-feet Sept. 29, 30.

1932-38: Maximum discharge, 430 second-feet May 15, 1936 (gage height, 3.15 feet); minimum not determined.

Remarks.- Records excellent except those for period of ice effect, Nov. 26 to Apr. 21, which were computed on basis of records for station at Wyoming-Idaho State line and are fair. A few diversions above station for irrigation.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.0	4.5	2.2	124
1.2	11.8	2.4	160
1.4	24	2.6	202
1.6	40	3.0	310
1.8	42	3.5	468
2.0	90		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	8.6	5.8	9.5	13	14	15	202	252	77	34	16
2	11	8.6	6.4	10	12	14	16	231	231	77	33	15
3	9.8	8.2	6.2	9.0	12	14	16	224	221	77	32	16
4	9.8	8.2	6.4	9.0	12	15	17	176	224	82	30	17
5	9.8	7.5	6.6	8.8	12	14	18	128	229	79	27	16
6	9.4	7.8	6.6	9.2	11	14	20	98	221	82	27	15
7	9.4	8.6	6.6	9.5	11	12	19	90	212	72	26	15
8	9.0	7.5	6.8	10	11	10	19	83	204	68	26	15
9	9.4	7.8	7.0	10	12	10	19	83	193	65	25	16
10	9.4	7.8	7.2	10	13	11	19	87	178	64	20	15
11	9.8	7.1	7.8	11	13	12	19	101	170	58	19	15
12	9.8	7.1	8.5	11	13	12	20	120	164	52	17	15
13	8.6	6.5	9.0	11	12	13	21	146	155	50	18	16
14	8.6	7.5	9.0	11	12	14	23	182	147	48	18	16
15	10	7.5	8.5	11	12	15	25	193	138	54	17	16
16	10	6.8	8.2	12	10	14	30	242	133	52	16	16
17	14	7.8	8.2	12	9	14	35	266	135	47	16	15
18	13	7.5	8.2	11	10	14	42	229	138	44	16	14
19	11	7.1	8.0	10	11	13	54	193	128	43	15	14
20	11	8.2	7.4	10	11	14	60	172	117	42	14	13
21	11	7.8	7.6	10	12	16	80	160	119	40	15	13
22	9.8	6.2	8.0	10	13	15	92	162	124	39	16	12
23	9.8	5.8	8.4	11	14	15	111	182	110	38	14	9.4
24	9.8	5.8	8.4	10	15	15	129	191	100	37	14	9.0
25	9.4	5.8	8.6	10	11	15	149	202	93	37	16	9.4
26	9.4	6.0	8.8	10	12	16	140	224	90	37	16	9.8
27	9.8	6.4	8.6	9.5	15	16	140	231	89	36	16	9.8
28	9.4	6.4	8.6	9.5	14	16	146	239	82	36	15	7.8
29	9.0	6.2	8.0	10	-	15	162	255	82	36	16	4.8
30	9.0	5.6	8.4	11	-	15	176	252	82	35	20	4.8
31	9.0	-	8.8	12	-	15	-	252	-	34	16	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	309.2	14	8.6	9.97	613
November.....	215.7	8.6	5.6	7.19	428
December.....	240.6	9.0	5.8	7.76	477
Calendar year					
January.....	318.0	12	8.8	10.3	651
February.....	338	15	9	12.1	704
March.....	432	16	10	13.9	857
April.....	1,832	176	15	61.1	3,630
May.....	5,596	266	83	181	11,100
June.....	4,559	252	82	162	9,040
July.....	1,636	62	34	52.8	3,240
August.....	620	34	14	20.0	1,230
September.....	395.8	17	4.8	13.2	785
Water year 1937-38.....	16,492.3	266	4.8	45.2	32,740

Peak discharge.- May 2 (11:30 p.m.) 280 sec.-ft.

Salt River at Wyoming-Idaho State line

Location.- Water-stage recorder, lat. 43°10', long. 111°04', in sec. 16, T. 3 S., R. 46 E., just downstream from Trout Creek, half a mile upstream from mouth, and three-quarters of a mile west of Wyoming-Idaho State line.

Drainage area.- 890 square miles.

Records available.- April 1934 to September 1938. July 1917 to September 1918 at site 4 miles upstream; records not equivalent.

Extremes.- Maximum discharge during year, 2,220 second-feet May 18 (gage height, 3.82 feet); minimum daily, 387 second-feet Feb. 28.

1934-38: Maximum discharge, 3,520 second-feet May 6, 1936 (gage height, 4.64 feet); minimum, 216 second-feet May 17, 1934 (gage height, 1.30 feet).

Remarks.- Records excellent except those for days of ice effect, Jan. 5, 6, which were estimated and are fair. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	471	499	450	446	391	391	441	2,070	1,760	1,150	769	693
2	471	498	480	441	391	395	431	2,020	1,690	1,140	734	686
3	471	477	471	441	391	404	431	1,900	1,650	1,130	720	699
4	477	471	477	446	395	404	436	1,750	1,590	1,140	706	693
5	477	460	471	490	395	404	450	1,620	1,470	1,140	685	693
6	482	455	471	460	399	399	455	1,590	1,450	1,280	699	693
7	488	488	471	417	404	399	455	1,550	1,370	1,460	693	686
8	494	477	471	408	404	399	471	1,380	1,310	1,320	693	686
9	488	471	471	412	404	399	494	1,340	1,260	1,220	699	686
10	494	466	505	408	408	404	522	1,340	1,180	1,140	686	686
11	494	466	627	426	412	399	528	1,340	1,070	1,090	686	699
12	488	460	699	422	412	408	552	1,420	1,040	1,050	699	699
13	498	460	627	422	412	422	634	1,480	1,070	1,010	686	699
14	488	466	576	422	408	426	706	1,620	1,070	986	686	680
15	528	477	552	426	408	422	828	1,710	1,050	1,020	693	666
16	540	477	534	446	404	426	1,050	1,850	1,010	1,060	699	660
17	564	488	522	441	404	477	1,100	2,050	1,000	1,030	686	660
18	595	482	510	441	395	471	1,340	2,200	986	986	706	653
19	570	482	494	436	399	471	1,770	2,140	978	994	713	647
20	552	505	460	426	412	499	1,830	2,000	970	962	699	640
21	552	558	471	436	395	522	1,690	1,910	930	906	673	627
22	540	546	477	450	399	494	1,690	1,820	858	874	666	627
23	528	522	471	436	395	494	1,800	1,800	858	850	653	621
24	522	499	455	412	395	482	1,800	1,820	922	850	647	621
25	516	488	436	417	395	471	1,870	1,950	962	858	653	621
26	510	488	455	395	391	460	1,960	1,870	970	850	653	614
27	510	477	450	404	391	460	1,910	1,880	962	828	686	614
28	505	477	450	441	387	466	1,860	1,900	970	828	693	608
29	505	477	446	417	-	460	1,860	1,900	962	828	693	608
30	505	471	417	417	-	455	1,980	1,910	1,030	806	686	614
31	505	-	455	399	-	460	-	1,860	-	806	673	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	15,818	595	471	510	31,370
November.....	14,518	558	455	484	28,800
December.....	15,302	699	417	494	30,350
Calendar year 1937.....	213,920	1,590	367	586	424,300
January.....	13,301	490	395	429	26,390
February.....	11,196	412	387	400	22,210
March.....	13,633	522	391	440	27,040
April.....	33,344	1,980	431	1,111	66,140
May.....	54,860	2,200	1,340	1,770	108,800
June.....	34,398	1,760	858	1,147	68,230
July.....	31,592	1,460	806	1,019	62,680
August.....	21,421	789	647	691	42,490
September.....	19,792	706	608	660	39,260
Water year 1937-38.....	279,175	2,200	367	765	553,700

Strawberry Creek near Bedford, Wyo.

Location.- Water-stage recorder, lat. 42°57', long. 110°54', in sec. 27, T. 34 N., R. 118 W., at mouth of canyon, 1½ miles east of Bedford.

Drainage area.- 21.3 square miles.

Records available.- June 1932 to September 1938.

Extremes.- Maximum discharge during year, 291 second-feet June 7 (gage height, 3.39 feet); minimum daily discharge, 25 second-feet Mar. 31, Apr. 1.
1932-38: Maximum discharge observed, 675 second-feet June 25, 1932 (gage height, 3.00 feet, former site and datum), from rating curve extended above 300 second-feet; minimum not determined.

Remarks.- Records excellent except those for period Apr. 21 to June 18, which are good. No gage heights for period Feb. 22 to Mar. 4, but flow is constant, as stream is almost entirely spring-fed. One small diversion above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	43	40	43	40	33	31	25	98	203	139	88	73
2	43	40	43	40	33	31	26	104	208	141	87	71
3	43	40	43	39	33	31	28	98	212	141	86	71
4	43	40	43	39	33	31	28	87	234	139	84	70
5	42	40	43	39	33	31	28	73	249	139	83	70
6	42	42	42	39	33	31	28	70	260	139	83	69
7	42	42	42	35	33	31	28	71	276	136	81	67
8	42	42	40	36	34	31	29	70	276	134	81	67
9	42	42	40	36	34	31	25	69	247	132	80	66
10	42	40	40	35	33	31	25	66	214	132	80	66
11	42	40	46	35	33	31	26	66	203	130	80	66
12	42	40	48	35	33	31	25	67	201	128	78	66
13	42	40	47	35	33	31	26	73	194	125	80	64
14	42	40	46	34	33	31	26	81	184	125	78	63
15	42	42	44	34	35	31	23	94	184	123	76	63
16	42	43	44	34	33	31	28	116	190	111	74	63
17	43	43	44	34	33	31	28	139	199	105	73	62
18	44	43	44	34	33	31	30	136	201	98	71	62
19	43	43	43	33	33	31	42	123	182	96	70	60
20	43	43	43	33	33	31	57	111	174	94	70	60
21	43	43	43	35	33	31	59	108	180	94	69	60
22	44	43	43	35	33	31	65	108	184	95	67	60
23	44	43	43	35	33	31	71	114	178	94	66	62
24	44	42	43	35	32	31	80	130	168	93	64	62
25	44	42	43	35	32	31	83	152	158	92	69	62
26	43	42	44	34	32	30	87	180	154	92	71	60
27	43	42	43	34	32	30	87	203	150	92	74	60
28	43	42	42	34	32	31	88	219	145	90	74	60
29	42	42	40	34	-	31	87	214	143	90	73	59
30	42	42	40	34	-	28	90	205	143	90	71	59
31	42	-	40	34	-	25	-	194	-	90	71	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							1,323	44	42	42.7	2,620	
November.....							1,248	43	40	41.6	2,480	
December.....							1,332	48	40	43.0	2,640	
Calendar year 1937.....							19,746	172	24	54.1	39,160	
January.....							1,101	40	33	35.5	2,180	
February.....							921	34	32	32.9	1,830	
March.....							951	31	25	30.7	1,890	
April.....							1,380	90	25	46.0	2,740	
May.....							3,637	219	66	117	7,210	
June.....							5,894	276	143	185	11,690	
July.....							3,517	141	90	113	6,980	
August.....							2,352	88	64	75.9	4,670	
September.....							1,923	73	59	64.1	3,810	
Water year 1937-38.....							25,579	276	25	70.1	50,740	

Henrys Lake near Lake, Idaho

Location.- Staff gage, lat. 44°36', long. 111°21', in SW $\frac{1}{4}$ sec. 26, T. 15 N., R. 43 E., at dam, 4 miles south of Lake post office.

Records available.- July 1923 to September 1938.

Remarks.- Henrys Lake impounds water for supplemental irrigation of lands served primarily by several canals diverting from Henrys Fork. It has a capacity of 80,000 acre-feet between elevations 6,458 and 6,473 feet above mean sea level. (Capacity published erroneously in Water-Supply Paper 833 as 80,000 acre-feet.) Gage heights and contents as computed are affected at times by action of wind. Gates in dam closed Oct. 3 to July 17. Gage-height record and capacity table furnished by North Fork Reservoir Co.

Contents, in acre-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	-							-	-	41,837	27,606
2	-	-							-	-	41,500	27,500
3	-	-							-	-	41,108	27,232
4	-	-							-	-	40,996	26,911
5	-	-							-	-	40,548	26,648
6	-	2,062							-	39,765	40,436	26,438
7	-	-							-	-	39,875	26,073
8	-	-							-	-	39,315	25,655
9	-	-							-	-	39,090	25,446
10	-	-							-	-	38,866	25,237
11	-	-							-	-	38,194	24,923
12	-	-							-	-	37,559	24,714
13	-	-							-	-	36,976	24,766
14	-	-							-	-	36,537	24,871
15	-	-							-	-	35,990	24,923
16	-	-							28,730	-	35,168	24,976
17	-	2,932							-	-	34,510	24,976
18	-	-							-	42,397	33,251	24,976
19	-	-							-	42,455	32,812	24,976
20	1,409	-							-	42,565	32,429	25,028
21	-	-							-	42,673	31,620	25,028
22	-	-							-	42,622	30,818	25,080
23	-	-							-	42,507	30,282	25,080
24	-	-							32,484	42,455	29,748	25,132
25	1,880	-							-	42,117	29,518	-
26	-	-						21,300	-	42,117	28,051	-
27	1,771	-						-	-	42,117	28,676	-
28	-	-						-	-	42,061	28,462	-
29	-	-						-	-	42,061	28,248	-
30	-	-						-	-	42,005	28,142	-
31	-	-						-	-	41,895	27,874	-

Note.- Readings discontinued during periods for which no records are given.

Henrys Fork near Lake, Idaho

Location.- Water-stage recorder, lat. 44°36', long. 111°21', in SW¼ sec. 23, T. 15 N., R. 43 E., a quarter of a mile downstream from Henrys Lake Dam and 4 miles south of village of Lake.

Drainage area.- 104 square miles (including basin of Dry Creek).

Records available.- September 1922 to September 1938. May 1920 to September 1922 at site 3 miles downstream and below mouth of Dry Creek, whose floodwaters have been diverted into Henrys Lake since 1923; records equivalent.

Extremes.- Maximum discharge during year, 387 second-feet Aug. 13-22 (gage height, 3.50 feet); minimum, 0.1 second-foot (estimated) Oct. 3-31 (leakage through reservoir gates).

1920-38: Maximum discharge, 907 second-feet June 13, 1928 (gage height, 5.40 feet); minimum, that of Oct. 3-31, 1937.

Remarks.- Records good. Records for Oct. 3 to July 17 computed on basis of observer's notes and three estimates of discharge. Flow controlled by operation of Henrys Lake gates, which were closed Oct. 3 to July 17.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41								-		95	144
2	20								-		129	145
3	*.1								-		144	144
4	-								-		179	141
5	-								-		196	141
6	-								-		194	151
7	-								-		192	184
8	-								-		192	184
9	-								-		192	176
10	-								-	*3	192	178
11	-								-		192	165
12	-								-		285	165
13	-								-		387	87
14	-								-		387	8
15	-								-		387	9
16	-								-		387	9
17	-								-		387	9
18	-								-	20	387	9
19	-								-	53	387	9
20	*.1								-	52	387	9
21	-								-	82	387	9
22	-								*6	106	387	9
23	-								*3	102	348	9
24	-								-	102	287	6
25	-								-	103	287	3
26	-								-	102	285	3
27	-								-	100	252	3
28	-							*1	-	101	180	3
29	-							-	-	100	152	3
30	-							-	-	98	149	3
31	-							-	-	97	147	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				64	41	.1	2.06	127				
November.....				30	-	-	*1	60				
December.....				31	-	-	*1	61				
Calendar year 1937.....				15,127	351	.1	41.5	30,010				
January.....				31	-	-	*1	61				
February.....				28	-	-	*1	56				
March.....				31	-	-	*1	61				
April.....				30	-	-	*1	60				
May.....				31	-	-	*1	61				
June.....				120	-	-	*4	238				
July.....				1,269	106	3	40.9	2,520				
August.....				8,139	387	95	263	16,140				
September.....				2,118	184	3	70.6	4,200				
Water year 1937-38.....				11,922	387	.1	32.7	23,640				

*Estimated.

Henrys Fork near Island Park, Idaho

Location.— Water-stage recorder, lat. 44°25', long. 111°24', in SW $\frac{1}{4}$ sec. 28, T. 13 N., R. 43 E., an eighth of a mile upstream from Buffalo River, an eighth of a mile downstream from Island Park Dam, and 2 miles west of Island Park.

Records available.— January 1933 to September 1938.

Extremes.— Maximum discharge during year, 1,580 second-feet May 4 (gage height, 6.14 feet); minimum, 9 second-feet Dec. 8 (gage height, 1.99 feet); minimum daily discharge, 27 $\frac{3}{4}$ second-feet Dec. 8.
1933-38: Maximum discharge, 1,590 second-feet May 9, 1937 (gage height, 6.08 feet); minimum, that of Dec. 8, 1937.

Remarks.— Records excellent. Flow regulated by storage in Henrys Lake and occasionally for a few hours at a time by operation of gates in diversion tunnel of Island Park Reservoir. No water stored in that reservoir during year ending Sept. 30, 1938.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 3 to Nov. 16, July 11 to Sept. 30)

2.0	9	4.5	713
2.5	42	5.0	968
3.0	115	5.5	1,234
3.5	277	6.0	1,506
4.0	483	6.2	1,616

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	398	386	320	349	357	357	345	1,380	1,340	747	581	586
2	398	390	365	353	345	361	345	1,430	1,310	797	581	586
3	390	398	361	353	333	365	349	1,640	1,270	947	577	586
4	378	366	353	337	325	353	349	1,580	1,240	868	577	577
5	378	373	345	317	317	349	349	1,530	1,210	920	618	572
6	378	378	341	*337	317	349	341	1,400	1,190	868	646	568
7	378	378	345	357	317	349	337	1,220	1,180	817	656	568
8	362	373	279	357	325	353	341	1,100	1,160	762	656	586
9	373	373	357	353	329	349	345	1,060	1,130	703	660	595
10	369	373	373	357	341	349	349	1,130	1,060	656	660	595
11	378	378	378	357	349	353	349	1,200	984	632	660	590
12	365	296	440	353	361	357	378	1,200	936	623	660	586
13	365	453	398	357	369	394	365	1,150	910	604	694	581
14	365	406	406	353	373	378	390	1,130	889	586	858	554
15	366	402	406	365	369	357	366	1,130	858	568	863	444
16	378	390	398	373	365	365	398	1,150	838	572	843	444
17	402	390	390	373	357	365	415	1,200	807	568	858	444
18	366	365	362	369	357	357	423	1,280	792	554	838	436
19	378	293	373	365	361	353	449	1,260	757	554	832	432
20	369	328	353	357	353	361	470	1,160	738	572	822	432
21	369	370	365	357	353	337	474	1,060	723	572	817	423
22	365	390	369	365	353	353	518	1,010	718	581	817	423
23	361	366	369	361	349	349	568	1,000	703	595	822	423
24	361	378	337	341	349	357	637	1,040	684	609	822	*434
25	361	378	341	333	357	349	733	1,110	670	604	792	*445
26	378	378	369	349	353	349	863	1,150	665	609	752	457
27	365	335	366	345	353	345	984	1,210	660	604	733	449
28	361	372	378	*347	353	349	1,070	1,280	665	604	706	444
29	361	378	357	*350	-	349	1,150	1,290	661	613	642	440
30	361	357	357	*352	-	345	1,240	1,290	656	604	604	440
31	361	-	357	*354	-	349	-	1,290	-	595	595	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	11,598	402	261	374	23,000
November.....	11,231	453	293	374	22,280
December.....	11,349	440	279	366	22,510
Calendar year 1937.....	168,724	1,450	279	462	334,700
January.....	10,946	373	317	353	21,710
February.....	9,740	373	317	348	19,320
March.....	11,005	394	337	355	21,650
April.....	15,710	1,240	337	524	31,160
May.....	38,010	1,580	1,000	1,226	75,390
June.....	27,404	1,340	661	913	54,360
July.....	20,608	968	554	665	40,880
August.....	22,224	863	577	717	44,080
September.....	15,140	595	423	505	30,030
Water year 1937-38.....	204,964	1,580	279	562	406,500

*Discharge estimated.

HENRYS FORK BASIN

Henrys Fork at Warm River, Idaho

Location.- Water-stage recorder, lat. 44°07', long. 111°20', in sec. 12, T. 9 N., R. 43 E., 1,000 feet upstream from Warm River and half a mile from War River railroad station. Prior to Sept. 20 gage at site 200 feet downstream at same datum.

Drainage area.- 660 square miles.

Records available.- September 1910 to March 1915, April 1918 to September 1938.

Average discharge.- 24 years (1910-14, 1918-38), 998 second-feet.

Extremes.- Maximum discharge during year, 2,600 second-feet May 2 (gage height, 6.57 feet, former site, present datum); minimum observed, 520 second-feet Dec. 8 (gage height, 3.80 feet, former site, present datum).
1910-15, 1918-38: Maximum discharge, 3,540 second-feet May 12, 1927 (gage height, 7.55 feet); minimum, 421 second-feet Dec. 18, 1931 (gage height, 3.45 feet).

Remarks.- Records good except those for period Nov. 18 to Mar. 2, which were computed on basis of four discharge measurements, thrice-weekly gage readings, weather records, and records for station near Ashton and are fair. Flow regulated by storage in Henrys Lake, about 80 miles upstream. Some water diverted above station for irrigation of meadows on headwaters.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	764	724	596	586	664	681	645	2,540	1,830	1,130	996	990
2	759	729	612	581	667	685	640	2,490	1,790	1,220	976	990
3	759	724	612	580	667	689	645	2,390	1,740	1,310	976	983
4	753	735	612	580	667	684	650	2,370	1,710	1,350	1,000	983
5	747	718	618	575	667	667	662	2,240	1,660	1,310	1,010	983
6	735	718	623	701	667	667	650	2,070	1,630	1,280	1,020	970
7	735	724	623	646	667	662	645	1,910	1,610	1,250	1,040	964
8	729	718	530	591	678	662	645	1,790	1,590	1,180	1,050	964
9	741	712	560	626	689	662	645	1,720	1,560	1,130	1,050	976
10	729	712	630	662	682	662	667	1,750	1,510	1,080	1,040	976
11	724	712	640	662	674	662	662	1,850	1,430	1,050	1,030	976
12	735	718	637	662	667	687	667	1,900	1,370	1,020	1,030	976
13	724	735	776	670	667	689	695	1,870	1,350	1,020	1,040	964
14	724	776	634	677	667	712	718	1,870	1,340	996	1,110	964
15	759	764	629	684	618	684	764	1,880	1,310	976	1,170	893
16	764	741	624	692	570	678	788	1,880	1,280	964	1,210	849
17	776	747	618	701	567	724	812	1,940	1,250	964	1,200	837
18	770	740	612	701	563	684	837	1,980	1,240	944	1,190	824
19	729	700	586	701	560	689	924	1,940	1,200	957	1,190	818
20	735	596	586	688	603	712	983	1,810	1,160	970	1,180	806
21	724	680	586	675	646	706	1,000	1,710	1,130	976	1,180	800
22	729	729	586	662	689	712	1,050	1,650	1,120	964	1,200	794
23	724	729	594	662	682	735	1,120	1,640	1,100	990	1,190	794
24	718	729	603	662	674	712	1,200	1,670	1,100	1,000	1,190	794
25	718	720	612	645	667	684	1,360	1,720	1,080	1,020	1,180	800
26	718	720	654	628	670	656	1,530	1,760	1,060	1,020	1,150	849
27	729	596	695	630	674	650	1,650	1,780	1,060	1,010	1,130	800
28	718	623	695	632	677	650	1,820	1,810	1,060	1,020	1,120	794
29	718	623	695	634	-	666	2,090	1,830	1,040	1,020	1,080	782
30	712	623	695	648	-	650	2,300	1,840	1,050	1,020	1,020	788
31	712	-	645	662	-	645	-	1,860	-	1,010	1,000	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						22,811	776	712	736	45,240		
November.....						21,215	776	596	707	42,080		
December.....						19,618	837	530	633	36,310		
Calendar year 1937.....						301,692	1,950	530	827	598,410		
January.....						20,106	701	575	649	39,880		
February.....						18,250	689	560	652	36,200		
March.....						21,089	735	645	680	41,830		
April.....						29,464	2,300	640	932	58,440		
May.....						59,460	2,540	1,640	1,918	117,800		
June.....						40,360	1,830	1,040	1,345	80,050		
July.....						33,151	1,350	944	1,069	65,750		
August.....						33,948	1,210	976	1,095	67,330		
September.....						26,681	990	782	889	52,920		
Water year 1937-38.....						346,153	2,540	530	948	686,500		

Henrys Fork near Ashton, Idaho

Location.- Water-stage recorder, lat. 44°05', long. 111°30', in sec. 28, T. 9 N., R. 42 E., a quarter of a mile downstream from power plant and 3 miles west of Ashton.

Drainage area.- 1,030 square miles.

Records available.- August 1902 to June 1909, April 1920 to September 1938.

Average discharge.- 19 years (1902-08, 1925-38), 1,301 second-feet.

Extremes.- Maximum daily discharge during year, 4,040 second-feet May 1 (gage height, 7.48 feet); minimum discharge, 148 second-feet Jan. 16, 23 (gage height, 4.85 feet), due to regulation by power plant; minimum daily discharge, 612 second-feet Dec. 25 (gage height, 5.58 feet).
1902-1909, 1920-38: Maximum discharge observed, 6,220 second-feet May 7, 1925; minimum discharge, 65 second-feet Oct. 16, 1935 (gage height, 4.59 feet), due to regulation by power plant; minimum daily discharge, 440 second-feet Dec. 5, 1931 (gage height, 5.29 feet).

Remarks.- Records excellent. Flow regulated at power plant above station and by storage in Henrys Lake. Some water diverted above station for irrigation of meadows on headwaters.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,000	949	862	767	890	904	886	4,040	2,760	1,670	1,280	1,280
2	975	949	862	949	1,020	936	898	3,990	2,650	1,780	1,260	1,250
3	975	949	898	1,010	932	993	910	3,780	2,660	1,790	1,250	1,220
4	975	949	923	778	1,030	920	962	3,730	2,500	1,810	1,280	1,230
5	975	949	910	868	908	916	949	3,330	2,410	1,760	1,280	1,230
6	949	949	962	838	814	664	923	3,030	2,370	1,670	1,290	1,220
7	949	949	910	917	934	1,040	936	2,760	2,320	1,630	1,320	1,200
8	949	949	721	992	920	888	962	2,580	2,300	1,580	1,340	1,230
9	949	949	767	786	920	871	988	2,470	2,260	1,530	1,370	1,220
10	936	936	1,000	1,000	940	698	1,010	2,560	2,180	1,420	1,340	1,230
11	936	936	1,130	943	936	862	1,000	2,760	2,020	1,370	1,310	1,230
12	923	949	1,280	892	953	898	1,030	2,890	1,980	1,320	1,290	1,230
13	923	850	1,120	866	744	949	1,090	2,830	1,920	1,320	1,310	1,230
14	910	1,030	975	987	1,040	1,020	1,150	2,920	1,910	1,320	1,370	1,220
15	1,010	1,000	1,050	966	892	923	1,260	2,980	1,890	1,290	1,420	1,190
16	1,010	975	1,000	854	783	923	1,280	2,940	1,810	1,290	1,530	1,080
17	1,030	962	1,000	1,040	765	1,030	1,320	3,080	1,790	1,290	1,500	1,070
18	1,040	998	962	1,030	786	962	1,310	3,050	1,780	1,260	1,480	1,070
19	962	949	1,050	968	864	962	1,460	2,890	1,690	1,230	1,510	1,070
20	936	923	874	916	741	1,010	1,550	2,650	1,650	1,250	1,480	1,050
21	936	1,030	898	889	1,000	838	1,580	2,520	1,600	1,260	1,480	1,050
22	936	949	898	975	900	898	1,630	2,450	1,550	1,250	1,480	1,050
23	936	962	962	858	833	1,050	1,780	2,470	1,550	1,280	1,510	1,070
24	936	975	802	912	958	988	1,870	2,520	1,550	1,320	1,500	1,070
25	923	975	612	851	873	936	2,160	2,610	1,530	1,310	1,510	1,070
26	923	949	862	844	900	898	2,430	2,670	1,480	1,310	1,480	1,150
27	949	923	1,120	913	802	910	2,500	2,720	1,480	1,310	1,450	1,090
28	949	949	936	884	1,000	936	2,740	2,760	1,480	1,310	1,400	1,050
29	923	910	1,040	952	-	936	3,170	2,800	1,450	1,340	1,370	1,050
30	910	936	988	866	-	923	3,610	2,740	1,480	1,280	1,310	1,050
31	910	-	988	1,000	-	910	-	2,740	-	1,260	1,220	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						29,543	1,040	910	953	58,600		
November.....						28,507	1,030	850	950	56,540		
December.....						29,862	1,290	612	947	58,240		
Calendar year 1937.....						415,883	2,920	612	1,139	824,900		
January.....						28,099	1,040	686	906	55,730		
February.....						25,078	1,040	741	896	49,740		
March.....						28,592	1,050	664	922	56,710		
April.....						45,364	3,610	896	1,512	89,980		
May.....						90,260	4,040	2,450	2,912	179,000		
June.....						57,880	2,760	1,450	1,929	114,800		
July.....						43,760	1,310	1,230	1,412	86,800		
August.....						42,900	1,530	1,220	1,384	85,090		
September.....						34,450	1,280	1,050	1,268	68,530		
Water year 1937-38.....						483,795	4,040	612	1,325	959,600		

HENRYS FORK BASIN

Diversions from Henrys Fork between Ashton and
St. Anthony gaging stations, Idaho

Between Ashton and St. Anthony stations seven canals divert water from Henrys Fork for irrigation. Records for each irrigation season from 1919 to 1938 are available. Records of discharge of canals computed from daily readings of staff gage and combined to show total diverted flow. Records good except those for May and June, which are fair.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								893	1,230	802	788	562
2								909	1,240	753	765	559
3								894	1,220	616	770	513
4								912	1,200	596	779	485
5								884	1,210	582	790	507
6								852	1,200	540	776	498
7								894	1,200	579	781	486
8								895	1,190	591	808	519
9								980	1,180	589	782	520
10								949	1,190	715	720	503
11								959	1,160	876	704	479
12								996	1,150	1,010	697	456
13								1,050	1,120	1,080	675	455
14								1,070	1,020	1,060	669	454
15								1,080	877	1,050	676	449
16								1,100	867	1,040	616	444
17								1,090	937	1,030	605	455
18								1,080	947	1,020	595	437
19								1,080	937	862	599	436
20								1,090	907	876	527	458
21								1,110	950	799	517	439
22								1,120	1,020	821	516	440
23								1,260	1,020	795	516	442
24								1,120	895	791	514	454
25								1,240	889	785	529	466
26								1,260	911	762	510	479
27								1,220	902	745	603	479
28								1,220	877	715	596	446
29								1,250	864	751	596	349
30								1,280	803	735	587	346
31								1,240	-	806	568	-
Month								Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....								32,947	1,260	852	1,063	65,350
June.....								31,063	1,240	803	1,035	61,610
July.....								24,772	1,080	540	799	49,130
August.....								20,194	808	510	651	40,050
September.....								13,980	562	346	466	27,730
The period.....												243,900

Henrys Fork at St. Anthony, Idaho

Location.- Water-stage recorder, lat. 43°58', long. 111°41', in sec. 1, T. 7 N., R. 40 E., half a mile upstream from bridge on main street of St. Anthony.

Records available.- March 1919 to October 1938 (irrigation seasons only).

Extremes.- Maximum discharge observed during period May to October, 6,730 second-feet May 2 (gage height, 5.90 feet); minimum daily discharge, 676 second-feet July 19, Aug. 3 (gage height, 3.09 feet).
1919-38: Maximum discharge observed, 9,030 second-feet May 8, 1925 (gage height, 6.70 feet); minimum daily discharge, 413 second-feet July 22, 1931 (gage height, 2.78 feet).

Remarks.- Records good. Diversions for irrigation above station. Flcw regulated by operation of power plant 17 miles upstream and by storage in Henrys Lake.

Rating table, for the period May 1 to Oct. 10 (gage height, in feet, and discharge, in second-feet)

2.9	524	4.2	2,250
3.1	684	4.5	2,940
3.3	876	4.8	3,680
3.5	1,095	5.1	4,450
3.7	1,340	5.4	5,270
3.9	1,660	5.9	6,730

Discharge, in second-feet, 1937-38

Day	Oct.					Apr.	May	June	July	Aug.	Sept.	Oct.
1	915						*5,600	3,780	2,750	748	994	866
2	965						6,610	3,630	3,430	712	983	887
3	965						5,610	3,580	3,480	676	951	887
4	952						5,190	3,560	3,230	693	985	887
5	979						4,450	3,580	3,160	693	972	1,060
6	965						3,800	3,700	2,870	684	994	1,080
7	952						3,430	3,700	2,630	721	940	1,050
8	965						†3,060	3,700	2,290	739	972	994
9	965						2,700	3,530	2,230	856	1,120	1,040
10	940						2,990	3,130	1,980	866	1,030	1,250
11	952						3,460	2,610	1,520	930	1,040	-
12	952						3,830	2,490	1,150	908	1,030	-
13	940						3,780	2,580	994	940	1,030	-
14	915						4,420	2,920	866	1,040	994	-
15	990						4,560	3,130	776	1,100	972	-
16	952						4,320	2,870	767	1,160	887	-
17	1,030						4,770	2,890	816	1,140	856	-
18	1,310						4,830	2,890	768	1,130	836	-
19	-						†4,200	2,630	676	1,180	816	-
20	-						†3,600	2,340	693	1,180	816	-
21	-						†3,000	2,540	730	1,180	816	-
22	-						2,990	2,800	930	1,160	816	-
23	-						3,260	3,010	940	1,180	816	-
24	-						3,530	2,820	983	1,150	*816	-
25	-						3,430	2,490	983	1,160	*816	-
26	-						3,730	2,340	1,030	1,150	897	-
27	-						3,980	3,520	940	1,080	816	-
28	-					†3,530	4,160	2,340	919	1,020	776	-
29	-						4,190	2,190	919	1,030	806	-
30	-						3,900	2,170	836	972	836	-
31	-						3,780	-	767	897	-	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
1937												
October 1-18.....						17,603	1,310	915	978	34,920		
1938												
May.....						125,160	6,610	2,700	4,037	248,300		
June.....						88,460	3,780	2,170	2,949	175,500		
July.....						47,033	3,480	676	1,518	93,330		
August.....						30,035	1,180	676	969	59,570		
September.....						27,427	1,120	776	914	54,400		
October 1-10.....						10,001	1,250	866	1,000	19,840		
The period.....										650,900		

*Estimated.

†Interpolated.

‡Discharge measurement.

HENRYS FORK BASIN

Diversions from Henrys Fork between St. Anthony
and Rexburg gaging stations, Idaho

Between St. Anthony and Rexburg gaging stations four canals divert water from Henrys Fork for irrigation. Records available for part of each irrigation season from 1919 to 1938. Records of discharge of canals computed from daily readings of staff gage and combined to show total diverted flow. Records good except those for May and June, which are fair.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								882	1,110	584	792	445
2								921	1,120	551	734	444
3								895	1,040	517	703	446
4								877	1,060	476	736	454
5								872	1,070	444	727	461
6								867	1,040	432	701	458
7								877	996	444	764	467
8								903	968	474	732	483
9								919	896	524	787	511
10								935	899	545	732	503
11								952	910	668	761	501
12								977	862	735	744	495
13								992	836	754	760	485
14								1,010	726	781	680	475
15								1,020	746	825	623	475
16								1,030	744	850	628	472
17								1,010	754	888	634	457
18								999	774	858	645	454
19								967	775	726	648	451
20								945	750	731	623	453
21								935	822	773	653	456
22								961	833	1,030	653	480
23								1,010	801	959	602	502
24								1,050	710	865	586	504
25								1,070	715	840	588	505
26								1,080	710	814	580	505
27								1,120	704	876	538	472
28								1,130	688	814	526	439
29								1,120	664	784	501	460
30								1,110	642	718	508	484
31								1,110	-	742	449	-
Month								Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....								30,566	1,130	867	966	60,630
June.....								25,865	1,120	642	846	50,310
July.....								22,042	1,030	432	711	43,720
August.....								20,338	792	449	656	40,340
September.....								14,188	511	439	473	28,140
The period.....												223,100

Henrys Fork near Rexburg, Idaho

Location.- Water-stage recorder, lat. 43°50', long. 111°54', in sec. 30, T. 6 N., R. 39 E., just downstream from highway bridge, 7 miles west of Rexburg, and below all tributaries.

Drainage area.- 3,010 square miles.

Records available.- April 1909 to September 1938.

Extremes.- Maximum discharge during year, 6,220 second-feet May 3 (gage height, 9.08 feet); minimum, 478 second-feet Aug. 8 (gage height, 2.51 feet).
1909-38: Maximum discharge, 9,490 second-feet June 29, 1927 (gage height, 9.90 feet); minimum, 183 second-feet March 24-28, 1934 (gage height, 1.45 feet).

Remarks.- Records good except those for period of ice effect, Dec. 22 to Feb. 8, which were estimated and are fair. Flow regulated by operation of power plant at Ashton and by storage in Henrys Lake. Diversions for irrigation above station. No diversions from Henrys Fork below station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	906	1,190	1,260			1,440	1,420	5,140	4,630	3,580	630	1,040
2	956	1,200	1,150			1,450	1,370	5,950	4,500	4,240	580	1,130
3	962	1,220	1,160			1,600	1,350	6,170	4,310	4,880	558	1,160
4	945	1,250	1,240			1,710	1,560	5,860	4,250	5,000	540	1,180
5	962	1,260	1,310		1,420	1,570	1,400	5,510	4,320	4,780	526	1,160
6	978	1,240	1,320			1,540	1,370	4,950	4,450	4,600	512	1,100
7	978	1,240	1,320			1,380	1,300	4,220	4,590	4,440	494	1,050
8	989	1,260	1,190			1,540	1,270	3,710	4,670	4,190	476	1,050
9	1,020	1,290	1,040		1,450	1,440	1,240	3,280	4,730	3,950	504	1,070
10	1,020	1,310	1,190		1,430	1,370	1,290	3,020	4,610	3,660	566	1,080
11	989	1,310	1,600		1,430	1,400	1,340	3,190	4,150	3,200	615	1,040
12	1,010	1,240	2,140		1,440	1,450	1,320	3,530	3,370	2,610	635	1,030
13	1,010	1,200	2,680		1,430	1,540	1,390	3,850	3,180	2,030	655	1,010
14	1,000	1,110	2,280		1,400	1,730	1,520	3,990	3,380	1,380	735	972
15	989	1,170	2,040		1,460	1,730	1,700	4,480	3,730	1,130	896	934
16	1,050	1,170	1,900		1,380	1,570	1,900	4,820	3,880	1,040	1,000	868
17	1,010	1,130	1,810		1,310	1,720	2,150	4,880	3,700	874	1,070	802
18	1,170	1,110	1,740		1,290	1,830	2,350	5,200	3,630	786	1,040	770
19	1,260	1,070	1,640		1,320	1,660	2,540	5,390	3,670	705	1,020	755
20	1,200	1,190	1,560		1,390	1,640	2,980	5,030	3,470	630	1,070	735
21	1,140	1,340	1,460		1,420	1,720	3,290	4,250	3,090	571	1,050	725
22	1,110	1,460			1,450	1,440	3,020	3,730	3,290	540	1,050	710
23	1,120	1,470			1,430	1,550	2,740	3,610	3,540	562	1,040	685
24	1,110	1,430			1,390	1,680	2,780	3,700	3,970	600	1,050	665
25	1,140	1,410			1,400	1,620	2,980	3,880	3,920	685	1,040	650
26	1,160	1,380	1,400		1,380	1,560	3,340	3,910	3,540	755	1,050	645
27	1,140	1,320			1,460	1,480	3,760	4,130	3,440	760	1,080	690
28	1,120	1,250			1,370	1,480	3,790	4,400	3,570	700	1,010	660
29	1,120	1,280			-	1,480	3,900	4,670	3,390	695	984	660
30	1,160	1,260			-	1,470	4,380	4,850	3,420	725	1,020	675
31	1,170	-			-	1,440	-	4,730	-	690	978	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					32,894	1,260	906	1,061	65,240			
November.....					37,780	1,470	1,070	1,259	74,940			
December.....					47,030	2,680	1,040	1,517	93,280			
Calendar year 1937.....					469,694	3,990	363	1,287	931,600			
January.....					44,020	-	-	*1,420	87,310			
February.....					39,390	1,460	1,290	1,407	78,130			
March.....					48,210	1,630	1,370	1,555	95,620			
April.....					65,540	4,380	1,240	2,218	132,000			
May.....					138,030	6,170	3,020	4,453	273,500			
June.....					116,390	4,730	3,090	3,880	230,900			
July.....					64,988	5,000	540	2,096	128,900			
August.....					26,474	1,080	476	822	50,530			
September.....					26,701	1,180	645	890	52,960			
Water year 1937-38.....					687,447	6,170	476	1,883	1,364,000			

*Estimated.

HENRYS FORK BASIN

Diversions from Fall River above gaging station
near Squirrel, Idaho

Above Squirrel gaging station three canals divert water from Fall River for irrigation. Records available for part of each irrigation season from 1918 to 1938. Records of discharge of canals computed from daily readings of staff gage and combined to show total diverted flow. Records good.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								0	36	86	124	20
2								0	56	106	124	20
3								0	73	105	124	20
4								0	73	59	125	20
5								0	88	59	129	20
6								0	120	59	140	20
7								0	138	59	79	20
8								0	148	59	82	20
9								0	161	59	85	20
10								0	170	59	-	19
11								0	175	59	6	19
12								0	175	88	9	19
13								0	176	110	8	23
14								0	180	120	8	23
15								0	181	120	9	23
16								0	186	134	55	20
17								0	184	134	58	20
18								0	184	159	58	20
19								0	189	173	59	20
20								0	189	173	59	36
21								0	194	6	59	36
22								0	206	6	57	36
23								0	202	7	47	36
24								0	206	2	46	24
25								0	207	2	47	20
26								19	209	150	47	20
27								19	206	124	-	20
28								19	204	125	-	20
29								35	210	127	-	26
30								35	204	127	-	26
31								36	-	124	-	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....						159	36	0	5.13	315		
June.....						4,830	210	36	164	9,780		
July.....						2,780	173	2	89.7	5,610		
August.....						1,642	140	0	53.0	3,260		
September.....						682	36	19	22.7	1,350		
The period.....										20,220		

Fall River near Squirrel, Idaho

Location.- Staff gage, lat. 44°04', long. 111°15', in sec. 34, T. 9 N., R. 44 E., 4 miles northeast of Squirrel and 10 miles upstream from Conant Creek. Prior to Nov. 7 staff gage at site 300 feet upstream and at different datum.

Drainage area.- 380 square miles.

Records available.- January 1904 to June 1909, May 1918 to September 1938. August 1902 to December 1903 at site at Wilson's sawmill, 3 miles upstream.

Average discharge.- 20 years (1918-38), 734 second-feet.

Extremes.- Maximum discharge observed during year, 3,050 second-feet June 8 (gage height, 3.32 feet); minimum observed, 329 second-feet Feb. 18 (gage height, 1.14 feet). 1904-09, 1918-38: Maximum discharge observed, 6,440 second-feet June 27, 1927; minimum observed, 72 second-feet Feb. 9, 1930.

Remarks.- Records good except those for periods of ice effect, Nov. 21-29, Dec. 20 to Jan. 14, Jan. 20 to Feb. 6, Feb. 18-20, which were computed on basis of weather records and records for periods intervening between those of ice effect and are fair. Diversions for irrigation above station.

Rating table, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 6)

1.0	250	1.8	860	2.9	2,360
1.2	365	2.0	1,090	3.2	2,850
1.4	506	2.3	1,470	3.5	3,360
1.6	670	2.6	1,900		

Discharge, in second-feet, water year October 1937 to September 1933

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	435	362	417	350	350	353	341	2,820	2,620	2,430	688	670	
2	428	382	404	350		365	353	2,490	2,620	2,350	688	670	
3	428	382	404	360		372	353	2,020	2,430	2,060	688	644	
4	428	376	404	380		372	365	1,810	2,560	1,670	670	644	
5	470	370	391	424		353	353	1,470	2,850	1,640	653	644	
6	463	370	391	424	365	353	353	1,310	3,020	1,580	619	628	
7	449	378	391	400		365	353	1,260	2,920	1,420	688	628	
8	435	378	445	390		365	347	365	1,190	3,050	1,310	670	619
9	435	378	619	380		365	347	365	1,190	2,860	1,390	724	670
10	435	378	636			378	347	365	1,310	2,590	1,340	780	628
11	421	378	653	370	378	347	378	1,550	2,270	1,500	706	619	
12	407	378	653		378	365	404	1,750	2,270	1,070	742	602	
13	382	372	653		378	372	430	1,670	2,270	1,020	724	602	
14	382	398	569		353	372	505	2,200	2,460	926	742	602	
15	449	398	553		378	353	372	537	2,300	2,430	926	724	565
16	463	384	521	404	353	365	636	2,170	2,360	926	670	585	
17	656	398	505	404	358	365	670	2,520	2,520	904	670	569	
18	760	353	490	395	360	365	653	2,170	2,590	820	653	569	
19	526	365	475	404	360	372	820	1,750	2,360	800	653	569	
20	463	404	450		360	372	882	1,550	2,170	760	653	553	
21	442	390	420		365	365	840	1,550	2,620	724	636	545	
22	414		390	353	341	882	1,690	2,620	904	636	537		
23	414		370	353	378	994	2,140	2,590	882	688	537		
24	400			347	365	1,240	2,300	2,270	860	653	561		
25	400			353	353	1,370	2,520	2,110	882	653	561		
26	400	370	350		353	341	1,420	2,750	2,430	724	670	553	
27	368			353	341	1,310	2,620	2,590	742	653	553		
28	368			353	353	1,370	2,850	2,060	760	670	553		
29	376			-	365	1,670	2,820	2,300	724	670	521		
30	376			378	-	365	2,240	2,490	1,840	688	653	537	
31	376	-	-	-	353	-	2,520	-	688	670	-		

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	13,689	760	376	442	27,150
November.....	11,530	404	353	378	22,470
December.....	14,004	653	350	452	27,780
Calendar year 1937.....	247,316	3,010	265	678	490,600
January.....	11,493	424	350	371	22,800
February.....	10,034	378	347	358	19,900
March.....	11,149	378	341	360	22,110
April.....	25,017	2,240	341	767	45,650
May.....	62,950	2,650	1,190	2,031	124,900
June.....	74,690	3,050	1,840	2,490	148,100
July.....	35,420	2,430	688	1,143	70,250
August.....	21,087	780	619	679	41,770
September.....	17,758	670	521	592	35,220
Water year 1937-38.....	306,591	3,050	341	840	608,100

HENRYS FORK BASIN

Diversions from Fall River between Squirrel
and Chester gaging stations, Idaho

Between Squirrel and Chester gaging stations nine canals divert water from Fall River for irrigation. Records available for part of each irrigation season from 1919 to 1938. Records of discharge of canals computed from daily readings of staff gage and combined to show total diverted flow. Records good except those for May and June, which are fair.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								213	785	576	615	571
2								164	786	529	614	550
3								167	795	445	612	529
4								204	810	425	606	518
5								217	822	422	605	507
6								221	709	424	596	505
7								227	701	448	575	503
8								230	754	443	603	514
9								232	781	442	625	288
10								252	805	441	597	498
11								257	823	453	600	480
12								259	833	499	592	478
13								366	849	529	560	483
14								388	854	597	570	479
15								397	840	629	566	486
16								341	841	650	560	416
17								237	841	539	546	475
18								235	823	546	542	477
19								257	812	548	547	480
20								268	768	552	540	476
21								448	627	466	530	474
22								452	222	491	548	478
23								565	268	579	556	481
24								606	426	575	556	477
25								608	503	578	577	475
26								613	555	574	579	472
27								654	545	575	564	476
28								663	634	601	555	480
29								689	745	611	572	473
30								710	735	604	568	467
31								753	-	614	564	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....						11,673	733	164	383	23,550		
June.....						21,282	854	222	709	42,210		
July.....						16,405	650	422	529	32,540		
August.....						17,840	625	530	575	35,380		
September.....						14,466	571	288	482	28,690		
The period.....										162,400		

Fall River near Chester, Idaho

Location.- Water-stage recorder, lat. 44°01', long. 111°34', in sec. 13, T. 8 N., R. 41 E., half a mile upstream from mouth and 2 miles north of Chester.

Records available.- April 1920 to October 1938 (irrigation seasons only).

Extremes.- Maximum discharge observed during period May to October, 3,010 second-feet May 2 (gage height, 4.58 feet); minimum daily discharge, 103 second-feet Aug. 6 (gage height, 1.61 feet).

1920-38: Maximum discharge, 6,380 second-feet June 27, 1927 (gage height, 6.60 feet); minimum, 9 second-feet Aug. 7, 1923 (gage height, 1.01 feet).

Remarks.- Records good. Station is below all diversions for irrigation from Fall River.

Rating table, May 2 to Oct. 8, 1938 (gage height, in feet, and discharge, in second-feet)

1.0	19	2.6	565
1.2	37	2.9	798
1.4	62	3.2	1,070
1.6	100	3.6	1,510
1.8	162	4.0	2,060
2.0	240	4.4	2,700
2.3	388	4.7	3,230

Discharge, in second-feet, 1937-38

Day	Oct.				Apr.	May	June	July	Aug.	Sept.	Oct.
1	188					-	2,180	1,810	166	228	131
2	249					3,010	2,160	2,080	135	220	152
3	236					2,420	2,160	1,920	138	212	148
4	211					2,120	2,200	1,600	125	212	148
5	254					1,740	2,340	1,470	117	208	148
6	241					1,450	2,470	1,340	103	200	155
7	232					1,360	2,550	1,240	108	192	170
8	232				*351	†1,280	2,580	1,090	148	192	159
9	224					1,210	2,420	1,150	181	235	267
10	215					1,360	2,060	1,110	208	392	410
11	215					1,520	1,710	957	224	212	-
12	207					1,810	1,600	765	236	204	-
13	184					1,780	1,700	623	249	200	-
14	200					2,400	1,890	500	276	185	-
15	225					2,550	2,030	426	272	177	-
16	254						2,340	1,820	415	249	181
17	382						2,720	1,920	459	216	159
18	530						2,560	1,960	404	215	152
19	-						2,020	1,740	350	220	142
20	-						1,520	1,470	324	208	142
21	-						1,490	1,880	300	204	142
22	-						1,680	2,200	488	185	138
23	-						1,860	2,400	431	185	135
24	-						1,930	2,200	415	189	135
25	-						2,060	1,850	426	181	138
26	-						2,240	1,840	393	196	138
27	-						2,420	2,060	276	192	128
28	-						2,550	1,670	258	189	114
29	-						2,560	1,540	236	212	111
30	-						2,240	1,410	204	212	122
31	-						2,180	-	192	212	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
1937					
October 1-18.....	4,479	530	184	249	8,880
1938					
May 2-31.....	60,410	3,010	1,210	2,014	119,800
June.....	60,010	2,580	1,410	2,000	119,000
July.....	23,652	2,080	192	763	46,910
August.....	5,952	276	103	192	11,810
September.....	5,344	393	111	178	10,600
October 1-10.....	1,888	410	131	189	3,740
The period.....					311,900

*Discharge measurement.

†Discharge interpolated.

Teton River near St. Anthony, Idaho

Location.- Water-stage recorder, lat. 43°56', long. 111°37', in sec. 15, T. 7 N., R. 41 E., half a mile above railroad bridge and 4 miles southeast of St. Anthony.

Drainage area.- 920 square miles.

Records available.- April 1903 to June 1909, April 1920 to September 1938.

Extremes.- Maximum discharge during year, 3,940 second-feet April 19 (gage height, 6.80 feet); minimum, 318 second-feet Feb. 14 (gage height, 1.90 feet).

1903-8, 1930-38: Maximum discharge, 7,820 second-feet June 5, 1909 (gage height, 6.90 feet, former site and datum); minimum, 88 second-feet March 12, 1906 (gage height, 1.00 foot, former site and datum).

Remarks.- Records excellent except those for periods of ice effect, Dec. 21 to Jan. 9, Jan. 21 to Feb. 3, Feb. 20, 21, which were computed on basis of one discharge measurement and weather records and are fair. Flow affected by diversions from streams in Teton River Basin 20 miles upstream and by flow diverted from Henry's Fork through Cross Cut canal into Teton River.

Rating table, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 10, July 28 to Sept. 30)

1.7	240	4.0	1,595
2.0	357	5.0	2,395
2.5	585	6.0	3,240
3.0	870	6.8	3,940

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	391	391	336	320	332	345	353	2,040	2,820	2,070	804	858
2	386	391	408		332	365	349	2,000	2,800	2,000	792	922
3	382	391	443		332	459	357	1,560	2,000	1,920	780	790
4	382	391	378		332	421	378	1,290	2,060	1,910	762	700
5	434	391	370		336	386	403	1,200	3,120	1,950	756	689
6	457	391	365	319	341	365	412	1,180	3,200	2,030	739	667
7	439	395	361	330	332	353	450	1,060	3,200	2,200	722	656
8	412	395	356	340	328	345	489	1,000	3,150	2,090	716	651
9	403	391	361	350	332	341	598	989	2,930	1,920	735	635
10	399	386	399	361	353	356	656	969	2,400	1,840	728	651
11	399	382	705	353	370	349	624	923	2,000	1,790	722	635
12	395	382	1,300	370	365	421	728	1,110	1,890	1,640	728	630
13	395	386	750	349	332	662	910	1,290	1,940	1,440	711	624
14	395	391	494	332	316	583	1,150	1,690	1,980	1,290	711	624
15	443	412	430	357	328	439	1,580	1,840	1,910	1,270	705	614
16	553	417	425	374	345	553	2,020	1,820	1,890	1,250	694	604
17	499	421	417	374	345	683	1,970	2,260	1,920	1,220	683	630
18	494	417	399	353	320	518	2,350	2,230	2,000	1,130	672	578
19	490	399	391	336	324	475	3,260	1,920	1,920	1,050	667	566
20	434	439	361	324	332	494	2,200	1,570	1,720	1,020	656	563
21	421	558	325	332	340	452	1,400	1,420	1,840	982	645	558
22	408	640		349	412	1,250	1,470	2,160	949	635	558	558
23	417	504		349	439	1,230	1,760	2,300	923	645	558	558
24	412	461		341	448	1,220	2,060	2,130	916	667	548	548
25	408	448		341	408	1,210	2,430	1,880	916	667	533	533
26	408	425	332	332	391	1,440	2,680	1,850	903	578	533	533
27	408	382		326	391	1,280	3,020	1,960	890	705	533	533
28	403	405		356	391	1,180	3,520	1,920	877	728	533	533
29	399	399		-	386	1,280	3,440	1,880	864	722	558	558
30	399	370		-	379	1,560	3,250	1,960	834	780	563	563
31	391	-	-	-	-	365	-	3,030	-	822	834	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	13,036	553	382	421	25,860
November.....	12,549	640	370	418	24,890
December.....	13,004	1,300	325	419	25,790
Calendar year 1937.....	209,303	1,930	273	573	415,200
January.....	10,474	374	319	358	20,770
February.....	9,443	370	316	337	18,730
March.....	13,334	683	336	430	26,450
April.....	34,247	3,260	349	1,142	67,930
May.....	57,841	3,440	923	1,866	114,700
June.....	68,730	3,200	1,720	2,291	136,300
July.....	42,906	2,200	822	1,364	85,100
August.....	22,127	834	635	716	44,010
September.....	18,654	858	533	622	37,000
Water year 1937-38.....	316,405	3,440	316	867	627,500

Peak discharge.- Mar. 13 (8 p.m.) 1,140 sec.-ft.; Mar. 16 (9 p.m.) 1,370 sec.-ft.; Apr. 16 (1 a.m.) 2,790 sec.-ft.; Apr. 17 (3 a.m.) 2,440 sec.-ft.; Apr. 19 (4 a.m.) 3,940 sec.-ft.

Diversions from Teton River between St. Anthony gaging
station and mouth, Idaho

Between St. Anthony gaging station and mouth 17 canals divert water from Teton River for irrigation. Records available for part of each irrigation season from 1919 to 1938. Records of discharge of each canal computed from daily staff-gage readings and combined to show total diverted flow. Records good except those for May and June, which are fair.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								314	1,330	786	737	577
2								314	1,290	683	721	570
3								321	1,420	583	682	556
4								306	1,390	554	677	546
5								299	1,420	553	690	513
6								277	1,410	494	655	479
7								277	1,410	253	689	478
8								264	1,410	436	673	479
9								262	1,350	468	705	510
10								140	1,330	493	724	549
11								102	1,190	711	746	569
12								104	1,210	798	747	584
13								113	1,220	849	739	591
14								482	1,240	788	711	589
15								530	1,240	953	732	607
16								729	1,240	1,090	651	614
17								535	1,250	1,010	642	620
18								545	1,290	1,020	628	610
19								519	1,230	1,100	629	608
20								571	1,150	1,060	622	568
21								655	1,240	1,010	590	566
22								769	1,360	976	583	551
23								842	1,280	921	593	543
24								990	1,200	965	617	568
25								1,010	1,130	1,000	601	554
26												
27								1,060	1,140	997	593	538
28								1,210	1,140	911	613	517
29								1,180	1,130	911	646	519
30								1,040	1,040	752	650	523
31								1,130	967	748	691	523
								1,270	-	758	740	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....							18,200	1,270	102	587	36,100	
June.....							37,697	1,420	987	1,256	74,750	
July.....							24,551	1,100	253	792	48,700	
August.....							20,717	747	553	666	41,090	
September.....							16,641	620	478	555	33,010	
The period.....											233,600	

BLACKFOOT RIVER BASIN

Blackfoot River near Blackfoot, Idaho

Location.— Water-stage recorder, lat. 43°08', long. 112°28', at east quarter corner of sec. 28, T. 3 S., R. 34 E., about 2 miles upstream from mouth and 9 miles southwest of Blackfoot.

Records available.— July 1913 to September 1938.

Extremes.— Maximum daily discharge during year, 578 second-feet April 25 (gage height, 5.75 feet); minimum daily, 2 second-feet on several days.

1913-38: Maximum discharge, 868 second-feet May 21, 1921; no flow on many days.

Remarks.— Records good except those for periods of missing gage heights, Oct. 3-9, 11, 12, Dec. 11-13, June 26-29, which were estimated and are poor. No records obtained during winter period, Dec. 23 to Mar. 26. Flow regulated by storage at Blackfoot Dam and by diversions for irrigation from and waste into Blackfoot River above station.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used April 12-25, June 21 to Sept. 30)

Oct. 1 to Apr. 11

Apr. 26 to June 20

1.0	1	3.0	198	1.0	1	2.5	127
1.2	3.4	4.0	327	1.2	3.4	3.0	200
1.4	10	5.0	447	1.4	10	4.0	347
1.7	31.5	6.0	567	1.7	33	5.0	487
2.0	62	6.2	591	2.0	63	5.8	591
2.5	125						

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	148	302			-	149	480	158	222	34	4
2	2	150	307			-	134	459	184	354	25	18
3	3	158	331			-	122	544	113	492	15	18
4	3	197	166			-	119	551	79	480	10	20
5	4	207	138			-	122	555	49	385	4	21
6	4	220	140			-	155	532	24	366	2	7
7	5	210	191			-	166	467	11	399	6	4
8	20	197	227			-	207	480	8	444	58	3
9	40	188	258			-	201	470	12	506	64	3
10	68	188	221			-	149	548	28	460	51	4
11	76	179	280			-	216	230	29	185	30	4
12	84	170	320			-	242	184	71	52	15	4
13	93	171	400			-	276	186	67	14	9	3
14	98	171	538			-	332	220	65	9	6	2
15	117	184	519			-	345	254	79	11	24	2
16	140	183	442			-	376	232	305	33	14	3
17	191	197	409			-	419	233	172	22	5	3
18	299	225	379			-	500	266	123	51	5	4
19	341	272	337			-	539	316	161	36	6	3
20	301	285	302			-	551	425	192	28	4	5
21	250	284	279			-	557	462	376	9	6	12
22	236	293	303			-	559	395	215	4	6	27
23	232	302	-			-	543	313	179	5	5	12
24	225	307	-			-	559	236	326	8	5	19
25	212	290	-			-	578	164	243	7	5	24
26	206	245	-			-	577	133	228	5	5	25
27	167	203	-			150	572	130	212	4	7	15
28	121	123	-			137	570	98	197	9	8	11
29	108	198	-			143	566	93	181	5	4	10
30	104	244	-			138	554	138	166	6	5	11
31	114	-	-			152	-	151	-	10	6	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	3,866	341	2	125	7,670
November.....	6,448	307	148	215	12,790
December 1-22.....	6,789	538	138	309	13,460
Calendar year					
January.....	-	-	-	-	-
February.....	-	-	-	-	-
March 27-31.....	720	152	137	144	1,430
April.....	10,945	578	119	365	21,710
May.....	9,725	555	88	314	19,290
June.....	4,238	376	8	131	8,410
July.....	4,621	506	4	149	9,170
August.....	446	64	2	14.5	891
September.....	299	27	2	10.0	583
Water year					

MUD LAKE BASIN

Mud Lake near Terretton, Idaho

Location.- Water-stage recorder, lat. 43°53', long. 112°24', in SW¼ sec. 1, T. 6 N., R. 34 E., about 2 miles north of Owsley Canal Co. pump house, 2½ miles northeast of Terretton, and 14 miles southwest of Hamer. Staff gage at first Owsley Canal Co. pumping plant used Dec. 24 to Mar. 28. Zero of each gage is 4,775.35 feet above mean sea level.

Records available.- April 1921 to September 1938.

Extremes.- Maximum daily contents during year, 22,000 acre-feet May 19 (mean daily gage height, 5.19 feet); lake was practically dry Oct. 1 to Nov. 15 at 4 p.m. when Camas Creek diversion canal was released into it.

1921-38: Maximum contents observed, 61,660 acre-feet May 5, 1923 (gage height, 9.20 feet); minimum, that of Oct. 1 to Nov. 15, 1937.

Remarks.- Records good. High winds occasionally disturb the recording of mean lake stages. Contents for Mar. 7-9, 11, 12, 26, June 21-28 interpolated. Water diverted from lake and from tributaries during irrigation season by pumping and by gravity. Camas Creek diversion canal reported in operation Oct. 1 to Nov. 15 and Aug. 21 to Sept. 30. Recorder record furnished by watermaster for Mud Lake, and staff gage height record by Owsley Canal Co.

Contents, in acre-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	1,840	5,340	9,350	12,500	16,400	19,100	19,200	10,600	4,940	3,080
2		0	1,940	5,460	9,490	12,700	16,400	19,500	19,100	10,300	4,680	3,090
3		0	2,040	5,560	9,660	13,200	16,500	19,500	18,800	10,200	4,810	3,030
4		0	2,150	5,650	9,800	13,200	16,500	19,700	18,600	10,100	4,640	2,980
5		0	2,260	5,750	9,910	13,400	16,600	19,900	18,400	9,950	4,500	2,870
6		0	2,370	5,900	10,000	13,400	16,800	20,100	18,200	9,910	4,350	2,860
7		0	2,530	6,020	10,100	13,500	16,900	20,300	17,900	9,840	4,210	2,750
8		0	2,620	6,120	10,300	13,600	16,700	20,500	17,200	9,770	4,130	2,590
9		0	2,700	6,230	10,500	13,600	16,700	20,700	17,500	9,500	4,030	2,640
10		0	2,870	6,300	10,600	13,700	16,700	20,900	17,000	9,740	3,930	2,580
11		0	3,010	6,410	10,700	13,900	16,800	21,100	16,700	9,600	3,820	2,620
12		0	3,140	6,540	10,900	14,000	16,900	21,200	16,500	9,420	3,700	2,620
13		0	3,270	6,670	11,100	14,200	17,100	21,400	16,300	9,150	3,550	2,640
14		0	3,320	6,770	11,200	14,300	17,200	21,500	16,000	8,820	3,570	2,580
15		40	3,410	6,910	11,300	14,400	17,300	21,500	15,700	8,660	3,500	2,610
16		180	3,520	7,100	11,400	14,500	17,400	21,500	15,400	8,360	3,450	2,620
17		310	3,610	7,270	11,500	14,500	17,500	21,800	15,100	8,080	3,340	2,610
18		450	3,740	7,390	11,700	14,700	17,500	21,900	14,800	7,770	2,940	2,590
19		587	3,860	7,530	11,800	13,600	17,600	22,000	14,600	7,500	3,250	2,540
20		718	3,950	7,650	11,900	15,100	17,800	21,900	14,400	7,270	3,210	2,540
21		856	4,050	7,800	12,000	15,100	17,900	21,700	14,100	7,050	3,060	2,500
22		944	4,150	7,920	12,000	15,100	17,900	21,400	13,800	6,800	3,080	2,460
23		1,020	4,250	8,080	12,100	15,500	18,100	21,300	13,400	6,620	3,080	2,450
24		1,070	4,370	8,270	12,200	15,600	18,200	21,200	13,100	6,410	3,080	2,380
25		1,160	4,430	8,360	12,300	15,700	18,100	21,000	12,800	6,200	3,060	2,370
26		1,290	4,620	8,520	12,300	15,800	18,300	20,700	12,500	6,080	3,080	2,370
27		1,580	4,710	8,690	12,400	16,000	18,400	20,400	12,100	5,880	3,080	2,350
28		1,610	4,860	8,820	12,500	16,200	18,600	20,200	11,800	5,700	3,060	2,320
29		1,620	4,940	8,950	-	16,300	18,800	19,900	11,500	5,510	3,110	2,290
30		1,730	5,050	9,050	-	16,400	19,000	19,700	11,500	5,320	3,110	2,270
31		-	5,210	9,220	-	16,400	-	19,500	-	5,160	3,130	-

Camas Creek at Camas, Idaho

Location.- Water-stage recorder, lat. $44^{\circ}00'$, long. $112^{\circ}13'$, in E $\frac{1}{2}$ sec. 21, T. 8 N., R. 38 E., 350 feet upstream from Oregon Short Line Railroad bridge at Camas and half a mile upstream from Beaver Creek.

Records available.- April 1925 to September 1938.

Average discharge.- 12 years (1926-38), 15.6 second-feet.

Extremes.- Maximum discharge during year, about 900 second-feet probably on May 3 (gage height, 3.98 feet, from floodmark), from rating curve extended above 400 second-feet; no flow Oct. 1 to Apr. 14, July 22, 23, Aug. 8 to Sept. 30.
1925-38: Maximum discharge, that for 1938, probably on May 3; no flow June 1-7, 1926, and during many periods in the years 1930-38.

Remarks.- Records good except those for May 1-3, which were computed on basis of weather records, high-water marks, and records for stations on nearby streams and are fair, and those for Mar. 15-20, which were computed on basis of information furnished by watermaster and are poor. Discharge for May 23, July 7 interpolated. Diversions above station for irrigation and stock water. Watermaster for Mud Lake furnished gage-height record and result of one discharge measurement.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						0	0	500	425	103	10	
2						0	0	700	368	136	7	
3						0	0	800	322	184	5	
4						0	0	530	314	247	4	
5						0	0	410	288	215	3	
6						0	0	274	272	179	2	
7						0	0	204	266	148	2	
8						0	0	167	258	116	0	
9						0	0	172	247	92	0	
10						0	0	174	236	62	0	
11						0	0	182	207	42	0	
12						0	0	209	174	27	0	
13						0	0	215	150	18	0	
14						0	0	207	129	13	0	
15						1	11	225	125	9	0	
16						4	9	277	125	8	0	
17						3	4	322	112	13	0	
18						2	2	360	90	13	0	
19						1	25	395	78	4	0	
20						1	42	337	71	4	0	
21						0	39	249	60	3	0	
22						0	73	202	48	1	0	
23						0	109	194	44	0	0	
24						0	132	186	44	4	0	
25						0	155	202	53	3	0	
26						0	236	230	62	3	0	
27						0	322	274	45	4	0	
28						0	349	308	38	5	0	
29						0	380	380	35	9	0	
30						0	331	410	65	21	0	
31						0	-	410	-	16	0	
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						0	0	0	0	0		
November.....						0	0	0	0	0		
December.....						0	0	0	0	0		
Calendar year 1937.....						2,681	222	0	7.3	5,310		
January.....						0	0	0	0	0		
February.....						0	0	0	0	0		
March.....						12	4	0	.4	24		
April.....						2,219	380	0	74.0	4,400		
May.....						9,705	800	167	313	19,250		
June.....						4,749	425	35	158	9,420		
July.....						1,707	247	0	55.1	3,390		
August.....						33	10	0	1.1	65		
September.....						0	0	0	0	0		
Water year 1937-38.....						18,420	800	0	50.5	36,550		

Beaver Creek at Dubois, Idaho

Location.- Water-stage recorder, lat. $44^{\circ}11'$, long. $112^{\circ}14'$, in NW $\frac{1}{4}$ sec. 21, T. 10 N., R. 36 E., half a mile north of Dubois.

Drainage area.- 220 square miles.

Records available.- April 1921 to September 1938.

Discharge.- Maximum discharge during year, 240 second-feet May 1 (gage height, 2.40 feet); no flow prior to Apr. 14 and July 27-29, Aug. 1 to Sept. 30.
1921-38: Maximum discharge, 858 second-feet Apr. 7, 1930; maximum gage height, about 6.5 feet Mar. 16, 1926; no flow for long periods.

Remarks.- Records good. Discharge for Apr. 14 computed on basis of information furnished by watermaster; that for June 5-8 interpolated. Diversions for irrigation above station. Gage-height record and one discharge measurement furnished by watermaster for Mud Lake.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.10	0	1.10	21.5	2.10	178
.30	.3	1.30	40	2.30	219
.50	2.2	1.50	67	2.40	240
.70	6.0	1.70	101.5		
.90	11.5	1.90	139		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	200	166	79		
2							0	217	160	60		
3							0	152	160	135		
4							0	128	143	130		
5							0	111	135	96		
6							0	96	127	105		
7							0	77	118	75		
8							0	70	110	49		
9							0	64	102	35		
10							0	70	94	27		
11							0	80	84	20		
12							0	91	70	16		
13							0	94	66	11		
14							1.0	96	64	8.2		
15							18	107	85	12		
16							8.2	118	67	20		
17							10	128	54	15		
18							21	166	52	9.7		
19							75	170	50	7.2		
20							147	158	39	5.4		
21							147	128	30	3.0		
22							124	109	29	1.2		
23							139	102	33	.4		
24							147	111	34	.3		
25							162	124	26	.1		
26							182	133	22	.6		
27							172	150	25	.1		
28							145	170	40	0		
29							150	180	25	.8		
30							168	184	33	4.1		
31							-	176	-	.8		
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							0	0	0	0	0	
November.....							0	0	0	0	0	
December.....							0	0	0	0	0	
Calendar year 1937.....							36	9	0	.1	71.0	
January.....							0	0	0	0	0	
February.....							0	0	0	0	0	
March.....							0	0	0	0	0	
April.....							1,816.2	182	0	60.5	3,600	
May.....							3,960	217	64	128	7,860	
June.....							2,223	166	22	74.1	4,410	
July.....							926.9	135	0	29.9	1,840	
August.....							0	0	0	0	0	
September.....							0	0	0	0	0	
Water year 1937-38.....							8,926.1	217	0	24.5	17,700	

Beaver Creek at Camas, Idaho

Location.- Staff gage, lat. $44^{\circ}01'$, long. $112^{\circ}14'$, in NE $\frac{1}{4}$ sec. 21, T. 8 N., R. 36 E., a quarter of a mile northwest of Oregon Short Line Railroad station at Camas and three-eighths of a mile upstream from confluence with Camas Creek.

Records available.- April 1921 to September 1938.

Extremes.- Maximum discharge observed during year, 57 second-feet June 1 (gage height, 2.54 feet); no flow except during May to July.

1921-38: Maximum discharge, 163 second-feet Apr. 7, 1930; usually no flow past station except for short period during spring of each year; none passed station 1931 to 1936.

Remarks.- Records fair. Discharge interpolated May 3. Flow affected by irrigation diversions above Dubois, about 14 miles above gage, and by heavy channel losses below Dubois. Gage read twice daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								0	54	0		
2								4	50	0		
3								7	53	1		
4								10	52	20		
5								9	46	7		
6								10	46	10		
7								1	46	4		
8								0	42	0		
9								0	45	0		
10								0	39	0		
11								0	32	0		
12								0	20	0		
13								0	14	0		
14								0	12	0		
15								0	18	0		
16								3	16	0		
17								12	7	0		
18								23	0	0		
19								36	0	0		
20								30	0	0		
21								20	0	0		
22								11	0	0		
23								6	0	0		
24								6	0	0		
25								11	0	0		
26								14	0	0		
27								26	0	0		
28								45	0	0		
29								49	0	0		
30								53	0	0		
31								54	-	0		
Month	Second-foot-days											
October.....	0											
November.....	0											
December.....	0											
Calendar year												
January.....	0											
February.....	0											
March.....	0											
April.....	0											
May.....	438											
June.....	592											
July.....	42											
August.....	0											
September.....	0											
Water year 1937-38.....	1,072											
	54											
	0											
	2.9											
	2,120											

Little Lost River near Howe, Idaho

Location.- Water-stage recorder, lat. 43°53', long. 113°06', in sec. 3, T. 6 N., R. 28 E., a quarter of a mile upstream from diversion dam of Blaine County Investment Co., 6 miles northwest of Berenice, and 7 miles northwest of Howe. Prior to Sept. 2, staff gage 124 feet downstream.

Records available.- April 1921 to September 1938 except during winters.

Extremes.- Maximum discharge during year, 150 second-feet June 10, 11 (gage height, 1.60 feet); minimum discharge observed, 12 second-feet Apr. 1-11, 13-15; minimum gage height, 0.10 foot Apr. 10, 11.

1921-38: Maximum discharge, about 450 second-feet Aug. 11, 1936, during cloudburst (gage height, 3.1 feet, from high-water mark); minimum, 13 second-feet Apr. 15, 20, 1925 (gage height, -0.12 foot).

Remarks.- Records good. Once-daily staff-gage reading prior to Sept. 2, during period Sept. 11-16, and on Sept. 24. No records Nov. 21 to Mar. 31. Discharge for Apr. 1-9 computed on basis of weather records and records for stations on nearby streams; that for Oct. 5 interpolated. Many diversions for irrigation both above and below station. Prior to 1937 water was stored in small reservoir of Blaine County Investment Co. on Dry Creek, about 40 miles upstream, and during irrigation seasons was released and carried through Corral and Wet Creeks to Little Lost River, from which it was diverted into the company's main canal a quarter of a mile below station. Gage-height record and result of one discharge measurement furnished by watermaster for Little Lost River.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	14					12	64	126	138	52	42
2	26	14					12	92	132	114	44	36
3	27	15					12	86	132	132	41	34
4	23	16					12	76	132	138	42	34
5	24	18					12	74	138	138	46	34
6	24	15					12	71	138	132	40	37
7	25	15					12	69	144	120	42	39
8	25	17					12	65	144	108	42	39
9	25	15					12	61	144	102	40	39
10	25	18					12	55	150	92	41	40
11	25	17					12	68	150	108	39	40
12	25	18					13	74	144	92	44	40
13	25	17					12	72	144	102	44	40
14	28	19					12	81	144	102	48	39
15	30	19					12	86	138	114	50	38
16	32	19					13	92	132	114	48	38
17	32	18					14	97	132	102	47	37
18	31	19					19	102	132	97	45	37
19	32	19					21	97	132	92	44	37
20	32	19					29	97	120	86	44	36
21	32	-					30	86	114	86	45	36
22	32	-					32	86	114	86	41	36
23	18	-					34	92	114	81	46	35
24	18	-					34	97	120	81	34	36
25	18	-					35	102	108	81	30	36
26	18	-					34	114	108	86	33	36
27	18	-					46	120	102	81	37	36
28	18	-					46	126	102	81	36	37
29	18	-					47	126	97	81	37	36
30	18	-					55	126	97	72	38	35
31	18	-					-	126	-	64	37	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						768	32	18	24.8	1,520		
November 1-20.....						541	19	14	17.0	676		
December.....						-	-	-	-	-		
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March.....						-	-	-	-	-		
April.....						670	55	12	22.3	1,350		
May.....						2,780	126	55	69.7	5,510		
June.....						3,824	150	57	127	7,580		
July.....						3,103	138	64	100	6,150		
August.....						1,297	52	57	41.8	2,670		
September.....						1,115	42	34	37.2	2,210		
Water year												

Blaine County Investment Co.'s canal near Howe, Idaho

Location.- Staff gage above Cippoletti weir, lat. 43°53', long. 113°05', in NW¼ sec. 11, T. 6 N., R. 28 E., 665 feet downstream from head gates and 7 miles northwest of Howe.

Records available.- April 1924 to September 1938 (irrigation seasons only).

Extremes.- Maximum discharge observed during year, 57 second-feet June 9-12; maximum gage height, 2.72 feet June 9-11; practically no flow during winter except leakage through head gates, and none reported Oct. 1 to May 2, Aug. 1-5, Sept. 1-30.

1924-38: Maximum discharge observed, 87 second-feet May 24, 25, 1928; practically no flow during nonirrigation season, and none reported June 26 to Sept. 1, Sept. 15, 16, 1934, July 24 to Oct. 9, 16-25, 1936, Apr. 9, 1937, to May 2, 1938, Aug. 1-5, Sept. 1-30, 1938.

Remarks.- Records good. Gage read once daily. Discharge for May 4-15, Aug. 6, 18 computed on basis of reported gate changes and that for Aug. 19-31 on field estimate by engineer of discharge on Aug. 28. Canal diverts water from Little Lost River in sec. 2, T. 6 N., R. 28 E., for irrigation of lands in project of Blaine County Investment Co. Gage-height record and results of two discharge measurements furnished by watermaster for Little Lost River.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								0	51	41	0	
2								0	52	31	0	
3								7.9	52	40	0	
4								4.2	51	42	0	
5								.4	53	44	0	
6								.4	53	44	1.5	
7								.4	54	44	5.3	
8								.4	55	37	5.3	
9								.4	57	37	5.3	
10								.4	57	33	4.1	
11								.4	57	33	4.1	
12								.4	57	26	4.1	
13								.4	56	31	4.1	
14								.4	56	26	4.1	
15								6.9	56	31	4.1	
16								14	51	31	4.1	
17								15	49	31	4.1	
18								24	50	25	1.8	
19								25	49	20	.1	
20								21	37	20	.1	
21								13	28	26	.1	
22								13	30	25	.1	
23								14	30	25	.1	
24								20	32	18	.1	
25								25	24	18	.1	
26								33	24	18	.1	
27								43	23	18	.1	
28								44	23	18	.1	
29								47	22	18	.1	
30								49	21	15	.1	
31								49	-	11	.1	
Month								Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....								0	0	0	0	0
November.....								0	0	0	0	0
December.....								0	0	0	0	0
Calendar year												
January.....								0	0	0	0	0
February.....								0	0	0	0	0
March.....								0	0	0	0	0
April.....								0	0	0	0	0
May.....								472.0	49	0	15.2	936
June.....								1,310	57	21	43.7	2,600
July.....								877	44	11	28.3	1,740
August.....								53.3	5.3	0	1.72	106
September.....								0	0	0	0	0
Water year 1937-38.....								2,712.3	57	0	7.43	5,380

BIG LOST RIVER BASIN

Big Lost River at Howell ranch, near Chilly, Idaho

Location.- Water-stage recorder, lat. 44°01', long. 114°00', in sec. 30, T. 8 N., R. 21 E., at Howell ranch, 9 miles southwest of Chilly and 21 miles northwest of Mackay.

Records available.- April 1904 to August 1906, July 1907 to November 1914, and May 1920 to September 1938, except during winters.

Extremes.- Maximum discharge during year, 3,170 second-feet June 6 (gage height, 5.17 feet); minimum discharge recorded, 46 second-feet Nov. 4 (gage height, 0.60 foot), but may have been less sometime during winter.
1904-14, 1920-38: Maximum discharge, 3,500 second-feet June 12, 1921 (gage height, 5.94 feet); minimum, 22 second-feet (discharge measurement) Nov. 23, 1936.

Remarks.- Records good. None for Nov. 22 to Dec. 12, Dec. 14 to Mar. 31. Discharge for Oct. 3, 10-20, Apr. 5-22 computed on basis of once-daily staff-gage readings and that for Apr. 1-4 on basis of weather records and records for nearby streams. No regulation. Several small diversions above station. Hammerly ditch (capacity about 20 second-feet) diverts a quarter of a mile below station. Gage-height record and results of two discharge measurements furnished by watermaster for Big Lost River.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.60	46	2.40	630	4.20	2,170
.90	81	2.70	850	4.50	2,470
1.20	135	3.00	1,090	4.80	2,770
1.50	213	3.30	1,350	5.10	3,070
1.80	318	3.60	1,620	5.20	3,170
2.10	451	3.90	1,890		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*60	59					55	1,170	2,170	1,800	489	259
2	*59	59					55	906	2,370	1,710	456	235
3	59	56					55	722	2,570	1,660	417	219
4	59	59					55	*606	2,770	1,480	394	213
5	*59	59					56	459	2,970	1,400	377	199
6	*59	60					55	446	3,070	1,220	363	193
7	*60	61					55	417	2,970	1,220	351	181
8	*60	56					55	394	3,070	1,260	338	179
9	*60	60					59	432	2,770	1,300	351	174
10	60	57					61	541	2,270	1,260	338	174
11	59	56					62	624	2,020	1,260	316	171
12	59	63					65	700	2,070	1,130	310	163
13	59	75	†250				68	906	2,020	1,090	307	161
14	59	62					73	1,090	1,890	1,070	284	153
15	65	74					66	1,220	1,940	1,130	276	151
16	65	71					104	1,260	1,940	1,130	259	149
17	62	65					131	1,260	2,070	1,000	245	149
18	65	62					403	1,130	1,590	954	242	146
19	62	61					451	946	1,620	906	235	144
20	65	67					394	812	1,580	882	226	142
21	67	65					347	798	1,680	798	219	142
22	67	-					441	890	1,660	760	223	144
23	67	-					427	1,130	1,530	745	242	149
24	65	-					437	1,530	1,480	686	248	144
25	65	-					500	1,710	1,580	679	284	140
26	65	-					456	2,170	1,780	672	273	140
27	63	-					478	2,470	1,800	604	252	137
28	62	-					553	2,770	1,710	578	242	137
29	61	-					738	2,470	1,620	578	232	142
30	61	-					906	2,220	1,980	547	232	163
31	61	-					-	2,170	-	523	235	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							1,919	67	59	61.9	3,810	
November 1-21.....							1,307	75	56	62.2	2,590	
December.....							-	-	-	-	-	
Calendar year												
January.....							-	-	-	-	-	
February.....							-	-	-	-	-	
March.....							-	-	-	-	-	
April.....							7,681	906	55	256	15,240	
May.....							36,399	2,770	394	1,174	72,200	
June.....							62,820	3,070	1,480	2,094	124,500	
July.....							32,032	1,800	523	1,033	65,330	
August.....							9,258	489	219	299	18,360	
September.....							4,992	259	137	166	9,900	
Water year												

*Interpolated.

†Discharge measurement

Big Lost River (east channel) above Mackay Reservoir, near Mackay, Idaho

Location.- Water-stage recorder, lat. 45°59', long. 113°45', in sec. 32, T. 8 N., R. 23 E., 3 miles upstream from Mackay Dam, above flow line of reservoir, and about 7½ miles northwest of Mackay.

Records available.- May 1919 to September 1938.

Average discharge.- 19 years, 50.4 second-feet.

Extremes.- Maximum discharge during year, 1,320 second-feet June 7 (gage height, 5.02 feet); no flow Oct. 1 to Apr. 28.

1919-38: Maximum discharge, that of June 7, 1938; no flow for long periods in 1920 and each year of period 1923-38.

Remarks.- Records good. Discharge for Sept. 23 based on staff-gage reading; that for Aug. 30, 31, Sept. 1, 11-16, 22, 24-30 interpolated. Diversions for irrigation above station. The sum of the combined discharge of east and west channels of Big Lost River and the combined discharge of east and west channels of Warm Spring Creek, near Mackay, Idaho, represents practically the entire surface flow of Big Lost River that enters Mackay Reservoir. Gage-height record and result of one discharge measurement furnished by watermaster for Big Lost River.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to June 7				June 8 to Sept. 30			
0.50	0	3.50	423	0.60	12.0	2.70	259
.80	10.5	3.80	568	.90	24	3.10	361
1.30	46	4.30	743	1.20	42	3.50	415
1.80	112	4.80	1,095	1.50	67	3.90	561
2.30	201	5.10	1,440	1.80	97	4.30	660
2.80	303			2.10	136	4.70	965
				2.40	184	5.10	1,460

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	148	1,100	985	249	45
2							0	186	1,100	840	224	44
3							0	148	1,150	935	206	44
4							0	124	1,150	840	189	42
5							0	103	1,200	720	174	39
6							0	85	1,260	638	150	36
7							0	72	1,320	598	144	34
8							0	63	1,310	598	130	31
9							0	59	1,260	615	123	30
10							0	72	1,200	598	119	29
11							0	94	1,090	598	109	28
12							0	115	985	565	105	27
13							0	151	1,040	556	94	26
14							0	203	985	521	93	24
15							0	256	935	521	89	23
16							0	288	935	550	83	22
17							0	321	985	521	78	21
18							0	334	935	480	68	21
19							0	303	758	466	62	18
20							0	268	690	466	49	18
21							0	240	720	415	44	18
22							0	240	758	390	41	17
23							0	275	690	378	40	16
24							0	372	660	354	41	16
25							0	537	660	343	45	16
26							0	743	758	354	56	15
27							0	910	795	321	56	15
28							0	1,040	795	300	50	15
29							9	1,150	758	292	48	14
30							59	1,100	840	275	47	14
31							-	1,100	-	257	46	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							0	0	0	0	0	
November.....							0	0	0	0	0	
December.....							0	0	0	0	0	
Calendar year 1937.....							3,336	192	0	9.1	6,620	
January.....							0	0	0	0	0	
February.....							0	0	0	0	0	
March.....							0	0	0	0	0	
April.....							68	59	0	2.3	135	
May.....							11,100	1,150	59	368	22,020	
June.....							28,822	1,320	660	961	57,170	
July.....							16,268	985	257	525	32,270	
August.....							3,052	249	40	98.5	6,050	
September.....							758	45	14	25.3	1,500	
Water year 1937-38.....							60,066	1,320	0	165	119,100	

Big Lost River (west channel) above Mackay Reservoir, near Mackay, Idaho

Location.- Water-stage recorder, lat. 43°58', long. 113°45', in sec. 5, T. 7 N., R. 23 E., 3 miles upstream from Mackay Dam, above flow line of reservoir, and about 7½ miles northwest of Mackay. Prior to May 14 at site 200 feet upstream; small inflow between two sites during peak season.

Records available.- May 1919 to September 1938.

Average discharge.- 19 years, 54.5 second-feet.

Extremes.- Maximum discharge during year, 759 second-feet June 8, 9 (gage height, 4.74 feet); minimum, 13 second-feet Apr. 23-26; minimum gage height, 0.80 foot Mar. 26, Apr. 1-3, 23-25.

1919-38: Maximum discharge, 1,200 second-feet (estimated), sometime during period June 5-16, 1921 (gage height, 4.45 feet); minimum, 9 second-feet May 22, 26, 1935.

Remarks.- Records good. Discharge for Feb. 17, 18, Mar. 18, 23-25 interpolated. D1-versions for irrigation above station. The sum of the combined discharge of east and west channels of Big Lost River and the combined discharge of east and west channels of Warm Spring Creek, near Mackay, Idaho, represents practically the entire surface flow of Big Lost River that enters Mackay Reservoir. This summation is published on the following page. Gage-height record and results of two discharge measurements furnished by watermaster for Big Lost River.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

May 14 to Sept. 30

2.20	53	3.70	344
2.50	95	4.00	440
2.80	144	4.30	554
3.10	201	4.60	686
3.40	266	4.75	759

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	26	26	24	19	17	16	35	458	458	117	66
2	30	26	26	24	18	17	16	63	476	390	111	66
3	30	26	26	24	17	17	16	60	554	409	105	67
4	30	26	26	24	17	17	16	51	618	384	100	67
5	30	26	26	24	17	17	17	46	640	341	95	66
6	30	26	26	23	18	17	17	40	663	306	90	63
7	30	26	26	22	18	17	17	37	686	273	89	65
8	30	26	27	21	17	17	18	36	734	273	86	63
9	30	26	27	21	17	17	19	35	734	285	84	63
10	30	26	27	21	17	17	19	37	596	280	83	62
11	30	26	26	21	18	17	18	41	458	280	80	62
12	30	26	26	21	18	17	18	44	433	259	77	61
13	30	26	26	21	18	17	18	48	423	244	74	61
14	30	26	26	21	18	17	18	61	403	229	73	61
15	30	26	26	21	18	17	17	76	354	224	73	61
16	30	26	26	21	17	17	16	90	396	237	70	60
17	30	26	26	21	17	17	16	108	423	218	70	60
18	30	26	26	21	17	16	16	119	426	201	67	60
19	30	26	26	21	17	16	16	116	365	191	65	58
20	30	26	26	21	17	16	14	98	324	181	65	58
21	30	26	26	19	17	16	14	84	330	175	63	58
22	30	27	26	19	17	16	14	80	347	168	61	58
23	30	26	25	19	17	16	13	89	327	158	63	58
24	30	26	25	19	17	16	13	124	306	153	65	58
25	29	26	24	19	17	16	13	175	298	149	69	58
26	29	26	24	19	17	16	13	235	336	155	69	58
27	29	26	24	19	17	16	14	365	359	148	69	58
28	28	26	24	19	17	15	16	495	365	137	67	57
29	28	26	24	19	-	16	20	575	359	132	67	57
30	27	26	24	19	-	16	25	554	403	127	67	57
31	26	-	24	19	-	16	-	495	-	124	65	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	916	30	26	29.5	1,820
November.....	781	27	26	26.0	1,550
December.....	793	27	24	25.6	1,670
Calendar year 1937.....	10,507	85	21	28.9	20,850
January.....	647	24	19	20.9	1,280
February.....	486	19	17	17.4	964
March.....	513	17	16	16.5	1,020
April.....	493	25	13	16.4	978
May.....	4,512	575	35	146	8,950
June.....	13,624	734	298	454	27,020
July.....	7,289	458	124	235	14,460
August.....	2,399	117	61	77.4	4,760
September.....	1,827	67	57	60.9	3,620
Water year 1937-38.....	34,280	734	13	93.9	67,990

Combined discharge, in second-feet, of Big Lost River (east and west channels) and Warm Spring Creek (east and west channels) above Mackay Reservoir, near Mackay, Idaho, 1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	117	117	126	118	115	108	105	283	1,870	1,800	494	205
2	118	118	126	120	113	108	105	353	1,910	1,560	455	204
3	119	117	125	121	112	107	105	308	2,070	1,690	426	211
4	118	117	126	121	112	106	107	271	2,170	1,560	397	208
5	118	118	126	120	112	105	111	244	2,270	1,370	373	205
6	116	118	127	119	111	105	113	218	2,380	1,240	339	204
7	116	118	128	118	111	107	116	202	2,470	1,150	331	208
8	115	118	128	117	110	107	118	189	2,520	1,140	314	202
9	116	118	127	117	112	107	120	181	2,480	1,170	305	204
10	116	118	128	118	112	107	117	192	2,210	1,140	297	205
11	116	118	126	117	113	108	115	218	1,880	1,140	284	205
12	116	120	123	116	114	109	114	245	1,740	1,070	274	201
13	115	120	122	116	113	111	115	287	1,780	1,020	258	200
14	115	120	122	119	110	111	113	356	1,690	982	257	198
15	116	120	123	119	110	111	109	434	1,610	977	255	196
16	118	118	123	119	109	112	108	493	1,640	1,020	242	192
17	119	122	123	118	108	113	107	559	1,720	965	235	190
18	119	119	123	118	106	110	109	593	1,690	891	222	190
19	118	121	123	118	111	108	106	558	1,430	854	212	184
20	119	121	124	117	111	110	100	497	1,310	832	199	185
21	119	121	123	114	111	110	99	446	1,350	771	190	183
22	119	125	124	114	111	110	98	446	1,400	732	188	185
23	119	124	123	114	109	107	97	499	1,310	701	189	185
24	119	127	122	114	109	106	97	647	1,280	669	194	180
25	118	125	122	114	109	106	98	887	1,250	653	205	180
26	118	126	121	114	109	106	98	1,190	1,390	668	213	180
27	119	128	121	114	109	107	99	1,570	1,470	621	213	179
28	117	129	120	115	108	107	103	1,880	1,480	581	206	176
29	118	128	120	115	-	106	120	2,080	1,430	563	204	174
30	117	128	119	115	-	106	176	2,000	1,580	534	206	177
31	116	-	119	115	-	106	-	1,920	-	514	204	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	3,639	119	115	117	7,220
November.....	3,637	129	117	121	7,210
December.....	3,833	128	119	124	7,600
Calendar year 1937.....	47,675	394	90	131	94,570
January.....	3,624	121	114	117	7,190
February.....	3,100	115	106	111	6,150
March.....	3,347	113	105	108	6,840
April.....	3,293	176	97	110	6,540
May.....	20,246	2,080	181	653	40,160
June.....	52,760	2,520	1,250	1,759	104,600
July.....	30,578	1,800	514	986	60,650
August.....	8,380	494	188	270	16,620
September.....	5,792	211	174	193	11,490
Water year 1937-38.....	142,236	2,520	97	390	282,100

Note.- In addition to the records of combined flow into Mackay Reservoir as given in the above table, some unrecorded flow also reached the reservoir, as indicated by the following observations:

May 6, 9.5 second-feet, measured discharge at a point below station on west channel of Big Lost River.

May 27, 20 second-feet, estimated discharge bypassing station on east channel of Big Lost River.

June 9, 129 second-feet, estimated summation of unrecorded flow past gaging stations.

BIG LOST RIVER BASIN

Mackay Reservoir near Mackay, Idaho

Location.- Staff gage on head-gate tower of dam, lat. 43°57', long. 113°40', in sec. 12, T. 7 N., R. 23 E., 4 miles northwest of Mackay. Zero of gage is 6,000 above mean sea level.

Records available.- January 1919 to September 1938.

Extremes.- Maximum contents during year, 41,270 acre-feet May 30 (gage height, 64.20 feet); minimum, 142 acre-feet Oct. 3-8 (gage height, 7.85 feet).

1919-38: Maximum contents, those of May 30, 1938; no available storage during some periods in 1919, 1920, 1924, 1926, 1929, and each year of period 1931-1935; minimum stage, 6.3 feet Aug. 5, 1934.

Remarks.- Gage heights computed as for midnight on day shown based on once-daily gage readings Oct. 1 to Apr. 30 and Aug. 22 to Sept. 30, and twice-daily gage readings May 1 to Aug. 21. Capacity of reservoir is 38,400 acre-feet between gage heights 7.0 and 62.0 feet. Water is used for irrigation of lands within Big Lost River irrigation district. There is considerable seepage around the dam because of its porous foundation, but the greater part of this water finds its way back to Big Lost River between the reservoir and station below the reservoir near Mackay. Gage-height record and capacity table furnished by watermaster for Big Lost River.

