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W. C. MENDENHALL, Director

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SURFACE WATER SUPPLY *of the* UNITED STATES 1930

PART 12 NORTH PACIFIC SLOPE DRAINAGE BASINS B. SNAKE RIVER BASIN

NATHAN C. GROVER, Chief Hydraulic Engineer
G. C. BALDWIN, LYNN CRANDALL, G. L. PARKER
C. G. PAULSEN, A. B. PURTON, and G. H. CANFIELD
District Engineers

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ILLUSTRATION

FIGURE 1. Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car.....

SURFACE WATER SUPPLY OF SNAKE RIVER BASIN, 1930

AUTHORIZATION AND SCOPE OF WORK

This volume is one of a series of 14 reports presenting results of measurements of flow made on streams in the United States during the year ending September 30, 1930.

The data presented in these reports were collected by the United States Geological Survey under the following authority contained in the organic law (20 Stat. L., p. 394):

Provided, That this officer [the Director] shall have the direction of the Geological Survey and the classification of public lands and examination of the geological structure, mineral resources, and products of the national domain.

The work was begun in 1888 in connection with special studies relating to irrigation. Since the fiscal year ending June 30, 1895, successive appropriation bills passed by Congress have carried the following items:

For gaging the streams and determining the water supply of the United States, and for the investigation of underground currents and artesian wells, and for the preparation of reports upon the best methods of utilizing the water resources.

Annual appropriations for the fiscal year ending June 30, 1895-1931

1895-----	\$12, 500. 00	1919-----	\$148, 244. 10
1896-----	24, 500. 00	1920-----	175, 000. 00
1897-1899-----	50, 000. 00	1921-1923-----	180, 000. 00
1900-----	70, 000. 00	1924-25-----	170, 000. 00
1901-2-----	100, 000. 00	1926-----	165, 000. 00
1903-1906-----	200, 000. 00	1927-----	151, 000. 00
1907-----	150, 000. 00	1928-----	147, 000. 00
1908-1910-----	100, 000. 00	1929-----	270, 500. 00
1911-1917-----	150, 000. 00	1930-----	275, 000. 00
1918-----	175, 000. 00	1931-----	595, 000. 00

In the execution of the work many private and State 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 9.

Measurements of stream flow have been made at about 6,070 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July, 1930, 2,430 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements were made at other points. In connection with this work data were also collected in

regard to precipitation, evaporation, storage reservoirs, river profiles, and water power in many sections of the country and will be made available in water-supply papers from time to time.

DEFINITION OF TERMS

The volume of water flowing in a stream—the “run-off” or “discharge”—is expressed in various terms, each of which has become associated with a certain class of work. These terms may be divided into two groups—(1) those that represent a rate of flow, as second-feet, gallons per minute, miner’s inches, and discharge in second-feet per square mile, and (2) those that represent the actual quantity of water, as run-off in inches, acre-feet, and millions of cubic feet. The principal terms used in this series of reports are second-feet, second-feet per square mile, run-off in inches, and acre-feet. They may be 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 of rectangular cross section 1 foot wide and 1 foot deep at an average velocity of 1 foot per second. It is generally used as a fundamental unit from which others are computed.

“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 the 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 required to cover an acre to the depth of 1 foot. The term is commonly used in connection with storage for irrigation.

The following terms not in common use are here defined.

“Stage-discharge relation,” an abbreviation for the term “relation of gage height to discharge.”

“Control,” a term used to designate the natural section or stretch of the channel or artificial structure below the gage which determines the stage-discharge relation at the gage.

EXPLANATION OF DATA

The data presented in this report cover the year beginning October 1, 1929, and ending September 30, 1930. At the beginning of January in most parts of the United States much of the precipitation in the preceding three months is stored in the form of snow or ice, or in ponds, lakes, and swamps, or as underground water, and this stored water passes off in the streams during the spring break-up. At the end of September, on the other hand, the only stored water

available for run-off is possibly a small quantity in the ground; therefore the run-off for the year beginning October 1 is practically all derived from precipitation within that year.

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

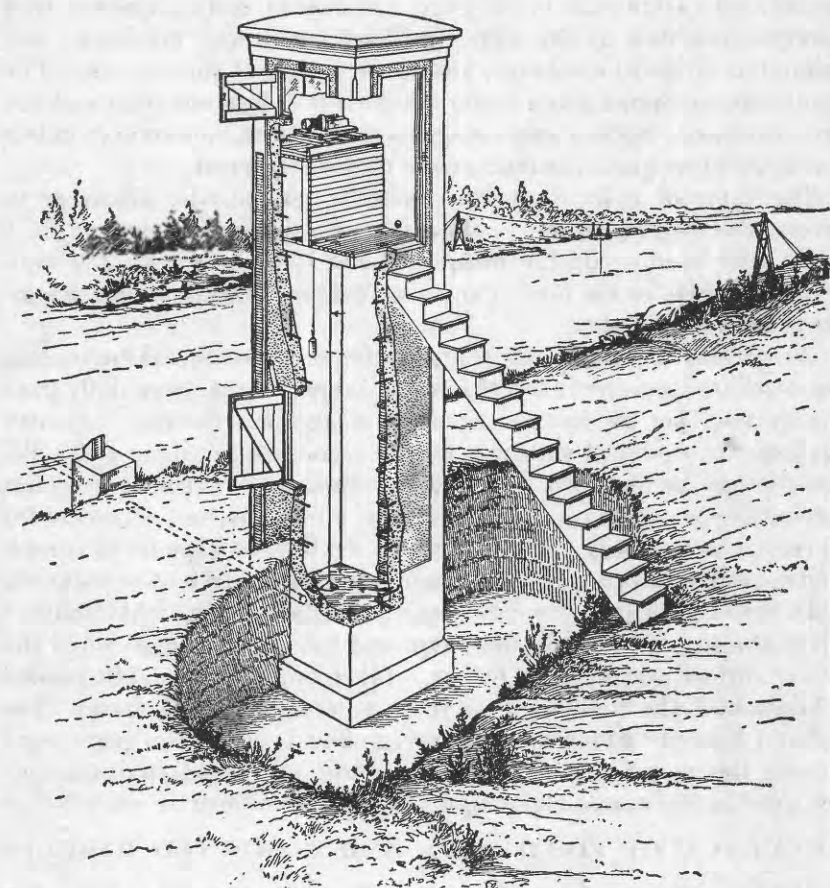


FIGURE 1.—Typical river-measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car

readings on a staff or chain 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. A typical gaging station, equipped with water-stage recorder and measuring cable and car, is shown in Figure 1.

From the discharge measurements rating tables are prepared that give the discharge for any stage. The application of the daily gage

heights to these rating tables gives the daily discharge from which the monthly and yearly mean discharge is computed.

The data presented for each gaging station in the area covered by this report 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.

The description of the station gives, in addition to statements regarding location and type of gage, information as to diversions that decrease the flow at the gage, artificial regulation, maximum and minimum recorded discharge, and the accuracy of the records. The maximum discharge given under "Extremes" does not represent the crest discharge unless a water-stage recorder was in operation or unless a nonrecording gage was read at the time of the crest.

The table of daily discharge gives, in general, the discharge in second-feet corresponding to the daily gage height which may be a once daily reading or the mean of twice daily readings of a non-recording gage, or the mean daily gage height obtained from a water-stage recorder graph.

At stations on streams subject to sudden or rapid diurnal fluctuation the discharge obtained from the rating table and the mean daily gage height may not be the true mean discharge for the day. If such stations are equipped with water-stage recorders, the mean daily discharge may be obtained by averaging discharge at regular intervals during the day or by using the discharge integrator, an instrument for obtaining 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 "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 given is the minimum daily discharge. The column headed "Mean" is the average flow in cubic feet per second during the month. On this average flow are based computations recorded in the remaining columns, which are defined on page 2.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of stream-flow data depends primarily (1) on the permanence 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 records are accurate within 5 per cent; "good," within 10 per cent; "fair," within 15 per cent; and "poor," within 20 per cent 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 run-off 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.

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.

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

PUBLICATIONS

Investigation of water resources by the United States Geological Survey has consisted in large part of measurements of the volume of flow of streams and studies of the conditions affecting that flow, but it has comprised also investigation of such closely allied subjects as irrigation, water storage, water powers, underground waters, and quality of waters. Most of the results of these investigations have been published in the series of water-supply papers, but some have appeared in the bulletins, professional papers, monographs, and annual reports.

The results of stream-flow measurements are now published annually in 12 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 the Mississippi.

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. North Pacific slope drainage basins, in three parts:

A, Pacific slope basins in Washington and upper Columbia River Basin.

B, Snake River Basin.

C, Pacific slope basins in Oregon and lower Columbia River Basin.