Contents, in acre-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	153	231	3,671	9,009	12,670	15,260	17,510	20,070	40,200	38,920	36,590	28,130
2	145	300	4,104	9,146	12,800	15,330	17,560	20,660	39,590	38,720	36,980	28,310
3	142	348	4,284	9,270	12,920	15,440	17,600	21,110	39,120	38,480	36,510	28,470
4	142	390	4,436	9,414	13,030	15,530	17,640	21,490	38,660	38,320	34,890	28,630
5	142	433	4,677	9,554	13,140	15,610	17,710	21,820	38,330	38,570	33,860	28,830
6	142	483	4,724	9,662	13,250	15,690	17,800	22,100	38,130	39,140	34,430	29,020
7	142	525	4,913	9,810	13,330	15,770	17,880	22,390	38,160	39,560	33,300	29,180
8	142	666	5,113	9,938	13,430	15,850	17,990	22,660	38,060	40,030	32,660	29,300
9	147	825	5,320	10,060	13,540	15,930	18,090	22,970	37,960	40,220	32,180	29,430
10	150	990	5,518	10,160	13,630	16,010	18,200	23,110	37,040	40,290	32,390	29,540
11	150	1,165	5,674	10,310	13,730	16,090	18,300	23,350	35,940	40,370	32,500	29,600
12	155	1,331	5,866	10,480	13,840	16,130	18,390	23,620	35,620	40,270	32,110	29,710
13	158	1,502	6,057	10,630	13,950	16,170	18,470	24,000	35,510	40,140	31,520	29,850
14	158	1,665	6,245	10,780	14,070	16,210	18,580	24,620	36,940	39,990	31,010	29,990
15	158	1,809	6,430	10,910	14,200	16,280	18,690	25,340	39,060	39,980	30,500	30,100
16	164	1,977	6,588	10,990	14,330	16,360	18,740	26,000	39,420	40,080	30,060	30,210
17	167	2,140	6,759	11,080	14,440	16,470	18,780	26,670	39,370	40,020	29,710	30,320
18	167	2,297	6,911	11,180	14,530	16,590	18,860	27,310	39,270	39,850	29,290	30,420
19	167	2,442	7,044	11,290	14,610	16,690	18,910	27,920	38,720	39,540	28,820	30,540
20	167	2,556	7,196	11,390	14,690	16,770	18,950	28,440	38,130	39,340	28,390	30,650
21	172	2,675	7,382	11,500	14,760	16,850	19,000	28,730	38,020	39,230	27,780	30,780
22	176	2,779	7,593	11,620	14,810	16,930	19,040	28,970	38,260	39,050	27,090	30,880
23	176	2,855	7,762	11,760	14,870	17,010	19,060	29,350	38,440	38,830	26,780	31,010
24	176	2,891	7,888	11,880	14,950	17,090	19,090	30,210	38,890	38,790	26,820	30,960
25	176	2,936	8,002	11,940	15,000	17,180	19,140	31,290	39,060	38,480	26,930	30,860
26	176	2,977	8,154	12,020	15,040	17,260	19,180	32,890	39,060	38,390	27,070	30,740
27	176	3,102	8,331	12,130	15,110	17,340	19,220	35,290	39,060	38,230	27,230	30,580
28	176	3,291	8,492	12,240	15,180	17,390	19,290	38,010	39,000	37,970	27,360	30,380
29	176	3,477	8,606	12,340	-	17,430	19,440	40,690	38,740	37,720	27,500	30,120
30	176	3,656	8,715	12,460	-	17,450	19,660	41,270	38,700	37,360	27,730	29,990
31	176	-	8,855	12,560	-	17,470	-	40,960	-	34,880	27,920	-

Big Lost River below Mackay Reservoir, near Mackay, Idaho

Location.- Water-stage recorder, lat. 43°56', long. 115°38', in sec. 18, T. 7 N., R. 24 E., 450 feet downstream from Oleson Suspension Bridge, 1 mile downstream from head of Sharp ditch, 1½ miles below Mackay Reservoir, and 2½ miles northwest of Mackay.

Records available.- December 1903 to August 1906, May 1912 to March 1915, January 1919 to September 1938. April 1913 to March 1915 at site 1 mile downstream.

Average discharge.- 22 years (1904-5, 1912-14, 1919-38), 256 second-feet.

Extremes.- Maximum discharge during year, 2,520 second-feet June 5 (gage height, 5.56 feet); minimum, 28 second-feet Nov. 8 (gage height, 1.34 feet).

1903-6, 1912-15, 1919-38: Maximum discharge, 2,990 second-feet June 10, 1921 (gage height, 5.79 feet); minimum, 18 second-feet Nov. 1, 1934; minimum gage height, 1.23 feet Nov. 5-8, 1926.

Remarks.- Records good. Sharp ditch is only diversion between station and reservoir; many above reservoir. Flow regulated by reservoir. Gage-height record and results of one discharge measurement furnished by watermaster for Big Lost River.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	142	118	56	70	77	87	101	106	2,040	1,700	685	127
2	139	118	54	72	77	87	101	101	2,120	1,740	685	124
3	139	127	65	72	77	90	101	104	2,280	1,740	680	124
4	136	130	65	72	77	90	101	109	2,360	1,660	680	124
5	136	130	56	72	77	90	101	112	2,440	1,220	680	124
6	139	136	50	72	77	90	104	112	2,440	990	680	124
7	139	133	52	70	77	87	104	109	2,440	865	680	127
8	139	80	56	70	77	87	104	112	2,440	895	586	127
9	139	65	54	70	80	90	104	112	2,440	1,020	432	127
10	139	68	54	70	80	90	104	109	2,440	1,090	251	124
11	139	56	54	70	82	93	104	106	2,200	1,060	255	124
12	139	56	54	75	82	93	106	106	1,680	1,090	442	127
13	139	56	54	75	82	96	106	106	1,620	1,020	370	127
14	139	58	54	75	82	96	106	106	693	990	530	127
15	139	60	58	75	85	96	106	109	279	955	525	127
16	139	60	60	75	85	98	104	188	1,300	958	481	127
17	139	65	60	75	85	98	104	324	1,620	958	427	127
18	139	68	63	77	85	98	104	324	1,620	925	417	127
19	139	54	63	77	85	96	104	333	1,620	895	432	127
20	142	50	63	77	85	96	104	333	1,520	865	456	127
21	142	80	63	77	85	96	104	338	1,350	835	466	127
22	142	112	65	77	82	93	104	342	1,280	805	456	127
23	142	130	65	77	87	96	104	342	1,220	745	403	133
24	142	121	65	77	87	96	104	342	958	745	329	133
25	142	142	63	77	87	96	104	347	1,060	715	251	133
26	142	152	60	80	87	98	104	351	1,320	715	194	194
27	146	104	63	80	87	98	104	370	1,450	715	146	231
28	146	56	63	82	87	98	104	437	1,450	715	127	268
29	146	56	68	80	-	98	104	685	1,660	715	127	315
30	146	56	68	80	-	101	104	1,520	1,560	685	127	315
31	146	-	70	80	-	101	-	1,960	-	685	127	-
Month						Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet	
October.....						4,362		146	136	141	8,650	
November.....						2,697		152	50	89.9	6,350	
December.....						1,858		70	50	59.9	3,690	
Calendar year 1937.....						58,569		715	50	160	116,600	
January.....						2,328		82	70	75.1	4,620	
February.....						2,503		87	77	82.2	4,670	
March.....						2,919		101	87	94.2	5,790	
April.....						3,113		106	101	104	6,170	
May.....						10,155		1,960	101	328	20,140	
June.....						51,300		2,440	279	1,710	101,800	
July.....						30,714		1,740	685	991	60,920	
August.....						13,127		685	127	423	26,040	
September.....						4,495		315	124	150	8,920	
Water year 1937-38.....						129,371		2,440	50	354	256,700	

Warm Spring Creek (east channel) near Mackay, Idaho

Location.- Staff gage, lat. 43°58', long. 113°45', in NE¼ sec. 5, T. 7 N., R. 23 E., 500 feet upstream from confluence with west channel and about 7½ miles northwest of Mackay.

Records available.- May 1919 to September 1938.

Average discharge.- 19 years, 29.1 second-feet.

Extremes.- Maximum discharge observed during year, 192 second-feet June 9; minimum observed, 15 second-feet Mar. 4-6, Apr. 22-24.

1919-38: Maximum discharge, 225 second-feet June 15, 1922; minimum, 9 second-feet May 8, 9, 13, 14, 1919, May 18-21, 1920.

Remarks.- Records fair. Gage read once weekly or oftener; discharge for days of missing gage heights interpolated. Practically all natural flow diverted during irrigation season. Flow during summer represents return water from irrigation. The sum of the discharge of east and west channels of Warm Spring Creek and the discharge of east and west channels of Big Lost River, near Mackay, Idaho, represents practically the entire flow of Big Lost River at this point, all of which enters Mackay Reservoir. Gage-height record and result of three discharge measurements furnished by water-master for Big Lost River.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	22	23	*19	18	16	16	20	*102	*120	36	20
2	*25	22	23	19	18	16	*16	*22	116	*120	34	*20
3	25	22	22	19	18	16	16	22	129	*126	32	*21
4	24	22	*22	19	18	15	17	21	*143	*115	29	21
5	24	*22	22	19	*18	*15	17	21	154	*105	27	21
6	23	*22	22	19	18	15	17	20	164	*98	*25	*21
7	23	22	22	19	18	16	17	*20	175	93	*24	22
8	22	22	22	*19	18	16	18	20	*186	89	24	22
9	*22	22	22	19	18	16	*18	20	*192	*84	*23	23
10	22	22	22	19	18	16	18	19	159	81	22	*24
11	22	22	*22	19	18	17	18	*19	*126	78	22	24
12	22	22	*22	20	*18	*17	17	20	120	75	22	23
13	22	*22	22	20	18	17	17	21	113	*72	*21	22
14	22	22	22	20	17	17	*17	*22	106	73	*21	*22
15	22	22	22	*20	*17	17	17	27	*100	73	21	22
16	*22	22	22	20	17	17	*17	32	105	*74	20	22
17	22	23	22	19	17	17	17	36	*110	69	*20	*22
18	22	23	*22	19	17	17	16	*41	*118	64	20	22
19	22	23	22	19	*17	*17	16	39	114	59	19	21
20	*22	*23	23	19	17	17	16	36	110	*54	*19	*21
21	22	23	23	18	17	17	16	*34	106	51	19	21
22	22	24	23	*18	17	17	15	40	*102	47	19	22
23	*22	24	23	18	17	16	*15	45	100	*44	19	*22
24	22	24	24	18	17	16	15	50	99	43	19	*20
25	22	24	*24	18	17	16	16	*56	*97	42	19	20
26	22	25	23	18	*17	*16	16	71	103	40	19	20
27	22	*25	23	18	17	16	17	*106	*109	*39	*19	20
28	22	25	22	18	16	16	17	*118	*118	38	*20	20
29	22	24	21	*18	-	16	18	114	*113	*38	20	20
30	*22	24	20	18	-	16	*18	110	116	*35	20	20
31	22	-	20	18	-	16	-	106	-	*38	20	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	697	25	22	22.5	1,360
November.....	686	25	22	22.9	1,360
December.....	689	24	20	22.2	1,370
Calendar year 1937.....	7,656	33	13	21.0	15,200
January.....	583	20	18	18.8	1,160
February.....	488	18	16	17.4	968
March.....	505	17	15	16.3	1,000
April.....	501	18	15	16.7	994
May.....	1,348	118	19	43.5	2,670
June.....	3,705	192	97	124	7,350
July.....	2,180	126	55	70.3	4,320
August.....	604	36	19	22.4	1,380
September.....	641	24	20	21.4	1,270
Water year 1937-38.....	12,717	192	15	34.8	25,220

*Determined from staff-gage reading.

Warm Spring Creek (west channel) near Mackay, Idaho

Location.- Water-stage recorder, lat. 43°58', long. 113°45', in NE¼ sec. 5, T. 7 N., R. 23 E., 500 feet upstream from confluence with east channel and about 7½ miles northwest of Mackay.

Records available.- May 1919 to September 1938.

Average discharge.- 19 years, 91.2 second-feet.

Extremes.- Maximum discharge during year, 304 second-feet June 9 (gage height, 2.62 feet); minimum, 61 second-feet Oct. 1; minimum gage height, 0.77 foot May 11.
1919-38: Maximum discharge, 800 second-feet (estimated) Aug. 11, 1938 (gage height, 4.42 feet, from high-water mark); minimum, 49 second-feet Apr. 27, 1935 (gage height, 0.62 foot).

Remarks.- Records good. Flow during summer represents return flow from irrigation. The sum of the discharge of east and west channels of Warm Spring Creek and the discharge of east and west channels of Big Lost River, near Mackay, Idaho, represents practically the entire flow of Big Lost River at this point, all of which enters Mackay Reservoir. Gage-height record and results of one discharge measurement furnished by watermaster for Big Lost River.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.			
1	62	69	77	75	78	75	73	80	212	233	92	74			
2	63	70	77	77	77	75	73	82	217	212	86	74			
3	64	69	77	78	77	74	73	78	239	222	83	79			
4	64	69	78	78	77	74	74	75	257	217	79	78			
5	64	70	78	77	77	73	77	74	276	207	77	79			
6	63	70	79	77	75	73	79	73	290	196	74	64			
7	63	70	80	77	75	74	82	73	290	185	74	87			
8	63	70	79	77	75	74	82	70	290	185	74	86			
9	64	70	78	77	77	74	83	67	297	185	75	88			
10	64	70	79	78	77	74	80	64	251	179	73	90			
11	64	70	78	77	77	74	79	64	207	179	73	91			
12	64	72	75	75	76	75	79	66	202	167	70	90			
13	63	72	74	75	77	77	80	67	202	163	69	91			
14	63	72	74	78	75	77	78	70	196	159	70	91			
15	64	72	75	76	75	77	75	75	191	159	70	90			
16	66	70	75	78	75	78	75	83	202	164	69	88			
17	67	73	75	78	74	79	74	94	207	157	68	87			
18	67	70	75	78	72	77	77	99	212	146	67	87			
19	66	72	75	78	77	75	74	100	196	138	66	87			
20	67	72	75	77	77	77	70	95	185	131	66	88			
21	67	72	74	77	77	77	69	88	191	130	64	86			
22	67	74	75	77	77	77	69	86	196	127	67	86			
23	67	74	75	77	75	75	69	90	191	121	67	87			
24	67	77	73	77	75	74	69	101	191	119	69	86			
25	67	75	74	77	75	74	69	119	191	119	72	86			
26	67	75	74	77	75	74	69	144	196	119	69	87			
27	68	77	74	77	75	75	68	191	207	113	69	86			
28	67	78	74	78	75	75	70	222	207	106	69	84			
29	68	78	75	78	-	74	73	239	202	101	69	83			
30	68	78	75	78	-	74	74	233	217	99	72	86			
31	68	-	75	78	-	74	-	222	-	95	73	-			
Month						Second-foot-days		Maximum		Minimum		Mean		Run-off in acre-feet	
October.....						2,026		68		62		65.4		4,020	
November.....						2,170		78		69		72.3		4,300	
December.....						2,351		80		73		75.8		4,660	
Calendar year 1937.....						26,176		99		52		71.7		51,910	
January.....						2,394		78		75		77.2		4,750	
February.....						2,126		78		72		75.9		4,220	
March.....						2,329		79		73		75.1		4,620	
April.....						2,236		83		68		74.5		4,440	
May.....						3,284		239		64		106		6,510	
June.....						6,608		297		185		220		13,110	
July.....						4,833		233		85		116		9,590	
August.....						2,235		92		64		72.1		4,430	
September.....						2,566		91		74		85.5		5,090	
Water year 1937-38.....						35,158		297		62		52.3		69,740	

Sharp ditch near Mackay, Idaho

Location.- Water-stage recorder, lat. $43^{\circ}57'$, long. $113^{\circ}40'$, in sec. 12, T. 7 N., R. 23 E., 250 feet downstream from head of ditch, half a mile downstream from Mackay Reservoir, and $3\frac{1}{2}$ miles northwest of Mackay. Prior to May 5 water-stage recorder at site 200 feet downstream.

Records available.- June 1912 to October 1914 and March 1919 to September 1938.

Extremes.- Maximum discharge recorded during year, 41 second-feet June 24-26; practically no flow during winter and May 3-5, July 11, 12.
1912-14, 1919-38: Maximum discharge observed, 42 second-feet June 23, 1921; usually no flow during winter and other times when gates in Mackay Reservoir are closed.

Remarks.- Records fair Oct. 1 to May 4, good May 5 to June 23, and poor June 24 to Sept. 30. Discharge for period June 24 to Sept. 30 based on once-daily staff-gage reading at old site 200 feet downstream. Discharge interpolated June 15. Sharp ditch diverts from east side of Big Lost River in SE $\frac{1}{4}$ sec. 12, T. 7 N., R. 23 E., 1 mile above station on Big Lost River below Mackay Reservoir, and half a mile below Mackay Reservoir. Water used for irrigation on land northwest of Mackay and above Streeter ditch. Gage-height record and three discharge measurements furnished by watermaster for Big Lost River.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	3						2	33	39	21	17
2	6	3						4	33	38	21	16
3	5	4						2	33	36	29	16
4	6	6						0	20	36	29	16
5	5	6						0	18	32	27	16
6	6	4						2	33	32	27	16
7	6	3						1	37	28	27	16
8	6	2						1	38	28	26	16
9	6	1						3	38	27	26	16
10	6	1						8	37	27	25	16
11	6	1						10	36	0	20	16
12	5	1						11	38	0	20	16
13	4	1						11	38	23	20	16
14	7	1						11	40	23	24	16
15	9	1						11	40	23	24	16
16	8	1						15	40	22	24	16
17	7	1						20	40	22	24	16
18	7	1						20	40	22	27	16
19	7	1						17	40	22	26	16
20	7	1						14	40	20	25	16
21	7	1						14	38	26	24	17
22	7	1						14	36	6	24	17
23	7	1						15	36	15	23	17
24	7	1						19	41	15	22	13
25	7	1						22	41	26	21	13
26	7	1						1	24	41	25	20
27	5	1						1	25	40	21	19
28	3	0						1	24	40	21	19
29	3	0						1	27	36	21	18
30	3	0						1	31	36	21	18
31	3	-						-	31	-	21	18
Month								Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....								184	9	3	5.9	365
November.....								50	6	0	1.7	99
December.....								0	0	0	0	0
Calendar year												
January.....								0	0	0	0	0
February.....								0	0	0	0	0
March.....								0	0	0	0	0
April.....								30	1	-	1.0	60
May.....								409	31	0	13.2	811
June.....								1,094	41	18	36.5	2,170
July.....								758	39	0	24.5	1,500
August.....								718	29	18	23.2	1,420
September.....								481	17	13	16.0	954
Water year 1937-38.....								3,724	41	0	10.2	7,380

Portneuf River at Topaz, Idaho

Location.- Staff gage, lat. 42°38', long. 112°06', in sec. 23, T. 9 S., R. 37 E., at Oregon Short Line Railroad bridge, a quarter of a mile west of Topaz, 1½ miles upstream from diversion dam of Portneuf-Marsh Valley Canal Co., and 6 miles southeast of McCammon.

Records available.- January 1913 to September 1915, July 1919 to September 1938.

Average discharge.- 19 years (1913-14, 1919-22, 1923-38), 197 second-feet.

Extremes.- Maximum discharge observed during year, 396 second-feet Apr. 26 (gage height, 2.57 feet); minimum observed, 111 second-feet Oct. 5; minimum gage height observed, 0.94 foot, Oct. 2, 5.
1913-15, 1919-38: Maximum discharge observed, 902 second-feet Apr. 3, 1913 (gage height, 6.1 feet, former site and datum); minimum observed, 65 second-feet Oct. 9, 1934 (gage height, 0.81 foot).

Remarks.- Records fair. Gage read once daily. Flow regulated by Portneuf-Marsh Valley Canal Co.'s reservoir near Chesterfield. Many ranch diversions above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	119	126	145	126	130	267	166	380	294	249	230	214
2	113	128	143	128	134	249	168	372	302	267	230	216
3	116	128	142	134	134	255	164	365	302	267	230	214
4	116	124	140	130	132	255	168	326	294	255	230	214
5	111	124	140	134	132	214	166	310	285	258	228	214
6	115	124	140	134	130	192	194	294	285	249	224	210
7	119	124	140	130	134	192	188	267	249	240	220	198
8	115	122	140	130	134	172	176	267	249	220	220	190
9	115	126	142	130	138	172	180	258	258	216	218	198
10	117	124	160	130	168	170	186	258	249	226	218	202
11	124	124	208	134	214	180	182	249	249	176	218	202
12	124	124	249	134	310	176	178	249	267	176	218	202
13	126	124	180	134	194	190	182	258	276	176	222	202
14	134	126	174	132	186	196	186	267	276	222	212	202
15	134	128	162	132	159	194	192	258	276	228	210	200
16	134	132	157	151	160	212	194	318	276	230	220	194
17	136	140	157	145	145	220	216	334	267	226	220	190
18	136	145	157	145	142	208	249	358	267	215	220	186
19	132	143	149	140	145	212	326	358	267	220	220	147
20	132	145	149	126	145	206	342	294	276	216	212	145
21	132	182	147	130	142	190	334	302	267	216	210	126
22	130	166	147	134	142	166	326	267	258	212	210	122
23	130	155	143	134	142	184	358	258	249	218	210	121
24	130	147	143	130	142	180	358	249	249	224	210	121
25	130	147	143	126	138	176	372	249	249	224	194	121
26	128	143	143	126	136	178	396	276	249	230	212	119
27	128	145	143	122	149	180	372	285	249	230	214	121
28	124	145	140	124	155	178	372	302	240	214	214	119
29	124	145	138	124	-	180	372	294	240	218	214	121
30	128	145	134	124	-	174	372	302	240	212	216	121
31	126	-	134	130	-	162	-	302	-	230	214	-
Month						Second-foot-days	Maximum	Minimum	Near		Run-off in acre-feet	
October.....						3,876	136	111	125		7,690	
November.....						4,099	182	122	137		8,130	
December.....						4,729	249	134	153		9,580	
Calendar year 1937.....						60,554	358	102	166		120,110	
January.....						4,081	151	122	132		8,090	
February.....						4,314	310	130	154		8,560	
March.....						6,113	285	162	197		12,120	
April.....						7,655	396	164	255		15,180	
May.....						9,126	380	249	294		18,100	
June.....						7,954	302	240	265		15,780	
July.....						7,001	285	176	226		13,690	
August.....						6,738	230	194	217		13,580	
September.....						5,152	216	119	172		10,220	
Water year 1937-38.....						70,838	396	111	194		140,500	

PORTNEUF RIVER BASIN

Portneuf River at Pocatello, Idaho

Location.- Water-stage recorder, lat. 42°52', long. 112°28', in sec. 27, T. 6 S., R. 34 E., at highway bridge at foot of Carson Street, in west end of Pocatello.

Records available.- August 1911 to September 1938. May 1897 to October 1899 at site 1 mile upstream.

Average discharge.- 25 years (1912-16, 1917-38), 254 second-feet.

Extremes.- Maximum discharge during year, 715 second-feet May 2 (gage height, 5.67 feet); minimum, 57 second-feet Aug. 15; minimum gage height, 2.66 feet June 9.
1897-99: 1911-38: Maximum discharge, in excess of 2,000 second-feet sometime during period May 15 to June 14, 1917; minimum, 14 second-feet July 4-11, 13, 17, 18, 1898.

Remarks.- Records good except those for periods of missing gage heights, Oct. 16-19, Nov. 16-30, Feb. 5-12, June 30 to July 2, which were computed on basis of weather records and records for station at Topaz and are fair. Discharge for Dec. 1, 6, 9, 12 based on once-daily staff-gage reading. Many diversions for irrigation above station. Flow regulated by reservoir near Chesterfield.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	93	116	239	244	*244	322	342	702	193	175	85	104
2	90	116	*237	242	240	374	342	702	179	175	89	101
3	90	116	*235	242	242	438	342	690	147	186	85	98
4	88	114	*233	246	250	460	353	654	134	193	74	100
5	89	116	*231	231	250	460	364	584	132	242	73	102
6	91	116	229	233	250	395	384	526	129	260	82	85
7	94	116	*228	*230	275	364	395	492	121	260	75	98
8	94	121	*226	*228	275	364	384	460	114	260	67	102
9	95	165	225	*225	300	353	384	427	97	227	71	101
10	95	182	*296	222	350	353	406	374	98	195	86	104
11	97	168	*367	220	450	342	416	364	94	171	71	104
12	97	170	438	220	550	342	427	342	91	150	70	104
13	100	184	*406	223	515	364	438	342	105	119	65	107
14	100	195	*374	223	482	384	449	342	140	116	65	108
15	105	186	342	225	427	384	460	353	127	116	70	108
16	125	190	322	260	364	364	471	553	129	114	73	111
17	150	200	311	322	332	395	482	395	126	118	71	107
18	150	210	300	332	311	416	504	416	119	*114	70	104
19	145	220	*290	290	311	406	572	416	119	*110	70	101
20	145	230	*280	260	311	416	630	*385	111	*106	69	100
21	135	250	270	239	280	416	642	*353	105	*103	73	98
22	126	250	270	250	280	384	642	322	101	*99	80	98
23	122	245	260	260	280	374	654	300	94	95	93	101
24	121	245	250	244	280	384	666	260	95	84	86	97
25	119	245	240	235	290	384	666	242	91	82	91	98
26	118	245	*242	231	290	384	678	231	94	74	94	114
27	119	240	*244	242	300	364	*684	218	95	70	97	116
28	116	240	*246	260	300	364	690	204	101	94	98	104
29	114	240	248	*256	-	364	690	204	89	97	102	101
30	118	240	250	*252	-	364	702	214	125	100	110	100
31	116	-	248	*248	-	353	-	199	-	85	108	-
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						3,457	150	88	112		6,860	
November.....						5,661	250	114	189		11,230	
December.....						8,577	438	225	277		17,010	
Calendar year 1937.....						75,020	606	49	206		148,800	
January.....						7,635	332	220	246		15,140	
February.....						9,029	550	240	322		17,910	
March.....						11,831	460	322	382		23,470	
April.....						15,259	702	342	509		30,270	
May.....						12,056	702	199	389		23,810	
June.....						3,495	193	89	116		6,930	
July.....						4,390	260	70	142		8,710	
August.....						5,513	110	65	81.1		4,980	
September.....						3,076	116	85	103		6,100	
Water year 1937-38.....						86,979	702	65	238		172,500	

*Interpolated.

Birch Creek near Downey, Idaho

Location.— Staff gage and wooden control, lat. 42°21', long. 112°15', in SE 1/4 sec. 28, T. 12 S., R. 36 E., just downstream from point where flow that is diverted through Malad power plant re-enters stream, 8.6 miles southwest of Downey, and 10 miles upstream from confluence with Marsh Creek.

Records available.— September 1937 to September 1938. Oct. 4, 1911, to April 30, 1913, and July 19, 1913, to Aug. 3, 1914, at site about 1 1/2 miles upstream, records equivalent.

Extremes.— Maximum discharge observed during period September 1937 to September 1938, 95 second-feet July 15 (discharge determined by area-velocity method from high-water mark at measuring section below station); minimum observed, 6.1 second-feet Nov. 7, Feb. 20, 22, and 24.

1912-14, 1938: Maximum discharge observed, that of July 15, 1938; minimum observed, 3.4 second-feet Dec. 24-27, 1913.

Remarks.— Records fair. Gage read twice daily except July 15-19. Discharge July 15-19 computed on basis of high-water mark and reported duration of flood from local cloud-burst. Discharge July 24, 25, Sept. 19-21, 25, 26 interpolated. Malad power plant with a small reservoir above station may cause slight diurnal fluctuation. Water is diverted from Birch Creek half a mile below station and carried by intermountain canal to Devil Creek in Bear River Basin.

Discharge, in second-feet, Sept. 6-30, 1937

Date	Discharge	Date	Discharge	Date	Discharge
Sept. 6	7.5	Sept. 16	7.5	Sept. 26	6.9
7	7.6	17	7.5	27	6.9
8	7.6	18	7.4	28	6.9
9	7.6	19	7.4	29	6.9
10	7.7	20	7.5	30	6.9
11	7.7	21	7.2		
12	7.8	22	7.2		
13	7.7	23	7.1		
14	7.7	24	7.0		
15	7.6	25	7.0		

Note.— Mean discharge Sept. 6-30, 7.34 second-feet (run-off, 364 acre-feet).

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.9	6.8	6.6	6.4	6.4	6.9	6.8	24	17	10	8.5	8.5
2	6.9	6.8	6.6	6.4	6.4	6.8	6.8	22	16	11	8.2	8.5
3	6.9	6.4	6.4	6.4	6.4	6.8	6.9	19	16	10	8.4	8.4
4	6.9	7.1	6.4	6.4	6.4	6.4	6.8	17	15	10	8.5	8.4
5	6.9	6.8	6.4	6.4	6.4	6.4	7.1	16	14	10	8.2	8.4
6	6.9	7.1	6.4	6.4	6.2	6.4	7.1	15	14	9.6	8.4	8.2
7	6.9	6.8	6.4	6.4	6.2	6.4	7.1	15	14	9.4	8.4	8.2
8	6.9	6.4	6.4	6.4	6.2	6.4	7.1	15	13	9.5	8.5	8.4
9	6.9	6.8	6.4	6.4	6.4	6.4	7.8	15	13	8.9	8.4	8.2
10	6.9	6.8	6.8	6.4	6.4	6.4	8.2	15	13	10	8.4	8.2
11	6.9	6.8	8.0	6.4	6.4	6.4	7.8	15	13	9.6	8.2	8.2
12	6.9	6.8	7.5	6.4	6.4	6.9	8.9	16	13	9.4	8.2	8.2
13	6.9	6.6	6.8	6.4	6.2	7.1	10	18	12	9.1	8.4	8.2
14	6.9	6.6	6.6	6.4	6.2	6.8	9.6	20	11	8.9	8.4	8.2
15	6.9	6.6	6.6	6.4	6.2	6.8	10	22	11	12	8.4	8.2
16	6.9	6.6	6.6	6.4	6.4	6.9	11	27	11	8.9	8.4	8.2
17	6.9	6.8	6.6	6.4	6.2	7.1	12	25	11	8.9	8.5	8.2
18	6.9	6.8	6.4	6.4	6.4	7.1	14	24	11	8.9	8.7	8.2
19	6.9	6.6	6.4	6.4	6.2	7.1	17	21	11	8.9	8.7	8.1
20	6.9	7.6	6.4	6.4	6.1	6.9	17	20	10	8.9	8.7	8.1
21	6.9	7.3	6.4	6.4	6.1	6.9	17	19	10	8.9	8.5	8.1
22	6.9	6.6	6.6	6.4	6.1	7.1	18	19	10	8.9	8.5	8.0
23	6.9	6.6	6.4	6.4	6.2	6.8	19	18	10	8.9	8.5	8.0
24	6.9	6.6	6.4	6.4	6.1	6.8	20	18	10	8.9	8.5	8.0
25	6.9	6.4	6.8	6.4	6.2	6.8	20	19	9.8	8.9	8.5	7.9
26	7.1	6.4	6.4	6.6	6.2	6.8	20	19	9.6	8.9	8.5	7.9
27	7.1	6.4	6.4	6.4	6.2	6.8	19	19	9.8	8.9	8.5	7.8
28	7.1	6.4	6.4	6.4	6.2	6.9	20	20	9.8	8.9	8.7	7.8
29	7.1	6.6	6.4	6.4	-	6.9	20	19	10	8.9	8.5	7.5
30	7.1	6.6	6.4	6.4	-	6.8	22	18	10	8.9	8.5	7.5
31	6.8	-	6.4	6.4	-	6.8	-	18	-	8.9	8.5	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	214.8	7.1	6.8	6.93	426
November.....	201.9	7.6	6.4	6.73	400
December.....	203.7	8.0	6.4	6.57	404
Calendar year					
January.....	198.6	6.6	6.4	6.41	394
February.....	178.4	6.4	6.1	6.28	348
March.....	209.7	7.1	6.4	6.76	416
April.....	384.0	22	6.8	12.8	762
May.....	587	27	15	18.9	1,160
June.....	358.0	17	9.6	11.9	710
July.....	289.6	12	8.9	9.34	574
August.....	262.2	8.7	8.2	8.46	520
September.....	243.7	8.5	7.5	8.12	463
Water year 1937-38.....	3,328.6	27	6.1	9.12	6,600

North Side Minidoka canal near Minidoka, Idaho

Location.- Water-stage recorder, lat. 42°40', long. 113°29', in sec. 1. T. 9 S., R. 25 E., 600 feet downstream from head gates at Minidoka Dam and 6 miles south of Minidoka.

Records available.- May 1909 to September 1938.

Extremes.- Maximum discharge during year, 1,680 second-feet July 14, 21-31, Aug. 1; maximum gage height, 9.56 feet July 29-30; no flow during winter.
1909-38: Maximum discharge, that of July 14, 21-31, Aug. 1, 1938; maximum gage height, 9.90 feet July 11, 1932; no flow during winters.

Remarks.- Records excellent. Flow controlled by operation of head gates. Water used for irrigation of 82,000 acres of land under North Side Minidoka project.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Dec. 14)

1.0	49	3.0	265	8.0	1,256
1.3	74	4.0	416	9.0	1,528
1.6	101	5.0	597	9.9	1,780
2.0	142	6.0	795		
2.5	201	7.0	1,015		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	748	365	213				0	1,280	1,610	1,100	1,680	1,250
2	732	367	213				0	1,280	1,610	862	1,620	1,180
3	714	368	213				0	1,250	1,610	563	1,560	1,140
4	704	370	213				0	1,200	1,610	491	1,520	1,140
5	710	373	213				0	1,210	1,610	447	1,490	1,140
6	672	370	213				0	1,210	1,610	446	1,490	1,140
7	599	367	216				0	1,200	1,610	446	1,490	1,140
8	594	368	217				0	1,200	1,610	446	1,480	1,130
9	592	368	217				81	1,240	1,610	568	1,480	1,160
10	594	367	149				81	1,330	1,610	879	1,470	1,170
11	596	367	97				81	1,460	1,610	1,180	1,470	1,070
12	601	367	97				158	1,570	1,610	1,460	1,480	1,080
13	605	365	97				263	1,580	1,600	1,630	1,480	1,080
14	607	362	36				303	1,580	1,660	1,680	1,490	1,040
15	611	365	0				303	1,580	1,490	1,670	1,490	969
16	559	371	0				303	1,590	1,390	1,660	1,490	967
17	449	371	0				304	1,560	1,170	1,660	1,490	962
18	332	350	0				306	1,510	1,180	1,660	1,490	955
19	336	312	0				365	1,530	1,180	1,660	1,490	951
20	338	312	0				416	1,530	1,180	1,670	1,490	946
21	345	309	0				478	1,510	1,180	1,680	1,480	946
22	351	307	0				516	1,510	1,180	1,680	1,490	953
23	354	285	0				548	1,510	1,170	1,680	1,490	958
24	357	222	0				635	1,500	1,180	1,680	1,490	955
25	352	202	0				730	1,540	1,180	1,680	1,480	948
26	352	165	0				784	1,590	1,180	1,680	1,480	951
27	356	131	0				854	1,610	1,250	1,680	1,420	955
28	360	187	0				951	1,610	1,290	1,680	1,380	946
29	359	211	0				1,110	1,610	1,250	1,680	1,340	953
30	359	212	0				1,240	1,610	1,120	1,680	1,290	953
31	359	-	0				-	1,610	-	1,680	1,290	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						15,597	748	332	503	30,940		
November.....						9,457	373	131	315	18,760		
December.....						2,404	217	0	77.5	4,770		
Calendar year 1937.....						235,445	1,650	0	645	467,000		
January.....						0	0	0	0	0		
February.....						0	0	0	0	0		
March.....						0	0	0	0	0		
April.....						10,808	1,240	0	360	21,440		
May.....						45,100	1,610	1,200	1,455	89,450		
June.....						42,050	1,610	1,120	1,402	83,400		
July.....						40,598	1,680	446	1,510	80,520		
August.....						45,770	1,680	1,290	1,476	90,780		
September.....						31,133	1,250	946	1,038	61,750		
Water year 1937-38.....						242,917	1,680	0	666	481,800		

South Side Minidoka canal near Minidoka, Idaho

Location.— Water-stage recorder, lat. 42°40', long. 113°29', in sec. 12, T. 9 S., R. 25 E., 300 yards downstream from head gates at Minidoka Dam and 6 miles south of Minidoka.

Records available.— April 1909 to September 1938.

Extremes.— Maximum discharge during year, 1,350 second-feet July 19, 20, 23-25; maximum gage height, 5.90 feet July 20; no flow during winter.

1909-1938: Maximum discharge, that of 1938; no flow during winters.

Remarks.— Records excellent. Flow controlled by operation of head gates. Water diverted from Snake River at Minidoka Dam for irrigation of 54,000 acres of land under South Side Minidoka project.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	512	198	149				0	723	1,240	928	1,340	1,050
2	520	220	149				0	728	1,240	693	1,340	967
3	512	234	149				0	728	1,240	508	1,340	940
4	461	242	100				0	733	1,260	630	1,300	913
5	393	252	0				0	733	1,250	632	1,250	976
6		353	252	0			0	733	1,280	632	1,250	1,040
7		308	252	0			0	733	1,280	439	1,250	1,090
8		285	250	0			0	736	1,280	301	1,250	1,110
9		273	249	0			0	815	1,300	369	1,280	1,130
10		258	250	0			0	928	1,300	443	1,250	1,100
11		241	250	0			0	1,020	1,290	689	1,230	1,030
12		244	249	0			0	1,110	1,300	919	1,240	955
13		312	249	0			0	1,140	1,210	1,230	1,250	910
14		454	249	0			0	1,180	1,160	1,310	1,250	904
15		434	234	0			0	1,180	1,160	1,310	1,220	858
16		226	211	0			0	1,150	1,130	1,300	1,220	798
17		229	192	0			0	1,080	771	1,300	1,250	776
18		202	172	0			0	1,010	741	1,310	1,260	774
19		188	158	0			0	919	744	1,350	1,250	741
20		190	151	0			131	787	749	1,350	1,220	694
21		175	151	0			324	717	749	1,340	1,210	686
22		170	150	0			326	744	748	1,340	1,230	790
23		172	150	0			322	823	744	1,350	1,240	821
24		175	151	0			324	849	741	1,350	1,240	794
25		181	150	0			494	884	741	1,350	1,220	760
26		198	151	0			625	1,010	741	1,310	1,210	730
27		200	149	0			628	1,080	840	1,310	1,190	673
28		194	150	0			628	1,130	976	1,290	1,180	615
29		194	149	0			642	1,130	1,000	1,320	1,160	595
30		194	149	0			697	1,180	1,000	1,350	1,190	610
31		199	-	0			-	1,240	-	1,340	1,180	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							8,647	520	170	279	17,150	
November.....							6,014	252	149	200	11,930	
December.....							547	149	0	17.6	1,080	
Calendar year 1937.....							170,896	1,340	0	468	339,000	
January.....							0	0	0	0	0	
February.....							0	0	0	0	0	
March.....							0	0	0	0	0	
April.....							5,141	697	0	171	10,200	
May.....							28,953	1,240	717	934	57,430	
June.....							31,233	1,300	741	1,041	61,950	
July.....							32,271	1,350	301	1,041	64,010	
August.....							38,470	1,340	1,160	1,241	76,300	
September.....							25,820	1,180	595	861	51,210	
Water year 1937-38.....							177,096	1,350	0	485	351,300	

Goose Creek above Trapper Creek, near Oakley, Idaho

Location.- Water-stage recorder, lat. 42°07', long. 113°56', in sec. 13, T. 15 S., R. 21 E., 5 miles upstream from Trapper Creek and 10 miles south of Oakley.

Records available.- April 1911 to September 1916, March 1919 to September 1938.

Average discharge.- 15 years (1911-14, 1926-38), 39.8 second-feet.

Extremes.- Maximum discharge during year, 244 second-feet May 3 (gage height, 3.64 feet); minimum, 3.0 second-feet Aug. 21; minimum gage height, 1.40 feet Aug. 21, 22. 1911-16, 1919-38: Maximum discharge, 670 second-feet May 16, 1921; maximum gage height (ice affected), 5.6 feet Feb. 21, 1927; no flow July 22 to Aug. 10, Aug. 22-30, 1934, Aug. 15 to Oct. 3, 1935.

Remarks.- Records good except those for period of ice effect or of missing gage heights, Dec. 4-7, Dec. 21 to Feb. 26, which were computed on basis of weather records and records for Trapper Creek and for Oakley Reservoir near Oakley and are fair. Diverisions for irrigation above station; flow of artesian well (completed in 1935) enters below. Practically entire flow passing station is stored in Oakley Reservoir. Gage-height record furnished by Oakley Canal Co.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.5	11	21		26	57	37	200	93	21	8.7	17
2	4.5	11	20		26	59	36	227	85	26	7.8	19
3	4.5	11	20		25	57	37	233	85	30	6.3	15
4	4.3	11	20		25	52	37	214	78	33	5.9	13
5	4.5	12	20		25	42	41	196	70	43	5.6	11
6	4.7	12	21		25	37	46	177	67	51	5.2	9.6
7	5.2	12	22		25	36	47	158	58	50	4.9	8.7
8	5.6	13	23		27	34	45	147	54	42	4.7	7.6
9	5.6	14	24		30	33	45	140	52	37	4.7	8.0
10	5.9	14	25		35	33	48	136	48	31	4.7	8.0
11	5.9	15	30		40	33	54	128	46	27	4.5	8.0
12	6.3	15	33		45	35	59	128	46	16	4.5	7.3
13	6.9	16	33		40	41	62	136	48	13	4.1	7.6
14	7.3	16	33		35	48	67	148	50	11	4.0	7.6
15	7.6	16	32		32	47	72	164	50	10	4.1	7.6
16	8.3	16	30		31	46	67	191	59	27	4.0	7.3
17	8.3	18	29		30	46	70	220	55	26	4.0	6.9
18	8.3	19	31		30	49	77	225	48	21	3.6	6.6
19	11	20	30		30	49	93	218	43	21	3.4	5.9
20	12	26	26		30	52	109	211	43	18	3.4	5.6
21	11	33	25		30	47	136	200	40	13	3.2	5.2
22	11	32	25		30	40	158	179	38	13	3.2	5.2
23	11	31	24		30	43	162	153	36	12	3.4	5.2
24	11	30	23		30	46	164	136	35	12	5.2	5.9
25	10	28	25		30	46	177	125	28	11	4.7	6.6
26	10	27	25		32	41	179	125	26	12	4.7	6.3
27	10	25	25		38	39	186	122	19	12	7.3	6.3
28	10	24	25		45	39	194	122	17	12	9.6	6.3
29	10	24	25		-	38	184	126	17	12	16	5.6
30	11	25	25		-	36	177	111	20	11	21	5.6
31	11	-	25		-	35	-	104	-	10	14	-
Month				Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet			
October.....				247.2		12	4.5	7.97	490			
November.....				575		33	11	19.2	1,140			
December.....				798		33	20	25.7	1,580			
Calendar year 1937.....				10,709.9		136	1.5	29.3	21,230			
January.....				775		-	-	25.0	1,540			
February.....				875		45	25	31.2	1,740			
March.....				1,336		59	33	43.1	2,850			
April.....				2,866		194	36	95.5	5,680			
May.....				5,098		233	104	164	10,110			
June.....				1,452		95	17	48.4	2,880			
July.....				1,624		51	10	22.1	1,360			
August.....				190.2		21	3.2	6.14	377			
September.....				245.5		19	5.2	8.18	487			
Water year 1937-38.....				15,141.9		233	3.2	41.5	30,030			

Oakley Reservoir near Oakley, Idaho

Location.- Staff gage, lat. 42°12', long. 113°55', in sec. 19, T. 14 S., R. 22 E., just upstream from right abutment of dam on Goose Creek, 4 miles southwest of Oakley.

Records available.- October 1912 to September 1938.

Extremes.- Maximum contents observed, 22,100 acre-feet May 28 (gage height, 75.00 feet); minimum, 799 acre-feet Oct. 9 (gage height, 14.38 feet).

1913-38: Maximum contents, 74,600 acre-feet June 15, 1921 (gage height, 136.2 feet); reservoir drained at close of season in 1915, 1919, 1920, 1928, 1933.

Remarks.- Zero of gage corresponds to elevation of bottom of diversion tunnel and zero capacity. Gage height 136.0 feet corresponds to elevation of crest of spillway and capacity of 74,350 acre-feet. Water is used for irrigation of lands along Goose Creek in Oakley Canal Co. project. Gage-height record and capacity table furnished by Oakley Canal Co.

Contents, in acre-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,400	-	-	5,620	-	-	-	-	-	-	13,300	-
2	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	21,700	-	-	-
4	-	-	-	-	-	-	-	-	21,600	-	12,700	7,150
5	1,610	-	3,700	-	-	10,400	13,300	19,100	21,400	-	-	-
6	-	-	-	-	8,100	-	-	-	-	-	-	-
7	-	-	-	-	-	10,600	-	-	-	-	-	-
8	923	1,940	-	-	-	-	13,600	19,500	-	-	12,100	-
9	799	1,980	-	6,130	-	-	-	-	20,700	-	-	6,580
10	-	-	-	-	-	-	-	-	-	19,600	-	-
11	-	-	4,010	-	-	10,900	-	19,600	-	-	11,500	-
12	-	-	-	-	8,590	11,000	14,000	-	-	-	-	6,220
13	927	-	-	-	8,660	-	-	-	20,200	-	-	-
14	965	2,240	-	-	-	-	14,300	-	-	19,300	-	-
15	1,000	-	-	-	-	11,300	14,500	19,900	-	-	-	5,740
16	-	-	-	6,630	-	-	-	-	20,100	-	-	-
17	-	-	4,640	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	18,000	10,100	-
19	1,140	-	-	-	-	11,800	-	20,900	-	-	-	5,190
20	-	-	4,970	-	9,120	-	15,300	-	-	-	-	-
21	-	2,680	-	-	-	-	15,500	21,400	-	16,400	-	-
22	-	-	-	7,080	-	-	-	-	-	-	9,120	4,790
23	-	-	-	-	-	-	-	-	19,900	-	-	-
24	-	-	-	-	-	12,300	-	22,000	-	-	-	-
25	-	-	-	-	-	12,400	16,500	-	-	15,100	-	-
26	-	-	-	-	-	-	-	22,100	-	-	8,360	4,280
27	-	-	-	-	9,720	-	-	-	19,500	-	-	-
28	-	3,240	-	-	-	-	17,300	-	19,500	14,200	-	-
29	-	-	-	7,530	-	-	17,600	-	-	-	7,680	-
30	-	-	-	-	-	-	-	-	19,100	-	-	-
31	-	-	-	-	-	12,900	-	21,900	-	-	-	-

Trapper Creek near Oakley, Idaho

Location.— Water-stage recorder, lat. 42°10', long. 113°59', in sec. 34, T. 14 S., R. 21 E., 4 miles upstream from Oakley Dam and 7 miles southwest of Oakley.

Records available.— May 1911 to September 1916 and March 1919 to September 1938.

Average discharge.— 14 years (1911-12, 1913-14, 1926-38), 13.5 second-feet.

Extremes.— Maximum discharge during year, 47 second-feet Apr. 30 (gage height, 5.26 feet); minimum, 4.4 second-feet Jan. 25 (gage height, 4.69 feet).

1911-16, 1919-38: Maximum discharge recorded, 98 second-feet May 28, June 8, 1921 (a higher flow may have occurred during cloudburst about midnight Aug. 15, 1931); minimum not determined, probably occurs during winter.

Remarks.— Records good. Discharge for Nov. 19, 20, Dec. 12-16, Jan. 4-8 computed on basis of weather records and records for stations on nearby streams. Discharge Oct. 8-11, Nov. 23-26, Dec. 3, 4, 7-10, Sept. 23-28 interpolated. A few small diversions above station; flow of artesian well completed in 1936 enters above. Practically entire flow passing gage is stored in Oakley Reservoir. Gage-height record furnished by Oakley Canal Co.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.			
1	9.0	9.4	10	11	11	16	13	42	28	14	8.6	9.4			
2	9.0	9.4	10	11	11	15	13	38	27	15	8.6	9.0			
3	9.4	9.4	9.8	11	11	18	13	35	27	15	8.6	9.4			
4	10	9.4	9.6	10	11	13	14	32	26	14	8.6	9.0			
5	10	9.4	9.4	10	11	12	16	29	25	15	8.6	8.6			
6	10	10	10	10	11	11	15	28	23	14	9.0	8.6			
7	9.4	10	11	10	11	11	14	27	22	13	8.6	8.6			
8	9.4	10	11	10	10	11	15	26	22	12	9.0	8.6			
9	9.4	10	12	11	10	11	16	25	22	11	9.0	8.6			
10	9.4	10	12	11	11	11	17	26	22	11	9.0	9.0			
11	9.4	10	13	11	11	12	17	27	21	11	9.0	9.0			
12	9.4	11	15	11	12	13	18	27	20	11	9.0	8.6			
13	9.0	11	15	11	11	14	18	30	20	11	9.4	8.6			
14	9.4	11	14	10	11	13	18	31	21	11	9.4	8.6			
15	10	11	13	11	11	13	18	33	20	12	10	8.1			
16	10	10	12	12	11	13	20	36	19	12	9.4	8.6			
17	11	11	12	11	10	15	22	36	19	11	9.0	8.6			
18	11	12	12	11	12	13	26	35	18	11	9.0	8.1			
19	9.4	13	11	10	12	14	31	33	18	10	9.0	8.1			
20	9.0	15	11	11	12	14	29	31	17	9.4	9.0	8.6			
21	9.0	15	11	11	12	13	30	29	16	9.4	8.1	8.6			
22	9.0	13	11	11	12	13	31	27	16	10	8.6	8.6			
23	9.4	13	11	11	12	14	35	27	16	9.4	9.0	8.6			
24	9.4	12	12	11	12	14	33	27	16	9.4	9.0	8.6			
25	9.4	12	13	11	11	13	35	27	16	10	9.4	8.6			
26	9.0	11	13	12	11	13	35	29	15	9.4	9.0	8.6			
27	9.0	11	13	12	11	13	32	30	16	10	9.0	8.6			
28	9.0	11	13	12	12	14	31	31	15	9.4	9.4	8.6			
29	9.0	10	13	12	-	13	33	31	15	9.4	8.6	8.6			
30	9.0	10	13	12	-	13	36	30	16	9.4	8.6	9.0			
31	9.0	-	12	12	-	13	-	29	-	9.4	9.4	-			
Month						Second-foot-days		Maximum		Minimum		Mean		Run-off in acre-feet	
October.....						292.8		11		9.0		9.45		581	
November.....						330.0		15		9.4		11.0		655	
December.....						367.8		15		9.4		11.9		730	
Calendar year 1937.....						5,154.9		38		7.7		14.1		10,230	
January.....						341		12		10		11.0		676	
February.....						314		12		10		11.2		623	
March.....						409		18		11		13.2		811	
April.....						696		38		13		23.2		1,380	
May.....						946		42		25		30.5		1,880	
June.....						594		28		15		19.8		1,180	
July.....						348.6		15		9.4		11.2		691	
August.....						279.9		10		8.1		9.03		555	
September.....						260.1		9.4		8.1		8.67		516	
Water year 1937-38.....						5,179.2		42		8.1		14.2		10,280	

P. A. lateral near Milner, Idaho

Location.- Staff gage, lat. $42^{\circ}32'$, long. $114^{\circ}01'$, in sec. 22, T. 10 S., R. 21 E., 600 feet downstream from pumping station and $2\frac{1}{2}$ miles northeast of Milner.

Records available.- April 1919 to September 1938.

Extremes.- Maximum discharge during year, 62 second-feet on many days; no flow on many days.

1919-38: Maximum discharge, 64 second-feet May 11-13, 1920, July 11-12, 19-29, 1932; no flow on many days.

Remarks.- Records excellent. Flow regulated by operation of pumping plant, which lifts water from Snake River for irrigation on North Side Twin Falls tract.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	0					0	21	61	60	61	60
2	17	0					0	31	61	60	61	60
3	0	0					0	33	61	60	61	60
4	0	0					0	33	61	60	61	60
5	0	0					0	46	61	53	61	60
6	0	0					0	49	61	46	61	59
7	0	0					0	54	61	47	61	59
8	0	0					0	62	61	47	61	59
9	0	0					0	62	60	46	61	60
10	0	0					0	62	60	53	61	61
11	0	0					0	62	60	56	61	61
12	0	0					0	62	61	56	61	61
13	0	0					0	62	61	61	61	61
14	0	0					0	62	61	61	61	61
15	0	0					0	61	61	61	61	61
16	0	0					0	61	60	61	61	61
17	0	0					0	61	60	61	61	61
18	0	0					0	61	60	61	61	61
19	0	11					0	61	60	61	60	61
20	0	16					0	61	60	61	60	61
21	0	5					0	61	60	61	60	61
22	0	0					0	61	60	61	60	61
23	0	0					0	61	60	61	60	59
24	0	0					0	62	60	61	60	59
25	0	0					0	62	60	61	60	55
26	0	0					0	62	60	61	60	55
27	0	0					0	62	60	61	60	55
28	0	0					0	62	60	61	60	37
29	0	0					2	62	60	61	60	-
30	0	0					10	62	60	61	60	-
31	0	-					-	62	-	61	60	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						43	26	0	1.39	85		
November.....						32	16	0	1.07	33		
December.....						0	0	0	0	0		
Calendar year 1937.....						8,866	62	0	24.3	17,590		
January.....						0	0	0	0	0		
February.....						0	0	0	0	0		
March.....						0	0	0	0	0		
April.....						12	10	0	1.40	24		
May.....						1,746	62	21	56.3	3,480		
June.....						1,812	61	60	60.4	3,590		
July.....						1,803	61	46	58.2	3,580		
August.....						1,878	61	60	60.6	3,720		
September.....						1,650	61	0	55.0	3,270		
Water year 1937-38.....						8,976	62	0	24.6	17,790		

Milner low-lift canal near Milner, Idaho

Location.— Water-stage recorder, lat. 42°31', long. 114°01', in sec. 3E, T. 10 S., R. 21 E., 600 feet downstream from head of canal and $\frac{1}{2}$ miles south of Milner.

Records available.— June 1921 to September 1938.

Extremes.— Maximum discharge during year, 170 second-feet Aug. 2-6, 8-12, 14-19; no flow on many days.
1921-38: Maximum discharge, 174 second-feet July 7, 1936 (gage height, 3.67 feet); no flow on many days.

Remarks.— Records good. Flow controlled by operation of pumping plant, which lifts water from Snake River above Milner Dam for irrigation of 8,000 acres of land in Milner low-lift irrigation district.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								0	144	150	169	122
2								0	145	132	170	120
3								44	145	107	170	121
4								55	145	68	170	120
5								70	150	0	170	121
6								95	151	0	170	121
7								109	150	0	162	121
8								109	151	0	170	121
9								126	151	0	170	121
10								137	151	23	170	121
11								139	151	93	170	121
12								139	150	105	170	121
13								139	151	154	162	121
14								138	152	151	170	121
15								138	151	152	170	122
16								140	151	151	170	122
17								142	151	150	170	120
18								142	150	148	170	121
19								142	151	147	170	122
20								142	131	153	149	93
21								142	131	155	149	85
22								141	131	155	148	93
23								141	131	154	149	93
24								141	131	155	125	93
25								141	142	155	148	93
26								141	149	158	148	94
27								141	150	158	148	94
28								143	150	158	148	94
29								142	150	159	149	94
30								141	150	158	151	86
31								142	-	158	150	-
Month								Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....								0	0	0	0	0
November.....								0	0	0	0	0
December.....								0	0	0	0	0
Calendar year 1937.....								20,828	172	0	57.1	41,312
January.....								0	0	0	0	0
February.....								0	0	0	0	0
March.....								0	0	0	0	0
April.....								0	0	0	0	0
May.....								3,702	143	0	119	7,340
June.....								4,387	152	131	146	8,700
July.....								3,728	159	0	120	7,390
August.....								4,975	170	125	150	9,870
September.....								3,312	122	85	110	6,570
Water year 1937-38.....								20,104	170	0	55.1	39,870

Gooding canal at Milner, Idaho

Location.- Water-stage recorder on Milner-Gooding canal in SW $\frac{1}{4}$ sec. 7 and staff gages on North Side Canal Co. diversions in secs. 18 and 19, T. 10 S., R. 21 E., about 3 miles downstream from head gates that are in sec. 28, T. 10 S., R. 21 E., lat. 42° 31', long. 114° 01'.

Records available.- May 1930 to September 1938.

Extremes.- Maximum discharge during year, 2,300 second-feet July 26-29, Aug. 1. No flow on many days.

1930-38: Maximum discharge, that of 1938; no flow on many days.

Remarks.- Records good. Gooding canal diverts water from Snake River for Milner-Gooding project of Bureau of Reclamation and in part for project of North Side Canal Co. The latter project also receives water through the North Side Twin Falls canal and P. A. lateral. Discharge of canal is computed by combining the discharge of Milner-Gooding diversion and that of North Side Canal Co. diversions below their division point and adding from 15 to 45 second-feet to that sum for loss between head gates and division point.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	870	0					0	1,250	1,560	1,950	2,300	1,960
2	460	0					0	1,250	1,630	1,950	2,250	1,980
3	0	0					0	1,290	1,700	1,950	2,280	1,980
4	0	0					0	1,290	1,750	1,980	2,290	1,970
5	0	0					0	1,340	1,750	1,980	2,280	1,970
6	0	0					0	1,210	1,750	1,930	2,230	1,970
7	0	0					0	1,470	1,800	1,970	2,130	1,960
8	0	0					0	1,530	1,840	1,970	2,130	1,960
9	0	0					0	1,540	1,850	1,930	2,120	1,960
10	0	0					0	1,540	1,840	1,970	2,080	1,980
11	0	0					280	1,540	1,850	1,970	2,070	1,980
12	0	0					429	1,560	1,910	1,950	2,070	1,980
13	0	290					434	1,520	1,960	1,980	2,030	1,960
14	0	580					478	1,510	1,970	2,060	2,040	1,960
15	0	475					490	1,510	1,960	2,210	2,060	1,950
16	0	460					490	1,530	1,960	2,220	2,060	1,960
17	0	445					549	1,560	1,960	2,210	2,070	1,950
18	0	245					592	1,560	1,960	2,210	2,060	1,950
19	0	55					794	1,550	1,960	2,220	2,060	1,970
20	0	55					537	1,540	1,960	2,260	2,070	1,960
21	0	55					848	1,540	1,970	2,260	2,050	1,940
22	0	55					853	1,540	1,960	2,230	2,020	1,930
23	0	20					853	1,540	1,960	2,230	2,010	1,910
24	0	0					928	1,540	1,960	2,230	1,990	1,920
25	0	0					950	1,530	1,950	2,270	1,980	1,920
26	0	0					1,030	1,530	1,960	2,300	1,970	1,920
27	0	0					1,050	1,540	1,950	2,300	2,000	1,930
28	0	0					1,060	1,510	1,960	2,300	2,000	1,930
29	0	0					1,030	1,520	1,960	2,300	2,010	1,930
30	0	0					1,190	1,530	1,960	2,290	2,000	1,010
31	0	-					-	1,540	-	2,280	2,000	-

Month	Gooding canal				Distribution (acre-feet)		
	Second-foot-days	Maximum	Minimum	Mean	Acre-feet	To Milner-Gooding project	To North Side Canal Co. project
October.....	1,330	870	0	42.9	2,640	0	2,640
November.....	2,735	580	0	91.2	5,420	5,420	0
December.....	0	0	0	0	0	0	0
Calendar year 1937.....	301,697	2,250	0	827	598,400	327,300	271,100
January.....	0	0	0	0	0	0	0
February.....	0	0	0	0	0	0	0
March.....	0	0	0	0	0	0	0
April.....	15,295	1,190	0	510	30,340	2,810	27,530
May.....	45,930	1,560	1,210	1,482	91,100	30,470	51,630
June.....	56,520	1,970	1,560	1,884	112,100	60,540	51,570
July.....	65,780	2,300	1,970	2,122	130,600	76,030	54,460
August.....	64,720	2,300	1,970	2,088	128,400	73,980	54,410
September.....	57,290	1,980	1,010	1,910	113,600	62,540	51,090
Water year 1937-38.....	309,600	2,300	0	848	614,100	320,800	293,300

North Side Twin Falls canal at Milner, Idaho

Location.-- Water-stage recorder, lat. 42°32', long. 114°01', in sec. 20, T. 10 S., R. 21 E., half a mile north of Milner and three-quarters of a mile below head gates at Milner Dam.

Records available.-- May 1909 to September 1938.

Extremes.-- Maximum discharge during year, 2,790 second-feet July 25 (gauge height, 8.08 feet); no flow Apr. 10-21.

1909-38: Maximum discharge, 3,200 second-feet July 5-7, 29-31, 1921, May 15, 1928, June 2, July 23, 1929; no flow on many days when head gates were closed.

Remarks.-- Records excellent. Flow controlled by operation of head gates. Water diverted by this canal and by P. A. lateral, and part of that diverted by Gording canal, all at Milner, is used for irrigation of 170,000 acres of land under the North Side Canal Co. system.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	156	550	543	472	478	472	494	1,400	2,410	2,320	2,690	2,300
2	457	559	537	472	484	487	547	1,510	2,460	2,280	2,660	2,320
3	878	559	531	472	478	478	692	1,580	2,480	2,190	2,630	2,330
4	857	553	537	472	481	466	753	1,570	2,480	2,200	2,610	2,250
5	853	566	537	472	481	475	738	1,620	2,520	1,980	2,690	2,250
6	853	559	537	463	475	472	678	1,670	2,550	1,850	2,600	2,240
7	853	556	540	460	478	475	559	1,780	2,560	2,100	2,610	2,210
8	857	563	543	460	481	469	528	1,850	2,560	2,060	2,600	2,200
9	299	569	543	460	481	463	456	1,380	2,560	2,060	2,690	2,180
10	58	566	537	457	478	466	0	1,890	2,560	2,260	2,580	2,140
11	52	559	528	460	475	463	0	2,030	2,570	2,420	2,560	2,090
12	57	559	531	469	472	463	0	2,240	2,570	2,510	2,530	2,080
13	60	553	531	460	487	457	0	2,220	2,560	2,600	2,530	1,900
14	61	563	528	460	480	466	0	2,240	2,540	2,710	2,560	1,500
15	61	566	512	484	484	472	0	2,240	2,530	2,600	2,570	1,460
16	99	559	500	487	484	463	0	2,250	2,530	2,570	2,540	1,430
17	571	556	500	478	487	463	0	2,230	2,600	2,520	2,600	1,400
18	661	566	494	475	487	469	0	2,310	2,610	2,550	2,480	1,380
19	672	563	515	463	487	469	0	2,120	2,490	2,640	2,470	1,390
20	654	550	522	460	487	469	0	2,020	2,450	2,690	2,470	1,380
21	634	547	525	460	487	442	0	2,110	2,430	2,670	2,470	1,350
22	627	553	525	466	484	478	117	2,210	2,410	2,680	2,450	1,330
23	618	550	522	460	484	472	271	2,240	2,410	2,720	2,420	1,340
24	598	547	515	478	484	457	382	2,200	2,320	2,740	2,390	1,330
25	588	543	518	478	478	469	540	2,180	2,270	2,790	2,370	1,290
26	582	547	509	484	475	457	752	2,170	2,270	2,760	2,360	1,270
27	556	547	487	484	472	454	990	2,180	2,280	2,750	2,350	1,240
28	543	550	475	481	472	424	1,100	2,230	2,290	2,710	2,330	1,200
29	537	553	472	472	-	442	1,170	2,280	2,370	2,690	2,290	1,120
30	540	550	466	478	-	448	1,300	2,350	2,560	2,680	2,300	602
31	537	-	469	481	-	454	-	2,410	-	2,700	2,320	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				15,429	878	52	498	30,600				
November.....				16,671	569	543	556	33,070				
December.....				16,029	543	466	517	31,790				
Calendar year 1937.....				424,510	2,990	0	1,163	842,000				
January.....				14,578	497	457	470	28,920				
February.....				13,471	490	472	461	26,720				
March.....				14,374	487	424	464	28,510				
April.....				12,077	1,300	0	403	23,950				
May.....				63,210	2,410	1,400	2,039	125,400				
June.....				73,800	2,570	2,270	2,460	146,400				
July.....				76,980	2,790	1,850	2,483	152,700				
August.....				77,410	2,690	2,290	2,497	153,500				
September.....				50,532	2,330	602	1,684	100,200				
Water year 1937-38				444,561	2,790	0	1,218	881,800				

South Side Twin Falls canal at Milner, Idaho

Location.- Water-stage recorder, lat. 42°31', long. 114°01', in sec. 29, T. 10 S., R. 21 E., 700 feet downstream from head gates at Milner.

Records available.- May 1909 to September 1938.

Extremes.- Maximum daily discharge during year, 3,530 second-feet Aug. 7-8 (gage height, 10.19 feet); minimum daily, 40 second-feet (estimated) April 10-13.
1909-1938: Maximum discharge, 4,600 second-feet Aug. 12, 1918, part of which spilled through waste gates below gage and returned to river. No flow Sept. 20, 1920.

Remarks.- Records excellent except those for period when head gates were closed, April 10-13, which were estimated by observer and are fair. Flow controlled by operation of head gates. South Side Twin Falls canal diverts water from Snake River at Milner Dam for irrigation of 202,000 acres of land in Twin Falls County.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,520	289	595	538	492	401	506	1,460	3,240	3,010	3,510	3,350
2	1,480	84	595	541	326	368	509	2,550	3,260	2,890	3,500	3,300
3	1,470	85	595	535	316	509	512	2,830	3,270	2,790	3,530	3,320
4	1,470	87	598	538	322	506	512	2,770	3,270	2,820	3,520	3,340
5	1,510	88	598	538	470	382	512	2,930	3,290	2,450	3,510	3,340
6	1,540	92	598	538	465	598	512	2,880	3,280	2,350	3,520	3,340
7	1,530	619	595	538	465	506	504	2,890	3,300	2,510	3,530	3,260
8	1,530	1,020	598	538	478	504	509	2,920	3,310	2,680	3,530	3,150
9	1,530	716	583	538	495	506	176	3,000	3,320	2,920	3,510	3,110
10	1,530	619	571	541	495	501	40	3,020	3,320	3,160	3,510	3,040
11	1,430	440	574	538	492	506	40	3,070	3,310	3,290	3,490	2,980
12	1,390	103	574	535	336	512	40	3,150	3,310	3,360	3,480	2,980
13	1,390	103	571	535	490	515	40	3,180	3,310	3,460	3,460	2,930
14	1,330	106	562	538	490	518	806	3,210	3,280	3,490	3,490	2,910
15	1,290	108	562	518	340	512	1,540	3,200	3,270	3,480	3,500	2,870
16	1,300	813	562	515	495	512	872	3,260	3,230	2,780	3,500	2,840
17	1,300	2,100	565	509	492	512	748	3,240	3,070	3,480	3,490	2,780
18	1,210	476	565	501	492	506	745	3,220	3,030	3,490	3,500	2,750
19	1,170	385	568	501	501	506	732	3,140	3,040	3,490	3,500	2,710
20	978	385	562	501	498	506	758	3,070	2,950	3,490	3,500	2,560
21	886	385	562	501	498	512	845	3,080	2,920	3,480	3,500	2,380
22	777	382	562	504	495	504	954	3,070	2,910	3,480	3,500	2,320
23	729	382	568	501	495	506	1,190	3,140	2,920	3,490	3,500	2,320
24	726	418	565	501	498	515	1,500	3,180	2,920	3,510	3,500	2,330
25	704	481	562	504	492	504	1,680	3,220	2,930	3,530	3,500	2,330
26	694	509	565	506	501	504	1,750	3,230	2,930	3,530	3,500	2,330
27	688	559	562	504	498	504	1,770	3,240	2,930	3,520	3,480	2,330
28	694	598	568	504	501	509	2,230	3,220	2,980	3,520	3,470	2,330
29	697	592	571	495	-	506	2,520	3,240	3,000	3,520	3,470	2,280
30	704	598	547	487	-	512	2,580	3,240	3,010	3,500	3,400	2,270
31	707	-	538	490	-	512	-	3,240	-	3,500	3,400	-
Month						Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet	
October.....						35,904		1,540	688	1.158	71,210	
November.....						13,622		2,100	84	454	27,020	
December.....						17,761		598	538	573	35,230	
Calendar year 1937.....						624,229		3,640	68	1.710	1,238,000	
January.....						16,071		541	487	518	31,880	
February.....						12,928		501	316	462	25,540	
March.....						15,474		598	368	499	30,690	
April.....						27,632		2,580	40	921	54,810	
May.....						94,090		3,280	1,460	3,035	186,600	
June.....						94,110		3,320	2,910	3,137	186,700	
July.....						99,970		3,530	2,350	3,225	198,500	
August.....						108,330		3,530	3,400	3,495	214,900	
September.....						84,080		3,350	2,270	2,803	166,800	
Water year 1937-38.....						619,972		3,530	40	1,699	1,230,000	

Rock Creek near Twin Falls, Idaho

Location.- Water-stage recorder, lat. 42°36', long. 114°32', in SW $\frac{1}{4}$ sec. 36, T. 9 S., R. 15 E., at highway bridge, 3 miles upstream from mouth and 4 miles northwest of Twin Falls.

Records available.- March 1922 to September 1938.

Average discharge.- 16 years, 213 second-feet.

Extremes.- Maximum discharge during year, 332 second-feet Nov. 18 (gage height, 2.86 feet); minimum, 111 second-feet Feb. 20 (gage height, 1.82 feet).

1922-38: Maximum discharge, 984 second-feet Sept. 21, 1927 (gage height, 4.5 feet, former datum, from floodmarks); minimum, 94 second-feet Mar. 22, Apr. 1-3, 11, 12, 1935.

Remarks.- Records good. Discharge for Nov. 6, 7, Mar. 4, Sept. 4, 5 interpolated. Practically all normal summer flow diverted several miles upstream for irrigation. Waste water from South Side Twin Falls low-line canal, which crosses Rock Creek 12 miles upstream from station, causes abrupt fluctuations in stage at times. Irrigation wastes and drain discharges from project lands enter above gage. Gage-height record for October to February furnished by Murtaugh Irrigation District.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	227	206	217	152	133	129	148	246	196	235	212	252
2	233	206	220	155	130	129	148	260	192	269	208	249
3	235	275	230	150	127	130	149	255	188	298	212	249
4	235	196	230	146	125	128	144	260	181	293	217	247
5	243	184	230	144	119	126	135	255	186	301	210	245
6	240	180	230	146	124	125	133	243	183	285	208	243
7	242	177	233	149	126	124	128	235	184	265	208	249
8	235	173	230	150	127	121	128	208	181	249	210	246
9	235	177	217	149	126	120	129	194	186	235	206	255
10	238	192	235	149	128	117	222	175	192	230	208	263
11	238	192	240	149	129	122	233	171	194	215	206	266
12	235	184	238	148	127	148	152	171	199	194	208	263
13	238	177	238	143	118	152	127	168	192	196	212	252
14	238	177	233	146	121	149	140	179	194	192	208	255
15	238	177	235	146	124	148	136	208	192	192	212	269
16	238	166	233	146	116	148	294	217	210	196	215	269
17	252	171	233	148	117	148	291	220	220	194	217	263
18	255	249	230	142	120	149	275	230	215	196	217	266
19	243	258	227	142	120	157	222	269	222	203	215	260
20	240	286	225	149	114	166	154	252	222	203	217	260
21	233	258	227	142	115	157	175	252	220	206	220	258
22	227	230	233	144	115	159	177	240	217	208	222	255
23	220	188	230	138	116	179	173	222	235	206	227	258
24	217	161	210	128	117	181	171	206	235	210	222	252
25	217	177	201	134	117	171	184	206	227	212	222	252
26	220	179	199	139	118	162	220	196	235	215	217	255
27	220	177	190	136	122	155	220	194	235	208	227	260
28	217	179	162	138	126	157	212	203	225	203	233	260
29	212	175	160	136	-	154	215	196	227	206	233	263
30	210	217	166	132	-	150	217	201	233	215	235	260
31	212	-	155	134	-	149	-	199	-	212	240	-
Month						Second-foot-days		Maximum	Minimum	Mean	Run-off in acre-feet	
October.....						7,184		255	210	232	14,250	
November.....						5,966		288	166	199	11,830	
December.....						6,737		240	155	217	13,360	
Calendar year 1937.....						81,873		226	104	224	162,400	
January.....						4,450		155	128	144	8,830	
February.....						3,417		133	114	122	6,780	
March.....						4,510		181	117	145	8,960	
April.....						5,448		294	124	182	10,810	
May.....						6,731		269	168	217	13,350	
June.....						6,223		235	181	207	12,340	
July.....						6,949		301	192	224	13,780	
August.....						6,724		240	206	217	13,340	
September.....						7,694		269	243	256	15,260	
Water year 1937-38.....						72,033		301	114	197	142,900	

Salmon Falls Creek near San Jacinto, Nev.

Location.- Water-stage recorder, lat. 41°57', long. 114°42', in sec. 23, T. 47 N., R. 64 E., in canyon 200 yards downstream from highway bridge, 250 yards downstream from Shoshone Creek and 5 miles north of San Jacinto.

Records available.- September 1909 to September 1916, October 1918 to September 1938.

Average discharge.- 24 years (1910-16, 1919-20, 1921-38), 121 second-feet.

Extremes.- Maximum discharge during year, 803 second-feet Apr. 28 (gage height, 6.02 feet); minimum, 18 second-feet Aug. 16-18 (gage height, 2.40 feet).

1909-16, 1919-38: Maximum discharge, 1,280 second-feet May 22, 1912 (gage height, 7.5 feet); minimum, 9.8 second-feet Aug. 4, 1931; minimum gage height, 2.20 feet Sept. 7, 1934.

Remarks.- Records good. Many diversions for irrigation above station. Salmon Dam of Salmon River Canal Co., 15 miles below station, forms a reservoir having a capacity of about 180,000 acre-feet. Gage-height record furnished by a Salmon River Canal Co., Ltd.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	40	51	59	61	98	108	705	529	154	29	211
2	26	41	52	61	61	90	108	733	477	163	28	75
3	27	42	50	60	61	86	106	775	438	155	28	49
4	28	44	50	55	61	89	111	705	412	155	27	44
5	28	46	49	50	56	92	122	623	412	167	26	38
6	29	46	46	47	56	92	146	556	412	180	25	35
7	30	47	54	50	62	92	143	503	387	163	24	35
8	32	47	54	60	60	90	141	494	372	138	24	32
9	32	47	54	56	61	89	152	412	350	121	21	32
10	32	46	55	58	61	87	182	387	332	105	23	32
11	32	46	58	59	64	90	208	360	314	90	22	32
12	32	46	61	59	69	94	230	357	293	82	21	32
13	32	47	62	58	60	106	266	374	264	72	21	31
14	33	47	62	59	65	121	302	387	243	69	21	29
15	36	48	64	60	61	122	305	451	239	67	21	30
16	36	48	65	64	61	136	288	542	228	65	18	27
17	37	50	64	64	55	141	302	650	200	64	20	24
18	39	50	64	62	52	150	334	691	190	65	20	23
19	38	55	64	62	60	161	400	733	186	58	24	23
20	37	61	55	59	61	157	516	747	172	52	25	22
21	37	60	48	54	61	139	636	691	190	48	24	21
22	37	59	51	62	60	131	664	650	206	45	23	21
23	39	55	60	61	61	126	677	569	186	43	24	21
24	39	54	45	47	61	134	691	490	174	41	24	21
25	39	54	55	44	62	129	733	438	157	43	23	21
26	39	54	50	52	62	122	775	425	141	44	23	21
27	39	52	56	54	76	114	789	425	131	41	24	22
28	39	53	60	60	93	114	789	451	126	40	28	21
29	39	52	59	64	-	116	719	477	131	37	26	21
30	39	52	61	60	-	110	691	529	148	34	27	24
31	39	-	58	61	-	108	-	556	-	32	37	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,067	39	26	34.4	2,120
November.....	1,498	61	40	49.6	2,950
December.....	1,737	65	45	56.0	3,450
Calendar year 1937.....	29,483	357	11	80.3	58,490
January.....	1,781	64	44	57.5	3,530
February.....	1,744	93	52	62.3	3,460
March.....	3,526	161	86	114	6,990
April.....	11,634	789	106	338	23,080
May.....	16,856	775	357	544	33,430
June.....	8,040	529	126	268	15,950
July.....	2,633	180	32	84.9	5,220
August.....	751	37	18	24.2	1,490
September.....	1,068	211	21	35.6	2,120
Water year 1937-38.....	52,325	789	21	143	103,800

Salmon River Canal Co. Reservoir near Rogerson, Idaho

Location.- Staff gage attached to upstream face of concrete dam on Salmon Falls Creek, lat. $42^{\circ}13'$, long. $114^{\circ}44''$, in sec. 17, T. 14 S., R. 15 E., 10 miles west of Rogerson. Zero of gage is 4,990.0 feet above mean sea level.

Records available.- January 1922 to September 1938. Operation of reservoir began May 1910.

Extremes.- Maximum contents, 60,670 acre-feet May 25 (gage height, 35.8 feet); minimum, 2,000 acre-feet Oct. 13-17 (gage height, 1.6 feet).

1922-38: Maximum contents, 123,700 acre-feet May 30, 31, 1922 (gage height, 61.1 feet); minimum, 125 acre-feet Sept. 21 to Oct. 5, 1934 (gage height, 0.1 foot).

Remarks.- Reservoir has a capacity of 182,650 acre-feet between gage heights 0.0 and 80.0 feet (elevations, 4,990.0 and 5,070.0 feet, respectively, above sea level). Water is used for irrigation of lands in Salmon River Canal Co. project. Gage-height record and table of storage capacity furnished by Salmon River Canal Co.

Contents, in acre-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,905	2,635	4,862	7,358	10,040	12,350	17,250	37,340	59,600	44,400	25,240	11,060
2	2,905	2,702	4,930	7,430	10,180	12,500	17,400	38,640	59,600	44,000	24,220	11,200
3	2,905	2,702	4,998	7,575	10,260	12,640	17,550	39,930	59,270	44,400	23,370	11,340
4	2,972	2,770	5,065	7,648	10,330	12,780	17,700	41,320	58,950	44,800	22,520	11,480
5	2,972	2,838	5,200	7,720	10,400	12,930	18,000	42,620	58,530	45,000	21,670	11,490
6	2,972	2,905	5,200	7,792	10,480	13,080	18,300	43,300	58,200	45,200	20,860	10,620
7	2,972	2,905	5,200	7,865	10,550	13,220	18,460	44,800	57,770	45,500	20,060	9,895
8	2,835	2,972	5,268	7,938	10,620	13,360	18,620	45,800	57,340	45,700	19,260	9,170
9	2,500	3,040	5,335	8,010	10,690	13,510	18,780	46,600	56,910	45,800	18,460	8,445
10	2,375	3,108	5,402	8,082	10,760	13,660	19,100	47,200	56,400	46,000	17,700	7,720
11	2,250	3,175	5,470	8,155	10,840	13,800	19,420	48,000	56,000	46,000	16,800	6,995
12	2,125	3,175	5,605	8,300	10,910	13,910	19,820	48,600	55,500	45,300	16,050	6,550
13	2,000	3,242	5,740	8,372	10,980	13,920	20,220	49,200	55,100	44,500	15,150	6,550
14	2,000	3,310	5,875	8,445	11,060	13,960	20,700	49,800	54,700	43,600	14,250	6,550
15	2,000	3,378	6,010	8,518	11,130	13,910	21,180	50,400	54,200	42,620	13,560	6,550
16	2,000	3,445	6,010	8,590	11,200	13,800	21,670	51,100	53,700	41,690	12,500	6,550
17	2,000	3,512	6,145	8,735	11,270	14,100	22,260	51,900	53,200	40,580	11,640	6,550
18	2,125	3,580	6,280	8,880	11,340	14,400	22,860	52,800	52,600	39,470	10,910	6,550
19	2,188	3,648	6,348	9,025	11,490	14,550	23,460	54,000	52,000	38,360	10,910	6,550
20	2,250	3,650	6,482	9,098	11,660	14,850	24,050	55,200	51,600	37,250	10,910	6,695
21	2,312	3,985	6,550	9,170	11,640	15,150	24,730	56,400	51,100	36,140	10,910	6,695
22	2,375	4,120	6,550	9,242	11,710	15,300	25,920	57,660	50,600	35,030	10,910	6,840
23	2,438	4,255	6,695	9,388	11,780	15,600	27,020	58,950	50,200	33,920	10,910	6,840
24	2,438	4,322	6,695	9,460	11,850	15,900	28,220	59,920	49,600	32,810	10,910	6,840
25	2,500	4,390	6,768	9,460	12,000	16,050	28,320	60,670	49,000	31,700	10,910	6,840
26	2,500	4,458	6,840	9,460	12,070	16,200	30,510	60,560	48,400	30,680	10,910	6,840
27	2,500	4,525	6,913	9,505	12,140	16,420	31,880	60,560	47,800	29,660	10,910	6,840
28	2,568	4,660	6,995	9,778	12,220	16,850	33,560	60,240	46,300	28,640	10,910	6,840
29	2,568	4,729	7,068	9,750	-	16,800	34,760	60,130	46,000	27,790	10,910	6,895
30	2,568	4,795	7,140	9,822	-	16,950	36,140	59,810	45,200	26,940	10,910	6,895
31	2,635	-	7,285	9,868	-	17,100	-	59,810	-	26,090	10,910	-

Salmon River Canal Co. canal near Rogerson, Idaho

Location.- Water-stage recorder, lat. 42°15', long. 114°45', in sec. 7, T. 14 S., R. 15 E., half a mile downstream from Salmon River Canal Co. Reservoir and 7 miles west of Rogerson.

Records available.- April 1937 to September 1938.

Extremes.- Maximum discharge during year, 577 second-feet July 17 (gage height, 7.34 feet); no flow for long periods.

1937-38: Maximum discharge, that of July 17, 1938; no flow for long periods in each year.

Remarks.- Records good. Gage-height record furnished by Salmon River Canal Co.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

-0.10	0	2.80	138	5.60	393
.40	11	3.20	170	6.00	434
.80	24	3.60	203	6.40	478
1.20	40	4.00	239	6.80	522
1.60	60	4.40	275	7.20	566
2.00	83	4.80	313	7.30	577
2.40	109	5.20	353		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0					0		0	511	434	423	0
2	0					0		0	535	0	413	0
3	0					0		0	500	0	393	0
4	0					0		0	533	0	393	0
5	0					0		0	544	0	393	286
6	0					0		0	544	0	393	383
7	69					0		0	544	0	393	373
8	73					0		0	544	0	393	363
9	67					0		0	544	0	393	353
10	62					0		0	522	0	393	343
11	58					152		0	489	296	403	238
12	55					190		0	478	423	413	0
13	52					39		0	456	467	423	0
14	49					0		0	456	522	434	0
15	8					0		0	445	544	456	0
16	0					0		0	445	566	467	0
17	0					0		0	445	577	380	0
18	0					0		0	413	566	0	0
19	0					0		0	383	555	0	0
20	0					0		0	383	555	0	0
21	0					0		0	363	555	0	0
22	0					0		0	373	566	0	0
23	0					0		0	393	555	0	0
24	0					0		0	413	533	0	0
25	0					0		295	423	511	0	0
26	0					0		413	445	500	0	0
27	0					0		434	489	489	0	0
28	0					0		456	500	478	0	0
29	0					0		467	522	456	0	0
30	0					0		500	522	434	0	0
31	0					0		500	-	423	0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	493	73	0	15.9	978
November.....	0	0	0	0	0
December.....	0	0	0	0	0
Calendar year					
January.....	0	0	0	0	0
February.....	0	0	0	0	0
March.....	381	190	0	12.3	756
April.....	0	0	0	0	0
May.....	3,055	500	0	98.9	6,080
June.....	14,155	544	363	472	28,060
July.....	11,005	577	0	355	21,830
August.....	6,356	467	0	224	13,800
September.....	2,339	383	0	76.0	4,640
Water year 1937-38.....	38,394	577	0	105	76,160

Big Wood River at Hailey, Idaho

Location.- Water-stage recorder, lat. 43°31', long. 114°20', in SW $\frac{1}{4}$ sec. 9, T. 2 N., R. 18 E., at steel highway bridge, a quarter of a mile southwest of Hailey.

Drainage area.- 640 square miles.

Records available.- June 1915 to September 1938.

Average discharge.- 23 years, 287 second-feet.

Extremes.- Maximum discharge during year, 4,480 second-feet June 7 (gage height, 7.31 feet); practically no flow Oct. 25.

1915-38: Maximum discharge, that of June 7, 1938; maximum gage height, 8.66 feet June 12, 1921; practically no flow Sept. 15-23, Nov. 20, 22, 23, 1931, Oct. 25, 1937.

Remarks.- Records good except those for extremely low flows, which are fair. Discharge for period of missing or doubtful gage-height record, Feb. 19-25, computed on basis of weather records and records for stations near Gooding and Bellevue; that for Jan. 19 interpolated. Water diverted around station by Hailey power plant and returned to river through Big Wood Slough. Total flow of river at Hailey (combined flow of Big Wood River and Big Wood Slough) is given in table on following page. Diversions for irrigation above station. Gage-height record for period July to September and six discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	1	1	80	101	54	31	2,510	3,580	1,960	530	171
2	0	1	0	87	101	56	30	2,200	3,610	1,960	505	169
3	0	1	0	84	103	56	31	1,980	3,920	1,920	416	166
4	0	1	1	76	101	54	32	1,620	4,060	1,760	317	173
5	0	1	1	70	99	30	32	1,460	4,060	1,680	274	161
6	0	1	1	68	101	30	32	1,210	4,340	1,540	254	157
7	0	1	1	78	99	30	34	1,210	4,340	1,500	221	155
8	0	1	1	73	103	30	36	1,140	4,200	1,540	212	150
9	0	0	1	73	103	30	39	1,100	3,780	1,570	212	146
10	0	1	1	73	105	30	42	1,320	3,060	1,540	254	146
11	0	0	7	74	101	30	46	1,500	2,580	1,500	284	146
12	0	1	262	79	105	29	52	1,620	2,590	1,560	277	144
13	0	0	226	79	105	31	60	1,860	2,410	1,320	270	139
14	0	0	160	80	99	32	97	2,150	2,260	1,260	270	135
15	0	0	150	78	94	32	237	2,280	2,310	1,260	260	131
16	1	0	131	78	92	34	284	2,420	2,310	1,150	257	129
17	0	0	124	78	92	35	307	2,600	2,520	1,120	248	125
18	0	0	114	78	90	35	500	2,570	2,260	1,080	238	123
19	0	0	106	82	45	35	862	2,260	2,040	950	188	121
20	1	0	97	85	45	35	920	1,880	1,960	885	109	119
21	1	0	97	85	45	34	950	1,760	2,080	885	74	91
22	1	0	97	90	45	31	1,100	1,760	2,080	790	69	34
23	0	0	96	92	45	30	1,240	2,130	1,880	706	75	20
24	0	0	96	82	45	31	1,280	2,690	1,800	664	72	19
25	0	0	96	85	45	30	1,420	3,120	1,840	694	139	18
26	0	0	96	84	61	29	1,460	3,640	2,040	724	173	17
27	0	1	96	82	56	29	1,460	4,060	2,040	676	164	17
28	0	0	96	84	56	31	1,380	4,200	1,920	658	161	16
29	0	0	96	90	-	33	1,740	3,640	1,880	624	161	14
30	1	1	96	89	-	29	2,060	3,320	2,080	585	189	16
31	1	-	92	96	-	30	-	3,180	-	558	169	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						6	1	0	0.2	12		
November.....						12	1	0	.4	24		
December.....						2,438	262	0	78.6	4,840		
Calendar year 1937						39,065	810	0	107	77,480		
January.....						2,512	96	68	81.0	4,980		
February.....						2,282	105	45	81.5	4,530		
March.....						1,062	56	29	34.3	2,110		
April.....						17,794	2,060	30	593	35,290		
May.....						70,390	4,200	1,100	2,271	139,600		
June.....						81,520	4,340	1,800	2,717	161,700		
July.....						36,419	1,960	558	1,175	72,240		
August.....						7,022	530	69	227	13,930		
September.....						3,168	173	14	106	6,280		
Water year 1937-38.....						224,625	4,340	0	615	445,500		

Combined discharge, in second-feet, of Big Wood River and Big Wood Slough at Hailey, Idaho,
water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	94	99	97	112	128	151	151	2,690	3,520	2,110	596	334
2	94	99	97	117	131	155	155	2,370	3,660	2,100	558	335
3	89	102	82	114	129	153	141	2,130	4,080	2,050	483	335
4	91	101	89	109	128	151	156	1,780	4,220	1,860	442	347
5	93	100	88	102	128	110	150	1,610	4,210	1,770	420	327
6	94	103	90	99	126	110	158	1,370	4,500	1,620	407	321
7	94	105	95	108	125	124	130	1,380	4,500	1,570	401	318
8	93	110	93	102	133	120	137	1,310	4,350	1,620	393	308
9	92	110	85	103	128	118	147	1,260	3,900	1,650	408	299
10	93	109	98	103	130	123	161	1,500	3,140	1,610	407	299
11	88	109	175	104	126	126	166	1,670	2,690	1,570	402	300
12	92	109	398	108	130	127	194	1,780	2,720	1,420	388	295
13	92	109	262	108	130	139	202	2,030	2,550	1,370	381	287
14	101	113	192	109	124	141	270	2,300	2,370	1,310	380	282
15	97	111	182	106	119	140	317	2,430	2,420	1,330	368	273
16	98	111	162	106	117	153	377	2,580	2,420	1,230	359	268
17	101	113	154	106	117	150	449	2,770	2,670	1,200	345	265
18	104	114	144	105	109	149	704	2,730	2,360	1,160	331	262
19	97	114	134	109	125	153	1,100	2,400	2,100	1,040	320	259
20	95	115	126	112	131	153	1,130	2,010	2,010	979	304	255
21	98	116	126	110	129	149	1,160	1,900	2,130	984	292	239
22	98	111	126	115	129	136	1,320	1,900	2,130	899	298	221
23	89	110	125	117	131	143	1,450	2,290	1,940	812	317	225
24	96	113	125	107	133	149	1,480	2,870	1,880	766	307	224
25	97	110	125	111	131	140	1,610	3,320	1,960	796	346	220
26	93	111	125	110	139	141	1,650	3,830	2,190	829	332	218
27	96	103	123	111	134	143	1,640	4,220	2,200	764	311	224
28	94	102	124	113	144	154	1,550	4,360	2,050	741	307	232
29	98	100	124	116	-	144	1,930	3,800	2,000	702	312	242
30	101	100	125	114	-	143	2,240	3,470	2,240	653	326	257
31	100	-	121	122	-	151	-	3,330	-	622	329	-
Month						Second-foot-days	Maximum	Minimum	Near		Run-off in acre-feet	
October.....						2,952	104	88	95.2		5,860	
November.....						3,232	116	99	108		6,410	
December.....						4,202	398	82	136		9,330	
Calendar year 1937.....						82,307	988	77	225		163,200	
January.....						3,398	122	99	109		6,720	
February.....						3,584	144	109	128		7,110	
March.....						4,339	155	110	140		8,610	
April.....						22,425	2,240	130	748		44,480	
May.....						75,390	4,560	1,260	2,432		149,500	
June.....						85,100	4,500	1,380	2,337		168,800	
July.....						39,127	2,110	622	1,262		77,610	
August.....						11,559	586	292	373		22,930	
September.....						8,271	347	218	276		16,410	
Water year 1937-38.....						263,569	4,500	82	722		522,800	

BIG WOOD RIVER BASIN

Big Wood River near Bellevue, Idaho

Location.- Water-stage recorder, lat. 43°19', long. 112°21', in sec. 20, T. 1 S., R. 18 E., $1\frac{1}{2}$ miles upstream from flow line of Magic Reservoir, 3 miles upstream from Camas Creek, and 10 miles southwest of Bellevue.

Drainage area.- 823 square miles.

Records available.- July 1911 to September 1938 except for winters.

Extremes.- Maximum discharge during year, 3,200 second-feet June 7 (gage height, 4.64 feet); minimum discharge recorded, 28 second-feet Nov. 11-14; minimum gage height, 1.35 feet Nov. 30.

1911-38: Maximum discharge, 3,660 second-feet June 16, 1921 (gage height, 6.07 feet); minimum 7 second-feet Apr. 14, 1932 (gage height, 1.10 feet).

Remarks.- Records good. Discharge for Oct. 11-13, Nov. 20, 21, Mar. 19-21, Aug. 16-18 interpolated. No records Dec. 1 to Mar. 9. Many diversions for irrigation above station. Gage-height record and nine discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Mar. 10 to June 6				June 8 to Sept. 20			
1.50	67	3.30	1,290	1.30	51	2.80	930
1.80	148	3.60	1,660	1.60	121	3.10	1,220
2.10	267	3.90	2,060	1.90	239	3.40	1,530
2.40	415	4.20	2,480	2.20	419	3.70	1,680
2.70	666	4.60	3,080	2.50	660	4.00	2,280
3.00	950						

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	30				-	72	1,990	2,630	1,760	250	147
2	40	31				-	72	2,060	2,630	1,640	202	144
3	40	31				-	72	1,720	2,780	1,760	181	138
4	40	30				-	81	1,600	2,860	1,640	170	131
5	38	30				-	94	1,370	2,930	1,580	128	138
6	40	30				-	99	1,240	3,000	1,400	118	134
7	38	30				-	130	1,150	3,100	1,280	121	128
8	38	30				-	142	1,140	3,190	1,280	121	131
9	36	30				-	148	1,090	3,030	1,320	138	139
10	36	30				81	142	1,130	2,570	1,270	162	131
11	36	28				81	133	1,240	2,140	1,240	154	131
12	36	28				91	127	1,360	2,010	1,120	141	128
13	36	28				130	130	1,530	1,940	1,000	138	121
14	36	28				155	142	1,720	1,820	912	141	118
15	38	31				151	136	1,860	1,760	912	141	116
16	36	33				155	164	1,990	1,760	831	136	113
17	34	33				151	221	2,130	1,820	769	131	110
18	34	34				149	349	2,200	1,760	687	126	110
19	33	34				137	770	2,060	1,570	606	121	108
20	33	34				126	910	1,720	1,420	525	121	105
21	34	34				115	983	1,470	1,420	501	118	102
22	33	34				104	1,090	1,370	1,520	486	118	99
23	33	34				96	1,330	1,480	1,440	426	118	87
24	33	34				94	1,360	1,720	1,390	386	118	71
25	34	34				89	1,460	1,990	1,380	352	121	69
26	34	36				84	1,520	2,340	1,530	372	118	73
27	33	34				79	1,520	2,700	1,560	352	116	80
28	33	34				81	1,430	2,930	1,530	340	110	85
29	31	34				79	1,520	3,000	1,460	322	110	99
30	31	34				84	1,720	2,780	1,570	292	108	105
31	31	-				74	-	2,630	-	266	131	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,100	42	31	35.6	2,180
November.....	955	36	28	31.6	1,980
December.....	-	-	-	-	-
Calendar year					
January.....	-	-	-	-	-
February.....	-	-	-	-	-
March 10-31.....	2,385	155	74	108	4,730
April.....	18,067	1,720	72	602	35,840
May.....	56,710	3,000	1,090	1,829	112,500
June.....	61,640	3,190	1,380	2,051	122,100
July.....	27,619	1,760	266	891	54,780
August.....	4,227	250	108	136	8,380
September.....	3,390	147	69	113	6,720
Water year					

Magic Reservoir near Richfield, Idaho

Location.- Staff gage, lat. 43°15', long. 114°22', in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 2 S., R. 18 E., 18 miles northwest of Richfield. Observations are referred to an assumed datum that is about 137 feet lower than sea level.

Drainage area.- 1,500 square miles.

Records available.- February 1909 to September 1938.

Extremes.- Maximum contents during year, 192,300 acre-feet July 12, 13 (gage height, 4,935.20 feet); minimum, 39,460 acre-feet Oct. 1 (gage height, 4,875.25 feet).
1909-38: Maximum contents, those of July 12, 13, 1938; no storage for several days in 1909, 1919, 1920, 1924, 1928, and 1935.