Water-supply papers and other publications of the United States Geological Survey containing data in regard to the water resources of the United States may be obtained or consulted as indicated 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, Me., Statehouse.
 Boston, Mass., 2500 Customhouse.
 Hartford, Conn., 318 State Office Building.
 Albany, N. Y., 506 Broadway-Arcade Building.
 Trenton, N. J., 710 Trenton Trust Building.
 Harrisburg, Pa., Claster Building.
 Charlottesville, Va., Brooks Museum, University of Virginia.
 South Charleston, W. Va., Naval Ordnance Plant.
 Asheville, N. C., 220 Post Office Building.
 Columbia, S. C., 801 National Loan & Exchange Bank Building.
 Ocala, Fla., Post Office Building.
 Tuscaloosa, Ala., Post Office Building.
 Chattanooga, Tenn., 630 Power Building.
 Columbus, Ohio, Engineering Experiment Station, Ohio State University.
 Indianapolis, Ind., 319 Federal Building.
 Chicago, Ill., 1503 Consumers Building.
 Madison, Wis., 337N State Capitol.
 St. Paul, Minn., 202 Old State Capitol.
 Topeka, Kans., 23 Federal Building.
 Rolla, Mo., Rolla Building, School of Mines and Metallurgy.
 Fort Smith, Ark., Post Office Building.
 Austin, Tex., State Capitol.
 Santa Fe, N. Mex., State Capitol.
 Tucson, Ariz., 210 Post Office Building.
 Denver, Colo., 403 Post Office Building.
 Salt Lake City, Utah, 313 Federal Building.
 Idaho Falls, Idaho, 228 Federal Building.
 Boise, Idaho, Federal Building.
 Helena, Mont., 416 Power Block.
 Tacoma, Wash., 406 Federal Building.
 Portland, Oreg., 606 Post Office Building.
 San Francisco, Calif., 303 Customhouse.
 Los Angeles, Calif., 751 South Figueroa Street, room 510.
 Honolulu, Hawaii, Territorial Office Building.

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

Stream-flow records have been obtained at about 6,070 points in the United States, and the data obtained have been published in the reports tabulated below:

Stream-flow data in reports of the United States 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	Mean discharge in second-feet	1884 to Dec. 31, 1892.
14th A, pt. 2	Monthly discharge (long-time records, 1871 to 1893)	1888 to Dec. 31, 1893.
B 131	Descriptions, measurements, gage heights, and ratings	1893 and 1894.
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 and 1896.
W 15	Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas.	1897.
W 16	Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte, 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.
W 82 to 85	Complete data	1902.
W 97 to 100	do.	1903.
W 124 to 135	do.	1904.
W 165 to 178	do.	1905.
W 201 to 214	do.	1906.
W 241 to 252	do.	1907 and 1908.
W 261 to 272	do.	1909.
W 281 to 292	do.	1910.
W 301 to 312	do.	1911.
W 321 to 332	do.	1912.
W 351 to 362	do.	1913.
W 381 to 394	do.	1914.
W 401 to 414	do.	1915.
W 431 to 444	do.	1916.
W 451 to 464	do.	1917.
W 471 to 484	do.	1918.
W 501 to 514	do.	1919 and 1920.
W 521 to 534	do.	1921.
W 541 to 554	do.	1922.
W 561 to 574	do.	1923.
W 581 to 594	do.	1924.
W 601 to 614	do.	1925.
W 621 to 634	do.	1926.
W 641 to 654	do.	1927.
W 661 to 674	do.	1928.
W 681 to 694	do.	1929.
W 696 to 709	do.	1930.

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

Numbers of water-supply papers containing results of stream measurements, 1899-1930

[For basins included see p. 5]