Remarks.- Water is stored in this reservoir for irrigation of lands under Carey Act project of the Big Wood Canal Co. Available capacity of the reservoir is about 191,500 acre-feet between gage heights 4,821.5 and 4,935.0 feet. Gage height record and table of contents furnished by watermaster for Big Wood and Little Wood Rivers.

Contents, in acre-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	39,460	42,410	41,980	52,010	57,100	62,540	84,410	188,400	189,500	191,900	181,100	154,500
2	39,540	42,580	42,070	52,190	57,300	63,030	84,850	188,800	190,700	191,900	180,000	153,600
3	39,620	42,760	42,150	52,380	57,490	63,620	85,400	189,000	191,100	191,900	178,900	153,000
4	39,710	42,840	42,240	52,380	57,680	64,310	85,730	188,800	191,500	191,900	177,400	152,600
5	39,790	42,930	42,330	52,470	57,870	64,600	86,610	187,600	191,500	191,900	176,300	152,000
6	39,870	43,020	42,410	52,840	57,970	65,000	87,180	187,600	191,500	191,500	175,200	151,300
7	39,960	43,020	42,500	52,940	58,160	65,400	87,960	187,200	191,500	191,100	174,100	150,700
8	40,040	43,100	42,580	53,120	58,350	65,790	89,090	186,400	191,500	191,100	172,600	150,100
9	40,120	43,100	42,670	53,310	58,550	66,090	90,570	184,900	191,500	191,100	171,500	149,400
10	40,210	43,190	42,760	53,400	58,740	66,490	92,870	183,800	191,100	191,500	170,800	148,800
11	40,290	43,280	43,100	53,500	58,930	66,990	95,560	182,200	191,100	191,900	169,700	148,100
12	40,380	43,360	43,550	53,590	59,220	67,480	98,410	181,100	191,500	192,300	169,000	147,800
13	40,460	43,450	46,800	53,780	59,420	67,980	103,400	181,100	191,500	192,300	168,000	147,200
14	40,630	43,540	47,520	53,880	59,710	68,680	108,300	181,500	191,500	191,900	167,200	146,600
15	40,710	43,620	47,970	54,060	59,900	70,390	113,800	182,200	191,500	191,900	166,200	145,900
16	40,790	43,710	48,420	54,250	60,100	71,400	123,300	182,600	191,500	191,900	165,100	145,300
17	40,880	43,800	48,880	54,340	60,300	72,620	135,100	182,600	191,500	191,500	164,400	144,700
18	40,880	43,970	49,240	54,630	60,390	74,660	148,100	183,000	191,500	191,500	163,700	144,100
19	40,960	44,230	49,610	54,820	60,580	76,520	165,700	183,000	191,500	191,100	162,700	143,100
20	41,060	43,450	49,880	55,010	60,780	77,570	180,000	183,000	191,500	190,700	161,700	142,600
21	41,220	42,760	50,070	55,200	60,970	78,610	188,400	182,200	191,500	189,900	161,000	141,600
22	41,390	41,730	50,340	55,390	61,170	79,350	189,400	181,500	191,900	189,200	160,300	140,700
23	41,560	41,220	50,620	55,580	61,360	79,990	188,800	181,100	191,900	188,400	159,600	140,100
24	41,640	41,300	50,800	55,770	61,560	80,820	188,400	181,100	191,900	187,600	158,900	139,200
25	41,730	41,390	50,990	55,960	61,750	81,160	188,200	181,500	191,900	186,600	158,300	138,500
26	41,810	41,470	51,080	56,150	61,950	81,480	188,000	182,200	191,900	186,100	157,600	137,400
27	41,900	41,560	51,260	56,240	62,140	81,910	188,000	183,400	191,900	185,300	156,900	136,500
28	41,980	41,730	51,540	56,430	62,340	82,450	187,600	184,900	191,900	184,500	156,300	135,700
29	42,070	41,810	51,730	56,620	-	82,880	187,000	186,400	191,900	183,800	155,900	134,800
30	42,240	41,900	51,820	56,720	-	83,420	187,200	187,400	191,900	183,000	155,300	133,900
31	42,330	-	52,010	56,910	-	83,970	-	188,000	-	182,200	154,600	-

Big Wood River below Magic Dam, near Richfield, Idaho

Location.- Water-stage recorder, lat. 43°14', long. 114°22', in sec. 18, T. 2 S., R. 18 E., half a mile downstream from Magic Dam and 18 miles northwest of Richfield.

Records available.- April 1911 to September 1938.

Average discharge.- 26 years (1912-38), 385 second-feet.

Extremes.- Maximum discharge during year, 5,610 second-feet Apr. 21 (gage height, 11.55 feet); minimum, 5 second-feet Nov. 25 to Dec. 28, Jan. 5 to Feb. 11; minimum gage height recorded, 1.58 feet Jan. 26 to Feb. 26, Mar. 6, 7.
1911-38: Maximum discharge, that of Apr. 21, 1938; no flow Feb. 3, 1915.

Remarks.- Records good. Discharge for Dec. 11, Feb. 18, Feb. 27 to Mar. 4 interpolated. Many ranch diversions in upper drainage area. Flow completely regulated by gates at Magic Dam. Gage-height record and seven discharge measurements furnished by water-master for Big Wood and Little Wood Rivers.

Rating table, period Apr. 21 to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet)

2.90	236	4.40	975	5.90	1,830	7.80	3,010	9.80	4,350
3.20	347	4.70	1,140	6.20	2,010	8.20	3,270	10.20	4,630
3.50	485	5.00	1,505	6.60	2,250	8.60	3,530	10.60	4,910
3.80	645	5.30	1,470	7.00	2,490	9.00	3,790	11.00	5,190
4.10	810	5.60	1,650	7.40	2,760	9.40	4,070	11.80	5,610

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	6	5	6	5	6	8	3,340	2,490	1,890	772	440
2	7	6	5	6	5	6	8	3,860	2,880	1,860	755	440
3	7	6	5	6	5	6	9	4,070	3,080	2,010	728	435
4	7	6	5	6	5	6	9	3,660	3,340	2,070	711	435
5	7	6	5	5	5	6	9	3,010	3,530	2,070	711	435
6	7	6	5	5	5	6	10	2,680	3,530	1,950	706	435
7	7	6	5	5	5	6	10	2,430	3,600	1,680	706	435
8	7	6	5	5	5	6	10	2,490	3,650	1,500	689	435
9	7	6	5	5	5	7	10	2,620	3,530	1,250	662	430
10	7	6	5	5	5	7	10	2,620	2,940	1,030	656	426
11	7	6	5	5	5	7	10	2,560	2,490	1,140	628	426
12	7	6	5	5	5	7	10	2,370	2,190	1,170	606	455
13	7	6	5	5	5	7	10	2,260	2,190	1,140	596	417
14	7	6	5	5	5	7	10	2,370	2,190	1,080	596	426
15	7	6	5	5	5	7	10	2,680	2,130	1,060	596	440
16	7	6	5	5	5	7	11	2,880	2,070	1,020	557	460
17	7	6	5	5	5	7	11	3,010	2,070	980	546	460
18	7	6	5	5	5	7	11	3,010	2,010	970	540	466
19	7	246	5	5	5	8	477	3,080	1,890	942	540	495
20	7	383	5	5	5	8	1,700	2,940	1,690	904	530	610
21	6	395	5	5	5	8	4,980	2,560	1,440	832	510	515
22	6	316	5	5	5	8	5,330	2,370	1,690	794	495	520
23	6	95	5	5	5	8	4,910	2,260	1,680	788	475	525
24	6	6	5	5	5	8	4,420	2,260	1,660	777	475	525
25	6	5	5	5	5	8	4,210	2,370	1,620	788	460	525
26	6	5	5	5	5	8	4,070	2,620	1,620	794	455	540
27	6	5	5	5	5	8	4,000	2,680	1,710	804	450	552
28	6	5	5	5	5	8	3,790	3,010	1,740	804	435	552
29	6	5	5	5	5	8	3,400	3,400	1,770	799	430	552
30	6	5	5	5	5	8	3,270	3,270	1,770	772	435	249
31	6	-	6	5	-	8	-	2,620	-	766	440	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	207	8	6	6.7	411
November.....	1,579	396	6	52.6	3,130
December.....	168	6	6	5.1	313
Calendar year 1937.....	88,065	772	5	241	174,700
January.....	159	6	5	5.1	315
February.....	167	6	5	5.6	311
March.....	222	8	6	7.2	440
April.....	44,733	5,330	8	1,491	88,730
May.....	87,530	4,070	2,250	2,817	173,200
June.....	69,990	3,560	1,440	2,333	138,800
July.....	36,434	2,070	766	1,175	72,270
August.....	17,891	772	430	577	35,470
September.....	13,975	552	249	466	27,720
Water year 1937-38.....	272,826	5,330	5	747	541,100

Big Wood River above North Gooding canal, near Shoshone, Idaho

Location.- Staff gage, lat. 43°06', long. 114°18', in sec. 10, T. 4 S., R. 18 E., 1 mile upstream from North Gooding canal, 13 miles below Magic Dam, and 14 miles northeast of Shoshone.

Records available.- April 1921 to September 1938.

Extremes.- Maximum discharge during year, 4,560 second-feet about Apr. 22 (gage height, 9.53 feet, from high-water marks); no flow Oct. 1 to Apr. 19 and July 21 to Sept. 30. 1921-38: Maximum discharge, that for Apr. 22, 1938; no flow for long periods.

Remarks.- Records good except those for period of missing gage heights, July 18-20, which were computed on basis of field estimates of flow and are poor. Discharge for Apr. 23-27 computed on basis of records for station below Magic Dam. Many diversions for irrigation. Richfield and Lincoln canals are main diversions between station and Magic Dam. Lincoln canal, completed in spring of 1925, diverts all the flow, except during high water, around station on right bank to avoid channel losses in the natural stream bed. Flow regulated by diversions above station and by operation of head gates at Magic Dam. Gage-height record and two discharge measurements furnished by Water-master for Big Wood and Little Wood Rivers.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.20	38	2.00	393	3.80	1,049	5.60	1,925	7.40	3,005	9.20	4,240
.50	71	2.30	480	4.10	1,181	5.90	2,090	7.70	3,200	9.50	4,480
.80	113	2.60	571	4.40	1,315	6.20	2,260	8.00	3,400	9.70	4,640
1.10	168	2.90	675	4.70	1,460	6.50	2,440	8.30	3,610		
1.40	234	3.20	792	5.00	1,610	6.80	2,620	8.60	3,820		
1.70	309	3.50	918	5.30	1,760	7.10	2,810	8.90	4,030		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	2,740	1,560	961		
2							0	3,260	1,870	1,000		
3							0	3,400	2,090	1,090		
4							0	3,140	2,260	1,180		
5							0	2,500	2,620	1,220		
6							0	2,140	2,620	1,180		
7							0	1,870	2,620	1,360		
8							0	1,820	2,740	1,410		
9							0	1,920	2,620	1,050		
10							0	1,870	2,200	752		
11							0	1,870	1,510	639		
12							0	1,660	1,220	393		
13							0	1,510	1,180	309		
14							0	1,610	1,220	234		
15							0	1,320	1,220	168		
16							0	2,040	1,180	148		
17							0	2,260	1,090	91		
18							0	2,260	1,090	29		
19							0	2,260	1,000	12		
20							1,070	2,260	752	10		
21								3,540	1,920	540	0	
22								4,400	1,610	540	0	
23								4,300	1,460	713	0	
24								3,800	1,410	675	0	
25								3,600	1,510	639	0	
26								3,500	1,710	639	0	
27								3,500	1,320	752	0	
28								3,330	1,920	792	0	
29								3,000	2,500	833	0	
30								2,620	2,440	833	0	
31							-	1,920	-	-	0	

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	0	0	0	0	0
November.....	0	0	0	0	0
December.....	0	0	0	0	0
Calendar year 1937.....	0	0	0	0	0
January.....	0	0	0	0	0
February.....	0	0	0	0	0
March.....	0	0	0	0	0
April.....	36,660	4,400	0	1,222	72,710
May.....	64,430	3,400	1,410	2,075	127,800
June.....	41,618	2,740	540	1,367	82,560
July.....	13,236	1,410	0	427	26,250
August.....	0	0	0	0	0
September.....	0	0	0	0	0
Water year 1937-38.....	165,944	4,400	0	427	309,300

Big Wood River below North Gooding canal, near Shoshone, Idaho

Location.- Staff gage, lat. 43°04', long. 114°18', in sec. 15, T. 4 S., R. 18 E., 300 yards downstream from North Gooding canal, 11 miles northeast of Shoshone, and 14 miles downstream from Magic Dam.

Records available.- January 1911 to September 1938. No flow in water years 1928-29, 1930-31, 1933-34 to 1936-37.

Extremes.- Maximum discharge during year, 3,970 second-feet Apr. 22 (gage height, 8.85 feet); no flow Oct. 1 to Apr. 19 and July 21 to Sept. 30.
1911-38: Maximum discharge, that of Apr. 22, 1938; maximum gage height, 15.0 feet, former datum, May 18, 1911; no flow for long periods.

Remarks.- Records good except those above 2,000 second-feet, which are fair, and those for period of missing gage heights, July 18-20, which were computed on basis of field estimates and are poor. Discharge for periods of missing or uncertain gage heights Apr. 23-27, May 3, July 7, 8, 18-20, computed on basis of records for stations below Magic Dam and above North Gooding canal and information furnished by watermaster. Several diversions for irrigation, North Gooding, Richfield, and Lincoln canals divert water between station and Magic Dam. Since completion, in 1925, of Lincoln canal, which diverts 7 miles upstream, most of river flow has been diverted above station. Gage-height record and one discharge measurement furnished by watermaster for Big Wood and Little Wood Rivers.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.40	0.2	2.00	63	3.60	264	5.20	644	6.80	1,540	8.40	3,380
.50	5.0	2.40	99	4.00	337	5.60	788	7.20	1,920	8.80	3,970
1.20	15	2.80	144	4.40	423	6.00	980	7.60	2,350		
1.60	35	3.20	200	4.80	525	6.40	1,240	8.00	2,640		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	2,580	1,380	875		
2							0	3,240	1,630	925		
3							0	3,300	1,920	1,040		
4							0	3,100	2,130	1,100		
5							0	2,350	2,470	1,170		
6							0	1,920	2,350	1,100		
7							0	1,720	2,470	1,240		
8							0	1,630	2,590	1,380		
9							0	1,720	2,350	850		
10							0	1,630	1,920	712		
11							0	1,630	1,380	582		
12							0	1,460	1,040	264		
13							0	1,380	1,040	264		
14							0	1,460	1,100	185		
15							0	1,720	1,040	126		
16							0	1,820	980	120		
17							0	2,130	980	67		
18							0	2,020	980	26		
19							0	2,150	875	8		
20							1,070	2,020	677	2		
21							3,380	1,720	472	0		
22							3,970	1,460	498	0		
23							3,800	1,240	677	0		
24							3,500	1,310	644	0		
25							3,400	1,380	644	0		
26							3,300	1,540	644	0		
27							3,300	1,630	712	0		
28							3,240	1,720	788	0		
29							2,970	2,240	850	0		
30							2,470	2,350	788	0		
31							-	1,720	-	0		
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						0	0	0	0	0	0	
November.....						0	0	0	0	0	0	
December.....						0	0	0	0	0	0	
Calendar year 1937.....						0	0	0	0	0	0	
January.....						0	0	0	0	0	0	
February.....						0	0	0	0	0	0	
March.....						0	0	0	0	0	0	
April.....						34,400	3,970	0	1,147	68,230		
May.....						59,280	3,300	1,240	1,912	117,600		
June.....						37,999	2,590	472	1,267	75,370		
July.....						12,016	1,380	0	366	23,830		
August.....						0	0	0	0	0		
September.....						0	0	0	0	0		
Water year 1937-38.....						143,695	3,970	0	394	285,000		

Big Wood River at Gooding, Idaho

Location.- Water-stage recorder, lat. 42°57', long. 114°43', in NE¼ sec. 31, T. 5 S., R. 15 E., 30 feet downstream from highway bridge and half a mile north of Gooding.

Records available.- April 1921 to September 1938 except for winters. June 1896 to October 1899 at station at approximately same site but known as "Malade River at Toponis, Idaho."

Extremes.- Maximum discharge during year, 3,900 second-feet Apr. 23 (gage height, 8.48 feet); probably no flow for long periods.

1921-38: Maximum discharge, that of Apr. 23, 1938; no flow for long periods in each year.

Remarks.- Records good. None for Dec. 1 to Mar. 31. Many diversions for irrigation both above and below station. Flow regulated by Magic Reservoir, above stations and also affected by deliveries from Milner-Gooding canal, which diverts from Snake River. Gage-height record and 19 discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Rating table, period Apr. 21 to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Sept. 4-30)

1.70	39	3.70	710	5.70	1,880	7.70	3,280
2.10	111	4.10	910	6.10	2,160	8.10	3,580
2.50	216	4.50	1,140	6.50	2,440	8.50	3,900
2.90	360	4.90	1,380	6.90	2,720		
3.30	525	5.30	1,620	7.30	3,000		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	54	0					39	2,370	1,410	965	71	66
2	20						52	2,720	1,650	1,080	73	64
3	3	0					69	3,140	1,880	1,170	71	60
4	1	0					153	3,000	2,020	1,380	75	59
5	0	0					148	2,510	2,230	1,560	81	57
6	0	0					92	2,160	2,230	1,620	79	54
7	0	0					83	1,880	2,300	1,680	77	49
8	0	0					86	1,680	2,370	1,590	49	47
9	0	0					90	1,880	2,370	1,230	62	48
10	0	0					86	1,820	2,150	860	59	49
11	0	0					90	1,820	1,650	860	51	48
12	0	0					115	1,720	1,230	392	59	54
13	0	0					134	1,470	1,050	235	55	54
14	0	0					155	1,500	1,140	242	57	48
15	0	0					165	1,720	1,140	165	59	44
16	0	2					206	1,880	1,080	174	71	46
17	0	11					206	2,090	1,080	160	69	44
18	0	7					238	2,160	1,080	118	69	44
19	0	7					227	2,300	1,050	96	67	51
20	0	8					109	2,300	885	100	67	57
21	0	3					2,380	2,180	610	96	75	55
22	0	0					3,500	1,820	456	95	77	59
23	0	0					3,820	1,820	534	81	69	62
24	0	0					3,660	1,500	810	73	60	57
25	0	0					3,420	1,530	760	73	54	57
26	0	0					3,280	1,650	710	67	55	55
27	0	0					3,070	1,820	735	73	55	54
28	0	0					3,000	1,820	835	69	60	55
29	0	0					2,790	2,160	860	64	66	62
30	0	0					2,440	2,370	865	69	64	62
31	0	-					-	1,950	-	71	67	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	78	54	0	2.5	155
November.....	38	11	0	1.3	75
December.....	-	-	-	-	-
Calendar year					
January.....	-	-	-	-	-
February.....	-	-	-	-	-
March.....	-	-	-	-	-
April.....	33,903	3,820	39	1,130	67,250
May.....	62,520	3,140	1,470	2,017	124,000
June.....	39,200	2,370	456	1,307	77,750
July.....	16,508	1,680	64	533	32,740
August.....	2,023	81	49	65.3	4,010
September.....	1,621	66	44	54.0	3,220
Water year					

Big Wood River near Gooding, Idaho

Location.- Water-stage recorder, lat. 42°54', long. 114°48', in sec. 21, T. 6 S., R. 14 E., at Hudson ranch, 2 miles downstream from bridge on Bliss-Gooding highway, 3½ miles downstream from Little Wood River, 5 miles upstream from diversion dam for King Hill project, and 6 miles southwest of Gooding.

Records available.- March 1916 to September 1938, except for winters.

Extremes.- Maximum discharge during year, 3,810 second-feet Apr. 23 (gage height, 8.77 feet); no flow for short periods.

1916-38: Maximum discharge, that of Apr. 23, 1938; maximum gage height, 9.00 feet Mar. 17, 1922; no flow for some periods in each year.

Remarks.- Records good except those for Jan. 24-31, Feb. 18, 21-24, which were computed on basis of weather records and records for nearby stations in same drainage basin. Diversions for irrigation above and below station. Flow regulated by Magic Reservoir above station and also affected by deliveries from canals diverting from Snake River at Milner. Gage-height record for April to September and 11 discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers; gage-height record for October to March furnished by North Side Canal Co.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Dec. 11				Dec. 12 to Sept. 30			
0.30	0.6	3.30	328	1.10	21	4.10	535
.80	6.2	3.80	446	1.60	59.5	4.60	630
1.30	31	4.30	593	2.10	125	5.10	631
1.80	78.5	4.80	763	2.60	209	5.60	1,073
2.30	147	5.30	962	3.10	303	6.10	1,340
2.80	231			3.60	410	6.60	1,630

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	75	18	52	77	47	103	97	2,240	1,430	851	58	34
2	31	18	48	70	38	398	125	2,630	1,490	1,000	49	35
3	15	21	56	54	39	617	172	2,930	1,730	1,070	50	34
4	16	23	60	65	36	313	313	2,930	1,850	1,260	56	32
5	12	25	66	58	36	144	398	2,530	2,060	1,430	69	80
6	14	25	66	49	35	120	260	2,150	2,150	1,520	62	112
7	19	28	83	48	33	95	254	1,890	2,100	1,560	62	39
8	14	31	68	50	34	88	240	1,660	2,150	1,490	42	40
9	13	36	65	56	34	63	275	1,770	2,150	1,230	52	44
10	13	37	75	60	41	91	283	1,730	2,100	870	56	49
11	6	44	573	56	58	77	260	1,700	1,660	779	43	54
12	7	43	772	52	48	90	283	1,620	1,180	495	40	54
13	9	45	303	58	37	252	293	1,400	1,000	264	31	58
14	5	56	167	58	39	323	344	1,400	1,050	253	30	58
15	6	59	176	60	39	177	398	1,590	1,100	176	36	46
16	1	56	179	50	36	207	433	1,810	1,020	135	54	37
17	1	69	160	38	36	354	410	1,930	1,000	136	56	34
18	5	78	136	41	30	213	457	2,060	1,000	93	56	33
19	1	74	118	37	26	367	396	2,240	1,000	52	52	41
20	24	115	100	35	32	811	223	2,260	532	54	49	50
21	39	85	83	29	35	283	1,610	2,100	762	65	58	54
22	24	70	73	31	35	186	3,480	1,810	495	75	63	58
23	10	122	90	25	40	169	3,700	1,590	728	79	56	70
24	11	124	69	25	40	251	3,590	1,430	779	54	44	66
25	13	84	65	25	42	508	3,370	1,460	728	39	28	62
26	7	58	79	26	46	457	3,260	1,520	680	36	26	58
27	3	51	63	25	58	457	3,150	1,700	698	52	27	62
28	4	45	56	30	57	582	3,040	1,700	745	60	26	66
29	5	50	49	35	-	220	2,730	1,970	796	54	34	73
30	4	48	76	35	-	143	2,330	2,240	851	58	34	90
31	8	-	62	40	-	106	-	1,930	-	54	35	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						418	78	0	13.5	829		
November.....						1,644	124	18	54.8	3,260		
December.....						4,090	772	48	132	8,110		
Calendar year												
January.....						1,403	77	25	45.3	2,780		
February.....						1,138	67	25	40.6	2,260		
March.....						8,265	811	77	267	16,390		
April.....						36,178	3,700	97	1,206	71,750		
May.....						59,940	2,930	1,400	1,934	118,900		
June.....						37,312	2,150	495	1,244	74,010		
July.....						15,344	1,580	36	495	30,450		
August.....						1,434	68	26	46.3	2,840		
September.....						1,625	112	32	54.1	3,220		
Water year 1937-38.....						168,787	3,700	1	462	334,800		

Big Wood Slough at Hailey, Idaho

Location.- Water-stage recorder, lat. 43°31', long. 114°19'30", in sec. 9, T. 2 N., R. 18 E., at highway bridge, an eighth of a mile northeast of steel bridge over Big Wood River, and an eighth of a mile southwest of Hailey.

Records available.- June 1915 to September 1938.

Average discharge.- 23 years, 109 second-feet.

Extremes.- Maximum discharge during year, 303 second-feet Apr. 19 (gage height, 3.84 feet); minimum, 19 second-feet Feb. 18.

1915-38: Maximum discharge observed, 419 second-feet June 6, 1921: maximum gage height, 5.55 feet during period of missing gage heights, Jan. 20-23, 1937 (elevation of top of ice in well); practically no flow May 8, 1931.

Remarks.- Records good. Staff gage read once daily Oct. 11-15, Jan. 20 to Mar. 9, Apr. 2-13. Flow affected by operation of Hailey power plant half a mile up-stream. Big Wood Slough, a natural channel of Big Wood River, is utilized as a tailrace for the power plant, and its discharge plus the discharge of Big Wood River at Hailey, Idaho, equals the total flow of river at this point. Gage heights for period July to September and four discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	94	98	96	32	27	97	120	182	145	146	56	163
2	94	98	87	30	30	99	125	169	145	142	53	166
3	89	101	82	30	26	97	110	154	158	130	67	169
4	91	100	88	33	27	97	124	169	160	103	125	174
5	93	99	87	*32	29	80	118	147	153	91	146	166
6	94	102	89	*31	25	80	126	162	159	76	153	164
7	94	104	94	30	26	94	96	172	159	71	180	163
8	93	109	92	29	30	90	101	168	151	79	181	166
9	92	110	84	30	25	88	108	166	119	79	196	153
10	93	108	97	*30	25	93	119	178	84	72	153	163
11	88	109	168	*30	25	96	120	172	96	67	118	154
12	92	108	136	*29	25	98	142	157	136	56	111	151
13	92	109	36	*29	25	108	142	168	139	47	111	148
14	101	113	32	*29	25	109	173	148	110	47	110	147
15	97	111	32	*28	25	108	80	152	111	68	108	142
16	97	111	31	*28	25	119	93	160	105	78	102	139
17	101	113	30	*28	25	115	142	171	146	79	97	140
18	104	114	30	*27	19	114	204	164	96	75	93	139
19	97	114	29	*27	80	118	242	142	58	90	132	133
20	94	115	29	27	86	118	210	133	46	94	195	136
21	97	116	29	25	84	115	214	138	47	99	218	148
22	97	111	29	25	84	105	216	138	53	99	229	187
23	89	110	29	25	86	113	207	168	56	106	242	205
24	96	113	29	25	88	118	198	183	82	102	235	205
25	97	110	29	26	86	110	189	195	118	102	206	202
26	93	111	29	26	78	112	186	186	150	105	159	201
27	96	102	27	29	78	114	175	160	156	88	147	207
28	94	102	28	29	88	123	172	162	132	83	146	216
29	98	100	28	26	-	114	187	168	120	78	151	228
30	100	99	29	25	-	114	177	146	165	68	157	241
31	99	-	29	26	-	121	-	152	-	64	160	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,946	104	88	95.0	5,840		
November.....						3,220	116	98	107	6,390		
December.....						1,764	168	27	56.9	3,500		
Calendar year 1937.....						43,242	247	25	118	85,770		
January.....						876	33	25	28.3	1,740		
February.....						1,302	88	19	46.5	2,580		
March.....						3,277	123	80	106	6,500		
April.....						4,616	242	80	154	9,160		
May.....						5,000	195	133	161	9,920		
June.....						3,555	165	46	118	7,050		
July.....						2,684	146	47	86.6	5,320		
August.....						4,537	242	53	146	9,000		
September.....						5,103	241	136	170	10,120		
Water year 1937-38.....						38,880	242	19	107	77,120		

*Discharge interpolated.

Camas Creek near Blaine, Idaho

Location.- Water-stage recorder, lat. 43°20', long. 114°33', in sec. 15, T. 1 S., R. 16 E., a quarter of a mile north of Macon siding on Hill City branch of Oregon Short Line Railroad, three-eighths of a mile downstream from Willow Creek, 2½ miles upstream from backwater of Magic Reservoir, and 4 miles southeast of Blaine.

Drainage area.- 618 square miles.

Records available.- May 1912 to September 1938 except for winters. Discharge measurements only for 1922.

Extremes.- Maximum discharge during year, 8,690 second-feet about Apr. 18 (gage height, 15.48 feet, from floodmarks), from rating curve extended above 6,000 second-feet; minimum, 2.2 second-feet Oct. 2 (gage height, 0.98 foot).

1921-38: Maximum discharge, that which occurred about Apr. 18, 1938; minimum, 1.6 second-feet July 10, 11, 13, Aug. 25-29, 31, 1931, Aug. 16-20, 1934 (gage height, 0.90 foot).

Remarks.- Records good except those for periods of missing gage height, Apr. 18-30, May 1-4, 6-10, 20-24, which were computed on basis of weather records and records for Magic Reservoir near Richfield and are fair. Discharge for May 12, July 3-13 interpolated. No record Dec. 1 to Mar. 10. Many small diversions above station. No regulation. Gage-height record and results of four discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Rating table. Mar. 11 to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet)

1.0	2.8	5.5	1,030	10.0	3,470
1.5	18.9	6.0	1,230	11.0	4,250
2.0	86	6.5	1,450	12.0	5,140
2.5	141	7.0	1,700	13.0	6,090
3.0	241	7.5	1,955	14.0	7,090
3.5	364	8.0	2,230	15.0	8,140
4.0	505	8.5	2,510	15.5	8,690
4.5	670	9.0	2,810		
5.0	845	9.5	3,120		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	172	2,000	490	99	9.2	5.2
2	2.3	4.0				-	172	2,500	480	118	8.3	5.0
3	2.3	4.6				-	172	2,000	452	114	5.9	5.4
4	2.4	4.4				-	172	1,600	418	111	5.4	5.9
5	2.4	4.6				-	163	1,270	404	107	4.8	5.0
6	2.7	4.7				-	172	1,000	378	103	4.6	5.2
7	2.7	4.2				-	211	800	364	100	4.4	5.0
8	2.7	4.6				-	298	750	348	96	4.2	5.2
9	2.7	4.4				-	490	700	320	92	5.0	5.0
10	2.7	4.2				-	722	700	500	89	4.8	4.2
11	2.8	4.2				59	990	722	257	85	4.1	5.0
12	2.9	4.2				64	1,500	722	226	81	3.9	5.7
13	2.8	4.7				85	2,180	722	204	78	3.8	5.9
14	2.9	4.9				98	2,510	740	192	74	3.5	5.7
15	3.1	4.9				113	3,260	758	180	78	3.4	5.2
16	3.2	4.4				180	4,420	758	163	72	3.3	4.8
17	3.6	4.4				241	5,290	792	145	65	3.1	4.4
18	3.9	4.4				298	8,000	775	129	59	3.1	4.1
19	3.5	3.9				283	8,000	758	122	54	3.1	3.9
20	3.4	4.7				243	8,000	700	119	46	3.0	4.6
21	3.4	4.6				176	4,500	650	108	39	3.0	4.8
22	3.2	4.7				174	3,500	600	104	32	3.1	4.6
23	3.2	4.2				174	3,000	550	104	25	3.4	4.4
24	3.2	4.4				174	2,500	560	104	22	3.3	4.2
25	3.2	4.2				170	2,500	568	102	18	19	4.2
26	3.2	4.2				172	2,500	564	99	18	12	4.2
27	3.4	4.2				172	2,500	618	94	17	9.2	4.2
28	3.4	3.9				170	1,500	635	92	14	7.1	4.2
29	3.4	3.7				170	1,700	635	87	13	5.7	4.2
30	3.7	3.5				170	1,900	584	92	12	5.0	4.2
31	3.9	-				172	-	536	-	11	4.8	5.2

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	94.4	3.9	2.3	3.05	187
November.....	130.6	4.9	3.5	4.35	259
December.....	-	-	-	-	-
Calendar year					
January.....	-	-	-	-	-
February.....	-	-	-	-	-
March 11-31	3,558	298	59	169	7,060
April.....	73,994	8,000	163	2,466	146,800
May.....	27,287	2,500	536	890	54,120
June.....	6,537	490	87	221	13,160
July.....	1,942	118	11	62.6	3,850
August.....	166.6	19	3.0	5.37	330
September.....	144.6	5.9	3.9	4.82	287
Water year					

Lincoln canal near Richfield, Idaho

Location.- Water-stage recorder, lat. 43°10', long. 114°19', in sec. 9, T. 3 S., R. 18 E., at head of canal, 100 yards east of Shoshone-Hailey highway, 5½ miles downstream from Magic Dam, and 12 miles northwest of Richfield.

Records available.- April 1925 to September 1938 (prior to 1937, irrigation seasons only).

Extremes.- Maximum discharge during year, 239 second-feet July 15; maximum gage height, 2.81 feet Aug. 31; no flow for long periods.
1925-38: Maximum discharge, 706 second-feet May 28, 1927 (gage height, 4.00 feet); no flow for long periods in each year.

Remarks.- Records good. Canal diverts water from right bank of Big Wood River in sec. 9, T. 3 S., R. 18 E., thence approximately parallels river for 10 miles to head of North Gooding canal in sec. 15, T. 4 S., R. 18 E., where water is either diverted into North Gooding canal or returned to Big Wood River. Canal is used to avoid large channel losses in natural bed of river. No diversions above gage. Gage-height record and 10 discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0					0	161	146	194	181	142
2		0					0	162	150	196	186	139
3		0					0	162	153	196	181	139
4		0					0	161	154	196	181	139
5		0					0	157	156	196	179	138
6		0					0	154	156	196	177	136
7		0					0	151	157	66	174	132
8		0					0	150	157	0	174	128
9		0					0	150	156	0	167	128
10		0					0	151	153	0	167	128
11		0					0	150	148	0	164	127
12		0					0	148	144	111	161	126
13		0					0	146	144	191	164	126
14		0					0	146	144	217	164	124
15		0					0	148	144	236	169	130
16		0					0	150	142	235	165	136
17		0					0	153	142	230	164	138
18		0					0	151	139	230	167	136
19		0					0	150	138	226	167	134
20		36					0	150	133	226	167	133
21		93					0	148	130	224	169	138
22		121					56	148	167	203	165	144
23		83					167	146	189	182	162	145
24		0					164	145	189	182	164	144
25		0					165	145	187	201	162	144
26		0					167	146	191	212	156	148
27		0					166	148	189	210	154	153
28		0					164	150	192	206	153	154
29		0					162	150	194	209	150	153
30		0					161	150	194	201	148	85
31		-					-	146	-	192	146	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							0	0	0	0	0	
November.....							333	121	0	11.1	660	
December.....							0	0	0	0	0	
Calendar year												
January.....							0	0	0	0	0	
February.....							0	0	0	0	0	
March.....							0	0	0	0	0	
April.....							1,371	167	0	45.7	2,720	
May.....							4,673	162	145	151	9,270	
June.....							4,778	194	130	159	9,480	
July.....							5,375	239	0	173	10,660	
August.....							5,158	191	146	166	10,230	
September.....							4,067	154	85	136	8,070	
Water year 1937-38.....							25,755	239	0	70.6	51,090	

Lincoln canal near Shoshone, Idaho

Location.— Water-stage recorder, lat. 43°05', long. 114°19', in sec. 15, T. 4 S., R. 18 E., a quarter of a mile upstream from mouth of canal, 7 miles west by north from Richfield, 11 miles north-northeast of Shoshone, and 12½ miles downstream from Magic Dam.

Records available.— May 1925 to September 1938 (1929-36, irrigation seasons only).

Extremes.— Maximum discharge during year, 207 second-feet July 16 (gauge height, 1.37 feet); no flow for long period.

1925-38: Maximum discharge, 667 second-feet May 29, 1927 (gauge height, 2.48 feet); no flow for long periods each year.

Remarks.— Records good. Canal diverts water from right bank of Big Wood River in sec. 9, T. 3 S., R. 18 E., from which point it approximately parallels river for 10 miles to head of North Gooding canal, in sec. 15, T. 4 S., R. 18 E., where its water is either diverted into North Gooding canal or returned to Big Wood River. Canal is used to avoid large channel losses in natural bed of river. Five ditches have rights to divert 12.5 second-feet for irrigation above this station. Gauge-height record and four discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	0					0	134	121	164	160	108
2	0	0					0	138	123	170	157	106
3	0	0					0	138	127	172	150	108
4	0	0					0	138	126	174	147	106
5	0	0					0	136	126	174	147	106
6	0	0					0	131	123	174	145	110
7	0	0					0	127	123	133	143	108
8	0	0					0	127	125	8	143	110
9	0	0					0	127	123	0	136	110
10	0	0					0	126	123	0	131	110
11	0	0					0	125	118	0	129	108
12	0	0					0	123	112	8	114	108
13	0	0					0	118	110	157	118	108
14	0	0					0	118	110	170	121	106
15	0	0					0	123	110	201	123	110
16	0	0					0	125	110	204	123	114
17	0	0					0	125	110	204	118	118
18	0	0					0	125	110	199	116	118
19	0	0					0	123	108	193	121	116
20	0	7					0	123	104	193	121	112
21	0	53					0	121	100	193	121	116
22	0	98					42	121	118	177	121	118
23	0	102					160	118	152	157	118	126
24	0	5					145	116	150	154	118	123
25	0	0					145	118	152	164	118	123
26	0	0					140	123	154	182	112	123
27	0	0					138	125	157	180	112	131
28	0	0					138	125	160	172	112	131
29	0	0					136	127	160	172	108	131
30	0	0					131	127	162	170	108	115
31	0	-					-	123	-	160	110	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						6	6	0	0.2	12		
November.....						265	102	0	8.8	526		
December.....						0	0	0	0	0		
Calendar year												
January.....						0	0	0	0	0		
February.....						0	0	0	0	0		
March.....						0	0	0	0	0		
April.....						1,165	150	0	38.8	2,310		
May.....						3,893	138	116	126	7,720		
June.....						3,805	162	100	127	7,550		
July.....						4,579	204	0	148	9,080		
August.....						3,921	160	108	126	7,780		
September.....						3,458	131	106	115	6,820		
Water year 1937-38.....						21,072	204	0	57.7	41,800		

Thorn Creek spillway near Gooding, Idaho

Location.-- Water-stage recorder, lat. $43^{\circ}01'$, long. $114^{\circ}37'$, in sec. 6, T. 5 S., R. 16 E., 800 feet downstream from diversion from North Gooding canal, 900 feet upstream from Thorn Creek, and $7\frac{1}{2}$ miles northeast of Gooding.

Records available.-- April 1928 to September 1938 (prior to 1937, irrigator seasons only).

Extremes.-- Maximum discharge during year, 447 second-feet Apr. 24 (gage height, 2.90 feet); no flow for long periods.

1928-38: Maximum discharge, that of Apr. 24, 1938; usually no flow during non-irrigation season.

Remarks.-- Records good. Spillway diverts from North Gooding canal and discharges into Thorn Creek in sec. 6, T. 5 S., R. 16 E. It is utilized as part of plan to minimize losses from natural channel of Big Wood River. Gage-height record and results of seven discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0					0	118	84	133	144	138
2	0	0					0	189	80	142	146	133
3	0	0					0	218	109	168	148	131
4	0	0					0	76	122	137	160	131
5	0	0					0	80	111	129	160	127
6	0	0					0	71	120	129	158	122
7	0	0					0	124	111	120	122	120
8	0	0					0	31	118	106	125	118
9	0	0					0	83	124	135	133	116
10	0	0					0	62	113	133	125	115
11	0	0					0	92	115	142	125	115
12	0	0					0	97	95	105	131	118
13	0	0					0	95	115	113	122	115
14	0	0					0	108	116	125	125	111
15	0	5					0	101	122	122	129	111
16	0	68					0	106	124	160	140	111
17	0	44					0	122	135	162	140	113
18	0	42					0	122	140	150	138	115
19	0	35					0	148	152	166	135	122
20	0	9					0	158	154	174	142	124
21	0	3					0	150	142	178	152	124
22	0	1					0	129	142	176	148	125
23	0	0					213	109	152	156	137	125
24	0	0					390	106	158	152	129	124
25	0	0					337	131	152	152	124	122
26	0	0					298	122	142	156	122	122
27	0	0					259	116	135	162	122	124
28	0	0					220	106	138	152	129	125
29	0	0					172	100	135	150	133	127
30	0	0					79	98	135	154	135	79
31	0	-					-	94	-	152	138	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						70	64	0	2.3	139		
November.....						207	68	0	6.9	411		
December.....						0	0	0	0	0		
Calendar year 1937.....						21,245	225	0	58.2	42,150		
January.....						0	0	0	0	0		
February.....						0	0	0	0	0		
March.....						0	0	0	0	0		
April.....						1,968	390	0	65.6	3,900		
May.....						3,482	218	31	112	6,910		
June.....						3,791	158	80	126	7,520		
July.....						4,481	178	105	145	8,890		
August.....						4,217	160	122	136	8,360		
September.....						3,603	138	79	120	7,150		
Water year 1937-38.....						21,819	390	0	59.8	43,280		

Little Wood River near Carey, Idaho

Location.- Water-stage recorder, lat. 43°23', long. 116°00', in E½ sec. 30, T. 1 N., R. 21 E., a third of a mile upstream from West canal, and 6 miles northwest of Carey.

Drainage area.- 312 square miles.

Records available.- April 1904 to May 1905 and September 1926 to September 1938.

February 1920 to September 1926 at site 6 miles upstream; records equivalent except those for spring run-off.

Average discharge.- 15 years (1920-24, 1925-27, 1929-38), 132 second-feet.

Extremes.- Maximum discharge during year, about 6,000 second-feet Apr. 20 (gage height, 12.07 feet, from high-water mark), from rating curve extended above 1,800 second-feet (because of failure of storage reservoirs on Little Fish Creek); minimum discharge, 16 second-feet Nov. 19 (gage height, 0.87 foot).

1904-5, 1925-38: Maximum discharge, that of Apr. 20, 1938; minimum, 5.6 second-feet Aug. 21 and 28, 1934.

Remarks.- Records good except those for periods of possible ice effect, Dec. 1-7, 9, Jan. 21, 24-31, Feb. 18-23, which are fair, and those for Dec. 18 to Jan. 18, which are poor. Discharge for Apr. 23 to Aug. 17 based on twice-daily staff-gage readings. Irrigation diversions and regulation above station. Gage-height record for October, April, and September furnished by watermaster for upper Little Wood River.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	18	27	35	55	51	67	82	1,920	905	563	146	85	
2	18	32	36		47	72	82	1,560	945	563	141	83	
3	18	29	37		45	73	89	1,210	985	636	131	82	
4	18	29	37		43	67	98	1,020	965	636	*127	83	
5	19	28	36		45	61	105	945	945	636	122	77	
6	20	29	35	55	48	61	112	825	945	527	116	74	
7	20	29	35		47	62	131	786	945	457	109	74	
8	20	30	33		49	61	155	710	945	457	103	71	
9	20	30	32		52	63	201	786	965	440	116	68	
10	19	32	42		52	65	249	748	742	423	105	65	
11	19	31	774	55	51	67	291	786	673	406	103	68	
12	19	30	942		49	76	347	1,020	673	372	99	66	
13	19	30	279		47	100	447	905	673	356	98	62	
14	19	33	182		51	105	569	985	636	340	97	61	
15	21	32	155		45	105	718	1,020	636	340	96	57	
16	21	34	125	55	47	122	855	1,070	636	324	96	54	
17	21	36	100		43	144	1,080	1,070	636	308	94	53	
18	23	37	80		50	118	1,820	945	599	293	88	55	
19	22	36	70		56	54	122	2,900	825	492	263	86	52
20	23	40	65		47	56	114	2,100	748	492	599	82	51
21	22	41	60	55	56	97	1,700	673	492	1,020	78	51	
22	22	40		54	56	83	1,700	673	527	406	77	51	
23	23	42		46	56	95	1,740	748	457	220	85	50	
24	24	42		45	56	94	1,740	825	440	220	82	48	
25	*24	41		48	56	83	1,860	945	440	192	82	50	
26	*25	41	60	50	56	84	1,510	1,020	492	206	82	50	
27	*25	36		50	60	86	1,360	1,070	457	192	80	50	
28	*26	35		50	61	95	1,310	1,160	457	179	80	48	
29	26	33		50	-	83	1,410	1,070	457	179	72	50	
30	27	33		50	-	86	1,510	985	563	166	75	52	
31	28	-		50	-	90	-	905	-	153	77	-	
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....						669	28	18	21.6	1,330			
November.....						1,018	42	27	33.9	2,020			
December.....						3,790	942	32	122	7,520			
Calendar year 1937.....						29,742	942	11	61.5	59,000			
January.....						1,641	-	-	52.9	3,250			
February.....						1,432	61	-	51.1	2,840			
March.....						2,701	144	61	87.1	5,360			
April.....						28,271	2,900	82	942	56,070			
May.....						29,958	1,920	673	966	59,420			
June.....						20,141	985	440	671	39,950			
July.....						12,072	1,020	153	389	23,940			
August.....						3,025	146	72	97.6	6,000			
September.....						1,839	86	48	61.3	3,650			
Water year 1937-38.....						106,557	2,900	18	292	211,400			

Little Wood River near Richfield, Idaho

Location.- Water-stage recorder, lat. 43°03', long. 114°08', in sec. 30, T. 4 S., R. 20 E., half a mile upstream from Jim Burn's slough and head of Dietrich canal and 1 mile east of railroad station at Richfield.

Records available.- January 1911 to September 1938 (irrigation seasons only).

Extremes.- Maximum discharge recorded, 868 second-feet May 3 (gauge height, 3.97 feet); minimum recorded, 70 second-feet Oct. 1 (gauge height, 1.37 feet), but may have been less during period of missing gauge heights, Oct. 2-8.
1911-38: Maximum discharge recorded, that of May 3, 1938; minimum recorded, 7.6 second-feet June 24, 25, 1920 (gauge height, 0.52 foot).

Remarks.- Records good. None for Dec. 1 to Mar. 29. Small ranch diversions above gage. Gage-height record and nine discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Rating table, MAR. 30 to Sept. 30 (gauge height, in feet, and discharge, in second-feet)

1.40	87	2.40	322	3.40	660
1.60	120	2.60	385	3.60	734
1.80	158	2.80	450	3.90	849
2.00	205	3.00	518		
2.20	261	3.20	588		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	107				-	131	734	404	270	105	140
2	*72	107				-	127	850	382	319	101	138
3	*72	107				-	129	810	372	334	108	138
4	*73	105				-	133	697	375	379	112	138
5	*73	104				-	142	624	398	401	113	140
6	*73	102				-	150	570	398	430	113	144
7	*74	102				-	156	518	388	417	113	144
8	*74	104				-	156	501	366	401	115	144
9	74	104				-	*167	477	344	385	115	142
10	74	104				-	*179	453	319	379	115	148
11	75	105				-	*190	440	252	359	113	150
12	76	107				-	*202	447	218	344	112	152
13	78	107				-	213	477	198	294	110	152
14	76	111				-	224	501	188	216	110	152
15	83	111				-	270	511	173	173	110	154
16	92	113				-	297	*514	171	*160	113	152
17	89	111				-	310	518	167	*147	115	152
18	91	115				-	334	556	167	134	122	150
19	96	117				-	365	518	185	129	125	152
20	98	*120				-	518	494	190	124	125	152
21	107	*124				-	606	454	154	120	122	152
22	109	127				-	642	382	148	117	122	148
23	111	127				-	697	353	180	113	124	146
24	109	127				-	772	359	192	113	127	142
25	107	125				-	753	369	198	113	129	142
26	105	121				-	810	385	190	112	131	142
27	111	119				-	753	401	202	103	140	140
28	109	117				-	697	427	*216	98	146	140
29	107	117				-	660	460	235	97	142	140
30	107	*115				156	678	467	235	100	140	*140
31	107	-				134	-	437	-	101	140	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						2,774	111	72	89.5	5,500		
November.....						3,382	127	102	113	6,710		
December.....						-	-	-	-	-		
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March.....						-	-	-	-	-		
April.....						11,481	810	127	383	22,770		
May.....						15,644	830	353	505	31,030		
June.....						7,605	404	148	254	15,080		
July.....						6,984	430	97	225	13,850		
August.....						3,728	146	101	120	7,390		
September.....						4,866	154	138	146	8,660		
Water year												

*Interpolated.

†Determined from staff-gage reading.

BIG WOOD RIVER BASIN

Little Wood River at Shoshone, Idaho

Location.— Water-stage recorder, lat. 42°56', long. 114°24', in sec. 2, T. 6 S., R. 17 E., just upstream from diversion dam for town water supply and 400 feet upstream from Shoshone-Richfield highway bridge in Shoshone.

Records available.— April 1922 to September 1938 (irrigation seasons only).

Extremes.— Maximum discharge recorded, 578 second-feet July 4 (gage height, 3.85 feet); minimum, 5 second-feet (estimated) Oct. 2 (gage height, 0.62 foot).

1922-38: Maximum discharge, 664 second-feet June 18, 1922; maximum gage height, 3.85 feet July 4, 1938; practically no flow July 29, 1931.

Remarks.— Records good. None for Nov. 12 to Mar. 30. Many irrigator diversions both above and below station. Flow is affected, also, by operation of Milner-Gooding canal, which diverts from Snake River and crosses this stream above station. Gage-height record and 20 discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Rating table, May 3 to Sept. 30 (gage height, in feet, and discharge in second-feet)
(Shifting-control method used May 3 to June 23)

1.20	196	2.20	421	3.20	520
1.40	268	2.40	442	3.40	538
1.60	330	2.60	462	3.60	556
1.80	370	2.80	482	3.80	574
2.00	398	3.00	502		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	65					52	408	361	500	400	337
2	22	65					50	446	334	519	398	337
3	35	65					48	533	330	560	406	337
4	31	65					48	520	394	565	417	339
5	31	65					52	479	420	554	409	337
6	28	65					58	456	430	556	403	334
7	24	68					70	597	409	536	390	334
8	22	65					†76	420	418	506	368	332
9	22	68					*83	437	428	448	370	332
10	35	89					*90	430	439	452	370	332
11	38	87					*97	416	436	444	356	341
12	31	-					*104	417	398	434	332	339
13	33	-					*111	366	424	461	322	337
14	35	-					†118	384	463	435	319	332
15	40	-					131	404	461	416	327	332
16	55	-					147	422	453	442	337	332
17	45	-					199	420	451	430	341	334
18	40	-					247	422	454	414	337	337
19	40	-					268	446	463	433	334	337
20	52	-					305	460	470	434	343	345
21	48	-					369	448	471	431	348	348
22	55	-					254	412	479	421	339	350
23	55	-					330	372	510	405	334	343
24	45	-					357	341	545	393	330	339
25	45	-					363	374	536	366	332	341
26	45	-					363	385	522	399	332	339
27	52	-					385	366	515	403	332	339
28	70	-					367	395	525	398	343	341
29	65	-					359	400	507	403	339	345
30	65	-					353	412	501	404	334	197
31	65	-				52	-	406	-	405	337	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							1,304	70	22	42.1	2,590	
November 1-11							767	89	65	69.7	1,520	
December.....							-	-	-	-	-	
Calendar year												
January.....							-	-	-	-	-	
February.....							-	-	-	-	-	
March.....							-	-	-	-	-	
April.....							5,854	395	48	195	11,610	
May.....							13,034	533	341	420	25,850	
June.....							13,547	545	330	452	26,870	
July.....							14,007	565	386	452	27,780	
August.....							10,977	417	319	354	21,770	
September.....							9,999	350	197	333	19,830	
Water year												

*Interpolated.

†Determined from staff-gage reading.

Fish Creek above dam near Carey, Idaho

Location.- Water-stage recorder and sharp-crested control, in sec. 2, T. 1 N., R. 22 E., 1 1/4 miles upstream from West Fork of Fish Creek, 1 1/4 miles upstream from dam of Carey Valley Reservoir Co., and 14 miles northeast of Carey.

Drainage area.- About 56 square miles.

Records available.- May 1920 to September 1938 (irrigation seasons only except 1921, 1922, 1923, 1927).

Extremes.- Maximum discharge recorded during year, 167 second-feet May 1 (gage height, 1.94 feet); minimum recorded, 1.6 second-feet Sept. 7 (gage height, 0.10 foot).
1920-38: Maximum discharge, that of May 1, 1938; no flow Sept. 9-12, Oct. 17-27, 1926.

Remarks.- Records good. No regulation. During high stages of 1938 water bypassed station. On Apr. 24, May 8, and May 29, 84 second-feet, 10 second-feet, and 9 second-feet, respectively, was measured, additional to flow passing gage. Several small diversions above gage. Gage-height record furnished by watermaster for Fish Creek.

Rating table, period Apr. 24 to Sept. 30 (gage height, in feet, and discharge, in second-feet)

0.10	1.6	1.30	91
.40	14.7	1.60	125
.80	44.5	1.90	162
1.00	62	2.00	175

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.2	-					-	165	58	18	7.9	4.3
2	2.2	-					-	152	54	25	7.0	3.9
3	2.2	1.9					-	157	52	31	6.6	3.6
4	-	-					-	126	49	34	6.2	3.6
5	-	-					-	118	47	34	6.2	3.6
6	-	-					-	111	43	28	5.8	3.9
7	-	-					-	*102	41	24	4.3	2.9
8	-	-					-	92	41	21	3.9	1.9
9	-	-					-	87	39	20	4.3	2.6
10	-	-					-	85	37	19	4.3	2.9
11	-	-					-	90	34	18	4.3	3.2
12	-	-					-	94	35	17	5.0	3.9
13	-	-					-	100	32	16	4.6	4.3
14	-	5.2					-	104	29	15	4.6	4.6
15	-	-					-	108	29	16	4.6	4.3
16	-	-					-	112	28	19	4.6	3.9
17	1.9	-					-	111	27	17	4.6	3.9
18	-	-					-	104	26	15	4.6	2.9
19	-	-					-	95	25	14	5.0	2.6
20	-	-					-	81	22	14	6.2	2.6
21	-	-					-	71	20	12	5.0	2.6
22	-	-					-	63	20	11	4.3	2.6
23	-	-					-	66	21	10	4.3	2.6
24	1.9	-					-	148	71	21	8.8	3.9
25	-	-					-	156	74	20	7.9	3.9
26	-	-					-	153	77	18	7.9	3.9
27	-	-					-	147	77	17	7.5	4.3
28	-	-					-	142	72	16	7.9	3.9
29	-	-					-	145	69	16	8.4	3.6
30	-	-					-	152	68	17	7.9	3.6
31	2.6	-					-	62	-	8.4	4.3	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....												
November.....												
December.....												
Calendar year												
January.....							-	-	-	-	-	
February.....							-	-	-	-	-	
March.....							-	-	-	-	-	
April 24-30.....							1,043	156	142	147	2,070	
May.....							2,944	165	62	93.0	5,840	
June.....							932	58	16	31.1	1,850	
July.....							512.7	34	7.5	16.5	1,020	
August.....							149.6	7.9	3.6	4.83	297	
September.....							91.1	4.6	1.9	3.04	181	
Water year												

*Interpolated.

Fish Creek near Carey, Idaho

Location.— Water-stage recorder, in sec. 15, T. 1 N., R. 22 E., 600 feet downstream from Carey Valley Reservoir Co.'s dam and 11 miles northeast of Carey.

Records available.— April 1919 to September 1920, May 1923 to September 1938 (irrigation seasons only 1924-29, 1931-33). 1921 and 1922, discharge measurements.

Extremes.— Maximum discharge during year, 341 second-feet May 1 (gage height, 3.10 feet); minimum, 0.3 second-foot Nov. 20 to Dec. 28.
1919-20, 1923-38: Maximum discharge, that of May 1, 1938; reservoir gates usually closed during nonirrigation season and flow past station is leakage only.

Remarks.— Records good except those for discharges below 4 second-feet, which are fair. Discharge for Oct. 9, 24, 31, Nov. 15 to Dec. 2, Apr. 23, 24, May 22, 25, June 11, 14, July 7 computed on basis of reported gate changes. Discharge for period of missing gage heights, Oct. 4-8, 10-16, 18-23, 25-30, Nov. 1, 2, 4, 6-13, Dec. 4 to Jan. 18, Jan. 20 to Mar. 8, Mar. 10 to Apr. 22, May 26, 27, June 12, 13, 15-17, July 8, Aug. 28 to Sept. 2 interpolated. Flow regulated by storage in Fish Creek Reservoir. No diversions between station and dam. An unknown quantity of water bypassed station during high stages. P. C. Benedict measured 41.1 second-feet, Apr. 29, in flood channel additional to that passing station. Gage-height record furnished by watermaster for Fish Creek.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.00	0	0.80	43.5	2.00	180
.05	.7	1.00	61.3	2.30	222
.20	5.15	1.20	81.2	2.60	266
.40	14.6	1.40	103	2.90	311
.60	27.8	1.70	140	3.10	341

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.4	4.4	0.3	0.4	0.4	0.6	1.4	311	64	16	72	6.0
2	4.4	4.4	.3	.4	.4	.6	1.5	354	65	16	59	6.0
3	4.4	4.4	.3	.4	.4	.6	1.5	334	63	14	59	6.0
4	4.4	4.4	.3	.4	.4	.6	1.5	274	63	11	59	4.6
5	4.4	4.4	.3	.4	.5	.6	1.6	160	61	11	59	1.6
6	4.4	4.5	.3	.4	.5	.6	1.6	81	45	8.6	59	1.6
7	4.4	4.6	.3	.4	.5	.6	1.6	81	57	4.8	59	1.6
8	4.4	4.7	.3	.4	.5	.6	1.7	87	88	2.5	76	1.8
9	5.3	4.8	.3	.4	.5	.6	1.7	94	79	2.5	75	1.8
10	6.0	4.8	.3	.4	.5	.6	1.7	101	79	2.5	75	1.6
11	6.0	4.9	.3	.4	.5	.7	1.8	103	69	6.5	75	1.8
12	6.0	5.0	.3	.4	.5	.7	1.8	92	54	9.4	75	2.2
13	6.0	5.1	.3	.4	.5	.7	1.8	92	54	16	67	5.6
14	6.0	5.2	.3	.4	.5	.8	1.9	92	53	20	45	3.4
15	6.0	5.2	.3	.4	.5	.8	1.9	89	48	22	26	1.6
16	6.0	3.6	.3	.4	.5	.8	2.0	109	48	26	21	1.6
17	6.0	.4	.3	.4	.5	.9	2.0	113	48	26	20	1.6
18	6.0	.4	.3	.4	.5	.9	2.0	113	48	29	18	1.8
19	6.0	.4	.3	.4	.5	1.0	2.1	121	41	47	18	1.8
20	6.0	.3	.3	.4	.5	1.0	2.1	136	35	56	18	1.6
21	6.0	.3	.3	.4	.6	1.0	2.1	143	29	60	19	1.6
22	6.0	.3	.3	.4	.6	1.1	2.2	135	26	63	21	1.4
23	6.0	.3	.3	.4	.6	1.1	15	95	22	74	9.4	1.8
24	5.7	.3	.3	.4	.6	1.1	104	63	20	78	9.4	6.0
25	5.2	.3	.3	.4	.6	1.2	187	23	20	78	8.6	7.2
26	5.2	.3	.3	.4	.6	1.2	208	15	21	77	6.0	8.6
27	5.2	.3	.4	.4	.6	1.2	187	14	21	77	6.0	9.4
28	5.2	.3	.4	.4	.6	1.3	194	14	21	79	6.0	9.4
29	5.2	.3	.4	.4	-	1.3	208	20	17	84	6.0	9.4
30	5.2	.3	.4	.4	-	1.3	251	40	15	83	6.0	29
31	4.9	-	.4	.4	-	1.4	-	65	-	83	6.0	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	165.3	6.0	4.4	5.36	330
November.....	78.9	5.2	.3	2.63	156
December.....	9.8	.4	.3	.32	19
Calendar year 1937.....	3,669.0	77	-	10.1	7,280
January.....	12.4	.4	.4	.40	25
February.....	14.4	.6	.4	.51	29
March.....	27.5	1.4	.6	.89	55
April.....	1,393.5	251	1.4	46.4	2,760
May.....	3,544	334	14	114	7,030
June.....	1,372	88	15	45.7	2,720
July.....	1,180.8	84	2.5	38.1	2,340
August.....	1,138.4	76	6.0	36.7	2,660
September.....	139.4	29	1.4	4.65	276
Water year 1937-38.....	9,077.4	334	.3	24.9	18,000

Silver Creek near Picabo, Idaho

Location.— Water-stage recorder, lat. 43°17', long. 114°01', in sec. 1, T. 2 S., R. 20 E., 1½ miles downstream from drain ditch of Blaine County Drainage District No. 1 and 3 miles southeast of Picabo.

Records available.— May 1920 to September 1938 (1922-35, irrigation seasons only).

Extremes.— Maximum discharge during year, 245 second-feet Dec. 13 (gage height, 2.96 feet); minimum, 58 second-feet June 11 (gage height, 0.95 foot).
1920-38: Maximum discharge, 312 second-feet Apr. 5, 1923; maximum gage height, 5.41 feet Apr. 15, 1938; minimum discharge, 26 second-feet June 2, 1920 (gage height, 0.46 foot).

Remarks.— Records good except those for periods of ice effect, Dec. 26, 27, Jan. 25-28, which were computed on basis of weather records and records for stations on nearby streams and are fair. Discharge for Apr. 18-21, 24 interpolated. Many diversions for irrigation above station. Some water is bypassed around station by slough on right bank heading 500 feet above gage. Gage-height record and 12 discharge measurements furnished by watermaster for Big Wood and Little Wood Rivers.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	109	118	114	115	109	115	135	134	64	165	150	171
2	103	118	114	111	108	130	136	134	62	187	161	176
3	98	116	113	110	107	157	143	135	62	189	153	177
4	105	114	112	109	107	159	153	131	62	193	154	175
5	98	110	111	108	107	147	169	127	62	199	158	173
6	90	111	108	109	107	141	176	125	63	212	157	173
7	89	113	107	108	106	141	178	126	61	212	157	172
8	88	113	109	107	108	142	185	127	62	202	157	173
9	88	112	109	107	108	142	187	128	64	196	153	173
10	91	114	113	107	112	145	184	124	62	191	154	172
11	93	115	158	107	109	151	175	121	60	188	147	171
12	98	116	213	109	110	156	169	119	61	187	146	171
13	100	115	221	108	107	182	166	121	68	186	147	171
14	100	117	166	108	110	205	179	119	70	186	148	171
15	106	121	141	108	111	196	179	116	70	185	153	170
16	112	116	131	109	109	195	160	110	74	179	157	168
17	116	121	126	110	106	220	150	111	80	179	161	168
18	123	125	124	109	122	199	147	110	82	173	160	167
19	123	124	121	108	113	187	144	120	94	166	162	167
20	123	127	118	108	109	188	141	121	92	163	160	166
21	124	130	117	108	108	175	138	124	93	162	159	165
22	123	131	116	110	108	165	135	100	105	160	164	163
23	122	130	116	104	107	167	134	90	114	158	165	164
24	120	126	113	88	108	155	132	80	124	153	164	167
25	120	124	91	100	108	142	131	77	123	150	168	167
26	125	124	130	100	106	142	133	65	118	148	169	167
27	125	121	120	105	107	148	137	65	119	140	169	167
28	121	119	114	105	107	154	134	63	124	140	169	166
29	121	117	113	109	-	131	133	67	132	144	169	166
30	121	116	113	106	-	148	129	69	139	148	167	167
31	119	-	110	107	-	138	-	68	-	150	168	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	3,394	125	88	109	6,730
November.....	3,575	151	110	119	7,080
December.....	3,882	221	91	125	7,700
Calendar year 1937.....	42,549	245	-	117	84,390
January.....	3,317	115	88	107	6,580
February.....	3,044	122	106	109	6,040
March.....	4,963	220	115	160	9,840
April.....	4,592	197	129	153	9,110
May.....	3,328	135	65	107	6,800
June.....	2,568	139	60	85.5	5,090
July.....	5,391	212	140	174	10,690
August.....	4,916	169	146	159	9,750
September.....	5,084	177	163	169	10,080
Water year 1937-38.....	48,050	220	60	132	95,300

Note.— The following measurements of discharge in second-feet in bypass channel, which carries water around station, have been made during water year 1937-38:

Oct. 23.....	*1	July 7.....	35.8
Jan. 17.....	*1.5	20.....	*7
Mar. 11.....	8.57	22.....	6.29
Apr. 6.....	*15	Sept. 6.....	19.6
25.....	*3	26.....	*10

* Discharge estimated.

King Hill canal near Hagerman, Idaho

Location.- Staff gage, lat. 42°52', long. 114°55', in SW $\frac{1}{4}$ sec. 27, T. 6 S., R. 13 E., half a mile west of highway bridge over Big Wood River, 1,000 feet downstream from heading at Idaho Power Co.'s canal, 430 feet upstream from mouth of inverted syphon crossing Snake River, and 3 $\frac{1}{2}$ miles north of Hagerman.

Records available.- March 1930 to September 1938 (prior to 1938 irrigation seasons only).

Extremes.- Maximum discharge during year, 296 second-feet May 15, 16; maximum gage height, 3.57 feet Aug. 26-29; no flow (reported) June 12-14, July 24-26, Aug. 18-20.
1930-38: Maximum discharge, 308 second-feet May 24-26, 1937; maximum gage height, 3.64 feet July 3, 4, 1931, Aug. 13 to Sept. 4, 1935, Aug. 11-14, Aug. 16 to Sept. 1, 1936; practically no flow for long periods when gates were closed.

Remarks.- Records good. Gage read twice daily during irrigation season. Water is diverted from Big Wood River through Idaho Power Co.'s canal by King Hill Irrigation District for use on its project. Gage-height record furnished by King Hill Irrigation District.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	251	5	5	*5			5	228	278	273	288	278
2	251	5	5	5			5	230	281	270	288	278
3	249	5	5	5			5	230	284	267	286	278
4	246	5	*5	5			5	227	291	263	290	275
5	243	5	5	5			5	224	291	260	290	275
6	238	*5	5	5		5	5	224	291	252	288	275
7	238	5	5	5			5	221	291	252	284	273
8	241	5	5	15			44	221	291	255	288	271
9	241	5	5				139	178	291	262	284	271
10	172	*5	5				141	199	291	268	286	270
11	5	5	*5				149	263	291	275	290	268
12	5	5	5			15	154	263	194	279	290	268
13	5	*5	5			5	138	1273	10	283	288	268
14	5	5	*5			5	151	279	193	283	288	268
15	5	5	5			5	175	1290	278	283	288	268
16		*5	5			5	181	1292	281	283	288	268
17		5	5			5	181	1268	281	281	281	267
18		5	5	*5		5	181	1268	281	281	170	263
19		5	5	5		5	192	282	284	281	10	262
20		5	*5	5	5	5	203	257	284	281	115	262
21		5	5	5		5	203	257	286	281	275	262
22		5	5	5		5	203	249	288	281	278	262
23		*5	5	5		5	203	246	288	281	279	262
24		5	5	5		5	208	1250	290	1193	283	262
25		5	5	*5		5	218	1257	290	10	264	259
26	6	5	5			5	220	260	288	178	284	254
27	6	*5	5			5	222	1268	288	280	286	251
28	*6	5	5			5	221	271	148	283	286	246
29	6	5	5			5	226	1273	193	284	286	246
30	*5	5	5			5	227	278	270	284	283	246
31	5	-	5		-	5	-	278	-	286	281	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	2,479	251	5	80.0	4,920
November.....	150	5	5	5.0	298
December.....	155	5	5	5.0	307
Calendar year					
January.....	155	-	-	5.0	307
February.....	140	-	-	5.0	278
March.....	155	-	-	5.0	307
April.....	4,215	227	5	140	8,380
May.....	7,778	292	178	251	15,430
June.....	7,578	291	0	253	15,030
July.....	7,943	288	0	258	15,750
August.....	8,171	290	0	264	16,120
September.....	7,956	278	246	265	15,790
Water year 1937-38	46,875	292	0	128	92,980

*Gage reading by observer.

†Discharge measurement.

‡Discharge computed on basis of observer's notes.

Note.- Discharge for period Oct. 10 to Apr. 8 computed on basis of gage readings by observer and discharge measurements.

Clover Creek near Bliss, Idaho

Location.- Staff gage, lat. 42°59', long. 115°01', in SW $\frac{1}{4}$ sec. 15, T. 5 S., R. 12 E., at Whitlatch ranch, just upstream from flow line of Saunders Reservoir, $\frac{3}{4}$ miles upstream from Hog Creek, and 5 miles northwest of Bliss.

Records available.- April to September 1938.

Extremes.- Maximum discharge observed during period, 86 second-feet Apr. 28 (gage height, 292 feet); practically no flow Aug. 28, 29.

Remarks.- Records fair. Discharge interpolated Apr. 29 to May 5 and May 7-9. Several irrigation diversions above and below station. Gage read twice daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	68	8.7	0.9	3.6	0.3
2							-	62	9.4	1.6	3.2	.4
3							-	56	9.4	2.5	3.2	.4
4							-	50	9.8	2.3	3.2	.6
5							-	44	8.7	3.7	3.0	.5
6							-	*58	7.8	4.6	3.3	1.0
7							-	36	7.5	3.9	3.3	.6
8							-	34	7.2	4.1	3.2	.6
9							-	32	7.2	3.6	3.2	.8
10							-	30	7.2	3.6	2.9	.8
11							-	28	7.5	3.3	.7	.9
12						*161	-	22	5.3	3.3	1.0	1.0
13							-	20	6.5	3.0	1.5	1.0
14							-	17	5.3	3.0	1.2	.7
15							-	16	5.6	2.5	.2	.8
16							-	16	5.3	2.3	1.5	.5
17							-	15	5.1	2.1	2.2	.9
18							-	15	5.3	1.8	1.0	.6
19							-	27	6.2	1.5	.9	.9
20							-	17	5.3	1.3	.8	1.4
21							-	16	5.0	1.1	.8	1.7
22							-	17	4.8	1.0	.9	1.7
23							-	15	5.7	1.0	.9	1.9
24							-	15	.7	1.0	1.3	1.9
25							-	12	2.9	1.0	.2	1.9
26							-	11	1.4	1.2	.1	1.9
27							-	10	1.9	2.1	.1	1.9
28							86	8.4	1.9	2.3	.0	1.9
29							80	7.0	.4	3.7	.0	1.9
30							74	11	.7	3.4	.1	2.3
31							-	8.7	-	3.4	.2	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....							774.1	68	7.0	25.0	1,540	
June.....							163.4	9.8	.4	5.45	324	
July.....							76.1	4.6	.9	2.45	151	
August.....							47.7	3.6	0	1.54	95	
September.....							33.6	2.3	.3	1.12	67	
The period.....											2,180	

*Discharge measurement.

King Hill Creek near King Hill, Idaho

Location.- Staff gage, lat. 43°01', long. 115°14', in SW $\frac{1}{4}$ sec. 2, T. 5 S., R. 10 E., at road bridge on Worth Montgomery ranch, $\frac{1}{4}$ miles above mouth, and $\frac{1}{4}$ miles northwest of King Hill.

Drainage area.- 83.6 square miles.

Records available.- April to September 1938. February to May 1913 at site $\frac{1}{4}$ miles upstream.

Extremes.- Maximum discharge observed during period, 202 second-feet Apr. 28 (gage height, 3.12 feet); minimum observed, 0.3 second-foot Sept. 27; minimum gage height, -0.60 foot Aug. 16, Sept. 1, 3-5, 8, 9, 23-28.
1913, 1938: Maximum discharge, 302 second-feet Mar. 30, 1913; minimum, 0.2 second-foot Feb. 21, 22, 1913.

Remarks.- Records fair. Discharge for June 8-25 computed on basis of records for stations in adjacent drainage basins. Discharge interpolated Apr. 29 to May 2, June 26. Several irrigation diversions above station. Gage read twice daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	168	13	4.8	1.7	0.7
2							-	157	10	6.6	1.7	.6
3							-	146	10	6.9	1.7	.5
4							-	130	10	7.1	1.6	.5
5							-	123	9.8	7.1	1.4	.5
6							-	102	9.8	6.6	1.2	.8
7							-	92	9.8	6.7	1.2	.8
8							-	81	9.0	5.4	1.2	.6
9							-	78	8.0	4.8	1.2	.6
10							-	75	7.5	4.8	1.1	.7
11							-	72	7.0	4.8	.9	.6
12							-	66	6.5	4.5	.9	.5
13							-	63	6.5	4.5	.7	.6
14							-	57	6.0	6.6	.6	.5
15							-	54	6.0	6.9	.6	.6
16							-	51	5.5	7.3	.6	.8
17							-	48	5.5	6.2	.9	.8
18							-	45	5.5	4.0	.9	.6
19							-	48	5.0	3.6	.9	.6
20							-	45	4.5	3.2	1.0	.6
21							-	40	4.0	2.4	.9	.6
22							-	38	3.5	1.9	1.1	.5
23							-	31	3.0	1.9	1.1	.4
24							-	28	2.5	1.9	1.2	.4
25							-	24	2.0	1.9	.9	.4
26							-	21	1.8	1.9	.9	.4
27							-	20	1.7	1.9	.9	.4
28							-	202	19	1.7	.9	.5
29							-	191	18	1.9	.9	.5
30							-	180	17	2.2	1.8	.9
31							-	16	-	1.7	.9	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....						1,973	168	16	63.6	3,910		
June.....						179.1	13	1.7	5.97	355		
July.....						153.5	7.3	1.7	4.31	265		
August.....						32.6	1.7	.6	1.06	66		
September.....						17.1	.8	.4	.57	34		
The period.....										4,650		

Bennett Creek near Bennett, Idaho

Location.- Water-stage recorder, lat. 43°13'30", long. 115°31'30", in sec. 28, T. 2 S., R. 8 E., 100 yards downstream from East Fork of Bennett Creek and 7½ miles southwest of Bennett post office (Dixie Store).

Drainage area.- 21.3 square miles.

Records available.- May to September 1938.

Extremes.- Maximum discharge during period, 38 second-feet May 19 (gage height, 0.94 foot); minimum, 0.7 second-foot Sept. 19-30 (gage height, -0.26 foot).

Remarks.- Records good. Discharge for May 20-23, Sept. 25-29 interpolated. No regulation or diversion above station; many diversions for irrigation below.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								-	15	4.1	1.6	.9
2								-	14	5.1	1.6	.9
3								-	13	4.9	1.6	.9
4								37	12	4.2	1.6	.8
5								34	11	4.1	1.6	.9
6								32	11	3.8	1.5	.8
7								30	9.8	3.4	1.5	.8
8								26	9.3	3.0	1.5	.8
9								25	8.6	2.9	1.5	.8
10								24	8.1	2.9	1.4	.8
11								23	7.0	2.4	1.3	.8
12								25	6.8	2.5	1.3	.8
13								26	6.8	2.3	1.3	.8
14								28	6.4	2.3	1.3	.8
15								29	6.0	2.6	1.2	.8
16								30	5.8	2.4	1.2	.8
17								30	5.8	2.2	1.2	.8
18								32	5.6	2.1	1.2	.8
19								36	5.6	2.0	1.2	.7
20								32	5.3	2.0	1.2	.7
21								28	5.8	2.0	1.1	.7
22								25	6.4	2.0	1.2	.7
23								21	7.2	1.9	1.1	.7
24								17	5.1	1.9	1.2	.7
25								17	4.4	1.8	1.1	.7
26								18	4.1	1.8	1.0	.7
27								21	3.9	1.9	1.0	.7
28								20	3.6	1.8	1.0	.7
29								18	3.6	1.8	1.0	.7
30								16	4.6	1.7	1.0	.7
31								16	-	1.7	1.0	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May 4-31.....				716	37	16	25.6	1.20	1.25	1,420		
June.....				221.6	15	3.6	7.39	.347	.39	440		
July.....				81.5	5.1	1.7	2.63	.123	.14	162		
August.....				39.5	1.6	1.0	1.27	.596	.69	78		
September.....				23.2	.9	.7	.77	.036	.04	46		
The period.....										2,150		

Peak discharge.- May 27 (6:45 p.m.) 35 sec.-ft.; June 23 (1:30 a.m.) 16 sec.-ft.; July 2 (7 p.m.) 7.0 sec.-ft.

Mountain Home feeder canal near Mountain Home, Idaho

Location.- Water-stage recorder above concrete control, lat. 43°13', long. 115°42', in sec. 36, T. 2 S., R. 6 E., 30 feet downstream from point of diversion from Canyon Creek and 5 miles north of Mountain Home.

Records available.- April 1924 to September 1929, April 1931 to September 1938.

Extremes.- Maximum discharge during year, 127 second-feet Mar. 19 (gage height, 1.82 feet); minimum, 1 second-foot Mar. 31 to Apr. 5.
1924-29, 1931-38: Maximum discharge, 226 second-feet Feb. 21, 1927 (gage height, 2.18 feet, former datum); no flow for long periods in each year.

Remarks.- Records good except those for Mar. 23-31, Apr. 2-10, which were computed on basis of partial gage-height record and information furnished by watermaster and are fair. Result of discharge measurement shown for Apr. 1. Discharge for Oct. 11, Nov. 1, Dec. 26, July 2, 27, Aug. 2-6, 10-12, 19, 20, Sept. 25-30 interpolated. No record Jan. 9 to Feb. 5. Canal diverts from Canyon Creek in sec. 36, T. 2 S., R. 6 E. Water for irrigation of about 5,000 acres included in project of Mountain Home Irrigation District is delivered to Mountain Home cooperative canal, which heads in Mountain Home feeder canal half a mile below station. At times when there is a surplus of water for irrigation, canal feeds directly into Mountain Home Reservoir. No diversions from canal above station; three small diversions between station and head gates of Mountain Home cooperative canal, half a mile downstream. Flow regulated by head gates in Canyon Creek and by storage in Long Tom Reservoir. Gage-height record furnished by Mountain Home Irrigation District.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	2	5	10	-	38	1	87	73	85	65	62
2	2	2	5	10	-	80	1	83	72	86	65	62
3	1	2	5	9	-	88	1	77	72	86	61	61
4	1	2	5	9	-	80	1	72	73	82	59	57
5	1	2	5	9	-	76	1	68	71	76	58	57
6	1	2	5	8	15	70	2	66	73	74	56	56
7	1	2	5	8	15	64	6	64	76	73	54	55
8	1	2	5	7	14	59	6	59	74	73	54	54
9	1	2	6	-	14	56	6	45	73	70	56	52
10	1	2	7	-	15	53	15	41	73	59	58	53
11	1	2	11	-	18	51	44	40	73	59	59	50
12	1	2	37	-	25	52	47	41	73	59	60	46
13	1	2	31	-	28	76	64	41	75	59	62	45
14	1	2	26	-	28	85	64	43	75	58	62	45
15	1	2	25	-	27	87	60	44	75	66	62	44
16	1	2	26	-	24	107	59	43	73	68	62	43
17	2	2	26	-	22	111	59	66	73	66	62	42
18	3	3	24	-	19	106	63	72	73	66	62	39
19	2	3	24	-	19	116	63	74	72	67	61	36
20	2	4	22	-	19	119	62	74	71	68	61	36
21	2	4	20	-	18	117	71	73	70	67	60	34
22	2	4	19	-	17	114	85	72	72	67	62	20
23	2	5	17	-	16	90	99	70	72	66	62	19
24	2	5	16	-	16	-	100	71	71	65	62	18
25	2	5	15	-	16	-	98	69	69	65	62	18
26	2	5	14	-	17	60	91	70	68	65	62	18
27	2	6	14	-	22	-	88	71	68	65	62	18
28	2	6	13	-	25	-	86	77	67	65	62	18
29	2	6	12	-	-	75	84	77	81	66	61	18
30	2	6	12	-	-	55	80	75	87	66	61	18
31	2	-	11	-	-	1	-	73	-	64	62	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						49	5	1	1.6	97		
November.....						95	6	2	5.2	188		
December.....						468	37	5	16.1	928		
Calendar year 1937.....						11,096	89	-	30.4	22,010		
January 1-8.....						70	10	7	9.8	139		
February 6-28.....						450	28	14	19.6	893		
March.....						2,305	119	1	74.4	4,570		
April.....						1,507	100	1	50.2	2,990		
May.....						1,998	87	40	64.5	3,960		
June.....						2,198	87	40	72.9	4,340		
July.....						2,119	85	58	68.4	4,200		
August.....						1,975	65	54	60.5	3,720		
September.....						1,193	62	18	39.8	2,370		
Water year												

Mountain Home cooperative canal near Mountain Home, Idaho

Location.— Water-stage recorder and concrete control, lat. 43°12', long. 115°42', in sec. 38, T. 2 S., R. 6 E., at Lambertson weir, 300 feet downstream from point of diversion from Mountain Home feeder canal and 4½ miles north of Mountain Home.

Records available.— April 1924 to September 1929; April 1931 to September 1938.

Extremes.— Maximum discharge during year, 80 second-feet Apr. 29 (gage height, 1.40 feet); no flow Oct. 1 to Apr. 18.
1924-29, 1931-38: Maximum discharge, 109 second-feet July 16, 1925 (gage height, 1.69 feet, former datum); no flow, except occasional stock-water runs, during nonirrigation seasons.

Remarks.— Records good. Discharge for April 16 computed on basis of information furnished by watermaster; that for Apr. 22, 23, May 6, 7, June 3, 4, July 8, 9, 23, Aug. 27 interpolated. No diversions between station and head of canal. Flow regulated by gates at head of canal and by operation of Long Tom and Little Camas Reservoirs. Canal diverts from Mountain Home feeder canal. Water is used for irrigation on about 5,000 acres of Mountain Home Irrigation District. Gage-height record furnished by Mountain Home Irrigation District.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	76	62	76	41	38
2							0	72	62	77	45	39
3							0	69	62	48	41	39
4							0	65	62	42	38	39
5							0	63	62	40	43	39
6							0	56	62	36	45	38
7							0	49	63	35	42	38
8							0	42	63	37	42	38
9							0	38	62	40	42	38
10							0	34	62	42	42	37
11							0	33	51	43	42	37
12							0	33	45	45	49	37
13							0	33	45	52	55	37
14							0	34	46	55	55	38
15							0	34	46	59	50	38
16							4	35	45	61	48	38
17							15	46	42	57	44	38
18							15	55	36	57	42	36
19							15	55	38	56	42	35
20							42	46	40	56	42	29
21							48	40	43	56	41	28
22							51	33	45	55	41	21
23							56	29	45	55	41	19
24							61	33	45	55	41	18
25							65	40	44	51	41	18
26							70	47	44	48	41	18
27							71	54	54	48	40	18
28							74	58	58	42	39	17
29							77	58	65	41	38	17
30							75	57	72	41	38	17
31							-	58	-	41	38	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						0	0	0	0	0		
November.....						0	0	0	0	0		
December.....						0	0	0	0	0		
Calendar year 1937.....						6,950.1	78	0	19.0	13,790		
January.....						0	0	0	0	0		
February.....						0	0	0	0	0		
March.....						0	0	0	0	0		
April.....						739	77	0	24.6	1,470		
May.....						1,475	76	29	47.6	2,930		
June.....						1,569	72	36	52.3	3,110		
July.....						1,547	77	35	49.9	3,070		
August.....						1,329	55	38	42.9	2,640		
September.....						937	39	17	31.2	1,860		
Water year 1937-38.....						7,596	77	0	20.8	15,080		

Wild Horse Reservoir near Gold Creek, Nev.

Location.- Bench mark of Indian Irrigation Service at Wild Horse Dam, lat. $41^{\circ}41'10''$, long. $115^{\circ}51'20''$, in NE $\frac{1}{4}$ sec. 25, T. 44 N., R. 54 E., 8 miles west of Gold Creek. Zero of project datum is 6,109.18 feet above mean sea level.

Records available.- March to September 1938.

Remarks.- Capacity of reservoir, 32,600 acre-feet. Elevations and capacity curve furnished by Indian Irrigation Service. Elevations determined by spirit leveling.

Contents, in acre-feet, water year October 1937 to September 1938

Mar. 18	0	June 1	21,920
Apr. 1	930	30	21,920
17	3,530	July 9	22,060
19	4,200	14	21,340
30	20,500	29	17,540
May 2	21,920	Aug. 31	13,220
24	22,350	Sept. 9	12,490
25	22,060	Oct. 1	12,490

Owyhee River near Gold Creek, Nev.

Location.- Water-stage recorder, lat. 41°41'10", long. 115°51'30", in NW¼ sec. 25, T. 44 N., R. 54 E. (revised), 500 feet downstream from Wild Horse Dam and 8 miles west of Gold Creek. Altitude, about 6,130 feet.

Drainage area.- 209 square miles.

Records available.- October 1936 to September 1938, March 1916 to September 1925 at site 1,200 feet upstream.

Extremes.- Maximum discharge during year, 553 second-feet Apr. 19 (gage height, 4.92 feet); practically no flow at times when reservoir gates were closed.
1916-25, 1936-38: Maximum discharge, 1,810 second-feet May 5, 1922 (gage height 10.11 feet, former site and datum), from rating curve extended above 400 second-feet; practically no flow at times when reservoir gates were closed.

Remarks.- Records good except those for periods of missing gage heights, Oct. 1 to Nov. 30, Jan. 17 to Mar. 18, which were computed on basis of weather records and records for station at Mountain City and are fair. Small diversions for irrigation above station. Flow after Mar. 18 regulated by storage in Wild Horse Reservoir (capacity, 32,600 acre-feet).

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 9 to Sept. 9)

1.0	2	1.8	20	2.6	78	3.6	226
1.2	4	2.0	31	2.8	101	4.0	314
1.4	8	2.2	44	3.0	127	4.5	439
1.6	13	2.4	59	3.3	172	5.0	575

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			4	5		8	0	3	46	0	65	59
2			4	5		9	0	148	46	0	65	59
3			4	5		10	0	363	46	0	65	59
4			4	4		10	0	363	46	0	65	59
5			4	4		10	0	363	46	0	65	58
6			4	4		9	0	360	46	0	65	58
7			4	4		8	0	360	46	0	65	57
8			4	4		8	0	358	46	0	65	57
9			4	4		8	0	358	46	65	65	22
10			6	4		8	0	353	46	120	54	0
11				7	4	10	0	249	46	120	58	0
12				9	4	12	29	76	46	95	58	0
13				8	4	20	81	76	46	65	58	0
14				5	5	18	111	76	46	65	58	0
15				6	5	15	141	76	46	65	58	0
16			5	5		18	148	76	46	65	58	0
17			5	5		20	250	77	46	65	58	0
18			5	5		8	413	77	46	65	58	0
19			4	5		0	365	77	46	65	58	0
20			4	5		0	4	77	47	65	58	0
21				5		0	3	56	48	65	58	0
22				4		0	3	34	18	65	58	0
23				5		0	3	21	0	65	58	0
24				4		0	3	131	0	65	59	0
25				3		0	3	153	0	65	59	0
26				4		0	3	98	0	65	59	0
27				4		0	3	147	0	65	59	0
28				4		0	3	46	0	65	59	0
29				4		0	3	46	0	65	60	0
30				4		0	3	46	0	65	60	0
31				5		0	-	46	-	65	59	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	91	-	-	3	180
November.....	120	-	-	4	238
December.....	146	9	3	4.7	290
Calendar year 1937.....	9,303	250	1	25.5	18,460
January.....	136	5	4	4.4	270
February.....	140	-	-	5	278
March.....	209	20	0	6.7	415
April.....	1,672	413	0	52.4	3,120
May.....	4,790	363	3	155	9,500
June.....	987	48	0	32.9	1,960
July.....	1,635	120	0	52.7	3,240
August.....	1,867	66	54	60.2	3,700
September.....	488	59	0	16.3	968
Water year 1937-38.....	12,181	413	0	33.4	24,160

Owyhee River at Mountain City, Nev.

Location.- Water-stage recorder, lat. 41°50', long. 115°59', in SE¼ sec. 36, T. 46 N., R. 53 E., at Mountain City, one mile downstream from California Creek.

Drainage area.- 350 square miles.

Records available.- May to December 1913, November 1926 to September 1938.

Average discharge.- 12 years (1926-38), 87.9 second-feet.

Extremes.- Maximum discharge during year, 1,470 second-feet Apr. 19 (gage height, 6.70 feet), from rating curve extended above 600 second-feet; minimum daily, 3 second-feet Oct. 1, 2.

1913, 1927-38: Maximum discharge, 1,830 second-feet Apr. 20, 1936 (gage height, 7.6 feet), from rating curve extended above 600 second-feet; no flow July 29 to Sept. 15, 1931, and July 21 to Sept. 18, 1934.

Remarks.- Records good except those for periods of ice effect, Nov. 30 to Dec. 10, Dec. 19 to Mar. 9, and periods of missing gage heights, June 23-26, Sept. 16, 17, which were computed on basis of weekly gage readings, weather records, records for station near Gold Creek and are fair. Diversions for irrigation above station. Flow after Mar. 18 affected by storage in Wild Horse Reservoir (capacity, 32,600 acre-feet).

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	14	13		-	40	64	626	202	55	74	65
2	3	14	13		-	45	65	553	190	66	74	66
3	4	14	13		-	50	77	807	182	65	74	66
4	4	13	14		-	51	114	821	176	54	74	68
5	4	13	14		-	50	137	775	171	52	76	68
6	4	13	14		-	44	156	749	165	45	74	66
7	5	13	15		-	42	152	784	157	38	76	66
8	5	13	15		-	42	148	801	154	32	77	66
9	5	13	15		-	42	176	801	154	27	77	66
10	5	14	20		-	42	210	775	150	117	77	35
11	5	14	24		-	49	218	739	141	124	62	20
12	5	14	40		-	64	220	474	139	124	65	14
13	5	15	36		-	107	302	474	148	87	65	11
14	6	14	27		-	91	322	494	142	83	70	9
15	7	14	24		-	77	394	541	126	87	66	8
16	8	16	25		-	93	468	580	123	83	64	8
17	7	18	28		-	95	655	526	117	82	61	9
18	9	20	28		-	63	1,080	474	114	87	61	9
19	9	21	25		-	71	1,430	449	114	80	59	9
20	11	27	20		20	102	1,030	402	110	80	59	9
21	11	35	15		-	72	867	355	107	80	59	9
22	10	34	14		-	70	857	278	108	80	58	9
23	11	27	13		-	74	775	256	50	80	64	9
24	12	23	12		-	95	743	245	45	80	58	9
25	11	22	13		-	77	720	435	40	77	59	9
26	12	23	13		-	71	701	274	35	74	59	9
27	13	21	14		26	80	577	426	34	76	61	9
28	12	20	14		-	107	532	288	31	76	68	9
29	11	19	15		-	74	547	263	34	76	68	9
30	12	12	15		-	74	601	239	52	76	66	9
31	14	-	15		-	66	-	214	-	74	65	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						243	14	3	7.8	482		
November.....						543	35	12	18.1	1,080		
December.....						576	40	12	18.6	1,140		
Calendar year 1937						25,841	556	1	70.8	51,250		
January.....						465	-	-	15	922		
February.....						580	107	40	20	1,110		
March.....						2,126	1,430	64	68.6	4,220		
April.....						14,328	821	214	478	28,420		
May.....						15,918	202	31	513	31,570		
June.....						3,511	124	27	117	6,960		
July.....						2,317	77	58	74.7	4,600		
August.....						2,070	68	8	66.8	4,110		
September.....						826	77	8	27.5	1,640		
Water year 1937-38						43,483	1,430	3	119	86,250		

Owyhee River above Owyhee Reservoir, Oreg.

Location.— Water-stage recorder, lat. 43°15', long. 117°30', in SE¼ sec. 18, T. 27 S., R. 43 E., 3 miles above flow line of Owyhee Reservoir and 8 miles southwest of Watson. Zero of gage is about 2,690 feet above mean sea level as determined by Bureau of Reclamation.

Records available.— October 1931 to September 1938 in reports of U. S. Geological Survey. April 1929 to September 1936 in reports of Oregon State engineer.

Extremes.— Maximum discharge during year, 13,600 second-feet May 2 (gage height, 11.88 feet); minimum, 131 second-feet Feb. 13 (gage height, 3.69 feet).
1929-38: Maximum discharge, 16,000 second-feet Mar. 20, 1932, Apr. 19, 1936; maximum gage height, 12.95 feet Mar. 20, 1932; minimum discharge, 103 second-feet Aug. 19, 1934 (gage height, 3.57 feet).

Remarks.— Records excellent. Diversions for irrigation above station. Flow slightly regulated by storage in 11 small reservoirs, which have a total capacity of 52,000 acre-feet. Water-stage recorder inspected and some discharge measurements furnished by Bureau of Reclamation.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to May 2						May 3 to Sept. 30			
3.5	93	5.0	610	7.0	2,200	10.0	7,550	3.5	102
3.7	133	5.5	930	7.5	2,770	11.0	10,600	3.7	144
4.2	270	6.0	1,310	8.0	3,460			4.2	277
4.8	505	6.5	1,720	9.0	5,180			4.8	505

Note.— Same as preceding table above 4.8 feet.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	143	177	322	280	224	736	1,900	5,600	2,100	373	230	190
2	143	177	304	270	193	895	1,630	11,200	1,810	365	219	190
3	146	177	301	287	164	2,000	1,510	11,500	1,630	376	219	193
4	146	177	280	267	201	2,960	1,720	8,700	1,510	380	219	186
5	147	177	261	261	209	2,530	2,960	6,760	1,310	408	219	186
6	150	177	245	239	242	1,760	5,180	5,600	1,190	440	219	183
7	150	180	236	236	251	1,470	4,800	4,600	1,040	515	219	193
8	147	182	218	236	245	1,350	4,340	4,430	695	610	216	196
9	150	182	221	227	261	1,270	4,520	4,000	776	545	216	198
10	152	182	245	233	248	1,350	4,800	3,750	712	464	206	201
11	152	182	322	254	204	1,590	5,180	3,450	652	404	201	208
12	152	182	355	264	145	1,550	5,820	3,510	610	365	198	198
13	156	182	1,600	280	133	1,680	6,040	3,170	568	338	193	198
14	156	182	2,150	280	152	2,460	5,390	3,100	545	326	190	193
15	157	185	1,860	287	177	2,530	4,600	3,030	520	306	196	198
16	157	180	1,270	280	193	2,420	4,990	2,960	505	299	190	198
17	162	187	965	270	201	3,100	6,270	2,900	482	287	190	190
18	164	190	930	264	187	3,450	8,700	2,900	496	296	193	196
19	164	215	1,000	261	162	2,960	11,500	2,900	505	290	193	198
20	170	233	895	267	147	3,520	12,500	2,960	482	277	190	193
21	196	270	750	254	185	4,800	10,600	2,960	487	271	190	188
22	182	751	594	242	174	3,560	9,000	2,900	467	268	188	188
23	177	1,650	475	248	208	2,100	8,700	2,590	474	259	188	188
24	174	965	390	245	322	2,050	8,110	2,560	482	253	186	186
25	174	604	351	251	318	3,830	7,550	2,100	487	253	186	186
26	177	459	336	277	409	4,430	7,550	1,950	505	253	186	180
27	180	390	333	297	477	3,830	6,040	1,760	496	244	188	186
28	180	340	326	304	610	3,600	6,270	1,720	460	239	188	186
29	177	329	326	284	-	3,680	5,820	1,860	424	236	188	193
30	177	329	318	284	-	3,100	5,600	2,260	404	230	198	193
31	177	-	304	254	-	2,260	-	2,360	-	227	188	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5,031	196	143	162	9,980
November.....	9,763	1,630	177	325	19,340
December.....	18,481	2,150	218	596	36,660
Calendar year 1937.....	252,809	11,500	127	693	501,500
January.....	8,143	304	227	263	16,150
February.....	6,640	610	133	237	13,170
March.....	78,661	4,800	756	2,537	156,000
April.....	179,790	12,500	1,510	5,993	366,600
May.....	121,840	11,500	1,720	3,930	241,700
June.....	23,042	2,100	404	768	45,700
July.....	10,395	610	227	355	20,620
August.....	6,178	230	186	199	12,250
September.....	5,760	206	183	192	11,420
Water year 1937-38.....	473,714	12,500	133	1,300	939,600

Peak discharge.— Mar. 21 (6 a.m.) 6,040 sec.-ft.; Mar. 28 (3 p.m.) 4,340 sec.-ft.; Apr. 6 (2 p.m.) 5,820 sec.-ft.; Apr. 8 (3 p.m.) 4,800 sec.-ft.; Apr. 19 (7 p.m.) 13,200 sec.-ft.; May 2 (9 a.m.) 13,600 sec.-ft.

Owyhee Reservoir at Owyhee Dam, near Nyssa, Oreg.

Location.- Staff gage, lat. 43°38', long. 117°15', in sec. 20, T. 22 S., R. 45 E., at Owyhee Dam, 21 miles southwest of Nyssa. Gage readings are elevations above mean sea level (surveys of U. S. Bureau of Reclamation).

Records available.- October 1932 to September 1938.

Extremes.- Maximum contents during year, 1,123,000 acre-feet May 29 (elevation, 2,670.09 feet); minimum, 903,100 acre-feet Sept. 30 (elevation, 2,651.38 feet).
1932-38: Maximum contents, 1,125,300 acre-feet June 11, 1936 (elevation, 2,670.27 feet); no storage Oct. 1-16, 1932.

Remarks.- Records excellent. Owyhee Dam, built by Bureau of Reclamation, was completed in September 1932. Storage of water for irrigation began Oct. 16, 1932. Capacity of reservoir between elevations 2,367.5 feet (sluice gates) and 2,670 feet is 1,122,000 acre-feet; between elevations 2,590.2 feet (diversion tunnel) and 2,670 feet it is 715,000 acre feet. According to the plan for operation the water level will not generally be drawn below elevation 2,590.2 feet. Water is released through diversion tunnel for irrigation of lands west of Snake River near Homedale, Idaho, and near Nyssa and Ontario, Oreg.; also released through dam to river for Owyhee canal, which diverts about 16 miles downstream. Gage-height record and capacity table furnished by U. S. Bureau of Reclamation.

Monthly elevation and contents, water year October 1937 to September 1938

Date	Elevation (feet)	Contents (acre-feet)	Change in contents dur- ing month (acre-feet)
Sept. 30.....	2,652.67	917,100	-
Oct. 31.....	2,251.78	907,400	-9,700
Nov. 30.....	2,653.40	925,100	+17,700
Dec. 31.....	2,656.82	963,200	+38,100
Jan. 31.....	2,658.19	978,800	+15,600
Feb. 28.....	2,660.50	1,005,600	+26,800
Mar. 31.....	2,664.00	1,047,300	+41,700
Apr. 30.....	2,666.80	1,081,600	+34,300
May 31.....	2,670.08	1,122,800	+41,200
June 30.....	2,667.31	1,067,900	-34,900
July 31.....	2,669.41	1,028,200	-69,700
Aug. 31.....	2,656.24	956,600	-71,600
Sept. 30.....	2,651.38	903,100	-53,500
Water year 1937-38			-14,000

Owyhee River below Owyhee Dam, Oreg.

Location.— Water-stage recorder, lat. 43°39', long. 117°15', in sec. 17, T. 22 S., R. 45 E., three-quarters of a mile below Owyhee Dam. Zero of gage is 2,343.67 feet above mean sea level (surveys of Bureau of Reclamation).

Records available.— February 1929 to September 1938.

Extremes.— Maximum discharge during year, 8,570 second-feet Apr. 22 (gage height, 9.83 feet); minimum, about 9 second-feet (estimated) Oct. 1 to Mar. 15.
1929-38: Maximum discharge, 14,600 second-feet Mar. 21, 1932 (gage height, 12.79 feet); no flow for a few hours Aug. 8, 9, 1932, when temporary diversion tunnel above gage was closed.

Remarks.— Records good except those for period Oct. 1 to Mar. 15, which were computed on basis of leakage data furnished by Bureau of Reclamation and are fair. Diversions for irrigation above station. Flow regulated since Oct. 16, 1932, by Owyhee Dam, which was completed by Bureau of Reclamation in September 1932. Water-stage recorder inspected and some discharge measurements furnished by U. S. Bureau of Reclamation.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

-0.4	1.5	1.0	91	3.0	660	7.0	4,060
-.2	6	1.5	176	4.0	1,240	8.0	5,450
0	12	2.0	294	5.0	1,970	10.0	8,950
.3	27	2.5	443	6.0	2,900	12.0	12,900

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							2,500	3,460	1,240	231	238	178
2							1,810	4,920	990	231	238	178
3							1,200	8,000	520	231	238	168
4							1,200	7,480	473	231	238	152
5							2,000	7,460	409	231	238	152
6							4,230	4,230	294	231	233	152
7							6,090	3,460	236	231	208	152
8							4,190	3,460	236	231	208	152
9							4,860	3,340	236	231	208	152
10							4,860	2,900	236	231	206	133
11							5,300	2,700	236	231	204	105
12							6,090	1,380	236	231	204	102
13							5,450	2,010	236	231	204	102
14							5,610	1,480	236	231	204	102
15						*8.9	5,450	1,170	236	231	204	102
16							2,450	4,320	1,620	236	231	102
17							2,360	5,150	1,380	236	231	104
18							2,310	7,350	1,170	236	231	104
19							2,700	8,190	1,480	236	231	104
20							3,010	8,190	1,280	231	231	104
21							4,220	8,190	1,140	229	231	105
22							4,180	8,190	1,520	231	229	101
23							2,900	7,820	1,080	231	229	98
24							5,250	7,640	500	231	229	178
25							6,410	7,640	318	231	226	178
26							6,410	6,710	291	231	226	178
27							6,260	5,450	731	236	233	178
28							5,610	5,380	243	231	238	178
29							4,600	3,340	748	231	238	178
30							4,190	3,940	1,100	231	238	178
31							3,460	-	1,480	-	238	178

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	279	-	-	†9.0	553
November.....	270	-	-	†9.0	536
December.....	279	-	-	†9.0	553
Calendar year 1937.....	147,457	11,200	-	404	292,500
January.....	279	-	-	†9.0	553
February.....	252	-	-	†9.0	500
March.....	67,055	6,410	-	216	133,000
April.....	158,340	8,190	1,200	5,278	314,100
May.....	74,011	8,000	243	2,387	146,800
June.....	9,538	1,240	229	318	18,920
July.....	7,175	238	226	231	14,230
August.....	6,311	238	178	204	12,520
September.....	3,679	178	98	123	7,300
Water year 1937-38.....	327,468	8,190	-	897	649,600

*Weir measurement.

†Estimated.

Boise River near Twin Springs, Idaho

Location.- Water-stage recorder, lat. $43^{\circ}40'$, long. $115^{\circ}44'$, in sec. 27, T. 4 N., R. 8 E., a quarter of a mile upstream from Birch Creek, $1\frac{1}{2}$ miles upstream from flow line of Arrowrock Reservoir, 4 miles downstream from Twin Springs, and 13 miles upstream from Arrowrock.

Drainage area.- 830 square miles.

Records available.- March 1911 to September 1938.

Average discharge.- 27 years, 1,120 second-feet.

Extremes.- Maximum discharge during year, 8,730 second-feet May 1 (gage height, 7.63 feet); minimum, 237 second-feet Oct. 1, 2 (gage height, 1.88 feet).

1911-38: Maximum discharge, 10,300 second-feet May 17, 1927 (gage height, 8.30 feet); minimum, 133 second-feet Dec. 15, 16, 1935 (gage height, 1.53 feet).

Remarks.- Records good. Discharge for Feb. 13, 14 interpolated. No diversion or regulation.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	237	277	252	394	466	662	710	8,070	5,180	3,000	694	418
2	237	273	260	460	466	726	710	7,210	5,570	2,630	870	406
3	240	269	380	448	460	750	767	5,570	6,370	2,660	656	394
4	244	264	350	369	442	742	818	4,430	6,170	2,420	640	400
5	248	260	277	367	456	726	892	3,640	6,370	2,350	610	384
6	252	269	277	367	430	710	892	3,160	6,580	2,280	586	378
7	256	269	281	367	424	670	970	2,860	6,580	2,140	574	378
8	256	269	260	430	430	655	1,160	2,630	6,370	2,080	560	394
9	252	285	256	448	430	670	1,300	2,660	5,570	1,990	574	400
10	252	281	453	499	454	678	1,340	2,930	4,520	1,850	560	389
11	248	285	3,410	546	492	686	1,430	3,160	4,070	1,750	532	384
12	248	290	4,600	448	532	726	1,650	3,160	4,070	1,600	518	378
13	248	290	2,140	424	512	892	1,650	3,640	4,250	1,600	499	367
14	248	316	1,510	454	505	960	1,710	4,160	4,160	1,430	512	362
15	256	330	1,240	518	492	930	1,950	4,520	4,070	1,400	512	356
16	269	308	1,030	553	466	1,150	2,350	4,900	4,070	1,370	506	345
17	424	316	902	532	418	1,640	2,350	5,370	4,430	1,270	486	335
18	490	326	801	506	400	1,350	3,400	4,990	3,920	1,210	473	335
19	335	326	670	486	486	1,270	4,610	4,160	3,160	1,120	473	335
20	308	466	581	460	454	1,160	4,250	3,660	3,000	1,070	454	340
21	294	783	560	448	460	1,040	3,980	3,160	3,160	1,020	442	335
22	285	516	567	506	454	882	4,070	3,240	3,320	960	436	335
23	281	430	618	553	436	920	4,160	3,730	3,160	911	448	340
24	277	430	553	506	430	854	4,070	4,430	3,000	882	448	335
25	273	408	546	448	418	784	4,430	5,180	3,160	854	448	330
26	269	430	532	448	454	776	4,610	5,970	3,400	854	442	325
27	269	391	546	460	525	854	4,430	7,000	3,160	819	424	325
28	269	386	518	518	595	990	4,340	7,630	2,960	792	406	320
29	264	370	492	559	-	920	5,080	6,370	2,700	784	406	340
30	264	303	499	499	-	844	5,970	5,870	3,490	750	389	356
31	273	-	460	480	-	784	-	5,080	-	726	389	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	8,566	490	237	276	0.333	0.38	16,990
November.....	10,416	783	260	347	.418	.47	20,660
December.....	25,521	4,600	252	833	1.00	1.15	51,220
Calendar year 1937.....	277,945	4,600	237	761	.617	12.45	561,300
January.....	14,601	553	367	468	.564	.65	28,760
February.....	12,974	595	400	463	.558	.58	25,730
March.....	27,301	1,540	655	881	1.05	1.22	54,150
April.....	80,049	5,970	710	2,668	3.21	3.58	158,800
May.....	141,840	8,070	2,660	4,675	5.61	6.35	281,300
June.....	129,780	6,580	2,700	4,326	5.21	5.81	267,400
July.....	45,971	3,000	726	1,466	1.80	2.06	91,360
August.....	15,768	694	369	509	.613	.71	31,280
September.....	10,319	418	320	361	.435	.49	21,460
Water year 1937-38.....	524,206	8,070	237	1,436	1.73	23.47	1,040,000

Peak discharge.- Dec. 12 (3 a.m.) 6,790 sec.-ft.; May 1 (noon to 3 p.m.) 8,737 sec.-ft.

Arrowrock Reservoir at Arrowrock, Idaho.

Location.- Lat. 43°36', long. 115°55', in E½ sec. 13, T. 3 N., R. 4 E., at Arrowrock, 22 miles by road east of Boise. Zero of gage is at mean sea level.

Records available.- October 1917 to September 1938.

Extremes.- Maximum contents during year, 300,300 acre-feet June 13, 14, 22, 23, July 1 (gage height, 3,218.8 feet); no storage during period Oct. 10-25, when sluice gates were open and natural flow of river was passing through dam.
1917-38: Maximum contents, those of June 13, 14, 22, 23, July 1, 1938; no storage during period in each of several years when natural flow was passing through reservoir.

Remarks.- Capacity of reservoir was increased during 1937 to 291,600 acre-feet (at gage height 3,216.0 feet, highest position of movable spillway crest). Stored water is used for irrigation of lands in Boise Valley. Gage heights and table of storage capacity furnished by Bureau of Reclamation.

Contents, in acre-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12,360	5,180	24,410	89,900	149,200	166,500	248,600	289,700	291,900	300,300	248,900	135,400
2	12,160	5,488	23,040	91,660	151,000	168,400	252,300	280,400	292,500	299,400	245,800	131,800
3	12,020	7,080	21,680	93,740	152,700	171,400	253,400	284,300	293,800	299,400	243,200	127,800
4	11,160	8,634	20,630	95,500	153,700	174,600	251,700	282,200	294,700	299,000	240,100	123,800
5	9,420	10,300	19,670	96,860	154,400	177,300	248,600	278,600	294,700	298,700	237,200	119,700
6	7,502	11,680	18,510	98,220	154,600	179,900	244,000	274,100	295,600	298,700	234,100	116,100
7	5,804	12,960	18,420	99,680	154,800	182,100	239,800	268,900	295,900	298,400	230,700	112,300
8	3,827	14,170	17,590	100,900	154,800	184,400	236,100	262,500	296,900	298,100	227,100	108,900
9	1,214	15,380	16,450	102,600	154,800	186,700	232,000	255,900	297,800	297,800	223,400	105,400
10	0	16,580	15,260	104,300	154,800	189,000	226,300	249,500	298,400	297,800	219,500	101,800
11	0	17,770	16,110	106,200	156,600	191,300	219,300	244,700	300,000	297,500	215,800	98,220
12	0	18,990	34,180	108,100	156,500	193,600	212,800	241,400	300,000	297,200	211,500	94,700
13	0	20,120	47,200	110,100	157,700	196,400	207,000	240,600	300,300	296,200	207,500	91,340
14	0	21,410	53,230	111,800	158,600	201,200	203,100	241,900	300,300	295,000	203,600	87,660
15	0	22,820	56,400	113,800	159,400	205,800	200,300	245,300	300,000	292,800	199,800	84,350
16	0	24,180	59,640	116,100	160,200	210,500	198,600	249,500	300,000	291,300	195,900	80,750
17	0	25,500	61,690	118,400	160,700	216,500	198,100	255,400	300,000	289,700	192,000	77,340
18	0	26,810	63,120	120,600	161,100	222,600	199,100	261,600	300,000	287,900	187,800	73,840
19	0	28,000	64,420	122,800	161,500	228,900	206,000	268,000	299,700	285,800	183,900	70,660
20	0	29,440	66,370	124,700	161,700	234,900	216,800	270,900	300,000	283,400	179,900	67,280
21	0	27,430	68,060	126,800	162,100	240,100	225,000	271,200	300,000	280,700	176,000	63,900
22	0	28,640	69,620	128,900	162,800	244,700	232,300	272,300	300,300	277,700	172,400	60,780
23	0	29,120	71,440	131,400	163,200	249,500	237,500	273,200	300,300	274,700	168,800	57,720
24	0	29,050	73,280	133,800	163,600	254,000	239,800	276,200	300,000	271,800	165,300	54,720
25	0	28,770	75,240	135,800	163,800	257,000	241,900	281,000	299,700	268,600	161,500	51,690
26	1,638	28,500	77,620	137,400	164,200	258,700	245,800	284,300	300,000	265,700	157,900	48,830
27	2,450	27,890	80,000	139,200	164,900	258,400	250,000	287,900	300,000	262,500	154,200	45,900
28	3,145	27,290	82,100	141,000	165,500	257,300	253,100	291,000	299,700	259,600	150,200	43,250
29	3,789	26,580	84,200	143,000	-	255,600	255,900	291,600	299,200	256,800	146,800	40,800
30	4,345	25,630	86,150	145,200	-	252,600	261,300	290,400	299,700	254,200	143,000	38,600
31	4,855	-	88,300	147,200	-	248,900	-	290,700	-	251,200	139,200	-

Note.- These figures do not allow for possible silt effect, which project officials indicate may have reduced the total capacity of the reservoir by as much as 6,000 acre-feet.

Boise River at Dowling ranch, near Arrowrock, Idaho

Location.— Water-stage recorder, lat. 43°35', long. 115°58', in sec. 15, T. 3 N., R. 4 E., at Dowling ranch, three-quarters of a mile upstream from Moore Creek and 4 miles downstream from Arrowrock.

Drainage area.— 2,230 square miles.

Records available.— March 1911 to September 1938.

Average discharge.— 27 years, 2,230 second-feet.

Extremes.— Maximum discharge during year, 14,800 second-feet May 28 (gage height, 9.03 feet); minimum, 3 second-feet Nov. 11; minimum gage height, 0.92 foot Jan. 5. 1911-38: Maximum discharge, 17,600 second-feet May 11, 1928 (gage height, 9.55 feet); minimum, 2 second-feet Nov. 19-27, 1935, Feb. 1-10, Oct. 30 to Nov. 5, Nov. 9, 27, 1936; minimum gage height, 0.62 foot Nov. 21, 22, 1935.

Remarks.— Records good except those below 20 second-feet, which are fair. Discharge for Nov. 17-20, Apr. 9, 10, 13 computed on basis of available gage heights and records of gate openings at Arrowrock Reservoir. Flow regulated by Arrowrock Reservoir. No diversions above station. Gage-height record furnished by Bureau of Reclamation. Two discharge measurements furnished by watermaster for Boise River.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used Oct. 1-12, Nov. 2 to Mar. 24, Apr. 1, 2)

0.70	2	2.20	330	3.70	1,530	5.60	4,770	7.60	10,170
1.00	18	2.50	480	4.00	1,910	6.00	5,690	8.00	11,430
1.30	60	2.80	675	4.40	2,490	6.40	6,710	8.40	12,730
1.60	125	3.10	915	4.80	3,170	6.80	7,810	8.80	14,070
1.90	215	3.40	1,200	5.20	3,930	7.20	8,960	9.10	15,090

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	528	474	1,200	11	11	774	70	10,500	10,800	6,060	2,740	2,740
2	516	174	1,220	6	200	528	676	12,400	11,400	5,460	2,740	2,740
3	654	6	1,180	8	410	326	2,670	12,400	12,400	5,340	2,820	2,740
4	978	4	1,210	8	592	400	3,640	11,800	12,700	5,100	2,820	2,740
5	1,120	4	1,190	8	768	442	4,440	10,800	12,400	4,880	2,820	2,650
6	1,130	4	1,000	8	856	447	4,770	10,200	12,700	4,660	2,820	2,650
7	1,120	4	717	8	898	452	4,960	10,200	12,700	4,340	2,900	2,670
8	1,210	4	1,070	7	951	452	4,660	9,960	12,100	4,030	2,990	2,670
9	880	4	1,170	8	960	458	5,700	9,860	10,800	3,830	2,990	2,670
10	528	4	1,160	8	814	469	6,960	9,860	8,670	3,640	3,080	2,490
11	522	4	547	8	766	474	7,250	9,560	8,380	3,440	3,080	2,490
12	504	4	27	7	774	474	7,250	8,960	8,380	2,440	2,990	2,490
13	504	4	232	8	774	233	6,900	8,670	8,670	2,440	2,990	2,490
14	492	4	798	10	782	18	6,190	8,670	8,670	2,730	2,990	2,420
15	498	4	782	10	790	16	6,190	8,670	8,380	2,640	2,990	2,420
16	522	4	864	11	798	16	6,190	8,960	8,090	2,540	2,990	2,420
17	712	160	987	10	798	16	6,190	8,960	8,380	2,440	2,990	2,420
18	1,070	580	1,000	11	798	18	6,190	8,670	7,810	2,440	2,990	2,340
19	830	750	668	11	798	22	6,320	8,090	6,450	2,440	2,990	2,340
20	675	700	266	10	798	24	6,450	8,090	6,060	2,440	2,900	2,340
21	640	872	266	11	798	24	6,680	7,530	6,060	3,540	2,820	2,260
22	612	872	266	16	798	25	7,530	7,250	6,450	3,350	2,820	2,190
23	592	924	262	15	790	29	8,960	7,250	6,450	2,350	2,820	2,190
24	592	1,040	125	17	790	492	9,660	7,530	6,060	2,350	2,820	2,190
25	415	1,050	15	16	790	1,480	9,660	8,960	5,940	2,260	2,820	2,120
26	375	1,120	16	16	790	1,000	9,660	11,100	6,060	3,170	2,820	2,120
27	385	1,160	11	18	790	2,740	9,860	12,700	6,060	2,080	2,740	2,050
28	380	1,220	10	13	798	2,990	9,660	14,400	5,890	2,080	2,740	1,910
29	370	1,300	10	12	-	3,540	9,860	14,100	5,220	2,990	2,740	1,910
30	405	1,280	9	11	-	3,830	9,860	12,100	5,940	2,820	2,740	1,720
31	452	-	8	11	-	3,540	-	10,800	-	2,820	2,740	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	20,211	1,210	370	652	40,090
November.....	13,734	1,300	4	458	27,240
December.....	18,346	1,220	8	592	36,390
Calendar year 1937.....	515,263	5,450	3	1,412	1,022,000
January.....	334	18	7	10.8	662
February.....	20,630	960	11	732	41,020
March.....	25,979	3,830	16	838	51,530
April.....	164,688	9,380	70	6,490	386,200
May.....	308,900	14,400	7,250	9,965	612,700
June.....	255,870	12,700	5,220	8,529	507,500
July.....	117,130	6,060	2,820	3,778	232,500
August.....	89,240	3,080	2,740	2,879	177,000
September.....	71,290	2,740	1,720	2,376	141,400
Water year 1937-38.....	1,136,400	14,400	4	3,113	2,254,000

Boise River below Ridenbaugh Canal, at Barber, Idaho

Location.- Chain gage, lat. 43°34', long. 116°08', in SW¼ sec. 29, T. 3 N., R. 3 E., at bridge 100 feet downstream from heading of Ridenbaugh canal, half a mile downstream from Barber Dam, and 0.7 mile southwest of Barber post office. Zero of gage is 2,741.53 feet above mean sea level (U. S. Army Engineer datum - Boise River Surveys).

Records available.- March to September 1938.

Extremes.- Maximum water-surface elevation during period, 2,755.32 feet May 2; minimum, 2,747.78 feet Apr. 2.

Remarks.- Records good. Gage read twice daily. Records collected in cooperation with Works Progress Administration, under Boise River Flood Control Project, to develop river profile.

Elevation, in feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	48.55	54.42	53.77	51.62	49.78	49.67
2						-	47.78	55.18	53.93	51.57	49.78	49.63
3						-	51.43	55.02	54.27	51.41	49.84	49.66
4						-	52.06	54.69	54.31	51.47	49.88	49.83
5						-	52.52	54.38	54.32	51.29	49.84	49.76
6						-	52.96	54.20	54.45	50.99	49.84	49.70
7						-	52.94	54.04	54.43	50.73	49.74	49.62
8						-	52.74	53.90	54.09	50.44	49.84	49.56
9						-	53.15	53.88	53.99	50.27	49.88	49.56
10						-	53.34	53.62	53.29	49.95	49.88	49.50
11						-	53.72	53.64	52.83	50.11	49.86	49.52
12						-	53.98	53.39	52.87	50.35	49.82	49.49
13						-	53.92	53.28	52.95	50.35	49.84	49.82
14						-	53.64	53.43	52.93	50.35	49.82	49.61
15						-	53.28	53.16	52.97	50.35	49.86	49.45
16						-	53.27	53.49	52.77	50.07	49.84	49.49
17						-	53.22	53.47	52.93	50.21	49.82	49.47
18						-	53.39	53.24	52.56	50.17	49.84	49.43
19						-	53.50	53.00	52.07	50.15	49.85	49.45
20						-	53.40	53.08	51.83	50.16	49.77	49.45
21						-	53.26	52.86	51.87	50.24	49.76	49.45
22						-	53.51	52.66	52.08	50.11	49.72	49.42
23						-	53.94	52.70	52.07	50.06	49.72	49.44
24						-	54.06	52.87	51.96	50.11	49.76	49.45
25						-	54.00	53.31	51.69	50.07	49.76	49.45
26						-	54.13	53.80	51.69	49.99	49.77	49.45
27						-	54.00	54.37	51.67	49.99	49.72	49.42
28						-	54.02	55.10	51.68	49.95	49.67	49.42
29						52.88	54.06	54.92	51.20	49.93	49.65	49.32
30						-	54.04	54.40	51.84	49.87	49.64	49.32
31						-	-	53.85	-	49.81	49.60	-

Note.- Add 2,700 feet to obtain elevation above mean sea level.

BOISE RIVER BASIN

Boise River at Boise, Idaho

Location.- Staff gage, lat. $43^{\circ}38'$, long. $116^{\circ}13'$, in SW $\frac{1}{4}$ sec. 10, T. 3 N., R. 2 E., at Eighth Street bridge, 9 blocks southwest of post office in Boise. Zero of gage is 2,675.47 feet above mean sea level (U. S. Army Engineer datum - Boise River Surveys).

Records available.- March to September 1938.

Extremes.- Maximum water-surface elevation during period, 2,684.27 feet May 2; minimum not determined, below gage.

Remarks.- Records good. Gage read twice daily. Records collected in cooperation with Works Progress Administration, under Boise River Flood Control Project, to develop river profile.

Elevation, in feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	-	83.09	82.52	80.12		
2						-	-	84.07	82.69	80.17		
3						-	79.49	83.95	83.27	80.07		
4						-	80.29	83.57	83.57	80.17		
5						-	80.82	83.12	83.52	80.02		
6						-	80.95	82.72	83.49	-		
7						-	81.19	82.67	83.52	-		
8						-	80.95	82.52	83.37	-		
9						-	81.29	82.37	82.87	-		
10						-	81.82	82.29	82.07	-		
11						-	81.99	82.19	81.49	-		
12						-	82.05	81.95	81.52	79.23		
13						-	82.17	81.69	81.69	79.19		
14						-	81.87	81.67	81.65	79.15		
15						-	81.97	81.67	81.57	79.12		
16						-	82.05	81.75	81.52	79.07		
17						-	81.95	81.67	81.39	-		
18						-	82.12	81.92	81.27	-		
19						-	82.29	81.59	80.87	-		
20						-	82.15	81.49	80.22	-		
21						-	82.02	81.39	79.77	-		
22						-	82.17	81.05	80.52	-		
23						-	82.65	80.85	80.52	-		
24						-	82.85	80.99	80.18	-		
25						-	82.72	81.39	80.02	-		
26						-	82.72	82.49	80.12	79.08		
27						-	82.65	83.22	80.17	79.07		
28						80.43	82.67	83.97	80.02	79.07		
29						80.61	82.62	84.02	80.02	79.07		
30						-	82.69	83.27	80.02	-		
31						-	-	82.82	-	-		

Note.- Add 2,600 feet to obtain elevation above mean sea level.

Boise River at Strawberry Glen Bridge, near Boise, Idaho

Location.- Wire-weight gage, lat. $43^{\circ}40'$, long. $116^{\circ}17'$, in NE $\frac{1}{4}$ sec. 25, T. 4 N., R. 1 E., at Strawberry Glen Bridge, 5 miles northwest of post office at Boise. Zero of gage is 2,574.19 feet above mean sea level (U. S. Army Engineer datum - Boise River Surveys).

Records available.- March to September 1938.

Extremes.- Maximum discharge observed during period, 13,000 second-feet May 2 (water-surface elevation, 2,807.46 feet); minimum observed, 147 second-feet Apr. 2 (water-surface elevation, 2,800.09 feet), from rating curve extended below 460 second-feet.

Remarks.- Discharge records fair, gage-height records good. Discharge Mar. 26, 27 estimated, that for Mar. 24, Aug. 6, 7, 9 interpolated. Gage read twice daily. Records collected in cooperation with Works Progress Administration, under Boise River Flood Control Project, to develop river profile.

Rating tables, water year 1937-38 (water-surface elevation, in feet, and discharge, in second-feet)
(Shifting-control method used March 23, 25, April 24-26)

Mar. 23 to Apr. 23				Apr. 27 to Sept. 30			
2,600.0	120	3.2	2,960	2,601.3	310	4.9	5,800
0.4	260	3.6	3,580	1.7	540	5.3	6,810
0.8	470	4.0	4,250	2.1	860	5.7	7,850
1.2	740	4.4	4,960	2.5	1,270	6.1	8,930
1.6	1,070	4.8	5,710	2.9	1,850	6.5	10,040
2.0	1,460	5.2	6,500	3.3	2,510	6.9	11,180
2.4	1,890	5.6	7,300	3.7	3,220	7.3	12,380
2.8	2,390	6.0	8,140	4.1	4,000	7.5	12,980
				4.5	4,860		

Elevation, in feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	1.32	6.47	5.69	3.71	1.55	1.60
2						-	1.10	7.38	5.85	3.24	1.62	1.60
3						-	2.54	7.00	6.22	3.26	1.70	1.55
4						-	3.40	6.64	6.48	3.27	1.72	1.68
5						-	3.96	6.00	6.49	3.17	1.70	1.68
6						-	4.39	5.55	6.49	2.88	-	1.58
7						-	4.49	5.44	6.52	2.69	-	1.58
8						-	4.40	5.39	6.38	2.42	1.75	1.56
9						-	4.69	5.29	6.10	2.28	-	1.54
10						-	5.42	5.27	5.48	1.97	1.68	1.50
11						-	5.78	5.26	4.54	1.87	1.70	1.40
12						-	5.87	5.08	4.69	2.29	1.72	1.36
13						-	5.87	4.76	4.84	1.86	1.73	1.42
14						-	5.30	4.82	4.89	2.14	1.72	1.38
15						-	5.35	4.89	4.72	2.28	1.76	1.35
16						-	5.51	4.94	4.61	2.19	1.76	1.54
17						-	5.18	5.17	4.62	2.02	1.72	1.55
18						-	5.15	5.29	4.60	2.01	1.74	1.34
19						-	5.41	4.81	4.00	2.00	1.75	1.40
20						-	5.27	4.76	3.51	2.09	1.68	1.38
21						-	5.08	4.59	3.46	2.13	1.60	1.40
22						-	5.20	4.21	3.60	1.94	1.60	1.36
23						1.60	5.84	4.19	3.76	1.89	1.60	1.36
24						-	6.17	4.32	3.51	1.90	1.61	1.35
25						2.13	6.12	4.67	3.27	1.92	1.64	1.34
26						-	6.14	5.97	3.35	1.79	1.63	1.34
27						-	6.05	6.51	3.36	1.80	1.61	1.34
28						3.88	6.01	7.17	3.29	1.70	1.57	1.42
29						4.14	5.97	7.27	3.14	1.80	1.52	1.37
30						4.24	6.01	6.64	3.19	1.60	1.51	1.36
31						3.88	-	5.88	-	1.67	1.48	-

Note.- Add 2,600 feet to obtain elevation above mean sea level.

BOISE RIVER BASIN

Discharge, in second-feet, of Boise River at Strawberry Glen Bridge near Boise, Idaho,
water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	820	10,000	7,850	£,220	445	415
2						-	150	12,700	8,120	£,340	475	415
3						-	2,010	11,500	9,200	£,510	540	445
4						-	3,280	10,300	10,000	£,510	540	540
5						-	4,250	8,660	10,000	£,340	540	540
6						-	4,960	7,590	10,000	1,850	550	475
7						-	5,140	7,070	10,000	1,540	565	475
8						-	4,960	7,070	9,760	1,150	575	445
9						-	5,520	6,810	8,930	1,040	560	445
10						-	6,900	6,810	7,330	725	540	415
11						-	7,720	6,810	4,860	648	540	360
12						-	7,930	6,300	5,320	1,040	540	340
13						-	7,930	5,560	5,560	648	575	371
14						-	6,700	5,560	5,800	895	540	350
15						-	6,700	5,800	5,320	1,040	575	335
16						-	6,700	5,800	5,090	940	575	330
17						-	6,500	6,550	5,090	765	540	350
18						-	6,500	6,810	5,090	765	575	330
19						-	6,900	5,560	3,800	765	575	360
20						-	6,700	5,560	2,860	850	540	350
21						-	6,300	5,090	2,860	895	475	360
22						-	6,500	4,210	3,040	725	475	340
23						1,210	7,720	4,210	3,410	685	475	340
24						1,550	8,720	4,420	2,860	685	475	325
25						1,890	8,640	5,320	2,510	685	508	330
26						2,200	8,780	8,660	2,680	610	508	330
27						3,700	8,660	10,000	2,680	610	475	330
28						4,080	8,660	12,100	2,510	540	445	371
29						4,420	8,660	12,400	2,170	610	415	345
30						4,600	8,660	10,300	2,340	475	415	340
31						4,080	-	8,390	-	445	404	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March 23-31.....						27,730	4,600	1,210	3,081	55,000		
April.....						189,550	8,780	150	6,318	375,000		
May.....						233,920	12,700	4,210	7,546	464,000		
June.....						167,040	10,000	2,170	5,568	331,300		
July.....						34,546	3,220	445	1,114	66,520		
August.....						15,975	575	404	515	31,690		
September.....						11,497	540	325	383	22,800		
The period.....										1,349,000		

Boise River (north channel) near Eagle, Idaho

Location.— Water-stage recorder, lat. 43°41', long. 116°22', in NW¼ sec. 17, T. 4 N., R. 1 E., 550 feet downstream from Dry Creek, 1 mile southwest of Eagle, and 3 miles upstream from confluence with south channel at downstream end of Eagle Island.

Records available.— December 1935 to March 1938 (discontinued). Records incomplete.

Extremes.— Maximum discharge during period Oct. 1, 1937 to Mar. 31, 1938, about 3,530 second-feet Mar. 30 (gage height, 4.46 feet), from rating curve extended above 1,100 second-feet; minimum, 27 second-feet Nov. 12 (gage height, 0.29 foot).
1936-38: Maximum discharge recorded, that of Mar. 30, 1938; minimum recorded, 23 second-feet Apr. 19, 1937.

Remarks.— Records good except those for Jan. 10-18, Feb. 1-7, Mar. 27-31 which were computed on basis of weather records and records for nearby stations and are fair. Discharge for Mar. 11, 13, 16 interpolated. Flow regulated by storage in Arrowrock Reservoir and by many canals that divert above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	103	89	54	139	180	43						
2	103	94	52	149	35	50						
3	84	61	52	142	35	63						
4	78	41	52	136	35	50						
5	81	37	52	108	35	47						
6	68	37	52	111	35	43						
7	52	33	50	117	35	43						
8	54	33	47	145	37	39						
9	56	35	47	149	35	39						
10	68	31	54	150	35	37						
11	68	31	86	150	37	38						
12	78	29	321	150	41	39						
13	68	50	136	150	41	78						
14	66	89	76	150	41	117						
15	63	100	68	180	41	129						
16	68	123	68	230	43	349						
17	129	123	66	235	39	569						
18	186	94	63	235	41	410						
19	133	89	61	236	43	1,050						
20	76	86	59	224	41	1,240						
21	68	76	59	224	41	1,050						
22	63	73	56	282	39	920						
23	63	71	56	371	37	1,020						
24	61	66	56	339	39	952						
25	59	61	162	299	39	1,490						
26	61	61	166	273	37	1,120						
27	66	59	201	269	39	2,980						
28	66	59	194	269	39	3,060						
29	68	54	180	282	-	3,240						
30	68	54	172	273	-	3,440						
31	73	-	169	265	-	3,380						
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				2,398	186	52	77.4	4,760				
November.....				1,937	125	29	64.6	3,840				
December.....				2,987	201	47	96.4	5,920				
Calendar year												
January.....				6,432	371	108	207	12,760				
February.....				1,215	180	35	43.4	2,410				
March.....				27,125	3,440	37	875	53,800				
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
The period.....								83,490				

Boise River (north channel) at Linder Bridge, near Eagle, Idaho

Location.- Staff gage, lat. 43°41', long. 116°25', in NW¼ sec. 13, T. 4 N., R. 1 W., at Linder Bridge on Darland Lane, 3 miles west of Eagle. Zero of gage is 2,508.58 feet above mean sea level (U. S. Army Engineer datum - Boise River Surveys).

Records available.- March to September 1938.

Extremes.- Maximum water-surface elevation during period, 2,516.68 feet May 2; minimum, not observed.

Remarks.- Records good. Gage read twice daily. Records collected in cooperation with Works Progress Administration, under Boise River Flood Control Project, to develop river profile.

Elevation, in feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	-	15.73	15.10	13.86	9.54	
2						-	-	16.50	15.23	13.38	9.38	
3						-	-	16.23	15.43	13.38	9.54	
4						-	13.13	16.06	15.73	13.40	9.93	
5						-	13.48	15.70	15.70	13.30	10.00	
6						-	13.06	15.38	15.68	12.93	-	
7						-	13.86	15.33	15.68	12.63	-	
8						-	13.96	15.28	15.53	12.28	-	
9						-	14.08	15.16	15.23	11.86	-	
10						-	14.53	15.10	-	-	-	
11						-	15.23	14.96	-	-	-	
12						-	15.43	14.88	-	-	-	
13						-	15.66	14.63	-	-	-	
14						-	15.26	14.63	-	-	-	
15						-	15.18	14.66	-	-	-	
16						-	15.03	14.63	-	-	-	
17						-	14.98	14.80	-	-	-	
18						-	14.90	14.86	-	-	-	
19						-	15.13	14.56	-	-	-	
20						-	15.13	14.48	-	-	-	
21						-	14.98	14.43	-	-	-	
22						-	14.88	-	-	-	-	
23						-	15.23	-	-	-	-	
24						-	15.60	-	-	-	-	
25						-	15.60	14.18	-	-	-	
26						-	15.58	15.23	-	10.00	-	
27						-	15.60	15.60	-	9.86	-	
28						-	15.50	16.06	13.40	9.80	-	
29						13.43	15.40	16.43	13.08	10.10	-	
30						13.69	15.43	16.90	13.18	9.78	-	
31						-	-	15.28	-	9.63	-	

Note.- Add 2,500 feet to obtain elevation above mean sea level.

Boise River (south channel) near Eagle, Idaho

Location.- Water-stage recorder, lat. 43°40'30", long. 116°24'30", in NW¼ sec. 24, T. 4 N., R. 1 W., 450 feet upstream from bridge on Darland Lane, 800 feet downstream from Phyllis canal heading, 1 mile upstream from confluence with north channel at downstream end of Eagle Island, and 3¼ miles southwest of Eagle.

Records available.- December 1935 to March 1938 (discontinued). Records incomplete.

Extremes.- Maximum discharge during period Oct. 1, 1937, to Mar. 31, 1938, 1,340 second-feet Mar. 26 (gage height, 4.78 feet); minimum, 5 second-feet Oct. 6, 7 (gage height, 0.57 foot).

1935-38: Maximum discharge recorded, that of Mar. 26, 1938; minimum recorded, 1.8 second-feet Apr. 19, 1937 (gage height, 0.40 foot).

Remarks.- Records good except those for periods of missing or incomplete gage-height record, Dec. 6-20, Apr. 1, which were computed on basis of weather records and records for nearby stations and are fair. Flow regulated by storage in Arrowrock Reservoir and by many diversions above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	360	28	35	104	49	350					
2	10	428	28	32	161	55						
3	6	183	28	32	74	65						
4	7	122	27	32	59	63						
5	6	108	26	28	55	59						
6	6	102	26	26	52	60						
7	14	97	25	26	51	59						
8	29	91	24	27	51	56						
9	32	96	24	30	50	56						
10	36	100	30	31	46	54						
11	38	104	45	32	46	54						
12	38	102	160	34	51	56						
13	36	66	100	32	50	71						
14	34	34	50	34	48	101						
15	35	32	50	41	49	32						
16	36	34	50	50	46	29						
17	52	56	45	57	41	127						
18	140	33	45	56	41	161						
19	261	33	45	54	44	531						
20	86	37	40	51	43	477						
21	87	33	37	49	43	396						
22	56	31	36	60	44	336						
23	74	30	32	103	44	331						
24	61	29	31	98	44	334						
25	74	29	35	60	44	570						
26	94	29	39	49	42	762						
27	112	28	42	48	40	1,140						
28	137	26	44	50	43	1,080						
29	150	27	41	53	-	900						
30	170	28	39	52	-	845						
31	185	-	38	50	-	685						
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				2,114	261	5	68.2	4,190				
November.....				2,488	428	26	82.9	4,930				
December.....				1,310	160	24	42.3	2,600				
Calendar year												
January.....				1,407	103	26	45.4	2,790				
February.....				1,506	161	40	55.8	2,990				
March.....				9,592	1,140	29	379	19,030				
April.....												
May.....												
June.....												
July.....												
August.....												
September.....												
The period.....								36,530				

BOISE RIVER BASIN

Boise River at Star, Idaho

Location.- Staff gage, lat. $43^{\circ}41'$, long. $116^{\circ}30'$, in SW $\frac{1}{4}$ sec. 17, T. 4 N., R. 1 W., immediately upstream from headgate of Canyon County canal, 500 feet upstream from new road bridge and three-fourths mile south of Star. Zero of gage is 2,481.144 feet above mean sea level (U. S. Army Engineer datum - Boise River Surveys).

Records available.- March to August 1938.

Extremes.- Maximum water-surface elevation during period of record, 2,487.29 feet May 29; minimum, below gage staff, not determined.

Remarks.- Records good. Gage read twice daily. Records collected in cooperation with Works Progress Administration, under Boise River Flood Control Project, to develop river profile.

Elevation, in feet, March to August 1938

Day	Mar.	Apr.	May	June	July	Aug.	Day	Mar.	Apr.	May	June	July	Aug.
1	-	-	65.94	66.29	64.74	61.79	16	-	65.16	65.46	65.32	62.22	-
2	-	-	66.66	66.34	64.32	61.60	17	-	65.06	65.62	65.26	62.46	-
3	-	-	66.64	66.44	64.26	62.09	18	-	65.04	65.64	65.39	62.79	-
4	-	-	66.69	66.64	64.34	61.99	19	-	65.16	65.39	64.92	62.82	-
5	-	-	66.44	66.69	64.26	61.98	20	-	65.09	65.34	-	62.76	-
6	-	64.92	66.22	66.59	63.89	-	21	-	64.96	65.34	-	62.59	-
7	-	64.94	66.16	66.69	63.56	-	22	-	64.92	64.99	-	62.59	-
8	-	65.04	66.14	66.62	63.22	-	23	-	65.29	64.92	64.62	62.02	-
9	-	65.02	66.04	66.44	62.92	-	24	-	65.72	64.96	64.44	61.99	-
10	-	65.56	66.92	66.12	62.44	-	25	-	65.69	65.12	-	62.22	-
11	-	65.66	65.79	65.34	62.22	-	26	-	65.79	65.89	-	62.48	-
12	-	65.59	65.74	65.42	62.34	-	27	-	65.76	66.16	64.12	62.32	-
13	-	65.54	65.46	65.49	62.24	-	28	-	65.62	66.39	64.17	61.99	-
14	-	65.26	65.44	65.54	62.24	-	29	64.80	65.59	67.29	63.79	62.68	-
15	-	65.24	65.44	65.46	62.24	-	30	64.93	65.62	66.92	63.84	62.36	-
							31	-	-	66.44	-	61.76	-

Note.- Add 2,400 feet to obtain elevation above mean sea level.

Boise River at Middleton, Idaho

Location.- Staff gage, lat. $43^{\circ}32'$, long. $116^{\circ}38'$, in SE $\frac{1}{4}$ sec. 7, T. 4 N., R. 2 W., at railroad bridge on McCall branch of Oregon Short Line, three-quarters of a mile southeast of Middleton. Zero of gage is 2,386.506 feet above mean sea level (U. S. Army Engineer datum - Boise River Surveys).

Records available.- March to July 1938.

Extremes.- Maximum water-surface elevation during period, 2,394.91 feet May 2; minimum not determined, below gage.

Remarks.- Records good. Gage read twice daily. Records collected in cooperation with Works Progress Administration, under Boise River Flood Control Project, to develop river profile.

Elevation, in feet, March to July 1938

Day	Mar.	Apr.	May	June	July	Day	Mar.	Apr.	May	June	July
1	-	91.39	93.99	93.62	91.89	16	-	93.27	92.84	92.46	-
2	-	90.23	94.88	93.72	91.63	17	-	93.21	92.96	92.43	-
3	-	90.61	94.68	93.88	-	18	-	93.21	93.03	92.51	-
4	-	91.61	94.57	94.15	-	19	-	93.33	92.87	92.06	-
5	-	91.99	94.28	94.21	91.61	20	-	93.34	92.61	91.59	-
6	-	92.46	93.94	94.07	91.33	21	-	93.18	92.76	91.51	-
7	-	92.46	93.81	94.24	91.01	22	-	93.11	92.31	91.59	-
8	-	92.73	93.70	94.10	90.79	23	-	93.52	92.21	91.76	-
9	-	92.59	93.59	93.84	90.56	24	-	93.85	92.19	91.61	-
10	-	93.31	93.44	93.42	90.31	25	-	93.79	92.36	91.41	-
11	-	93.54	93.29	92.51	90.19	26	-	93.85	93.27	91.31	89.34
12	-	93.60	93.23	92.59	90.06	27	-	93.79	93.75	91.41	-
13	-	93.60	92.83	92.67	89.91	28	-	93.71	94.45	91.36	-
14	-	93.35	92.81	92.71	-	29	92.43	93.62	94.61	91.11	-
15	-	93.29	92.81	92.63	-	30	92.57	93.63	94.48	91.11	-
						31	-	-	93.68	-	-

Note.- Add 2,300 feet to obtain elevation above mean sea level.

Boise River near Caldwell, Idaho

Location.- Staff gage, lat. 43°41', long. 116°41', in NW¼ sec. 15, T. 4 N., R. 3 W., at bridge on U. S. highway 30, just downstream from diversion points of Riverside and Farmer's Cooperative canals, 1½ miles north of Oregon Short Line Railroad station in Caldwell. Zero of gage is 2,348.81 feet above mean sea level (U. S. Army Engineer datum--Boise River Surveys).

Records available.- March to September 1938.

Extremes.- Maximum water-surface elevation during period, 2,357.56 feet May 2; minimum not determined.

Remarks.- Records good. Gage read twice daily. Records collected in cooperation with Works Progress Administration, under Boise River Flood Control Project, to develop river profile.

Elevation, in feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	53.66	56.31	55.71	-	-	
2						-	50.87	57.21	55.79	-	-	
3						-	-	57.23	55.99	-	49.02	
4						-	53.36	57.09	56.31	-	49.02	
5						-	53.95	56.73	56.39	-	49.02	
6						-	54.69	56.21	56.19	-	49.00	
7						-	54.61	56.01	56.46	-	48.94	
8						-	54.83	56.86	56.23	-	-	
9						-	54.60	55.63	55.86	-	48.92	
10						-	55.61	55.35	55.23	-	48.97	
11						-	55.65	55.13	53.81	-	48.97	
12						-	55.95	55.03	-	-	48.97	
13						-	55.93	54.39	-	-	-	
14						-	55.57	54.61	-	-	-	
15						-	55.42	54.43	-	-	-	
16						-	55.46	54.41	-	-	-	
17						-	55.43	54.66	-	-	48.97	
18						-	55.31	54.63	-	-	48.97	
19						-	55.46	54.66	-	-	48.97	
20						-	55.43	54.53	-	-	48.97	
21						-	55.19	54.49	-	-	-	
22						-	55.03	53.86	-	-	-	
23						-	55.71	53.71	-	-	-	
24						-	56.13	53.61	52.56	-	-	
25						-	56.06	53.99	-	-	-	
26						-	56.11	55.16	-	49.02	-	
27						-	56.03	55.81	53.36	-	-	
28						-	55.86	56.83	-	-	-	
29						54.69	55.67	57.43	-	-	-	
30						54.95	55.73	57.03	-	-	-	
31						54.48	-	56.09	-	-	-	

Note.- Add 2,300 feet to obtain elevation above mean sea level.

Boise River at Notus, Idaho

Location.- Water-stage recorder, lat. 43°43', long. 116°48', in SE¼ sec. 34, T. 5 N., R. 4 W., 360 yards upstream from steel highway bridge, a quarter of a mile southeast of Notus, and 7 miles northwest of Caldwell. Zero of gage is 2,238.55 feet above mean sea level (survey by Corps of Engineers, U. S. Army).

Records available.- April 1920 to September 1938.

Average discharge.- 16 years (1920-22, 1924-38), 1,100 second-feet.

Extremes.- Maximum discharge during year, 12,800 second-feet May 3 (gage height, 9.12 feet); minimum, 31 second-feet Aug. 10 (gage height, 0.26 foot).

1920-38: Maximum discharge observed, 14,500 second-feet May 19, 20, 1921; maximum gage height, that of May 3, 1938; minimum discharge, 10 second-feet Aug. 18, 1920.

Remarks.- Records good except those for period of missing gage heights. Oct. 4-31, which were estimated and are poor, and those for periods of channel change, Jan. 26 to May 1, which were computed on basis of five discharge measurements, recorder records, and records for nearby stations and are fair. Discharge for Oct. 1-3 computed on basis of once-daily staff-gage readings at former site, 360 yards downstream. Station is below all diversions for irrigation in Boise Valley. Flow regulated by storage in Arrowrock Reservoir. Many diversions for irrigation above station.

Rating table, Jan. 28 to Sept. 30 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Jan. 28 to May 1)

0.2	26	1.8	302	3.5	1,610	5.5	5,000	7.5	8,940
.6	69	2.2	425	4.0	2,400	6.0	5,920	8.0	10,080
1.0	124	2.6	620	4.5	3,250	6.5	6,870	8.5	11,290
1.4	203	3.0	960	5.0	4,100	6.9	7,650	9.1	12,820

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	640	447	563	662	394	3,420	8,500	7,860	3,000	61	43
2	34	880	447	530	602	425	572	10,800	7,860	2,820	50	45
3	34	761	441	530	555	470	991	12,000	8,280	2,400	46	43
4		538	438	513	457	453	2,910	11,500	8,940	2,660	47	47
5		488	432	492	437	429	3,930	10,300	9,390	2,740	49	51
6		468	429	471	425	422	4,910	9,160	8,940	2,350	50	57
7		457	432	478	414	414	5,000	8,500	9,390	1,660	51	62
8		450	426	478	418	408	5,540	8,280	8,940	993	47	77
9		457	426	506	414	400	5,360	7,860	8,280	584	42	109
10	40	527	450	510	411	394	6,490	7,250	7,250	354	34	127
11		527	530	510	429	390	7,250	6,870	5,180	210	38	129
12		524	733	527	461	394	7,650	6,680	4,910	99	43	131
13		513	839	530	437	445	7,650	5,730	5,000	81	44	139
14		502	563	513	418	584	7,250	5,540	5,180	78	41	141
15		506	548	541	411	566	6,680	5,540	4,910	78	43	147
16		530	548	575	408	698	6,870	5,540	4,640	106	43	149
17		555	587	620	404	797	6,680	5,730	4,370	121	42	131
18		555	541	635	394	1,290	6,680	6,110	4,640	86	42	136
19		559	524	630	400	1,980	6,870	6,110	3,840	70	41	139
20		610	510	605	394	3,000	7,060	5,730	2,740	50	37	120
21		559	499	591	394	2,660	6,680	5,540	2,400	47	41	115
22		527	499	669	390	2,370	6,300	4,730	2,570	86	42	121
23		510	488	647	394	2,240	7,250	4,370	3,000	72	41	134
24	500	496	478	823	400	2,660	8,280	4,190	2,820	47	47	129
25		482	492	719	397	3,000	8,500	4,370	2,270	44	45	134
26		478	567	675	394	3,300	6,500	6,110	2,030	47	40	138
27		471	579	675	390	3,420	8,280	7,650	2,130	53	39	139
28		468	615	714	387	4,730	8,070	9,620	2,030	62	42	164
29		460	591	730	-	4,910	7,650	12,000	1,560	92	45	238
30		450	583	714	-	5,180	7,650	11,500	1,430	109	43	310
31		-	571	690	-	4,730	-	8,940	-	87	42	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				8,122	-	34	262	16,110				
November.....				15,948	880	450	532	31,630				
December.....				16,233	839	426	524	32,200				
Calendar year 1937.....				102,009	1,560	19	279	202,300				
January.....				18,604	847	471	600	36,900				
February.....				12,077	662	387	431	23,950				
March.....				53,553	5,180	390	1,728	106,200				
April.....				186,923	8,500	572	6,231	370,800				
May.....				232,750	12,000	4,190	7,508	461,700				
June.....				152,780	9,390	1,430	5,093	303,000				
July.....				21,286	3,000	44	687	42,220				
August.....				1,358	61	34	43.8	2,690				
September.....				3,645	310	43	122	7,230				
Water year 1937-38.....				723,279	12,000	34	1,982	1,435,000				

Boise River near Parma, Idaho

Location.— Staff gage, lat. 43°44', long. 116°57', in NW¼ sec. 16, T. 5 N., R. 5 W., at Parma-Wilder highway bridge, 1½ miles southwest of Parma. Zero of gage is 2,214.38 feet above mean sea level (U. S. Army Engineer datum—Boise River Surveys).

Records available.— March to September 1938.

Extremes.— Maximum water-surface elevation during period, 2,221.28 feet May 3; minimum, 2,214.80 feet Aug. 6, 7, 16, Sept. 3.

Remarks.— Records good. Gage read twice daily. Records collected in cooperation with Works Progress Administration, under Boise River Flood Control Project, to develop river profile.

Elevation, in feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	18.76	20.00	19.60	-	15.65	16.64
2						-	-	20.64	19.66	-	15.76	16.64
3						-	-	21.16	19.77	17.26	15.70	14.60
4						-	18.04	20.96	20.04	17.46	15.40	15.14
5						-	18.64	20.64	20.20	17.44	15.22	15.68
6						-	19.10	20.20	20.08	17.36	14.68	16.70
7						-	19.13	19.94	20.18	17.06	14.60	16.80
8						-	19.38	19.81	20.02	16.76	14.70	16.84
9						-	19.18	19.66	19.84	16.30	15.18	16.90
10						-	19.72	19.43	19.47	15.74	15.68	16.96
11						-	19.94	19.30	18.66	15.46	15.98	16.96
12						-	20.11	19.16	-	15.10	16.30	16.94
13						-	20.09	18.80	18.40	14.84	16.26	16.96
14						-	20.03	18.74	18.58	14.76	16.54	16.90
15						-	19.68	18.72	18.48	14.66	16.60	16.88
16						-	19.66	18.78	18.36	14.86	14.78	15.46
17						-	19.64	18.78	-	14.96	15.30	15.36
18						-	19.60	18.86	18.38	14.94	16.28	16.06
19						-	19.62	19.10	-	14.86	16.40	16.04
20						-	19.71	18.88	-	14.72	16.46	15.96
21						-	19.46	18.94	-	14.66	16.56	15.96
22						-	19.38	18.46	-	14.66	16.52	15.96
23						-	19.66	18.33	-	14.74	16.46	15.96
24						-	20.08	-	-	14.66	16.56	16.00
25						17.95	20.12	-	-	14.66	16.68	16.16
26						-	20.12	18.84	-	14.66	16.66	16.16
27						-	20.10	19.66	-	14.64	16.66	16.16
28						-	19.94	20.28	17.08	14.70	16.50	16.40
29						-	19.78	21.01	-	14.86	16.68	16.54
30						19.31	19.75	20.88	-	14.92	16.72	16.54
31						-	-	20.12	-	15.46	16.88	-

Note.— Add 2,200 feet to obtain elevation above mean sea level.

BOISE RIVER BASIN

Diversions from Boise River, Idaho

Twenty-seven principal canals and several small farm laterals divert water from Boise River for irrigation below mouth of Moore Creek and between gaging stations at Dowling ranch and Notus. Records for the years 1919 to 1937 are available. Record of daily diversions subsequent to 1915 on file in office of Idaho Commissioner of Reclamation.

Daily gage-height records were obtained, frequent discharge measurements made, and records summarized under direction of W. E. Welsh, watermaster for Boise River.

Total amount of water, in acre-feet, diverted by each canal during irrigation season of 1938

Main canal of Bureau of Reclamation.....	717,140
Penitentiary.....	2,110
Ridenbaugh.....	157,990
Bubb.....	4,680
Consumers (Cruzen).....	6,820
Boise City No. 1.....	9,670
Settlers.....	47,740
Thurman Mill.....	10,540
Farmers Union (includes Boise Valley diversion).....	55,830
New Union (Little Union).....	4,290
New Dry Creek (Dry Creek).....	17,680
Ballantine.....	3,480
Eagle Island canals (7).....	12,530
Middleton Water Co.....	30,970
Middleton Mill ditch.....	17,440
Phyllis.....	110,110
Eureka No. 1.....	7,200
Pioneer (Little Pioneer).....	9,680
Canyon County.....	18,660
Caldwell High Line.....	17,060
Riverside No. 2.....	65,680
Farmers Cooperative.....	92,820
Canyon (Campbell).....	5,700
Seibenberg.....	2,640
Pioneer Dixie.....	8,900
Eureka No. 2.....	14,900
Upper Center Point.....	2,430
Lower Center Point.....	2,420
Miscellaneous.....	8,320
Total.....	1,465,400

Combined monthly discharge of canals diverting from Boise River, Idaho, 1938

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
April.....	4,908	720	2,446	145,550
May.....	5,566	4,188	5,043	310,100
June.....	5,557	5,136	5,426	322,880
July.....	5,143	3,853	4,500	276,720
August.....	3,858	3,442	3,648	224,280
September...	3,467	2,548	3,124	185,870
The period				1,465,400

South Fork of Boise River near Lenox, Idaho

Location.- Water-stage recorder, lat. $43^{\circ}30'$, long. $115^{\circ}41'$, in sec. 24, T. 2 N., R. 6 E., $\frac{1}{2}$ miles upstream from Smith Creek, 4 miles upstream from flow line of Arrowrock Reservoir, 4 miles west of discontinued Lenox post office, 13 miles upstream from mouth, and 17 miles above Arrowrock Dam.

Drainage area.- 1,090 square miles.

Records available.- March 1911 to September 1938.

Average discharge.- 27 years, 966 second-feet.

Extremes.- Maximum discharge during year, 8,600 second-feet May 1 (gage height, 9.31 feet); minimum, 183 second-feet Oct. 15 (gage height, 2.00 feet).
1911-38: Maximum discharge, 9,200 second-feet May 15, 1917 (gage height, 9.53 feet), from rating curve extended above 6,500 second-feet; minimum, 111 second-feet Aug. 10, 1934; minimum gage height, 1.68 feet Sept. 5-7, 1931.

Remarks.- Records good. Discharge for periods of missing gage heights or ice effect, Dec. 7-15, Jan. 5-12, 26-30, computed on basis of weather records and records for Boise River near Twin Springs and Arrowrock Reservoir at Arrowrock. No diversions for irrigation above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	192	242	223	352	399	520	702	8,000	5,730	2,480	601	341
2	192	242	207	383	395	626	692	7,810	5,910	2,270	572	352
3	192	239	245	424	387	702	718	6,100	6,290	2,380	553	348
4	195	239	276	358	383	666	806	5,190	6,290	2,170	548	345
5	195	235	259	340	368	656	916	4,350	6,290	2,070	525	352
6	195	232	229	330	372	606	977	3,880	6,290	1,980	511	337
7	195	235	230	330	368	596	1,040	3,590	6,290	1,780	489	341
8	199	232	220	350	364	587	1,180	3,320	6,100	1,550	462	341
9	201	239	210	380	364	606	1,350	3,320	5,370	1,600	449	334
10	201	242	400	420	383	621	1,480	3,590	4,510	1,480	449	330
11	201	248	2,900	450	403	631	1,600	4,030	3,880	1,400	445	334
12	195	255	3,900	400	432	682	1,780	4,190	3,880	1,280	428	337
13	195	259	1,800	383	416	886	1,930	4,680	4,030	1,210	416	337
14	189	272	1,500	395	395	946	2,070	5,370	3,730	1,140	416	326
15	186	297	1,000	407	403	916	2,270	5,730	3,730	1,180	420	326
16	204	286	900	420	372	1,040	2,590	5,910	3,590	1,240	424	319
17	279	293	692	416	330	1,110	2,820	6,480	3,590	1,110	416	311
18	456	311	621	399	308	1,040	4,550	6,290	3,450	1,070	399	308
19	356	315	548	391	364	1,040	6,290	5,370	2,940	977	391	311
20	293	375	475	375	375	977	5,910	4,510	2,700	916	383	311
21	272	601	445	360	391	886	5,730	3,880	2,700	896	372	311
22	262	484	441	379	383	778	5,730	3,730	2,820	823	368	308
23	255	368	471	412	383	806	5,910	4,030	2,820	794	364	308
24	255	364	441	387	387	811	5,730	4,680	2,590	772	387	304
25	252	356	454	364	387	756	6,100	5,550	2,590	740	391	293
26	248	360	445	350	383	723	6,670	6,290	2,590	734	385	293
27	245	337	458	350	412	740	6,290	7,240	2,480	718	375	293
28	245	315	466	400	454	800	5,910	7,620	2,380	703	352	290
29	245	319	456	450	-	789	6,290	7,050	2,170	682	348	311
30	242	272	416	430	-	750	7,050	6,100	2,590	651	345	341
31	242	-	416	416	-	729	-	5,730	-	651	337	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	7,283	466	186	235	0.216	0.25	14,450
November.....	9,064	601	232	302	0.277	.31	17,980
December.....	21,414	3,900	207	691	.634	.73	42,470
Calendar year 1937.....	234,432	3,900	138	642	.589	8.00	465,000
January.....	11,999	450	330	387	.355	.41	23,800
February.....	10,761	454	308	354	.352	.37	21,340
March.....	24,002	1,110	520	774	.710	.82	47,610
April.....	103,101	7,050	692	3,437	3.15	3.51	204,500
May.....	163,610	8,000	3,320	5,278	4.84	5.58	324,500
June.....	120,320	6,290	2,170	4,011	3.68	4.11	238,700
July.....	39,516	2,480	626	1,275	1.77	2.04	78,280
August.....	13,318	601	337	430	.394	.45	26,420
September.....	9,693	352	290	323	.296	.33	19,230
Water year 1937-38.....	534,081	8,000	186	1,463	1.34	18.91	1,059,000

Little Camas Reservoir near Bennett, Idaho

Location.- Staff gage near left end of dam, lat. 43°21', long. 115°23', in NE¼ sec. 9, T. 1 S., R. 9 E., 4 miles northeast of Bennett and 22 miles northeast of Mountain Home.

Drainage area.- 31.8 square miles.

Records available.- March 1924 to September 1938.

Extremes.- Maximum gage height observed during year, 4,967.93 feet May 13; minimum observed, 4,945.80 feet Nov. 5.

1924-38: Maximum gage height, that of May 13, 1938; usually no storage after irrigation season of each year.

Remarks.- Records good. Capacity of reservoir is 22,300 acre-feet between gage heights 4,931.0 and 4,965.0 feet. Water used for irrigation on about 5,000 acres of land in vicinity of Mountain Home. Gage-height record furnished by Mountain Home Irrigation District.

Gage height, in feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Jul	Aug.	Sept.
1								-	67.05	65.03	62.10	58.80
2								-	-	65.00	62.00	-
3								-	-	64.97	61.65	-
4								-	-	64.90	61.70	-
5		45.80						-	-	64.80	61.60	-
6								-	-	64.72	61.50	-
7								-	-	64.65	61.40	-
8								-	-	64.57	61.30	-
9								-	-	64.50	61.16	58.65
10								-	-	64.40	61.04	-
11								-	-	64.30	60.94	-
12								-	-	64.20	60.82	-
13								67.93	-	64.10	60.70	-
14								-	-	64.00	60.60	-
15								-	66.20	63.90	60.50	-
16								-	66.10	63.83	60.40	-
17								-	66.00	63.73	60.30	-
18								-	65.90	63.62	60.16	-
19								-	65.85	63.53	60.10	-
20								-	65.78	63.40	59.90	-
21								-	65.70	63.30	59.80	-
22								-	65.64	63.19	59.70	-
23								-	65.62	63.10	59.70	-
24								-	65.54	63.00	59.60	-
25								67.24	65.50	62.90	59.50	-
26								-	65.40	62.80	59.40	-
27								-	65.30	62.70	59.30	-
28								-	65.22	62.60	59.20	-
29								-	65.13	62.50	59.10	-
30								-	65.10	62.38	59.00	-
31								-	-	62.20	58.90	-

Note.- Add 4,900 feet to obtain elevation referred to datum of Mountain Home Irrigation District.

Little Camas canal at heading, near Bennett, Idaho

Location.- Staff gage, lat. 43°21'30", long. 115°23', in sec. 9, T. 1 S., R. 9 E., 400 feet downstream from Little Camas Reservoir, 4 miles northeast of Bennett, and 22 miles northeast of Mountain Home.

Records available.- June to November 1917, April 1924 to September 1938 (irrigation seasons only).

Extremes.- Maximum discharge during year, 61 second-feet June 4-13 (gage height, 2.18 feet); no flow prior to May 15 and subsequent to Sept. 1.

1917, 1924-38: Maximum discharge, 77 second-feet Apr. 27-30, May 1, 3, 9, 1924; no flow during nonirrigation seasons.

Remarks.- Records good. Gage read once daily. Canal diverts water from Little Camas Reservoir in sec. 9, T. 1 S., R. 9 E., and discharges it into Long Tom Creek Basin, where it is stored in Long Tom Reservoir for irrigation of 5,000 acres of land near Mountain Home. No diversions above gage. Flow regulated by head gates at Little Camas Reservoir. Gage-height record furnished by Mountain Home Irrigation District.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								0	56	55	54	13
2								0	58	55	54	0
3								0	60	56	54	0
4								0	61	55	54	0
5								0	61	55	54	0
6								0	61	55	54	0
7								0	61	55	54	0
8								0	61	54	54	0
9								0	61	55	55	0
10								0	61	55	50	0
11								0	61	55	50	0
12								0	61	55	50	0
13								0	61	55	50	0
14								0	61	55	50	0
15								9	61	55	50	0
16								28	61	55	50	0
17								27	61	55	50	0
18								28	58	55	46	0
19								28	54	55	43	0
20								31	54	57	43	0
21								33	54	57	43	0
22								36	55	55	43	0
23								42	55	55	43	0
24								44	54	55	43	0
25								44	54	55	43	0
26								44	55	55	43	0
27								45	55	55	43	0
28								46	55	55	43	0
29								48	55	54	43	0
30								50	55	54	43	0
31								53	-	54	43	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						0	0	0	0	0		
November.....						0	0	0	0	0		
December.....						0	0	0	0	0		
Calendar year 1937.....						5,664	60	0	15.5	11,230		
January.....						0	0	0	0	0		
February.....						0	0	0	0	0		
March.....						0	0	0	0	0		
April.....						0	0	0	0	0		
May.....						636	53	0	20.5	1,260		
June.....						1,737	61	53	57.9	3,450		
July.....						1,712	57	54	55.2	3,400		
August.....						1,490	54	45	48.1	2,960		
September.....						13	13	0	.4	26		
Water year 1937-38.....						5,588	61	0	15.3	11,100		

Moore Creek near Arrowrock, Idaho

Location.- Staff gage, lat. 43°35', long. 115°59', in sec. 21, T. 3 N., R. 4 E., at bridge on Boise-Arrowrock highway, a quarter of a mile upstream from mouth and 3 miles southwest of Arrowrock.

Drainage area.- 426 square miles.

Records available.- October 1914 to September 1938 (prior to December 1915, discharge measurements only).

Average discharge.- 22 years (1916-38), 290 second-feet.

Extremes.- Maximum discharge observed during year, 3,230 second-feet May 1; maximum gage height observed, 5.10 feet Apr. 19; minimum discharge, 28 second-feet Dec. 9; minimum gage height, 0.44 foot Oct. 1.

1915-38: Maximum discharge observed, 4,550 second-feet Apr. 19, 1938; maximum gage height, 6.3 feet, former datum, Apr. 11, 1918; minimum discharge, 7.9 second-feet Aug. 13-15, 17, 18, 1924; minimum gage height, 0.22 foot, present datum, Aug. 16, 18, 19, 1934.

Remarks.- Records fair. Discharge for Nov. 21, 26, Dec. 12, Mar. 17, July 5 computed on basis of reported high-water marks and staff-gage readings. Gage read once daily. No large diversions above station. Gage-height record furnished by Board of Control for Boise project. Two discharge measurements furnished by watermaster for Boise River.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	46	82	82	222	412	698	2,860	995	388	85	53
2	30	46	82	99	222	525	665	2,420	955	308	78	51
3	29	48	82	98	208	730	730	2,170	955	410	73	49
4	29	48	65	68	206	730	915	1,710	995	410	85	48
5	30	49	68	52	193	635	995	1,400	955	497	78	43
6	39	52	58	51	180	635	1,080	1,300	915	308	64	43
7	31	47	49	54	180	605	1,210	1,160	915	272	51	46
8	31	47	42	82	180	605	1,300	1,120	875	238	56	46
9	31	58	28	59	180	635	1,400	1,040	838	222	58	47
10	31	59	46	60	180	635	1,400	1,080	765	208	62	49
11	29	59	1,400	75	222	605	1,500	1,120	665	193	58	52
12	29	65	1,500	73	289	665	1,500	1,040	665	180	58	52
13	29	65	765	66	289	1,160	1,600	1,080	665	180	62	51
14	32	78	478	75	272	995	1,600	1,080	605	156	52	48
15	32	109	388	136	238	995	1,820	1,080	578	156	58	49
16	33	89	327	180	222	1,600	2,050	1,080	525	180	59	47
17	53	82	289	167	180	1,720	1,820	1,120	525	156	54	46
18	123	83	254	167	180	1,500	2,290	1,120	500	167	58	43
19	99	87	208	156	222	1,400	2,810	1,040	478	144	56	43
20	66	138	167	156	193	1,300	2,420	955	432	125	54	42
21	59	635	142	180	222	1,040	2,290	875	388	119	54	43
22	53	254	144	327	208	955	2,420	875	432	113	54	43
23	51	167	156	388	208	955	2,550	955	455	109	58	43
24	51	156	144	289	208	915	2,420	915	410	105	52	43
25	48	142	136	238	208	800	2,420	1,040	367	105	53	43
26	47	180	138	208	222	875	2,420	995	327	123	54	43
27	45	156	156	206	272	875	2,170	1,080	289	115	54	42
28	47	142	138	254	327	1,040	1,930	1,300	289	76	52	41
29	45	129	134	272	-	915	1,830	1,120	254	103	52	43
30	45	119	136	222	-	838	2,050	1,040	507	92	49	46
31	46	-	121	222	-	730	-	995	-	87	49	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	1,372	123	29	44.3	0.104	0.12	2,720
November.....	3,435	635	46	114	0.288	0.30	6,810
December.....	7,923	1,500	28	256	0.601	0.69	15,720
Calendar year 1937.....	79,040	1,500	14	217	0.509	6.90	156,800
January.....	4,764	388	51	154	0.362	0.42	9,450
February.....	6,135	327	180	219	0.514	0.54	12,170
March.....	27,825	1,720	412	898	2.11	2.43	55,190
April.....	52,403	2,810	665	1,747	4.10	4.57	103,900
May.....	38,165	2,860	875	1,231	2.89	3.33	76,700
June.....	18,619	995	254	617	1.45	1.62	36,750
July.....	6,045	497	75	195	0.458	0.53	11,990
August.....	1,840	85	49	59.4	0.139	0.16	3,650
September.....	1,377	53	41	45.9	0.108	0.12	2,730
Water year 1937-38.....	169,803	2,860	28	465	1.09	14.83	336,800

Deer Flat Reservoir near Caldwell, Idaho

Location.— Staff gage attached to outlet structure at each end of reservoir. One gage is at lower embankment, lat. 43°35', long. 116°45', in SE¼ sec. 19, T. 3 N., R. 3 W., 5 miles south and 2 miles west from Caldwell; the other is at upper embankment, lat. 43°34', long. 116°39', in NW¼ sec. 36, T. 3 N., R. 3 W., 1 mile south and 4 miles west from Nampa.

Records available.— October 1917 to September 1938.

Extremes.— Maximum contents during year, 178,300 acre-feet Apr. 17, 18, May 2 (gage height, 30.12 feet); minimum, 7,476 acre-feet Oct. 20.

1917-38: Maximum contents, 178,900 acre-feet Apr. 27, 28, 1922, and Apr. 24, 1932 (gage height, 30.18 feet); minimum, 5,390 acre-feet Oct. 22, 1924.

Remarks.— Reservoir has a capacity of 177,153 acre-feet between gage heights 0.0 and 30.0 feet. In addition to water received from local drainage, water for storage is diverted from Boise River at point 8 miles downstream from Moore Creek and carried to reservoir through main canal of Boise project. It is used for irrigation of lower lands of project. Gage-height record and table of storage capacity furnished by Board of Control for Boise project.

Contents, in acre-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,650	9,230	39,420	83,530	81,760	125,800	155,500	177,900	169,200	168,800	129,200	80,190
2	10,240	9,374	41,910	83,320	81,680	127,700	156,400	178,300	169,600	167,800	127,500	78,970
3	9,787	9,562	44,710	83,320	81,680	129,600	157,300	177,800	169,900	167,700	125,800	77,630
4	9,640	9,759	46,910	83,260	82,160	131,800	158,200	177,400	170,000	168,200	124,100	76,300
5	9,412	9,933	49,430	83,190	83,320	133,200	160,400	177,500	169,600	168,200	122,500	74,860
6	9,185	10,080	51,780	83,050	84,700	134,900	162,400	177,600	169,500	168,400	120,800	73,730
7	9,068	10,240	54,060	82,910	86,370	136,500	164,500	178,200	169,600	169,200	119,000	72,490
8	8,903	10,430	55,510	82,780	87,910	138,200	166,600	178,000	169,300	169,100	117,100	71,260
9	8,715	10,630	57,450	82,710	89,750	139,600	168,800	177,700	167,100	161,200	115,500	70,040
10	8,552	10,840	59,060	82,640	91,530	141,600	170,800	177,200	166,300	162,000	113,600	68,830
11	8,471	11,080	62,270	82,500	93,400	142,900	172,900	176,500	165,800	162,100	112,000	68,320
12	8,469	11,360	64,860	82,360	95,350	144,600	174,600	175,800	165,200	161,300	110,400	67,680
13	8,322	11,500	67,050	82,230	97,400	146,400	176,700	175,100	165,000	159,500	108,300	66,930
14	8,093	11,650	69,270	82,230	99,090	148,800	176,400	174,500	164,700	157,500	106,600	66,050
15	7,969	11,820	71,460	82,230	100,800	150,800	177,400	173,900	164,600	155,700	104,900	65,230
16	7,701	11,930	73,560	82,160	102,900	152,400	177,900	173,100	164,600	153,900	103,200	64,360
17	7,648	12,160	75,240	82,090	104,500	154,000	178,300	172,000	164,100	152,100	101,600	63,500
18	7,616	12,350	77,100	82,230	106,200	155,900	178,300	170,600	163,700	150,800	99,680	62,820
19	7,551	12,750	79,780	82,230	108,100	158,200	177,600	169,500	163,500	149,000	98,280	61,900
20	7,476	14,380	81,950	82,230	109,900	158,500	176,700	168,900	163,100	147,500	96,660	61,170
21	7,497	16,100	82,640	82,230	111,600	158,400	175,800	168,600	162,800	145,800	94,920	60,560
22	7,527	17,960	82,840	82,230	113,300	158,000	175,600	169,000	162,700	144,100	93,760	59,660
23	7,526	19,840	83,360	82,230	114,900	157,700	175,400	169,500	162,600	142,400	92,590	58,760
24	7,559	21,920	83,860	82,160	116,900	157,700	175,200	170,200	162,600	140,800	90,960	57,870
25	7,535	24,400	84,570	82,090	118,600	157,100	175,200	170,300	162,700	139,400	89,460	56,860
26	8,032	26,530	84,700	82,090	120,400	156,900	175,700	169,800	162,500	137,800	88,050	55,920
27	8,208	29,050	84,700	81,950	122,100	156,500	176,200	169,000	162,400	136,500	86,650	55,220
28	8,388	31,620	84,500	81,950	123,700	156,000	176,600	168,500	161,900	135,100	85,540	54,520
29	8,543	34,280	84,290	81,880	-	155,700	177,000	168,300	160,800	133,700	84,290	54,010
30	8,784	36,800	84,010	81,820	-	155,300	177,200	168,100	159,800	132,100	83,460	53,320
31	8,926	-	83,740	81,820	-	154,900	-	168,500	-	130,600	81,540	-

Drains crossing Phyllis canal to Boise River, Idaho

Phyllis canal diverts from the left bank of Boise River in sec. 24, T. 4 N., R. 1 W., 3½ miles southwest of Eagle. The canal flows west and south through Nampa and thence westward, passing through sec. 24, T. 3 N., R. 3 W., about 1½ miles north of upper embankment of Deer Flat Reservoir. Eight principal drains cross Phyllis canal in this reach. Records of the flow of these drains at points from which the flow could be diverted by gravity or pumping into Phyllis canal were collected during the winter season, November 23, 1937, to March 31, 1938.

A summary of the drain flow available for diversion during winter seasons is useful in conjunction with records for North and South Channels of Boise River near Eagle, to determine the feasibility of diverting water from these sources to supplement the storage impounded in Deer Flat Reservoir.

Mean monthly discharge, in second-feet, winter season 1937-38

Drain	Nov. (23-30)	Dec.	Jan.	Feb.	Mar.
Fivemile.....	10.0	9.7	8.9	7.1	7.8
Tenmile.....	5.6	4.9	3.8	3.2	3.0
Purdam.....	8.7	8.5	7.2	5.9	5.8
Mason.....	7.2	6.4	5.6	5.5	5.1
Indian Creek.....	19.5	18.7	16.4	14.8	14.3
Elijah.....	15.7	16.1	16.3	16.7	15.2
Wilson.....	17.8	20.2	21.6	23.2	25.8
Wilson (additional).....	11.5	11.9	13.5	13.4	9.9
Upper Embankment.....	7.7	8.2	9.4	9.3	10.8
Combined discharge.....	103.7	104.6	102.7	99.1	97.7
Run-off in acre-feet.....	1,650	6,430	6,310	5,500	6,010

Total run-off in acre-feet, Nov. 23 to Mar. 31, 25,900

Note.- Figures of mean monthly discharge were determined from hydrographs drawn through frequent discharge measurements. All discharge measurements in this summary, together with others made for the same purpose, are included in the list of miscellaneous measurements at the end of this report (see pp. 232, 233).

Malheur River near Drewsey, Oreg.

Location.- Water-stage recorder, lat. 43°41', long. 118°16', in SE¼ sec. 3, T. 22 S., R. 36 E., half a mile downstream from flow line of Warm Springs Reservoir and 10 miles southeast of Drewsey.

Drainage area.- 1,010 square miles.

Records available.- April to September 1923, June 1926 to September 1938. June to December 1920 and April to September 1921 at site 7 miles upstream.

Average discharge.- 12 years (1926-38), 128 second-feet.

Extremes.- Maximum discharge during year, 1,970 second-feet Apr. 20 (gage height, 6.20 feet); minimum, 4 second-feet July 24-28, Aug. 28 to Sept. 4 (gage height, 1.28 feet).

1920-21, 1923, 1926-38: Maximum discharge, 3,800 second-feet Mar. 19, 1932 (gage height, 8.17 feet); no flow at times.

Remarks.- Records fair. Discharge for period of ice effect, Dec. 4-6, computed on basis of weather reports and records for North Fork of Malheur River above Agency Valley Reservoir, near Beulah. Several small diversions above station.

Rating table, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.4	6.3	4.0	530
1.7	17	4.5	755
2.0	36	5.0	1,060
2.5	103	5.5	1,410
3.0	202	6.0	1,810
3.5	350		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	27	53	98	184	682	337	1,160	276	54	8	4
2	6	27	47	98	222	1,530	327	1,200	249	51	8	4
3	7	27	46	103	162	1,240	410	1,160	230	53	8	4
4	8	27	40	109	133	755	592	962	220	62	8	4
5	7	27	37	124	110	615	755	870	212	64	8	5
6												
7	13	27	40	131	117	570	755	730	204	60	8	5
8	18	27	44	158	212	530	615	638	197	53	7	5
9	27	28	49	124	227	530	682	570	190	42	7	6
10	27	28	49	93	184	530	810	518	179	33	6	6
11	28	30	58	87	190	592	930	476	182	29	6	7
12												
13	28	30	733	86	255	530	1,030	444	148	23	7	7
14	28	30	1,450	97	249	730	1,030	430	138	20	6	8
15	24	35	800	97	188	1,270	995	418	127	15	6	9
16	24	35	402	90	146	1,270	1,060	402	122	12	6	9
17	26	39	498	156	120	755	1,130	396	118	11	7	9
18												
19	25	42	550	244	101	995	1,240	406	117	11	7	9
20	26	44	350	142	101	1,100	1,610	413	112	11	8	9
21	30	45	327	118	108	682	1,850	399	105	11	8	8
22	31	62	255	120	113	930	1,690	396	101	10	8	7
23	44	124	195	113	105	995	1,610	402	108	7	7	7
24												
25	34	210	182	93	117	592	1,770	371	110	6	6	6
26	30	142	150	350	122	488	1,730	314	148	5	6	6
27	30	98	142	530	179	455	1,730	276	270	5	6	6
28	30	76	133	252	530	530	1,690	252	190	4	5	6
29	29	92	117	175	510	570	1,770	244	138	4	5	6
30												
31	28	89	138	142	413	570	1,650	255	108	4	4	5
1	28	92	140	134	518	680	1,450	279	90	4	4	5
2	28	78	142	134	530	755	1,300	327	82	4	4	6
3	27	71	133	133	-	530	1,200	368	88	5	4	6
4	27	68	125	125	-	398	1,160	374	60	6	4	7
5	27	-	120	118	-	357	-	317	-	7	4	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	765	51	5	24.7	1,520
November.....	1,774	210	26	59.1	3,520
December.....	7,525	1,450	37	243	14,930
Calendar year 1937.....	37,005	1,450	0	101	73,410
January.....	4,551	530	86	147	9,030
February.....	6,144	530	101	219	12,190
March.....	22,732	1,530	357	735	45,090
April.....	35,308	1,890	327	1,177	70,030
May.....	15,785	1,200	244	509	31,310
June.....	4,577	276	60	153	9,080
July.....	686	64	4	22.1	1,380
August.....	196	8	4	6.3	389
September.....	191	9	4	6.4	379
Water year 1937-38.....	100,234	1,890	4	275	188,800

Peak discharge.- Mar. 2 (9 a.m.) 1,690 sec.-ft.; Mar. 14 (2 a.m.) 1,610 sec.-ft.; Mar. 17 (5 a.m.) 1,270 sec.-ft.; Mar. 19 (7-9 p.m.) 1,138 sec.-ft.; Mar. 20 (4-8 a.m.) 1,130 sec.-ft.; Apr. 20 (10 p.m.) 1,970 sec.-ft.

Warsprings Reservoir near Riverside, Oreg.

Location.- Tape gage, lat. 43°35', long 118°12' (published erroneously in Water-Supply Paper 813, 833), in SE $\frac{1}{4}$ sec. 8, T. 23 S., R. 37 E., at Warsprings Reservoir Dam on Malheur River, 4 miles upstream from mouth of South Fork and 4 miles northwest of Riverside. Zero of gage is 3,327.00 feet above mean sea level (surveys of Bureau of Reclamation).

Records available.- January 1920 to September 1938.

Extremes.- Maximum contents observed during year, 194,300 acre-feet May 19-21 (gage height, 79.40 feet); minimum observed, 290 acre-feet Oct. 1, 2 (gage height, 3.05 feet).

1920-38: Maximum contents observed, that of May 19-21, 1938; no storage Sept. 18 to Nov. 1, 1929, Aug. 26 to sometime in November 1935.

Remarks.- Records excellent. Reservoir was completed in 1919 by Warsprings Irrigation District for irrigation of its lands on both sides of Malheur River, extending from mouth of canyon above Vale to Ontario. In 1926 a half interest in reservoir was purchased by the Government for Vale project of Bureau of Reclamation, which embraces lands between Namorf and mouth of Willow Creek just below Vale, mainly on north side of Malheur River. In 1930 capacity of reservoir was increased by flashboards from 170,000 acre-feet at gage height 74.0 feet (crest of spillway) to 192,500 acre-feet at gage height 79.0 feet (top of flashboards).

Monthly gage height and contents, water year October 1937 to September 1938

Date	Gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30.....	3.05	290	-
Oct. 31.....	8.50	1,900	+1,610
Nov. 30.....	14.50	6,500	+4,600
Dec. 31.....	26.49	22,380	+15,880
Jan. 31.....	-	*31,400	+9,020
Feb. 28.....	37.02	44,550	+13,150
Mar. 31.....	54.70	95,100	+50,550
Apr. 30.....	74.30	171,400	+76,300
May 31.....	79.34	194,000	+22,600
June 30.....	78.56	181,500	-12,500
July 31.....	72.23	162,000	-19,500
Aug. 31.....	67.98	144,900	-17,100
Sept. 30.....	64.51	131,000	-13,900
Water year 1937-38	-	-	+130,710

*Contents estimated; gage not read because of wind.

Malheur River below Warm Springs Reservoir, near Riverside, Oreg.

Location.- Hook gage, lat. 43°34', long. 118°12', in SW¼ sec. 17, T. 23 S., R. 37 E., 1 mile downstream from Warm Springs Dam, 3 miles upstream from South Fork, and 4 miles northwest of Riverside.

Drainage area.- 1,100 square miles.

Records available.- January 1906 to March 1907 and December 1908 to September 1910 (at site at Riverside, 4 miles downstream), December 1914 to July 1917, and March 1919 to September 1938 in reports of Geological Survey. October 1910 to November 1914 in reports of State engineer.

Average discharge.- 26 years (1909-16, 1919-38), 161 second-feet.

Extremes.- Maximum discharge observed during year, 415 second-feet June 17-22 (gage height, 4.71 feet); practically no flow Oct. 12 to Apr. 29.

1906-7, 1908-17, 1919-38: Maximum discharge observed, 5,490 second-feet Mar. 2, 1910; practically no flow at times.

Remarks.- Records good. Several small diversions for irrigation above station. Flow completely regulated since November 1919 by operation of gages in Warm Springs Dam.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.8	1.0	3.8	82
3.0	5.3	4.0	130
3.2	13	4.3	225
3.4	26	4.6	360
3.6	48		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.0							2.0	283	388	173	360
2	1.0							1.0	257	388	173	335
3	.5							3.0	233	388	182	335
4	.5							3.5	221	368	179	335
5	.5							11	209	368	164	310
6	.5							16	237	360	179	283
7	.5							27	310	310	209	270
8	.5							18	310	296	229	225
9	.5							16	310	310	245	213
10	.5							63	310	335	265	201
11	.5							201	310	335	270	150
12	0							310	310	335	283	132
13	0							335	310	335	283	132
14	0							335	335	335	283	132
15	0							310	335	301	283	132
16	0							257	335	283	283	132
17	0							185	360	265	283	132
18	0							335	415	253	283	132
19	0							261	415	253	274	164
20	0							310	415	255	245	189
21	0							360	415	253	241	182
22	0							360	388	253	225	173
23	0							310	335	253	201	170
24	0							261	292	233	185	164
25	0							233	283	213	201	164
26	0							225	257	213	257	164
27	0							233	265	213	301	164
28	0							257	310	213	335	164
29	0							253	310	193	360	164
30	0						35	310	360	176	360	164
31	0						-	310	-	173	360	-
Month								Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....								6.5	1.0	0	0.21	13
November.....								0	-	-	0	0
December.....								0	-	-	0	0
Calendar year 1937.....								30,682.0	475	0	84.1	60,870
January.....								0	-	-	0	0
February.....								0	-	-	0	0
March.....								0	-	-	0	0
April.....								3.5	3.5	0	.12	7
May.....								6,111.5	360	1.0	197	12,120
June.....								9,435	415	209	314	18,710
July.....								8,885	388	173	287	17,620
August.....								7,794	360	164	251	15,460
September.....								5,967	360	132	199	11,840
Water year 1937-38.....								38,202.5	415	0	105	75,770

Malheur River near Hope, Oreg.

Location.- Water-stage recorder, lat. 43°57', long. 117°29', in SW¼ sec. 5, T. 19 S., R. 43 E., half a mile upstream from intake of Vines canal and 6½ miles west of Hope.

Drainage area.- 3,030 square miles.

Records available.- May 1919 to September 1938 (incomplete prior to October 1922).

Average discharge.- 15 years (1922-25, 1926-38), 202 second-feet.

Extremes.- Maximum discharge during year, 2,470 second-foot Mar. 2 (gage height, 4.52 feet); minimum, 19 second-foot Oct. 9 (gage height, 0.56 foot).

1919-38: Maximum discharge, 8,100 second-foot Feb. 5, 1925, from rating curve extended above 3,000 second-foot; minimum, 3.5 second-foot Sept. 2, 1919 (gage height, 0.02 foot).

The two greatest floods known occurred in March 1894 and sometime in 1910.

Remarks.- Records fair except those for periods of ice effect, Dec. 25-27, Jan. 3-6, and those for period of no gage-height record, Jan. 25 to Feb. 5, which were estimated on basis of weather records at Vale and unpublished records for Malheur River below Nevada Dam, near Vale, and are poor. No large diversion above station except Vale-Oregon canal at Namorr, completed in 1930 by Bureau of Reclamation. Flow regulated to large extent by storage in Warm Springs Reservoir since November 1919 and in Agency Valley Reservoir since December 1935.

Rating tables, water year 1937-38 except for periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used June 18 to Aug. 31)

Oct. 1 to Feb. 24				Feb. 25 to Sept. 30			
0.6	21	1.4	135	0.6	21	2.2	408
.8	36	1.6	193	.8	36	2.5	575
1.0	57	1.8	269	1.0	57	3.0	930
1.2	89	2.0	357	1.3	111	3.5	1,370
				1.6	184	4.0	1,880
				1.9	280		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	32	40	63	95	1,130	287	482	394	156	120	184
2	30	34	40	53	95	1,770	252	460	306	161	125	195
3	25	36	39	49	102	1,320	238	488	248	161	125	190
4	23	34	39	44	98	754	310	476	235	166	132	181
5	22	34	38	42	89	504	418	313	204	151	148	187
6	20	34	38	42	84	434	545	222	156	153	134	187
7	20	34	38	57	78	424	498	209	109	134	136	190
8	20	34	38	60	91	398	394	148	184	118	158	179
9	19	34	38	45	103	365	394	129	222	107	183	151
10	20	35	43	47	114	355	429	72	198	120	166	132
11	24	35	156	46	167	321	775	57	179	122	184	136
12	24	35	571	53	299	351	1,070	190	144	129	201	132
13	24	35	571	51	261	551	761	248	122	141	206	94
14	23	36	316	53	204	747	898	330	125	165	209	85
15	22	35	278	56	171	557	858	365	148	165	215	86
16	21	35	500	58	144	478	850	334	146	174	222	83
17	24	40	391	60	119	450	922	222	158	156	225	77
18	22	39	299	60	116	408	1,220	238	148	156	215	81
19	20	51	211	61	116	439	1,320	330	192	139	219	81
20	21	53	174	57	105	515	1,370	326	174	144	219	76
21	21	47	144	58	111	460	1,070	389	184	125	205	122
22	21	55	121	268	107	356	1,030	439	195	139	206	134
23	21	55	109	510	114	310	978	398	206	132	206	120
24	20	55	80	316	299	408	898	338	151	148	184	111
25	21	51	78	233	588	620	835	256	94	168	166	109
26	20	47	74	162	653	653	866	201	88	184	184	100
27	21	45	72	146	692	790	782	201	88	144	187	94
28	20	43	70	124	828	1,030	634	291	90	139	153	98
29	22	42	68	113	-	835	515	370	141	134	171	96
30	29	41	63	102	-	498	521	413	141	134	174	96
31	31	-	60	95	-	351	-	444	-	137	175	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	703	32	19	22.7	1,390
November.....	1,214	55	32	40.5	2,410
December.....	4,797	571	38	155	9,510
Calendar year 1937.....	35,147	571	15	96.3	69,690
January.....	3,185	510	42	103	6,320
February.....	6,043	828	78	216	11,960
March.....	18,565	1,770	310	599	36,820
April.....	21,938	1,370	238	731	43,510
May.....	9,375	488	57	302	18,600
June.....	5,170	394	88	172	10,250
July.....	4,490	184	107	145	8,910
August.....	5,535	225	120	179	10,980
September.....	3,787	195	76	126	7,510
Water year 1937-38.....	84,800	1,770	19	232	168,200

Peak discharge.- Mar. 2 (4:30 a.m.) 2,470 sec.-ft.; Mar. 3 (6 a.m.) 1,820 sec.-ft.; Mar. 4 (9 a.m.) 906 sec.-ft.; Mar. 27 (10 a.m.) 954 sec.-ft.; Mar. 28 (8 a.m.) 1,220 sec.-ft.; Apr. 13 (2 a.m.) 1,090 sec.-ft.

North Fork of Malheur River above Agency Valley Reservoir, near Feulah, Oreg.

Location.- Water-stage recorder, lat. 43°58', long. 118°11', in sec. 33, T. 18 S., R. 37 E., at M. W. Scott's ranch, about 3 miles upstream from Warm Springs Creek and 4 miles northwest of Agency Valley Dam at Beulah.

Records available.- January to September 1914, June 1936 to September 1938.

Extremes.- Maximum discharge during year, 852 second-feet Dec. 11 (gage height, 4.25 feet); minimum, 26 second-feet Oct. 6 (gage height, 0.45 foot).
1914, 1936-38: Maximum discharge observed, 866 second-feet Apr. 15, 1914 (gage height, 4.8 feet, former datum); minimum, 20 second-feet Aug. 8, 9, 1936, Aug. 21, 1937.

Remarks.- Records fair. A few small diversions above station; no regulation.

Rating table, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used May 28 to Sept. 30)

0.6	37	2.2	290
.8	57	2.5	368
1.0	81	3.0	493
1.3	120	3.5	625
1.6	167	4.0	776
1.9	226		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	38	35	44	*70	610	153	805	346	86	44	48
2	32	38	†30	*35	*90	370	197	790	355	90	45	47
3	32	37	†29	*35	82	213	258	700	324	91	44	47
4	29	37	†28	*35	57	171	370	610	312	93	44	47
5	28	37	†30	*45	53	172	382	536	301	85	44	47
6	26	38	36	*55	64	155	335	470	290	80	43	47
7	28	36	47	*60	90	150	382	432	279	77	42	49
8	29	41	44	*70	78	155	432	394	258	72	42	56
9	31	39	42	*65	78	183	457	382	243	68	42	52
10	32	39	56	60	119	187	509	370	222	66	42	49
11	34	41	715	*60	103	222	550	362	205	65	44	49
12	35	43	457	*70	93	394	595	394	189	61	44	49
13	35	42	216	*70	77	565	550	407	180	59	45	48
14	35	45	174	*60	61	312	565	420	169	58	45	46
15	36	45	*160	*70	54	370	610	444	162	61	46	46
16	36	43	150	*90	48	655	700	470	152	59	45	45
17	47	46	*135	54	42	346	835	470	140	55	44	46
18	55	47	116	*54	57	312	888	470	137	55	43	52
19	43	62	*105	*55	61	457	828	470	137	52	42	52
20	42	104	*95	*56	57	290	852	432	126	49	42	52
21	39	77	*90	60	57	205	835	382	111	47	45	52
22	37	58	*70	134	59	203	835	358	131	44	45	52
23	37	54	46	97	*100	213	835	346	136	44	46	52
24	36	59	*53	48	*160	279	835	346	121	45	44	52
25	37	56	62	59	*150	247	820	370	112	44	44	53
26	37	58	*75	54	*130	234	790	407	104	43	47	53
27	37	53	*95	54	*170	279	760	457	99	47	47	52
28	37	49	*108	60	*190	279	715	493	100	48	46	53
29	37	47	*92	62	-	197	715	483	94	50	46	37
30	37	36	69	*60	-	176	745	420	86	47	44	55
31	38	-	47	*55	-	180	-	382	-	45	43	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,103	55	26	35.6	2,190
November.....	1,445	104	36	48.2	2,870
December.....	3,505	715	23	113	6,950
Calendar year 1937.....	29,853	715	22	61.8	59,220
January.....	1,886	154	35	60.8	3,740
February.....	2,430	190	42	66.8	4,820
March.....	8,771	655	150	283	17,400
April.....	18,383	888	153	613	36,460
May.....	14,282	805	346	461	28,330
June.....	5,601	346	86	187	11,110
July.....	1,886	93	43	60.8	3,740
August.....	1,367	47	42	44.1	2,710
September.....	1,505	57	45	50.2	2,990
Water year 1937-38.....	62,164	888	26	170	123,300

Peak discharge.- Dec. 11 (7:30 p.m.) 852 sec.-ft.; Mar. 13 (11 a.m.) 670 sec.-ft.; Mar. 16 (4 a.m.) 775 sec.-ft.; Mar. 19 (2 a.m.) 625 sec.-ft.; Apr. 11 (4 a.m.) 625 sec.-ft.; Apr. 12 (4 a.m.) 670 sec.-ft.