Year	1	2	3	4	5	6	7	8	9	10	11	12		
												A	B	C
1899 ^a	35	b 35, 36	36	36	36	c 36, 37	37	37	d 37, 38	38, f 39	38, f 39	38	38	38
1900 ^a	48, f 48	48	48, f 48	48	48	49, f 50	50	50	51	51	51	51	51	51
1901.....	65, 75	65, 75	65, 75	65, 75	65, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902.....	82, 83	b 82, 83	83	83	83	84	84	84	85	85	85	85	85	85
1903.....	97, 98	b 97, 98	98	98	98	99	99	99	100	100	100	100	100	100
1904.....	a 124, c 125, p 126, 127	p 126, 127	128	129	130	130, c 131	131	132	133	133, f 134	134	135	135	135
1905.....	a 165, c 166, p 167, 168	p 167, 168	169	170	171	172	172	174	175, f 177	176, f 177	177	178	178	177, 178
1906.....	a 201, c 202, p 203, 204	p 203, 204	205	206	207	208	208	210	211, f 213	212, f 213	213	214	214	214
1907-8.....	241	242	243	244	245	246	247	248	249	250, f 251	251	252	252	252
1909.....	261	262	263	264	265	266	267	268	269	270, f 271	271	272	272	272
1910.....	281	282	283	284	285	286	287	288	289	290	291	292	292	292
1911.....	301	302	303	304	305	306	307	308	309	310	311	312	312	312
1912.....	321	322	323	324	325	326	327	328	329	330	331	332-A	332-B	332-C
1913.....	351	352	353	354	355	356	357	358	359	360	361	362-A	362-B	362-C
1914.....	381	382	383	384	385	386	387	388	389	390	391	392	393	394
1915.....	401	402	403	404	405	406	407	408	409	410	411	412	413	414
1916.....	431	432	433	434	435	436	437	438	439	440	441	442	443	444
1917.....	461	462	463	464	465	466	467	468	469	470	471	472	473	474
1918.....	471	472	473	474	475	476	477	478	479	480	481	482	483	484
1919-20.....	501	502	503	504	505	506	507	508	509	510	511	512	513	514
1921.....	521	522	523	524	525	526	527	528	529	530	531	532	533	534
1922.....	541	542	543	544	545	546	547	548	549	550	551	552	553	554
1923.....	561	562	563	564	565	566	567	568	569	570	571	572	573	574
1924.....	581	582	583	584	585	586	587	588	589	590	591	592	593	594
1925.....	601	602	603	604	605	606	607	608	609	610	611	612	613	614
1926.....	621	622	623	624	625	626	627	628	629	630	631	632	633	634
1927.....	641	642	643	644	645	646	647	648	649	650	651	652	653	654
1928.....	661	662	663	664	665	666	667	668	669	670	671	672	673	674
1929.....	681	682	683	684	685	686	687	688	689	690	691	692	693	694
1930.....	696	697	698	699	700	701	702	703	704	705	706	707	708	709

^a Rating tables and index to Water-Supply Papers 35-39 contained in Water-Supply Paper 39. Tables of monthly discharge for 1899 in Twenty-first Annual Report, Part 4.

^b James River only.

^c Gallatin River.

^d Green and Gunnison Rivers and Colorado River above junction with Gunnison.

^e Kings and Kern Rivers and south Pacific slope basins.

^f Rating tables and index to Water-Supply Papers 47-52 and data on precipitation, wells, and irrigation in California and Utah contained in Water-Supply Paper 52.

Tables of monthly discharge for 1900 in Twenty-second Annual Report, Part 4.

^g Wissahickon and Schuylkill Rivers to James River.

^h Soloto River.

ⁱ Loup and Platte Rivers near Columbus, Nebr., and all tributaries below junction with Platte.

^j Tributaries of Mississippi from east.

^k Lake Ontario and tributaries to St. Lawrence River proper.

^l Hudson Bay only.

^m New England rivers only.

ⁿ Hudson River to Delaware River, inclusive.

^o Susquehanna River to Yackin River, inclusive.

^p Platte and Kansas Rivers.

^q Great Basin in California, except Truckee and Carson River Basins.

^r Below junction with Gila.

^s Rogue, Umpqua, and Siletz Rivers only.

The preceding table gives, by years and drainage basins, the numbers of the papers on surface-water supply published from 1899 to 1930. The data for any particular station will, as a rule, be found in the reports covering the years during which the station was maintained. For example, 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, 383, 403, 433, 453, 473, and 503, which contain records for the Ohio River Basin for those years.

COOPERATION

The work was carried on under cooperative agreement with the several States as follows: In Idaho with the Commissioner of Reclamation, Mr. George N. Carter; in Oregon with the State engineer, Mr. Rhea Luper; in Nevada with the State engineer, Mr. George W. Malone; and in Washington with the State department of conservation and development, Mr. Erle J. Barnes, director, and Mr. C. J. Bartholet, supervisor of hydraulics.

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

Assistance in collecting the records was also rendered by the following municipalities, corporations, organizations, and individuals: In Idaho by the cities of Boise and Pocatello, the Idaho Power Co., Weiser Irrigation District, Lake Irrigation District, Washington Water Power Co., Yellow Pine Co., Mesa Orchards Co., Owsley Canal Co., Peoples West Coast Hydro-Electric Corporation, Bunker Hill & Sullivan Mining & Concentrating Co., Idaho Water District No. 36, Twin Falls Canal Co., North Side Canal Co. (Ltd.), Utah Power & Light Co., water commissioner for Big Lost River, and the water masters for Big Wood, Little Wood, and Boise Rivers; in Oregon by the Warmspring Irrigation District, Malheur, Baker, and Wallowa Counties, Eastern Oregon Light & Power Co., and Inland Power & Light Co.

DIVISION OF WORK

The data for stations on Snake River above Milner, Idaho, for stations on tributaries that enter that stream above Idaho Falls, and for the station on Blackfoot River near Blackfoot were collected and prepared for publication under the direction of G. C. Baldwin and Lynn Crandall, district engineers, assisted by H. S. Kollenborn, D. I. Gardner, L. W. Beam, Melvin Luke, G. H. Powell, W. N. McConnel, and Helen George.

The data for stations on Snake River in Idaho below Milner, for the station at Oxbow, Oreg., for stations in Idaho on tributaries

entering Snake River below Idaho Falls (except for the station on Blackfoot River near Blackfoot), and for the station on Salmon Falls Creek near San Jacinto, Nev., were collected and prepared for publication under the direction of C. G. Paulsen, district engineer, assisted by T. R. Newell, Berkeley Johnson, F. M. Veatch, R. G. Kasel, W. V. Iorns, F. C. Craig, W. I. Travis, J. R. Throckmorton, E. G. Bailey, Miss E. H. Haugse, and Miss Josephine Ruick.

For stations in Oregon, the data for Burnt River at Huntington, Powder River near Robinette, Imnaha River at Imnaha, Grande Ronde River at Rondowa, East Fork of Wallowa River near Joseph, and Wallowa Falls power plant tailrace were collected and prepared for publication under the direction of G. H. Canfield, district engineer; assisted by K. N. Phillips, B. S. Barnes, A. H. Williams, H. M. Orem, and W. T. Miller. For other stations in Oregon, except Snake River at Oxbow, data were collected by the State of Oregon. Records computed in office of State engineer were reviewed, checked, and prepared for publication by G. H. Canfield, district engineer, assisted by K. N. Phillips and A. H. Williams.

The data for the station on Owyhee River at Mountain City, Nev., were collected and prepared for publication under the direction of A. B. Purton, district engineer, assisted by M. T. Wilson, and Miss Lysle Christensen.

The data for the stations in Washington were collected and prepared for publication under the direction of G. L. Parker, district engineer, assisted by D. J. F. Calkins, R. B. Kilgore, Arthur Johnson, G. M. Thayer, M. C. Boyer, H. C. Woster, L. I. Meyer, and R. J. Swanson.

The records were reviewed and manuscript assembled by P. R. Speer.

GAGING-STATION RECORDS

SNAKE RIVER

JACKSON LAKE AT MORAN, WYO.

LOCATION.—Staff gage in sec. 18, T. 45 N., R. 114 W., a short distance above outlet gates of Lake Moran. Zero of gage, 6,700 feet above mean sea level.

RECORDS AVAILABLE.—June, 1909, to September, 1930. Records for 1909 and 1910 fragmentary.

REMARKS.—Jackson Lake impounds water for irrigation of lands in Snake River Valley. It has a capacity of 847,000 acre-feet between elevations 6 730 and 6,769 feet, sea-level datum.