*Gage height missing; discharge computed on basis of weather records, and records for Malheur River above Warm Springs Reservoir, near Riverside, and Agency Valley Reservoir near Beulah.

†Stage-discharge relation affected by ice; discharge computed on basis of above-mentioned records.

Agency Valley Reservoir at Beulah, Oreg.

Location.- Pressure gage with mercury column, lat. 45°55', long. 116°09', in SW¼ sec. 15, T. 19 S., R. 37 E., at dam on North Fork of Malheur River, a quarter of a mile northwest of Beulah. Zero of gage is at mean sea level.

Drainage area.- 420 square miles.

Records available.- December 1935, when storage began, to September 1938.

Extremes.- Maximum contents observed during year, 60,660 acre-feet Apr. 18, May 27 (gage height, 3,340.40 feet); minimum observed, 3,627 acre-feet Oct. 2 (gage height, 3,299.70 feet).

1935-38: Maximum contents observed, that of Apr. 18, May 27, 1938; no storage prior to Dec. 21, 1935, when gates were first closed.

Remarks.- Records excellent. Agency Valley Reservoir was constructed in 1935 by Bureau of Reclamation; its capacity above elevation 3,263.21 feet (bottom of outlet tunnel) is 59,920 acre-feet at elevation 3,340 feet (top of spillway gates), or 52,220 acre-feet at elevation 3,323 feet (spillway crest). Diversions for irrigation above station. Gage-height record and capacity table furnished by Bureau of Reclamation.

Monthly elevation and contents, water year October 1937 to September 1938

Date	Gage height (feet)	Contents (acre-feet)	Change in contents during month (acre-feet)
Sept. 30	3,290.10	3,793	-
Oct. 31	3,294.90	6,039	+2,246
Nov. 30	3,300.60	9,365	+3,326
Dec. 31	3,310.90	17,850	+8,485
Jan. 31	3,315.20	22,450	+4,600
Feb. 28	3,320.35	28,700	+6,250
Mar. 31	3,336.20	52,940	+24,240
Apr. 30	3,340.20	60,300	+7,360
May 31	3,340.30	60,490	+190
June 30	3,339.80	59,540	-950
July 31	3,333.45	48,160	-11,380
Aug. 31	3,323.70	33,190	-14,970
Sept. 30	3,321.40	30,070	-3,120
Water year 1937-38			+26,277

North Fork of Malheur River at Beulah, Oreg.

Location.- Scaff gage, lat. 43°54', long. 118°09', in NE¼ sec. 22, T. 19 S., R. 37 E., at Beulah, a quarter of a mile downstream from Agency Valley Dam and 12 miles north-west of Juntura.

Drainage area.- 420 square miles.

Records available.- June 1926 to September 1938 (prior to December 1935 station was below intake of two canals with combined capacity of about 10 second-feet). March 1909 to June 1912 and November 1913 to July 1914, at site 6 miles downstream.

Extremes.- Maximum discharge observed during year, 1,260 second-feet Apr. 18, 19 (gage height, 6.00 feet); no flow Oct. 3 to Apr. 8, 1909-12, 1913-14, 1926-38: Maximum discharge, 5,910 second-feet Mar. 20, 1910; minimum prior to construction of reservoir, 5 second-feet Dec. 28, 1910, Jan. 26, 27, 1911.

Remarks.- Records good. Flow regulated since Dec. 21, 1935, by Agency Valley Reservoir of Bureau of Reclamation, when gates were first closed. Small diversions for irrigation above station; practically entire summer flow diverted below station and above Juntura. Gage-height record furnished by Bureau of Reclamation.

Rating table, Apr. 9 to Sept. 30, 1938 (gage height, in feet, and discharge in second-feet)

1.0	75	2.0	215	4.0	650
1.2	98	2.4	292	4.5	775
1.4	123	2.8	374	5.0	920
1.6	151	3.2	459		
1.8	182	3.6	551		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59						0	725	353	174	292	116
2	42						0	800	353	174	292	116
3	0						0	800	353	174	292	116
4	0						0	625	352	174	292	75
5	0						0	527	312	174	292	75
6	0						0	551	272	174	292	75
7	0						0	437	353	174	292	75
8	0						0	437	353	174	292	75
9	0						245	374	292	174	292	75
10	0						920	353	292	174	292	75
11							890	353	215	174	292	75
12	0						890	353	198	193	292	60
13	0						920	395	158	215	292	60
14	0						625	437	123	272	292	60
15	0						625	437	182	272	292	60
16	0						650	374	182	272	292	60
17	0						980	459	182	272	292	80
18	0						1,260	437	182	272	292	92
19	0						1,260	437	137	272	292	92
20	0						890	437	137	272	292	80
21	0						920	459	137	272	292	80
22	0						950	395	80	292	292	80
23	0						950	395	80	292	292	80
24	0						860	292	80	292	292	80
25	0						890	292	80	292	292	80
26	0						890	332	137	292	224	80
27	0						775	395	145	292	166	86
28	0						700	481	174	292	104	86
29	0						725	481	174	292	104	86
30	0						725	481	174	292	104	75
31	0						-	395	-	292	104	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....							101	59	0	3.3	200	
November.....							0	-	-	0	0	
December.....							0	-	-	0	0	
Calendar year 1937.....							32,435.9	401	0	88.9	64,330	
January.....							0	-	-	0	0	
February.....							0	-	-	0	0	
March.....							0	-	-	0	0	
April.....							18,340	1,260	0	611	56,380	
May.....							14,146	800	292	456	28,060	
June.....							6,222	353	80	207	12,340	
July.....							7,423	292	174	239	14,720	
August.....							8,106	292	104	261	16,080	
September.....							2,405	116	60	80.2	4,770	
Water year 1937-38.....							56,743	1,260	0	155	112,600	

South Fork of Payette River near Garden Valley, Idaho

Location.- Water-stage recorder, lat. 44°04', long. 115°56', in sec. 1, T. 8 N., R. 4 E., at Garden Valley ranger station, 300 feet upstream from Station Creek, 2.7 miles southeast of Garden Valley, and 5.9 miles upstream from Middle Fork of Payette River.

Drainage area.- 779 square miles.

Records available.- May 1921 to September 1938.

Average discharge.- 14 years (1924-38), 1,160 second-feet.

Extremes.- Maximum discharge during year, 7,710 second-feet June 8 (gage height, 6.57 feet); minimum, 110 second-feet Dec. 1 (gage height, 0.86 foot), from rating curve extended below 280 second-feet; minimum daily discharge, 275 second-feet Oct. 2, 1921-38; Maximum discharge observed, 10,600 second-feet May 26, 1928 (gage height, 8.0 feet); minimum discharge, 75 second-feet, Dec. 15, 1935, January 26, 1936 (gage height, 0.70 foot), from rating curve extended below 280 second-feet; minimum daily discharge, 217 second-feet Jan. 26, 1936.

Remarks.- Records excellent. A few diversions above station. Since Nov. 2, 1930, flow regulated by storage in Deadwood Reservoir, on Deadwood River. Slight regulation by operation of Grimes Pass power plant.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.80	95	2.40	1,010	4.00	2,910	5.60	5,660
1.20	225	2.80	1,390	4.40	3,510	6.00	6,450
1.60	430	3.20	1,850	4.80	4,180	6.40	7,280
2.00	690	3.60	2,360	5.20	4,900	6.80	7,710

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	364	430	285	408	419	503	607	5,280	5,090	3,590	1,060	942
2	275	430	419	442	430	522	607	4,900	5,470	3,580	1,020	942
3	315	424	484	442	430	542	627	3,920	5,250	3,700	1,020	893
4	408	419	424	430	419	542	655	3,350	6,050	3,550	1,090	869
5	442	414	353	454	419	536	676	2,840	6,250	2,640	1,090	805
6	408	424	370	460	408	522	683	2,560	6,860	2,700	1,100	789
7	448	419	396	408	402	503	712	2,300	7,280	2,660	1,080	797
8	454	442	353	414	408	496	813	2,160	7,490	2,490	984	893
9	472	442	336	408	419	522	917	2,160	7,070	2,420	909	893
10	460	442	529	424	436	529	925	2,420	6,250	2,500	813	829
11	454	448	3,080	448	442	536	976	2,560	5,660	2,230	789	821
12	454	460	2,980	424	472	574	1,090	2,630	5,470	2,640	909	909
13	460	448	1,560	414	454	755	1,150	3,050	5,470	1,570	1,200	1,200
14	436	478	1,100	419	442	742	1,240	3,430	5,280	1,550	1,340	1,200
15	460	490	959	460	448	720	1,390	3,760	5,090	1,550	1,200	1,150
16	466	460	837	460	408	885	1,610	4,010	5,090	1,510	1,090	959
17	562	460	750	436	375	1,150	1,730	4,360	5,280	1,790	950	976
18	568	466	693	436	348	993	2,300	4,180	5,090	1,790	797	1,030
19	472	466	546	424	464	976	2,980	3,590	4,450	1,510	1,050	1,070
20	454	641	510	408	472	917	2,770	3,200	4,100	1,560	1,100	1,070
21	436	829	510	419	466	821	2,630	2,980	4,100	1,570	1,100	1,060
22	442	594	503	460	397	742	2,700	3,120	4,270	1,440	1,150	1,000
23	430	542	548	490	386	750	2,630	3,510	4,100	1,390	1,200	1,050
24	430	529	503	436	392	728	2,700	4,010	3,920	1,340	1,150	1,150
25	419	466	503	397	386	676	2,910	4,540	3,840	1,290	869	1,200
26	424	490	503	386	408	655	2,980	5,280	3,920	1,540	773	1,150
27	430	454	529	436	442	669	2,910	6,050	3,840	1,500	676	1,080
28	419	448	510	436	466	728	2,980	6,860	3,670	1,500	669	1,060
29	442	424	486	460	-	705	3,430	6,050	3,430	1,150	669	1,150
30	402	397	484	430	-	669	4,010	5,280	3,760	1,100	728	1,240
31	456	-	466	424	-	648	-	5,090	-	1,080	813	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	13,542	568	275	437	28,860
November.....	14,275	829	397	476	28,520
December.....	22,501	3,060	285	726	44,630
Calendar year 1937.....	321,674	3,120	275	891	638,100
January.....	13,393	490	386	432	26,560
February.....	11,878	484	348	424	23,560
March.....	21,236	1,150	496	685	42,120
April.....	54,338	4,010	607	1,811	107,800
May.....	119,436	6,860	2,160	3,855	236,900
June.....	163,490	7,490	3,430	5,116	304,400
July.....	60,960	3,590	1,080	1,966	120,900
August.....	30,368	1,340	669	980	60,230
September.....	30,177	1,240	789	1,008	59,860
Water year 1937-38.....	545,589	7,490	275	1,495	1,082,000

South Fork of Payette River near Banks, Idaho

Location.— Water-stage recorder, lat. 44°05'30", long. 116°06', in sec. 28, T. 9 N., R. 3 E., 1 mile upstream from confluence with North Fork of Payette River and 1½ miles northeast of Banks. Zero of gage is 2,812.00 feet above mean sea level.

Drainage area.— 1,200 square miles.

Records available.— August 1921 to September 1938.

Average discharge.— 17 years, 1,550 second-feet.

Extremes.— Maximum discharge during year, 10,600 second-feet May 1 (gage height, 9.71 feet); minimum, 257 second-feet Oct. 2, 3 (gage height, -0.02 foot).
1921-38: Maximum discharge, 13,800 second-feet May 17, 1927 (gage height, 10.6 feet, from floodmarks); minimum, 225 second-feet Dec. 15, 1935, Jan. 28, 1936, from rating curve extended below 400 second-feet.

Remarks.— Records good. Discharge for periods of missing or incomplete gage-height record, Dec. 10, 11, 13, July 11, 12, 14-19, 21-31, Aug. 1, 2, 12-17, 19-21, computed on basis of records for nearby stations; that for July 13, 20, Aug. 1, 18 based on once-daily staff gage reading. Small diversions for irrigation above station. Since Nov. 2, 1930, flow has been regulated by operation of gates in Deadwood Dam, on Deadwood River. Slight regulation by operation of Grimes Pass power plant.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

-0.1	225	2.3	1,580	4.7	3,740	7.1	6,800	9.5	10,267
.3	390	2.7	1,890	5.1	4,180	7.5	7,560	9.7	10,587
.7	585	3.1	2,220	5.5	4,660	7.9	7,920		
1.1	805	3.5	2,575	5.9	5,170	8.3	8,480		
1.5	1,045	3.9	2,940	6.3	5,690	8.7	9,080		
1.9	1,300	4.3	3,330	6.7	6,240	9.1	9,680		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	500	540	422	570	673	895	1,200	9,680	7,560	4,180	1,200	1,080
2	394	530	520	640	706	985	1,170	6,780	7,780	3,850	1,150	1,080
3	399	535	624	656	695	1,100	1,200	6,940	8,540	3,850	1,150	1,020
4	495	520	590	570	678	1,080	1,300	5,690	8,480	3,530	1,270	985
5	535	520	480	550	662	1,040	1,340	4,910	8,630	3,450	1,240	925
6	515	525	490	580	668	1,020	1,340	4,300	9,230	3,230	1,270	895
7	540	520	515	629	662	985	1,440	5,850	9,530	3,040	1,240	925
8	540	555	455	646	690	985	1,620	3,630	9,560	2,940	1,140	1,020
9	560	575	450	640	690	1,020	1,850	3,630	9,080	2,840	1,040	1,040
10	555	560	675	640	717	1,080	1,890	3,960	7,920	2,760	985	955
11	550	575	5,100	678	750	1,080	1,970	4,180	7,220	2,600	955	955
12	550	590	5,300	640	835	1,170	2,220	4,180	6,940	2,400	1,050	985
13	555	585	2,500	612	905	1,730	2,300	4,910	6,940	2,500	1,350	1,340
14	535	645	1,620	640	778	1,690	2,680	5,300	6,800	2,200	1,500	1,340
15	550	662	1,480	706	750	1,620	2,840	5,820	6,620	2,200	1,350	1,300
16	580	607	1,300	728	717	2,300	3,230	6,240	6,520	2,300	1,200	1,080
17	722	612	1,140	695	651	2,940	3,450	6,800	6,660	2,100	1,050	1,080
18	734	624	1,040	684	607	2,300	4,540	6,520	6,240	2,000	865	1,140
19	602	634	865	668	750	2,300	5,690	5,860	5,560	1,900	1,150	1,170
20	570	865	778	646	744	2,050	5,040	5,040	5,040	1,810	1,200	1,170
21	555	1,370	734	651	734	1,770	4,780	4,660	5,040	1,750	1,200	1,170
22	550	895	750	734	668	1,590	5,040	4,780	5,170	1,700	1,240	1,170
23	540	778	805	835	662	1,840	5,040	5,300	4,910	1,650	1,340	1,100
24	535	778	744	728	662	1,430	5,040	5,960	4,780	1,550	1,300	1,240
25	535	700	750	624	668	1,400	5,430	6,660	4,540	1,500	1,020	1,300
26	530	728	734	560	690	1,400	5,820	7,640	4,780	1,450	925	1,270
27	535	662	778	668	750	1,400	5,566	8,630	4,540	1,400	835	1,200
28	520	634	750	706	805	1,510	5,560	9,680	4,500	1,400	805	1,170
29	550	602	739	744	-	1,440	6,240	8,630	4,070	1,350	778	1,270
30	500	550	728	690	-	1,370	7,220	7,640	4,500	1,300	635	1,400
31	525	-	684	678	-	1,270	-	7,360	-	1,250	925	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	16,556	734	394	544	33,430
November.....	19,477	1,370	520	619	38,630
December.....	34,530	5,300	422	1,114	68,490
Calendar year 1937.....	437,090	5,300	320	1,198	867,000
January.....	20,436	835	550	659	40,530
February.....	19,897	835	607	710	39,415
March.....	45,530	2,940	895	1,469	90,310
April.....	103,920	7,220	1,170	3,464	206,100
May.....	186,860	9,680	3,530	6,028	370,600
June.....	196,900	9,680	4,070	6,563	390,500
July.....	71,760	4,180	1,250	2,315	142,300
August.....	34,558	1,500	778	1,115	68,540
September.....	33,775	1,400	895	1,126	66,990
Water year 1937-38.....	784,469	9,680	394	2,149	1,556,000

Payette River near Horseshoe Bend, Idaho

Location.- Water-stage recorder, lat. 43°56', long. 116°11'30", in SW¼ sec. 14, T. 7 N., R. 2 E., 100 feet east of tracks of Idaho Northern branch of Oregon Short Line Railroad and 1½ miles north of Horseshoe Bend.

Drainage area.- 2,230 square miles.

Records available.- February 1906 to September 1916, July 1919 to September 1938. Prior to November 1912 at site 2 miles upstream, in sec. 2.

Average discharge.- 27 years (1907-15, 1919-38), 2,990 second-feet.

Extremes.- Maximum discharge during year, 20,100 second-feet May 1 (gauge height, 9.16 feet); minimum, 375 second-feet Oct. 3 (gauge height, 0.40 foot), from rating curve extended below 500 second-feet.

1906-16, 1919-38: Maximum discharge, 22,100 second-feet June 9, 1921 (gauge height, 9.57 feet); minimum, 350 second-feet Dec. 17, 1935 (gauge height, 0.26 foot) from rating curve extended below 600 second-feet.

Remarks.- Records excellent. Flow regulated by storage in Payette Lake, Lake Fork, and Deadwood Reservoirs. Several diversions for irrigation from tributaries above station.

Rating tables, water year 1937-38 (gauge height, in feet, and discharge, in second-feet)

Oct. 1 to Dec. 10

Dec. 11 to Sept. 30

0.40	375	1.60	1,320	0.90	670	3.30	3,680	5.70	8,900	7.70	14,700
0.70	540	1.90	1,640	1.30	995	3.70	4,420	6.10	9,980	8.10	16,030
1.00	765	2.20	1,990	1.70	1,395	4.10	5,200	6.50	11,020	8.50	17,430
1.30	1,025	2.40	2,250	2.10	1,850	4.50	6,020	6.90	12,200	8.90	18,910
				2.50	2,360	4.90	6,980	7.30	13,430	9.30	20,470
				2.90	2,900	5.30	7,800				

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	678	717	799	1,180	1,290	1,550	2,380	17,600	15,700	8,040	1,650	1,580
2	528	701	774	1,230	1,320	1,710	2,380	18,500	15,700	7,560	1,600	1,640
3	516	709	962	1,230	1,310	1,850	2,380	16,700	16,000	7,100	1,490	1,620
4	554	709	1,010	1,120	1,270	1,850	2,520	14,400	16,400	6,880	1,570	1,580
5	655	878	816	1,050	1,240	1,850	2,520	11,900	16,400	6,650	1,650	1,500
6	632	701	782	1,040	1,230	1,790	2,520	10,200	17,100	5,600	1,710	1,460
7	662	693	824	1,060	1,230	1,730	2,600	9,060	17,800	4,900	1,730	1,430
8	662	717	790	1,130	1,250	1,700	2,910	6,540	17,800	4,520	1,640	1,530
9	678	790	701	1,130	1,250	1,730	3,320	8,040	17,100	4,230	1,640	1,590
10	685	757	901	1,170	1,300	1,790	3,500	8,290	16,700	3,950	1,480	1,560
11	670	816	5,760	1,240	1,370	1,790	3,770	8,540	14,700	3,680	1,400	1,520
12	670	850	9,330	1,190	1,460	1,910	4,230	8,540	13,700	3,500	1,420	1,470
13	693	842	5,600	1,130	1,410	2,680	4,610	9,060	12,800	3,320	1,560	1,750
14	670	810	3,590	1,210	1,400	2,830	5,100	9,880	11,000	3,160	1,980	1,750
15	670	980	2,750	1,290	1,560	2,830	5,710	10,400	10,200	3,070	1,790	1,710
16	717	918	2,380	1,370	1,320	3,770	6,660	11,000	10,700	3,160	1,630	1,530
17	876	935	2,170	1,350	1,240	4,900	7,560	11,900	11,300	2,990	1,590	1,470
18	962	953	1,980	1,310	1,180	4,230	9,600	11,900	11,300	2,910	1,240	1,520
19	824	1,010	1,730	1,290	1,320	4,140	11,900	11,300	10,700	2,750	1,290	1,530
20	765	1,230	1,440	1,240	1,300	3,860	11,600	10,700	10,400	2,520	1,440	1,530
21	741	2,120	1,300	1,260	1,340	3,600	11,300	9,880	10,200	2,380	1,440	1,480
22	717	1,660	1,270	1,460	1,270	3,240	11,900	9,600	9,880	2,240	1,440	1,460
23	717	1,400	1,430	1,550	1,260	2,990	11,900	10,200	9,600	2,100	1,550	1,430
24	701	1,380	1,380	1,430	1,240	2,910	11,600	10,700	9,330	1,980	1,790	1,500
25	701	1,360	1,220	1,300	1,240	2,910	11,900	11,900	9,060	1,910	1,590	1,590
26	693	1,390	1,220	1,180	1,260	2,830	13,100	13,700	8,800	1,850	1,520	1,560
27	709	1,300	1,290	1,220	1,320	2,830	12,500	15,400	8,290	1,790	1,460	1,460
28	693	1,180	1,320	1,290	1,410	2,990	12,200	17,100	8,040	1,850	1,410	1,430
29	725	1,100	1,290	1,370	-	2,830	12,800	16,400	7,660	1,910	1,370	1,460
30	685	998	1,360	1,310	-	2,680	14,100	16,000	7,500	1,910	1,400	1,640
31	685	-	1,540	1,290	-	2,620	-	16,000	-	1,790	1,440	-
Month	Second-foot-days		Maximum		Minimum		Mean		Run-off in acre-feet			
October.....	21,534		962		516		695		42,710			
November.....	30,504		2,120		678		1,017		60,500			
December.....	59,549		9,330		701		1,921		118,100			
Calendar year 1937.....	732,887		9,330		464		2,008		1,454,000			
January.....	38,620		1,550		1,040		1,246		76,600			
February.....	36,410		1,480		1,180		1,300		72,220			
March.....	82,720		4,900		1,550		2,668		164,100			
April.....	221,070		14,100		2,380		7,369		438,500			
May.....	373,530		18,500		8,040		12,050		740,900			
June.....	371,060		17,800		7,660		12,370		736,000			
July.....	112,210		8,040		1,790		3,620		222,600			
August.....	47,840		1,980		1,240		1,543		94,890			
September.....	46,230		1,730		1,430		1,541		91,790			
Water year 1937-38.....	1,441,277		18,500		516		3,949		2,859,000			

Payette River near Emmett, Idaho

Location.— Water-stage recorder, lat. 43°56', long. 116°27', in sec. 22, T. 7 N., R. 1 W., three-eighths of a mile downstream from Black Canyon Dam and 5 miles northeast of Emmett.

Records available.— June 1925 to September 1938.

Average discharge.— 13 years, 2,730 second-feet.

Extremes.— Maximum discharge during year, 22,800 second-feet May 1 (gage height, 12.90 feet); minimum, 2 second-feet (estimated) Jan. 13, when gates in dam were closed.

1925-38: Maximum discharge, that of May 1, 1938; minimum, that of Jan. 13, 1938.

Remarks.— Records good except those below 5 second-feet, which are fair. Discharge for periods when gates in dam were closed (Jan. 9-15, Feb. 1-3, 21-26), computed on basis of partial gage-height record, field estimate of Jan. 13, and discharge measurement of Jan. 14. Diversions for irrigation above station. Flow affected at times by operation of gates in Black Canyon Dam and by reservoirs upstream. Gage-height record collected in cooperation with U. S. Bureau of Reclamation.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	456	924	886	2,020	464	2,020	3,150	19,200	16,200	8,510	1,420	1,090
2	440	953	757	1,900	3	2,430	3,010	21,000	16,200	7,840	1,320	1,080
3	432	915	802	1,900	356	2,940	3,010	18,300	16,500	7,410	1,280	1,080
4	440	924	1,010	1,800	1,800	2,580	3,290	15,600	16,800	7,410	1,280	1,080
5	480	896	2,090	1,740	2,430	2,490	3,430	13,000	16,800	6,790	1,210	1,080
6	568	877	2,250	1,370	2,430	2,430	3,360	11,200	17,400	5,640	1,160	1,060
7	536	906	2,020	1,280	2,430	2,250	3,360	9,930	18,300	4,930	1,160	1,040
8	528	943	1,900	1,200	2,430	2,310	3,650	9,450	18,600	4,270	1,210	1,040
9	544	962	1,690	550	2,430	2,310	4,110	6,740	17,700	3,950	1,160	1,040
10	560	982	1,420	3	2,130	2,190	4,590	8,970	16,500	3,650	1,160	1,160
11	536	953	1,630	3	2,070	2,250	4,760	9,210	15,000	3,560	1,160	1,060
12	528	1,100	4,200	3	2,310	2,370	5,100	9,210	14,200	3,150	1,210	1,070
13	528	1,110	7,520	3	2,190	2,370	5,840	9,930	13,600	3,010	1,160	1,160
14	536	1,040	4,610	3	1,960	4,430	6,200	10,700	12,000	2,680	1,160	1,370
15	528	1,110	3,950	58	1,960	4,590	6,790	11,400	10,700	2,680	1,370	1,260
16	504	1,160	3,430	512	1,800	6,390	7,840	12,000	11,200	2,810	1,160	1,110
17	512	1,160	3,150	877	1,680	7,620	9,210	13,000	12,000	2,680	1,260	1,090
18	730	1,070	2,810	1,680	1,900	6,200	10,900	13,000	11,700	2,680	1,070	1,090
19	802	1,040	2,490	1,740	2,370	6,590	13,600	12,200	11,200	2,550	1,090	1,080
20	670	1,210	2,130	2,070	2,070	5,640	13,300	11,700	10,900	2,250	1,080	1,080
21	628	2,190	1,900	2,130	680	5,100	12,800	10,900	10,700	2,070	1,070	1,070
22	628	2,070	1,900	2,130	3	4,430	13,000	10,400	10,400	1,850	1,040	1,080
23	552	1,470	2,020	2,190	3	4,590	13,600	10,700	9,930	1,740	1,080	1,080
24	568	1,470	1,850	2,250	3	4,760	13,000	11,400	9,690	1,740	1,080	1,100
25	696	1,470	1,960	2,370	3	4,270	13,300	12,500	9,450	1,680	1,090	1,080
26	924	1,470	1,740	2,370	32	4,030	14,800	14,200	9,210	1,520	1,080	1,100
27	962	1,470	1,900	2,310	1,740	3,950	13,900	15,600	8,740	1,470	1,090	1,110
28	972	1,260	2,190	2,310	2,020	4,190	13,300	17,700	8,060	1,470	1,080	1,110
29	924	1,260	2,070	2,430	-	4,030	13,900	17,100	7,620	1,420	1,080	1,110
30	972	1,160	2,130	2,310	-	3,500	15,000	16,800	8,060	1,420	1,080	1,110
31	848	-	2,070	1,420	-	3,430	-	16,500	-	1,420	1,080	-
Month	Second-foot-days					Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	19,532					972	432	630	38,740			
November.....	35,516					2,190	877	1,184	70,440			
December.....	72,565					7,620	757	2,341	143,900			
Calendar year 1937.....	736,606					8,510	432	2,018	1,461,000			
January.....	44,932					2,430	3	1,449	89,120			
February.....	41,697					2,430	3	1,439	82,700			
March.....	118,650					7,620	2,020	3,627	235,300			
April.....	254,900					15,000	3,010	8,497	505,600			
May.....	401,240					21,000	8,740	12,940	795,600			
June.....	385,360					18,600	7,620	12,850	764,400			
July.....	106,150					8,510	1,420	3,424	210,500			
August.....	35,890					1,420	1,040	1,158	71,190			
September.....	33,070					1,370	1,040	1,102	65,590			
Water year 1937-38.....	1,549,502					21,000	3	4,245	3,073,000			

Payette River near Payette, Idaho

Location.— Wire-weight gage, lat. 44°02'30", long. 116°55'30", in SW¼ sec. 10, T. 8 N., R. 5 W., at highway bridge 1½ miles south of Payette.

Records available.— August 1935 to September 1938. January 1895 to July 1897 (incomplete) at site 2 miles downstream.

Extremes.— Maximum discharge observed during year, 23,400 second-feet May 2 (gage height, 11.90 feet); minimum, 295 second-feet Jan. 13, 14 (gage height, 2.71 feet).

1935-38: Maximum discharge observed, that of May 2, 1938; minimum, 180 second-feet Oct. 13, 20, 1935 (gage height, 2.04 feet).

Remarks.— Records good. Many diversions for irrigation above station. Flow is also regulated by operation of gates in Black Canyon Dam and by storage of water in reservoirs on tributary streams. Gage read twice daily.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to May 2					May 3 to Sept. 30				
2.7	290	5.1	2,780	8.5	10,510	3.3	575	7.0	5,890
3.0	455	5.4	3,230	9.0	12,200	3.6	815	7.5	7,030
3.3	685	5.7	3,710	9.5	14,000	3.9	1,100	8.0	8,290
3.6	920	6.0	4,230	10.0	15,870	4.2	1,410	8.5	9,680
3.9	1,230	6.5	5,190	10.5	17,780	4.5	1,760	9.0	11,190
4.2	1,550	7.0	6,280	11.0	19,730	5.0	2,420	9.5	12,830
4.5	1,960	7.5	7,530	11.5	23,360	5.5	3,150	10.0	14,590
4.8	2,360	8.0	8,950	11.8		6.0	3,930	10.5	16,480
						6.5	4,840	11.0	18,480

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	555	970	1,340	2,500	1,900	2,500	3,880	17,000	15,000	7,770	905	850
2	455	1,070	1,070	2,500	555	3,230	3,550	22,500	15,000	7,270	905	650
3	431	1,120	1,020	2,360	449	4,230	3,550	18,500	15,300	6,790	772	650
4	451	1,070	1,070	2,200	1,340	3,390	3,880	16,100	15,300	7,030	730	650
5	419	1,070	1,340	2,090	2,780	3,230	4,230	13,200	15,300	6,330	730	730
6	431	1,070	2,930	2,090	2,780	2,930	4,230	11,200	15,700	5,670	650	815
7	443	1,120	2,500	2,090	2,930	3,080	3,550	9,680	16,500	4,640	612	815
8	449	1,120	2,360	2,090	2,930	2,780	4,050	8,560	16,900	4,100	575	815
9	455	1,120	2,360	1,960	2,930	2,780	4,600	8,290	16,500	3,770	612	860
10	455	1,070	1,960	419	3,080	2,780	4,990	8,030	15,300	3,610	612	860
11	488	1,120	2,780	325	2,780	2,640	5,190	8,290	14,200	3,000	612	905
12	455	1,120	3,550	310	2,930	2,930	5,400	8,290	13,200	2,850	612	860
13	431	1,280	8,650	300	3,230	3,550	5,830	8,560	12,500	2,570	612	860
14	443	1,180	5,830	305	2,640	6,280	6,280	9,390	11,500	2,430	650	1,050
15	449	1,230	4,990	362	2,500	5,610	7,010	9,680	9,390	2,290	690	1,150
16	488	1,340	4,600	520	2,360	7,530	8,080	10,600	6,970	2,290	815	1,050
17	555	1,520	4,230	1,020	2,090	9,250	9,250	11,800	10,900	2,290	730	852
18	528	1,340	3,710	1,960	1,960	7,270	10,800	11,800	10,900	2,290	730	860
19	830	1,280	3,590	2,220	2,220	7,530	13,300	11,200	10,300	2,150	575	905
20	875	1,760	2,930	2,500	2,640	7,010	14,000	10,600	9,970	1,690	612	905
21	788	1,830	2,640	2,640	2,360	6,050	12,900	9,110	9,680	1,640	612	860
22	705	3,230	2,360	3,230	443	5,400	12,900	9,680	9,390	1,520	612	905
23	705	2,220	2,360	3,230	443	5,190	14,400	9,680	9,110	1,200	612	905
24	590	1,900	2,360	2,780	437	6,280	13,600	9,970	8,830	1,200	612	815
25	745	1,900	2,500	2,930	395	5,610	12,900	10,900	8,560	1,050	650	860
26	970	1,900	2,220	2,780	362	4,990	14,700	12,200	8,290	1,000	650	905
27	1,230	1,960	2,220	2,780	920	4,600	14,400	13,500	7,770	952	612	860
28	1,180	1,760	2,780	2,640	2,090	4,990	13,600	15,300	7,520	952	650	905
29	1,120	1,640	2,500	2,640	-	4,790	13,600	16,100	7,030	905	612	952
30	1,070	1,520	2,640	2,930	-	4,410	14,700	15,300	6,790	905	612	952
31	1,120	-	2,500	2,500	-	4,050	-	15,500	-	952	650	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	20,389	1,230	419	658	40,440
November.....	43,850	3,280	970	1,461	86,940
December.....	89,690	8,650	1,020	2,393	177,900
Calendar year 1937.....	737,877	8,650	362	2,022	1,464,000
January.....	61,221	3,230	300	1,975	121,400
February.....	54,474	3,230	362	1,946	108,000
March.....	146,890	9,250	2,500	4,738	291,400
April.....	263,350	14,700	3,560	8,778	522,300
May.....	370,310	22,500	8,030	11,950	734,500
June.....	352,600	16,900	6,790	11,750	699,400
July.....	95,306	7,770	908	3,010	185,100
August.....	20,628	905	575	665	40,910
September.....	25,911	1,150	650	864	51,390
Water year 1937-38.....	1,542,596	22,500	300	4,226	3,060,000

Deadwood Reservoir near Lowman, Idaho

Location.— Staff gage, lat. 44°18', long. 115°39', in SE¼ sec. 8, T. 11 N., R. 7 E., at Deadwood Dam, 15 miles north of Lowman. Gage readings are elevations above mean sea level.

Drainage area.— 108 square miles.

Records available.— October 1935 to September 1938.

Extremes.— Maximum elevation observed during year, 5,336.6 feet June 9, 1938; minimum observed, 5,282.8 feet Nov. 19, Dec. 6-10.

1935-38: Maximum elevation observed, that of June 9, 10, 1938; minimum observed, 5,260.1 feet Oct. 1, 1935.

Remarks.— Capacity of reservoir is reported to be 160,400 acre-feet between elevations 5,230.0 and 5,334.0 feet. Stored water is used in operation of Black Canyon power plant near Emmett. During the late fall of 1936, the Bureau of Reclamation cut an intermountain canal to divert a small flow of water from a tributary of Johnson Creek to Deadwood River Basin for supplemental storage in Deadwood Reservoir. Measurement of July 17 indicated flow in this canal of 9.08 second-feet. Gage read once daily. Gage-height record furnished by the Bureau of Reclamation.

Gage height, in feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	286.70	284.00	283.10	287.50	290.60	292.95	296.00	305.80	330.20	335.50	334.50	330.30
2	286.75	283.90	283.00	287.60	290.70	293.00	296.10	306.80	331.20	335.45	334.50	330.10
3	286.70	283.60	282.90	287.70	290.80	293.05	296.20	307.60	332.50	335.40	334.50	329.90
4	286.70	283.70	282.90	287.80	290.90	293.10	296.30	308.30	333.70	335.40	334.40	329.80
5	286.60	283.60	282.85	287.90	291.00	293.20	296.40	308.80	334.60	335.40	334.30	329.70
6	286.50	283.50	282.80	288.00	291.10	293.30	296.50	309.30	335.40	335.35	334.15	329.50
7	286.40	283.40	282.80	288.10	291.20	293.40	296.60	309.80	336.10	335.30	334.00	329.35
8	286.30	283.40	282.80	288.20	291.30	293.45	296.70	310.20	336.60	335.20	333.90	329.20
9	286.15	283.35	282.80	288.30	291.40	293.50	296.80	310.70	336.60	335.15	333.85	329.00
10	285.90	283.30	282.80	288.40	291.50	293.60	296.90	311.20	336.60	335.10	333.85	328.90
11	285.80	283.20	282.90	288.50	291.60	293.70	297.00	311.70	336.60	335.05	333.90	328.80
12	285.65	283.10	282.60	288.60	291.60	293.80	297.10	312.20	336.40	335.00	333.85	328.50
13	285.50	283.10	282.30	288.70	291.60	293.90	297.20	312.80	336.30	334.95	333.80	328.30
14	285.35	283.05	282.40	288.80	291.90	294.00	297.30	313.50	336.30	334.90	333.25	327.20
15	285.20	283.00	282.40	288.90	292.00	294.10	297.40	314.50	336.20	334.85	332.95	326.90
16	285.10	282.95	282.20	289.00	292.10	294.30	297.60	315.20	336.20	334.85	332.80	326.60
17	285.10	282.90	282.50	289.10	292.20	294.50	297.80	316.10	336.20	334.85	332.60	326.30
18	285.10	282.85	282.70	289.20	292.15	294.60	298.00	317.10	336.20	334.85	332.55	326.00
19	285.00	282.80	282.50	289.30	292.15	294.80	298.40	317.90	336.10	334.80	332.40	325.50
20	284.90	282.90	282.10	289.40	292.20	294.90	298.80	318.50	336.00	334.75	332.10	325.00
21	284.80	282.95	282.20	289.50	292.25	295.00	299.50	319.20	335.90	334.70	331.90	324.80
22	284.75	282.90	282.30	289.70	292.30	295.10	300.00	319.90	335.90	334.70	331.60	324.60
23	284.70	282.90	282.30	289.80	292.40	295.20	300.50	320.60	335.85	334.70	331.30	324.10
24	284.60	282.90	282.40	289.90	292.50	295.30	301.00	321.50	335.80	334.65	331.00	323.60
25	284.50	282.95	282.50	289.95	292.50	295.40	301.50	322.40	335.75	334.60	330.80	323.00
26	284.40	283.00	282.60	290.00	292.70	295.50	302.00	323.40	335.70	334.60	330.70	322.60
27	284.30	283.05	282.90	290.10	292.80	295.60	302.50	324.60	335.70	334.60	330.70	322.20
28	284.20	283.05	282.70	290.20	292.90	295.70	303.10	325.90	335.65	334.60	330.70	321.80
29	284.15	283.05	282.20	290.30	-	295.80	303.80	327.30	335.60	334.60	330.70	321.50
30	284.10	283.10	282.30	290.40	-	295.85	304.60	328.20	335.55	334.55	330.65	320.80
31	284.05	-	282.40	290.50	-	295.90	-	329.10	-	334.50	330.50	-

Note.— Add 5,000 feet to obtain elevations above mean sea level.

Deadwood River below Deadwood Reservoir, near Lowman, Idaho

Location.- Water-stage recorder, lat. 44°18', long. 115°39', in NE¼ sec. 17, T. 11 N., R. 7 E., 300 feet upstream from Wilson Creek, a quarter of a mile downstream from Deadwood Dam at lower end of Deadwood Basin, 15 miles north of Lowman, and 18 miles upstream from mouth.

Drainage area.- 108 square miles.

Records available.- October 1926 to September 1938.

Average discharge.- 11 years, 175 second-feet.

Extremes.- Maximum discharge observed during year, 1,320 second-feet June 10 (gage height, 4.65 feet); minimum, not determined, occurred when gates at dam were closed. 1927-38: Maximum discharge, 2,150 second-feet May 28, 1928 (gage height, 5.67 feet, at former site and datum); practically no flow for long periods when gates in dam were closed.

Remarks.- Records good except those for periods when reservoir gates were closed, Oct. 1, Dec. 12 to Feb. 16, Feb. 21 to June 4, which are poor. Discharge for Oct. 2, 3, 5, 8, 16, Nov. 23, 29, 30, Dec. 1-3, 9, 11, Feb. 17, 20 computed on basis of reported gate changes, and that for June 4 computed on basis of reported flow over spillway. Flow regulated since Nov. 2, 1930, by operation of gates in Deadwood Dam. During the late fall of 1936, the Bureau of Reclamation cut an intermountain canal to divert a small flow from a tributary of Johnson Creek to Deadwood River Basin for supplemental storage in Deadwood Reservoir. Measurement of July 17 indicated a flow in diversion of 9.08 second-feet. Once-daily staff-gage readings Oct. 2 to Dec. 11, Feb. 17-20, June 5-21 and gage-height record for June 22 to Sept. 30 furnished by Bureau of Reclamation.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to June 9					June 10 to Sept. 30						
0.40	16	2.30	324	4.30	1,120	1.00	59	2.60	436	4.20	1,100
.90	48	2.80	481	4.60	1,270	1.40	119	3.00	580	4.60	1,300
1.30	95	3.30	672			1.80	208	3.40	740	4.70	1,350
1.80	194	3.80	888			2.20	314	3.80	920		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	95	100						3	630	148	395
2	12	95	69		}	3			3	530	143	392
3	76	95	69				3	530	225	349		
4	129	95	48				20	550	264	314		
5	86	95	48				194	541	314	281		
6	118	95	48				554	522	346	275		
7	118	95	48				1,000	436	278	337		
8	136	95	48				1,200	452	179	367		
9	145	95	76				1,270	430	101	337		
10	139	95	95				1,320	336	66	326		
11	139	95	43				1,280	334	127	326		
12	139	95			1,200	337	358	623				
13	139	95	}		1,150	320	580	762				
14	139	95		1,150	300	600	762					
15	139	95		1,120	286	436	587					
16	131	95		1,100	281	392	504					
17	98	95		9	1,080	283	187	560				
18	98	95		52	1,050	262	270	620				
19	98	95		48	988	249	436	640				
20	98	95		40	920	233	466	640				
21	98	95	}	3		920	223	504	580			
22	98	95			875	213	580	560				
23	98	85			852	201	600	640				
24	98	48			808	191	396	720				
25	97	48			808	186	210	762				
26	97	48			762	177	119	700				
27	97	48			740	172	90	640				
28	95	48			700	166	95	660				
29	95	39			660	163	153	740				
30	95	12			640	159	230	785				
31	95	-			-	152	331	-				
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						3,243	145	3	105	6,430		
November.....						2,466	95	12	82.2	4,890		
December.....						762	100	-	24.3	1,490		
Calendar year 1937.....						53,741	1,050	0	147	106,600		
January.....						93	-	-	3	184		
February.....						221	52	-	7.9	438		
March.....						93	-	-	3	184		
April.....						90	-	-	3	179		
May.....						93	-	-	3	184		
June.....						24,380	1,320	3	813	48,360		
July.....						10,064	620	152	326	19,960		
August.....						9,244	600	66	298	18,340		
September.....						16,184	785	275	539	32,100		
Water year 1937-38.....						66,923	1,320	-	183	132,700		

Deadwood River near Lowman, Idaho

Location.— Water-stage recorder, lat. 44°05', long. 115°40', in sec. 29, T. 9 N., R. 7 E., 700 feet upstream from mouth and 2½ miles west of Lowman.

Drainage area.— 201 square miles.

Records available.— August 1921 to September 1938.

Average discharge.— 17 years, 350 second-feet.

Extremes.— Maximum discharge during year, 2,350 second-feet June 6; maximum gage height, 4.12 feet June 6 (caused by drift); minimum discharge recorded, 39 second-feet Dec. 1 (gage height, 0.93 foot).
1921-38: Maximum discharge, 4,230 second-feet May 9, 1928 (gage height, 5.17 feet); minimum, 28 second-feet Nov. 4, 1935 (gage height, 0.83 foot).

Remarks.— Records good except those for periods of ice effect or missing gage heights, Dec. 2, 3, 5-11, Dec. 20 to Feb. 1, Feb. 19, 20, which were computed on basis of weather records, and records for nearby stations and are fair. Flow regulated by storage in Deadwood Reservoir. Small amount of water diverted from tributary of Johnson Creek to Deadwood River Basin during the year.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.		
1	57	150	72		68	78	93	1,600	1,160	942	269	481		
2	48	150	140		67	78	97	1,360	1,200	898	257	487		
3	77	144	120		66	82	104	1,030	1,240	915	291	440		
4	183	144	89		64	80	112	831	1,220	873	374	432		
5	164	142	90		62	82	112	696	1,390	856	401	369		
6	166	150	90		62	78	112	620	1,830	784	446	354		
7	170	142	90		64	77	122	574	2,110	724	412	391		
8	200	153	90		64	77	150	555	2,280	686	314	446		
9	203	150	110		64	84	170	580	2,270	667	232	423		
10	186	156	250		57	84	174	667	2,140	633	174	396		
11	183	156	650		67	84	186	703	2,020	587	180	391		
12	203	156	613		68	95	221	746	1,900	546	354	545		
13	186	156	301		66	147	236	906	1,840	524	626	769		
14	186	170	196		66	131	269	1,030	1,810	499	688	769		
15	193	156	167		64	126	314	1,110	1,720	487	574	674		
16	200	153	136		61	180	369	1,190	1,690	481	493	561		
17	207	158	114		48	221	412	1,240	1,690	475	339	587		
18	174	153	104		61	174	593	1,140	1,610	446	269	647		
19	156	161	91		120	180	696	933	1,480	423	499	674		
20	153	257	85		120	153	640	823	1,390	401	561	674		
21	153	265	80		108	131	633	784	1,340	385	568	654		
22	153	193	80		64	122	667	831	1,320	366	620	613		
23	153	183	80		62	114	660	959	1,290	354	667	660		
24	153	156	80		62	117	688	1,090	1,240	344	548	732		
25	153	119	80		61	106	746	1,210	1,190	334	334	784		
26	153	124	75		66	99	784	1,380	1,150	319	232	746		
27	183	112	75		70	106	784	1,510	1,110	314	180	668		
28	150	112	75		75	117	823	1,510	1,050	319	180	668		
29	150	104	75		-	110	977	1,360	986	314	193	761		
30	150	68	75		-	106	1,160	1,210	1,020	306	261	815		
31	150	-	75		-	99	-	1,170	-	273	385	-		
Month					Second-foot-days		Maximum		Minimum		Mean		Run-off in acre-feet	
October.....					4,966		207		48		160		9,850	
November.....					4,593		265		68		153		9,110	
December.....					4,448		650		72		143		8,620	
Calendar year 1937.....					100,531		1,080		-		275		199,400	
January.....					2,170		-		-		70		4,300	
February.....					1,957		120		48		69.9		3,880	
March.....					3,518		221		77		113		6,980	
April.....					13,104		1,160		93		437		25,990	
May.....					31,348		1,600		555		1,011		62,180	
June.....					45,686		2,280		986		1,523		90,620	
July.....					16,481		942		273		532		32,690	
August.....					11,921		688		174		385		23,640	
September.....					17,631		815		354		588		34,970	
Water year 1937-38.....					157,823		2,280		48		432		313,000	

PAYETTE RIVER BASIN

Payette Lake at Lardo, Idaho

Location.— Staff gage, lat. $44^{\circ}55'$, long. $116^{\circ}07'$, in sec. 8, T. 18 N., R. 3 E., at outlet of lake at Lardo. Zero of gage is 4,982.24 feet above mean sea level.

Drainage area.- 131 square miles.

Records available.- August 1921 to September 1938 (fragmentary).

Extremes.- Maximum gage height observed during year, 8.10 feet July 16; minimum observed, 1.38 feet Oct. 15.
1921-38: Maximum gage height observed, 8.75 feet July 13, 1935; minimum observed, 0.95 foot Oct. 3, 1931.

Remarks.- No diversion above station. Regulation of storage for use in lower Payette River Valley effected by flashboards on dam in outlet channel. Because of location of gage in outlet channel, gage heights show slightly lower elevations at times than prevailed on main lake. Gage-height record furnished by U. S. Forest Service, supplemented by reports from Bureau of Reclamation July 25 to Sept. 16.

Gage height, in feet, water year October 1937 to September 1938

[illegible]

North Fork of Payette River at Lardo, Idaho

Location.- Water-stage recorder, lat. 44°54'30", long. 116°07'30", in sec. 8, T. 18 N., R. 3 E., a quarter of a mile downstream from Lardo and outlet of Payette Lake.

Drainage area.- 131 square miles.

Records available.- September 1908 to June 1917, May 1919 to September 1938.

Average discharge.- 27 years (1908-16, 1919-38), 345 second-feet.

Extremes.- Maximum discharge during year, 3,440 second-feet June 7 (gage height, 6.86 feet); minimum, 6 second-feet Oct. 13-15; minimum gage height, 1.26 feet Dec. 12. 1908-17, 1919-38: Maximum discharge, 4,260 second-feet June 10, 1933; maximum gage height, 7.5 feet June 5, 1909, June 10, 1933; minimum discharge, practically no flow Nov. 5-8, 1931, Nov. 17-24, 1933, Nov. 14-27, 1935.

Remarks.- Records good. Flow partly regulated by storage in Payette Lake. No diversions above station. Gage-height record collected in cooperation with U. S. Forest Service.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	10	61	162	156	111	132	1,780	2,900	1,550	104	445
2	9	10	60	159	141	113	130	1,910	2,900	1,420	237	450
3	9	10	58	154	141	117	128	1,680	3,110	1,350	297	431
4	9	10	57	150	141	115	128	1,550	3,110	540	278	426
5	8	10	53	148	143	115	130	1,460	3,220	202	308	398
6	8	10	53	143	143	115	128	1,250	3,330	180	269	394
7	7	9	52	141	148	113	123	1,130	3,330	130	328	358
8	7	10	50	136	152	111	121	1,020	3,330	115	324	341
9	7	11	20	134	148	107	123	985	3,110	143	281	316
10	7	11	49	132	152	111	126	985	2,800	194	269	297
11	7	12	33	130	154	117	123	1,020	2,100	240	297	278
12	7	13	8	132	159	119	126	1,060	867	230	285	260
13	6	15	36	132	159	132	128	1,130	682	233	300	256
14	6	18	100	136	159	141	130	1,290	1,860	246	297	253
15	6	19	154	141	154	141	136	1,460	2,250	253	150	240
16	7	20	182	141	148	150	150	1,640	2,400	285	52	224
17	10	21	205	143	143	154	167	1,780	2,900	324	50	208
18	11	22	185	145	158	159	224	1,820	2,700	267	50	197
19	10	25	177	145	156	162	341	1,680	2,550	177	49	185
20	10	26	164	141	132	157	426	1,500	2,150	121	47	175
21	10	47	164	143	150	152	485	1,420	2,200	98	296	167
22	11	49	164	152	126	152	560	1,460	2,150	94	445	159
23	11	53	148	154	121	154	588	1,640	2,100	96	475	150
24	11	61	152	150	117	159	648	1,910	2,000	96	525	141
25	11	63	152	145	115	157	773	2,150	1,910	126	495	132
26	11	66	154	143	113	152	882	2,500	1,860	297	465	123
27	11	66	162	138	111	148	950	2,800	1,820	297	460	119
28	10	67	162	134	107	148	985	3,220	1,820	300	431	111
29	10	66	159	130	-	145	1,060	3,220	1,780	179	402	106
30	10	63	167	128	-	138	1,250	3,000	1,680	106	421	100
31	11	-	167	128	-	136	-	2,900	-	102	445	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						276	11	6	8.9	547		
November.....						903	67	9	30.1	1,790		
December.....						3,508	205	8	113	6,960		
Calendar year 1937.....						84,001	1,950	-	230	166,600		
January.....						4,390	162	128	142	8,710		
February.....						3,867	159	107	138	7,670		
March.....						4,201	162	107	136	8,330		
April.....						11,401	1,250	121	380	22,610		
May.....						54,350	3,220	985	1,753	107,800		
June.....						70,719	3,330	682	2,357	140,300		
July.....						9,971	1,550	94	322	19,780		
August.....						9,172	525	47	296	18,190		
September.....						7,440	450	100	248	14,760		
Water year 1937-38.....						180,198	3,330	6	494	357,400		

Lake Fork of Payette River above reservoir near McCall, Idaho

Location.- Water-stage recorder, lat. 44°55', long. 116°00', in NW¼ sec. 8, T. 18 N., R. 4 E., three-quarters of a mile downstream from power plant, 2½ miles upstream from Lake Fork Reservoir dam, and 5 miles east of McCall.

Records available.- May 1926 to September 1933 (irrigation seasons only).

Extremes.- Maximum discharge during water year 1936-37, 924 second-feet (revised) June 20 (gage height, 5.10 feet); minimum discharge (revised), 1.77 second-feet, discharge measurement, Dec. 10.

Maximum discharge during water year 1937-38, 1,730 second-feet May 28 (gage height, 6.39 feet); practically no flow at times during October and November.

1926-38: Maximum discharge observed, 2,520 second-feet June 9, 1933 (gage height about 7.9 feet, present datum, from floodmark); practically no flow at times during October and November, 1937.

Remarks.- Records good except those for Apr. 1, 3-10, May 12-15, 30, 31, June 1, 3-5, 7, 8, June 10 to July 3, Nov. 21-23, 30, 1937, Feb. 18, 23-28, June 30 to July 12, 15-19, 1938, which were computed on basis of discharge measurements, gage heights, weather records, records for nearby stations, and records for Lake Fork Reservoir and are fair. Diurnal fluctuations at low stages caused by operation of power plant of McCall Light & Power Co. and small storage reservoirs above station. No diversions for irrigation above station. Gage-height record furnished by Lake Irrigation District.

Revisions.- Revised figures of discharge for the water year 1936-37, superseding those published in Water-Supply Paper 535, are given herein.

Rating table, Apr. 2, 1937 to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet) (Shifting-control method used June 3 to Sept. 3, 1937; June 30 to July 19, 1938)

0.1	1.0	2.5	309	4.9	1,040
.4	12	2.6	380	5.2	1,160
.7	31.5	3.1	457	5.5	1,290
1.0	58.5	3.4	539	5.8	1,425
1.3	92	3.7	625	6.1	1,575
1.6	134	4.0	718	6.4	1,730
1.9	185	4.3	817		
2.2	244	4.6	924		

Discharge, in second-feet, 1936-38

1936-37

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	7	13				11	145	400	155	30	9
2	5	-	-				11	228	498	147	31	8
3	6	-	-				11	287	525	139	29	16
4	7	-	-				11	457	431	125	28	10
5	14	-	-				12	484	332	105	27	9
6	14	-	-				14	431	296	87	26	18
7	13	-	-				14	418	309	76	24	8
8	12	-	-				14	392	320	69	24	16
9	5	-	-				15	444	457	62	24	7
10	5	-	*2				17	431	470	66	24	16
11	6	-	-				19	405	332	56	23	7
12	14	-	-				24	380	283	52	22	8
13	13	-	-				27	470	298	44	23	16
14	13	-	-				105	600	291	44	24	7
15	13	-	-				116	600	298	44	23	7
16	5	-	-				78	596	344	42	23	7
17	6	-	-				63	610	298	40	21	7
18	6	-	-				56	640	248	43	21	6
19	16	-	-				63	655	278	44	21	6
20	14	-	-				68	511	610	41	20	8
21	13	-	-				80	553	392	39	20	16
22	6	-	-				71	640	332	38	20	8
23	6	-	-				62	655	272	36	20	8
24	6	*16	-				58	610	194	32	20	8
25	7	-	-				68	754	183	34	20	9
26	16	-	-				116	718	178	37	19	9
27	14	-	-				145	718	176	35	19	18
28	14	8	-				118	686	142	32	18	8
29	13	8	-				97	539	158	30	9	7
30	5	7	-				96	420	157	29	12	8
31	5	-	-				-	400	-	28	18	-

Discharge, in second-feet, of Lake Fork of Payette River above reservoir near McCall, Idaho,
1936-38--Continued

1937-38

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	14			-	28	42	924	888	425	57	23
2	9	3			-	29	44	610	1,040	425	53	24
3	9	3			-	30	44	444	1,080	332	51	24
4	19	15			-	30	44	368	1,040	294	46	23
5	18	13			-	30	42	309	1,080	234	38	23
6	8	3			-	32	41	278	1,120	234	44	22
7	8	2			-	34	42	263	1,080	230	43	22
8	9	14			-	37	45	267	961	218	42	25
9	9	3			-	38	50	289	765	200	40	24
10	8	14			-	38	50	368	610	180	38	23
11	18	4			-	38	52	405	640	167	37	23
12	8	15			-	42	58	405	734	157	35	22
13	8	3			-	51	62	525	734	142	34	22
14	8	18			-	49	69	582	702	136	34	22
15	18	15			-	47	65	655	702	165	34	21
16	10	10			37	60	113	686	834	167	32	21
17	21	14			-	57	153	686	750	147	31	21
18	20	13			-	53	431	553	582	145	27	20
19	18	13			-	52	498	431	498	134	27	21
20	18	23			-	48	356	392	582	124	26	21
21	18	60			-	48	356	444	670	108	25	21
22	16	40			-	48	368	567	596	91	25	20
23	8	35			29	47	309	734	825	77	28	19
24	9	33			28	46	332	834	553	72	26	19
25	9	27			27	44	444	924	582	67	28	19
26	18	25			26	44	431	1,160	567	62	25	19
27	8	23			27	45	392	1,240	553	58	24	19
28	17	21			27	45	431	1,240	525	57	24	19
29	8	19			-	44	562	961	470	68	24	20
30	5	15			-	42	766	870	454	64	23	19
31	2	-			-	42	-	888	-	58	23	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October 1936	297	16	5	9.6	569
November.....	-	-	-	-	-
December.....	-	-	-	-	-
Calendar year					
January 1937	-	-	-	-	-
February.....	-	-	-	-	-
March.....	-	-	-	-	-
April.....	1,662	145	11	55.4	3,300
May.....	15,857	734	145	512	31,450
June.....	9,512	610	142	317	18,870
July.....	1,853	155	28	59.8	3,680
August.....	683	31	9	22.0	1,350
September.....	303	18	7	10.1	601
Water year					
October 1937	372	21	2	12.0	738
November.....	508	60	2	16.9	1,010
December.....	-	-	-	-	-
Calendar year					
January 1938	-	-	-	-	-
February.....	-	-	-	-	-
March.....	1,319	60	28	42.5	2,620
April.....	6,732	766	41	224	13,350
May.....	19,302	1,240	263	623	38,280
June.....	22,048	1,120	470	735	43,730
July.....	5,016	405	57	162	9,950
August.....	1,040	57	23	33.5	2,060
September.....	641	25	19	21.4	1,270
Water year					

Peak discharge.- 1936: Apr. 30 (11:15 p.m.) 1,080 sec.-ft.; May 16 (11:30 p.m.) 862 sec.-ft.; May 28 (2 a.m.) 1,730 sec.-ft.; June 2 (11 p.m.) 1,560 sec.-ft.; June 5 (10:45 p.m.) 1,420 sec.-ft.; June 16 (10 p.m.) 1,080 sec.-ft.

Lake Fork Reservoir near McCall, Idaho

Location.- Staff gage, lat. 44°54', long. 116°03', in NW¼NW¼ sec. 13, T. 18 N., R. 3 E., 3 miles east of McCall. Zero of gage is at mean sea level.

Records available.- April 1926 to September 1938.

Extremes.- Maximum contents during year, 18,770 acre-feet July 10, 11 (gage height, 5,118.15 feet); probably no storage during winter.
1926-38: Maximum contents, 19,010 acre-feet June 21, 1937 (gage height, 5,118.30 feet); probably no storage during fall and winter.

Remarks.- Water stored in reservoir is used for irrigation of 6,800 acres of land near Norwood. Gage read once daily. Elevation of gate sill of outlet is 5,097.0 feet. Gage-height record and table of contents furnished by Lake Irrigator District.

Contents, in acre-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	-	14,770	18,090	14,620	5,629
2							-	-	14,770	18,090	14,340	5,510
3							-	-	15,390	18,280	14,080	5,341
4							-	-	-	16,330	13,770	5,182
5							-	-	16,010	18,360	13,460	4,970
6							413	-	16,160	18,240	13,080	4,832
7							-	-	16,240	18,440	12,760	4,675
8							-	-	16,130	18,600	12,470	4,547
9							-	-	16,010	18,680	12,090	4,453
10							-	12,050	15,390	18,770	11,750	4,359
11							-	-	15,450	18,770	11,420	4,266
12							-	12,320	16,320	18,720	11,040	4,173
13							-	12,350	16,630	18,720	10,750	4,061
14							-	12,930	16,780	18,570	10,360	3,987
15		0					-	13,260	16,880	18,560	9,954	3,894
16							-	-	16,940	18,520	9,666	3,801
17							-	13,850	17,100	18,440	9,311	3,708
18							-	13,820	16,940	18,280	8,973	3,662
19							-	13,540	16,630	18,130	8,676	3,542
20							-	13,260	16,630	17,920	8,298	3,494
21							-	13,230	16,660	17,700	-	3,437
22							-	13,260	16,630	17,410	7,777	3,372
23							-	13,570	16,700	17,180	7,525	-
24			0				-	13,860	16,630	16,860	7,273	3,210
25							-	14,180	16,550	16,600	7,021	3,145
26							-	14,770	17,100	16,280	6,769	3,048
27							5,838	15,080	17,410	16,130	6,594	2,983
28							-	15,420	17,590	15,790	6,416	2,887
29							-	15,460	17,860	15,420	6,186	2,807
30							-	14,920	18,080	15,200	6,047	-
31							-	14,850	-	14,920	5,838	-

Lake Irrigation District canal near McCall, Idaho

Location.— Staff gage, lat. 44°54', long. 116°03', in SW¼ sec. 13, T. 18 N., R. 3 E., 600 feet downstream from head of canal, half a mile south of Lake Fork Reservoir, and 3 miles east of McCall.

Records available.— May 1926 to September 1938.

Extremes.— Maximum discharge observed during year, 137 second-feet Aug. 7-15 (gage height, 4.70 feet); practically no flow during nonirrigation season.

1926-38: Maximum discharge observed, 146 second-feet July 12-17, 1937 (gage height, 4.93 feet); no flow during nonirrigation seasons.

Remarks.— Records good. Discharge for Oct. 12-14, 16-19 computed on basis of information furnished by watermaster and engineer's visit of Oct. 15; that for Aug. 21, Sept. 23, 30 interpolated. Flow is regulated at head gate of canal. No diversions between head and station. Canal diverts water from right bank of Lake Fork of Payette River in SW¼ sec. 13, T. 18 N., R. 3 E., for irrigation of 6,800 acres of land near McCall and Norwood, in Lake Irrigation District project. Gage-height record furnished by watermaster for Lake Irrigation District.

Rating table, June 13 to Sept. 30 (gage height, in feet, and discharge, in second-feet)

1.60	2.2	3.00	36	4.20	102
2.10	6.3	3.30	50	4.50	123
2.40	13.5	3.60	66	4.80	144
2.70	23.4	3.90	84	5.00	158

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2								0	126	124	70
2	0								0	116	124	64
3	0								0	96	127	61
4	0								0	48	133	60
5	0								0	20	135	60
6	0								0	20	135	58
7	0								0	20	136	58
8	0								0	20	137	58
9	0								0	20	137	55
10	0								0	20	137	50
11	0								0	39	137	50
12	3								0	59	137	44
13	6								6	74	137	35
14	6								33	89	137	31
15	6								50	102	133	31
16	6								60	117	126	31
17	6								66	121	124	31
18	6								74	121	122	34
19	3								75	123	117	37
20	0								79	128	112	37
21	0								86	129	110	36
22	0								88	132	110	36
23	0								101	133	110	36
24	0								112	133	102	36
25	0								118	133	94	36
26	0								122	134	84	36
27	0								124	134	73	36
28	0								125	131	70	36
29	0								129	129	70	36
30	0								131	126	72	36
31	0								-	124	74	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				44	6	0	1.4	87				
November.....				0	0	0	0	0				
December.....				0	0	0	0	0				
Calendar year 1937.....				10,245	146	0	28.1	20,520				
January.....				0	0	0	0	0				
February.....				0	0	0	0	0				
March.....				0	0	0	0	0				
April.....				0	0	0	0	0				
May.....				0	0	0	0	0				
June.....				1,581	131	0	52.7	3,140				
July.....				2,917	134	20	94.1	5,790				
August.....				3,576	137	70	115	7,090				
September.....				1,315	70	31	43.8	2,610				
Water year 1937-38.....				9,433	137	0	25.8	18,720				

Weiser River at Tamarack, Idaho

Location.- Staff gage, lat. 44°57', long. 116°23', in sec. 30, T. 19 N., R. 1 E., 0.4 mile southeast of Tamarack, Adams County.

Drainage area.- 36.5 square miles.

Records available.- September 1936 to September 1938.

Extremes.- Maximum discharge observed during year, 715 second-feet Mar. 16 (gage height, 5.57 feet); minimum observed, 1.7 second-feet at times when water was being stored in mill pond (gage height, 0.52 foot).

1936-38: Maximum discharge observed, that of Mar. 16, 1938; minimum observed, that at times in 1938 when water was being stored in mill pond.

Remarks.- Records good except those for Nov. 29, July 30, and periods of ice effect, Dec. 1, 2, 7-9, Dec. 21 to Jan. 13, Jan. 25-30, Feb. 12-18, 20, which were computed on basis of weather records and records for nearby stations and are fair. Gage read twice daily. No diversion or regulation. Small flow from Boulder Creek (Salmon River Basin) through transmountain diversion enters Weiser River above gage during late irrigation season. Results of 14 discharge measurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.4	5.8	8.4	15	16	26	69	550	57	13	9.4	8.5
2	4.0	3.4	7.9		16	34	64	462	50	14	9.7	7.0
3	5.0	3.4	7.5		15	42	64	363	44	15	9.4	6.2
4	4.6	3.4	8.0		15	48	76	292	42	15	9.1	5.8
5	4.6	3.4	7.5		16	50	82	237	39	18	9.1	5.8
6	4.6	4.0	6.6	15	15	50	82	211	34	14	9.1	5.8
7	4.0	3.8	6.3		15	50	100	185	33	13	8.8	5.8
8	3.8	5.0	6.0		16	48	122	172	31	12	8.2	7.9
9	3.4	5.2	6.8		16	48	145	185	29	11	9.1	7.3
10	3.4	4.6	7.5		18	50	154	185	28	10	8.2	6.6
11	3.0	5.4	377	14	20	57	185	198	26	10	7.9	6.4
12	3.0	5.8	431			78	221	198	25	10	7.9	6.2
13	3.0	5.8	185			164	267	198	25	9.4	8.2	6.2
14	3.4	7.8	122			208	329	198	24	9.4	7.9	5.8
15	3.4	7.5	100			195	352	198	22	11	7.6	5.8
16	4.0	6.2	73	16	20	580	490	198	20	10	7.6	5.6
17	5.2	6.4	61	14		520	490	185	21	10	7.3	5.4
18	6.8	5.8	69	14		267	550	172	24	9.4	7.3	5.4
19	5.6	6.4	44	14		221	580	136	20	9.1	7.6	5.6
20	4.4	16	31	14		164	550	118	18	8.5	7.6	5.4
21	4.2	16	25	14	20	136	550	108	18	8.2	7.0	5.4
22	4.2	9.0		18	20	122	610	102	18	7.6	6.6	5.4
23	5.6	11		17	20	109	580	102	18	7.6	7.6	5.4
24	3.6	15		16	20	100	550	96	17	7.3	7.3	5.4
25	3.4	15		14	20	91	580	91	16	7.0	6.6	5.4
26	3.4	18	20	14	20	86	550	81	15	7.0	6.6	5.2
27	3.2	12		15	20	82	520	76	15	7.6	6.6	5.2
28	3.0	11		16	20	86	462	76	15	10	6.4	5.4
29	3.0	12		15	-	82	520	86	14	9.1	6.2	5.4
30	3.0	8.8		15	-	78	550	72	14	7.0	6.2	5.6
31	3.8	-		15	-	75	-	64	-	8.8	5.8	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	121.2	6.8	3.0	3.91	0.107	0.12	240
November.....	240.9	18	3.4	8.03	.220	.25	478
December.....	1,810.5	431	6.0	58.4	1.60	1.84	3,590
Calendar year 1937.....	9,664.1	431	-	26.5	.726	9.85	19,170
January.....	468	18	-	15.0	.411	.47	924
February.....	519	-	15	18.5	.507	.53	1,030
March.....	3,935	580	26	127	3.48	4.01	7,800
April.....	10,446	610	64	348	9.53	10.63	20,720
May.....	5,595	550	64	180	4.93	5.68	11,100
June.....	772	57	14	25.7	.704	.79	1,530
July.....	319.0	18	7.0	10.3	.282	.33	633
August.....	239.9	9.7	5.8	7.74	.212	.24	476
September.....	178.3	8.5	5.2	5.94	.163	.18	354
Water year 1937-38.....	24,642.8	610	3.0	67.5	1.85	25.07	48,880

Weiser River near Starkey, Idaho

Location.- Staff gage, 44°51', long. 116°25', in SE¼ sec. 31, T. 18 N., R. 1 E., 1,000 feet upstream from East Fork of Weiser River and 3¼ miles east of Starkey.

Drainage area.- 66.6 square miles.

Records available.- April 1937 to September 1938.

Extremes.- Maximum discharge during year, 1,350 second-feet Apr. 18 (gage height, 4.40 feet); minimum, 5.6 second-feet Dec. 8 (gage height, 0.33 foot).
1937-38: Maximum discharge, that of Apr. 18, 1938; minimum, that of Dec. 8, 1937.

Remarks.- Records good. Discharge for periods of missing gage heights Nov. 5-7, 9, 10, 12-24, May 4-7 computed on basis of weather records and records for other stations in Weiser River Basin; that for June 7 interpolated. Gage read twice daily. No diversion or regulation. Bureau of Reclamation furnished results of nine discharge measurements.

Rating table, period Dec. 11 to Sept. 30 (gage height, in feet, and discharge, in second-feet)

0.5	7.5	2.0	135	3.5	725
.8	16.5	2.3	199	3.8	920
1.1	34	2.6	288	4.1	1,130
1.4	57.5	2.9	400	4.4	1,350
1.7	90	3.2	550		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.7	11	20	40	34	61	118	1,280	103	27	16	12
2	9.7	10	20	38	35	84	110	990	96	28	16	14
3	11	10	21	29	34	96	118	758	84	31	16	13
4	12	10	17	37	33	103	135	500	78	30	16	13
5	11	10	16	34	32	103	154	400	72	31	15	13
6	10	15	16	31	31	103	154	350	67	28	15	13
7	10	15	16	30	32	103	187	325	62	25	15	13
8	10	17	11	30	33	96	226	306	58	25	15	17
9	10	15	18	28	32	96	256	323	53	23	16	16
10	10	15	18	29	33	103	288	342	51	21	15	15
11	10	12	822	28	43	118	323	400	48	20	14	14
12	10		695	27	37	144	400	422	47	20	14	14
13	10		323	25	46	306	445	400	47	20	15	14
14	10		199	28	44	360	550	400	46	18	15	13
15	10	15	154	31	42	360	605	380	44	18	15	12
16	11		118	33	43	888	790	380	43	20	15	12
17	14		126	30	46	888	920	380	46	20	14	12
18	15		96	29	37	550	1,060	342	47	18	15	12
19	13	30	84	29	44	400	1,130	256	43	18	14	12
20	11		67	29	42	306	990	199	40	16	14	12
21	11		55	28	38	241	920	187	39	16	14	12
22	11		56	37	37	212	1,130	187	41	15	14	12
23	10	39	47	33	37	187	1,060	187	40	15	15	12
24	10		54	35	37	164	1,020	187	37	16	14	12
25	9.7		51	31	37	154	1,060	187	32	15	14	12
26	9.7		40	49	34	39	154	1,060	175	30	15	14	12
27	10	31	46	35	42	154	888	175	29	15	14	12
28	10	28	47	37	45	144	888	164	32	14	13	12
29	10	26	45	36	-	135	955	154	30	17	13	13
30	10	21	43	35	-	135	1,130	144	28	15	13	13
31	11	-	42	34	-	126	-	118	-	12	12	-
Month				Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off		
										Inches	Acres-feet	
October.....				329.8		15	9.7	10.6	0.159	0.18	654	
November.....				610		-	10	20.3	.305	.34	1,210	
December.....				3,392		822	11	109	1.64	1.89	6,730	
Calendar year 1937.....												
January.....				990		40	25	31.9	.479	.55	1,960	
February.....				1,070		46	31	38.2	.574	.60	2,120	
March.....				7,074		888	61	228	3.42	3.94	14,030	
April.....				19,070		1,130	110	656	9.55	10.66	37,820	
May.....				10,998		1,280	118	355	5.33	6.14	21,810	
June.....				1,513		103	28	50.4	.757	.84	3,000	
July.....				622		51	12	20.1	.302	.35	1,230	
August.....				450		16	12	14.5	.218	.25	893	
September.....				388		17	12	12.9	.194	.22	770	
Water year 1937-38.....				46,506.8		1,280	9.7	127	1.91	25.96	92,230	

Weiser River near Council, Idaho

Location.— Staff gage, lat. 44°41', long. 116°29', in sec. 29, T. 16 N., R. 1 W., 0.7 mile downstream from Cottonwood Creek, 2 miles upstream from Middle Fork of Weiser River, and 3½ miles southwest of Council.

Drainage area.— 390 square miles.

Records available.— April 1937 to September 1938.

Extremes.— Maximum discharge during year, about 6,700 second-feet Mar. 16 or 17 (gage height, 7.6 feet, from floodmark), from rating curve extended above 5,500 second-feet; minimum, 26 second-feet Oct. 30 (gage height, 0.40 foot).

1937-38: Maximum, that of Mar. 16 or 17, 1938; minimum, that of Oct. 30, 1937.

Remarks.— Records good below 3,500 second-feet and fair above. Discharge Dec. 11, 12, Mar. 15-18 computed on basis of observer's reports, weather records, and records for other stations in Weiser River Basin; that for Mar. 20, 22 interpolated. Gage read once daily Feb. 20 to Mar. 15; twice daily remainder of year. Flow regulated by storage in Lost Valley Reservoir. Several diversions from Weiser River and its tributaries above station. Bureau of Reclamation furnished results of 13 discharge measurements.

Rating table, period Dec. 11 to Sept. 30 (gage height, in feet, and discharge, in second-feet)

0.3	23	2.3	555	4.3	1,555	6.2	4,030
.7	65.5	2.7	725	4.7	1,825	6.6	4,790
1.1	149	3.1	905	5.1	2,215	7.0	5,550
1.5	257	3.5	1,100	5.4	2,620	7.5	6,500
1.9	395	3.9	1,310	5.8	3,280		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59	32	99	224	274	1,050	680	3,840	1,200	239	49	60
2	59	32	99	213	435	905	680	3,460	1,150	224	46	60
3	59	32	103	173	495	1,200	680	2,780	1,100	245	47	58
4	59	31	92	173	395	950	905	2,620	1,050	242	47	55
5	59	32	92	183	360	1,000	950	1,820	1,000	257	48	58
6	59	31	81	189	395	1,000	905	1,540	950	213	46	60
7	59	32	74	171	815	905	950	1,360	905	186	47	64
8	59	43	67	163	770	860	1,150	1,510	770	171	46	78
9	57	46	74	149	575	860	1,310	1,510	680	166	52	78
10	57	41	218	161	1,000	860	1,360	1,560	615	151	49	73
11	54	51	2,500	156	1,200	905	1,420	1,480	575	126	46	73
12	54	53	4,000	151	1,480	1,150	1,600	1,480	575	113	46	71
13	52	60	1,480	144	905	2,000	1,670	1,600	535	104	46	71
14	47	95	950	199	815	2,220	1,820	1,600	495	88	54	66
15	45	81	770	308	595	3,500	2,000	1,670	475	86	56	66
16	45	64	635	378	535	5,500	2,220	1,670	515	88	61	67
17	47	67	680	360	495	5,700	2,770	1,670	535	82	62	66
18	49	63	615	342	378	3,800	3,100	1,600	475	71	62	66
19	46	99	475	325	378	2,620	3,650	1,420	415	60	66	66
20	47	365	378	342	308	2,050	3,280	1,200	395	47	66	67
21	47	248	325	395	325	1,480	2,930	1,100	435	40	69	67
22	47	152	308	455	325	1,370	3,280	1,150	395	34	67	69
23	45	206	245	475	342	1,260	3,280	1,200	395	34	69	64
24	42	285	254	325	360	1,310	3,280	1,360	378	29	67	62
25	34	305	257	325	395	1,310	3,460	1,480	342	30	66	62
26	32	285	242	308	435	1,150	3,460	1,480	325	35	67	62
27	32	189	308	290	495	1,150	2,930	1,480	325	42	66	62
28	29	160	308	274	555	1,150	2,930	1,540	325	54	62	66
29	28	138	274	257	-	950	3,100	1,480	274	64	61	69
30	27	122	236	213	-	860	3,460	1,560	257	55	60	69
31	29	-	230	227	-	770	-	1,260	-	52	60	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						1,466	59	27	47.3	2,910		
November.....						3,460	355	51	115	6,860		
December.....						16,469	4,000	67	551	32,670		
Calendar year												
January.....						8,048	475	144	260	15,960		
February.....						15,835	1,480	274	566	31,410		
March.....						51,795	5,700	770	1,671	102,700		
April.....						65,210	3,650	680	2,174	129,300		
May.....						51,280	3,840	1,100	1,654	101,700		
June.....						17,851	1,200	257	595	35,430		
July.....						3,408	237	29	110	6,760		
August.....						1,756	69	46	56.6	3,480		
September.....						1,975	78	55	65.8	3,920		
Water year 1937-38						238,563	5,700	27	654	473,000		

Weiser River above Crane Creek, near Weiser, Idaho

Location.- Water-stage recorder, lat. 44°18', long. 116°48', in sec. 10, T. 11 N., R. 4 W., 1 mile upstream from Crane Creek, and 9 miles northeast of Weiser.

Drainage area.- 1,160 square miles.

Records available.- July 1920 to September 1938.

Average discharge.- 17 years (1921-38), 800 second-feet.

Extremes.- Maximum discharge during year, 10,200 second-feet Dec. 12 (gage height, 8.2 feet, from floodmarks); minimum, 32 second-feet Aug. 14 (gage height, 0.90 foot). 1920-38: Maximum discharge, about 14,000 second-feet Mar. 19, 1932 (gage height, about 10.8 feet, from floodmarks); minimum, 5 second-feet (estimated), Aug. 11 to Sept. 10, 1931.

Remarks.- Records good except those for periods of ice effect or missing or incomplete gage-height record, Oct. 17-24, Dec. 11-13, Feb. 12, Mar. 18, July 13-16, which were computed on basis of weather records and records for stations on nearby streams, and are fair. Record for Dec. 5 and July 17 based on once-daily staff-gage reading. Discharge Oct. 4, 5, Dec. 3, 4, 6, 18, June 24, 25, July 18 interpolated. Small storage reservoirs and numerous diversions for irrigation above station.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 19

Nov. 20 to Sept. 30

1.0	47	2.6	755	0.9	31.5	3.9	2,100	6.9	7,210
1.4	138	3.0	1,115	1.4	150	4.4	2,750	7.4	8,310
1.8	286	3.4	1,520	1.9	359	4.9	3,540	7.9	9,460
2.2	495	3.8	1,980	2.4	660	5.4	4,360	8.2	10,170
				2.9	1,040	5.9	5,250		
				3.4	1,520	6.4	6,180		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	68	394	660	1,110	1,860	1,690	6,180	3,380	9C4	101	49
2	74	72	345	590	2,040	3,080	1,560	7,000	3,380	8E0	88	62
3	76	74	*319	590	2,710	4,020	1,520	5,600	3,460	8F8	76	60
4	*77	76	*292	507	1,980	3,160	1,860	4,530	3,380	896	71	53
5	*77	76	†266	454	1,450	2,640	2,100	3,780	3,300	8E5	66	51
6	78	76	*254	454	1,550	2,570	2,040	3,230	3,300	760	56	47
7	78	78	241	460	2,710	2,300	1,980	2,860	3,230	688	53	51
8	76	80	245	460	2,780	2,040	2,100	2,500	3,080	611	51	68
9	76	94	220	448	2,040	1,980	2,300	2,570	2,640	5E8	47	83
10	76	113	307	426	2,450	1,980	2,500	2,780	2,250	4E3	49	98
11	72	101	6,000	438	3,620	1,920	2,570	2,930	2,040	438	47	93
12	68	98	9,500	432	5,000	1,980	2,640	3,000	1,980	4C0	44	93
13	64	113	5,000	432	3,620	3,700	2,780	3,230	1,920	375	38	93
14	64	135	2,640	448	2,710	5,600	2,860	3,380	1,860	3E0	33	96
15	64	186	2,570	968	2,100	5,230	3,080	3,620	1,740	3E0	33	96
16	60	186	2,040	1,280	1,610	8,500	3,300	3,700	1,740	3E0	42	93
17		154	2,100	1,220	1,300	9,000	4,020	3,780	1,920	†275	53	93
18		157	*1,700	1,100	1,170	6,560	4,530	3,700	1,740	*2E8	45	90
19	70	204	1,310	1,130	1,090	8,980	5,410	3,380	1,520	1E2	49	93
20		1,080	1,180	1,040	1,040	5,050	5,410	2,860	1,390	1E8	49	88
21		1,590	1,030	968	1,010	3,620	5,050	2,570	1,450	144	55	93
22	78	775	960	1,550	976	3,080	4,870	2,570	1,500	115	62	93
23		584	858	2,360	976	3,080	5,410	2,860	1,470	1C1	62	93
24		1,080	780	1,470	1,090	5,050	5,410	3,080	*1,370	90	66	90
25	78	920	688	1,080	1,150	4,360	5,410	3,460	*1,260	50	80	90
26		1,320	715	936	1,240	3,700	5,600	3,860	1,160	50	71	90
27		842	709	828	1,360	3,300	5,410	3,940	1,090	76	64	90
28	70	639	960	842	1,500	3,000	4,870	4,100	1,110	55	62	93
29	70	532	904	812	-	2,570	5,050	4,020	1,010	50	64	93
30	68	448	798	723	-	2,230	5,410	3,780	936	110	55	96
31	68	-	798	667	-	1,920	-	3,540	-	1C7	53	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	2,216	-	-	71.5	4,400
November.....	11,931	1,590	68	398	23,660
December.....	46,094	9,500	220	1,497	91,430
Calendar year 1937.....	235,952	9,500	9	646	468,000
January.....	25,773	2,360	426	831	51,120
February.....	53,362	5,000	976	1,906	105,800
March.....	115,080	9,000	1,860	3,712	228,300
April.....	108,730	5,600	1,520	3,624	215,700
May.....	112,390	7,000	2,500	3,625	222,900
June.....	61,586	3,460	936	2,053	122,200
July.....	11,747	904	76	379	23,300
August.....	1,785	101	33	57.6	3,540
September.....	2,471	98	47	82.4	4,901
Water year 1937-38.....	553,165	9,500	33	1,516	1,097,000

*Discharge interpolated.

†Discharge computed from staff-gage reading.

East Fork of Weiser River near Council, Idaho

Location.- Water-stage recorder, lat. 44°46', long. 116°16', in SE¼ sec. 31, T. 17 N., R. 2 E., three-quarters of a mile southwest of Squaw Creek ranger station and 9 miles northeast of Council. Zero of gage is 6,224.1 feet above mean sea level.

Drainage area.- 2.0 square miles.

Records available.- September 1932 to November 1934, April to October 1935, September 1936 to September 1938.

Extremes.- Maximum discharge during year, 77 second-feet June 16 (gage height, 3.52 feet); probably no flow at times during winter.
1933-35, 1937-38: Maximum discharge, that of June 16, 1938; maximum gage height, 4.11 feet June 9, 1933 (ice affected); no flow Apr. 8, 1937, and probably no flow at times during winter of 1937-38.

Remarks.- Records good except those for period of ice effect, Nov. 8-30, and period of missing gage heights, June 17-26, which were computed on basis of records for stations on other streams in same drainage basin, and are fair. Result of discharge measurement used Nov. 7. Stream not regulated. No diversions above station. Results of two discharge measurements furnished by Bureau of Reclamation.

Rating table, period May 14 to Sept. 30, 1938, (gage height, in feet, and discharge, in second-feet)

1.20	0.5	2.00	13.3	2.80	41
1.40	2.5	2.20	18.5	3.00	50
1.60	5.6	2.40	26	3.20	60
1.80	9.1	2.60	32.5	3.40	70.5

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.6	0.6						-	48	36.0	4.5	1.2
2	.6	.6						-	52	36.0	4.2	1.1
3	.6	.6						-	56	31.0	3.8	1.1
4	.6	.7						-	56	30.0	3.6	1.1
5	.6	.6						-	58	27.0	3.2	1.1
6	.6	.6						-	52	24.0	3.1	1.1
7	.6	.6						-	55	24.0	3.0	1.1
8	.6	.6						-	59	24.0	2.8	1.4
9	.6	.6						-	52	22.0	2.6	1.2
10	.6	.6						-	47	21.0	2.5	1.1
11	.6	.6						-	46	19.0	2.4	1.0
12	.6	.6						-	49	17.0	2.3	1.0
13	.6	.6						-	51	16.0	2.3	1.0
14	.6	.6						15	53	15.0	2.3	.9
15	.6	.6						15	54	15.0	2.3	.9
16	.7	.6						18	53	14.0	2.0	.9
17	.8	.6						19	60	12.0	1.9	.9
18	.6	.6						17	17.0	1.8	.9	.9
19	.6	.6						15	11.0	1.8	.9	.9
20	.6	.6						14	9.9	1.8	.8	.8
21	.6	.6						15	9.3	1.8	.8	.8
22	.6	.6						18	8.7	1.9	.7	.7
23	.6	.6						22	8.2	1.9	.7	.7
24	.6	.6						28	7.3	1.7	.7	.7
25	.6	.6						36	6.8	1.9	.7	.7
26	.6	.6						40	6.4	1.7	.7	.7
27	.6	.6						46	5.4	1.5	.7	.7
28	.6	.6						47	4.9	1.4	.7	.7
29	.6	.6						46	4.6	1.3	.7	.7
30	.6	.6						46	4.2	1.3	.7	.7
31	.6	.6						46	4.6	1.2	.6	.6

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	18.9	0.8	0.6	0.61	0.305	0.35	37
November.....	18.1	-	-	.60	.300	.33	36
December.....	-	-	-	-	-	-	-
Calendar year							
January.....							
February.....							
March.....							
April.....							
May 14-31.....	503	47	14	27.9	14.0	9.37	998
June.....	1,616	53	42	53.9	27.0	29.6	3,210
July.....	489.7	36	4.6	15.8	7.90	9.11	971
August.....	71.8	4.6	1.2	2.32	1.16	1.34	142
September.....	27.8	1.4	.7	.93	.465	.52	55
Water year							

East Fork of Weiser River near Starkey, Idaho

Location.- Staff gage, lat. 44°51', long. 116°23', in SE¼ sec. 31, T. 18 N., R. 1 E., 500 feet upstream from confluence with Weiser River and 3¼ miles east of Starkey.

Drainage area.- 31.6 square miles.

Records available.- April 1937 to September 1938.

Extremes.- Maximum discharge during year, probably in excess of 400 second-feet May 1, during log jam (observed gage height, 2.50 feet); minimum, 1.7 second-feet Oct. 1, 2; minimum gage height, 0.09 foot Jan. 3.
1937-38: Maximum discharge observed, that of May 1, 1938; minimum, 1.4 second-feet Sept. 16, 1937.

Remarks.- Records good except those for periods of missing or doubtful gage heights, Nov. 12-24, June 22 to July 1, those for period of ice effect, Jan. 25-27, and those for periods of backwater from log on control, Apr. 16-18, Apr. 30 to May 2, all of which were computed on basis of weather records, engineer's observations of June 24 and July 1, and records for other stations in Weiser River Basin and are fair. Discharge for Nov. 5-7, 9, 10 interpolated. Gage read twice daily. Diversions for irrigation above station. Results of 13 discharge measurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.7	3.1	7.0	14	14	26	38	325	206	56	5.8	2.3
2	1.7	2.9	8.5	14	13	32	36	320	229	59	5.5	2.2
3	2.3	2.9	9.5	8.4	14	32	38	315	224	54	4.8	2.2
4	2.5	2.9	8.5	11	13	36	40	210	219	47	4.2	2.2
5	2.3	3.3	8.5	9.5	13	32	42	190	210	49	3.7	2.4
6	2.1	3.8	8.0	9.5	13	32	42	155	234	43	3.7	2.3
7	2.5	4.2	7.5	13	13	28	46	141	210	40	3.7	2.3
8	2.5	4.6	6.0	12	13	28	51	126	190	40	3.5	3.1
9	2.5	5.6	7.5	11	13	27	60	128	152	36	4.0	2.8
10	2.5	6.5	10.0	12	14	27	64	152	134	36	4.0	2.4
11	2.5	7.5	195	10	15	28	68	190	128	35	4.0	2.4
12	2.5		210	11	14	36	77	206	134	32	2.9	2.4
13	2.5		84	9.5	14	64	86	257	128	29	2.6	2.4
14	2.5		57	13	14	62	94	273	117	24	2.6	2.5
15	2.5		48	16	13	62	104	273	120	22	2.8	2.5
16	2.7	10	40	13	14	142	150	267	162	26	2.8	2.2
17	2.9		39	12	14	136	200	299	141	16	2.6	2.2
18	2.9		30	12	13	102	250	257	112	16	2.5	2.2
19	2.9		26	12	13	86	299	198	102	15	2.5	2.4
20	2.9		24	13	12	71	267	169	96	14	2.4	2.4
21	2.5	13	25	13	13	64	293	166	106	10	2.4	2.2
22	2.5		24	15	13	51	309	177	100	9.3	2.4	2.2
23	2.5		22	14	13	51	299	236	95	7.9	2.6	2.4
24	2.5		23	12	13	50	298	267	89	7.9	2.4	2.4
25	2.5		19	12	12	43	288	299	75	7.3	2.6	2.4
26	2.9	10	21	13	13	43	293	309		7.0	2.5	2.4
27	2.9	10	20	14	13	40	293	309		7.0	2.5	2.4
28	2.9	10	17	14	15	43	299	304		6.7	2.4	2.4
29	2.9	8.5	15	14	-	40	309	299		6.7	2.3	2.6
30	2.9	6.6	15	13	-	40	315	257		6.7	2.3	2.4
31	3.3	-	14	13	-	39	-	210	-	6.1	2.3	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	79.7	3.3	1.7	2.57	158
November.....	235.4	-	2.9	7.85	467
December.....	1,049.0	210	6.0	33.8	2,080
Calendar year 1937.....					
January.....	382.9	16	8.4	12.4	759
February.....	374	15	12	13.4	742
March.....	1,589	142	25	51.3	3,150
April.....	5,043	315	36	169	10,000
May.....	7,292	325	126	235	14,460
June.....	4,088	234	-	136	8,110
July.....	773.6	59	6.1	25.0	1,530
August.....	97.3	5.8	2.3	3.14	193
September.....	71.2	3.1	2.2	2.37	141
Water year 1937-38.....	21,075.1	325	1.7	57.7	41,790

West Fork of Weiser River near Fruitvale, Idaho

Location.- Staff gage, lat. 44°50', long. 116°28', in NW $\frac{1}{4}$ sec. 9, T. 17 N., R. 1 W., at Taylor ranch, $\frac{1}{2}$ miles northwest of Fruitvale, Adams County, and $\frac{1}{2}$ miles upstream from confluence with Weiser River.

Drainage area.- 78 square miles.

Records available.- October 1910 to January 1913, October 1919 to September 1925, April 1937 to September 1938.

Extremes.- Maximum discharge during year not determined; maximum daily discharge, 1,000 second-feet May 1; minimum daily, 2.6 second-feet (computed) Oct. 30, 31, Nov. 5 (gage height, about -0.03 foot).
1910-13, 1919-25, 1937-38: Maximum daily discharge, that of May 1, 1938; minimum, 0.5 second-foot July 23-27, 1911.

Remarks.- Records good except those for period when water was below gage, Oct. 28 to Nov. 7, those for periods of ice effect, Dec. 7, Jan. 25-27, those for periods of missing gage heights, Apr. 23, 24, Apr. 29 to May 4, all of which were computed on basis of one discharge measurement, weather records, observer's notes, and records for stations on nearby streams, and are fair. Gage read twice daily. Several irrigation diversions above and below station. Flow regulated at Lost Valley Reservoir on Lost Creek, 12 miles upstream. Results of 14 discharge measurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	2.7	4.5	30	39	132	117	1,000	305	7.8	33	48
2	51	2.8	7.5	35	41	158	108	900	290	7.8	33	47
3	51	2.8	13	41	43	205	119	800	240	10	34	46
4	51	2.7	13	30	44	205	142	700	217	13	33	45
5	49	2.6	12	20	43	176	162	680	174	14	34	44
6	49	2.7	9.5	23	50	140	172	522	132	11	33	44
7	47	2.8	5.0	30	69	140	102	420	125	10	33	48
8	46	4.5	7.1	29	68	140	218	420	120	9.0	30	46
9	46	6.7	7.9	27	66	158	230	420	118	8.4	30	48
10	44	5.5	16	27	89	167	257	420	109	6.9	30	48
11	43	5.0	256	26	124	176	271	440	103	5.8	29	48
12	41	6.7	348	27	124	196	315	480	103	5.6	28	47
13	27	7.1	167	27	96	386	315	500	59	5.2	30	46
14	30	10	109	28	83	225	345	545	39	5.2	33	46
15	30	12	96	32	77	288	390	568	38	5.6	38	46
16	30	9.5	83	44	68	765	420	568	36	6.6	41	46
17	29	7.1	73	44	66	558	540	590	34	7.8	48	46
18	30	7.1	64	43	63	390	725	590	34	7.2	50	44
19	29	8.7	55	43	59	300	725	500	31	5.4	50	43
20	29	14	51	43	53	230	725	440	17	4.8	50	43
21	29	18	47	43	50	194	725	385	13	5.2	51	44
22	23	10	44	51	49	162	805	385	11	4.4	52	44
23	14	10	41	52	49	153	875	368	12	4.4	50	45
24	10	19	41	48	57	144	950	402	15	6.1	48	43
25	8.7	19	39	47	64	141	880	420	14	14	50	43
26	7.9	16	43	46	70	162	880	440	12	14	51	43
27	6.3	12	38	44	89	153	830	440	11	31	51	42
28	2.8	14	33	43	102	137	830	420	11	33	50	42
29	2.7	12	32	42	-	144	850	402	8.4	37	50	43
30	2.6	6.7	32	51	-	134	875	402	9.0	33	50	42
31	2.6	-	31	47	-	124	-	350	-	31	49	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	912.6	51	2.6	29.4	1,810
November.....	259.7	19	2.6	8.66	515
December.....	1,821.5	348	4.5	58.8	3,610
Calendar year					
January.....	1,163	52	20	37.5	2,310
February.....	1,895	124	39	67.7	3,760
March.....	6,783	765	124	219	13,450
April.....	14,978	950	108	499	29,710
May.....	15,917	1,000	350	513	31,570
June.....	2,440.4	305	8.4	81.3	4,840
July.....	372.2	37	4.4	12.0	738
August.....	1,272	51	28	41.0	2,520
September.....	1,350	48	42	45.0	2,680
Water year 1937-38.....	49,164.4	1,000	2.6	135	97,510

Lost Valley Reservoir near Tamarack, Idaho

Location.- Staff gage, lat. 44°57'30", long. 116°28', in sec. 28, T. 19 N., R. 1 W., a short distance upstream from outlet gates near left end of dam, 4 miles west of Tamarack, and 16 miles north of Council.

Drainage area.- 29.4 square miles.

Records available.- May to September 1924, May 1926 to September 1938.

Extremes.- Maximum gage height recorded during year, 25.39 feet July 26; minimum, 2.60 feet Oct. 26.

1924, 1926-38: Maximum gage height, 25.60 feet June 12, 1937; gage not read when reservoir was nearly empty.

Remarks.- Stored water from this reservoir used for irrigation in Weiser Valley. Elevation of permanent spillway crest referred to present datum (which is 1.40 feet lower than datum used in 1924) is 22.26 feet. Temporary flashboard structure was raised during 1938 to permit storage to about elevation 25.8-26.0 feet on gage. Prior to October 1929 elevation of spillway crest was 17.80 feet, present datum. Gage-height record furnished by owners of Lost Valley Reservoir.

Gage height, in feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-						-	-	-	24.70	-	21.64
2	-						-	-	-	-	-	-
3	-						-	24.86	23.74	-	-	21.43
4	-						-	-	-	-	-	-
5	-						-	24.00	23.52	-	-	21.14
6	-						-	-	-	-	-	-
7	8.15	5.25					-	23.42	23.80	25.08	-	-
8	-						-	-	23.72	-	-	-
9	-						-	-	23.78	-	24.32	-
10	-						-	23.12	-	-	-	20.54
11	-		8.41				-	-	-	-	-	-
12	-						-	23.24	23.42	-	-	-
13	6.75						-	-	-	-	24.00	-
14	-						-	-	-	-	-	-
15	-						-	-	-	25.23	23.78	-
16	-						-	24.02	23.74	25.28	-	-
17	-				14.68		-	24.18	-	-	-	-
18	4.90						-	-	-	-	-	-
19	-						23.60	23.84	23.90	-	-	-
20	-						-	-	-	-	-	-
21	-						24.10	23.40	-	25.36	-	-
22	-						-	-	-	-	-	18.95
23	-						24.32	-	24.28	-	-	-
24	-						-	23.22	24.38	25.37	-	-
25	-						-	-	-	-	-	-
26	2.68						24.20	23.48	24.49	25.39	-	-
27	-						-	-	-	-	-	-
28	-						24.10	23.63	-	-	-	-
29	-						-	-	24.68	-	-	-
30	-						24.40	24.04	-	25.00	-	-
31	-						-	-	-	-	-	-

Lost Creek near Tamarack, Idaho

Location.- Water-stage recorder, lat. 44°57', long. 116°28', in sec. 28, T. 19 N., R. 1 W., a quarter of a mile downstream from dam of Lost Valley Reservoir, 4 miles west of Tamarack, and 16 miles north of Council.

Drainage area.- 29.4 square miles.

Records available.- January 1910 to August 1914, May 1920 to September 1921, and May 1924 to September 1938.

Extremes.- Maximum discharge during year, 476 second-feet May 1 (gage height, 3.44 feet); minimum, 0.45 second-foot Oct. 26 (discharge measurement).

1910-14, 1920-21, 1924-38: Maximum discharge, 668 second-feet May 17, 18, 1921 (gage height, 4.29 feet); practically no flow at times when gates in dam were closed.

Remarks.- Records good except those for periods of missing gage heights, Dec. 9-11, Dec. 15 to Feb. 16, Apr. 5, June 1-3 (computed on basis of reports relative to operation of gate or spillway), and those for period of low flow, Oct. 26 to Dec. 8, which are fair. No diversion between gage and reservoir; practically entire flow diverted below station during irrigation season. Flow regulated by operation of head gates at dam. Gage-height record furnished by owners of Lost Valley Reservoir.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	1	2			9	10	444	210	4	29	48
2	41	1	2			9	10	413	260	3	29	48
3	40	1	2			9	10	360	170	3	29	47
4	39	1	2			9	10	328	155	3	29	48
5	39	1	2			9	15	328	122	3	29	47
6	40	1	2			9	22	290	83	3	29	46
7	40	1	2			9	22	259	83	3	29	46
8	40	2	2		7	9	23	237	83	3	28	46
9	39	2	2			9	23	224	83	3	29	46
10	39	2	2			9	23	224	83	3	29	46
11	38	2	4			9	23	230	81	4	28	46
12	38	2	6			10	23	240	74	4	28	46
13	33	2				10	23	253	23	4	31	46
14	27	2				10	24	262	23	4	37	46
15	26	2				10	25	262	22	3	40	46
16	25	2				11	24	263	22	3	49	46
17	26	2			9	11	29	332	22	3	49	46
18	25	2			9	11	71	353	22	3	49	46
19	23	2			9	11	153	328	12	3	49	46
20	23	2			9	11	209	286	2	3	49	46
21	23	2			10	11	259	256	2	3	49	46
22	20	2	6		10	11	300	240	2	3	49	46
23	12	2			10	11	364	233	3	3	49	44
24	8	2			10	11	394	240	4	10	49	44
25	5	2			9	11	379	253	4	14	48	42
26	3	2			9	11	386	266	4	17	48	42
27	1	2			9	11	375	273	4	29	48	41
28	1	2			9	11	364	230	4	29	48	41
29	1	2			-	10	368	206	3	29	48	41
30	1	-			-	10	392	218	3	29	48	41
31	1	-			-	10	-	218	-	29	48	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	756	41	1	24.4	1,500
November.....	53	2	1	1.8	105
December.....	144	-	2	4.6	286
Calendar year 1937.....	7,112	69	0	19.5	14,110
January.....	233	-	-	7.5	462
February.....	268	10	-	9.1	508
March.....	312	11	9	10.1	619
April.....	4,341	394	10	145	8,610
May.....	8,569	444	208	278	17,002
June.....	1,609	210	2	53.6	3,190
July.....	260	29	3	8.4	516
August.....	1,230	49	28	39.7	2,440
September.....	1,356	48	41	45.2	2,690
Water year 1937-38.....	19,119	444	1	52.4	37,939

Hornet Creek near Council, Idaho

Location.- Staff gage, lat. 44°45', long. 116°29', in sec. 5, T. 16 N., R. 1 W., Adams County, 2½ miles upstream from confluence with Weiser River and 2.5 miles northwest of Council.

Drainage area.- 107 square miles.

Records available.- April 1937 to September 1938 (incomplete).

Extremes.- Maximum and minimum discharges not determined.

Remarks.- Records good. Gage read about twice weekly. Several diversions for irrigation above station. Gage-height record and results of eight discharge measurements furnished by Bureau of Reclamation.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Mar. 14 to Sept. 30

0.60	0.6	1.80	101	3.00	437
.90	8.2	2.10	154	3.30	570
1.20	27	2.40	226	3.60	715
1.50	59	2.70	320		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		-			-	-	176	+370	+309	67	-	
2		-			-	-	+194	+336	+204	-	-	1.3
3		-			-	-	+213	303	200	-	-	
4		-			-	-	+231	+269	+197	-	-	
5		-			-	-	+249	+234	+194	-	-	
6		-			-	-	+268	200	+191	-	-	
7		-	*11		-	-	286	+167	188	-	-	
8	*0.8	*6.4			*173	-	+308	+194	+166	-	-	
9		4.2			-	-	+331	+191	+143	-	-	
10					-	-	+354	188	121	-	5.8	
11		-			-	*293	376	+194	+119	-	-	
12		-			-	-	+396	200	+118	-	-	
13		-			-	-	+417	+220	+116	-	-	
14		-			-	715	437	240	114	13	-	
15		-			-	1,210	458	+235	+111	-	-	
16		-			-	-	548	+231	+106	-	-	
17		-			-	-	+587	226	+104	-	-	
18		-			*124	-	+626	+208	+101	-	-	
19		-			-	592	665	+190	98	-	-	
20		-			-	-	+661	+172	+96	-	-	
21		-			-	376	+657	154	+94	-	-	
22		-			-	-	+652	+174	+92	-	-	
23		-			-	-	+648	+195	+90	-	-	
24		-			-	-	+644	213	+89	-	-	
25		-			-	338	640	+213	+97	-	-	
26		-			-	-	525	+213	+85	-	-	
27		-			-	-	+496	+213	83	-	3.7	
28		-			-	-	+466	+213	+78	-	-	
29		-			-	255	437	+213	75	-	-	
30		-			-	-	+404	+213	+70	-	-	
31		-			-	-	-	213	-	-	-	
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....						-	-	-	-			
February.....						-	-	-	-			
March.....						-	-	-	-			
April.....						13,850	565	176	445	26,480		
May.....						6,823	370	154	220	13,530		
June.....						3,730	209	70	125	7,420		
July.....						-	-	-	-			
August.....						-	-	-	-			
September.....						-	-	-	-			
Water year												

*Discharge measurement.

†Interpolated.

Middle Fork of Weiser River near Mesa, Idaho

Location.- Staff gage, lat. 44°39', long. 116°27', in NW¼ sec. 10, T. 15 N., R. 1 W., at old highway bridge, 1½ miles north of Mesa, Adams County, and 2½ miles upstream from confluence with Weiser River.

Drainage area.- 86.5 square miles.

Records available.- August 1919 to November 1921, April 1937 to September 1938. October 1910 to August 1913 at site three-quarters of a mile upstream.

Extremes.- Maximum discharge observed during year, 1,380 second-feet May 1; maximum gage height, 3.88 feet Dec. 11; minimum discharge, 0.1 second-feet Aug. 31 (gage height, 0.12 foot).

1919-21, 1937-38: Maximum discharge observed, that of May 1, 1938; no flow Aug. 12, Aug. 15 to Sept. 24, 1937.

Remarks.- Records good except those above 1,000 second-feet, which are fair. Gage read twice daily. Mesa Orchards canal diverts about 6½ miles upstream. Results of 17 discharge measurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.8	15	32	64	83	118	100	1,300	700	193	17	0.2
2	2.0	18	26	56	96	138	98	840	700	198	16	.5
3	4.7	17	24	51	87	174	103	668	735	187	14	1.0
4	4.7	18	25	47	80	158	116	575	735	154	13	.8
5	3.8	18	20	42	82	118	116	488	700	156	13	.7
6	3.8	18	23	44	83	110	114	435	668	136	13	.7
7	3.8	18	25	48	85	107	125	410	700	142	9.8	1.0
8	3.8	19	23	48	83	96	129	410	575	133	7.0	3.0
9	3.4	18	18	43	90	93	144	435	515	123	8.7	3.7
10	3.8	18	61	46	87	100	151	435	460	114	8.7	5.8
11	3.8	18	990	43	136	102	161	515	410	107	5.8	4.0
12	3.8	19	460	41	161	129	182	488	410	87	6.5	4.0
13	3.8	20	266	38	100	220	193	575	410	80	5.8	2.8
14	3.8	22	187	68	90	254	210	545	410	71	8.7	1.3
15	5.6	23	158	70	88	247	226	575	360	59	8.7	1.3
16	7.3	20	147	88	79	435	360	668	385	65	5.4	1.1
17	19	21	147	96	76	338	410	668	360	59	5.1	1.3
18	20	20	118	82	68	261	515	575	315	59	3.7	1.3
19	16	31	100	79	68	262	575	575	236	49	3.7	19
20	15	79	83	96	59	214	515	488	236	47	3.7	20
21	12	89	82	77	58	179	575	515	273	46	3.0	20
22	12	46	88	147	58	171	575	605	269	41	3.4	19
23	12	64	93	105	68	161	605	605	262	40	3.0	20
24	12	133	100	87	77	166	575	635	247	36	3.0	20
25	12	109	85	80	87	142	575	805	243	30	2.6	18
26	12	79	70	82	93	138	545	878	223	25	2.2	20
27	12	56	90	87	93	131	605	840	196	26	1.9	21
28	12	46	82	82	100	127	635	878	204	24	1.0	19
29	12	38	74	76	-	123	770	840	193	26	.5	24
30	12	33	74	54	-	118	878	770	187	30	.3	23
31	12	-	70	58	-	108	-	668	-	24	.1	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						265.7	20	1.8	8.57	527		
November.....						1,141	133	15	38.0	2,260		
December.....						3,841	990	18	124	7,620		
Calendar year												
January.....						2,125	147	38	68.5	4,210		
February.....						2,415	161	58	86.2	4,790		
March.....						5,228	435	93	169	10,370		
April.....						10,881	878	98	363	21,580		
May.....						19,707	1,300	410	636	39,090		
June.....						12,317	735	187	411	24,430		
July.....						2,569	198	24	82.9	5,100		
August.....						198.3	17	.1	6.40	393		
September.....						277.9	24	.2	9.25	550		
Water year 1937-38.....						60,965.5	1,300	.1	167	120,900		

Mesa Orchards canal near Mesa, Idaho

Location.- Staff gage, lat. 44°38', long. 116°25', in sec. 14, T. 15 N., R. 1 W., 1,500 feet upstream from end of flume, 1½ miles northeast of Mesa, and 3 miles below head gates. Prior to irrigation season of 1938, staff gage at site 200 feet upstream at different datum.

Records available.- 1924, 1928, 1930-38 (irrigation seasons only).

Extremes.- Maximum discharge during period, 31 second-feet July 21-23, 26-29; maximum gage height, 1.84 feet July 21-23, 26, 28, 29; no flow at times.

1924, 1928, 1930-38: Maximum discharge, 36 second-feet June 8-10, 1935; no flow during nonirrigation season.

Remarks.- Records good. Those for period Oct. 1 to Dec. 10 computed on basis of 4 discharge measurements and information furnished by watermaster and hydrographer. Canal diverts water from Middle Fork of Weiser River in SE¼NW¼ sec. 9, T. 15 N., R. 1 E., for irrigation of Mesa Orchards and for domestic supply of village of Mesa. Flow regulated by operation of gates in diversion dam and of waste gates in flume above gage. Gage-height record furnished by operators of Mesa Orchards.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	4	6		0			-	18	26	30	26
2	11							-	19	25	30	25
3	11							-	22	24	30	25
4	11							-	24	20	30	25
5	11							-	24	19	29	25
6	11	4.5	5					-	24	18	29	25
7	11							0	25	18	28	25
8								-	26	16	28	26
9								-	27	19	28	24
10								-	28	18	28	24
11								-				
12	11							-				
13								-				
14								-				
15								-				
16		-										
17	5	-					-	29	29	28	23	
18		-					-	29	28	29	23	
19		-					-	27	28	29	15	
20		5	-					18	27	27	28	-
21			-					18	27	30	27	-
22	-						14	28	30	24	-	
23	-						18	28	30	27	-	
24	-						18	27	30	27	-	
25		-					18	27	30	27	-	
26		-						18	26	30	27	-
27	3.2	-						18	25	31	27	-
28		-						19	26	31	26	-
29		3	-					19	26	31	25	-
30	-						20	26	30	26	-	
31	-						19	-	30	26	-	
Month						Second-foot-days	Maximum	Minimum	Mean		Run-off in acre-feet	
October.....						232.2	11	-	7.5		461	
November.....						141.5	-	-	4.7		281	
December 1-10.....						57.2	-	-	5.7		113	
Calendar year												
January.....												
February.....												
March.....												
April.....												
May 30-31.....						217	20	14	18.1		430	
June.....						781	29	18	26.0		1,550	
July.....						814	31	16	26.3		1,610	
August.....						862	30	24	27.8		1,710	
September 1-18.....						425	26	15	23.6		843	
Water year												

WEISER RIVER BASIN

Rush Creek at Cambridge, Idaho

Location.- Staff gage, lat. $44^{\circ}35'$, long. $116^{\circ}40'$, in SW $\frac{1}{4}$ sec. 2, T. 14 N., R. 3 W., in Cambridge, 150 feet upstream from Superior Street, and three-eighths of a mile upstream from mouth.

Records available.- March to September 1932.

Extremes.- Maximum discharge observed during period, 582 second-feet, discharge measurement, Mar. 16 (gage height, 6.07 feet); no flow Aug. 23-31 and Sept. 6.

Remarks.- Records good except those for period of no gage-height record, May 1-3 (computed on basis of records for nearby stations), and those for extremely low stages in August and September, which are fair. Gage read twice daily. Several diversions for irrigation above station. Flow regulated slightly by operation of power plant 8 miles upstream.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	-	300	324	97	1.2	0.1
2						-	-	200	307	92	1.4	.2
3						-	-	150	341	92	1.9	.1
4						-	-	107	324	82	.9	.1
5						-	-	102	377	72	.6	.1
6						-	*88	92	377	60	.4	0
7						-	†84	87	359	52	.2	.1
8						-	-	87	324	46	.2	.6
9						-	-	92	260	43	.2	1.3
10						-	-	107	217	37	.2	.7
11						†52	-	107	204	35	.2	.7
12						-	†64	112	217	32	.1	.6
13						-	-	137	217	28	.1	.4
14						-	*84	158	204	27	.1	.1
15						-	-	160	217	20	.1	.1
16						†582	-	180	245	21	.1	.1
17						†275	-	192	231	16	.1	.1
18						-	-	180	180	12	.1	.1
19						-	-	147	169	7.6	.1	.1
20						-	-	127	180	5.3	.1	.2
21						-	-	122	204	5.3	.1	.2
22						-	-	158	182	1.7	.1	.1
23						-	-	192	180	.4	0	.1
24						-	-	217	158	.3	0	.2
25						-	-	260	147	.4	0	.2
26						*102	-	291	137	.4	0	.2
27						†102	†137	324	137	.9	0	.2
28						-	-	341	147	5.3	0	.2
29						-	†158	341	122	2.4	0	.2
30						-	-	307	122	1.7	0	.3
31						-	-	291	-	1.2	0	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....						5,688	-		183	11,280		
June.....						6,820	377	122	227	13,530		
July.....						497.9	97	.3	29.0	1,780		
August.....						8.5	1.9	0	.27	17		
September.....						7.7	1.3	0	.26	15		
The period.....										26,620		

*Discharge measurement.

†Determined from staff-gage reading.

Pine Creek near Cambridge, Idaho

Location.- Staff gage, lat. 44°35', long. 116°44', in SW $\frac{1}{4}$ sec. 32, T. 15 N., R. 3 W., 300 feet upstream from West Fork and 3.2 miles northwest of Cambridge.

Records available.- April 29 to September 30, 1938.

Extremes.- Maximum discharge observed during period, 235 second-feet June 5 (gage height, 2.38 feet); minimum observed, 5 second-feet Aug. 29, Sept. 1, 2, 5 (gage height, 0.42 foot).

Remarks.- Records good except those for May 1-3, which were computed on basis of records for other stations in same drainage basin and are fair. Gage read twice daily. Several diversions for irrigation above station. Results of four discharge measurements furnished by Bureau of Reclamation.

Rating table, Apr. 29 to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet)

0.4	2.9	1.3	52	2.2	197
.7	10.3	1.6	94	2.4	235
1.0	22.5	1.9	143		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							-	200	179	53	6	4
2							-	175	206	53	7	4
3							-	150	187	56	7	4
4							-	126	197	53	7	4
5							-	118	216	46	6	4
6							-	110	225	38	6	4
7							-	94	197	32	6	4
8							-	94	187	32	5	5
9							-	94	134	28	5	5
10							-	94	126	26	4	6
11							-	102	110	23	4	6
12							-	102	118	20	4	5
13							-	123	118	16	5	5
14							-	125	118	16	5	4
15							-	134	110	16	6	4
16							-	134	126	22	5	4
17							-	152	110	19	6	4
18							-	134	94	20	6	4
19							-	118	79	12	6	4
20							-	94	79	10	6	4
21							-	86	102	7	6	4
22							-	110	102	7	6	5
23							-	125	94	7	4	6
24							-	143	86	6	4	6
25							-	170	86	6	4	6
26							-	179	76	7	4	5
27							-	206	73	6	4	5
28							-	197	73	7	4	5
29							152	206	72	11	4	5
30							170	187	58	9	4	6
31							-	179	-	7	4	-
Month							Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet	
October.....												
November.....												
December.....												
Calendar year												
January.....												
February.....												
March.....												
April.....												
May.....							4,266	-	86	138	8,460	
June.....							3,738	225	58	125	7,410	
July.....							671	56	8	21.6	1,330	
August.....							160	7	4	5.2	317	
September.....							141	6	4	4.7	280	
The period.....											17,800	

Little Weiser River near Indian Valley, Idaho

Location.- Staff gage, lat. $44^{\circ}30'$, long. $116^{\circ}24'$, in NE $\frac{1}{4}$ sec. 1, T. 13 N., R. 1 W., 80 feet downstream from barn at Richardson ranch, about one mile upstream from diversion feeding C. Ben Ross Reservoir, and $4\frac{1}{2}$ miles southeast of Indian Valley.

Drainage area.- 81.9 square miles.

Records available.- April to September 1938. June 1920 to February 1921, March to September 1923, and February 1924 to October 1927 at nearby sites; records equivalent.

Extremes.- Maximum discharge observed during period, about 1,200 second-feet May 1 (gage height, about 5.15 feet, from floodmarks), from rating curve extended above 600 second-feet; minimum discharge, 8.8 second-feet September 25-28 (gage height, 0.50 foot). 1920-21, 1923-27, 1938: Maximum discharge observed, about 1,840 second-feet February 4, 1925; minimum observed, 3.6 second-feet August 23-30, September 4, 5, 1924.

Remarks.- Records good except those for May 1-5, which are fair. Daily discharge for May 1-5, July 8, 9 computed on basis of records for other stations in same drainage basin. Gage read twice daily. One small diversion for ranch above station. Many diversions for irrigation below station, including feeder canal to C. Ben Ross Reservoir. Results of three discharge measurements furnished by Bureau of Reclamation.

Rating table, Apr. 29 to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet)

0.5	8.8	2.3	165	4.1	703
.8	17.9	2.6	230	4.4	830
1.1	30.5	2.9	305	4.7	965
1.4	48	3.2	389	5.0	1,110
1.7	75	3.5	484	5.2	1,210
2.0	113	3.8	589		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								900	484	156	26	16
2								650	553	138	25	14
3								500	553	148	25	13
4								425	518	129	23	12
5								375	518	113	23	12
6								332	553	99	24	12
7								318	518	99	23	13
8								305	484	90	23	19
9								318	389	85	23	19
10								332	332	80	23	15
11								332	332	75	21	14
12								360	318	70	21	14
13								419	318	65	21	13
14								419	318	60	21	13
15								419	305	60	20	12
16								451	332	65	19	12
17								451	279	54	19	12
18								419	242	54	18	12
19								360	230	49	18	12
20								332	230	47	18	12
21								332	207	43	17	12
22								360	218	42	16	12
23								451	196	40	20	12
24								484	175	38	17	12
25								518	175	37	16	10
26								589	165	36	17	8.8
27								589	165	36	16	8.8
28								589	146	35	15	8.8
29								518	129	34	15	10
30							589	484	185	30	15	12
31							-	484	-	27	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....							
November.....							
December.....							
Calendar year							
January.....							
February.....							
March.....							
April.....							
May.....	13,815	-	305	446	5.45	6.28	27,400
June.....	9,567	553	129	319	3.89	4.34	18,990
July.....	2,132	156	27	68.8	.840	.97	4,230
August.....	612	26	14	19.7	.241	.26	1,210
September.....	377.4	19	8.8	12.6	.154	.17	749
The period.....							52,570

Crane Creek Reservoir near Midvale, Idaho

Location.- Staff gage, lat. 44°22', long. 116°37', in SE¼ sec. 19, T. 12 N., R. 2 W., 10 miles southeast of Midvale.

Drainage area.- 242 square miles.

Records available.- November 1923 to September 1938.

Extremes.- Maximum gage height observed during year, 50.5 feet Mar. 19; minimum observed, 24.6 feet Oct. 12, 16, 25, 28, 30, Nov. 6.
1924-38: Maximum gage height, 56.3 feet Feb. 22, 1927; no usable storage during periods Sept. 23, 1928, to Feb. 28, 1929, and Sept. 25 to about Dec. 1, 1929.

Remarks.- Capacity of reservoir is reported to be about 60,000 acre-feet at gage-height of 55 feet. Water is used for irrigation in lower Weiser Valley. Gage heights furnished by Crane Creek Reservoir Administration Board.

Gage height, in feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25.75	-	-	36.1	-	47.1	-	-	47.75	46.85	45.15	40.6
2	25.6	-	-	-	42.8	47.6	47.25	48.0	-	46.95	45.0	40.5
3	-	-	-	-	-	48.8	-	48.05	-	-	-	40.4
4	-	-	28.42	-	48.3	47.5	48.05	47.65	46.9	44.8	40.3	-
5	25.3	-	-	-	44.0	48.2	47.75	48.05	-	-	44.7	-
6	25.2	24.6	-	-	-	48.1	-	48.05	47.5	46.9	44.5	39.9
7	-	-	-	-	45.0	48.1	48.1	48.05	47.45	46.85	44.4	39.8
8	-	-	-	36.4	45.5	48.1	48.1	-	47.4	46.85	-	-
9	24.75	-	-	-	45.75	-	48.1	48.05	47.35	46.2	44.2	39.5
10	-	-	-	-	46.0	47.7	48.1	48.05	47.3	-	44.0	-
11	24.7	-	28.2	-	46.75	47.6	-	-	47.25	46.75	43.8	39.3
12	24.6	-	-	-	47.1	47.5	48.0	48.05	-	46.75	43.65	39.2
13	-	24.65	-	-	47.1	-	47.9	48.05	47.15	46.7	-	39.1
14	-	-	-	-	46.75	48.35	47.95	48.05	47.05	46.7	-	39.0
15	-	-	-	37.2	46.25	49.1	48.0	48.05	46.95	46.65	43.0	38.9
16	24.6	-	-	-	45.9	50.1	48.05	48.05	46.9	-	42.8	38.8
17	-	-	-	-	45.5	50.3	-	48.0	48.85	46.6	-	-
18	-	-	34.7	-	-	-	-	48.0	47.3	46.55	42.5	38.6
19	-	-	-	-	45.2	50.5	48.1	-	47.25	46.5	42.25	38.55
20	-	25.5	-	-	-	50.3	48.05	-	-	46.5	-	38.5
21	-	-	-	-	45.4	-	48.05	47.95	-	46.4	42.1	-
22	-	-	-	40.7	-	49.5	-	-	47.2	46.4	-	38.4
23	24.6	-	-	-	-	49.3	48.05	47.9	47.2	-	41.85	38.35
24	-	-	35.6	-	45.8	49.3	48.0	47.9	47.2	46.1	41.7	-
25	-	-	-	-	-	-	48.0	47.9	47.2	46.0	41.6	38.25
26	-	-	-	-	46.4	49.0	47.95	-	47.1	45.8	41.5	38.2
27	-	26.1	-	-	46.7	48.55	47.9	47.85	-	-	41.35	38.1
28	24.6	-	-	-	-	48.0	47.9	47.85	47.1	-	-	38.0
29	-	-	-	41.8	-	47.8	47.9	-	47.05	45.6	41.04	38.0
30	24.6	-	-	-	-	47.5	47.9	47.8	47.05	45.5	40.9	37.5
31	-	-	-	-	-	47.4	-	47.8	-	-	-	-

Crane Creek near Midvale, Idaho

Location.- Water-stage recorder, lat. 44°22', long. 116°37'30", in SE¼ sec. 19, T. 12 N., R. 2 W., 400 feet downstream from Crane Creek Dam and 1½ miles southeast of Midvale.

Drainage area.- 242 square miles.

Records available.- October 1910 to April 1916 and May 1924 to September 1938.

Average discharge.- 17 years (1912-15, 1924-38), 83.4 second-feet.

Extremes.- Maximum discharge during year, 335 second-feet Mar. 16 (gauge height, 3.42 feet); practically no flow Oct. 13 to Feb. 7, Feb. 20 to Mar. 2, Apr. 3-8.
1910-16, 1924-38: Maximum discharge, 4,240 second-feet Dec. 3, 1910 (gauge height, 8.9 feet); practically no flow at times in each year when gates in dam were closed.

Remarks.- Records good except those for period of uncertain gage heights, which are fair. Flow regulated by storage in Crane Creek Reservoir. No large diversions above station. Gage-height record furnished by Crane Creek Reservoir Administration Board.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.00	0	2.10	239
.30	8.0	2.40	326
.60	30	2.70	440
.90	59.5	3.00	581
1.20	93	3.30	755
1.50	130	3.50	891
1.80	176		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36				0	0	252	17	17	18	98	95
2	35				0	0	88	18	17	18	98	94
3	34				0	172	0	18	17	18	97	106
4	34				0	420	0	18	17	18	98	122
5	34				0	336	0	18	17	18	113	121
6	34				0	333	0	17	17	18	136	122
7	34				0	333	38	17	17	18	136	122
8	34				*38	333	126	17	18	18	135	122
9	34				95	333	180	17	18	18	145	107
10	33				*100	316	221	17	18	18	158	99
11	33				*374	260	221	18	18	18	166	99
12	24				*780	228	221	18	18	18	180	97
13	0				808	228	148	18	19	18	182	75
14	0				808	270	43	18	19	17	180	60
15	0				*785	479	46	17	20	17	178	61
16	0				*696	736	56	18	20	17	166	61
17	0				*530	828	56	17	20	17	133	60
18	0				*347	814	56	17	19	18	136	57
19	0				*231	814	80	17	18	18	136	57
20	0				0	814	106	17	18	18	134	48
21	0				0	814	113	17	20	30	131	38
22	0				0	808	115	17	20	68	129	38
23	0				0	808	115	17	20	144	129	37
24	0				0	801	115	17	20	144	131	38
25	0				0	801	115	17	18	125	124	38
26	0				0	801	99	17	19	100	112	37
27	0				0	801	52	17	20	100	112	37
28	0				0	788	31	17	20	100	109	38
29	0				-	587	18	17	18	100	105	38
30	0				-	444	17	17	18	100	97	38
31	0				-	365	-	17	-	100	95	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	399	36	0	12.9	791
November.....	0	0	0	0	0
December.....	0	0	0	0	0
Calendar year 1937.....	13,446	218	0	36.8	26,680
January.....	0	0	0	0	0
February.....	5,592	808	0	200	11,090
March.....	15,865	828	0	512	31,470
April.....	2,728	252	0	90.9	5,410
May.....	535	18	17	17.3	1,060
June.....	558	20	17	18.5	1,100
July.....	1,467	144	17	47.3	2,910
August.....	4,081	182	95	132	8,090
September.....	2,162	123	37	72.1	4,290
Water year 1937-38.....	33,386	828	0	91.5	66,210

*Gage height uncertain; discharge computed on basis of reported gate changes at Crane Creek Dam.

Crane Creek at mouth, near Weiser, Idaho

Location.- Water-stage recorder, lat. 44°18', long. 116°47', in sec. 14, T. 11 N., R. 4 W., just downstream from steel highway bridge at Harris ranch, a quarter of a mile upstream from mouth, and 10 miles northeast of Weiser.

Drainage area.- 258 square miles.

Records available.- July 1920 to September 1938.

Average discharge.- 17 years (1921-38), 67.4 second-feet.

Extremes.- Maximum discharge during year, 1,160 second-feet Mar. 19 (gage height, 5.77 feet); minimum, 3 second-feet Oct. 22 (gage height, 1.76 feet).

1920-38: Maximum discharge, about 2,350 second-feet about Feb. 7, 1925, (gage height, 6.80 feet, from well-defined marks on gage); minimum, 0.2 second-foot May 26, 1931; minimum gage height, 1.30 feet Jan. 21, 1922.

Remarks.- Records good except those for periods of missing or incomplete gage-height record, which are fair. Flow regulated by storage in Crane Creek Reservoir. Several small ditches divert water above station for irrigation.

Rating table, water year 1937-38 (gage height, in feet and discharge, in second-feet)

Mar. 19 to Sept. 30

1.80	3.9	4.20	350
2.10	15.5	4.50	446
2.40	33	4.80	585
2.70	57	5.10	745
3.00	88	5.40	930
3.30	127	5.70	1,130
3.60	178	5.80	1,200
3.90	245		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	4	5	7	71	76	327	24	9	16	78	79
2	31	4	5	6	148	160	159	23	10	15	79	79
3	33	4	5	6	112	256	22	20	8	16	80	87
4	33	4	4	5	49	468	20	20	10	17	79	108
5	33	4	4	5	30	366	28	21	13	16	86	105
6	32	4	4	5	34	369	28	18	13	16	114	106
7	31	4	4	5	153	382	20	16	12	14	116	106
8	31	4	5	5	94	359	116	18	12	10	116	106
9	31	4	5	5	128	352	174	15	12	10	123	100
10	31	4	22	5	234	342	232	11	12	11	141	81
11	31	4	402	5	*500	*270	235	8	14	10	146	82
12	31	4	119	5	*950	*260	235	7	13	11	160	84
13	16	4	27	5	*925	*400	202	8	12	11	162	75
14	8	4	15	8	*900	425	50	8	14	11	160	52
15	5	5	103	37	*850	555	46	6	14	12	158	50
16	5	4	42	45	*750	*865	56	6	16	12	158	50
17	5	5	63	25	*575	*895	56	6	17	13	114	50
18	5	5	43	22	*400	*925	57	6	18	14	117	50
19	4	7	21	24	*275	*1,030	70	6	17	16	117	50
20	4	26	15	21	22	*930	99	6	16	13	117	48
21	4	21	11	20	21	*930	108	5	17	11	*116	39
22	4	9	7	*75	24	*930	112	5	20	33	*115	37
23	4	9	7	*150	58	*995	110	5	20	*105	*114	37
24	5	18	6	37	66	*1,030	109	5	20	*120	113	30
25	5	14	6	21	*40	962	109	4	20	*110	114	30
26	5	22	6	14	*30	898	108	5	20	78	85	29
27	4	10	8	11	*25	930	59	5	18	78	94	29
28	4	8	9	10	25	898	39	6	18	78	90	29
29	4	7	6	9	-	745	24	6	16	79	90	30
30	4	6	9	9	-	565	23	6	16	79	81	30
31	4	-	10	8	-	490	-	8	-	79	79	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	476	33	4	15.4	944
November.....	232	26	4	7.7	460
December.....	1,005	402	4	32.4	1,990
Calendar year 1937.....	15,469	402	1	42.4	30,670
January.....	615	150	5	19.8	1,220
February.....	7,489	950	21	267	14,850
March.....	19,029	1,030	76	614	37,740
April.....	3,032	327	20	101	6,010
May.....	311	24	4	10.0	617
June.....	447	20	8	14.9	887
July.....	1,113	120	10	35.9	2,210
August.....	3,522	162	78	114	6,990
September.....	1,867	108	29	62.2	3,700
Water year 1937-38.....	39,138	1,030	4	107	77,620

*Gage-height record missing or incomplete; discharge computed on basis of weather records and records for Crane Creek near Midvale.

†Gage height missing; discharge interpolated.

WEISER RIVER BASIN

Weiser Irrigation District canal near Weiser, Idaho

Location.- Water-stage recorder, lat. 44°15', long. 116°51', in sec. 32, T. 11 N., R. 4 W., 3¼ miles downstream from headworks of canal and 7 miles east of Weiser.

Records available.- April 1920 to September 1938.

Extremes.- Maximum discharge during year, 210 second-feet July 3 (gage height, 3.31 feet); practically no flow during winter.

1920-38: Maximum discharge, 221 second-feet July 15, 1932; maximum gage height, 3.43 feet May 5, 1926; usually no flow during nonirrigation seasons.

Remarks.- Records good. Discharge for Apr. 21, July 25, 30, Aug. 2 computed on basis of incomplete recorder graph; that for July 31 and Aug. 1, on basis of once-daily staff-gage reading. One farm lateral diverts water a quarter of a mile above gage. Canal diverts water from Weiser River in sec. 35, T. 11 N., R. 4 W., 3¼ miles above gage, for irrigation of about 7,000 acres included in projects of Weiser and Weiser Bench Irrigation Districts near Weiser. Gage-height record furnished by Weiser Irrigation District.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-	57			-	-	-	189	187	192	181	117
2	-	62			-	-	-	190	188	173	150	125
3	-	63			-	-	-	191	188	202	138	129
4	-	68			*0.5	-	-	190	187	196	135	147
5	-	66			-	-	-	190	186	194	134	144
6	92	65			-	-	-	191	188	194	152	144
7	90	66			-	-	-	193	189	192	156	147
8	89	71	*0.4		-	-	-	190	186	190	150	157
9	87	84			-	*2.0	-	191	185	189	149	169
10	86	100			-	-	-	192	183	185	167	169
11	86	95			-	-	-	195	183	183	166	163
12	84	92			-	-	-	195	188	200	178	155
13	75	103			-	-	*0.5	197	190	199	174	155
14	63	78			-	-	-	199	190	197	171	132
15	56	1.2			-	-	-	194	194	194	169	128
16	51	1.2			-	*2.0	-	194	194	198	173	122
17	-	-			-	-	-	195	194	198	158	121
18	-	-			-	-	-	194	194	188	144	120
19	-	-			-	-	-	192	192	162	150	121
20	-	-			-	-	-	190	193	146	149	118
21	-	-			-	*1.6	45	188	197	132	150	112
22	-	-			*1.5	-	90	190	197	123	152	111
23	-	-			-	-	109	191	197	145	154	107
24	-	-			-	-	119	192	199	180	155	104
25	-	-			-	-	126	192	198	178	167	102
26	-	-			-	-	138	194	199	151	152	101
27	65	-			-	-	148	193	198	138	143	105
28	64	-			-	-	160	192	202	142	140	105
29	61	-			-	-	175	186	202	147	141	110
30	60	-			-	-	183	187	199	165	132	113
31	59	-			-	-	-	190	-	169	121	-
Month					Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....					-	-	-	-	-			
November 1-16.....					1,071.4	100	1.2	67.0	2,130			
December.....					-	-	-	-	-			
Calendar year												
January.....					-	-	-	-	-			
February.....					-	-	-	-	-			
March.....					-	-	-	-	-			
April 21-30.....					1,293	183	45	129	2,560			
May.....					5,947	199	186	192	11,800			
June.....					5,767	202	183	192	11,440			
July.....					5,442	202	123	176	10,790			
August.....					4,751	181	121	153	9,480			
September.....					3,853	169	101	128	7,640			
Water year												

*Discharge measurement.

Mann Creek near Weiser, Idaho

Location.- Staff gage, lat. 44°24', long. 116°54', in sec. 11, T. 12 N., R. 5 W., at Richard's ranch, 12 miles upstream from mouth and 11 miles north-northeast of Weiser.

Drainage area.- 56 square miles.

Records available.- March 1911 to September 1913, July to November 1920, and April 1937 to September 1938.

Extremes.- Maximum discharge observed during year, 945 second-feet Apr. 30 (gage height, 4.28 feet); minimum observed, 0.7 second-foot Oct. 1 (gage height, 0.40 foot).
1911-13, 1920, 1937-38: Maximum discharge observed, that of April 30, 1938; no flow Aug. 18 to Sept. 22, 1937.

Remarks.- Records good. Discharge for periods of ice effect, Jan. 5, 6, 25-27 and of missing gage heights Mar. 16-19, computed on basis of weather records and records for other stations in Weiser River basin. Gage read twice daily. Diversions for irrigation above and below station. Results of 11 discharge measurements furnished by Bureau of Reclamation.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.7	2.8	11	24	45	96	78	755	78	12	6.3	2.4
2	1.3	2.6	11	22	37	174	84	478	68	15	5.0	2.4
3	1.7	2.8	11	20	37	197	90	340	66	17	5.2	2.2
4	2.1	2.8	9.6	21	33	138	150	268	62	16	4.5	2.2
5	1.5	2.8	8.4	21	30	121	161	222	59	19	4.5	2.2
6	1.7	3.0	8.0	21	31	109	150	194	55	15	4.2	2.6
7	1.7	3.0	8.0	21	36	100	163	194	55	11	4.0	3.1
8	1.5	4.2	7.2	19	36	100	167	179	48	10	4.2	4.5
9	1.5	4.2	7.6	19	34	106	197	181	51	11	4.2	4.2
10	1.5	3.5	32	19	41	103	197	181	38	8.9	3.8	3.8
11	1.5	3.8	51.0	19	67	101	209	194	31	8.2	3.3	3.8
12	1.5	4.0	185	19	73	129	235	194	31	7.3	3.0	3.0
13	1.6	4.2	85	19	51	350	235	207	30	7.9	3.8	2.8
14	1.7	6.8	63	24	45	209	263	236	26	8.9	4.2	2.4
15	2.4	4.5	69	29	39	273	312	207	25	8.2	4.2	2.2
16	2.8	4.5	60	28	35	400	350	194	26	15	4.0	2.2
17	5.0	6.4	56	28	34	300	415	181	31	7.6	3.8	2.1
18	5.2	6.0	48	26	30	250	510	167	26	7.3	3.0	1.9
19	3.3	21	43	26	30	200	438	149	22	6.3	3.3	1.9
20	3.0	98	39	26	30	159	350	126	21	8.2	3.3	2.6
21	3.0	36	56	26	30	132	415	112	24	7.6	3.0	2.6
22	3.0	20	35	45	29	111	642	108	26	7.6	3.0	2.4
23	3.0	29	30	38	30	111	510	112	22	7.3	4.8	2.2
24	3.0	30	30	31	35	174	438	123	20	7.0	3.3	2.2
25	2.8	28	31	30	40	163	588	126	18	6.3	3.0	2.2
26	2.8	28	29	29	47	157	510	130	17	6.3	3.0	2.4
27	2.8	22	28	28	56	148	392	130	16	6.6	3.0	2.6
28	2.8	19	26	27	59	123	415	117	17	8.2	2.6	2.6
29	2.8	17	25	26	-	113	560	108	14	18	2.2	2.8
30	2.8	14	25	25	-	90	835	89	14	8.6	2.4	3.0
31	2.8	-	24	25	-	87	-	86	-	7.0	2.6	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						74.8	5.2	0.7	2.41	148		
November.....						433.9	98	2.6	14.5	861		
December.....						1,590.8	510	7.2	51.3	3,160		
Calendar year												
January.....						781	45	19	25.2	1,560		
February.....						1,120	73	29	40.0	2,220		
March.....						5,010	400	87	162	9,940		
April.....						10,029	835	73	334	19,890		
May.....						5,088	755	86	193	12,080		
June.....						1,037	78	14	34.6	2,060		
July.....						510.3	19	6.3	10.0	615		
August.....						114.7	6.3	2.2	3.70	228		
September.....						79.5	4.5	1.9	2.65	158		
Water year 1937-38.....						26,669.0	835	.7	73.1	52,910		

Burnt River near Hereford, Oreg.

Location.- Water-stage recorder, lat. 44°30', long. 116°11', in SE¼ sec. 21, T. 12 S., R. 37 E., at entrance to canyon, 1,250 feet below Unity Dam (completed by Bureau of Reclamation in 1937), 0.7 mile below mouth of South Fork of Burnt River, and 7 miles west of Hereford. Temporary staff gage 300 feet downstream used Oct. 1-28.

Records available.- March 1915 to September 1916, October 1928 to September 1938 (incomplete prior to 1930).

Drainage area.- 309 square miles.

Extremes.- Maximum discharge during year, 725 second-feet Apr. 19 (gage height, 4.19 feet); no flow between 8 a.m., Oct. 28 and 9 a.m., Nov. 22.
1915-16, 1928-29: Maximum discharge, 1,510 second-feet Apr. 14, 1936 (gage height, 6.91 feet); minimum before construction of Unity Reservoir, 1.6 second-feet Aug. 31, 1935 (gage height, 0.92 foot).

Remarks.- Records good for Mar. 10 to Sept. 30, fair for Oct. 1-28 and Feb. 19 to Mar. 9, and poor for Nov. 22 to Feb. 18. Shifting-control method used Apr. 20-24. Records for periods of missing gage heights, Feb. 18, May 7-12, computed on basis of records for Burnt River near Durkee. Many small diversions for irrigation in basin above station. Some regulation from reservoir on South Fork of Burnt River (capacity, about 700 acre-feet), 3 miles above mouth, and by Unity Reservoir beginning Feb. 19, 1932.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.7	0	49	52	46	2.4	249	450	81	13	31	70
2	6.8	0	46	51	48	3.4	247	432	76	13	31	70
3	10	0	44	49	50	1.3	273	370	67	13	31	69
4	11	0	44	42	48	1.6	334	325	60	14	37	69
5	12	0	43	39	44	2.5	400	300	53	16	53	69
6	9.6	0	41	37	43	2.4	415	296	46	40	52	69
7	10	0	14	36	60	2.4	432	265	42	49	59	61
8	9.6	0	27	38	63	2.9	485	245	77	47	52	52
9	9.6	0	48	38	60	5.4	505	230	90	46	52	52
10	9.6	0	48	38	70	3.7	525	220	81	40	70	52
11	10	0	58	40	76	4.7	565	205	81	22	82	52
12	11	0	96	41	71	5.2	585	180	81	26	82	52
13	10	0	108	42	66	4.9	565	155	81	40	82	51
14	11	0	113	41	61	3.8	545	151	81	42	81	25
15	12	0	114	42	57	2.9	545	151	57	49	79	12
16	14	0	114	46	52	3.2	585	144	12	56	79	13
17	15	0	114	47	46	3.8	625	132	12	69	79	13
18	19	0	112	44	40	4.5	685	126	12	68	79	13
19	22	0	107	44	.4	4.9	705	122	12	67	79	50
20	20	0	105	41	.5	4.4	665	119	11	67	78	62
21	18	0	101	41	.6	4.0	625	111	11	67	78	62
22	20	59	102	41	.6	4.5	605	104	11	67	77	49
23	19	86	86	44	.4	23	585	98	11	67	77	42
24	20	75	75	44	.4	101	565	93	11	67	74	29
25	20	66	67	43	.6	176	565	89	11	68	75	22
26	20	64	63	40	.6	217	525	80	11	68	76	21
27	16	66	64	39	.8	257	468	77	12	68	75	21
28	5.3	61	64	41	.8	300	450	79	12	69	73	20
29	0	57	63	42	-	300	432	86	12	55	72	20
30	0	53	62	43	-	281	432	87	12	52	71	20
31	0	-	58	44	-	270	-	87	-	32	71	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	380.2	22	0	12.3	754
November.....	587	86	0	19.6	1,160
December.....	2,250	114	14	72.6	4,460
Calendar year 1937.....	17,434.0	464	0	47.8	34,580
January.....	1,311	52	37	42.3	2,600
February.....	1,011.7	76	.4	36.1	2,010
March.....	2,003.8	300	1.3	64.6	3,970
April.....	15,187	705	247	506	30,120
May.....	5,599	450	77	181	11,110
June.....	1,227	90	11	40.9	2,430
July.....	1,457	69	13	47.0	2,890
August.....	2,079	82	31	67.1	4,120
September.....	1,282	70	12	42.7	2,540
Water year 1937-38.....	34,374.7	705	0	94.2	68,160

Peak discharge.- Apr. 19 (9 a.m.) 725 sec.-ft.

Burnt River near Durkee, Oreg.

Location.- Water-stage recorder, lat. 44°34', long. 117°31', in SW¼ sec. 25, T. 11 S., R. 42 E., 3 miles west of Durkee.

Records available.- October 1931 to September 1938 (discontinued). September 1928 to September 1932 at site 20 miles downstream, at Huntington.

Drainage area.- 697 square miles.

Extremes.- Maximum discharge during year, 980 second-feet Apr. 21 (gage height, 5.87 feet); minimum observed, 0.3 second-foot Oct. 2.

1931-38: Maximum discharge, 1,290 second-feet Apr. 15, 1936 (gage height, 6.47 feet); no flow at times.

Remarks.- Records good except those for period of missing gage heights, Oct. 5-22, which were interpolated and are fair. Diversions for irrigation above station; slight regulation from operation of small reservoir on South Fork of Burnt River and, since Feb. 19, 1938, from operation of Unity Reservoir.

Rating tables, water year 1937-38 (gage height, in feet, and discharge in second-feet)

Oct. 1 to Apr. 21			Apr. 22 to Sept. 30		
1.2	0.3		1.2	0.3	
1.4	1.6		1.4	1.9	
1.7	7.5		1.7	7.6	
2.0	20		2.0	20	
2.5	51		2.5	57	
3.0	108		3.0	117	
4.0	290		4.0	336	
5.0	610		5.0	645	

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.0	5.4	50	72	67	138	278	610	60	3.0	10	7.4
2	.7	5.9	54	71	76	163	265	610	57	3.0	7.4	8.2
3		5.9	54	60	73	191	260	628	52	3.5	5.7	8.5
4		5.9	49	49	72	149	260	610	49	5.4	4.8	11
5		5.7	47	46	66	131	285	495	42	4.6	2.7	18
6		5.9	50	50	65	124	304	450	35	3.2	2.3	18
7		6.5	47	63	69	119	346	420	27	3.2	1.9	18
8		6.7	49	58	85	106	391	377	11	4.1	1.7	29
9		5.2	42	48	93	100	438	350	5.7	3.7	1.4	39
10		5.2	39	58	124	101	468	323	5.7	3.0	1.5	40
11		6.7	77	59	182	107	592	305	14	2.7	1.2	36
12		8.2	105	57	157	123	629	265	20	2.5	1.1	33
13		6.7	105	52	154	168	668	229	32	1.8	1.4	35
14		6.2	116	61	140	202	688	198	30	1.4	1.8	36
15		4.7	127	59	114	191	668	176	27	1.4	5.2	35
16		3.2	134	58	89	206	708	160	29	1.5	9.1	32
17		4.7	126	60	72	195	750	156	42	4.2	11	20
18		4.0	126	61	73	174	818	154	42	6.2	21	14
19		4.3	134	61	81	167	906	158	30	9.8	19	11
20		5.7	130	60	67	160	952	152	23	15	18	11
21			9.6	124	61	62	143	952	148	21	10	9.7
22		11	120	63	44	133	948	140	11	24	13	11
23	.6	10	113	63	41	130	925	131	5.9	22	13	18
24	1.4	10	113	54	48	130	925	116	7.1	15	11	27
25	1.9	38	94	46	73	131	902	89	18	10	10	28
26	1.7	49	89	68	110	162	890	66	27	5.9	9.1	27
27	2.2	49	100	62	114	191	840	64	14	2.7	9.1	29
28	3.0	48	85	60	114	216	780	64	8.2	4.4	9.4	25
29	3.4	49	80	63	-	242	680	66	4.8	9.1	8.8	25
30	3.6	49	80	61	-	270	645	67	3.9	17	8.5	21
31	4.0	-	77	62	-	290	-	63	-	16	7.9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	39.5	4.0	-	1.27	78
November.....	435.3	49	3.4	14.5	863
December.....	2,756	156	39	68.9	5,470
Calendar year 1937.....	14,813.0	422	.1	40.6	29,390
January.....	1,826	72	46	58.9	3,620
February.....	2,531	182	41	90.4	5,020
March.....	5,054	290	100	163	10,020
April.....	19,189	952	260	640	38,060
May.....	7,840	628	63	253	15,550
June.....	754.3	50	3.9	25.1	1,500
July.....	218.3	24	1.4	7.04	433
August.....	238.8	21	1.1	7.70	474
September.....	680.8	40	7.4	22.7	1,350
Water year 1937-38.....	41,563.0	952	-	114	82,440

Peak discharge.- Apr. 21 (1 a.m.) 980 sec.-ft.

Powder River at Salisbury, Oreg.

Location.- Water-stage recorder, lat. 44°39', long. 117°52', in NE¼ sec. 38, T. 10 S., R. 39 E., 700 feet downstream from Salisbury siding of Sumpter Valley Railroad and 8½ miles south of Baker. Zero of gage is 3,633.84 feet above mean sea level.

Drainage area.- 230 square miles.

Records available.- December 1903 to August 1914 and October 1929 to September 1938 in reports of Geological Survey. January 1904 to July 1914 and June 1926 to September 1936 in reports of State engineer.

Average discharge.- 20 years (1904-13, 1926-28, 1929-38), 108 second-feet).

Extremes.- Maximum discharge during year, 845 second-feet May 1 (gage height, 5.34 feet); minimum, 4.2 second-feet Sept. 25 (gage height, 1.15 feet).

1903-14, 1926-38: Maximum discharge, 1,820 second-feet Mar. 20, 1910 (gage height, 7.05 feet, former site and datum); no flow Aug. 31, 1909, Sept. 7, 1931.

Remarks.- Records fair except those for periods of missing or doubtful gage heights, which are poor. Diversions for irrigation above station.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.0	0.7	2.6	205
1.2	5.9	2.9	270
1.4	17	3.2	337
1.6	34	3.5	406
1.8	60	4.0	475
2.0	91	4.5	545
2.5	143	5.0	770

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.9	6.9	35	54	62	182	176	820	453	70	23	5.6
2	5.9	7.4	38	54	59	171	169	770	453	75	22	5.6
3	6.4	7.9	31	54	59	163	184	585	441	74	22	6.4
4	6.4	8.4	27	49	56	161	228	489	418	85	22	6.4
5	7.4	8.9	30	50	54	159	250	418	418	93	18	6.9
6	7.9	9.9	32	57	60	167	239	360	406	80	15	7.4
7	8.9	10	28	66	74	163	246	314	372	63	13	7.9
8	8.9	11	35	50	64	157	274	292	337	57	13	8.4
9	8.9	8.9	27	47	89	169	303	270	303	52	15	8.4
10	8.9	7.4	34	53	105	178	326	281	266	50	14	10
11	8.9	6.9	194	53	81	205	348	292	253	47	14	8.9
12	8.9	7.4	239	52	80	266	372	316	222	45	13	9.9
13	8.9	8.4	147	54	72	372	363	348	237	*42	13	8.4
14	8.9	11	130	56	74	314	372	372	216	40	13	8.4
15	9.9	13	132	64	75	548	372	429	192	*40	13	7.9
16	10	15	121	60	68	418	406	453	180	*39	15	7.4
17	12	16	126	53	82	326	477	453	188	*39	13	6.9
18	13	16	112	63	63	314	429	429	120	*38	13	5.9
19	21	23	93	53	70	360	720	394	169	*38	12	5.9
20	30	44	91	53	66	292	645	348	149	*36	9.9	5.6
21	28	36	86	50	60	220	609	314	143	35	9.9	5.6
22	22	39	85	78	53	209	645	303	165	*33	8.4	5.9
23	21	40	66	75	54	211	621	314	145	*30	7.9	5.2
24	19	40	64	69	64	211	609	348	135	*28	8.9	5.2
25	16	45	60	60	72	218	621	406	130	*27	8.9	5.2
26	15	56	70	56	86	220	597	537	102	*26	8.9	5.6
27	13	47	77	59	109	244	537	609	102	*26	7.4	5.2
28	13	45	72	63	132	255	489	645	102	*27	7.4	4.9
29	12	39	63	57	-	230	537	585	91	27	6.4	5.6
30	11	32	64	60	-	211	670	513	80	26	5.9	5.6
31	8.9	-	57	57	-	205	-	477	-	25	5.9	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	385.9	30	5.9	12.4	765
November.....	566.4	56	6.9	22.2	1,320
December.....	2,466	239	27	79.5	4,890
Calendar year 1937.....	26,455.3	394	3.9	72.5	52,470
January.....	1,768	78	47	57.0	3,510
February.....	2,023	132	53	72.3	4,010
March.....	7,309	418	157	236	14,500
April.....	13,046	720	169	435	25,880
May.....	13,484	820	270	435	26,750
June.....	7,028	453	80	234	13,940
July.....	1,413	93	25	45.6	2,800
August.....	391.8	23	5.9	12.6	777
September.....	202.2	10	4.9	6.74	401
Water year 1937-38.....	50,183.3	820	4.9	137	99,540

Peak discharge.- Feb. 9 (10 p.m.) 315 sec.-ft.; Mar. 13 (5 p.m.) 465 sec.-ft.; Mar. 15 (10:30 p.m.) 535 sec.-ft.; May 1 (4 p.m.) 845 sec.-ft.

*Gage height doubtful or missing; discharge computed on basis of records for station at Robinette.

Powder River near Robinette, Oreg.

Location.- Staff gage, lat. 44°46', long. 117°04', in SE $\frac{1}{4}$ sec. 22, T. 9 S., R. 46 E., 2 miles northwest of Robinette.

Drainage area.- 1,710 square miles.

Records available.- September 1928 to September 1938.

Average discharge.- 10 years, 385 second-feet.

Extremes.- Maximum discharge observed during year, 3,100 second-feet May 1, 28 (gage height, 5.20 feet); minimum observed, 43 second-feet Oct. 1 (gage height, 0.60 foot).
1928-38: Maximum discharge observed, 4,180 second-feet June 15, 16 1933 (gage height, 6.9 feet, former site and datum); minimum observed, 18 second-feet Sept. 2-10, 1930.

Remarks.- Records good. Gage read twice daily. Several diversions for irrigation above station, none below.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.6	43	3.0	1,090
.9	95	3.5	1,500
1.2	173	4.0	1,950
1.6	315	4.5	2,400
2.0	465	5.0	2,900
2.5	755		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	102	207	264	418	755	848	3,100	2,220	950	242	114
2	65	100	179	249	440	1,020	815	2,700	2,310	950	218	105
3	83	102	170	253	418	1,250	785	2,400	2,220	668	188	107
4	79	107	188	218	418	1,090	815	2,040	2,310	640	185	95
5	77	112	182	235	395	1,020	880	1,950	2,310	640	145	95
6	81	112	170	235	395	950	1,020	1,770	2,220	585	137	114
7	81	117	159	249	440	880	950	1,590	2,310	612	129	117
8	81	132	142	258	485	815	950	1,410	2,220	612	119	135
9	81	122	129	253	462	785	1,020	1,330	2,040	612	119	156
10	79	124	195	264	612	785	1,090	1,330	1,680	485	119	162
11	79	127	1,170	256	815	815	1,170	1,170	1,500	485	109	156
12	83	129	1,170	245	1,020	848	1,250	1,250	1,410	462	109	153
13	81	129	848	238	725	1,170	1,330	1,330	1,500	462	124	135
14	81	129	612	253	695	1,500	1,330	1,500	1,500	485	109	137
15	81	129	640	307	668	1,590	1,330	1,500	1,330	462	124	129
16	81	129	585	327	640	1,860	1,500	1,680	1,590	585	119	124
17	201	132	640	315	560	1,680	1,770	1,770	1,410	485	119	129
18	170	155	560	315	535	1,590	2,220	1,590	1,090	462	109	124
19	182	140	485	311	485	1,590	2,400	1,410	1,090	462	105	129
20	188	311	418	307	440	1,500	2,310	1,250	950	418	107	105
21	182	395	375	323	440	1,330	2,220	1,170	1,090	375	87	85
22	170	287	355	395	462	1,250	2,310	1,330	1,250	351	85	85
23	145	271	323	418	535	1,090	2,400	1,590	1,250	319	85	91
24	135	264	303	375	640	1,170	2,400	1,590	1,250	287	83	93
25	122	268	275	375	668	1,170	2,600	1,950	1,330	264	102	89
26	122	299	299	343	695	1,250	2,500	2,130	1,020	264	114	91
27	119	291	327	339	725	1,250	2,400	2,500	1,020	256	112	81
28	112	242	315	418	755	1,170	2,310	2,900	1,090	253	109	89
29	109	238	279	375	-	1,020	2,500	2,900	1,170	260	109	91
30	105	207	275	343	-	950	2,700	2,700	1,090	264	105	89
31	107	-	264	395	-	880	-	2,400	-	242	112	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						3,406	201	44	110	6,760		
November.....						5,382	395	100	179	10,680		
December.....						12,239	1,170	129	395	24,250		
Calendar year 1937.....						111,690	1,280	25	306	221,500		
January.....						9,461	418	218	305	18,770		
February.....						15,985	1,020	395	571	31,710		
March.....						36,023	1,850	755	1,152	71,450		
April.....						50,123	2,700	785	1,671	99,420		
May.....						57,230	3,100	1,170	1,845	113,500		
June.....						46,770	2,310	950	1,559	92,770		
July.....						14,637	950	242	472	29,030		
August.....						3,838	242	83	124	7,610		
September.....						3,405	162	85	114	6,750		
Water year 1937-38.....						258,500	3,100	44	708	512,700		

Imnaha River at Imnaha, Oreg.

Location.- Water-stage recorder, lat. 45°34', long. 118°51', in SW¼ sec. 16, T. 1 N., R. 48 E., at Imnaha, three-eighths of a mile downstream from Sheep Creek.

Drainage area.- 705 square miles.

Records available.- June 1928 to September 1938.

Average discharge.- 10 years, 402 second-feet.

Extremes.- Maximum discharge during year, 4,800 second-feet May 1 (gage height, 8.27 feet), from rating curve extended above 3,000 second-feet; minimum, 71 second-feet Dec. 9 (gage height, 1.05 feet).

1928-38: Maximum discharge, that of May 1, 1938: minimum, 35 second-feet Jan. 26, 1938, Jan. 8, 1937.

Remarks.- Records good except those for period of recorder stoppage, Oct. 1-23, (computed on basis of records for Powder River near Robinette and Grande Ronde River at Rondowa), and those above 3,000 second-feet, which are fair. Diversions for irrigation above station.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Apr. 15 Apr. 16 to Sept. 30

1.1	78	1.4	105
1.3	117	1.7	188
1.5	175	2.0	305
1.8	285	2.4	500
2.2	460	2.8	760
2.6	670	3.2	1,060
3.0	920	3.6	1,380
3.4	1,220	4.0	1,750
3.8	1,560	4.5	2,300
4.1	1,850	5.0	2,930
		5.6	3,760
		6.2	4,650

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	88	117	138	178	189	420	420	4,200	2,740	1,650	336	147
2	100	113	149	220	186	495	410	3,060	2,800	1,420	314	144
3	135	113	166	169	182	505	428	2,480	2,800	1,380	301	142
4	125	111	140	127	169	495	485	2,120	2,670	1,260	318	133
5	115	111	122	143	175	470	550	1,750	2,740	1,260	354	133
6	110	111	135	156	175	428	535	1,560	2,860	1,180	377	136
7	108	111	133	169	189	392	535	1,470	2,860	1,100	391	142
8	107	111	104	192	178	370	615	1,470	2,740	1,140	340	185
9	106	117	91	203	178	361	700	1,520	2,300	1,140	305	172
10	105	113	165	203	231	366	712	1,750	1,900	1,060	276	152
11	104	115	596	186	253	379	760	1,850	1,800	1,020	292	147
12	104	120	1,280	182	293	500	955	2,020	1,800	948	288	144
13	103	117	760	175	273	820	1,060	2,360	1,900	1,020	247	156
14	103	135	576	192	257	955	990	2,480	1,950	948	244	131
15	103	138	500	228	238	760	1,060	2,480	2,020	948	232	123
16	106	130	446	238	234	1,260	1,300	2,930	2,180	948	228	121
17	130	130	406	234	192	1,220	1,800	2,930	2,360	920	228	119
18	160	130	370	228	210	920	2,800	2,600	1,900	775	224	116
19	150	127	334	220	228	760	2,800	2,300	1,560	725	213	114
20	150	146	301	203	203	654	2,360	2,120	1,470	658	206	119
21	130	217	293	206	210	576	2,240	2,070	1,750	612	195	112
22	120	182	281	210	200	525	2,420	2,240	1,800	573	188	107
23	116	169	261	196	196	500	2,240	2,540	1,750	542	202	107
24	115	210	249	169	203	475	2,420	2,930	1,800	500	199	107
25	115	206	217	146	210	446	2,800	3,270	1,960	462	178	107
26	113	203	238	149	234	428	2,670	3,760	2,020	450	161	107
27	113	182	261	165	281	442	2,420	3,900	1,900	425	168	105
28	111	175	246	192	352	500	2,420	4,050	1,960	401	162	103
29	109	165	231	186	-	505	2,660	3,900	1,900	401	155	103
30	111	133	228	159	-	485	3,620	3,550	1,800	377	160	110
31	122	-	203	189	-	451	-	3,000	-	354	147	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	3,587	160	88	116	7,110
November.....	4,258	210	111	142	8,450
December.....	9,589	1,260	91	309	19,020
Calendar year 1937.....	120,146	1,560	35	329	238,500
January.....	5,775	238	127	186	11,450
February.....	6,119	352	169	219	12,140
March.....	17,793	1,260	361	574	35,290
April.....	47,365	3,620	410	1,579	93,950
May.....	80,920	4,200	1,470	2,610	160,500
June.....	64,000	2,860	1,470	2,133	126,900
July.....	26,497	1,650	354	855	52,560
August.....	7,639	391	147	246	15,150
September.....	3,824	185	103	127	7,580
Water year 1937-38.....	277,366	4,200	88	760	550,100

Peak discharge.- Dec. 12 (1 a.m.) 1,740 sec.-ft.; Apr. 19 (1 a.m.) 3,200 sec.-ft.; May 1 (3 a.m.) 4,800 sec.-ft.; May 28 (5 a.m.) 4,500 sec.-ft.

Salmon River below Valley Creek, at Stanley, Idaho

Location.— Water-stage recorder, lat. 44°14', long. 114°55', in SE¼SE¼ sec. 34, T. 11 N., R. 13 E., three-quarters of a mile downstream from Valley Creek and 14 miles north-east of Stanley. Zero of gage is 8,189.24 feet above mean sea level.

Drainage area.— 535 square miles.

Records available.— July 1925 to September 1938.

Average discharge.— 13 years, 569 second-feet.

Extremes.— Maximum discharge during year, 3,790 second-feet June 8 (gage height, 3.76 feet); minimum discharge recorded, 186 second-feet Dec. 9 (gage height, 0.74 foot). 1925-38: Maximum discharge, 5,020 second-feet June 27, 1927 (gage height, 4.41 feet); minimum, 100 second-feet (estimated) Nov. 20-30, 1929.

Remarks.— Records good except those for periods of ice effect or missing gage heights, Dec. 14-22, Dec. 24 to Jan. 7, Jan. 28 to Feb. 21, Feb. 23 to Mar. 7, Mar. 9-12, 14-25, Mar. 27 to Apr. 7, Apr. 9-11, 13-15, which were computed on basis of weather records and records for other stations in Salmon River Basin and are fair. Discharge for Oct. 8 interpolated. Small diversions for irrigation above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	213	233	237	250	270	270	270	2,090	2,800	2,550	850	370
2	210	237	245	280		270	270	1,810	2,980	2,370	624	364
3	210	235	262	280		270	280	1,620	3,140	2,310	589	364
4	210	228	245	280		280	280	1,450	3,350	2,070	573	364
5	210	228	241	250		280	280	1,310	3,410	1,950	541	358
6	210	241	233	260	270	260	280	1,220	3,600	1,730	525	358
7	210	228	233	260		260	280	1,170	3,700	1,630	502	353
8	210	237	216	272		267	277	1,130	3,700	1,640	494	347
9	210	237	213	272		260	290	1,200	3,500	1,600	509	347
10	210	249	258	277		260	290	1,800	3,050	1,540	487	347
11	210	245	249	272	270	260	290	1,310	2,710	1,510	472	347
12	206	245	268	272		270	292	1,350	2,630	1,430	458	341
13	206	249	268	267		277	310	1,500	2,800	1,310	443	335
14	210	254	450	272		280	330	1,610	2,710	1,210	443	324
15	213	254	400	277		280	330	1,760	2,650	1,320	443	318
16	213	254	350	272	270	290	390	1,880	2,630	1,310	436	318
17	241	258	340	258		290	423	2,020	2,880	1,210	423	312
18	232	254	330	267		280	581	2,090	2,880	1,140	410	318
19	245	262	310	267		290	760	1,810	2,470	1,030	396	318
20	245	297	290	249		290	760	1,680	2,320	1,010	396	324
21	245	324	290	254	267	290	760	1,600	2,320	1,000	390	318
22	249	282	300	258		280	808	1,620	2,390	939	390	318
23	245	282	307	258		290	847	1,760	2,380	928	396	324
24	245	297	300	258		300	867	2,020	2,160	877	403	318
25	245	287	290	249		290	1,020	2,240	2,240	817	410	318
26	241	277	290	254	270	287	1,130	2,550	2,390	818	396	318
27	241	272	300	249		290	1,160	2,880	2,470	739	390	318
28	241	292	290	260		300	1,240	3,410	2,390	779	383	318
29	237	254	270	270		250	1,420	3,330	2,320	730	363	341
30	237	233	290	270		270	1,560	2,860	2,980	713	377	347
31	237	-	260	270	-	270	-	2,800	-	676	370	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	7,017	262	206	226	0.422	0.49	13,920
November.....	7,723	324	228	257	.480	.54	15,320
December.....	10,503	949	213	339	.534	.73	20,850
Calendar year 1937.....	154,808	1,690	196	424	.793	10.77	307,000
January.....	8,154	280	249	263	.492	.57	16,170
February.....	7,557	-	-	270	.505	.53	14,990
March.....	8,591	300	260	277	.518	.60	17,040
April.....	18,105	1,560	270	604	1.13	1.26	35,910
May.....	58,390	3,410	1,130	1,884	3.52	4.06	115,800
June.....	83,720	3,700	2,150	2,791	5.22	5.82	166,100
July.....	41,096	2,550	876	1,326	2.48	2.86	81,510
August.....	14,102	650	370	455	.850	.98	27,970
September.....	10,065	370	312	336	.628	.70	19,950
Water year 1937-38.....	275,023	3,700	206	753	1.41	19.14	545,500

Salmon River below Yankee Fork, near Clayton, Idaho

Location.— Water-stage recorder, lat. 44°16', long. 114°44', in sec. 20, T. 11 N., R. 15 E., a quarter of a mile downstream from Sunbeam Dam and Yankee Fork, and 18 miles upstream from Clayton.

Drainage area.— 841 square miles.

Records available.— October 1921 to September 1932.

Average discharge.— 15 years (1922-24, 1925-32), 237 second-feet.

Extremes.— Maximum discharge during year, 6,770 second-feet June 7 (gage height, 8.78 feet); minimum discharge recorded, 235 second-feet Nov. 5 (gage height, 1.99 feet).

A smaller discharge may have occurred during period of no gage-height record.

1921-32: Maximum discharge, 8,000 second-feet (estimated) June 27, 1927; minimum, 160 second-feet (estimated) Nov. 25-30, 1929.

Correction.— The maximum discharge for the water year 1930-31 as published in Water-Supply Paper 723 should be corrected to "Maximum daily discharge, 2,350 second-feet (estimated) May 16."

Remarks.— Records good except those for periods of missing gage heights or ice effect Nov. 5-19, Nov. 21 to Dec. 14, Jan. 26-29, which were computed on basis of one discharge measurement, weather records, records for other stations in Salmon River Basin, and are fair. Discharge for Nov. 20 based on staff-gage reading. No diversions for irrigation above station except those above Stanley.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used April 22 to September 30)

1.9	210	4.3	1,565	6.7	4,000
2.3	357	4.7	1,900	7.1	4,540
2.7	560	5.1	2,240	7.5	5,100
3.1	785	5.5	2,620	7.9	5,700
3.5	1,030	5.9	3,040	8.3	6,300
3.9	1,295	6.3	3,600	8.7	6,930

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	276	312	300	334	348	344	348	3,620	5,100	3,500	845	510
2	272	326	300	376	352	344	344	3,040	5,550	3,260	815	500
3	272	312	310	344	348	352	371	2,520	5,850	3,040	785	495
4	276	300	300	321	348	321	376	2,150	6,000	2,720	785	505
5	280	300	300	350	352	350	376	1,900	5,150	2,620	725	490
6	284	310	300	334	344	344	371	1,740	6,450	2,380	714	420
7	294	310	300	357	344	321	367	1,620	6,610	2,200	703	485
8	280	310	290	362	348	321	386	1,550	6,450	2,150	692	485
9	280	310	280	371	348	339	405	1,580	5,850	2,100	725	485
10	280	320	350	357	357	339	400	1,760	4,960	1,980	686	485
11	280	320	800	334	362	334	415	1,860	4,260	1,940	664	485
12	280	320	1,100	359	371	344	435	2,020	4,130	1,820	632	480
13	280	320	900	326	362	352	445	2,360	4,400	1,650	620	470
14	288	330	700	339	357	345	455	2,720	4,260	1,620	632	470
15	296	330	576	352	352	344	505	3,040	4,130	1,740	632	460
16	304	330	495	348	357	367	620	3,380	4,130	1,700	615	455
17	352	330	480	344	330	381	755	3,620	4,400	1,550	593	450
18	381	330	480	344	348	352	1,130	3,620	4,260	1,470	576	450
19	334	340	445	339	357	376	1,440	3,040	3,620	1,400	560	450
20	334	367	391	321	334	381	1,530	2,720	3,150	1,330	554	450
21	330	360	375	344	344	376	1,300	2,520	3,380	1,260	538	450
22	321	370	386	367	334	339	1,330	2,620	3,500	1,220	532	450
23	321	370	400	357	344	371	1,300	3,040	3,260	1,160	549	450
24	321	370	386	344	334	395	1,330	3,620	3,150	1,130	566	445
25	316	370	381	334	326	386	1,550	4,130	3,150	1,100	598	440
26	316	370	386	320	330	376	1,700	4,960	3,260	1,060	571	435
27	316	360	395	330	334	371	1,700	5,700	3,260	1,030	544	435
28	316	350	386	350	330	395	1,880	6,610	3,150	998	527	435
29	316	340	362	370	-	357	2,200	6,000	3,040	965	527	465
30	316	320	366	357	-	371	2,520	5,440	4,000	935	516	460
31	321	-	346	344	-	367	-	5,100	-	905	516	460

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	9,423	381	272	304	0.361	0.42	18,690
November.....	10,027	380	300	334	.397	.44	19,890
December.....	13,589	1,100	280	438	.621	.60	26,950
Calendar year 1937.....	217,196	2,620	-	595	.707	9.60	430,800
January.....	10,689	376	320	345	.410	.47	21,200
February.....	9,695	371	326	346	.411	.43	19,230
March.....	11,038	395	321	356	.423	.49	21,690
April.....	28,064	2,620	344	355	1.11	1.24	56,660
May.....	99,600	6,610	1,550	3,213	3.82	4.40	197,600
June.....	132,860	6,610	3,040	4,429	5.27	5.88	263,500
July.....	53,943	3,600	905	1,740	2.07	2.39	107,000
August.....	19,637	845	516	650	.749	.86	36,750
September.....	14,035	610	435	468	.558	.62	27,840
Water year 1937-38.....	412,500	6,610	272	1,130	1.34	18.24	818,200

Salmon River near Challis, Idaho

Location.- Water-stage recorder, lat. 44°23', long. 114°15', in sec. 7, T. 12 N., R. 19 E., 250 feet downstream from Bayhorse Creek and 9 miles south of Challis. Zero of gage is 5,163.99 feet above mean sea level.

Drainage area.- 1,740 square miles.

Records available.- October 1928 to September 1938.

Average discharge.- 10 years, 1,190 second-feet.

Extremes.- Maximum discharge during year, 9,010 second-feet June 7, 8; maximum gage height, 7.53 feet June 7; minimum discharge, 273 second-feet Feb. 18 (gage height, 1.21 feet).

1929-38: Maximum discharge, 9,790 second-feet June 2, 1936 (gage height, 7.83 feet); minimum, 238 second-feet Dec. 10, 1932 (gage height, 0.89 foot).

Remarks.- Records good except those for period of missing gage heights, Dec. 10-13, which were computed on basis of records for other stations in Salmon River Basin and are fair. Some diversions for irrigation in addition to those above Stanley.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

1.2	270	3.6	1,660	6.0	5,290
1.6	400	4.0	2,080	6.4	6,190
2.0	580	4.4	2,560	6.8	7,170
2.4	790	4.8	3,120	7.2	8,200
2.8	1,025	5.2	3,760	7.5	9,010
3.2	1,310	5.6	4,480		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	472	535	512	472	555	512	526	4,480	7,170	5,510	1,520	905
2	462	526	485	545	550	512	508	4,290	7,680	4,930	1,480	905
3	458	530	472	530	555	516	540	3,430	8,200	4,670	1,440	875
4	458	530	476	472	526	498	560	3,040	8,470	4,230	1,390	905
5	467	516	480	467	521	472	570	2,620	8,470	4,110	1,310	875
6	472	512	480	480	545	503	570	2,430	8,740	3,730	1,270	845
7	462	516	480	498	545	485	560	2,250	9,010	3,510	1,230	845
8	472	516	480	498	560	480	605	2,140	9,010	3,510	1,200	845
9	487	516	462	526	545	503	630	2,080	8,200	3,510	1,230	845
10	467	521	500	580	575	516	630	2,310	7,170	3,430	1,200	845
11	462	526	600	560	575	521	655	2,430	6,430	3,330	1,160	818
12	458	530	1,200	540	570	530	708	2,620	6,190	3,120	1,120	818
13	454	535	1,200	526	526	545	708	3,040	6,430	2,970	1,090	818
14	462	540	905	535	555	550	708	3,590	6,190	2,730	1,090	790
15	472	545	845	565	540	540	782	4,110	5,960	2,830	1,090	790
16	485	545	762	560	540	570	905	4,380	5,960	3,030	1,090	790
17	521	555	708	530	490	580	1,060	4,870	6,430	2,730	1,020	762
18	605	560	708	530	440	555	1,520	4,670	6,190	2,530	995	762
19	555	560	555	521	550	555	2,190	4,200	5,510	2,430	995	762
20	530	560	570	485	526	555	1,970	3,680	4,980	2,310	965	735
21	526	570	535	516	530	555	1,860	3,510	5,080	2,230	965	735
22	526	605	555	605	508	490	1,920	3,510	5,290	2,140	935	735
23	530	580	580	555	508	535	1,860	4,020	4,980	2,030	965	735
24	535	580	540	508	498	580	1,920	4,870	4,870	2,030	965	735
25	535	580	565	472	476	565	2,080	5,510	4,870	1,930	1,020	735
26	540	605	550	472	485	550	2,370	6,670	5,180	1,930	1,020	735
27	540	580	630	449	498	540	2,310	7,680	5,290	1,810	965	735
28	535	580	605	494	498	580	2,430	8,470	5,080	1,730	935	735
29	535	555	555	545	-	535	2,760	7,940	4,770	1,710	935	735
30	540	545	580	526	-	535	3,350	7,420	5,960	1,630	905	790
31	530	-	540	530	-	545	-	7,170	-	1,570	905	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	15,533	605	454	501	0.288	0.33	30,810
November.....	16,454	605	512	548	.315	.35	32,640
December.....	19,215	1,200	462	620	.356	.41	38,110
Calendar year 1937.....	322,647	3,650	-	884	.508	6.89	640,000
January.....	16,088	605	449	519	.298	.34	31,910
February.....	14,780	575	440	528	.303	.32	29,320
March.....	16,488	590	472	532	.306	.35	32,700
April.....	39,745	3,350	508	1,325	.761	.65	78,630
May.....	133,430	8,470	2,080	4,304	2.47	2.65	264,700
June.....	193,760	9,010	4,770	6,459	3.71	4.14	384,300
July.....	90,180	5,510	1,570	2,909	1.67	1.92	178,900
August.....	34,400	1,520	905	1,110	.638	.74	68,230
September.....	23,940	905	735	798	.459	.51	47,480
Water year 1937-38.....	614,013	9,010	440	1,682	.967	13.11	1,218,000

Salmon River at Salmon, Idaho

Location.- Water-stage recorder, lat. 45°11', long. 113°54', in sec. 6, T. 21 N., R. 22 E., just upstream from Lemhi River, near Rose ranch buildings, 1,000 feet downstream from island and three-eighths of a mile downstream from highway bridge at Salmon.

Drainage area.- 3,600 square miles.

Records available.- April 1912 to September 1916 and July 1919 to September 1938.

Average discharge.- 21 years (1913-16, 1920-38), 1,750 second-feet.

Extremes.- Maximum discharge during year, 9,600 second-feet June 7, 8 (gage height, 6.53 feet); minimum, 559 second-feet Dec. 9 (gage height, 2.12 feet).
1912-16, 1919-38: Maximum discharge observed, 16,400 second-feet June 12, 1921 (gage height, 9.35 feet, staff gage at site 700 feet upstream); minimum, 242 second-feet Jan. 8, 1937 (gage height, 1.50 feet).

Remarks.- Records good. Discharge interpolated Jan. 27, 28, 31, Feb. 1-4. Diversions for irrigation above station.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.1	545	3.7	2,630	5.3	6,360
2.5	870	4.1	3,440	5.7	7,400
2.9	1,350	4.5	4,370	6.1	8,480
3.3	1,940	4.9	5,350	6.5	9,600

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	716	758	716	813	807	784	784	4,250	7,940	6,620	1,880	1,180
2	707	760	698	716	804	775	766	5,450	8,210	5,850	1,760	1,180
3	698	768	707	784	800	804	758	4,810	8,480	5,720	1,700	1,130
4	698	766	775	741	797	823	794	4,010	9,040	5,480	1,660	1,120
5	698	758	784	682	794	804	813	3,550	9,040	5,220	1,580	1,120
6	724	758	750	660	775	766	813	3,230	9,320	4,980	1,530	1,080
7	741	766	758	660	804	775	813	2,920	9,600	4,610	1,480	1,070
8	750	775	766	682	822	775	813	2,720	9,600	4,490	1,420	1,060
9	750	758	652	707	804	758	842	2,540	9,320	4,370	1,430	1,060
10	741	784	645	804	822	775	880	2,540	8,480	4,250	1,430	1,040
11	741	775	794	964	842	784	880	2,720	7,400	4,010	1,360	1,030
12	741	775	1,700	812	870	804	891	2,820	7,140	3,780	1,360	1,030
13	741	766	1,940	880	832	832	933	3,020	7,140	3,550	1,320	1,020
14	732	784	1,430	822	784	912	944	3,550	7,140	3,340	1,310	1,010
15	758	804	1,220	842	832	870	944	4,130	6,760	3,230	1,340	998
16	766	804	1,150	870	813	870	998	4,610	6,620	3,550	1,320	986
17	775	804	1,080	851	758	964	1,140	4,850	6,580	3,440	1,280	966
18	815	822	1,020	822	690	870	1,350	5,220	7,140	3,230	1,260	975
19	880	822	998	813	675	813	2,200	4,980	6,480	3,020	1,220	964
20	851	822	954	775	766	813	2,540	4,490	5,850	2,820	1,190	964
21	832	842	851	707	784	813	2,360	4,010	5,600	2,720	1,190	954
22	832	902	804	794	794	794	2,270	3,890	5,850	2,630	1,150	944
23	813	860	870	870	775	766	2,270	4,130	5,720	2,540	1,150	944
24	804	832	880	794	784	804	2,200	4,730	5,600	2,460	1,180	944
25	794	851	870	724	794	822	2,270	5,480	5,480	2,360	1,200	933
26	775	851	880	716	766	804	2,540	6,360	5,600	2,270	1,260	933
27	775	842	880	730	766	794	2,720	7,670	5,720	2,250	1,240	933
28	766	794	922	744	775	794	2,720	8,760	5,720	2,180	1,190	933
29	766	832	902	758	-	813	2,920	9,320	5,480	2,130	1,160	944
30	766	804	851	813	-	784	3,440	8,760	5,720	2,050	1,150	975
31	758	-	870	810	-	784	-	8,210	-	1,970	1,150	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	23,702	880	698	765	47,010
November.....	24,043	902	758	801	47,690
December.....	29,097	1,940	645	939	57,710
Calendar year 1937.....	411,862	3,780	350	1,128	817,000
January.....	24,240	964	660	782	48,080
February.....	22,129	870	675	790	43,890
March.....	25,142	964	758	811	49,870
April.....	46,636	3,440	758	1,555	92,500
May.....	147,580	9,520	2,540	4,760	492,700
June.....	214,070	9,600	5,450	7,138	424,600
July.....	111,110	6,620	1,970	3,564	220,400
August.....	41,890	1,880	1,150	1,351	83,090
September.....	30,420	1,180	933	1,014	60,340
Water year 1937-38.....	740,039	9,600	645	2,028	1,468,000

Salmon River at Whitebird, Idaho

Location.- Water-stage recorder, lat. 45°45', long. 116°20', in sec. 22, T. 28 N., R. 1 E., just upstream from Whitebird Creek, half a mile downstream from Canfield-Joseph highway bridge and 1 mile southwest of Whitebird.

Drainage area.- 13,400 square miles.

Records available.- August 1910 to September 1917, October 1919 to September 1938.

Average discharge.- 28 years (1910-17, 1919-38), 10,320 second-feet.

Extremes.- Maximum discharge during year, 76,200 second-feet May 28 (gauge height, 28.95 feet); minimum, 2,340 second-feet Dec. 10 (gauge height, 11.22 feet).
1910-17, 1919-38: Maximum discharge, 88,800 second-feet June 9, 1921 (gauge height, 31.2 feet); minimum, 1,580 second-feet Dec. 11, 1932 (gauge height, 10.23 feet), from rating curve extended below 2,200 second-feet.
Maximum stage known, about 37.5 feet, present datum, June 1894 (discharge, 120,000 second-feet).

Remarks.- Records excellent. Amount of water diverted above station for irrigation is negligible.

Rating table, water year 1937-38 (gauge height, in feet, and discharge, in second-feet)

11.2	2,340	14.5	8,120	18.5	19,980	24.0	45,960
11.6	2,800	15.0	9,290	19.0	21,880	25.0	51,640
12.0	3,360	15.5	10,540	19.6	24,300	26.0	57,520
12.4	4,000	16.0	11,870	20.2	26,860	27.0	63,580
12.8	4,700	16.5	13,290	20.8	29,580	28.0	69,920
13.2	5,440	17.0	14,790	21.4	32,400	29.0	76,240
13.6	6,220	17.5	16,400	22.0	35,360		
14.0	7,040	18.0	18,130	23.0	40,500		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Jul.	Aug.	Sept.
1	2,680	3,000	3,070	3,830	3,440	4,080	4,700	38,900	61,700	28,600	7,460	4,340
2	2,740	2,930	2,680	3,510	3,440	4,340	4,520	44,800	62,300	29,100	7,250	4,430
3	2,740	2,930	2,450	3,070	3,750	4,520	4,810	40,000	65,100	26,900	7,040	4,520
4	2,740	2,930	2,800	2,860	3,830	4,520	4,700	33,400	67,300	26,000	6,620	4,430
5	2,740	2,930	3,280	2,800	3,830	4,610	5,060	28,200	67,900	25,600	6,620	4,260
6	2,740	2,860	3,070	2,560	3,670	4,430	5,250	24,300	68,500	23,900	6,420	4,260
7	2,740	2,860	2,930	2,500	3,670	4,340	5,250	21,500	69,200	21,900	6,220	4,260
8	2,740	2,930	2,930	2,580	3,830	4,170	5,440	19,600	67,500	20,400	6,020	4,340
9	2,800	3,000	2,560	3,070	3,830	4,080	5,630	18,500	62,300	19,600	5,820	4,520
10	2,800	3,070	2,400	3,510	3,750	4,080	6,220	16,900	54,500	18,500	5,820	4,610
11	2,800	3,070	3,850	3,670	3,920	4,170	6,620	20,000	46,800	17,400	5,820	4,430
12	2,800	3,070	12,400	4,000	4,170	4,540	7,040	21,100	46,000	16,400	5,630	4,340
13	2,800	3,070	11,900	4,000	4,260	4,970	7,460	23,900	46,000	16,400	5,440	4,170
14	2,740	3,070	9,780	3,830	4,080	6,020	7,900	27,700	45,400	14,500	5,440	4,080
15	2,800	3,140	7,900	3,920	3,920	6,420	8,120	33,400	43,700	13,900	5,440	4,000
16	2,800	3,210	6,830	4,000	3,830	7,040	8,810	37,900	43,200	13,600	5,440	4,000
17	3,070	3,210	6,020	4,000	3,670	7,900	10,500	41,600	44,800	13,900	5,440	3,920
18	3,440	3,140	5,630	3,920	3,440	7,900	14,800	42,100	43,700	13,300	5,250	3,830
19	3,590	3,140	5,250	3,750	3,210	7,250	20,700	39,600	39,500	12,400	5,060	3,830
20	3,440	3,210	4,880	3,670	3,140	6,620	23,500	34,900	36,400	11,600	4,970	3,750
21	3,360	3,830	4,520	3,510	3,440	6,020	21,500	31,900	35,400	10,800	4,880	3,750
22	3,360	4,260	4,260	3,360	3,590	5,630	20,400	31,400	36,400	10,300	4,790	3,750
23	3,210	3,920	3,920	3,440	3,670	5,250	20,400	33,900	35,900	10,000	4,790	3,670
24	3,140	3,920	3,750	3,590	3,670	4,970	20,000	39,500	33,900	9,530	4,680	3,670
25	3,140	3,920	3,590	3,510	3,670	5,060	20,700	47,100	32,400	9,290	4,880	3,670
26	3,070	3,750	3,590	3,140	3,670	4,880	23,900	56,300	31,900	8,810	4,790	3,590
27	3,000	3,670	3,830	2,620	3,750	4,880	25,100	64,800	31,000	8,580	4,790	3,590
28	3,000	3,510	4,080	2,500	3,920	4,880	24,700	74,300	31,900	8,580	4,790	3,510
29	2,930	3,510	4,260	2,800	-	4,970	26,400	73,700	29,600	8,350	4,610	3,590
30	2,930	3,360	4,340	3,140	-	4,970	31,400	68,500	27,700	8,350	4,520	3,670
31	2,930	-	4,080	3,360	-	4,790	-	64,200	-	7,900	4,430	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	91,810	3,590	2,680	2,962	182,100
November.....	96,420	4,260	2,860	3,221	195,200
December.....	146,830	12,400	2,400	4,736	291,200
Calendar year 1937.....	2,416,550	33,400	1,980	6,621	4,793,000
January.....	104,120	4,000	2,500	3,359	206,500
February.....	104,060	4,230	3,140	3,716	206,400
March.....	162,100	7,900	4,080	5,229	321,500
April.....	401,330	31,400	4,520	13,580	796,000
May.....	1,195,800	74,300	18,500	38,570	2,372,000
June.....	1,410,700	69,200	27,700	47,020	2,798,000
July.....	483,390	29,100	7,900	15,590	958,800
August.....	171,370	7,460	4,430	5,528	339,900
September.....	120,780	4,610	3,510	4,026	239,600
Water year 1937-38.....	4,490,710	74,300	2,400	12,300	8,907,000

Valley Creek at Stanley, Idaho

Location.- Staff gage, lat. 44°13', long. 114°56', in sec. 3, T. 10 N., R. 13 E., a quarter of a mile upstream from mouth, three-eighths of a mile downstream from upper Stanley, and three-quarters of a mile upstream from lower Stanley.

Drainage area.- 176 square miles.

Records available.- December 1910 to October 1913 and May 1921 to September 1938.

Average discharge.- 18 years (1911-13, 1922-38), 179 second-feet.

Extremes.- Maximum discharge observed during year, 1,090 second-feet June 7-9; maximum gage height, 3.25 feet June 8; minimum discharge, 61 second-feet Oct. 3, 29 (gage height, 0.99 foot).

1910-13, 1921-38: Maximum discharge observed, 1,850 second-feet May 29, 1921 (gage height, 4.4 feet); minimum discharge, 40 second-feet (estimated) Nov. 17-30, 1929, and Dec. 8-13, 1932.

Remarks.- Records good except those for December to March, which are fair. Discharge for periods of ice effect or missing or doubtful gage heights, Dec. 8-10, 23-26, Jan. 1 to Feb. 2, Mar. 18-27, June 27 to July 2, computed on basis of weather records and records for other stations in upper Salmon River Basin. Gage read two to four times weekly except during the spring run-off, when it was read once daily. Diversions for irrigation above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*63	65	84		80	83	*86	740	740	700	166	*89
2	63	*65	*82		80	*83	83	805	870	650	*160	88
3	61	*66	81		84	*83	81	680	940	592	155	86
4	*62	66	86		*80	83	*80	538	980	555	147	*86
5	*63	*67	*91		77	*79	*80	510	980	558	144	86
6	*64	68	*95		*78	*76	79	510	1,010	510	139	*86
7	65	66	100		*78	*73	*81	510	1,090	444	132	86
8	*65	*66	104		79	70	*84	510	1,090	444	127	*87
9	*66	66	109		*78	*71	86	494	1,090	457	*126	86
10	*66	*66	266		77	*73	*92	510	1,010	432	125	*87
11	66	66	432		*76	*74	98	565	805	362	*121	*86
12	*66	*67	*342		*76	*76	*102	592	838	362	117	*85
13	*66	*68	252		75	77	107	592	838	336	*114	84
14	66	*69	*217		*75	*79	*115	592	838	313	111	86
15	*67	70	*182		*75	81	*124	620	838	336	111	*85
16	68	*74	147		75	*86	132	650	805	358	109	*84
17	*68	*79	*140		*75	92	*234	710	805	*356	107	83
18	68	68	*134		*76	91	356	690	838	*314	*104	81
19	*68	*92	127		75	90	406	592	*814	*263	100	*81
20	68	*100	*121		*74	90	392	538	*790	271	*100	81
21	*68	109	*115		72	89	356	565	*768	252	*101	*80
22	*68	*105	109		63	88	392	592	*744	232	*102	*80
23	68	*100	106		*66	88	392	650	*720	214	102	79
24	*67	96	103		70	87	510	680	*697	197	*101	*79
25	66	*95	100		*70	86	*524	710	*674	187	100	*79
26	*66	*93	103		70	86	538	805	650	197	100	79
27	66	92	107		*74	91	510	940	650	182	*98	*79
28	*64	*91	*102		*79	96	740	905	650	182	*95	79
29	61	90	98		-	*93	838	905	650	182	*92	79
30	*62	*87	*95		-	*91	680	870	750	182	90	*79
31	*64	-	92		-	88	-	805	-	166	*89	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	2,029	68	61	65.5	0.372	0.43	4,020
November.....	2,587	109	65	79.6	.452	.50	4,750
December.....	4,322	432	81	139	.790	.91	8,570
Calendar year 1937.....	49,536	536	48	136	.773	10.45	98,230
January.....	2,480	-	-	80.0	.455	.52	4,920
February.....	2,106	84	63	75.2	.427	.44	4,180
March.....	2,593	96	70	83.6	.475	.55	5,140
April.....	8,308	858	79	277	1.57	1.75	16,480
May.....	20,355	940	484	657	3.73	4.30	40,370
June.....	24,962	1,090	650	832	4.73	5.28	49,510
July.....	10,916	700	166	352	2.00	2.31	21,650
August.....	3,585	166	89	116	.659	.76	7,110
September.....	2,497	89	79	83.2	.473	.53	4,950
Water year 1937-38.....	86,540	1,090	61	237	1.35	18.28	171,600

*Interpolated.

Yankee Fork of Salmon River near Clayton, Idaho

Location.- Water-stage recorder, lat. 44°17', long. 114°44', in sec. 17, T. 11 N., R. 15 E., $\frac{1}{2}$ mile upstream from mouth and 17 miles west of Clayton. Prior to April 14, staff gage at site 2,000 feet downstream, in sec. 18, at different datum.

Drainage area.- 195 square miles.

Records available.- May 1921 to September 1938.

Average discharge.- 15 years (1922-24, 1925-38), 178 second-feet.

Extremes.- Maximum discharge observed during year, 2,110 second-feet May 28, from rating curve extended above 1,200 second-feet (gage height, 5.92 feet); minimum not determined, occurred during period of ice effect.
1921-38: Maximum discharge, 3,380 second-feet June 12, 1921 (gage height, 6.79 feet, former site and datum); minimum, 10 second-feet (estimated) Dec. 5, 6, 1927.

Remarks.- Records fair except those for Dec. 6-13, Dec. 15 to Mar. 31 which are poor. Discharge for periods of missing or questionable gage heights, and ice effect, Nov. 25 to Dec. 13, Dec. 15 to Apr. 13, July 5, 6, computed on basis of two discharge measurements, weather records, and records for other streams in Salmon River Basin. Discharge Oct. 2, July 21-24, July 26 to Aug. 1, Aug. 23, 24 interpolated. No diversion or regulation above station. Staff gage read twice daily Oct. 1 to Dec. 7.