Daily contents, in acre-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1...	395, 810	416, 160	428, 340	452, 140	470, 410	491, 550	507, 480	572, 740	761, 220	811, 930	529, 320	339, 710
2...	396, 480	416, 610	428, 790	452, 600	471, 100	492, 240	507, 940	576, 990	767, 950	809, 400	517, 470	329, 720
3...	397, 150	417, 060	429, 240	453, 280	472, 010	492, 700	508, 410	582, 680	773, 440	806, 870	506, 090	320, 680
4...	397, 820	417, 520	429, 470	453, 730	472, 930	493, 620	508, 870	589, 560	779, 460	804, 100	494, 550	312, 530
5...	398, 490	417, 970	429, 920	454, 420	473, 620	494, 320	509, 340	595, 490	784, 480	801, 060	482, 550	305, 450
6...	399, 160	418, 420	430, 370	454, 870	474, 530	495, 010	509, 800	602, 140	789, 740	797, 530	471, 550	298, 450
7...	399, 830	418, 870	430, 600	455, 550	475, 220	495, 700	510, 270	606, 680	795, 760	793, 260	460, 780	295, 900
8...	400, 500	419, 320	431, 500	456, 010	475, 910	496, 390	510, 730	611, 460	799, 040	786, 980	450, 550	293, 570
9...	401, 170	419, 770	434, 210	456, 690	476, 600	496, 860	511, 430	614, 800	802, 070	778, 460	440, 540	292, 510
10...	402, 070	420, 220	435, 560	457, 140	477, 740	497, 320	512, 360	618, 140	806, 370	768, 200	431, 050	290, 810
11...	402, 740	420, 670	436, 910	457, 830	478, 430	497, 780	513, 520	621, 010	809, 650	760, 730	423, 150	289, 120
12...	403, 410	421, 120	438, 270	458, 510	479, 120	498, 240	514, 920	623, 640	813, 950	752, 260	414, 810	287, 210
13...	404, 080	421, 580	439, 630	458, 960	480, 030	498, 700	517, 010	626, 280	816, 470	743, 070	408, 550	284, 870
14...	404, 750	422, 030	440, 540	459, 640	480, 720	499, 160	518, 870	629, 650	816, 720	734, 910	406, 320	282, 160
15...	405, 420	422, 480	441, 450	460, 100	481, 640	499, 630	521, 660	633, 490	817, 740	725, 760	404, 750	280, 260
16...	406, 090	422, 930	442, 360	460, 780	482, 320	500, 090	523, 980	637, 340	820, 260	715, 420	403, 630	279, 000
17...	406, 540	423, 150	442, 820	461, 470	483, 010	500, 550	526, 070	640, 710	822, 540	706, 840	403, 180	277, 330
18...	407, 210	423, 380	443, 500	461, 930	483, 930	501, 010	527, 470	645, 520	823, 820	694, 810	403, 630	275, 020
19...	407, 880	423, 600	443, 950	462, 620	484, 620	501, 470	529, 320	650, 100	825, 090	684, 810	403, 410	271, 880
20...	408, 550	423, 830	444, 410	463, 300	485, 560	501, 930	531, 430	655, 670	825, 340	674, 570	403, 180	267, 690
21...	409, 220	424, 060	445, 090	463, 990	486, 240	502, 400	533, 770	663, 420	825, 850	664, 140	403, 410	262, 680
22...	409, 890	424, 280	445, 770	464, 680	486, 930	502, 860	536, 340	675, 550	826, 350	652, 280	403, 180	258, 540
23...	410, 560	424, 730	446, 460	465, 140	487, 620	503, 320	539, 850	683, 100	827, 120	640, 230	403, 180	253, 580
24...	411, 240	425, 180	447, 140	465, 820	488, 320	503, 780	543, 830	689, 200	827, 120	627, 240	400, 060	249, 450
25...	411, 910	425, 640	447, 820	466, 510	489, 010	504, 240	547, 810	695, 540	827, 120	614, 560	397, 370	248, 210
26...	412, 580	426, 090	448, 500	466, 970	489, 700	504, 700	552, 720	701, 420	826, 610	602, 380	394, 020	247, 380
27...	413, 250	426, 540	449, 180	467, 660	490, 390	505, 160	557, 430	708, 790	824, 580	590, 030	389, 800	247, 170
28...	413, 920	426, 990	449, 870	468, 350	490, 860	505, 630	562, 140	716, 650	821, 520	577, 940	382, 710	247, 170
29...	414, 590	427, 660	450, 320	468, 800	-----	506, 090	566, 620	727, 740	817, 990	565, 440	372, 520	246, 550
30...	415, 290	428, 120	451, 000	469, 490	-----	506, 550	569, 450	740, 100	814, 700	553, 660	361, 540	246, 140
31...	415, 710	-----	451, 460	469, 950	-----	507, 010	-----	752, 260	-----	541, 490	350, 570	-----

SNAKE RIVER NEAR MORAN, WYO.

LOCATION.—Water-stage recorder 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 above Pacific Creek.

DRAINAGE AREA.—820 square miles.

RECORDS AVAILABLE.—September, 1903, to September, 1930.

EXTREMES.—Maximum discharge during year, 7,620 second-feet July 24 (gauge height, 6.81 feet); minimum, 34 second-feet Oct. 1-6, Nov. 3 to Dec. 11 (gauge height, 0.27 foot).

1903-1930: Maximum discharge, 15,100 second-feet June 12, 1918 (gauge height, 10.41 feet); practically no flow during a few days in 1907 and 1909.