Rating table, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Dec. 14 to Sept. 30

1.0	43.5	2.2	181	3.4	495	4.6	1,055	5.8	2,020
1.3	61.5	2.5	241	3.7	605	4.9	1,290	5.9	2,110
1.6	88.5	2.8	310	4.0	740	5.2	1,510		
1.9	130	3.1	394	4.3	900	5.5	1,750		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	53	50	45				40	960	1,670	625	148	92
2	53	50	45				40	715	1,800	585	143	90
3	53	49	45				40	548	1,930	548	140	90
4	49	49	45				45	457	1,930	502	136	91
5	50	49	*45				45	382	1,980	473	132	87
6	47	49	60				45	331	2,020	445	130	86
7	47	50					50	300	1,980	416	132	86
8	47	50					50	281	1,930	407	132	86
9	50	48					50	286	1,670	385	141	85
10	50	47	71				55	353	1,290	364	128	85
11	49	51					60	385	1,120	347	109	84
12	50	51					65	446	1,120	323	120	84
13	50	50					75	605	1,120	305	120	82
14	50	50					85	765	1,080	286	122	80
15	49	47					85	900	1,020	308	124	79
16	52	47	50				116	1,020	990	261	116	78
17	55	49					161	1,120	1,050	230	114	77
18	59	48					313	930	900	228	109	76
19	55	47					385	740	765	226	108	76
20	52	48					333	645	690	222	105	76
21	52	50					318	625	765	214	102	75
22	50	47	50		*36		313	690	765	206	100	75
23	49	50					284	930	690	197	105	75
24	49	51					296	1,180	645	189	111	74
25	49	50					339	1,400	645	181	116	74
26	49	50					361	1,800	645	176	114	74
27	49	50					358	1,980	625	172	105	73
28	49	50					423	2,060	565	167	101	73
29	49	50					548	1,860	548	162	94	76
30	49	45					690	1,670	765	157	92	77
31	50	-					-	1,630	-	182	92	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	1,564	59	47	50.5	0.259	0.30	3,100
November.....	1,472	51	45	49.1	.252	.28	2,920
December.....	1,624	-	-	52.4	.269	.31	3,220
Calendar year 1937.....	45,023	800	-	118	.605	8.22	85,340
January.....	1,240	-	-	40	.205	.24	2,460
February.....	1,120	-	-	40	.205	.21	2,220
March.....	1,240	-	-	40	.205	.24	2,460
April.....	6,066	690	40	202	1.04	1.16	12,030
May.....	27,994	2,060	281	903	4.63	5.34	55,530
June.....	34,713	2,020	548	1,157	5.93	6.62	68,850
July.....	9,469	625	152	305	1.56	1.80	18,780
August.....	3,641	148	92	117	.600	.69	7,220
September.....	2,416	92	73	80.5	.413	.46	4,790
Water year 1937-38.....	92,559	2,060	-	254	1.30	17.65	183,600

*Discharge measurement.

East Fork of Salmon River near Clayton, Idaho

Location.- Staff gage, lat. 44°13', long. 114°17', in NW¼ sec. 1, T. 10 N., R. 18 E., at highway bridge, 4 miles upstream from confluence with Salmon River and 7 miles south-east of Clayton.

Drainage area.- 497 square miles.

Records available.- September 1928 to September 1938.

Average discharge.- 10 years, 202 second-feet.

Extremes.- Maximum discharge observed during year, 3,580 second-feet June 6 (gage height, 5.00 feet); minimum observed, 34 second-feet Dec. 1, 2 (gage height, 0.60 foot).
1928-38: Maximum discharge observed, that of June 6, 1938; minimum observed, 29 second-feet Dec. 3, 1928; minimum gage height observed, 0.38 foot Nov. 23, 1931.

Remarks.- Records fair except those for periods of ice effect or doubtful gage heights, Dec. 3-9, Dec. 19 to Jan. 13, Apr. 27-29, May 1-21, July 2, Aug. 1-4, Aug. 6 to Sept. 15, Sept. 17-21, which were computed on basis of two discharge measurements, weather records, and records for other stations in Salmon River Basin, and are poor. Several small irrigation diversions above station. Gage read once daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	81	82	34		70	80	85		1,580	2,160	400	
2	81	82	34		70	80	85		1,920	1,770	350	
3	76	84	70		70	78	85		2,420	1,390	370	
4	76	84	70		71	72	85		2,970	1,290	350	
5	74	84	70		71	72	101		2,970	1,290	332	
6	74	84	70		70	85	101		3,580	1,290		
7	74	84	70	70	70	85	121		3,270	1,110		
8	74	68	70		71	101	133		2,160	1,110		
9	74	76	90		70	101	143		2,160	1,110		
10	71	76	122		72	85	172		1,290	990		
11	71	76	190		78	82	172	400	1,030	990	300	160
12	71	68	192		78	84	172		1,380	990		
13	71	76	167		78	84	172		1,380	990		
14	74	82	102	72	78	84	202		1,380	990		
15	74	82	112	72	78	82	202		1,290	910		
16	76	82	102	72	78	77	202		1,290	910		140
17	78	82	102	72	78	78	270		1,290	910		
18	78	82	102	72	72	78	332		1,290	910		
19	78	82		72	72	72	460		1,290	870		140
20	78	82		72	72	72	380		1,290	830		
21	78	76		72	78	72	355		1,290	755	250	
22	82	76		72	76	72	355	460	1,290	755		135
23	84	76		72	75	75	332	460	1,290	685		135
24	82	76		72	75	76	270	650	1,110	685		135
25	82	76	75	72	77	76	270	1,030	1,290	618		148
26	84	76		75	77	76	270	1,480	1,920	552		145
27	84	76		75	78	85	355	2,040	1,580	490		156
28	84	82		75	78	85	460	2,550	1,290	490		158
29	84	82		75	-	85	555	1,480	1,290	490	200	158
30	84	54		72	-	85	650	1,480	2,550	432		172
31	82	-		72	-	85	-	1,580	-	432		-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	2,414	84	71	77.9	0.157	0.18	4,790
November.....	2,348	84	54	78.3	.153	.18	4,860
December.....	2,734	192	34	85.2	.177	.20	5,420
Calendar year 1937.....	48,927	815	-	134	.270	3.67	97,170
January.....	2,218	-	-	71.5	.144	.17	4,400
February.....	2,081	78	70	74.3	.149	.16	4,130
March.....	2,504	101	72	80.8	.163	.19	4,970
April.....	7,557	650	85	252	.507	.57	14,990
May.....	21,610	2,550	-	697	1.40	1.61	42,860
June.....	52,150	3,580	1,050	1,735	3.50	3.90	105,400
July.....	29,184	2,160	432	941	1.89	2.18	57,890
August.....	8,532	-	-	275	.553	.64	16,920
September.....	4,782	-	-	159	.320	.36	9,480
Water year 1937-38.....	138,094	3,580	34	378	.761	10.34	275,900

Pahsimeroi River near May, Idaho

Location.- Staff gage, lat. 44°42', long. 114°03', in $\frac{1}{4}$ sec. 25, T. 16 N., R. 20 E., a quarter of a mile downstream from old highway bridge on Challis-Salmon River highway, a quarter of a mile upstream from confluence with Salmon River, and 10 miles north-west of May.

Records available.- October 1929 to September 1938.

Extremes.- Maximum discharge observed during year, 258 second-feet July 4 (gage height, 2.74 feet); minimum observed, 84 second-feet May 26 (gage height, 1.76 feet).
1930-38: Maximum discharge observed, 279 second-feet Dec. 10-14, 16, 17, 1929; minimum observed, 75 second-feet Apr. 23, 1934.

Remarks.- Records fair. Many diversions above station for irrigation. Gage read once daily. Discharge for May 27-29, June 2-10 estimated.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	144	188	212	188	188	177	188	212	97	177	*144	177
2	144	188	200	188	188	188	188	166		166	144	177
3	144	188	200	188	188	188	188	144		200	*142	177
4	144	188	200	188	188	188	188	144		258	*140	*177
5	155	188	200	188	188	188	188	144		*229	*138	177
6	155	200	200	188	188	188	188	144	120	200	*136	*172
7	155	200	*194	188	188	188	188	144		200	134	166
8	155	200	188	188	188	188	188	134		200	134	166
9	155	200	188	177	188	188	188	134		188	144	166
10	155	200	188	177	188	188	188	134		188	144	166
11	155	200	212	177	188	200	188	124	124	177	134	166
12	155	200	212	177	200	200	177	124	134	166	134	166
13	166	200	200	177	200	212	166	115	144	155	134	166
14	*169	200	200	177	200	212	166	113	124	155	144	166
15	*171	200	200	188	200	212	166	111	124	155	144	166
16	*174	200	200	188	188	212	166	111	134	*155	144	166
17	*177	212	200	188	188	212	155	93	134	*158	144	166
18	*180	212	200	188	188	200	177	97	144	155	144	166
19	*183	212	200	188	188	200	177	91	144	155	144	155
20	*185	212	200	188	188	188	155	91	144	155	144	155
21	188	212	200	188	188	188	155	91	144	144	144	155
22	188	212	200	188	188	188	155	91	144	144	144	155
23	188	200	200	188	188	188	155	89	134	144	144	155
24	188	200	188	188	188	188	166	89	134	144	144	155
25	177	200	188	188	188	188	166	86	134	*144	155	155
26	177	200	188	188	188	188	155	84	134	*144	166	155
27	177	200	188	188	188	188	155		134	*144	166	155
28	177	212	188	188	177	188	144	100	134	*144	166	*155
29	177	212	188	188	-	188	144		144	*144	166	*155
30	177	212	188	188	-	188	144	115	177	*144	166	155
31	177	-	188	188	-	188	-	102	-	*144	188	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						5,212	188	144	168	10,340		
November.....						8,048	212	188	202	12,000		
December.....						6,098	212	188	197	12,100		
Calendar year 1937.....						58,326	223	83	180	115,700		
January.....						5,762	188	177	166	11,430		
February.....						5,301	200	177	189	10,510		
March.....						5,985	212	177	193	11,870		
April.....						5,112	188	144	170	10,140		
May.....						3,816	212	84	117	7,170		
June.....						3,940	177	97	131	7,810		
July.....						5,173	258	144	187	10,280		
August.....						4,559	188	134	147	9,040		
September.....						4,909	177	155	164	9,740		
Water year 1937-38.....						61,715	258	84	169	122,400		

*Interpolated.

SALMON RIVER BASIN

Lemhi River at Salmon, Idaho

Location.- Staff gage, lat. 45°10', long. 113°51', in sec. 10, T. 21 N., R. 22 E., 250 feet downstream from highway bridge, 700 feet upstream from diversion gates of power canal, 1,000 feet upstream from Kirtly Creek, and 1 mile southeast of Salmon.

Records available.- August 1925 to September 1938.

Average discharge.- 10 years, 212 second-feet.

Extremes.- Maximum discharge observed during year, 1,260 second-feet June 30, July 4; maximum gage height observed, 2.97 feet July 4; minimum discharge, 48 second-feet Aug. 8 (gage height, 1.06 feet).

1928-38: Maximum discharge, about 2,400 second-feet June 3, 1936 (gage height, about 4.0 feet, from floodmarks), from rating curve extended above 1,200 second-feet; minimum, 14 second-feet July 22, 23, 1931, Aug. 50 to Sept. 3, 1937.

Remarks.- Records fair. Many diversions for irrigation above station. Idaho Power Co. (formerly Salmon River Power & Light Co.) diverts water for power 700 feet downstream.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	178	*201	137	*184	164	186	390	890	1,140	76	*89
2	70	178	201	154	186	*164	186	344	940	*1,140	76	89
3	70	182	201	*156	205	164	194	*322	*915	1,140	72	94
4	64	182	201	187	*234	171	197	301	890	1,260	*64	94
5	64	186	197	187	262	*169	205	301	890	1,200	57	99
6	64	186	194	150	248	167	209	272	*890	*1,140	54	99
7	68	186	186	150	*232	164	*212	272	890	1,090	*51	99
8	68	*186	186	154	197	*170	214	272	890	940	48	99
9	70	186	164	157	164	175	*216	244	842	795	*50	89
10	*82	186	209	154	*164	175	218	*200	*774	750	52	84
11	94	*186	*209	*164	164	182	226	157	705	665	55	82
12	109	186	209	175	178	190	*226	160	705	582	60	*80
13	109	186	209	171	*189	*246	226	*164	*705	*472	*63	78
14	120	186	205	*171	180	301	226	167	705	361	66	74
15	157	*186	197	171	164	272	231	175	*705	344	66	*74
16	157	186	186	175	*164	253	231	190	705	338	68	74
17	157	186	194	171	*164	253	291	*234	705	332	72	72
18	164	186	205	171	164	239	349	277	705	*298	68	70
19	171	*186	205	178	*173	231	440	272	750	282	66	70
20	171	186	*190	*186	182	222	328	248	705	*230	64	*71
21	182	194	175	194	*178	231	267	231	1,140	197	64	*71
22	186	197	160	194	175	222	*267	214	*991	*170	*68	72
23	186	201	*160	178	171	222	267	205	842	144	72	72
24	*184	205	160	157	167	205	248	*218	842	126	*77	70
25	182	201	157	144	167	205	*248	231	842	*122	82	70
26	178	201	160	*144	*169	205	248	328	795	120	82	*72
27	178	201	*177	144	171	201	*244	440	795	112	87	74
28	178	201	194	*149	171	201	239	544	*818	*108	87	*80
29	178	201	201	154	-	194	226	842	842	104	*94	87
30	178	201	197	167	-	*182	339	890	1,260	96	82	78
31	178	-	157	182	-	190	-	*890	-	96	89	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						4,091	186	64	132	8,110		
November.....						5,699	205	178	190	11,300		
December.....						5,847	209	157	189	11,600		
Calendar year 1937.....						47,548	267	14	130	94,300		
January.....						5,068	194	137	163	10,050		
February.....						5,117	262	160	183	10,150		
March.....						6,340	301	164	205	12,580		
April.....						7,304	440	186	243	14,490		
May.....						9,995	890	157	322	19,820		
June.....						25,073	1,260	705	836	49,750		
July.....						15,877	1,260	96	512	31,490		
August.....						2,122	89	48	68.5	4,210		
September.....						2,428	99	70	80.9	4,810		
Water year 1937-38.....						94,957	1,260	48	260	188,300		

*Interpolated.

North Fork of Salmon River at North Fork, Idaho

Location.- Staff gage, lat. 45°25', long. 113°59', in SW¼ sec. 16, T. 24 N., R. 21 E., 750 feet upstream from bridge on Salmon River highway, a quarter of a mile upstream from mouth, and a quarter of a mile northeast of North Fork.

Drainage area.- 214 square miles.

Records available.- October 1929 to September 1938. April to September 1912 at site 6 miles upstream, above mouth of Spring Creek.

Extremes.- Maximum discharge observed during year, 830 second-feet May 29 (gage height, 3.88 feet, on auxiliary gage 200 feet downstream); minimum observed, 25 second-feet Jan. 25 (gage height, 0.65 foot, on auxiliary gage).
1929-38: Maximum discharge, 901 second-feet June 13, 1933 (gage height, 4.40 feet); minimum, 11 second-feet Dec. 8, 1932 (gage height, 0.06 foot).

Remarks.- Records good except those for periods of ice effect, Jan. 2, 5-15, 20, 22-24, Jan. 26 to Feb. 10, Feb. 18-22, which were computed on basis of one discharge measurement, weather records, and records for other stations in Salmon River Basin and are fair. No diversions. Gage read once daily. Gage heights were obtained from auxiliary gage 200 feet downstream, as permanent gage was inaccessible.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	33	36	26	38	38	42	414	670	205	60	41
2	29	34	38	45	38	35	49	*343	670	205	57	41
3	*29	34	53	39	38	35	42	272	632	193	57	39
4	29	34	40	32	36	36	44	230	632	193	57	39
5	30	34	42	32	36	36	44	205	594	205	55	39
6	30	34	38	32	36	36	46	181	594	181	55	39
7	30	34	38	32	36	36	46	170	556	170	53	37
8	30	35	32	35	35	38	43	158	520	158	49	40
9	30	35	40	37	35	40	53	143	484	154	51	40
10	28	35	45	40	35	38	55	152	431	143	52	40
11	28	35	74	40	36	39	57	158	380	*127	49	39
12	28	35	76	40	35	43	63	*170	332	*124	47	38
13	29	34	52	40	40	44	66	181	332	121	46	37
14	29	37	46	40	35	51	67	205	301	115	42	38
15	33	36	44	40	33	48	73	272	286	123	45	38
16	31	35	41	40	36	52	78	301	286	113	46	36
17	33	39	42	39	36	46	94	332	286	112	42	36
18	35	36	40	38	35	44	148	316	286	*106	44	37
19	32	36	41	36	+33	48	158	301	257	101	45	36
20	33	38	39	35	35	44	141	257	244	96	45	35
21	33	41	41	35	35	42	123	244	244	89	47	34
22	32	39	40	38	35	50	125	230	230	82	41	34
23	32	39	28	38	34	43	117	244	230	78	42	33
24	30	39	30	36	35	43	117	316	218	74	40	32
25	32	38	42	25	38	41	158	397	205	*75	40	32
26	32	38	43	30	38	40	170	448	205	76	39	33
27	35	38	52	35	41	41	170	556	205	68	39	+34
28	35	39	45	38	38	43	205	594	181	68	38	36
29	33	38	43	38	-	*41	218	830	181	*72	39	36
30	33	27	38	38	-	39	257	790	205	66	40	35
31	33	-	38	38	-	*40	-	710	-	64	38	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	965	35	28	31.1	0.145	0.17	1,910
November.....	1,079	41	27	36.0	.168	.19	2,140
December.....	1,337	76	28	43.1	.201	.23	2,650
Calendar year 1937.....	24,096	348	22	66.0	.308	4.13	47,800
January.....	1,127	45	25	36.4	.170	.20	2,240
February.....	1,010	41	33	36.1	.168	.18	2,000
March.....	1,290	52	35	41.6	.194	.22	2,560
April.....	3,069	257	42	102	.477	.53	6,090
May.....	10,120	830	143	326	1.52	1.75	20,070
June.....	10,877	670	181	363	1.70	1.90	21,570
July.....	3,762	205	64	121	.565	.65	7,460
August.....	1,440	60	38	46.5	.217	.25	2,869
September.....	1,104	41	32	36.8	.172	.19	2,190
Water year 1937-38.....	37,180	830	25	102	.477	6.46	73,740

*Interpolated.

+Discharge measurement.

Middle Fork of Salmon River near Cape Horn, Idaho

Location.- Water-stage recorder, lat. 44°25', long. 115°18', in sec. 34, T. 13 N., R. 11 E., 1,100 feet downstream from Little Beaver Creek, half a mile downstream from junction of Marsh and Beaver Creeks, and 1½ miles northwest of Cape Horn.

Drainage area.- 138 square miles.

Records available.- September 1928 to September 1938.

Average discharge.- 10 years, 198 second-feet.

Extremes.- Maximum discharge recorded during year, 2,260 second-feet May 27 (gage height, 6.18 feet); minimum discharge, 40 second-feet Nov. 29 (gage height, 2.20 feet). 1928-38: Maximum discharge, 2,340 second-feet June 8, 1933 (gage height, 6.26 feet); minimum, 35 second-feet (estimated) Nov. 28-30, 1928. A lesser discharge may have occurred during winter.

Remarks.- Records good except those for periods of ice effect or missing gage heights, Nov. 29 to Apr. 24, which were computed on basis of weather records and records for other stations in Salmon River Basin and are poor. No diversions above station.

Rating table, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

2.2	40	3.7	433	5.2	1,290
2.5	65	4.0	565	5.5	1,550
2.8	145	4.3	715	5.8	1,840
3.1	225	4.6	880	6.1	2,150
3.4	319	4.9	1,065	6.2	2,260

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73	66					80	663	1,600	742	192	121
2	71	65					80	613	1,740	715	187	119
3	71	64					80	547	1,890	663	185	117
4	71	65					80	488	1,890	678	179	119
5	71	68					80	425	1,890	589	177	115
6	71	65					85	378	1,940	547	174	113
7	71	64					85	359	1,940	506	169	113
8	71	66					90	355	1,890	484	164	121
9	71	66					90	382	1,600	454	167	115
10	71	68					95	433	1,370	421	162	113
11	70	62					100	462	1,250	397	155	111
12	68	65					105	560	1,250	378	152	109
13	68	66					110	715	1,330	359	152	107
14	68	66					120	852	1,250	351	157	103
15	70	68					140	940	1,170	378	155	103
16	75	68					160	1,100	1,170	359	150	101
17	98	68					200	1,170	1,210	319	145	101
18	89	65					250	1,030	1,100	312	143	99
19	75	68					300	880	940	288	141	101
20	75	82					300	852	880	275	138	101
21	73	82					300	910	940	272	134	99
22	71	68					300	970	940	266	132	101
23	70	71					300	1,060	880	256	134	101
24	68	70					300	1,210	825	241	134	99
25	68	68					305	1,370	798	238	132	98
26	68	68					309	1,550	798	235	130	98
27	68	71					323	1,840	742	232	123	96
28	68	66					363	1,940	689	223	123	98
29	68	64					425	1,690	715	225	121	111
30	68	60					524	1,550	970	209	119	107
31	70	-					-	1,550	-	201	119	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	2,229	98	68	71.9	0.521	0.60	4,420
November.....	2,023	82	60	67.4	.488	.54	4,010
December.....	2,945	-	-	95	.688	.79	5,840
Calendar year 1937	56,880	910	-	156	1.13	15.30	112,800
January.....	2,480	-	-	80	.580	.67	4,920
February.....	2,100	-	-	75	.543	.57	4,170
March.....	2,480	-	-	80	.580	.67	4,920
April.....	6,079	524	80	203	1.47	1.64	12,060
May.....	23,844	1,940	355	930	6.74	7.77	57,210
June.....	37,597	1,940	689	1,253	9.08	10.13	74,570
July.....	11,771	742	201	380	2.75	3.17	23,350
August.....	4,645	192	119	150	1.09	1.26	9,210
September.....	3,210	121	96	107	.775	.86	6,370
Water year 1937-38	106,403	1,940	-	292	2.12	28.67	211,000

Middle Fork of Salmon River near Meyers Cove, Idaho

Location.- Staff gage, lat. 44°57', long. 114°44', in sec. 27, T. 19 N., R. 14 E., at Geo. D. Crandall ranch, 500 feet downstream from Brush Creek and 15 miles northwest of Meyers Cove.

Drainage area.- 2,020 square miles.

Records available.- July 1931 to September 1938.

Extremes.- Maximum discharge observed during year, 16,600 second-feet May 28 (gage height, 8.10 feet); minimum observed, 348 second-feet Dec. 1 (gage height, 1.54 feet). 1931-38: Maximum discharge observed, 17,000 second-feet June 10, 1933 (gage height, 8.10 feet); minimum not determined.

Remarks.- Records good except those for periods of ice effect, Dec. 8-11, Dec. 24 to Mar. 4, which were computed on basis of weather records and records for other stations in Salmon River Basin and are fair. Gage read once daily.

Rating table, water year 1937-38, except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Apr. 27 to July 30)

1.5	325	3.3	1,920	5.1	5,470	6.9	11,610
1.8	475	3.6	2,370	5.4	6,510	7.2	12,900
2.1	670	3.9	2,870	5.7	7,225	7.5	14,235
2.4	910	4.2	3,430	6.0	8,190	7.8	15,615
2.7	1,200	4.5	4,050	6.3	9,240	8.1	17,020
3.0	1,540	4.8	4,720	6.6	10,380		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	600	600	348				670	7,540	12,000	5,740	1,480	1,000
2	600	600	448				635	10,400	12,900	5,740	1,540	1,050
3	568	568	475			625	670	7,540	13,800	5,740	1,600	1,000
4	568	568	505				708	6,020	14,200	5,470	1,600	1,050
5	568	568	535			635	745	4,960	14,200	5,210	1,540	1,050
6	600	568	530			635	825	4,490	14,700	4,720	1,540	1,000
7	600	600	520			635	955	3,630	14,700	4,480	1,480	1,000
8	600	600	510			800	1,000	3,630	14,700	4,270	1,420	955
9	600	600	500			835	1,100	3,630	12,900	4,060	1,420	1,050
10	600	600	700			670	1,100	3,840	11,200	3,840	1,420	1,000
11	600	600	1,500			670	1,150	3,840	9,610	3,430	1,310	1,000
12	568	600	2,210			670	1,200	4,490	9,610	3,240	1,360	955
13	568	600	2,530			708	1,260	5,470	8,880	3,240	1,310	955
14	568	600	1,420			745	1,310	6,920	8,880	3,240	1,310	910
15	568	635	1,480			785	1,360	8,190	8,530	3,050	1,360	910
16	600	635	1,050			825	1,790	8,880	8,190	3,840	1,310	910
17	568	635	868			785	1,950	9,990	8,880	3,430	1,310	910
18	568	635	898			745	2,700	8,990	8,190	2,700	1,260	868
19	568	670	785			708	3,840	8,190	7,540	2,700	1,200	868
20	600	670	670			670	4,050	6,920	6,610	2,530	1,200	868
21	600	635	535			670	3,840	6,610	6,610	2,370	1,200	868
22	635	635	568			635	3,840	6,920	7,220	2,370	1,150	868
23	600	635	600			635	3,430	6,920	6,610	2,210	1,150	868
24	600	635				635	3,630	9,240	6,310	2,140	1,200	868
25	600	635				670	3,840	10,400	6,020	2,140	1,150	868
26	600	600				635	4,050	12,000	6,310	2,060	1,150	868
27	600	600		650		635	4,270	14,700	6,020	2,140	1,100	825
28	600	568				670	4,490	16,600	6,020	2,210	1,100	825
29	600	475				708	4,490	15,200	5,470	2,060	1,100	868
30	568	420				708	5,740	13,300	6,020	1,920	1,050	868
31	568	-				670	-	12,500	-	1,920	1,050	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	18,551	535	568	589	0.292	0.34	36,200
November.....	17,955	670	420	598	.296	.33	35,810
December.....	25,355	2,530	348	818	.405	.47	50,290
Calendar year 1937.....	477,092	6,610	348	1,307	.647	8.80	946,300
January.....	18,600	-	-	600	.297	.34	36,890
February.....	18,800	-	-	600	.297	.31	33,320
March.....	20,892	825	-	674	.354	.59	41,440
April.....	70,678	5,740	635	2,356	1.17	1.30	140,200
May.....	252,950	16,600	3,630	8,160	4.04	4.36	501,700
June.....	282,830	14,700	5,470	9,428	4.67	5.21	561,000
July.....	104,210	5,740	1,920	3,362	1.66	1.91	206,700
August.....	40,370	1,600	1,050	1,302	.645	.74	80,070
September.....	27,903	1,050	825	930	.460	.51	55,340
Water year 1937-38.....	896,794	16,600	348	2,457	1.22	16.51	1,779,000

Bear Valley Creek near Cape Horn, Idaho

Location.- Water-stage recorder in about sec. 31, T. 13 N., R. 10 E., 250 feet below Fir Creek, 5 miles upstream from mouth, and 7 miles northwest of Cape Horn.

Drainage area.- 180 square miles.

Records available.- September 1921 to September 1938.

Average discharge.- (1928-38) 10 years, 238 second-feet.

Extremes.- Maximum discharge recorded during the year, 2,560 second-feet May 28 (gage height, 4.33 feet); minimum discharge, 51 second-feet Nov. 30.

1921-38: Maximum discharge, 3,450 second-feet June 9, 1933 (gage height, 5.49 feet); minimum, 28 second-feet Nov. 11, 1931.

Remarks.- Records good except those for Nov. 30 to Apr. 25 which are poor. Discharge for periods of ice effect or missing gage heights, Nov. 25 to Apr. 24 and June 8-11, computed on basis of weather records and records for other stations in Salmon River Basin. No regulation or diversion above station.

Rating table, water year 1937-38, except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.0	44	2.5	555	4.0	1,670
1.3	92	2.8	740	4.3	1,960
1.6	161	3.1	945	4.6	2,280
1.9	263	3.4	1,170	4.9	2,610
2.2	395	3.7	1,410		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	83	83					95	875	1,960	765	185	133
2	83	85					95	875	2,060	651	176	130
3	83	79					95	753	2,120	753	173	124
4	83	79					95	682	2,120	772	170	119
5	81	78					95	597	2,120	683	164	117
6		90					100	533	2,120	573	161	114
7	81	81					100	511	2,060	503	158	114
8	83	85					105	500	1,900	462	156	121
9	83	81					105	538	1,600	435	156	128
10	81	106					110	669	1,450	407	153	121
11	79	90					115	720	1,400	372	151	119
12	79	94					120	812	1,370	343	148	117
13	79	104					125	1,020	1,410	335	145	117
14	79	100					130	1,210	1,410	317	148	114
15	87	94					150	1,370	1,250	317	145	114
16	88	96					170	1,450	1,210	367	145	110
17	119	96					200	1,620	1,290	313	143	108
18	130	94					250	1,540	1,210	307	140	108
19	102	94					350	1,210	1,060	279	138	106
20	94	110					350	1,100	945	263	133	104
21	90	151					350	1,130	945	252	133	104
22	88	133					350	1,290	1,020	247	130	104
23	87	121					350	1,450	982	233	130	108
24	85	117					375	1,580	910	225	133	106
25	85	106					400	1,670	826	215	128	102
26	83	100					435	1,960	796	211	128	100
27	83	108					462	2,170	753	203	126	98
28	81	110					500	2,390	740	208	124	98
29	81	95					573	2,120	663	205	119	98
30	81	80					698	1,960	633	201	117	106
31	83	-					-	2,010	-	191	119	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....				2,685	130	79	86.6	0.481	0.55	5,330		
November.....				2,933	151	78	97.8	.543	.61	5,820		
December.....				3,720	-	-	120	.667	.77	7,380		
Calendar year 1937.....				65,936	1,080	-	791	1.01	13.64	130,800		
January.....				2,945	-	-	95	.528	.61	5,840		
February.....				2,520	-	-	90	.500	.52	5,000		
March.....				2,945	-	-	95	.528	.61	5,840		
April.....				7,438	688	95	248	1.38	1.54	14,750		
May.....				38,315	2,390	500	1,236	6.87	7.92	76,000		
June.....				40,523	2,120	663	1,351	7.51	8.38	80,580		
July.....				11,602	779	191	374	2.08	2.40	23,010		
August.....				4,475	185	117	144	.800	.92	8,880		
September.....				3,362	133	98	112	.622	.68	6,870		
Water year 1937-38.....				123,463	2,390	-	338	1.98	25.52	244,900		

Peak discharge.- May 31 (12:30 p.m.) 2,220 sec.-ft.; June 3 (3 p.m.) 2,340 sec.-ft.

South Fork of Salmon River near Knox, Idaho

Location.- Staff gage, lat. $44^{\circ}39'$, long. $115^{\circ}42'$, in $W\frac{1}{2}$ sec. 11, T. 15 N., R. 6 E., an eighth of a mile below Curtis Creek, three-quarters of a mile above Warm Lake Creek, $1\frac{1}{4}$ miles southwest of Knox, and 21 miles northeast of Cascade.

Drainage area.- 92 square miles.

Records available.- September 1928 to September 1938.

Average discharge.- 10 years, 119 second-feet.

Extremes.- Maximum discharge observed during year, 1,340 second-feet May 28, June 5 (gage height, 4.40 feet); minimum discharge, 20 second-feet (estimated) Nov. 30. 1928-38: Maximum discharge observed, 1,560 second-feet June 9, 1933 (gage height, 4.69 feet); minimum observed, 16 second-feet Feb. 17, Aug. 19, 20, 1931.

Remarks.- Records fair. Gage read three or four times weekly. Discharge for periods of ice effect, or missing or doubtful gage heights, Nov. 20-25, Nov. 29 to Dec. 11, Dec. 18 to Feb. 28, Mar. 14-21, computed on basis of weather records and records for South Fork of Salmon River near Warren and for Johnson Creek at Yellow Pine. No diversions above station.

Rating table, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 28)

1.1	20	2.6	338	4.1	1,130
1.4	44	2.9	464	4.4	1,340
1.7	84	3.2	605	4.7	1,560
2.0	144	3.5	764		
2.3	231	3.8	938		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*30	*32	30	-	-	*44	*60	605	*1,130	399	*84	*54
2	30	*32	35	-	-	*44	*60	*546	1,200	*399	81	54
3	30	32	40	-	-	44	59	488	*1,240	399	84	*54
4	*30	*32	35	-	-	*45	*61	*432	1,270	*366	*93	*53
5	30	32	35	-	-	*45	*64	378	1,340	*333	*82	*53
6	*30	*32	35	-	-	46	66	*383	1,130	300	81	*52
7	*30	32	35	-	-	*48	*66	*388	1,200	*366	*79	52
8	30	*34	25	-	*44	51	66	*394	*1,070	231	*77	61
9	*30	37	30	-	-	*51	*67	399	938	*218	75	*56
10	*29	*36	40	-	*44	51	*68	*413	*880	*206	*72	52
11	*28	*36	400	-	-	*54	69	*428	*822	193	69	*50
12	28	*36	399	-	-	56	*66	442	764	*182	66	49
13	*31	35	*314	-	*44	59	64	*427	*764	*171	*64	*48
14	*34	*36	*229	-	-	62	*78	532	*764	160	*63	*47
15	37	*36	144	-	-	66	*91	*563	764	157	61	46
16	*38	37	*122	-	-	69	105	*594	*736	144	*60	*45
17	*40	*38	101	-	-	67	*144	*625	709	*137	*58	*45
18	41	38	90	-	-	66	184	656	*696	130	*57	44
19	*38	39	80	-	-	64	*261	*606	682	*126	56	41
20	35	50	70	*51	-	62	338	556	556	121	*56	*41
21	*34	60	60	-	*44	61	*338	605	*532	*117	*56	*41
22	*33	50	60	*49	-	59	*338	*605	509	113	56	*42
23	32	50	60	-	-	*59	338	605	*496	*109	61	*42
24	*31	50	60	-	-	59	*360	*712	484	105	*59	*42
25	30	45	60	-	-	*62	*422	820	*449	*101	*58	42
26	*30	41	60	-	-	64	464	1,060	*435	*98	56	*42
27	30	*42	60	-	-	*63	*464	*1,200	420	94	*55	*43
28	30	43	60	-	*44	*63	464	1,340	*410	*93	54	*44
29	*31	35	60	-	-	*62	*511	1,130	399	*92	*54	44
30	*31	20	60	-	-	*62	*558	*1,100	*399	91	*54	*45
31	32	-	60	-	-	*61	-	1,060	-	87	54	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	993	41	28	32.0	0.348	0.40	1,970
November.....	1,148	60	20	38.3	.416	.46	2,280
December.....	2,949	400	25	95.1	1.03	1.19	5,860
Calendar year 1937.....	34,205	580	-	93.7	1.02	13.82	67,940
January.....	1,550	-	-	50	.543	.63	3,070
February.....	1,280	-	-	45	.489	.51	2,500
March.....	1,769	69	44	57.1	.621	.72	3,510
April.....	6,314	558	59	210	2.28	2.54	12,520
May.....	20,150	1,340	378	650	7.07	8.15	39,970
June.....	23,158	1,340	399	772	8.39	9.36	45,930
July.....	5,738	399	87	185	2.01	2.32	11,380
August.....	2,025	84	54	65.3	.710	.82	4,020
September.....	1,424	61	41	47.5	.515	.58	2,820
Water year 1937-38.....	68,478	1,340	20	188	2.04	27.68	135,800

*Interpolated.

†Determined from staff-gage reading.

South Fork of Salmon River near Warren, Idaho

Location.- Staff gage, lat. 45°00', long. 115°35', in SE¼ sec. 15, T. 21 N., R. 7 E., 500 feet downstream from Elk Creek, 900 feet north of Elk Creek power plant, and 8 miles southeast of Warren.

Drainage area.- 1,160 square miles.

Records available.- July 1951 to September 1938.

Extremes.- Maximum discharge observed during year, 15,600 second-feet May 29 (gage height, 12.16 feet), from rating curve extended above 3,000 second-feet; minimum discharge, 242 second-feet Dec. 1 (gage height, 2.55 feet).
1931-32: Maximum discharge observed, 20,000 second-feet June 9, 1933 (gage height, 13.16 feet), from rating curve extended above 3,000 second-feet; minimum discharge, 200 second-feet sometime during period Dec. 9-15, 1932, and on Jan. 28, 1933; minimum gage height, 2.35 feet Jan. 28, 1933.

Remarks.- Records good. Gage read twice daily. No appreciable diversion or regulation.

Rating table, water year 1937-38 (gage height in feet, and discharge, in second-feet)

2.5	230	5.7	2,530	8.9	7,860
2.9	340	6.1	3,020	9.3	8,690
3.3	495	6.5	3,560	9.7	9,550
3.7	715	6.9	4,180	10.2	10,670
4.1	1,000	7.3	4,850	10.7	11,840
4.6	1,330	7.7	5,560	11.2	13,060
4.9	1,690	8.1	6,300	11.7	14,330
5.3	2,090	8.5	7,060	12.2	15,650

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	358	375	342	450	545	628	600	9,330	10,900	5,020	1,060	628
2	358	358	325	572	545	628	628	8,080	11,600	4,850	1,000	600
3	358	358	472	545	520	655	85	6,680	12,100	4,810	1,000	572
4	375	358	430	392	520	628	685	5,920	12,100	4,180	1,000	545
5	375	340	325	430	495	628	715	5,020	12,100	3,860	920	545
6	375	340	358	392	520	600	685	4,340	12,300	3,420	920	520
7	358	358	375	410	520	600	685	3,660	11,600	3,020	885	520
8	358	358	255	450	520	545	715	3,420	11,800	2,900	850	555
9	358	375	255	520	495	572	850	3,420	10,200	2,770	850	715
10	358	358	545	628	495	572	885	3,860	9,110	2,650	815	628
11	358	392	4,020	655	520	572	920	4,340	8,480	2,530	780	572
12	340	392	3,420	900	520	628	1,080	4,850	9,480	2,420	780	572
13	340	392	2,200	545	520	920	1,160	5,560	8,480	2,200	748	545
14	340	410	1,510	800	520	1,000	1,160	6,490	8,480	2,200	780	520
15	392	410	1,420	655	495	885	1,330	7,260	8,270	2,200	760	520
16	410	410	1,240	628	495	1,080	1,600	7,660	8,480	2,200	748	520
17	450	392	1,080	572	430	1,240	1,990	8,480	8,890	2,090	748	495
18	572	392	1,000	545	430	1,080	3,560	7,860	7,660	1,890	685	495
19	450	392	885	545	495	1,000	4,340	6,870	6,680	1,790	685	495
20	410	450	748	520	495	920	3,710	6,110	6,680	1,690	685	472
21	392	920	685	520	495	850	3,560	5,740	7,060	1,600	655	472
22	392	572	685	572	495	780	3,710	6,490	6,870	1,610	628	472
23	375	545	685	572	495	748	3,560	7,860	6,890	1,420	715	472
24	375	572	655	520	472	748	3,560	8,690	6,110	1,420	685	472
25	358	520	628	410	472	715	4,680	10,200	6,110	1,830	655	472
26	358	495	628	375	472	628	4,850	12,100	6,110	1,240	655	450
27	358	450	715	430	545	655	4,680	13,900	5,920	1,240	628	450
28	358	450	715	495	600	715	4,850	14,300	5,920	1,240	600	450
29	340	410	685	572	-	715	5,560	11,400	5,380	1,240	600	495
30	340	280	715	472	-	685	7,260	10,900	5,560	1,240	572	572
31	358	-	600	520	-	655	-	10,900	-	1,160	572	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	11,697	572	340	377	0.325	0.37	23,200
November.....	12,224	920	280	427	.368	.41	25,440
December.....	26,501	4,020	242	919	.792	.91	56,530
Calendar year 1937.....	430,737	7,060	-	1,180	1.02	13.78	954,300
January.....	16,112	655	392	520	.448	.52	31,960
February.....	14,141	600	430	505	.435	.45	28,050
March.....	23,275	1,240	545	751	.647	.75	46,170
April.....	74,223	7,260	600	2,474	2.13	2.58	147,200
May.....	231,570	14,300	3,420	7,470	6.44	7.42	459,300
June.....	255,910	12,300	5,580	8,550	7.35	8.20	507,600
July.....	73,030	5,020	1,160	2,356	2.03	2.34	144,900
August.....	28,704	1,080	572	785	.669	.75	47,020
September.....	15,911	715	450	530	.457	.51	31,560
Water year 1937-38.....	780,898	14,300	242	2,139	1.84	25.02	1,549,000

East Fork of South Fork of Salmon River at Stibnite, Idaho

Location.- Water-stage recorder, lat. 41°54', long. 115°19', in about sec. 14, T. 18 N., R. 9 E., 30 feet downstream from Meadow Creek, half a mile northeast of Stibnite post office, and 10½ miles upstream from Johnson Creek.

Drainage area.- 19.5 square miles.

Records available.- June 1928 to September 1938.

Average discharge.- 10 years, 23.7 second-feet.

Extremes.- Maximum discharge during year, 356 second-feet June 6 (gage height, 3.97 feet); minimum discharge not determined, probably occurred during winter.
1928-38: Maximum discharge recorded, 369 second-feet June 14, 1935 (gage height, 4.49 feet); minimum discharge, 2 second-feet Oct. 29, 1936 (gage height, 1.71 feet).

Remarks.- Records good except those for periods of ice effect or missing gage heights, Nov. 27, Nov. 29 to Apr. 4, Apr. 6-12, which were computed on basis of weather records and records for other stations in South Fork of Salmon River Basin and are poor. Discharge Oct. 1-8, 12 interpolated. Slight regulation by storage reservoir (capacity about 700 acre-feet) on South Fork of Meadow Creek, and diversion from Meadow Creek of about a third of a second-foot for transporting mine tailings. Gage-height record furnished by Yellow Pine Co.

Rating table, Apr. 13 to Sept. 30, 1938 (gage height, in feet, and discharge, in second-feet)

1.9	5.7	2.7	56.5	3.8	243
2.1	12.2	3.0	92.5	4.0	262
2.3	22.5	3.3	136		
2.5	37.5	3.6	187		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	6					6	89	157	87	20	14
2	8	6					6	72	178	81	20	14
3	8	6					6	58	192	76	21	13
4	8	7					8	46	205	70	21	13
5	8	7					*11	39	220	68	21	12
6	8	6					11	35	230	63	21	10
7	8	6					11	33	238	62	21	11
8	8	6					11	32	222	66	21	14
9	8	6					12	34	189	62	22	13
10	8	6					13	36	171	56	16	13
11	8	6					14	38	164	52	16	12
12	8	6					15	43	164	52	15	11
13	7	6					16	52	160	52	15	11
14	8	6					16	64	157	54	17	11
15	8	6					17	75	154	54	15	11
16	8	6					18	91	159	45	14	11
17	8	6					19	95	162	45	14	11
18	8	6					30	81	141	48	14	12
19	6	6					34	70	130	43	16	11
20	6	8					31	66	128	38	15	11
21	6	8					32	68	147	33	14	10
22	6	7					35	80	134	32	15	10
23	6	7					29	97	124	32	16	10
24	6	6					27	115	118	27	18	10
25	6	7					33	136	108	27	18	10
26	6	7					33	157	100	28	15	10
27	6	6					34	174	102	30	13	10
28	6	6					37	173	95	30	13	10
29	6	6					48	157	89	25	14	11
30	6	6					70	152	87	21	14	11
31	6	-					-	154	-	20	14	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	221	8	6	7.1	438
November.....	189	8	5	6.3	375
December.....	372	-	-	12	738
Calendar year 1937.....	6,531	99	-	17.9	12,950
January.....	186	-	-	6	369
February.....	168	-	-	6	333
March.....	186	-	-	6	369
April.....	681	70	6	22.7	1,350
May.....	2,613	174	32	84.3	5,180
June.....	4,115	230	87	154	9,150
July.....	1,479	87	20	47.7	2,930
August.....	519	22	13	16.7	1,030
September.....	341	14	10	11.4	676
Water year 1937-38.....	11,570	230	-	31.7	22,940

*Determined from staff-gage reading.

East Fork of South Fork of Salmon River near Stibnite, Idaho

Location.- Staff gage, lat. 44°56', long. 115°20', in sec. 34, T. 19 N., R. 9 E., 200 feet downstream from Sugar Creek, 3 miles north of Stibnite post office, and 8½ miles upstream from Johnson Creek.

Drainage area.- 43.5 square miles.

Records available.- June 1928 to September 1938.

Average discharge.- 10 years, 51.6 second-feet.

Extremes.- Maximum discharge during year, 520 second-feet (estimated) June 6; minimum not determined, occurred during period when gage was not read.
1928-39: Maximum discharge observed, 793 second-feet June 15, 1933 (gage height, 3.51 feet); minimum observed, 10 second-feet Apr. 7, 1929 and Apr. 7, 1936.
A lesser discharge may have occurred during periods of ice effect.

Remarks.- Records fair except those for December to March, which are poor. Discharge for periods of missing or doubtful gage heights, Oct. 1 to Apr. 3, Apr. 18-20, May 1-14, 16-27, May 29 to June 4, 6, 7, 9, 10, June 21 to July 4, July 13-15, computed on basis of weather records and records for other stations in Salmon River Basin. Some regulation by Yellow Pine Co.'s power plant above station and in small storage reservoir (capacity about 700 acre-feet) on South Fork of Meadow Creek. Gage read once daily. Gage-height record furnished by Yellow Pine Co.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			-				12	230	400	173	48	28
2			-				12	190	450	163	46	28
3			-				12	150	470	152	46	27
4			-				13	125	490	147	46	27
5			-				15	110	505	127	46	27
6			-				15	105	520	121	46	27
7			-				15	100	510	122	44	27
8			-				15	100	485	113	44	27
9			-				14	105	425	115	44	26
10			-				16	110	370	109	36	26
11			-				17	120	318	103	35	25
12			-				18	140	301	103	35	25
13	16		-				20	160	285	107	35	23
14			-				23	190	301	107	35	22
15			40				28	238	285	107	35	22
16			23				32	250	301	87	33	21
17			22				38	270	301	81	33	21
18			19				60	250	254	81	33	21
19			12				80	190	238	73	33	21
20			-				80	170	224	73	32	21
21			-				84	170	285	72	32	21
22			-				90	190	250	72	32	21
23			-				96	230	240	67	32	21
24			-				99	290	230	63	32	20
25			-				99	340	220	67	30	20
26			-				102	420	210	55	30	20
27			-				116	470	200	55	30	20
28			-				127	485	190	53	30	21
29			-				157	410	180	53	28	21
30			-				170	380	170	57	28	21
31			-				-	380	-	49	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	465	-	-	15	0.353	0.41	922
November.....	420	-	-	14	.329	.37	833
December.....	930	-	-	30	.708	.81	1,840
Calendar year 1937.....	13,311	188	-	36.5	.859	11.64	26,400
January.....	372	-	-	12	.282	.33	738
February.....	336	-	-	12	.282	.29	666
March.....	372	-	-	12	.282	.33	738
April.....	1,675	170	12	55.8	1.31	1.46	3,320
May.....	7,048	485	100	227	5.34	6.16	13,980
June.....	9,608	520	170	320	7.53	8.40	19,060
July.....	2,879	170	42	92.9	2.19	2.52	5,710
August.....	1,117	48	28	36.0	.847	.98	2,220
September.....	698	28	20	23.3	.548	.61	1,380
Water year 1937-38.....	25,920	520	-	71.0	1.67	22.67	51,410

East Fork of South Fork of Salmon River near Yellow Pine, Idaho

Location.- Water-stage recorder, lat. 44°58', long. 115°27', in NE¼ sec. 27, T. 19 N., R. 8 E., 200 feet upstream from Forest Service highway bridge, 1½ miles east of Yellow Pine, 1½ miles upstream from Quartz Creek, 2 miles downstream from Profile Creek, and 2.8 miles upstream from Johnson Creek.

Drainage area.- 104 square miles.

Records available.- August 1928 to September 1936.

Average discharge.- 10 years, 136 second-feet.

Extremes.- Maximum discharge during year, 1,450 second-feet June 5 (gage height, 4.30 feet); minimum not determined, probably occurred during period of ice effect.
1928-38: Maximum discharge, 2,050 second-feet June 14, 1933 (gage height, 5.26 feet); minimum discharge recorded, 25 second-feet Oct. 23, 1935. A smaller discharge may have occurred during periods of ice effect.

Remarks.- Records good except those for period of ice effect or missing gage heights, Nov. 30 to Apr. 29, which were computed on basis of records for other stations in Salmon River Basin and are fair. Slight regulation by Yellow Pine Co.'s power plant on this stream and small auxiliary reservoir on South Fork of Meadow Creek.

Rating table, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

1.2	27	2.4	263	3.6	845
1.5	55	2.7	365	3.9	1,085
1.8	101	3.0	491	4.2	1,350
2.1	173	3.3	650	4.3	1,450

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	40						868	968	417	118	74
2	44	40						540	1,120	388	116	72
3	45	40						429	1,220	377	114	71
4	46	40						369	1,220	368	112	70
5	45	40						325	1,300	343	107	70
6	45	40						295	1,300	325	105	67
7	45	40						279	1,300	309	103	67
8	45	40						265	1,220	302	101	60
9	45	40						259	1,030	289	103	78
10	45	41						292	860	275	99	72
11	44	40						302	803	257	94	70
12	43	41						325	810	244	94	68
13	42	40						384	810	229	92	67
14	42	41						464	796	226	94	64
15	48	41						551	768	226	94	64
16	45	40						610	775	217	88	64
17	55	41						655	796	199	87	64
18	50	39						563	704	190	85	63
19	43	40						478	622	182	85	64
20	42	50						433	604	173	83	65
21	41	50						417	686	165	82	63
22	40	43						460	633	157	80	62
23	40	43						556	577	151	87	62
24	40	43						704	556	146	85	60
25	40	42						831	535	144	85	60
26	39	41						1,020	511	139	80	60
27	39	40						1,140	501	135	76	59
28	39	42						1,170	478	134	74	59
29	39	38						1,000	442	144	74	64
30	39	30						928	421	129	72	67
31	41	-						936	-	120	74	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-foot
October.....	1,540	55	39	43.2	0.415	0.48	2,660
November.....	1,226	50	30	40.9	.373	.44	2,430
December.....	2,480	-	-	80	.739	.89	4,920
Calendar year 1937.....	37,120	534	-	102	.931	13.27	73,630
January.....	1,550	-	-	50	.491	.56	3,070
February.....	1,260	-	-	45	.433	.45	2,500
March.....	1,395	-	-	45	.433	.50	2,770
April.....	4,331	501	-	144	1.33	1.54	8,590
May.....	17,665	1,170	266	570	5.43	6.32	35,040
June.....	24,366	1,300	421	812	7.81	8.71	48,330
July.....	7,090	417	120	229	2.27	2.54	14,060
August.....	2,841	118	72	91.6	.831	1.02	5,640
September.....	1,988	80	59	66.3	.638	.71	3,940
Water year 1937-38.....	67,532	1,300	-	185	1.73	24.15	134,000

Peak discharge.- May 16 (10:30 p.m.) 686 sec.-ft.; May 28 (1:30 a.m.) 1,300 sec.-ft.; June 5 (9:30 p.m.) 1,450 sec.-ft.; June 21 (4:30 p.m.) 803 sec.-ft.

Johnson Creek at Yellow Pine, Idaho

Location.- Water-stage recorder, lat. 44°58', long. 115°30', in NE¼ sec. 29, T. 19 N., R. 5 E., 700 feet upstream from mouth and a quarter of a mile southwest of Yellow Pine post office.

Drainage area.- 213 square miles.

Records available.- August 1928 to September 1938.

Average discharge.- 10 years, 264 second-feet.

Extremes.- Maximum discharge during year, 5,530 second-feet May 28 (gage height, 6.02 feet); minimum, 24 second-feet Nov. 30 (gage height, 0.70 foot).

1928-38: Maximum discharge, 5,150 second-feet June 9, 1933 (gage height, 7.62 feet); minimum, 22 second-feet Nov. 30, 1933; minimum gage height, that of Nov. 30, 1937.

Remarks.- Records good. Discharge for Apr. 9 interpolated. During late fall of 1936, the Bureau of Reclamation cut an intermountain diversion to carry a small flow of water from a tributary of Johnson Creek to Deadwood River Basin for supplemental storage in Deadwood Reservoir. Measurement of July 17 indicated flow in diversion of 9.03 second-feet.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

0.7	24	2.8	665	4.9	2,270
1.0	51	3.1	840	5.2	2,590
1.3	99	3.4	1,035	5.5	2,910
1.6	167	3.7	1,245	5.8	3,270
1.9	260	4.0	1,470	6.0	3,520
2.2	375	4.3	1,710		
2.5	510	4.6	1,980		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	55	44	84	84	82	85	1,550	2,520	970	184	102
2	54	54	54	102	82	82	85	1,320	2,740	872	179	98
3	54	52	72	82	80	84	93	1,070	2,860	872	176	93
4	55	49	59	77	78	78	91	938	2,860	810	170	93
5	56	50	55	79	76	82	91	810	2,910	750	162	89
6	55	56	59	78	78	82	89	720	3,030	670	157	89
7	55	50	58	82	77	80	89	660	2,910	605	151	89
8	55	55	40	82	72	78	96	826	2,740	570	149	104
9	55	54	51	91	70	82	100	848	2,270	530	146	116
10	54	50	70	95	74	80	104	774	1,890	491	139	104
11	54	59	379	94	75	80	108	810	1,800	458	132	96
12	54	58	496	89	75	84	116	938	1,800	427	130	94
13	52	59	296	87	74	85	120	1,210	1,710	405	127	91
14	51	63	224	93	74	93	125	1,400	1,710	388	127	89
15	56	60	218	96	74	91	134	1,590	1,630	401	127	85
16	56	60	179	93	75	102	169	1,710	1,710	418	125	94
17	67	61	154	89	87	96	190	1,840	1,760	371	120	90
18	77	61	151	87	74	93	334	1,630	1,510	346	116	78
19	67	61	134	85	82	93	463	1,360	1,320	323	114	77
20	60	78	108	92	77	89	454	1,210	1,240	300	112	77
21	58	110	104	85	78	85	477	1,320	1,320	285	110	75
22	56	84	114	87	78	84	515	1,550	1,280	267	108	75
23	56	85	110	82	77	89	501	1,940	1,180	257	120	75
24	55	82	108	75	77	89	530	2,120	1,180	247	114	75
25	54	74	104	66	77	85	610	2,370	1,100	234	108	72
26	52	67	100	69	80	84	638	2,800	1,070	224	108	72
27	52	64	110	75	80	85	654	3,030	1,040	218	104	72
28	52	69	110	85	82	93	768	3,030	1,070	224	100	72
29	51	55	102	84	-	85	938	2,420	905	227	98	77
30	51	34	106	77	-	89	1,180	2,320	1,040	205	93	91
31	52	-	93	82	-	85	-	2,420	-	193	93	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	1,728	77	51	55.7	0.262	0.30	3,430
November.....	1,879	110	34	62.6	.294	.33	3,730
December.....	4,062	496	40	131	.615	.71	8,060
Calendar year 1937.....	70,105	1,600	34	217	1.02	13.82	156,900
January.....	2,614	102	66	84.3	.396	.46	5,180
February.....	2,149	84	67	76.8	.561	.58	4,260
March.....	2,869	102	78	86.1	.404	.47	5,290
April.....	9,937	1,180	85	331	1.55	1.73	19,710
May.....	48,034	3,030	626	1,549	7.27	8.38	95,270
June.....	54,105	3,030	905	1,804	8.47	9.45	107,300
July.....	13,558	970	193	437	2.05	2.36	26,890
August.....	3,999	184	93	129	.806	.70	7,930
September.....	2,584	116	72	86.1	.404	.45	5,130
Water year 1937-38.....	147,318	3,030	34	404	1.90	25.72	292,200

Peak discharge.- May 17 (1 a.m.) 2,070 sec.-ft.; May 28 (1-2 a.m.) 3,520 sec.-ft.; June 5 (10 p.m.) 3,390 sec.-ft.; June 16 (10 p.m.) 1,940 sec.-ft.

Mud Creek near Tamarack, Idaho

Location.- Staff gage, lat. 45°00', long. 116°21', in sec. 9, T. 19 N., R. 1 E., 0.5 mile upstream from Little Mud Creek, 5 miles upstream from confluence with Little Salmon River, and 3½ miles northeast of Tamarack.

Drainage area.- 15.8 square miles.

Records available.- April 1937 to September 1938 (incomplete).

Extremes.- Maximum discharge, about 300 second-feet, which probably occurred May 1 (gage height, 3.54 feet, from high-water mark observed May 3); minimum not determined.
1937-38: Maximum discharge, that of May 1, 1938; minimum, probably less than half a second-foot during late summer of 1937.

Remarks.- Records good except those for Mar. 16-19, Apr. 16-18, 24-27, 29, May 1, 2, (computed on basis of reported high-water marks and records for stations in Weiser River drainage), and those interpolated, which are fair. No diversions or regulation. Bureau of Reclamation furnished results of 19 discharge measurements and gage-height record.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	†26	275	†28			
2						-	†26	220	†26			
3						-	26	*183	†23			*1.6
4						-	†29	†150	20			
5			*2.0			-	†32	†136	†18			
6						-	†36	†122	†17			
7						-	†39	†109	†16			
8	*0.8	*0.8			*2.2	-	*42	†96	*14			
9						-	†51	*82	†13		*2.0	
10						-	†59	†83	†13			
11						-		*68	†84	†12		
12						-		†84	†85	†11		
13						*63	†100	†26	†11			
14						†60	†115	†27	*10			
15						*57	†131	†28	†10			
16						61	160	89	†10	*3.5		
17						65	190	†51	†9.9			
18						62	225	†73	9.9			
19						59	*227	†65	†9.3			
20						*56	†228	†57	†8.6			
21						†48	†229	*49	†8.0			
22						*40	†230	†49	†7.4			
23						†36	231	†49	†6.7			
24						†33	250	49	*6.1			
25						*29	240	†46	†6.2			
26						†29	230	†44	†6.3			
27						†28	220	†42	6.4			
28						†28	*209	†39	†6.0			
29						†27	250	†36	†5.6			
30						27	*261	*34	5.2			
31						†27	-	†31	-			
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....						-	-	-	-	-		
February.....						-	-	-	-	-		
March 1-31.....						835	65	27	43.9	1,660		
April.....						4,244	261	26	141	8,420		
May.....						2,699	275	31	87.1	5,350		
June.....						353.6	28	5.2	11.8	701		
July.....						-	-	-	-	-		
August.....						-	-	-	-	-		
September.....						-	-	-	-	-		
Water year												

†Interpolated.

*Discharge measurement.

SALMON RIVER BASIN

Boulder Creek near Tamarack, Idaho

Location.- Water-stage recorder, lat. 45°05', long. 116°27', in SW $\frac{1}{4}$ sec. 10, T. 20 N., R. 1 W., 350 feet upstream from transmountain diversion to Weiser River basin and 8 miles northwest of Tamarack.

Drainage area.- 5.9 square miles.

Records available.- April to September 1938.

Extremes.- Maximum discharge during period April to September, 226 second-feet May 27 (gage height, 2.95 feet); minimum daily discharge, 1.3 second-foot Sept. 27.

Remarks.- Records good except those for May 13 to June 27, which are fair. No regulation. Gage-height record and results of five discharge measurements furnished by Bureau of Reclamation.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Apr. 22 to May 27				May 28 to Sept. 30			
1.50	27	2.50	150	0.60	0.7	1.60	45
1.70	44	2.70	184	.80	3.2	1.80	62
1.90	65	2.90	218	1.00	8.2	2.00	83
2.10	90	3.00	235	1.20	17	2.20	108
2.30	119			1.40	30	2.40	136

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		-					-	145	151	16	3.4	2.1
2		-					-	116	157	15	3.4	1.9
3		-					-	84	154	15	3.4	1.8
4		-					-	62	148	14	3.2	1.8
5		-					-	54	145	13	3.0	1.8
6		*0.8					-	48	142	12	3.0	1.8
7		-					-	43	123	11	2.9	1.8
8		-					-	41	104	9.8	2.9	2.6
9		-					-	45	80	9.0	2.9	2.1
10		-					-	50	65	8.6	2.7	1.9
11		-					-	53	58	7.9	2.7	1.8
12		-					-	61	57	7.6	2.7	1.8
13		-					-	72	54	7.1	2.7	1.6
14		-					-	76	51	9.8	2.7	1.6
15		-					-	84	49	9.0	2.7	1.5
16		-					-	108	49	7.9	2.6	1.5
17		-					-	100	47	6.8	2.6	1.5
18		-					-	73	41	6.2	2.4	1.5
19		-					-	56	37	5.7	2.4	1.5
20		-					-	52	36	5.4	2.4	1.5
21		-					-	57	34	5.2	2.1	1.4
22		-					36	69	32	5.0	2.1	1.4
23		-					37	81	31	4.7	2.4	1.4
24		-					40	97	29	4.5	2.1	1.4
25		-					46	122	27	4.3	2.2	1.4
26		*1.5					46	160	25	4.3	2.2	1.4
27		-					45	187	24	4.3	2.1	1.3
28		-					50	182	22	4.5	1.9	1.4
29		-					65	176	19	4.5	1.9	1.5
30		-					108	162	17	4.1	1.8	1.4
31		-					-	154	-	3.6	1.8	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acre-feet		
October.....												
November.....												
December.....												
Calendar year												
January.....				-	-	-	-	-	-	-	-	-
February.....				-	-	-	-	-	-	-	-	-
March.....				-	-	-	-	-	-	-	-	-
April 22-30.....				473	108	36	52.6	8.92	2.99		938	
May.....				2,870	187	41	92.6	15.7	18.1		5,690	
June.....				2,008	157	17	66.9	11.3	12.6		3,980	
July.....				245.8	16	3.6	7.93	1.34	1.54		488	
August.....				79.3	3.4	1.8	2.56	.43	.50		157	
September.....				49.4	2.6	1.3	1.65	.28	.31		98	
The period.....												11,350

*Discharge measurement.

Grande Ronde River at La Grande, Oreg.

Location.- Water-stage recorder, lat. 45°21', long. 118°09', in sec. 35, T. 2 S., R. 37 E., 2½ miles northwest of La Grande. Zero of gage is 2,831.25 feet above mean sea level (general adjustment of 1929).

Drainage area.- 678 square miles.

Records available.- February 1918 to June 1923 and October 1925 to September 1938. November 1903 to September 1915, at Hilgard, 4 miles upstream; records equivalent.

Average discharge.- 24 years (1905-9, 1910-11, 1912-15, 1918-20, 1921-22, 1925-38), 347 second-feet.

Extremes.- Maximum discharge during year, 2,410 second-feet Apr. 18 (gage height, 5.12 feet); minimum, 11 second-feet Aug. 31 (gage height, 1.22 feet).
1903-15, 1918-23, 1925-38: Maximum discharge, 8,880 second-feet Mar. 18, 1932 (gage height, 8.90 feet); minimum, 4 second-feet Sept. 14, 16-20, 1922.

Remarks.- Records good except those for period of ice effect, Jan. 5-8, and day of no gage-height record, June 5, which were computed on basis of weather records and unpublished records for Grande Ronde River at lower reservoir site, near La Grande, and are poor.

Rating tables, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Feb. 23				Feb. 24 to Sept. 30			
1.2	9	2.0	125	1.3	17	3.0	560
1.4	25	2.3	210	1.6	54	3.5	845
1.6	49	2.6	315	1.9	116	4.0	1,230
1.8	82			2.2	212	4.5	1,710
				2.5	330	5.0	2,290

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	34	61	88	150	666	410	1,510	540	111	23	14
2	19	32	61	120	142	725	428	1,280	500	119	23	14
3	22	32	88	104	138	648	456	1,020	451	111	22	14
4	28	30	77	69	120	576	550	910	420	111	20	16
5	28	28	62	75	128	555	725	785	400	122	19	16
6	27	32	49	85	132	540	785	696	362	111	17	16
7	26	33	66	95	126	510	785	626	326	99	16	19
8	25	36	54	95	128	495	878	576	310	88	16	21
9	23	36	48	116	92	500	945	555	310	82	16	25
10	21	35	60	94	140	500	945	571	262	76	16	26
11	20	36	114	84	148	545	980	632	239	68	16	24
12	19	37	233	84	162	703	1,060	708	235	65	16	21
13	19	39	295	77	148	845	980	735	231	59	17	20
14	19	37	247	84	135	765	945	816	205	56	20	19
15	20	39	244	118	132	755	945	845	190	56	26	17
16	25	39	256	118	130	845	1,100	815	183	58	27	16
17	30	37	311	102	96	755	1,560	785	220	52	24	16
18	71	36	410	100	140	725	2,230	755	266	56	22	16
19	54	42	307	102	130	845	2,170	815	274	50	20	16
20	40	58	240	92	109	725	1,760	755	212	44	19	16
21	35	92	204	118	123	604	1,560	725	187	40	17	16
22	34	77	174	370	132	550	1,480	708	216	37	16	16
23	30	66	156	395	186	540	1,410	725	250	35	16	16
24	29	71	148	287	326	525	1,410	725	223	37	15	16
25	28	82	132	231	374	530	1,460	755	216	33	16	17
26	27	94	162	210	410	515	1,360	785	176	31	15	17
27	28	92	165	186	500	576	1,230	878	154	28	15	17
28	27	96	145	192	576	625	1,180	845	141	26	16	17
29	26	111	130	180	-	571	1,230	725	136	26	15	18
30	27	88	130	150	-	520	1,410	664	116	26	14	21
31	30	-	107	145	-	495	-	588	-	25	12	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	872	71	15	28.1	1,730
November.....	1,599	111	28	53.3	3,170
December.....	4,988	410	48	161	9,890
Calendar year 1937.....	1,07,793	2,860	11	295	213,800
January.....	4,366	395	69	141	8,660
February.....	5,258	576	92	189	10,420
March.....	19,315	845	495	623	35,310
April.....	34,347	2,230	410	1,145	68,130
May.....	24,364	1,510	555	786	48,330
June.....	7,951	540	116	265	15,770
July.....	1,938	122	25	62.5	3,840
August.....	560	27	12	18.1	1,110
September.....	533	26	14	17.8	1,060
Water year 1937-38.....	106,088	2,230	12	291	210,400

Peak discharge.- Jan. 22 (6 p.m.) 582 sec.-ft.; Apr. 18 (10 p.m.) 2,410 sec.-ft.

Grande Ronde River at Rondowa, Oreg.

Location.- Water-stage recorder, lat. 45°44', long. 117°47', in NW¼ sec. 23, T. 3 N., R. 40 E., 500 feet downstream from Wallowa River, at Rondowa. Zero of gage is about 2,281 feet above mean sea level, by railroad company profile and Geological Survey river profile.

Drainage area.- 2,555 square miles.

Records available.- October 1926 to September 1938.

Average discharge.- 12 years, 1,853 second-feet.

Extremes.- Maximum discharge during year, 9,840 second-feet May 28 (gage height, 6.18 feet); minimum, 305 second-feet Oct. 1 (gage height, 0.87 foot).
1926-38: Maximum discharge, 22,400 second-feet Mar. 18, 1932 (gage height, 9.30 feet) from rating curve extended above 10,000 second-feet; minimum, 225 second-feet Dec. 19, 1935; minimum daily discharge, 230 second-feet Jan. 8, 1937.

Remarks.- Records good. Many diversions for irrigation above station. Flow regulated by storage in Wallowa and Minam Lakes.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Dec. 11					Dec. 12 to Sept. 30				
0.9	316	1.9	1,080	1.1	415	2.2	1,390	4.0	4,110
1.1	422	2.2	1,390	1.3	550	2.6	1,870	4.5	5,060
1.3	560	2.6	1,870	1.6	790	3.0	2,430	5.0	6,140
1.6	805			1.9	1,070	3.5	3,230	6.0	9,140

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	308	422	746	990	1,030	2,070	2,000	7,370	5,910	2,580	641	409
2	354	435	720	960	1,050	2,430	1,940	6,390	5,910	2,280	618	403
3	524	435	712	841	1,050	2,660	2,000	5,690	5,910	2,210	610	415
4	468	429	672	748	1,010	2,500	2,430	5,260	5,690	2,140	595	422
5	442	429	632	739	960	2,430	2,820	4,760	5,800	1,940	580	403
6	416	435	640	697	970	2,430	2,980	4,290	6,020	1,870	543	415
7	410	435	616	689	1,000	2,280	2,980	3,330	6,020	1,800	536	428
8	405	468	560	722	1,000	2,140	3,060	3,660	5,690	1,870	550	572
9	399	495	502	748	932	2,140	3,140	3,480	4,670	1,940	543	681
10	387	468	696	764	1,090	2,140	3,230	3,400	3,930	1,870	522	588
11	381	462	1,500	764	1,140	2,140	3,230	3,660	3,750	1,740	508	543
12	381	481	2,280	782	1,220	2,580	3,480	3,660	3,750	1,560	508	515
13	376	475	1,870	790	1,210	2,980	3,480	4,110	3,930	1,440	516	494
14	376	498	1,680	1,030	1,160	3,060	3,320	4,290	4,020	1,390	588	467
15	381	495	1,740	1,400	1,110	3,400	3,320	4,670	4,020	1,480	618	460
16	410	481	1,680	1,300	1,060	3,330	3,570	5,060	4,290	1,500	572	454
17	517	475	1,800	1,240	960	3,570	4,580	5,160	4,480	1,370	550	441
18	584	481	1,800	1,190	932	3,400	7,680	4,760	3,750	1,270	558	434
19	517	510	1,740	1,140	960	4,200	7,990	4,580	3,140	1,180	558	428
20	524	566	1,660	1,070	904	3,570	6,790	4,380	2,900	1,050	536	428
21	510	850	1,400	1,100	942	3,140	6,390	4,200	3,230	942	515	415
22	502	737	1,270	1,870	980	2,740	6,140	4,290	3,480	875	601	397
23	481	746	1,170	1,800	1,080	2,580	5,910	4,580	3,570	850	487	391
24	468	796	1,050	1,740	1,280	2,580	6,020	5,160	3,660	790	467	373
25	462	823	913	1,470	1,430	2,580	6,140	6,020	3,750	756	487	373
26	448	985	913	1,300	1,560	2,500	5,910	7,080	3,840	722	508	373
27	442	886	1,200	1,170	1,680	2,500	5,690	8,150	3,400	681	494	379
28	435	985	1,320	1,130	1,870	2,660	5,580	9,140	3,140	673	480	385
29	429	922	1,210	1,090	-	2,680	5,910	7,830	3,060	673	474	379
30	428	814	1,180	1,030	-	2,360	6,650	7,080	2,820	689	448	385
31	448	-	1,100	990	-	2,210	-	6,260	-	665	415	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	13,614	584	308	439	27,000
November.....	17,999	985	422	600	35,700
December.....	36,872	2,280	502	1,189	75,130
Calendar year 1937.....	539,491	5,910	230	1,478	1,070,000
January.....	33,294	1,870	689	1,074	66,040
February.....	31,570	1,870	904	1,128	62,620
March.....	84,480	4,200	2,070	2,725	167,600
April.....	134,360	7,990	1,940	4,479	266,500
May.....	162,350	9,140	3,400	5,237	322,000
June.....	127,530	6,020	2,820	4,251	253,000
July.....	42,795	2,580	665	1,381	84,880
August.....	16,525	641	415	533	32,780
September.....	13,250	681	373	442	26,280
Water year 1937-38.....	714,640	9,140	308	1,958	1,418,000

Peak discharge.- Mar. 19 (3 a.m.) 4,590 sec.-ft.; Apr. 18 (8 p.m.) 9,140 sec.-ft.; May 28 (4 a.m. to 7 a.m.) 9,840 sec.-ft.

Catherine Creek near Union, Oreg.

Location.- Staff gage, lat. 45°09', long. 117°47', in SW¹/₄ sec. 2, T. 5 S., R. 40 E., 6 miles southwest of Union.

Drainage area.- 105 square miles.

Records available.- May 1906 to May 1907 (gage heights only), August 1911 to December 1912, March to September 1915, February 1918 to August 1919, and October 1925 to September 1938.

Average discharge.- 15 years (1911-12, 1918-19, 1925-38), 117 second-feet.

Extremes.- Maximum discharge during year, 1,100 second-feet Apr. 30 (gage height, 3.30 feet, from graph based on gage readings); minimum discharge observed, 20 second-feet Sept. 28, 29 (gage height, 0.51 foot).

1906-7, 1911-12, 1915, 1918-19, 1925-38: Maximum discharge observed, 1,240 second-feet May 21, 1912, and June 3 or 4, 1933; minimum observed, 4 second-feet Nov. 28, 27, 1930.

Remarks.- Records good except those for periods of ice effect, Dec. 5, 6, 24, 28, Jan. 1-9, 24-28, Feb. 17, 18, which were estimated on basis of weather records and observer's notes and are poor. A few small diversions for irrigation above station. Beginning in 1937 some water diverted into Big Creek in Powder River Basin.

Rating tables, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Aug. 2 to Sept. 30)

Oct. 1 to Dec. 11

Dec. 12 to Sept. 30

0.4	15	0.5	21	1.6	266
.7	38	.6	31	1.9	377
1.0	81	.8	57	2.2	505
1.3	147	1.0	96	2.5	655
		1.3	173	3.0	920

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	24	48	43	47	130	96	865	605	154	51	22
2	34	24	42	42	47	149	106	655	605	154	49	23
3	46	24	39	39	46	141	101	605	630	162	46	21
4	38	24	37	38	46	146	133	460	555	141	41	23
5	26	24	36	37	43	130	162	417	605	120	38	23
6	24	24	35	39	46	115	157	358	555	115	39	23
7	24	24	34	42	46	106	165	320	505	106	38	25
8	23	30	34	43	47	98	188	301	460	96	37	43
9	23	30	45	42	49	96	202	320	417	101	36	33
10	22	28	51	41	54	89	202	358	358	96	36	28
11	22	29	85	38	57	92	202	397	338	92	35	24
12	22	28	218	38	71	94	233	462	320	87	35	23
13	22	28	165	39	59	188	218	460	338	74	35	22
14	22	30	166	41	57	170	218	505	320	74	35	24
15	24	28	146	42	54	173	233	605	320	78	42	23
16	25	28	151	41	53	218	284	630	320	74	36	22
17	46	31	141	39	52	202	460	630	320	76	33	21
18	32	28	113	39	51	188	655	555	266	69	37	21
19	29	34	113	38	51	170	580	482	250	66	36	21
20	27	67	101	39	47	149	530	397	250	60	32	22
21	27	61	81	41	44	133	505	438	233	60	31	21
22	26	49	74	49	46	123	555	482	233	64	29	21
23	25	48	57	36	46	118	530	550	233	64	28	22
24	24	49	55	35	57	113	530	605	218	59	28	23
25	24	48	56	37	64	106	555	655	233	57	28	21
26	24	50	57	41	76	106	530	705	202	56	29	21
27	24	48	58	43	76	115	580	920	188	56	27	21
28	23	57	56	44	106	118	555	755	173	53	27	20
29	24	50	53	44	-	120	655	705	168	62	26	20
30	24	43	51	43	-	115	920	630	162	56	26	23
31	25	-	44	42	-	106	-	580	-	53	25	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	822	46	22	26.5	1,630
November.....	1,090	67	24	36.3	2,160
December.....	2,441	218	34	78.7	4,840
Calendar year 1937.....	32,527	520	15	89.1	64,530
January.....	1,255	49	35	40.6	2,490
February.....	1,538	106	43	54.9	3,050
March.....	4,117	218	69	133	8,170
April.....	11,040	920	98	368	21,900
May.....	16,907	920	301	545	33,530
June.....	10,380	630	162	346	20,590
July.....	2,635	162	53	85	5,230
August.....	1,071	51	25	34.5	2,120
September.....	700	43	20	23.3	1,390
Water year 1937-38.....	53,996	920	20	148	107,100

East Fork of Wallowa River near Joseph, Oreg.

Location.- Staff gage, lat. 45°16', long. 117°13', in SW¼ sec. 29, T. 3 S., R. 45 E., a quarter of a mile upstream from mouth, 1 mile above Wallowa Lake, and 6 miles south of Joseph.

Drainage area.- 9.6 square miles.

Records available.- July 1924 to September 1938.

Average discharge.- 14 years, 11.9 second-feet.

Extremes.- Maximum discharge observed during year, 154 second-feet June 17 (gage height, 2.30 feet); possibly greater on July 2, when gage was not read; minimum observed, 0.4 second-foot Feb. 24, 25, 28, Mar. 3-5, 7, 10; possibly less at times during periods of ice effect.

1924-38: Maximum discharge, 300 second-feet (estimated), July 25, 1937 (gage height, 3.63 feet, from floodmark); minimum observed, 0.1 second-foot Dec. 7, 1929, Nov. 1, 6, 1935.

Remarks.- Records fair. Practically entire low-water flow diverted 1 mile upstream for power. Twice-daily gage readings furnished by Inland Power & Light Co.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.8	1.6	1.6	*1.4	1.5	0.8	1.2	21	75	159	34	9.2
2	8.2	2.6	3.6	*1.1	1.6	1.1	1.2	11	77	*160	27	9.2
3	6.6	1.3	1.5	*1.1	†2.2	1.0	.8	12	78	161	27	12
4	2.8	1.3	3.1	*1.1	1.6	1.0	1.3	12	73	84	23	12
5	2.2	1.6	1.8	*1.1	1.6	1.0	1.1	10	81	84	21	11
6	2.4	1.6	2.2	*1.1	2.4	.8	1.1	8.6	107	80	22	10
7	1.8	1.0	2.0	*1.0	*1.0	1.0	.7	8.2	96	74	21	12
8	1.8	1.6	*2.0	*1.0	*1.0	1.0	2.4	8.6	103	77	21	14
9	1.8	1.6	*2.0	*2.1	*1.2	.7	1.2	7.9	101	77	22	13
10	2.8	1.6	*4.0	1.2	2.2	1.0	1.1	8.6	96	77	19	12
11	1.6	1.8	12	*1.6	3.6	1.3	1.2	9.3	96	74	19	11
12	1.5	1.6	10	1.8	2.8	1.1	1.3	11	103	75	17	10
13	1.5	1.5	3.6	2.2	1.8	1.6	1.2	12	103	66	18	9.6
14	1.5	3.1	3.1	3.3	3.1	1.2	1.3	14	124	70	19	9.2
15	3.6	5.0	3.1	2.2	2.8	1.2	1.5	19	124	67	18	9.2
16	1.5	1.8	4.1	2.2	2.6	1.6	2.4	21	132	65	16	8.8
17	7.2	4.4	2.2	1.5	*1.5	1.0	4.7	20	154	66	16	8.4
18	3.3	4.4	1.8	2.2	1.0	*1.5	13	17	139	60	15	8.8
19	2.4	1.5	†5.5	2.9	*1.8	*1.3	10	21	110	61	14	8.0
20	2.6	6.6	1.9	*2.0	3.1	1.8	8.6	17	110	59	14	7.6
21	1.6	3.6	1.6	1.6	2.2	*1.0	7.9	16	110	55	14	9.2
22	1.6	1.6	*1.4	1.8	1.2	1.5	7.6	18	124	50	13	8.4
23	1.8	1.6	*1.4	2.6	1.2	*1.4	6.9	20	124	49	14	8.4
24	2.2	1.8	*1.4	1.0	.8	1.2	8.6	24	124	48	17	8.0
25	2.6	4.1	*1.4	*1.2	1.0	1.6	9.0	34	132	40	15	8.3
26	1.6	3.8	*2.0	*1.4	1.1	1.2	8.6	37	132	30	12	8.0
27	1.5	1.8	*1.6	*2.6	1.5	1.5	7.6	66	139	37	10	8.0
28	2.6	3.1	1.5	*2.2	1.0	1.3	7.6	61	139	36	12	8.3
29	1.6	.8	1.6	2.2	-	*1.1	9.0	62	139	36	10	8.7
30	1.5	2.2	2.4	2.2	-	*1.2	12	69	139	3	10	8.7
31	2.6	-	1.0	*1.8	-	1.2	-	74	-	3	10	-
Month						Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet		
October.....						81.1	8.2	1.5	2.62	161		
November.....						71.9	6.6	.8	2.40	143		
December.....						88.4	12	1.0	2.85	175		
Calendar year 1937.....						2,470.4	44	-	6.77	4,900		
January.....						54.7	3.3	1.0	1.76	108		
February.....						50.4	3.6	.8	1.80	100		
March.....						37.1	1.8	.7	1.20	74		
April.....						142.1	13	.7	4.74	282		
May.....						750.2	74	7.9	24.2	1,490		
June.....						3,384	154	73	113	6,710		
July.....						2,072	150	34	66.8	4,110		
August.....						540	34	10	17.4	1,070		
September.....						289.0	14	7.6	9.63	573		
Water year 1937-38.....						7,560.9	154	.7	20.7	15,000		

*Stage-discharge relation affected by ice; discharge computed on basis of weather records and records for Imnaha River at Imnaha.

†Gage height missing; discharge computed on basis of weather records and records for Imnaha River at Imnaha.

Wallowa Falls power-plant tailrace near Joseph, Oreg.

Location.- Staff gage, lat. 45°16', long. 117°13', in SE¼ sec. 29, T. 3 S., R. 45 E., a quarter of a mile upstream from point where tailrace discharges into West Fork of Wallowa River and 6 miles south of Joseph. Zero of gage is 4,624.79 feet above mean sea level (general adjustment of 1929).

Records available.- August 1924 to September 1938.

Average discharge.- 14 years, 7.28 second-feet.

Extremes.- Maximum discharge observed during year, 15 second-feet Oct. 9 (gage height, 0.94 foot); no flow at times.

1924-38: Maximum discharge, 17 second-feet Dec. 1, 8, 1930, Jan. 9, 10, 1931; no flow at times.

Remarks.- Records fair. Flow regulated by operation of impulse wheel in power house. Water diverted at dam on East Fork of Wallowa River into a conduit 1 mile above power house and discharged into West Fork a quarter of a mile downstream. Hourly gage readings furnished by Inland Power and Light Co.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.9	8.1	7.2	7.4	7.4	7.4	7.2	2.1	7.6	0	6.3	6.5
2	8.7	7.7	6.5	7.7	7.6	7.2	7.4	3.5	7.4	0	6.5	6.3
3	7.4	8.1	7.4	7.7	7.0	7.2	6.8	7.6	7.6	0	5.9	6.6
4	8.7	7.7	7.6	7.7	7.6	7.6	7.1	7.6	7.6	0	6.5	5.8
5	8.5	7.9	7.7	7.6	7.4	7.4	7.4	7.9	6.8	0	6.1	6.3
6	8.5	8.1	7.9	7.6	5.4	6.8	7.4	7.6	7.9	0	6.3	6.5
7	8.5	7.4	7.6	7.7	7.2	7.4	7.4	7.7	8.1	0	5.4	6.6
8	7.7	8.1	7.2	7.6	7.4	7.4	6.3	7.0	8.3	3.1	5.9	6.6
9	8.7	8.1	7.6	6.5	7.4	7.2	7.2	7.7	2.3	6.1	4.5	6.5
10	7.6	7.6	8.3	7.4	6.5	7.2	6.6	7.9	0	5.4	6.3	6.6
11	8.1	7.9	8.7	7.4	7.7	7.1	7.0	7.7	0	6.1	6.3	5.6
12	8.3	7.9	7.9	7.4	7.4	7.2	7.4	7.9	0	6.5	6.6	6.5
13	8.1	7.9	9.1	7.6	6.3	7.0	7.2	7.7	0	5.9	6.3	6.5
14	7.9	7.7	8.7	7.9	7.6	7.4	7.4	7.1	0	6.1	5.8	6.3
15	8.1	5.8	8.7	7.7	7.7	7.6	7.4	6.8	0	5.9	6.5	6.3
16	8.5	8.3	7.4	7.2	7.7	7.7	7.6	8.1	0	6.3	6.6	6.1
17	7.9	5.8	8.5	7.6	7.7	7.4	8.8	7.7	0	5.4	4.8	6.5
18	8.5	5.8	8.5	7.6	7.6	7.0	6.0	7.7	0	6.3	6.5	5.8
19	8.1	8.3	4.7	7.2	7.6	7.4	7.4	7.6	0	6.5	6.1	6.8
20	8.1	8.1	8.1	7.4	7.0	7.0	7.6	7.2	0	6.0	6.3	6.5
21	7.9	7.7	8.5	7.1	7.3	7.7	7.6	7.7	0	6.1	5.6	6.3
22	8.1	8.1	8.3	7.6	7.4	7.2	7.6	6.6	0	5.8	6.5	6.5
23	7.9	8.3	8.3	7.0	7.4	7.2	7.6	7.7	0	6.1	6.6	5.1
24	7.7	8.1	8.3	7.4	7.4	7.2	6.8	7.9	0	5.3	1.5	6.3
25	8.3	7.7	8.3	7.4	7.4	7.2	7.9	7.7	0	3.8	0	5.6
26	7.9	5.8	7.7	7.4	7.6	7.4	7.7	7.7	0	6.5	2.6	6.6
27	8.1	8.1	8.1	6.6	6.8	6.8	7.7	7.1	0	6.1	6.5	6.8
28	7.7	7.6	8.1	7.2	7.6	7.2	7.9	6.3	0	6.5	5.6	6.5
29	8.1	6.6	8.3	7.6	-	7.4	7.2	6.8	0	5.4	6.5	6.3
30	8.1	7.2	7.1	7.2	-	7.2	7.7	6.8	0	6.3	6.5	6.3
31	7.6	-	7.9	7.2	-	7.2	-	6.0	0	5.6	6.6	-
Month				Second-foot-days		Maximum		Minimum		Mean		Run-off in acre-feet
October.....				252.2		8.9		7.4		8.14		500
November.....				227.5		8.3		5.8		7.58		451
December.....				244.2		9.1		4.7		7.68		484
Calendar year 1937.....				2,800.0		9.7		0		7.67		5,550
January.....				229.6		7.9		6.5		7.41		455
February.....				204.1		7.7		5.4		7.29		405
March.....				225.3		7.7		6.8		7.27		447
April.....				218.3		7.9		6.0		7.23		433
May.....				220.4		8.1		2.1		7.11		437
June.....				63.6		8.3		0		2.12		126
July.....				139.1		6.5		0		4.49		276
August.....				176.0		6.6		0		5.68		349
September.....				189.3		6.8		5.1		6.31		375
Water year 1937-38.....				2,389.6		9.1		0		6.55		4,740

Hurricane Creek near Joseph, Oreg.

Location.- Water-stage recorder, lat. 45°20', long. 117°18', in NE¼ sec. 7, T. 3 S., R. 44 E., upstream from intake of Moonshine ditch and 3¼ miles southwest of Joseph.

Drainage area.- 31 square miles.

Records available.- April to September 1915, April 1924 to September 1938.

Average discharge.- 11 years (1927-38), 64.0 second-feet.

Extremes.- Maximum discharge during year, 515 second-feet May 27 (gage height, 2.98 feet); minimum, 3.4 second-feet Feb. 10 (gage height, 0.91 foot).
1915, 1924-38: Maximum discharge, 716 second-feet May 26, 1928 (gage height, 2.65 feet, former site and datum); minimum, that of Feb. 10, 1938.

Remarks.- Records good except those for periods of missing gage heights, July 18 to 29, Oct. 2, Oct. 6 to Nov. 9 (computed on basis of records for Lostine River near Joseph and Bear Creek near Wallawa), of which those for July 16-29 are fair and the others poor. No diversion above station.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used July 30 to Sept. 26)

Oct. 1 to Feb. 10

Feb. 11 to Sept. 30

0.9	3.0	1.2	15.0	2.0	121
1.0	6.5	1.4	23.5	2.2	180
1.2	17.3	1.6	42	2.4	261
1.4	27	1.8	73	2.6	332

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	26	25	19	25	19	19	17	174	332	282	93	43
2	25	24	19	25	19	19	18	152	350	267	88	52
3	25	23	18	23	18	19	18	141	346	244	82	48
4	25	23	17	23	19	19	19	127	359	223	80	43
5	24	24	17	22	19	19	18	116	382	223	80	41
6	24	24	17	23	17	19	18	108	391	227	75	41
7	23	23	17	23	17	18	18	103	401	244	73	41
8	23	24	14	24	18	19	19	100	368	263	70	41
9	23	24	15	23	17	18	20	100	324	251	68	40
10	23	23	22	23	9.0	18	20	105	298	244	68	41
11	23	23	57	22	16	18	20	108	303	235	66	40
12	23	22	45	22	16	19	21	116	315	225	64	39
13	22	22	35	22	17	19	21	138	324	221	61	38
14	22	22	34	25	17	19	21	152	346	229	58	38
15	23	22	35	24	17	19	21	174	354	229	58	36
16	24	22	33	23	18	20	24	187	387	225	55	36
17	60	22	32	23	19	19	39	183	346	210	53	36
18	45	21	30	22	20	19	118	168	286	200	52	35
19	35	21	30	22	20	19	95	155	263	190	50	35
20	30	29	30	22	20	19	91	143	274	180	49	35
21	29	28	31	21	20	19	95	141	311	165	49	35
22	28	26	32	22	19	18	98	155	307	155	49	35
23	26	25	29	20	19	18	86	190	303	147	49	35
24	25	24	26	20	19	19	93	256	328	140	48	35
25	25	25	25	20	18	18	100	311	346	135	49	34
26	25	23	25	20	18	18	95	341	354	125	48	33
27	24	22	25	19	18	18	93	401	328	120	46	31
28	23	22	27	19	18	18	100	420	324	115	46	30
29	23	20	29	19	-	17	127	396	319	117	45	31
30	24	19	27	19	-	17	158	359	315	108	43	32
31	26	-	26	19	-	18	-	336	-	95	42	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	827	60	22	26.7	0.861	0.99	1,640
November.....	696	29	19	23.2	.748	.83	1,380
December.....	838	57	14	27.0	.871	1.00	1,660
Calendar year 1937.....	19,016.6	303	7.0	52.1	1.68	22.80	37,710
January.....	679	25	19	21.9	.706	.81	1,350
February.....	501.0	20	9.0	17.9	.577	.60	994
March.....	575	20	17	18.5	.597	.69	1,140
April.....	1,701	158	17	56.7	1.83	2.04	3,370
May.....	6,055	420	100	195	6.29	7.25	12,010
June.....	9,984	401	263	333	10.7	11.94	19,800
July.....	6,030	282	96	195	6.29	7.25	11,960
August.....	1,867	93	42	59.9	1.93	2.22	3,680
September.....	1,130	52	30	37.7	1.22	1.36	2,240
Water year 1937-38.....	30,873.0	420	9.0	84.6	2.73	36.98	61,220

Peak discharge.- May 24 (9 p.m.) 307 sec.-ft.; May 25 (11 p.m.) 368 sec.-ft.; May 27 (6 p.m.) 515 sec.-ft.

Lostine River near Lostine, Oreg.

Location.- Water-stage recorder, lat. 45°26', long. 117°26', in NW¼ sec. 34, T. 1 S., R. 43 E., 3½ miles south of Lostine and 10 miles above mouth.

Records available.- August 1912 to March 1914, April to September 1915, July 1925 to September 1938.

Average discharge.- 11 years (1912-13, 1926-38), 175 second-feet.

Extremes.- Maximum discharge during year, 1,860 second-feet May 28 (gage height, 6.70 feet); minimum, 20 second-feet Oct. 1 (gage height, 0.57 foot).

1912-14, 1915, 1925-38: Maximum discharge, 2,540 second-feet May 27, 1913; minimum, 10 second-feet Nov. 23-30, 1936.

Remarks.- Records good except those for periods of missing gage heights, Oct. 6-10, Nov. 21 to Dec. 17, July 13-29, and periods of ice effect, Jan. 4-6, 28, Feb. 9 (all computed on basis of records for Hurricane Creek near Joseph and Bear Creek near Wallawa), of which those for July 13-29 are fair and the others poor. No large diversions above station. Flow regulated slightly by Minam Lake reservoir.

Rating tables, water year 1937-38 except periods of ice effect (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Nov. 20

Dec. 18 to Sept. 30

0.4	12	0.6	22	1.6	117	3.5	560
.6	22	.8	33	1.9	168	4.0	720
.9	43	1.0	48	2.2	222	5.0	1,080
1.2	70	1.2	67	2.5	282	6.0	1,530
1.5	103	1.4	90	3.0	410		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	40	41	58	45	42	47	650	1,000	702	140	48
2	51	37	40	57	44	44	48	545	1,080	605	131	51
3	49	36	38	51	43	45	50	455	1,120	545	119	68
4	39	34	36	50	43	43	54	398	1,120	455	111	52
5	35	36	34	48	42	43	55	341	1,240	425	107	49
6	33	36	34	47	41	42	54	304	1,540	440	103	48
7	33	34	33	46	44	42	53	282	1,580	470	99	48
8	32	40	24	47	45	42	55	272	1,240	545	96	77
9	30	40	38	50	44	43	57	272	930	530	90	64
10	26	38	52	50	46	43	58	293	755	500	86	55
11	26	37	200	49	42	46	63	316	772	455	83	50
12	26	37	230	49	45	50	71	341	860	410	83	46
13	25	37	180	47	42	55	71	425	930	390	78	42
14	24	38	180	75	41	54	71	485	1,040	395	88	42
15	27	37	155	63	41	56	76	575	1,080	400	80	41
16	31	37	150	55	39	65	95	635	1,200	395	72	40
17	103	37	130	52	42	60	186	668	1,080	365	70	39
18	76	37	104	51	48	59	575	575	738	340	69	39
19	57	37	99	50	39	62	485	530	605	310	65	38
20	51	41	91	47	41	58	381	470	650	280	64	39
21	50	53	88	52	39	54	368	425	825	265	62	37
22	48	48	82	64	37	55	368	455	842	250	60	36
23	45	46	75	56	37	53	241	575	860	230	60	36
24	43	49	74	54	37	52	368	738	930	215	58	34
25	42	52	69	51	37	51	410	930	1,040	200	57	34
26	41	50	71	49	37	50	381	1,200	1,040	190	56	33
27	40	49	79	48	39	51	354	1,430	930	175	54	32
28	37	48	72	46	39	53	368	1,570	878	165	53	32
29	37	47	67	46	-	51	455	1,280	695	160	52	32
30	39	42	65	46	-	49	590	1,040	842	159	50	35
31	44	-	62	46	-	48	-	1,040	-	152	48	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,262	103	22	40.7	2,500
November.....	1,230	53	34	41.0	2,440
December.....	2,673	230	24	86.2	5,300
Calendar year 1937.....	52,158	1,120	20	143	103,460
January.....	1,699	75	45	51.6	3,170
February.....	1,159	48	37	41.4	2,300
March.....	1,559	65	42	50.3	3,090
April.....	6,508	590	47	217	12,910
May.....	19,523	1,570	272	630	38,720
June.....	29,242	1,380	605	975	58,000
July.....	11,108	702	152	358	22,030
August.....	2,444	140	48	78.8	4,880
September.....	1,517	77	32	43.9	2,610
Water year 1937-38.....	79,624	1,570	22	218	157,900

Peak discharge.- May 28 (1:30 a.m.) 1,860 sec.-ft.; May 30 (1 a.m.) 1,340 sec.-ft.; June 3 (2 a.m.) 1,240 sec.-ft.; June 6 (2 a.m.) 1,480 sec.-ft.; June 7 (1-2 a.m.) 1,530 sec.-ft.; June 8 (1 a.m.) 1,530 sec.-ft.

GRANDE RONDE RIVER BASIN

Bear Creek near Wallowa, Oreg.

Location.- Water-stage recorder, lat. 45°32', long. 117°33', in NE¼ sec. 34, T. 1 N., R. 42 E., at bridge 4½ miles southwest of Wallowa.

Records available.- April to September 1915, November 1931 to September 1938. April 1924 to November 1931 at site 1 mile upstream and above intakes of two irrigation ditches with a combined capacity of about 3 second-feet.

Extremes.- Maximum discharge during year, 926 second-feet May 27 (gage height, 3.13 feet); minimum, 7 second-feet Oct. 1 (gage height, 0.47 foot).
1915, 1924-36: Maximum discharge, 1,620 second-feet Apr. 22, 1936 (gage height, 3.62 feet, from floodmarks); minimum, 3 second-feet Jan. 20, Feb. 1, 1937.

Remarks.- Records good except those for periods of shifting control, April to July and month of September, which are fair. Small diversions for irrigation above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	12	34	39	40	59	58	586	470	174	21	11
2	12	12	33	36	38	65	58	447	470	159	21	10
3	12	12	32	35	36	65	63	365	482	149	20	13
4	10	12	28	*34	35	61	74	301	470	131	19	11
5	9	12	28	*32	34	59	80	261	512	114	18	11
6	9	12	27	*33	33	57	80	231	537	108	17	10
7	9	12	25	*34	35	55	83	210	530	103	17	12
8	9	14	18	*34	32	62	89	201	488	108	16	18
9	9	13	27	*32	*31	60	96	204	344	96	16	14
10	8	12	38	*29	31	49	100	231	325	88	15	12
11	8	13	143	28	26	52	105	253	325	82	15	11
12	8	12	171	28	29	65	121	272	373	74	15	10
13	8	12	129	28	28	80	123	350	405	70	15	10
14	8	14	117	57	24	85	119	389	394	66	17	10
15	9	13	117	83	23	88	119	436	399	64	16	9
16	10	12	104	80	22	109	147	469	442	59	14	9
17	19	12	93	71	27	107	297	464	389	55	14	9
18	14	12	83	66	46	104	768	394	290	48	14	9
19	12	14	74	61	34	98	654	374	246	48	13	9
20	12	34	67	54	33	89	492	355	254	42	14	9
21	12	46	63	56	25	80	430	355	307	40	14	9
22	12	41	58	66	24	71	384	415	312	36	13	9
23	12	41	54	63	25	68	365	522	330	34	13	8
24	12	39	53	59	26	65	369	640	330	31	13	9
25	12	46	53	56	28	61	400	775	340	30	13	9
26	12	46	52	54	32	59	365	798	307	27	13	8
27	12	44	50	52	41	61	332	820	258	26	13	8
28	12	44	45	47	52	67	336	745	246	25	12	8
29	12	39	43	45	-	67	410	600	232	24	11	8
30	12	35	43	44	-	65	560	518	199	24	11	10
31	13	-	39	43	-	61	-	476	-	22	11	-
Month				Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet				
October.....				336	19	8	10.8	566				
November.....				692	46	12	23.1	1,370				
December.....				1,941	171	18	62.6	3,850				
Calendar year 1937.....				27,951	498	3	76.6	55,440				
January.....				1,479	83	28	47.7	2,930				
February.....				890	52	22	31.8	1,770				
March.....				2,172	109	49	70.1	4,310				
April.....				7,677	768	58	256	15,230				
May.....				13,457	920	201	434	26,690				
June.....				11,006	537	199	367	21,830				
July.....				2,155	174	22	69.5	4,270				
August.....				464	21	11	15.0	920				
September.....				303	18	8	10.1	601				
Water year 1937-38.....				42,572	820	8	117	84,440				

Peak discharge.- Apr. 18 (3 p.m.) 900 sec.-ft.; Apr. 30 (10 p.m.) 633 sec.-ft.; May 25 (9 p.m.) 917 sec.-ft.; May 27 (1 p.m.) 926 sec.-ft.

*Stage-discharge relation affected by ice; discharge estimated on basis of records for Hurricane Creek near Joseph and Lostine River near Lostine.

Asotin Creek near Asotin, Wash.

Location.- Staff gage, lat. 46°20', long. 117°12', in sec. 20, T. 10 N., R. 45 E., half a mile upstream from Washington Water Power Co.'s diversion for water supply and irrigation, 4 miles upstream from George Creek, and 8 miles west of Asotin.

Drainage area.- 171 square miles.

Records available.- August 1928 to September 1955. March 1904 to November 1906 and August 1910 to October 1911, at practically same site, slightly distant.

Average discharge.- 10 years (1928-38), 56.4 second-feet.

Extremes.- Maximum discharge observed during year, 345 second-feet Apr. 19 (gage height, 2.15 feet); minimum observed, 28 second-feet Sept. 3.
1904-6, 1910-11, 1928-38: Maximum discharge observed, 1,180 second-feet Apr. 15, 1904 (gage height, 4.3 feet, former datum); minimum observed, 16 second-feet Jan. 5, 1937.

Remarks.- Records good. No diversion large enough to affect flow and no regulation. Twice daily gage readings and results of one discharge measurement furnished by Washington Water Power Co.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used Oct. 1 to Nov. 13, May 30 to June 22)

Nov. 14 to Apr. 18, June 23 to Sept. 30				Apr. 19 to May 29			
0.6	27	1.2	98	0.9	63	1.5	171
.8	44	1.5	160	1.1	92	1.8	244
1.0	67	2.0	291	1.3	126	2.0	301

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	30	40	55	45	59	78	244	147	48	31	28
2	32	30	39	51	46	67	75	218	138	48	31	28
3	32	30	38	47	44	70	78	182	132	48	31	27
4	30	30	37	45	43	70	91	171	126	52	31	28
5	32	30	36	44	42	78	88	143	126	50	33	29
6	30	30	36	42	46	70	84	130	124	46	30	31
7	29	30	36	41	45	67	83	120	118	44	30	31
8	28	30	33	40	42	67	88	109	107	41	29	36
9	28	31	34	40	40	66	95	109	97	44	28	33
10	28	31	38	39	43	66	100	111	87	39	28	31
11	28	30	60	39	42	66	109	117	82	38	28	30
12	28	31	70	40	46	78	119	128	79	36	30	30
13	28	33	64	38	44	100	123	147	76	36	31	30
14	28	38	57	42	44	107	113	149	71	35	33	28
15	28	39	53	67	44	111	109	160	68	35	31	28
16	29	35	57	73	43	188	123	171	71	34	31	28
17	30	34	49	68	40	190	202	171	73	34	30	28
18	29	34	48	64	44	158	330	171	73	36	31	28
19	28	36	46	59	42	140	330	149	66	34	31	28
20	29	34	44	54	42	115	258	138	62	33	30	28
21	29	42	43	52	42	105	206	136	62	33	31	28
22	30	39	43	62	40	95	194	145	59	33	30	28
23	30	38	42	54	40	90	182	160	64	31	30	28
24	29	38	42	53	43	88	182	162	62	32	28	28
25	29	40	41	52	45	86	182	194	64	31	29	29
26	29	48	41	50	46	86	182	206	59	31	29	29
27	29	45	44	49	49	93	171	231	55	31	28	30
28	29	43	44	48	52	105	171	251	52	31	28	28
29	29	42	44	48	-	103	171	206	50	33	28	29
30	30	40	51	46	-	95	206	171	50	31	28	31
31	31	-	58	45	-	88	-	160	-	30	28	-

Month	Second-foot-days	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	907	32	28	29.3	1,800
November.....	1,061	48	30	36.4	2,100
December.....	1,408	70	33	45.4	2,790
Calendar year 1937.....	17,572	210	16	48.1	34,860
January.....	1,547	73	38	49.9	3,070
February.....	1,224	52	40	43.7	2,430
March.....	2,967	190	59	95.7	5,380
April.....	4,523	330	76	151	8,970
May.....	5,060	244	109	163	10,460
June.....	2,500	147	50	83.3	4,960
July.....	1,158	52	30	37.4	2,300
August.....	925	33	28	29.8	1,830
September.....	876	36	27	29.2	1,740
Water year 1937-38.....	24,156	330	27	66.2	47,910

Selway River near Lowell, Idaho

Location.- Water-stage recorder, lat. 46°05', long. 115°31', in sec. 25, T. 32 N., R. 7 E., a quarter of a mile upstream from O'Hara Creek and 7 miles upstream from Lowell post office.

Drainage area.- 1,510 square miles.

Records available.- April 1911 to September 1912, October 1929 to September 1938.

Extremes.- Maximum discharge during year, 32,800 second-feet May 28 (gage height, 12.81 feet); minimum, 282 second-feet Dec. 9 (gage height, 2.29 feet).
1930-38: Maximum discharge, 33,800 second-feet June 14, 1933 (gage height, 13.17 feet); minimum, probably less than 100 second-feet Jan. 8, 1937, during period of ice effect.

Remarks.- Records good. Discharge for period of missing gage heights, Jan. 19-29, computed on basis of weather records and records for other stations in Clearwater River Basin. No diversions above station.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.2	245	5.5	4,330	9.5	17,350
2.6	460	6.0	5,440	10.0	19,520
3.0	748	6.5	6,680	10.5	21,750
3.4	1,120	7.0	8,080	11.0	24,040
3.8	1,580	7.5	9,680	11.5	26,590
4.2	2,080	8.0	11,330	12.0	28,780
4.6	2,680	8.5	13,270	12.5	31,250
5.0	3,360	9.0	15,270	12.8	32,750

Discharge, in second-feet; water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	407	432	517	800	922	1,410	1,560	18,200	19,500	3,820	954	524
2	426	426	401	666	922	1,500	1,520	15,300	19,500	3,750	907	524
3	432	413	560	643	907	1,500	1,560	12,500	19,100	3,540	889	517
4	438	407	682	575	861	1,550	1,630	10,700	18,200	3,540	890	504
5	426	407	612	620	843	1,520	1,680	9,320	18,200	3,300	843	490
6	420	420	560	800	834	1,440	1,770	8,080	18,200	3,100	817	497
7	407	426	546	889	972	1,370	1,740	7,360	16,900	3,010	800	504
8	401	497	458	870	934	1,320	1,940	6,950	15,700	2,700	782	589
9	395	582	534	916	870	1,330	2,440	7,080	12,500	2,600	791	643
10	389	524	463	907	889	1,350	2,600	7,360	10,500	2,440	782	612
11	384	517	1,800	916	916	1,370	2,760	7,790	9,320	2,300	748	560
12	378	524	3,360	817	953	1,450	3,100	8,380	9,980	2,160	715	524
13	372	510	2,220	800	954	1,880	3,450	9,980	11,000	2,010	715	510
14	372	497	1,610	852	916	2,370	3,540	11,400	10,300	1,940	817	497
15	378	597	1,430	1,220	907	2,370	3,730	12,900	9,320	1,800	880	477
16	401	560	1,320	1,230	861	2,370	4,440	14,100	9,000	1,800	817	470
17	597	524	1,240	1,140	765	2,440	7,940	14,900	9,650	1,700	748	463
18	635	490	1,220	1,130	699	2,220	20,000	13,300	9,980	1,600	715	450
19	575	463	1,170	1,100	851	2,300	20,000	12,100	7,500	1,570	732	438
20	531	546	1,080	1,050	861	2,080	14,100	11,000	7,080	1,450	757	438
21	560	843	1,010	1,000	817	1,880	11,000	10,300	7,220	1,410	707	438
22	524	817	954	1,200	817	1,710	9,320	11,000	7,790	1,340	658	426
23	490	691	861	1,200	808	1,670	8,690	12,900	6,950	1,300	643	420
24	463	732	765	1,100	825	1,660	8,690	16,100	6,300	1,230	658	413
25	457	757	782	1,000	843	1,640	10,300	19,100	5,920	1,100	628	413
26	444	825	791	900	907	1,620	12,100	21,300	5,800	1,100	612	407
27	432	732	934	850	1,080	1,690	11,400	22,700	5,800	1,110	620	407
28	426	961	1,070	900	1,220	1,880	11,400	29,300	5,100	1,110	589	407
29	420	843	982	900	-	1,880	12,900	29,800	4,540	1,100	575	413
30	413	699	963	765	-	1,740	15,700	25,000	4,120	1,000	553	463
31	426	-	954	782	-	1,640	-	21,800	-	1,010	539	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	13,819	635	372	446	0.295	0.34	27,410
November.....	17,562	861	407	585	.387	.43	34,830
December.....	31,641	3,360	334	1,021	.676	.78	62,760
Calendar year 1937.....	864,156	16,100	-	2,368	1.57	21.30	1,714,000
January.....	28,538	1,230	575	921	.610	.70	56,600
February.....	25,074	1,220	699	896	.593	.62	49,730
March.....	54,150	2,440	1,320	1,747	1.16	1.34	107,400
April.....	213,000	20,000	1,520	7,100	4.70	5.24	422,500
May.....	435,000	29,800	6,950	14,150	9.36	10.79	564,800
June.....	320,770	19,500	4,120	10,690	7.08	7.90	636,200
July.....	63,740	3,820	1,010	2,056	1.36	1.57	126,400
August.....	22,871	954	539	738	.489	.56	45,360
September.....	14,438	643	407	481	.319	.36	28,640
Water year 1937-38.....	1,243,603	29,800	334	3,407	2.26	30.63	2,467,000

Peak discharge.- Apr. 18 (9:30 p.m.) 25,400 sec.-ft.; May 28 (8 a.m.) 32,800 sec.-ft.

Clearwater River at Kamiah, Idaho

Location.— Water-stage recorder, lat. 46°14', long. 116°01', in sec. 1, T. 33 N., R. 3 E., 300 feet upstream from highway bridge at Kamiah and 6 miles downstream from South Fork of Clearwater River.

Drainage area.— 4,850 square miles.

Records available.— August 1910 to September 1938.

Average discharge.— 28 years, 8,140 second-feet.

Extremes.— Maximum discharge during year, 63,400 second-feet Apr. 19 (gage height, 15.31 feet); minimum, 630 second-feet Dec. 9 (gage height, 2.71 feet).

1910-38: Maximum discharge observed, 81,400 second-feet June 10, 1933 (gage height, 16.53 feet), from rating curve extended above 70,000 second-feet; minimum discharge, probably less than 200 second-feet Jan. 8, 1937, during period of ice effect.

Remarks.— Records good. Practically no diversion or regulation above station. Gage-height record collected in cooperation with U. S. Weather Bureau.

Rating tables, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

Oct. 1 to Dec. 12

Dec. 13 to Sept. 30

2.8	720	2.9	850	6.5	8,280	11.0	29,550
3.1	1,050	3.2	1,195	7.0	9,970	11.5	32,850
3.4	1,430	3.6	1,720	7.5	11,780	12.0	36,400
3.7	1,870	4.0	2,310	8.0	13,720	12.5	40,125
4.0	2,350	4.4	2,950	8.5	15,800	13.0	44,025
4.4	3,110	4.8	3,680	9.0	18,100	13.5	48,050
4.8	3,960	5.2	4,540	9.5	20,650	14.0	52,175
5.2	4,910	5.6	5,560	10.0	23,440	14.6	57,275
5.6	5,960	6.0	6,720	10.5	26,410	15.3	63,375
6.0	7,100						
6.4	8,320						

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	858	992	1,430	1,980	2,060	3,040	3,980	37,900	37,900	7,800	1,980	1,110
2	891	992	1,070	1,690	2,130	3,400	3,780	33,600	37,100	7,480	1,880	1,100
3	935	955	1,050	1,480	2,040	3,880	3,880	27,600	36,400	7,160	1,820	1,100
4	1,000	915	1,420	1,270	1,940	3,880	4,090	23,400	34,200	7,480	1,600	1,060
5	1,020	902	1,400	1,210	1,880	3,980	4,310	20,100	33,600	7,330	1,750	1,030
6	958	913	1,260	1,440	1,860	3,580	4,780	18,100	33,600	6,720	1,690	1,030
7	913	946	1,210	1,500	2,100	3,580	4,780	16,200	32,200	6,280	1,620	1,050
8	880	1,040	1,130	1,690	2,120	3,310	5,160	15,400	29,600	5,700	1,590	1,170
9	858	1,380	741	1,750	2,000	3,310	6,420	15,800	24,000	5,420	1,580	1,460
10	847	1,300	858	1,830	1,960	3,490	7,330	16,200	19,600	5,030	1,590	1,410
11	836	1,180	2,610	2,040	2,080	3,490	7,480	17,600	17,600	4,660	1,550	1,300
12	814	1,240	8,160	1,850	2,390	3,880	8,810	18,600	18,100	4,420	1,480	1,200
13	804	1,250	5,980	1,780	2,390	4,780	9,820	21,700	19,600	4,090	1,440	1,150
14	794	1,170	3,980	1,780	2,220	7,020	9,820	24,000	19,100	3,880	1,540	1,110
15	804	1,330	3,490	2,550	2,190	6,870	9,970	27,000	17,200	3,680	1,800	1,080
16	847	1,420	3,310	2,880	2,080	7,020	11,000	28,900	16,700	3,780	1,730	1,040
17	1,030	1,270	3,040	2,710	1,900	7,330	17,200	30,200	17,600	3,580	1,870	1,020
18	1,400	1,210	2,960	2,830	1,750	6,870	43,200	28,300	18,100	3,400	1,480	994
19	1,340	1,110	2,790	2,550	1,900	7,180	52,200	26,400	15,000	3,220	1,480	972
20	1,180	1,110	2,550	2,390	1,980	6,130	34,200	24,000	13,700	3,040	1,570	949
21	1,170	1,570	2,390	2,250	1,950	5,290	26,400	22,900	13,300	2,880	1,540	949
22	1,170	2,030	2,200	2,470	2,000	4,540	22,300	23,400	15,000	2,710	1,410	938
23	1,070	1,800	2,040	2,710	2,010	4,200	20,600	26,400	13,700	2,630	1,350	927
24	1,020	1,720	1,800	2,550	2,100	4,420	20,100	31,500	12,200	2,470	1,320	916
25	981	1,870	1,720	2,280	2,200	4,780	22,900	37,900	11,800	2,390	1,300	916
26	970	2,030	1,730	2,060	2,260	4,540	27,000	43,200	11,400	2,310	1,270	905
27	946	1,950	1,890	1,800	2,470	4,420	25,200	45,600	11,400	2,250	1,270	894
28	935	2,050	2,220	1,890	2,710	5,030	24,600	55,600	10,500	2,200	1,270	894
29	915	2,190	2,190	2,180	-	5,030	27,000	58,100	9,280	2,260	1,210	894
30	902	1,870	2,180	1,830	-	4,540	32,200	49,700	8,510	2,190	1,160	938
31	955	-	2,240	1,610	-	4,200	-	42,400	-	2,100	1,140	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	30,321	1,400	794	968	0.200	0.23	59,550
November.....	41,663	2,190	902	1,369	.286	.32	82,640
December.....	73,019	8,160	741	2,355	.486	.56	144,600
Calendar year 1937.....	1,830,573	32,900	200	5,015	1.03	14.04	3,630,000
January.....	62,630	2,880	1,210	2,020	.416	.48	124,200
February.....	58,670	2,710	1,750	2,095	.432	.45	116,400
March.....	147,010	7,330	3,040	4,742	.978	1.13	291,600
April.....	499,310	52,200	3,780	16,660	3.44	3.84	991,600
May.....	907,700	58,100	15,400	29,280	6.04	6.96	1,800,000
June.....	607,890	37,900	8,510	20,260	4.18	4.66	1,206,000
July.....	130,580	7,800	2,100	4,212	.868	1.00	289,000
August.....	47,180	1,980	1,340	1,521	.314	.36	93,540
September.....	31,606	1,460	894	1,050	.216	.24	62,490
Water year 1937-38.....	2,637,759	58,100	741	7,227	1.49	20.23	5,232,000

CLEARWATER RIVER BASIN

Clearwater River at Orofino, Idaho

Location.- Wire-weight gage, lat. 46°29', long. 116°16', in NW¼ sec. 7, T. 36 N., R. 2 E., at highway bridge in Orofino, a quarter of a mile downstream from Orofino Creek.

Drainage area.- 5,580 square miles.

Records available.- October 1930 to September 1938 (discontinued).

Extremes.- Maximum discharge observed during year, 72,300 second-feet Apr. 19 (gage height, 20.06 feet); minimum observed, 780 second-feet Dec. 10 (gage height, 7.31 feet). 1930-38: Maximum discharge observed, 81,500 second-feet June 10, 1933 (gage height, 20.87 feet), from rating curve extended above 70,000 second-feet; minimum observed, probably less than 250 second-feet Jan. 8, 1937, during period of ice effect; minimum gage height observed, 7.17 feet Dec. 4, 1935.

Remarks.- Records good. No diversions above station. Regulation negligible. Gage read once daily.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	940		1,880	2,710	2,420	3,750	5,220	40,500	38,900	†8,500	2,060	†1,150
2	940	*1,120	1,560	2,240	2,710	*4,360	4,460	38,900	38,900	†8,000	1,970	†1,150
3	1,000	1,120	*1,480	1,970	2,710	4,960	4,980	30,300	35,900	†7,500	1,880	†1,150
4	1,060	*1,080	1,400	†1,720	*2,520	5,750	*5,220	26,400	36,700	†8,000	1,800	†1,100
5	1,120	1,060	1,720	†1,600	2,350	5,480	5,480	22,600	34,500	†7,500	1,800	†1,060
6	1,060	*1,080	1,560	1,800	*2,420	5,750	*6,030	19,000	35,900	†7,000	*1,720	†1,070
7	1,060	*1,100	1,480	1,970	2,520	5,220	6,580	18,000	35,200	6,300	1,640	†1,100
8	1,000	1,120	*1,300	*2,060	2,710	*4,840	6,580	*17,000	31,000	6,020	1,640	†1,300
9	940	1,400	1,120	*2,150	*2,560	4,460	7,750	16,000	26,400	5,750	1,560	†1,600
10	1,000	*1,400	780	2,240	2,420	4,960	8,970	17,500	†22,000	*5,360	1,560	†1,500
11	940	*1,400	1,260	*2,280	*2,850	4,960	9,230	18,000	†20,000	4,960	1,560	†1,400
12	940	1,400	7,760	2,350	*2,880	5,480	9,610	19,000	†20,500	4,710	1,480	†1,300
13	*812	1,480	8,050	2,150	3,110	9,290	11,300	21,700	21,100	4,460	1,400	†1,200
14	885	1,400	5,480	†2,500	3,110	9,290	11,300	25,200	†21,000	4,280	1,560	†1,150
15	885	*1,600	4,220	†4,000	2,710	8,970	11,000	28,300	18,500	3,980	1,800	1,060
16	940	1,800	*4,060	†5,000	*2,560	8,970	11,700	31,000	17,500	3,980	1,880	†1,050
17	*1,210	1,560	*3,910	4,960	2,420	9,610	16,000	32,400	19,000	3,980	*1,790	†1,040
18	1,480	1,400	3,760	3,750	*2,350	8,660	46,300	31,000	18,500	3,760	*1,490	†1,030
19	1,480	1,480	3,760	3,320	2,240	9,610	72,300	29,000	18,000	*3,540	1,400	†1,020
20	*1,450	*1,400	*3,450	3,110	2,420	8,350	42,100	25,800	15,100	3,320	1,480	†1,010
21	*1,450	1,330	3,110	*3,400	2,350	7,160	31,700	24,600	14,200	*3,120	1,640	†1,000
22	1,400	2,350	2,710	*3,690	2,420	6,300	25,800	24,600	15,800	2,910	1,480	†990
23	*1,310	2,150	*2,480	3,980	2,420	5,750	25,400	27,100	14,200	2,910	1,400	†980
24	*1,210	1,880	2,240	3,530	2,520	5,480	22,800	32,400	15,300	2,710	1,330	†970
25	1,120	*2,150	*2,100	*3,190	*2,720	6,300	24,000	†40,000	12,900	2,560	1,530	†960
26	*1,120	2,420	1,970	*2,860	2,910	6,300	30,300	44,500	†12,500	2,420	†1,300	†950
27	1,120	2,520	2,530	2,520	3,110	6,020	30,300	46,200	†12,000	*2,380	†1,300	†950
28	1,120	2,420	2,420	2,520	3,320	6,300	28,500	55,100	†11,000	2,380	†1,300	†950
29	*1,090	2,910	2,710	2,710	-	6,870	29,000	56,800	†10,000	†2,400	1,190	†950
30	1,060	2,240	2,710	2,420	-	6,300	34,500	51,400	†9,000	†2,400	†1,170	†950
31	1,060	-	*2,710	†2,000	-	5,750	-	46,200	-	†2,200	†1,160	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	54,282	1,480	885	1,108	0.198	0.23	68,000
November.....	46,880	2,910	1,080	1,629	.282	.33	96,950
December.....	87,430	8,050	780	2,820	.505	.58	173,400
Calendar year 1937.....	1,937,211	33,800	250	5,307	.951	12.90	3,843,000
January.....	86,680	5,000	1,600	2,796	.501	.58	171,900
February.....	73,500	3,320	2,240	2,625	.470	.49	145,800
March.....	201,250	9,610	3,750	6,492	1.16	1.34	399,200
April.....	581,250	72,300	4,460	19,380	3.47	3.87	1,153,000
May.....	956,700	58,800	16,000	30,860	5.53	6.38	1,998,000
June.....	649,500	38,800	9,000	21,840	3.88	4.33	1,288,000
July.....	139,170	8,500	2,200	4,489	.804	.93	278,000
August.....	48,070	2,060	1,160	1,551	.278	.32	95,300
September.....	33,120	1,600	950	1,104	.198	.22	65,690
Water year 1937-38.....	2,939,632	72,300	780	8,054	1.44	19.60	5,831,000

*Discharge interpolated.

†Gage height missing; discharge computed on basis of weather records and records for other stations in Clearwater River Basin.

Clearwater River at Spalding, Idaho

Location.- Water-stage recorder, lat. 46°25', long. 116°51', in lot, 22, sec. 22, T. 38 N., R. 4 W., a quarter of a mile downstream from Lapwai Creek and three-eighths of a mile northwest of Spalding post office.

Drainage area.- 9,570 square miles.

Records available.- March 1926 to September 1938.

Average discharge.- 12 years, 14,640 second-feet.

Extremes.- Maximum discharge observed during year, 134,000 second-feet Apr. 19 (gage height from Spalding bridge staff, 20.00 feet), from rating curve extended above 110,000 second-feet; minimum discharge, 1,760 second-feet Oct. 16 (gage height, 2.31 feet).

1926-38: Maximum discharge, 172,000 second-feet Dec. 23, 1933 (gage height, 23.19 feet); minimum, probably less than 500 second-feet Jan. 9, 1937, during period of ice effect.

Maximum stage known, 25.6 feet Jan. 5, 1928 (former site and datum, 2,300 feet upstream), during severe ice jam.

Remarks.- Records excellent except those for period of missing gage heights, Apr. 16-19, which were computed on basis of staff gage readings at Spalding highway bridge, 2,300 feet upstream, and are good. No diversion or regulation.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.30	1,750	4.80	7,120	7.30	16,820	9.80	31,600	14.30	69,360
2.80	2,550	5.30	8,870	7.80	19,300	10.30	35,210	15.30	79,590
3.30	3,510	5.80	10,450	8.30	22,000	11.30	42,810	16.30	90,280
3.80	4,590	6.30	12,400	8.80	24,950	12.30	50,940	17.30	101,330
4.30	5,780	6.80	14,520	9.30	28,150	13.30	59,790	18.30	112,710

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,820	2,120	4,260	6,440	4,940	9,720	11,200	65,500	58,000	12,800	3,820	2,280
2	1,890	2,200	3,410	5,290	6,040	11,200	10,400	62,600	55,500	12,000	3,620	2,280
3	2,010	2,120	2,820	4,480	6,440	13,600	10,400	51,800	54,400	11,600	3,510	2,280
4	2,200	1,960	3,020	3,820	6,040	14,100	11,200	44,400	51,800	12,000	3,410	2,200
5	2,280	1,940	3,410	3,310	5,530	13,600	11,600	38,200	50,100	12,400	3,410	2,120
6	2,200	1,920	3,110	3,510	5,410	13,200	13,600	33,800	50,900	11,200	3,310	2,120
7	2,120	2,040	2,920	3,930	5,660	12,400	14,500	30,900	47,600	10,800	3,210	2,120
8	1,980	2,200	2,820	3,930	5,780	11,600	14,500	28,800	44,400	10,100	3,020	2,370
9	1,950	3,110	2,370	4,150	5,530	11,200	16,400	28,200	38,200	9,360	3,020	3,020
10	1,900	3,820	2,000	4,150	5,410	12,000	18,800	29,600	31,600	9,010	3,020	3,510
11	1,880	3,020	3,110	4,480	5,780	12,000	18,800	31,600	28,200	8,340	3,020	3,020
12	1,830	2,820	13,700	4,820	5,570	13,600	20,400	34,500	26,800	7,710	2,920	2,640
13	1,820	5,110	14,500	4,480	8,950	16,400	22,600	39,000	28,200	7,410	2,820	2,370
14	1,790	3,110	10,100	4,820	6,570	20,400	25,600	42,800	28,600	6,980	2,920	2,280
15	1,790	3,510	8,020	8,340	6,170	21,400	22,600	46,000	26,200	6,700	3,310	2,200
16	1,790	4,040	7,710	10,800	5,910	25,000	25,800	49,300	25,000	6,570	3,720	2,120
17	1,900	3,410	7,710	9,360	5,410	26,800	42,400	50,900	26,200	6,570	3,310	2,120
18	2,550	3,020	8,020	8,340	5,050	22,000	102,000	48,400	28,200	6,170	3,020	2,040
19	2,730	2,640	7,560	8,340	5,050	22,000	123,000	45,200	25,000	5,910	3,020	2,000
20	2,460	2,460	6,570	7,660	5,170	19,300	79,200	40,500	21,400	5,530	3,310	1,980
21	2,280	2,730	5,910	7,260	5,170	16,400	57,100	39,700	20,400	5,290	3,310	1,920
22	2,280	4,040	5,410	9,360	5,290	14,100	47,600	40,500	22,000	5,050	3,020	1,890
23	2,200	4,150	5,050	10,400	5,530	12,800	42,800	44,400	21,400	4,940	2,730	1,880
24	2,120	4,040	4,480	8,670	5,910	12,800	42,000	50,900	19,300	4,700	2,640	1,860
25	2,040	4,820	4,150	7,260	6,440	13,600	42,800	59,800	18,300	4,480	2,640	1,830
26	2,010	5,660	4,040	6,300	6,700	14,100	50,100	58,000	18,300	4,370	2,550	1,830
27	2,040	6,040	4,370	5,530	7,260	13,600	47,600	70,400	17,300	4,260	2,550	1,820
28	2,000	5,660	4,480	5,290	8,340	15,000	46,800	79,600	16,400	4,160	2,550	1,820
29	1,950	6,440	5,530	5,660	-	15,000	48,400	86,000	15,000	4,260	2,460	1,819
30	1,840	5,410	6,170	5,290	-	13,200	56,200	79,600	13,600	4,260	2,370	1,630
31	2,010	-	7,120	4,370	-	12,000	-	67,400	-	4,040	2,280	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	63,760	2,730	1,790	2,057	0.215	0.25	126,500
November.....	103,560	6,440	1,920	3,462	.361	.40	205,400
December.....	175,850	14,500	2,000	5,608	.568	.68	344,800
Calendar year 1937.....	3,465,560	50,900	500	9,495	.992	13.47	6,874,000
January.....	189,740	10,800	3,310	6,121	.640	.74	376,300
February.....	166,080	8,340	4,940	5,931	.620	.65	329,400
March.....	474,120	26,800	9,720	15,290	1.60	1.84	940,400
April.....	1,093,400	123,000	10,400	36,450	3.81	4.25	2,169,000
May.....	1,618,200	86,000	28,200	48,970	5.12	5.90	3,011,000
June.....	928,300	58,000	13,600	30,940	3.23	3.60	1,841,000
July.....	228,980	12,800	4,040	7,388	.772	.89	454,160
August.....	93,820	3,820	2,280	3,029	.316	.36	196,100
September.....	66,530	5,510	1,810	2,184	.228	.25	130,000
Water year 1937-38.....	5,099,320	123,000	1,790	13,970	1.46	19.81	10,110,000

CLEARWATER RIVER BASIN

Lochsa River near Lowell, Idaho

Location.- Water-stage recorder, lat. 46°09', long. 115°35', in SW¼ sec. 33, T. 33 N., R. 7 E., three-quarters of a mile by river northeast of Lowell post office, seven-eighths of a mile upstream from mouth, and 1¼ miles downstream from Pete King Creek.

Drainage area.- 1,180 square miles.

Records available.- October 1929 to September 1938. November 1910 to August 1912 (gage heights only) at approximately same site.

Extremes.- Maximum discharge during year, 24,500 second-feet April 18 (gage height, 11.07 feet); minimum, 287 second-feet Dec. 8 (gage height, 1.23 feet).

1929-38: Maximum discharge, 24,800 second-feet June 10, 1933 (gage height, 13.44 feet), from rating curve extended above 25,000 second-feet; minimum, probably less than 100 second-feet Jan. 8, 1937, during period of ice effect.

Remarks.- Records good. No diversions.

Revision.- Figure of yearly mean discharge and that of discharge per square mile for water year 1931 as published in Water-Supply Paper 723 are in error. They have been revised to 1,930 and 1.64 second-feet, respectively.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)
(Shifting-control method used April 19 to Sept. 30)

1.2	253	4.4	4,120	8.0	13,320
1.6	480	4.8	4,920	8.5	14,900
2.0	790	5.2	5,800	9.0	16,570
2.4	1,180	5.6	6,750	9.5	18,320
2.8	1,640	6.0	7,740	10.0	20,150
3.2	2,170	6.5	9,040	10.5	22,070
3.6	2,750	7.0	10,400	11.1	24,480
4.0	3,400	7.5	11,820		

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	323	344	467	705	817	1,000	1,300	13,300	13,300	2,750	657	385
2	359	328	373	681	790	1,130	1,280	11,500	13,000	2,830	633	379
3	361	323	409	560	773	1,160	1,320	9,580	12,700	2,800	626	373
4	385	317	501	522	722	1,180	1,340	8,250	12,100	2,730	610	355
5	367	312	454	536	714	1,180	1,360	7,240	12,100	2,620	595	350
6	344	323	428	580	714	1,130	1,530	6,390	12,400	2,450	565	355
7	333	333	343	602	782	1,090	1,500	5,920	11,500	2,310	550	361
8	323	460	333	618	739	1,060	1,680	5,680	10,400	2,100	536	428
9	317	529	296	625	681	1,090	2,100	6,030	8,510	1,900	543	480
10	512	454	373	697	714	1,130	2,240	6,390	6,990	1,840	536	467
11	306	428	1,630	773	756	1,160	2,380	6,990	6,390	1,700	515	434
12	301	497	2,990	665	835	1,210	2,830	7,490	6,510	1,600	494	397
13	291	467	1,900	657	773	1,540	3,150	9,040	7,240	1,500	494	373
14	291	460	1,410	799	756	2,030	3,150	9,580	6,760	1,420	580	361
15	296	558	1,560	1,250	722	2,030	3,400	10,400	6,150	1,370	649	350
16	306	501	1,280	1,200	657	2,310	4,120	11,200	6,030	1,330	572	339
17	454	464	1,160	1,130	602	2,450	7,740	11,200	6,510	1,230	522	333
18	441	409	1,210	1,120	618	2,240	19,400	10,400	6,510	1,200	508	328
19	415	361	1,080	1,060	649	2,240	17,300	9,580	5,350	1,150	558	323
20	379	397	956	956	649	1,960	11,800	8,770	4,920	1,070	633	317
21	373	697	880	946	665	1,770	9,310	8,770	4,820	1,020	543	312
22	361	673	817	1,120	657	1,580	7,990	9,310	5,680	956	494	312
23	350	602	714	1,100	657	1,510	7,490	10,700	4,920	918	474	306
24	339	730	641	985	665	1,500	7,490	12,700	4,410	871	454	306
25	344	730	633	880	681	1,480	8,510	14,600	4,310	814	441	306
26	344	853	673	908	730	1,460	9,040	15,900	4,220	836	343	301
27	339	899	748	790	817	1,520	8,510	18,800	4,310	730	474	296
28	328	890	835	817	899	1,650	8,770	19,000	3,750	732	441	296
29	323	790	799	808	-	1,570	9,850	20,500	3,320	817	415	301
30	317	610	862	673	-	1,470	11,800	17,300	2,990	736	397	317
31	339	-	853	799	-	1,380	-	14,900	-	697	391	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	10,641	454	291	343	0.291	0.54	21,110
November.....	15,509	890	312	517	.438	.49	50,760
December.....	27,479	2,990	296	886	.751	.87	54,500
Calendar year 1937.....	652,654	11,800	-	1,788	1.52	20.59	1,295,000
January.....	25,482	1,250	522	822	.697	.80	50,540
February.....	20,234	899	602	723	.613	.64	40,130
March.....	47,220	2,450	1,000	1,523	1.29	1.49	93,660
April.....	179,680	19,400	1,280	5,999	5.08	5.67	356,400
May.....	335,210	20,500	8,680	10,810	9.16	10.58	664,900
June.....	219,090	13,300	2,990	7,270	6.16	6.87	432,600
July.....	46,927	2,750	897	1,514	1.28	1.48	93,100
August.....	16,333	657	391	527	.447	.52	32,400
September.....	10,541	480	296	351	.297	.33	20,910
Water year 1937-38.....	953,356	20,500	291	2,612	2.21	30.06	1,890,000

South Fork of Clearwater River near Grangeville, Idaho

Location.- Staff gage, lat. 45°55', long. 116°01', in SE 1/4 sec. 30, T. 30'N., R. 4 E., downstream from power house of Washington Water Power Co., 6 miles southeast of Grangeville.

Drainage area.- 865 square miles.

Records available.- November 1910 to September 1916, April 1923 to September 1938.

Average discharge.- 19 years (1912-16, 1923-38), 813 second-feet.

Extremes.- Maximum discharge observed during year, 6,740 second-feet Apr. 18 (gage height, 9.00 feet); minimum observed, 81 second-feet Dec. 2 (gage height, 2.50 feet). 1910-16, 1923-38: Maximum discharge observed, 9,830 second-feet May 30, 1912 (gage height, 9.7 feet), from curve extended above 6,500 second-feet; practically no flow for indeterminate periods Aug. 24, 26, 1935.

Remarks.- Records good. Diurnal fluctuations caused by operation of power plant just above station. No diversions for irrigation. Gage read twice daily. Gage-height record furnished by Washington Water Power Co.

Rating table, water year 1937-38 (gage height, in feet, and discharge, in second-feet)

2.5	81	4.0	649	5.6	1,875	7.6	4,360
2.8	142	4.3	827	6.0	2,270	8.0	4,960
3.1	232	4.6	1,050	6.4	2,720	8.4	5,660
3.4	349	4.9	1,260	6.8	3,220	8.8	6,370
3.7	490	5.2	1,510	7.2	3,770	9.2	7,120

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	96	158	114	132	193	291	441	4,670	3,630	765	225	125
2	100	147	102	142	184	320	418	4,510	3,490	796	212	125
3	128	145	156	120	187	356	516	3,350	3,220	827	209	118
4	112	145	169	93	172	349	568	3,090	3,090	926	199	118
5	118	116	164	93	169	341	594	2,600	2,960	1,030	196	116
6	116	120	156	118	169	356	736	2,270	2,840	827	184	118
7	132	158	156	130	172	307	706	2,170	2,720	706	187	125
8	104	135	112	147	169	288	827	2,070	2,600	649	181	164
9	108	175	112	178	158	295	1,030	2,170	2,270	622	181	219
10	106	153	130	202	175	320	1,100	2,270	1,970	594	181	181
11	102	161	362	202	184	332	1,180	2,270	1,880	541	172	156
12	102	142	1,100	181	199	418	1,340	2,380	1,880	516	161	147
13	95	153	649	190	199	568	1,510	2,720	1,880	496	164	142
14	96	153	418	196	196	765	1,340	2,720	1,690	441	172	135
15	106	169	441	222	196	756	1,420	2,960	1,600	441	222	114
16	130	164	394	239	187	765	1,600	3,220	1,510	441	206	116
17	187	166	311	225	161	678	2,600	3,220	1,780	418	178	116
18	243	153	320	209	178	622	5,830	3,090	1,780	394	166	112
19	196	153	288	199	190	678	5,830	3,220	1,420	392	164	108
20	164	145	257	178	178	622	3,770	2,960	1,340	295	161	108
21	209	272	219	187	181	516	2,960	2,960	1,260	324	147	108
22	178	280	150	190	184	418	2,720	2,840	1,340	370	145	108
23	145	216	199	193	187	466	2,720	3,090	1,340	295	145	108
24	137	209	196	190	193	466	2,720	3,220	1,180	284	142	110
25	112	199	172	156	206	441	3,220	3,770	1,100	268	142	106
26	123	209	178	142	212	418	4,060	4,060	1,100	257	140	104
27	114	206	219	147	243	466	3,770	4,360	1,180	243	137	102
28	137	181	229	190	264	594	3,490	5,660	1,180	231	132	102
29	123	261	225	187	-	541	3,630	5,320	960	231	135	104
30	123	193	225	147	-	516	4,210	4,670	827	238	123	125
31	128	-	209	156	-	466	-	4,060	-	243	123	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	4,070	243	95	131	0.151	0.17	8,070
November.....	5,237	280	116	175	.202	.23	10,490
December.....	8,132	1,100	102	262	.303	.35	16,130
Calendar year 1937.....	187,727	3,650	-	514	.594	8.08	372,400
January.....	5,281	239	93	170	.197	.23	10,470
February.....	5,286	264	158	189	.218	.23	10,480
March.....	14,675	765	268	473	.547	.63	29,110
April.....	66,856	5,830	418	2,229	2.58	2.88	132,600
May.....	101,940	5,660	2,070	3,288	3.80	4.38	202,200
June.....	57,017	3,630	827	1,901	2.20	2.46	113,100
July.....	15,081	1,030	243	486	.562	.65	29,910
August.....	5,232	225	123	169	.195	.22	10,380
September.....	3,740	219	102	125	.145	.16	7,420
Water year 1937-38.....	292,547	5,830	93	801	.926	12.59	580,300

North Fork of Clearwater River near Ahsahka, Idaho

Location.— Water-stage recorder, lat. 46°31', long. 116°18', in SE¼ sec. 26, T. 37 N., R. 1 E., at Bruce's Eddy, 1½ miles northeast of Ahsahka and 2 miles upstream from mouth.

Drainage area.— 2,440 square miles.

Records available.— August 1926 to September 1938.

Average discharge.— 12 years, 5,600 second-feet.

Extremes.— Maximum discharge during year, 62,700 second-feet Apr. 18 (gage height, 26.75 feet), from rating curve extended logarithmically above 24,000 second-feet; minimum, 855 second-feet Oct. 13-15; minimum gage height, 2.29 feet Oct. 15.
1926-38: Maximum discharge, about 100,000 second-feet Dec. 23, 1933 (gage height, 35.5 feet, from floodmarks), from rating curve extended logarithmically above 24,000 second-feet; minimum, probably less than 250 second-feet Jan. 8, 1937 during period of ice effect.

Remarks.— Records good. Discharge for Oct. 3-7, Nov. 6-11 computed on basis of records for other stations in same basin, that for Oct. 21, 26-28, Nov. 3, 4 interpolated, and that for Nov. 5 based on one staff reading. No diversion or regulation above station.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	938	1,060	1,860	2,430	2,180	3,160	4,430	24,700	16,800	4,170	1,690	1,080
2	910	1,060	1,460	1,990	2,540	3,910	4,170	22,500	16,400	4,040	1,530	1,120
3	950	1,010	1,360	1,810	2,540	4,430	4,300	19,000	15,700	4,040	1,530	1,080
4	1,050	960	1,610	1,490	2,380	4,690	4,560	16,400	15,000	4,430	1,530	1,060
5	1,100	910	1,570	1,420	2,230	4,560	4,690	14,400	14,800	4,430	1,490	1,020
6	1,050	950	1,420	1,570	2,230	4,430	5,640	12,800	14,600	4,040	1,460	1,020
7	950	1,000	1,350	1,810	2,380	4,300	5,780	11,900	13,600	4,040	1,420	1,060
8	910	1,600	1,250	1,810	2,230	4,170	6,060	11,400	12,800	3,520	1,380	1,220
9	910	2,200	995	1,730	2,080	4,170	6,910	11,400	11,200	3,400	1,380	1,660
10	910	1,900	1,060	1,690	2,080	4,430	7,660	11,900	9,770	3,160	1,380	1,610
11	882	1,700	3,330	1,900	2,180	4,560	7,810	12,600	8,930	3,040	1,350	1,320
12	882	1,570	7,360	1,900	2,380	5,080	8,610	14,200	8,610	2,860	1,320	1,150
13	855	1,650	5,500	1,770	2,380	6,340	9,770	15,900	8,770	2,760	1,320	1,120
14	855	1,770	3,910	1,940	2,230	7,660	10,100	17,100	8,610	2,640	1,380	1,080
15	855	2,380	3,400	4,170	2,180	8,450	10,400	17,800	7,810	2,590	1,650	1,060
16	882	2,180	3,400	4,560	1,990	11,000	12,100	18,800	7,970	2,490	1,570	1,020
17	1,180	1,730	3,400	3,910	1,900	11,700	23,600	18,500	8,610	2,490	1,420	1,020
18	1,320	1,490	3,650	3,520	1,810	9,260	53,200	17,500	8,770	2,330	1,350	995
19	1,150	1,280	3,160	3,400	1,900	8,290	48,200	15,900	7,660	2,230	1,490	995
20	995	1,280	2,760	3,160	1,990	7,060	29,600	14,400	6,910	2,130	1,690	965
21	980	1,730	2,480	3,040	1,990	6,060	21,900	14,800	6,480	2,080	1,460	965
22	965	2,080	2,280	3,650	1,990	5,220	18,500	15,500	6,910	1,990	1,350	938
23	938	1,900	2,040	3,910	1,940	4,950	17,300	17,100	6,620	1,940	1,280	938
24	910	2,360	1,770	3,400	1,990	4,820	17,100	19,000	6,340	1,860	1,250	938
25	910	2,640	1,770	2,920	2,040	5,080	17,500	21,400	6,060	1,860	1,220	910
26	903	3,650	1,730	2,590	2,180	5,220	18,800	22,500	6,060	1,810	1,220	910
27	896	3,100	1,770	2,280	2,430	5,360	17,300	22,800	5,500	1,770	1,250	910
28	889	3,280	1,940	2,280	2,760	5,920	17,300	23,300	5,080	1,730	1,180	910
29	882	3,100	2,360	2,430	-	5,780	18,800	23,600	4,820	1,770	1,150	910
30	910	2,380	2,540	2,040	-	5,220	21,600	21,600	4,430	1,770	1,120	965
31	965	-	2,960	1,810	-	4,690	-	18,800	-	1,660	1,080	-
Month				Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off			
									Inches	Acres		
October.....				29,682	1,320	855	957	0.392	0.45	58,870		
November.....				55,920	3,650	910	1,664	.764	.85	110,900		
December.....				77,385	7,360	995	2,496	1.02	1.18	153,500		
Calendar year 1937.....				1,344,427	19,000	-	3,683	1.51	20.47	2,667,000		
January.....				78,330	4,560	1,420	2,527	1.04	1.20	155,400		
February.....				61,130	2,760	1,810	2,183	.895	.93	121,200		
March.....				179,970	11,700	3,160	5,805	2.38	2.74	357,000		
April.....				453,690	53,200	4,170	15,120	6.20	6.92	899,900		
May.....				539,500	24,700	11,400	17,400	7.13	8.22	1,070,000		
June.....				281,620	16,800	4,430	9,397	3.85	4.30	568,600		
July.....				85,040	4,430	1,650	2,743	1.12	1.29	168,700		
August.....				42,890	1,690	1,080	1,384	.667	.65	85,070		
September.....				32,149	1,860	910	1,072	.439	.49	66,770		
Water year 1937-38.....				1,917,306	53,200	855	5,253	2.15	29.22	3,803,000		

South Fork of Palouse River above Paradise Creek, near Pullman, Wash.

Location.— Water-stage recorder and Parshall flume through low concrete dam, lat. 46° 42' 20", long. 117° 09' 55", in SE¼ sec. 8, T. 14 N., R. 45 E., 1 mile upstream from Paradise Creek and 2 miles southeast of Pullman.

Drainage area.— 81.1 square miles.

Records available.— May 1934 to September 1938.

Extremes.— Maximum discharge during year, 285 second-feet Mar. 18 (gage height, 3.32 feet); no flow July 24 to Sept. 30.

1934-38: Maximum discharge, 517 second-feet Feb. 28, 1936 (gage height, 6.25 feet); no flow frequently during late summer months.

Remarks.— Records excellent. A 2-foot Cippoletti or a 6-inch rectangular weir, inserted in the flume, was used as control Oct. 1-12, Oct. 14 to Nov. 30, Dec. 2-9, June 10 to Sept. 30, and discharge for these periods was computed by use of weir formulas. No diversions or regulation.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.22	0.64	5.3	17	14	121	38	16	2.8	0.60		
2	.22	.60	1.6	14	32	119	36	15	2.6	.69		
3	.48	.60	1.3	9.9	42	137	33	14	2.2	.74		
4	.46	.60	1.2	7.6	32	95	72	14	2.1	.74		
5	.42	.58	.94	5.4	25	99	70	13	1.9	.84		
6	.41	.64	1.0	5.0	22	91	44	12	1.7	.74		
7	.43	.64	1.0	4.7	23	68	36	11	1.5	.60		
8	.39	1.3	.84	4.2	26	59	33	10	1.3	.60		
9	.32	1.3	.81	4.0	20	52	33	9.5	1.3	.39		
10	.29	.99	4.7	6.6	38	50	25	8.5	1.4	.39		
11	.32	.99	13	13	61	45	22	12	1.5	.29		
12	.96	1.2	10	10	61	52	29	14	1.5	.23		
13	3.2	1.2	5.1	14	48	52	32	9.9	1.3	.23		
14	1.3	1.8	3.4	49	56	46	27	8.5	1.2	.19		
15	.69	1.7	2.9	94	52	70	25	8.0	1.1	.13		
16	.51	1.3	3.8	58	41	117	34	7.3	1.2	.29		
17	.56	1.2	10	48	32	75	65	6.7	1.8	2.0		
18	.51	.94	9.2	41	30	111	80	8.8	2.9	.70		
19	.43	.89	5.1	56	29	209	58	9.3	3.5	.28		
20	.47	1.0	3.4	31	26	123	46	7.3	2.3	.20		
21	.71	.99	3.0	51	32	99	38	6.4	1.8	.12		
22	1.5	.94	2.4	106	58	78	34	5.6	1.5	.07		
23	.79	1.1	2.2	74	92	91	31	5.0	1.6	.02		
24	.60	1.6	1.8	34	105	113	28	4.5	1.5	0		
25	.56	2.1	1.7	24	90	115	25	4.0	1.5	0		
26	.47	2.3	1.7	15	89	77	23	3.9	1.4	0		
27	.43	2.9	2.7	13	91	68	22	3.9	1.4	0		
28	.43	3.7	12	17	95	56	20	4.9	1.1	0		
29	.47	3.2	36	18	-	51	18	5.5	.89	0		
30	.56	13	69	9.7	-	48	17	3.9	.69	0		
31	.64	-	38	12	-	43	-	3.0	-	0		

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	19.75	3.2	0.22	0.637	0.0079	0.009	39
November.....	51.92	13	.56	1.73	.021	.023	103
December.....	255.09	69	.81	823	.101	.116	506
Calendar year 1937.....	6,516.21	348	0	17.9	.221	2.986	12,900
January.....	866.1	106	4.0	27.9	.344	.397	1,720
February.....	1,362	105	14	48.6	.599	.624	2,700
March.....	2,638	209	43	85.1	1.05	1.211	5,230
April.....	1,094	80	17	36.5	.450	.502	2,170
May.....	265.4	16	3.0	8.56	.106	.122	526
June.....	50.48	3.5	.69	1.68	.021	.023	100
July.....	11.08	2.0	0	.357	.0044	.005	22
August.....	0	0	0	0	0	0	0
September.....	0	0	0	0	0	0	0
Water year 1937-38.....	6,613.82	209	0	18.1	.223	3.032	13,100

Peak discharge.— Mar. 18 (11:15 p.m.) 285 sec.-ft.

PALOUSE RIVER BASIN

South Fork of Palouse River at Pullman, Wash.

Location.- Water-stage recorder and 6-foot Cippoletti weir in low overflow dam, lat. 48°43'50", long. 117°11'00", in NE¼ sec. 6, T. 14 N., R. 45 E., at State Street crossing in Pullman, 600 feet upstream from Missouri Flat Creek.

Drainage area.- 132 square miles.

Records available.- February 1934 to September 1938.

Extremes.- Maximum discharge during year, 482 second-feet Mar. 18 (gage height, 3.14 feet); minimum, 0.36 second-foot Aug. 23, Sept. 24.

1934-38: Maximum discharge, 940 second-feet Jan. 24, 1935 (gage height, 3.87 feet); minimum, 0.29 second-foot Aug. 25, 1936, and Aug. 21, 1937.

Remarks.- Records excellent. Discharge for period Sept. 22-28 computed on basis of records for Paradise Creek near Pullman. A 2-foot Cippoletti weir, inserted in 6-foot opening, was used as control Oct. 1-12, 14-21, June 10 to Sept. 30, and discharge for these periods was computed by use of weir formulas. No important diversions. Slight regulation caused by operation of Moscow sewage-disposal plant on Paradise Creek.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.1	2.0	8.6	34	24	183	57	20	4.3	1.8	0.60	0.47
2	1.3	1.8	3.2	26	66	161	53	19	3.8	1.9	.51	.51
3	1.5	1.8	2.6	19	85	203	51	18	3.6	1.8	.56	.51
4	1.6	1.8	2.6	14	70	131	124	18	3.2	1.6	.51	.51
5	1.4	1.9	2.2	11	52	159	113	17	3.2	1.8	.51	.56
6	1.3	1.9	2.2	9.8	46	139	65	15	2.8	1.7	.60	.79
7	1.4	2.2	2.5	9.2	45	101	53	14	2.8	1.6	.43	.69
8	1.6	4.0	2.0	8.4	54	87	48	13	2.5	1.8	.56	1.4
9	1.7	3.5	2.0	8.2	39	78	49	13	2.5	1.7	.51	1.3
10	1.2	2.0	7.5	16	85	76	40	11	2.7	1.4	.60	.94
11	1.2	2.8	23	26	127	71	35	15	2.9	1.3	.56	.74
12	1.2	2.6	18	22	125	80	43	18	2.6	1.2	.56	.69
13	4.5	3.3	9.5	28	79	80	49	13	2.8	1.2	.56	.64
14	2.4	3.9	6.8	100	107	71	49	11	2.4	1.3	.60	.69
15	1.7	3.2	6.2	179	101	115	38	11	2.4	1.2	.56	.79
16	1.8	2.4	8.7	105	75	188	55	9.6	2.6	1.3	.79	.79
17	1.7	2.2	19	91	60	118	104	9.0	3.3	2.8	.64	.74
18	1.5	2.0	15	77	55	200	126	12	5.5	1.9	.79	1.1
19	1.4	2.2	12	100	55	376	80	12	5.0	1.2	.69	.74
20	1.4	2.5	6.6	60	48	190	63	9.9	4.0	1.2	.64	.74
21	1.6	2.5	6.1	94	51	156	55	8.6	3.4	1.2	.60	.69
22	2.9	2.0	5.1	182	115	121	49	7.6	2.7	.94	.56	.74
23	2.0	2.4	4.3	123	163	173	44	6.8	3.0	.89	.60	.74
24	1.7	4.3	3.9	59	180	182	38	6.4	2.8	.74	.60	.69
25	1.7	4.4	3.4	42	145	166	36	5.6	3.0	.64	.56	.69
26	1.6	4.9	4.6	28	140	122	32	5.3	2.8	.60	.64	.65
27	1.6	6.1	5.6	27	140	105	30	5.4	2.7	.79	.69	.69
28	1.6	8.7	26	34	143	103	27	6.6	2.3	.74	.69	.72
29	1.8	5.7	68	34	-	78	24	7.5	1.9	.69	.74	1.3
30	2.0	12	154	17	-	73	22	5.4	1.9	.69	.74	1.4
31	2.1	-	77	19	-	65	-	4.5	-	.69	.60	-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	53.5	4.5	1.1	1.73	0.013	0.015	106
November.....	103.0	12	1.8	3.43	.026	.029	204
December.....	518.0	154	2.0	16.7	.127	.146	1,030
Calendar year 1937.....	11,028.17	562	.48	30.2	.229	3.107	21,880
January.....	1,602.5	182	8.2	51.7	.392	.452	3,180
February.....	2,484	180	24	88.7	.672	.700	4,930
March.....	4,171	376	65	135	1.02	1.176	8,270
April.....	1,642	125	22	54.7	.414	.462	3,260
May.....	349.2	20	4.5	11.3	.085	.099	693
June.....	91.9	5.5	1.9	3.06	.023	.026	182
July.....	40.31	2.8	.60	1.30	.0098	.011	80
August.....	18.80	.79	.43	.608	.0046	.005	37
September.....	23.65	1.4	.47	.788	.0060	.007	47
Water year 1937-38.....	11,097.96	376	.43	30.4	.230	3.128	22,020

Peak discharge.- Mar. 18 (11 p.m.) 482 sec.-ft.

Paradise Creek near Pullman, Wash.

Location.- Water-stage recorder and Parshall flume through low overflow dam, lat. 46° 43'10", long. 117°09'30", in SW¼ sec. 4, T. 14 N., R. 45 E., 2,500 feet upstream from mouth and 1 mile southeast of Pullman.

Drainage area.- 37.0 square miles.

Records available.- April 1934 to September 1938 (discontinued).

Extremes.- Maximum discharge during year, 197 second-feet Mar. 19 (gage height, 2.64 feet); minimum, 0.04 second-foot Aug. 22.

1934-38: Maximum discharge, 326 second-feet Mar. 2, 1936; minimum, that of Aug. 22, 1938.

Remarks.- Records excellent. Discharge for period Aug. 6-11 computed on basis of records for South Fork of Palouse River at Pullman. A 2-root Cippoletti weir, inserted in the flume, was used as control Oct. 1 to Dec. 11, Dec. 13-16, Dec. 20-28, May 7-11, 13-18, May 20 to Sept. 30 and discharge for these periods was computed by use of weir formulas. No important diversions. Slight fluctuation caused by operation of Moscow sewage-disposal plant.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.62	0.99	1.0	13	7.9	45	16	4.0	1.3	0.94	0.29	0.32
2	.99	.79	1.0	10	33	46	15	3.7	1.1	.79	.29	.36
3	1.1	.79	.97	7.1	33	57	13	3.7	1.1	.79	.29	.39
4	1.1	.82	1.0	4.6	25	36	53	3.5	1.0	.64	.36	.45
5	.85	.76	1.0	3.4	17	51	35	3.6	1.2	.64	.32	.36
6	.94	.96	.94	2.9	15	40	18	3.0	1.0	.64	.29	.60
7	.88	.91	.99	2.6	14	30	14	3.0	1.0	.60	.26	.43
8	.76	2.1	.89	2.4	21	25	12	3.0	1.0	.74	.38	.69
9	.79	1.7	1.2	2.4	15	22	12	3.5	.89	.98	.31	1.0
10	.74	.94	2.2	6.6	39	23	11	2.8	.79	.69	.42	.60
11	.66	.97	7.6	12	54	20	10	4.2	.99	.56	.31	.47
12	.74	1.4	5.3	7.6	50	23	11	4.3	.74	.69	.26	.43
13	.76	1.2	2.6	9.6	30	23	12	3.3	.69	.80	.32	.43
14	.80	2.0	2.0	41	46	20	9.7	2.8	.79	.69	.32	.47
15	.76	1.4	2.0	66	43	38	9.1	2.6	.89	.60	.32	.47
16	.84	.99	2.9	38	28	59	15	2.2	.94	.89	.56	.51
17	1.0	.89	6.2	37	22	34	30	2.0	1.4	.83	.39	.56
18	.74	.79	4.7	32	18	57	37	3.1	2.7	.43	.47	.89
19	.80	.94	2.5	35	19	141	18	2.9	1.3	.47	.43	.51
20	.86	1.2	1.7	22	18	61	14	2.4	1.0	.60	.32	.64
21	.85	1.4	1.7	44	24	46	12	2.1	.99	.74	.32	.56
22	.87	.89	1.4	69	47	36	11	1.8	.89	.51	.23	.69
23	.71	1.2	1.1	33	59	59	9.5	1.6	.99	.47	.29	.69
24	.81	2.3	1.0	21	57	56	8.2	1.8	.79	.51	.29	.60
25	.92	1.8	.87	14	44	40	7.7	1.6	1.0	.36	.32	.64
26	.96	2.3	1.1	11	43	34	7.0	1.4	.94	.39	.39	.56
27	.81	1.6	.90	12	42	30	6.5	1.4	.84	.64	.36	.64
28	.82	3.2	7.5	15	40	30	5.8	2.0	.79	.43	.32	.69
29	.89	1.3	15	13	-	21	5.1	2.0	.74	.47	.32	.69
30	1.1	1.1	57	5.7	-	20	4.6	1.6	.74	.51	.26	.99
31	1.2	-	30	6.0	-	18	-	1.3	-	.47	.29	-
Month	Second-foot-days		Maximum		Minimum		Mean		Per square mile		Run-off	
											Inches	Acres-feet
October.....	26.86		1.2		0.66		0.866		0.023		0.027	53
November.....	39.63		3.2		.76		1.32		.038		.040	79
December.....	166.26		57		.87		5.36		.145		.167	330
Calendar year 1937.....	3,371.97		188		.26		9.24		.250		3.387	6,650
January.....	595.9		69		2.4		19.3		.522		.602	1,190
February.....	903.9		59		7.9		32.3		.877		.909	1,790
March.....	1,240		141		18		40.0		1.08		1.245	2,460
April.....	442.2		53		4.6		14.7		.397		.443	877
May.....	82.1		4.3		1.3		2.65		.072		.083	163
June.....	30.53		2.7		.69		1.02		.022		.031	61
July.....	19.31		.98		.36		.623		.017		.020	38
August.....	10.30		.56		.25		.332		.0090		.010	20
September.....	17.31		1.0		.32		.577		.016		.018	34
Water year 1937-38.....	3,577.30		141		.23		9.80		.265		3.595	7,100

Peak discharge.- Mar. 19 (5:30 p.m.) 197 sec.-ft.

Dry Fork of South Fork of Palouse River at Pullman, Wash.

Location.- Water-stage recorder and Parshall flume through low concrete over-flow dam, lat. 46°43'25", long. 117°11'10", in NE¼SE¼ sec. 6, T. 14 N., R. 45 E., at Pullman, half a mile upstream from mouth.

Drainage area.- 7.6 square miles.

Records available.- December 1934 to September 1938 (discontinued).

Extremes.- Maximum discharge during year, 80 second-feet Mar. 18 (gage height, 2.40 feet); no flow Oct. 1 to Nov. 7, Nov. 10, 18, June 1-17, June 20 to Sept. 30.
1934-38: Maximum discharge, 159 second-feet Feb. 27, 1936 (gage height, 2.76 feet); no flow for long periods each year.

Remarks.- Records good. A 2-foot or 6-inch Cippoletti weir or an orifice plate, inserted in the flume, was used as control Oct. 1 to Dec. 28, Jan. 3-10, Apr. 11-16, Apr. 25 to Sept. 30, and discharge for these periods was computed by use of weir or orifice formulas. No diversions or regulation.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0.05	1.4	1.1	16	2.0	0.23	0			
2		0	.04	1.1	4.1	13	1.8	.20	0			
3		0	.04	1.2	5.7	11	1.8	.20	0			
4		0	.06	.89	3.9	7.3	6.4	.24	0			
5		0	.05	.64	2.4	11	4.1	.24	0			
6		0	.06	.51	1.8	7.5	2.9	.18	0			
7		0	.04	.51	3.2	5.5	1.5	.17	0			
8		.01	.02	.43	2.5	4.6	1.3	.19	0			
9		.01	.02	.43	2.4	4.1	1.9	.19	0			
10		0	.50	3.6	5.3	3.7	1.3	.15	0			
11		.03	2.1	.95	7.5	3.4	1.0	.62	0			
12		.02	1.1	3.1	1.5	3.7	1.9	.43	0			
13		.06	.51	3.0	1.4	3.7	1.5	.20	0			
14		.04	.39	10	3.1	4.3	.99	.15	0			
15		.02	.32	6.9	4.0	9.0	.89	.11	0			
16		.01	1.2	3.2	3.5	12	3.7	.08	0			
17		.01	1.8	3.4	2.5	6.4	9.8	.06	0			
18		0	.74	5.0	2.2	25	5.1	.31	.05			
19		.02	.51	4.4	2.3	25	1.8	.27	.01			
20		.04	.36	2.9	2.3	8.9	1.4	.15	0			
21		.02	.29	4.8	3.6	6.3	1.1	.10	0			
22		.01	.20	7.2	7.4	5.0	.98	.06	0			
23		.02	.14	1.3	10	12	.76	.04	0			
24		.08	.10	.92	11	7.1	.76	.03	0			
25		.18	.10	.83	10	7.7	.65	.02	0			
26		.10	.15	.99	9.0	4.8	.47	.02	0			
27		.24	.36	1.6	8.5	4.3	.43	.02	0			
28		.60	4.5	2.0	8.8	4.5	.38	.04	0			
29		.15	11	1.2	-	2.9	.35	.03	0			
30		.07	16	.98	-	2.4	.30	.02	0			
31		-	3.2	.78	-	2.4	-	.01	-			
Month				Second-foot-days		Maximum	Minimum	Mean	Per square mile	Run-off		
										Inches	Acre-feet	
October.....				0		0	0	0	0	0	0	
November.....				1.74		.60	0	.058	.0076	.008	3.5	
December.....				45.95		16	.02	1.48	.195	.225	91	
Calendar year 1937.....				611.70		66	0	1.68	.221	2.965	1,210	
January.....				76.14		10	.43	2.46	.324	.374	151	
February.....				131.0		11	1.1	4.68	.616	.642	260	
March.....				244.5		25	2.4	7.89	1.04	1.199	486	
April.....				59.26		9.8	.30	1.98	.261	.291	118	
May.....				4.76		.62	.01	.154	.020	.023	9.4	
June.....				.06		.05	0	.002	.00026	.0003	.12	
July.....				0		0	0	0	0	0	0	
August.....				0		0	0	0	0	0	0	
September.....				0		0	0	0	0	0	0	
Water year 1937-38.....				563.41		25	0	1.54	.203	2.762	1,120	

Missouri Flat Creek at Pullman, Wash.

Location.- Water-stage recorder and Parshall flume through low concrete dam, lat. 46° 43'50", long. 117°11'00", in NE¼ sec. 6, T. 14 N., R. 45 E., at State Street crossing in Pullman, 600 feet upstream from mouth.

Drainage area.- 27.5 square miles.

Records available.- February 1934 to September 1938.

Extremes.- Maximum discharge during year, 262 second-feet Mar. 19 (gage height, 2.72 feet); minimum, less than 0.005 second-foot Oct. 21, June 15, June 28 to July 20, July 25-27, July 29 to Sept. 7, Sept. 12-30.
1934-38: Maximum discharge, 368 second-feet Mar. 2, 1936 (gage height, 2.83 feet); practically no flow for long periods each year.

Remarks.- Records excellent except those above 150 second-foot, which are fair. A 1-foot Cippoletti weir or a 3-inch rectangular weir, inserted in the flume, was used as control Oct. 1-22, Nov. 1 to Dec. 10, Dec. 13-17, Dec. 20-28, Mar. 5 to Sept. 30, and discharge for these periods was computed by use of weir formulas. No diversions or regulation.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.01	0.02	0.23	6.5	4.6	38	8.8	1.1	0.12	0		0
2	.01	.01	.17	4.6	29	37	7.6	1.0	.11	0		0
3	.01	.01	.16	3.3	25	46	7.4	.98	.08	0		0
4	.01	.01	.14	2.3	17	24	25	.98	.08	0		0
5	.01	.02	.12	1.6	13	45	18	.91	.06	0		0
6	.01	.01	.12	1.3	9.4	28	8.5	.83	.03	0		0
7	.01	.01	.12	1.2	13	20	6.8	.77	.02	0		0
8	.01	.11	.10	1.0	14	16	5.8	.77	.01	0		0
9	.01	.04	.10	.98	11	17	5.5	.77	.01	0		.01
10	.01	.02	.62	5.4	43	17	5.2	.73	.01	0		.01
11	.01	.07	2.8	7.8	38	13	4.1	1.1	.01	0		.01
12	.01	.10	2.2	4.5	27	17	5.1	1.2	.01	0		0
13	.01	.20	1.1	6.5	20	16	5.7	.80	.01	0		0
14	.02	.10	.77	40	33	13	4.0	.64	.01	0		0
15	.02	.06	.64	47	29	38	3.3	.53	0	0		0
16	.01	.04	.88	24	19	50	6.8	.45	.03	0		0
17	.01	.03	2.3	23	13	23	17	.42	.12	0		0
18	.01	.03	2.3	22	12	46	20	.81	.40	0		0
19	.01	.04	1.2	23	13	122	6.7	.80	.28	0		0
20	.01	.13	.74	12	13	48	4.9	.64	.14	0		0
21	0	.10	.61	34	21	39	3.7	.50	.10	.01		0
22	.01	.07	.66	52	43	27	3.2	.39	.07	.01		0
23	.01	.11	.45	18	48	56	2.8	.32	.04	.01		0
24	.01	.22	.37	8.4	43	40	2.4	.28	.03	.01		0
25	.01	.48	.32	7.0	34	29	2.2	.21	.03	0		0
26	.01	.39	.46	5.6	32	24	1.9	.19	.02	0		0
27	.01	.60	.84	7.1	32	22	1.7	.21	.01	0		0
28	.01	.91	4.0	9.3	30	20	1.6	.32	0	.01		0
29	.01	.50	7.8	7.2	-	12	1.4	.32	0	0		0
30	.04	.32	36	3.4	-	11	1.3	.21	0	0		0
31	.02	-	14	3.2	-	10	-	.16	-	0		-

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acres-feet
October.....	0.36	0.04	0	0.012	0.00044	0.0005	0.71
November.....	4.76	.91	.01	.159	.0058	.006	9.4
December.....	52.22	36	.10	2.65	.096	.111	163
Calendar year 1937.....	2,270.95	130	0	6.32	.226	3.065	4,510
January.....	392.98	52	.98	12.7	.462	.533	779
February.....	679.0	48	4.6	24.2	.880	.916	1,360
March.....	962	122	10	31.0	1.13	1.303	1,910
April.....	198.4	25	1.3	6.61	.240	.268	394
May.....	19.34	1.2	.16	.624	.023	.027	38
June.....	1.84	.40	0	.061	.0022	.002	3.6
July.....	.05	.01	0	.002	.000073	.00008	.10
August.....	0	0	0	0	0	0	0
September.....	.04	.01	0	.001	.000036	.00004	.08
Water year 1937-38.....	2,340.99	122	0	6.41	.233	3.167	4,650

Peak discharge.- Mar. 19 (3 p.m.) 262 sec.-ft.

PALOUSE RIVER BASIN

Fourmile Creek at Shawnee, Wash.

Location.- Water-stage recorder and Parshall flume through low concrete dam, lat. $46^{\circ}49'55''$, long. $117^{\circ}16'20''$, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 33, T. 16 N., R. 44 E., half a mile upstream from mouth and three-quarters of a mile north of Shawnee.

Drainage area.- 71.9 square miles.

Records available.- March 1934 to September 1938.

Extremes.- Maximum discharge during year, 414 second-feet Mar. 19 (gage height, 3.11 feet); no flow Oct. 1 to Nov. 11, July 13 to Sept. 30.
1934-38: Maximum discharge, 766 second-feet Jan. 24, 1935 (gage height, 4.13 feet); no flow for long periods each year.

Remarks.- Records excellent. Discharge Nov. 27 estimated. A 2-foot or a 6-inch Cipolletti weir, inserted in the flume, was used as control Oct. 1 to Nov. 29, Dec. 20-28, May 25 to June 21, June 24 to Sept. 30, and discharge for these periods was computed by use of weir formulas. No diversions or regulation.

Discharge, in second-feet, water year October 1937 to September 1938

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0	0.76	24	15	78	33	5.1	0.69	0.08		
2		0	.65	15	87	78	30	4.4	.69	.08		
3		0	.60	11	70	119	29	4.2	.60	.08		
4		0	.60	6.7	44	64	56	4.4	.47	.08		
5		0	.55	6.3	36	126	51	4.1	.39	.08		
6		0	.55	4.9	30	80	30	3.6	.32	.07		
7		0	.55	4.4	43	60	25	3.2	.26	.06		
8		0	.45	3.6	38	48	23	3.1	.23	.05		
9		0	.45	3.4	29	47	24	3.1	.20	.04		
10		0	.76	15	158	47	22	2.8	.18	.02		
11		0	10	17	80	41	19	4.0	.20	.01		
12		.01	7.5	9.9	64	48	21	6.4	.20	.01		
13		.26	2.6	20	46	48	23	5.6	.16	0		
14		.42	1.5	101	99	38	19	2.4	.15	0		
15		.62	1.3	95	86	101	16	2.1	.12	0		
16		.44	1.8	48	50	142	24	1.8	.18	0		
17		.26	10	46	42	67	43	1.6	.28	0		
18		.20	9.8	44	38	91	47	2.8	.71	0		
19		.20	2.9	57	37	274	25	3.2	1.0	0		
20		.30	2.2	30	38	136	19	2.1	.89	0		
21		.34	2.2	95	65	109	16	1.7	3.3	0		
22		.35	1.8	123	78	78	13	1.4	1.4	0		
23		.32	1.5	43	104	133	12	1.2	.70	0		
24		.40	1.3	24	89	107	11	1.1	.48	0		
25		.68	1.1	22	72	94	9.8	.94	.44	0		
26		1.2	1.2	18	68	78	8.7	.89	.30	0		
27		1.9	1.5	23	64	70	8.0	.89	.24	0		
28		2.9	4.6	26	61	66	7.3	1.2	.18	0		
29		2.5	43	22	-	44	6.3	2.1	.12	0		
30		1.1	197	6.5	-	41	5.8	1.5	.08	0		
31		-	47	10	-	38	-	1.0	-	0		

Month	Second-foot-days	Maximum	Minimum	Mean	Per square mile	Run-off	
						Inches	Acre-feet
October.....	0	0	0	0	0	0	0
November.....	14.40	2.9	0	.490	.0087	.007	29
December.....	347.72	187	.45	11.2	.166	.180	690
Calendar year 1937.....	5,576.32	321	0	16.3	.213	2.982	11,060
January.....	966.7	123	3.4	31.2	.434	.500	1,920
February.....	1,756	158	15	62.7	.872	.908	3,480
March.....	2,591	274	38	83.6	1.16	1.337	5,140
April.....	674.9	56	5.8	22.5	.313	.349	1,540
May.....	81.92	6.4	.89	2.64	.037	.045	162
June.....	15.36	3.3	.08	.612	.0071	.008	30
July.....	.66	.08	0	.021	.00029	.0003	1.3
August.....	0	0	0	0	0	0	0
September.....	0	0	0	0	0	0	0
Water year 1937-38.....	6,448.56	274	0	17.7	.246	3.332	12,790

Peak discharge.- Mar. 19 (6 p.m.) 414 sec.-ft.

In addition to the records of stream flow obtained at gaging stations in the Snake River Basin and reported in the preceding pages, measurements of flow were made at other points, as shown in the following table.

Miscellaneous discharge measurements in the Snake River Basin during the water year October 1937 to September 1938

Mud Lake Basin, Idaho

Date	Stream	Tributary to-	Locality	Discharge (sec.-ft.)
June 15	Beaver Creek...	Camas Creek.....	Sec. 11, T. 12 N., R. 36 E., 600 feet below railroad bridge and 1.3 miles north of Spencer.	90.6

Little Lost River Basin, Idaho

Sept. 9	Dry Creek.....	Little Lost River.	Sec. 1, T. 9 N., R. 24 E., in reservoir bottom, 600 feet above Dry Creek Dam and 36 miles northwest of Howe, Idaho.	22.3
9	.....do.....	.....do.....	Sec. 31, T. 10 N., R. 25 E., $1\frac{1}{2}$ miles below Dry Creek Dam and 36 miles northwest of Howe.	17.6
9	.....do.....	.....do.....	Sec. 20, T. 10 N., R. 25 E., about $3\frac{1}{2}$ miles below Dry Creek Dam and 36 miles northwest of Howe.	14.0
9	.....do.....	.....do.....	Sec. 15, T. 10 N., R. 25 E., at head of Farmers ditch, about $6\frac{1}{2}$ miles below Dry Creek Dam and 36 miles northwest of Howe.	8.06
9	Farmers ditch..	Dry Creek.....	About sec. 29, T. 10 N., R. 26 E., at lower end of Duck Pond, about 2 miles above confluence with Wet Creek and 33 miles northwest of Howe.	.66
9	.....do.....	.....do.....	Sec. 33, T. 10 N., R. 26 E., at mouth, just above confluence with Wet Creek, 30 miles northwest of Howe.	.41

Tributaries between Portneuf River and Salmon Falls Creek, Idaho

Oct. 26	Blue Lakes outlet.	SNAKE RIVER.....	SW $\frac{1}{4}$ sec. 28, T. 9 S., R. 17 E., at mouth, 4 miles north of Twin Falls.	206
Dec. 19	.....do.....	.....do.....	.....do.....	211
Feb. 26	.....do.....	.....do.....	.....do.....	215
Mar. 31	.....do.....	.....do.....	.....do.....	201
July 20	.....do.....	.....do.....	.....do.....	187
29	.....do.....	.....do.....	.....do.....	197
Sept. 5	.....do.....	.....do.....	.....do.....	199
Apr. 14	Rock Creek.....	.....do.....	Sec. 7, T. 11 S., R. 18 E., 600 feet below South Side Twin Falls canal siphon, 4 miles south of Kimberly.	59.9
14	.....do.....	.....do.....	SE $\frac{1}{4}$ sec. 7, T. 10 S., R. 17 E., at gage, 500 feet below Deadman Gulch Bridge and 1 mile west of Twin Falls.	111
Nov. 9	Clear Lakes outlet.	.....do.....	SE $\frac{1}{4}$ sec. 2, T. 9 S., R. 14 E., 100 feet below lake outlet, 5 miles north of Buhl.	518

Salmon Falls Creek Basin, Idaho-Nev.

Apr. 28	Salmon Falls Creek.	.....do.....	Sec. 8, T. 44 N., R. 63 E., 500 feet below dam, $2\frac{1}{2}$ miles above mouth of Jakes Creek, $6\frac{1}{2}$ miles southwest of Contact, Nev.	450
28	Shoshone Creek.	Salmon Falls Creek	Sec. 23, T. 47 N., R. 64 E., at mouth, 5 miles north of San Jacinto, Nev.	308
June 3	Salmon River Canal Co. canal lateral No. 1	Salmon River Canal Co. canal.	SW $\frac{1}{4}$ sec. 7, T. 13 S., R. 16 E., at head, 4 miles southwest of Hollister, Idaho.	379

Tributaries between Salmon Falls Creek and Big Wood River, Idaho

Nov. 9	Upper Salmon Falls power plant head race.	SNAKE RIVER.....	Sec. 3, T. 8 S., R. 13 E., 1,000 feet above power plant, 3 miles southwest of Hagerman.	5,940
10	.....do.....	.....do.....	.....do.....	3,400

Big Wood River Basin, Idaho

Aug. 3	West Fork Fish Creek.	Fish Creek.....	Sec. 3, T. 1 N., R. 22 E., $1\frac{1}{2}$ miles above Fish Creek Dam and about 11 miles northeast of Carey.	*.10
30	.....do.....	.....do.....	.....do.....	*.05

*Estimated.

Miscellaneous discharge measurements in the Snake River Basin during the water year October 1937 to September 1938--Continued

Tributaries between Big Wood and Owyhee Rivers, Idaho

Date	Stream	Tributary to--	Locality	Discharge (sec.-ft.)
Mar. 12	Clover Creek...	SNAKE RIVER.....	SW $\frac{1}{4}$ sec. 15, T. 5 S., R. 12 E., at Whitlatch ranch, $3\frac{1}{2}$ miles above Hog Creek and 5 miles northwest of Bliss.	161
Apr. 6	Bennett Creek..	.....do.....	SE $\frac{1}{4}$ sec. 9, T. 2 S., R. 8 E., just below mouth of Left Fork of Bennett Creek, $2\frac{1}{2}$ miles above gaging station, $5\frac{1}{2}$ miles southwest of Bennett post office, and 13 miles northeast of Mountain Home.	48.1
May 15	.....do.....	.....do.....	.....do.....	38.0
May 24	.....do.....	.....do.....	.....do.....	5.53
Apr. 29	.....do.....	.....do.....	SE $\frac{1}{4}$ sec. 21, T. 2 S., R. 8 E., $\frac{1}{2}$ mile above gaging station and East Fork of Bennett Creek, 7 miles southwest of Bennett post office, and $11\frac{1}{2}$ miles northeast of Mountain Home.	27.4
May 24	.....do.....	.....do.....	.....do.....	7.08
Dec. 2	Ake lateral No. 1.	Mountain Home feeder canal.	Sec. 36, T. 2 S., R. 6 E., at head, 5 miles north of Mountain Home.	*.20
Jan. 8	.....do.....	.....do.....	.....do.....	0
Feb. 23	.....do.....	.....do.....	.....do.....	0
Mar. 12	.....do.....	.....do.....	.....do.....	0
Apr. 22	.....do.....	.....do.....	.....do.....	0
Apr. 17	.....do.....	.....do.....	.....do.....	0
May 2	.....do.....	.....do.....	.....do.....	0
June 14	.....do.....	.....do.....	.....do.....	0
June 1	.....do.....	.....do.....	.....do.....	*.25
June 24	.....do.....	.....do.....	.....do.....	.90
July 21	.....do.....	.....do.....	.....do.....	2.73
Sept. 28	.....do.....	.....do.....	.....do.....	2.00
Sept. 10	.....do.....	.....do.....	.....do.....	1.81
Dec. 12	.....do.....	.....do.....	.....do.....	1.04
Dec. 2	Ake lateral No. 2.	.....do.....	.....do.....	.15
Jan. 8	.....do.....	.....do.....	.....do.....	*1.00
Feb. 28	.....do.....	.....do.....	.....do.....	.37
Mar. 12	.....do.....	.....do.....	.....do.....	*.15
Apr. 22	.....do.....	.....do.....	.....do.....	0
Apr. 17	.....do.....	.....do.....	.....do.....	9.15
May 14	.....do.....	.....do.....	.....do.....	6.76
June 1	.....do.....	.....do.....	.....do.....	*.25
June 24	.....do.....	.....do.....	.....do.....	3.88
July 21	.....do.....	.....do.....	.....do.....	1.99
Sept. 10	.....do.....	.....do.....	.....do.....	1.63
Jan. 8	Ake lateral No. 3.	.....do.....	.....do.....	0
Mar. 12	.....do.....	.....do.....	.....do.....	0
Apr. 22	.....do.....	.....do.....	.....do.....	0
Apr. 17	.....do.....	.....do.....	.....do.....	0
May 14	.....do.....	.....do.....	.....do.....	0
June 1	.....do.....	.....do.....	.....do.....	0
June 24	.....do.....	.....do.....	.....do.....	0
Sept. 10	.....do.....	.....do.....	.....do.....	0

*Estimated.

Boise River Basin, Idaho

Nov. 24	Fivemile drain and feeder ditch.	Boise River.....	NW $\frac{1}{4}$ sec. 32, T. 4 N., R. 1 W., $\frac{1}{2}$ mile above Phyllis canal crossing and $3\frac{1}{2}$ miles west of Star.	9.97
Dec. 21	.....do.....	.....do.....	.....do.....	9.72
Jan. 19	.....do.....	.....do.....	.....do.....	8.93
Feb. 19	.....do.....	.....do.....	.....do.....	6.42
Mar. 10	.....do.....	.....do.....	.....do.....	7.59
Nov. 23	Tenmile drain..	.....do.....	SW $\frac{1}{4}$ sec. 5, T. 3 N., R. 1 W., $\frac{1}{2}$ mile above Phyllis canal crossing, and $4\frac{1}{2}$ miles west of Star.	8.39
Dec. 21	.....do.....	.....do.....	.....do.....	5.20
Jan. 19	.....do.....	.....do.....	.....do.....	4.26
Feb. 19	.....do.....	.....do.....	.....do.....	3.08
Mar. 10	.....do.....	.....do.....	.....do.....	2.69
Nov. 23	.....do.....	.....do.....	SW $\frac{1}{4}$ sec. 6, T. 3 N., R. 1 W., $\frac{1}{2}$ mile below Phyllis canal crossing, and 4 miles northeast of Nampa post office.	2.59
Dec. 21	.....do.....	.....do.....	.....do.....	2.76
Nov. 23	Purdam drain..	.....do.....	NW $\frac{1}{4}$ sec. 7, T. 3 N., R. 1 W., $\frac{1}{2}$ mile below Phyllis canal crossing and $3\frac{1}{2}$ miles northeast of Nampa post office.	3.47
Dec. 21	.....do.....	.....do.....	.....do.....	11.0
Jan. 18	.....do.....	.....do.....	.....do.....	10.9
Feb. 19	.....do.....	.....do.....	.....do.....	9.31
Mar. 9	.....do.....	.....do.....	.....do.....	7.95
Mar. 31	.....do.....	.....do.....	.....do.....	7.96
			.....do.....	8.47

Miscellaneous discharge measurements in the Snake River Basin during the water year October 1937 to September 1938--Continued

Boise River Basin, Idaho--Continued

Date	Stream	Tributary to-	Locality	Discharge (sec.-ft.)
Nov. 23	Mason drain...	Boise River.....	NW $\frac{1}{4}$ sec. 23, T. 3 N., R. 2 W., $\frac{1}{4}$ mile above Phyllis canal crossing and $\frac{1}{2}$ mile northeast of Nampa post office.	7.36
Dec. 21	.....do.....	.....do.....	.....do.....	6.15
Jan. 18	.....do.....	.....do.....	.....do.....	5.45
Feb. 18	.....do.....	.....do.....	.....do.....	5.66
Mar. 9	.....do.....	.....do.....	.....do.....	5.01
31	.....do.....	.....do.....	.....do.....	5.23
Nov. 23	Indian Creek..	.....do.....	NE $\frac{1}{4}$ sec. 22, T. 3 N., R. 2 W., at Phyllis canal crossing, $\frac{1}{2}$ mile northeast of Nampa post office.	19.6
Dec. 21	.....do.....	.....do.....	.....do.....	18.5
Jan. 18	.....do.....	.....do.....	.....do.....	16.1
Feb. 18	.....do.....	.....do.....	.....do.....	14.6
Mar. 9	.....do.....	.....do.....	.....do.....	13.2
31	.....do.....	.....do.....	.....do.....	15.6
Nov. 23	Elijah drain..	.....do.....	NE $\frac{1}{4}$ sec. 28, T. 3 N., R. 2 W., at Phyllis canal crossing, 1 mile west of Nampa post office.	15.6
Dec. 21	.....do.....	.....do.....	.....do.....	16.3
Jan. 18	.....do.....	.....do.....	.....do.....	16.2
Feb. 18	.....do.....	.....do.....	.....do.....	17.2
Mar. 9	.....do.....	.....do.....	.....do.....	14.5
31	.....do.....	.....do.....	.....do.....	16.1
Nov. 23	Wilson drain..	.....do.....	NW $\frac{1}{4}$ sec. 35, T. 3 N., R. 2 W., 2 $\frac{1}{2}$ miles above Phyllis canal crossing and 1 $\frac{7}{8}$ miles southwest of Nampa post office.	17.3
Dec. 21	.....do.....	.....do.....	.....do.....	21.2
Jan. 18	.....do.....	.....do.....	.....do.....	21.4
Feb. 18	.....do.....	.....do.....	.....do.....	23.5
Mar. 9	.....do.....	.....do.....	.....do.....	24.6
31	.....do.....	.....do.....	.....do.....	28.0
Nov. 23	.....do.....	.....do.....	SE $\frac{1}{4}$ sec. 19, T. 3 N., R. 2 W., 1 $\frac{1}{8}$ mile above Phyllis canal crossing and 2 $\frac{1}{2}$ miles west of Nampa post office.	28.8
Dec. 21	.....do.....	.....do.....	.....do.....	33.00
Jan. 18	.....do.....	.....do.....	.....do.....	35.4
Feb. 18	.....do.....	.....do.....	.....do.....	37.3
Mar. 9	.....do.....	.....do.....	.....do.....	34.1
31	.....do.....	.....do.....	.....do.....	37.2
Nov. 23	Upper Embankment drain.	.....do.....	SW $\frac{1}{4}$ sec. 24, T. 3 N., R. 3 W., $\frac{3}{8}$ mile above Phyllis canal crossing, and 4 $\frac{1}{2}$ miles west of Nampa post office.	6.04
Dec. 21	.....do.....	.....do.....	.....do.....	6.69
Mar. 9	.....do.....	.....do.....	.....do.....	8.67
Jan. 18	.....do.....	.....do.....	SW $\frac{1}{4}$ sec. 24, T. 3 N., R. 3 W., $\frac{1}{4}$ mile above Phyllis canal crossing and 4 $\frac{1}{2}$ miles west of Nampa post office.	9.66
Feb. 18	.....do.....	.....do.....	SW $\frac{1}{4}$ sec. 24, T. 3 N., R. 3 W., 1 $\frac{1}{8}$ mile above Phyllis canal crossing and 4 $\frac{1}{2}$ miles west of Nampa post office.	9.06
Mar. 9	.....do.....	.....do.....	.....do.....	10.1
31	.....do.....	.....do.....	.....do.....	12.4

Malheur River Basin, Oreg.

May 25	Malheur River.	Snake River.....	NE $\frac{1}{4}$ sec. 16, T. 21 S., R. 38 E., at Allen bridge, near Juntura.	214
June 11	.....do.....	.....do.....	.....do.....	310
25	.....do.....	.....do.....	.....do.....	304
Aug. 5	.....do.....	.....do.....	.....do.....	133
Sept. 9	.....do.....	.....do.....	.....do.....	211
May 24	Middle Fork of Malheur River	Malheur River....	NE $\frac{1}{4}$ sec. 26, T. 20 S., R. 35 E., at Drewsey Bridge.	267
Apr. 17	Stinking Water Creek.	Middle Fork of Malheur River.	NE $\frac{1}{4}$ sec. 18, T. 21 S., R. 35 E., at highway bridge.	144
May 14	Cottonwood Creek.	Bully Creek.....	Sec. 8, T. 18 S., R. 43 E., at highway crossing near mouth.	1.2

Payette River Basin, Idaho

Oct. 7	Grimes Pass power plant intake tunnel	South Fork of Payette River.	Sec. 8, T. 8 N., R. 5 E., immediately above power plant at Grimes Pass, 6 $\frac{1}{2}$ miles southeast of Garden Valley.	293
July 14	Spink and Barker canal.	Lake Fork of Payette River.	Sec. 35, T. 18 N., R. 3 E., at head, 4 $\frac{1}{2}$ miles southeast of McCall.	12.4
14	Cruzen canal..	.....do.....	Sec. 3, T. 17 N., R. 3 E., at head, 5 miles south of McCall.	51.5
Aug. 9	.....do.....	.....do.....	.....do.....	39.5
18	.....do.....	.....do.....	.....do.....	41.1
Sept. 20	.....do.....	.....do.....	.....do.....	14.4

Miscellaneous discharge measurements in the Snake River Basin during the water year October 1937 to September 1938--Continued

Weiser River Basin, Idaho

Date	Stream	Tributary to-	Locality	Discharge (sec.-ft.)
Mar. 21	Cottonwood Creek.	Weiser River.....	SW $\frac{1}{4}$ sec. 27, T. 16 N., R. 1 W., at bridge on U.S. Highway 95, 3 miles south of Council.	*36.8
31	.....do.....	.....do.....	.....do.....	*22.4
Apr. 29	.....do.....	.....do.....	.....do.....	*104
May 12	.....do.....	.....do.....	.....do.....	*74.5
Mar. 26	Spring Creek..	Weiser River.....	NE $\frac{1}{4}$ sec. 10, T. 14 N., R. 3 W., at bridge on U.S. Highway 95, 700 feet southwest of Cambridge.	*80.6
Apr. 6	.....do.....	.....do.....	.....do.....	*35.7
14	.....do.....	.....do.....	.....do.....	*21.1
May 5	.....do.....	.....do.....	.....do.....	*3.55
17	.....do.....	.....do.....	.....do.....	*1.6
Mar. 26	Fine Creek....	.....do.....	NW $\frac{1}{4}$ sec. 10, T. 14 N., R. 3 W., at bridge on U.S. Highway 95, $\frac{1}{2}$ mile southwest of Cambridge.	*239
Apr. 7	.....do.....	.....do.....	.....do.....	*175
May 5	.....do.....	.....do.....	.....do.....	*171
17	.....do.....	.....do.....	.....do.....	*180
June 15	.....do.....	.....do.....	.....do.....	*116
Apr. 30	G. Ben Ross Reservoir feeder canal.	Little Weiser River.	NE $\frac{1}{4}$ sec. 35, T. 14 N., R. 1 W., below head gate, 3 miles south of Indian Valley.	†30
May 15	.....do.....	.....do.....	.....do.....	†2.0
28	.....do.....	.....do.....	.....do.....	*50.7
June 11	.....do.....	.....do.....	.....do.....	*4.33
Apr. 29	Dixie Creek...	Weiser River.....	Sec. 27, T. 14 N., R. 3 W., at bridge on U.S. Highway 95, 3 $\frac{1}{2}$ miles south of Cambridge.	†1.5
6	Sage Creek....	Weiser River.....	SE $\frac{1}{4}$ sec. 13, T. 13 N., R. 4 W., at bridge on U.S. Highway 95, 1.3 southwest of Midvale.	*64.7
14	.....do.....	.....do.....	.....do.....	*54.1
May 5	.....do.....	.....do.....	.....do.....	*8.27
27	Monroe Creek..	.....do.....	Sec. 34, T. 12 N., R. 5 W., at bridge on farm road 200 feet west of U. S. Highway 95, 6 miles in airline north of Weiser.	*106
Apr. 7	.....do.....	.....do.....	.....do.....	*63.7
13	.....do.....	.....do.....	.....do.....	*54.4
May 5	.....do.....	.....do.....	.....do.....	*4.85
17	.....do.....	.....do.....	.....do.....	*.35

*Discharge measurement made by U. S. Bureau of Reclamation engineer.

†Estimated.

Salmon River Basin, Idaho

Oct. 13	East Fork of South Fork of Salmon River.	South Fork of Salmon River.	About sec. 14, T. 18 N., R. 9 E., 150 feet above mouth of Meadow Creek and $\frac{3}{4}$ mile northeast of Stibnite.	3.82
13	Meadow Creek..	East Fork of South Fork of Salmon River.	About sec. 14, T. 18 N., R. 9 E., 50 feet above confluence with East Fork of South Fork of Salmon River and $\frac{1}{2}$ mile northeast of Stibnite.	4.98
July 17	Johnson Creek diversion.	Johnson Creek.....	Sec. 23, T. 14 N., R. 7 E., about $\frac{1}{2}$ mile below point of transmountain Johnson Creek-Deadwood River diversion, 9 miles south of landmark ranger station, and 11 miles southeast of Knox.	9.08
Apr. 4	Little Salmon River.	Salmon River.....	NE $\frac{1}{4}$ sec. 23, T. 19 N., R. 1 E., at bridge on U.S. Highway 95, 0.4 mile west of New Meadows.	242
28	.....do.....	.....do.....	.....do.....	*769
May 9	.....do.....	.....do.....	.....do.....	*304
21	.....do.....	.....do.....	.....do.....	*180
30	.....do.....	.....do.....	.....do.....	*155
June 8	.....do.....	.....do.....	.....do.....	*40.3

*Discharge measurement made by U. S. Bureau of Reclamation engineer.

Grande Ronde River Basin, Oreg.

Oct. 13	Little Minam River.	Grande Ronde River	SE $\frac{1}{4}$ sec. 27, T. 3 S., R. 41 E., at stock driveway cabin near Cove.	7.6
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