REMARKS.—Records excellent. Flow controlled by operation of outlet gates at Jackson Lake Dam.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	34	35	34	92	82	108	108	58	64	3,430	7,410	5,840
2.....	34	35	34	92	82	108	114	58	52	3,410	7,410	5,390
3.....	34	34	34	92	82	108	120	58	40	3,410	7,410	5,060
4.....	34	34	34	92	87	108	120	52	40	3,410	7,350	4,630
5.....	34	34	34	92	92	108	120	52	40	3,470	7,030	4,310
6.....	34	34	34	92	95	108	120	52	40	3,720	6,710	3,780
7.....	35	34	34	92	98	108	120	52	817	4,550	6,380	2,630
8.....	35	34	34	92	100	108	82	52	3,260	5,660	6,060	1,540
9.....	35	34	34	92	103	108	82	49	3,160	6,480	5,800	1,200
10.....	35	34	34	92	103	108	82	49	3,340	6,400	5,860	1,600
11.....	35	34	34	92	103	108	87	45	3,600	6,400	5,690	1,390
12.....	35	34	41	92	103	108	92	41	3,370	6,210	5,060	1,580
13.....	35	34	56	92	103	108	67	41	2,910	5,840	3,610	2,020
14.....	35	34	73	92	103	108	67	40	2,680	5,860	2,460	1,650
15.....	35	34	78	92	103	108	67	40	2,410	6,020	2,130	1,340
16.....	35	34	82	92	103	108	67	40	2,550	6,340	1,460	1,140
17.....	35	34	87	92	103	108	67	40	2,760	6,590	964	1,420
18.....	35	34	92	92	103	108	67	40	2,770	6,590	876	1,730
19.....	35	34	92	92	103	103	67	40	2,910	6,610	833	2,320
20.....	35	34	92	92	103	103	67	40	3,030	6,630	771	3,070
21.....	35	34	92	92	103	103	67	40	3,200	6,790	705	3,070
22.....	35	34	92	92	103	103	67	40	3,620	7,090	576	3,080
23.....	35	34	92	92	103	103	67	40	3,500	7,390	1,260	2,890
24.....	35	34	92	92	103	103	67	40	2,870	7,620	2,480	2,100
25.....	35	34	92	92	105	103	67	41	2,380	7,580	2,150	964
26.....	35	34	92	90	105	103	67	45	2,910	7,390	2,630	503
27.....	35	34	92	87	108	103	58	52	3,740	7,370	3,510	471
28.....	35	34	92	87	108	103	58	56	4,020	7,410	4,910	509
29.....	35	34	92	85	-----	103	58	64	3,760	7,370	6,420	630
30.....	35	34	92	85	-----	103	58	69	3,430	7,410	6,320	630
31.....	35	-----	92	82	-----	103	-----	69	-----	7,390	6,300	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	35					34			34.8		2,140	
November.....	35					34			34.1		2,030	
December.....	92					34			67.1		4,130	
January.....	92					82			90.8		5,580	
February.....	108					82			99.7		5,530	
March.....	108					103			106		6,520	
April.....	120					58			80.6		4,800	
May.....	60					40			48.2		2,960	
June.....	4,020					40			2,440		145,000	
July.....	7,620					3,410			6,060		373,000	
August.....	7,410					576			4,150		255,000	
September.....	5,840					471			2,280		136,000	
The year.....	7,620					34			1,300		943,000	

SNAKE RIVER NEAR HEISE, IDAHO

LOCATION.—Water-stage recorder in sec. 5, T. 3 N., R. 41 E., 3 miles above Heise.

Zero of gage 5,016.90 feet above mean sea level.

RECORDS AVAILABLE.—September, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 20,500 second-feet June 13 (gage height, 5.29 feet); minimum not determined.

1910-1930: Maximum discharge, about 60,000 second-feet May 19, 1927 (gage height, about 14.00 feet); minimum, 1,980 second-feet Apr. 1, 3-5, 1920.

REMARKS.—Records good except those for periods of ice effect Nov. 21-25, Dec. 1-5, 9, 11, 21, 26, 27, 29-31, Jan. 1-3, 6-13, Feb. 1-18, 20-27, which are poor. Discharge interpolated Nov. 10-30. Station above all irrigation diversions except Riley ditch (capacity about 30 second-feet) which diverts 1 mile above gage. Flow regulated by storage in Jackson Lake Reservoir.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	3,680	2,880	2,720	2,450		2,380	2,860	7,910	16,700	11,900	11,600	9,750
2-----	3,620	2,910		2,450		2,380	2,980	8,200	13,900	11,900	11,700	9,420
3-----	3,640	2,910		2,450		2,380	3,250	9,280	12,200	11,900	11,900	8,830
4-----	3,720	2,860		2,440		2,380	3,640	10,500	10,900	12,100	11,700	8,590
5-----	3,620	2,810		2,440		2,380	4,030	10,400	10,200	11,900	11,700	8,130
6-----	3,560	2,820	2,690			2,380	4,430	9,960	9,570	11,700	11,500	8,000
7-----	3,520	2,860	2,740			2,380	4,870	9,320	9,570	11,400	11,000	7,750
8-----	3,500	2,860	2,660			2,380	5,730	8,690	10,900	11,700	10,600	6,710
9-----	3,560	2,790	2,660			2,380	6,040	8,230	15,500	12,800	10,600	5,620
10-----	3,540	2,760	2,660			2,380	6,380	7,780	16,700	13,900	10,600	4,870
11-----	3,460	2,740	2,680			2,380	6,520	7,330	17,800	13,900	10,500	5,100
12-----	3,400	2,710	2,710			2,410	6,930	6,870	19,500	13,700	10,800	4,940
13-----	3,310	2,690	2,660			2,540	7,010	6,620	19,700	13,400	10,600	4,840
14-----	3,290	2,660	2,670			2,620	7,540	6,650	16,900	12,600	10,200	5,250
15-----	3,230	2,880	2,670			2,620	7,450	6,980	14,400	12,100	8,830	5,150
16-----	3,180	2,670	2,740			2,710	6,380	7,660	13,800	11,900	8,490	4,730
17-----	3,090	2,690	2,790			2,880	5,800	7,690	14,500	11,900	7,390	4,500
18-----	3,070	2,710	2,670			2,710	5,400	7,420	15,700	12,300	6,820	4,500
19-----	3,140	2,740	2,490			2,710	5,520	7,420	15,700	12,500	6,120	4,780
20-----	3,130	2,710	2,600			2,880	6,060	7,720	15,100	12,600	5,910	5,060
21-----	3,090	2,720	2,540			3,050	6,680	9,070	14,400	12,100	5,650	5,830
22-----	3,090		2,470			3,050	7,510	10,700	15,100	11,700	5,450	6,060
23-----	3,050		2,600			3,050	8,830	10,000	15,600	11,800	5,300	6,270
24-----	2,980		2,600			2,880	9,780	9,180	15,300	11,900	5,150	6,220
25-----	2,950		2,640			2,710	10,300	9,100	13,700	12,100	6,710	5,960
26-----	2,950	2,740	2,580			2,710	10,100	9,710	12,200	12,100	6,170	4,890
27-----	2,960	2,740	2,530			2,710	9,780	10,900	12,000	11,800	6,600	4,180
28-----	3,050	2,770	2,470			2,710	9,570	12,300	13,000	11,600	7,160	3,920
29-----	3,020	2,740	2,460			2,710	8,900	13,700	13,400	11,500	6,360	3,780
30-----	2,980	2,740	2,460			2,740	8,360	15,500	12,800	11,500	6,890	3,820
31-----	2,890		2,460			2,960		17,300		11,500	6,890	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	3,720	2,890	3,270	201,000
November-----	2,910	2,660	2,770	165,000
December-----	2,790	2,460	2,630	162,000
January-----	2,450		2,240	138,000
February-----			2,330	129,000
March-----	3,050	2,380	2,630	162,000
April-----	10,300	2,860	6,620	394,000
May-----	17,300	6,620	9,360	576,000
June-----	19,700	9,570	14,200	845,000
July-----	13,900	11,400	12,200	750,000
August-----	11,900	5,160	8,570	545,000
September-----	8,750	3,780	5,920	352,000
The year-----	19,700		6,100	4,420,000

DIVERSIONS FROM SNAKE RIVER BETWEEN HEISE AND SHELLEY GAGING STATIONS, IDAHO

Between Heise and Shelley gaging stations 50 separate canals divert water from Snake River for irrigation. Forty of these divert above mouth of Henrys Fork and 10 below. Records are available during a portion of each irrigation season from June, 1919, to September, 1930, showing combined discharges of all canals. Most of these canals are equipped with staff gages read once daily; a few have water-stage recorders. Records good except those for May, which are fair.

Daily and monthly discharge, in second-feet, 1930

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1.....	2,570	7,900	7,860	7,180	6,100	16.....	3,070	8,600	8,320	4,280	4,130
2.....	2,970	7,840	8,140	6,540	6,150	17.....	3,440	8,200	8,350	3,960	4,520
3.....	3,060	7,820	7,490	6,680	6,040	18.....	3,790	8,300	8,380	3,830	4,900
4.....	3,120	8,030	7,290	6,680	6,080	19.....	4,330	8,210	8,320	3,710	5,020
5.....	3,490	7,840	7,530	6,810	5,970	20.....	4,740	8,000	8,280	3,770	5,210
6.....	3,540	7,890	7,720	6,740	5,690	21.....	4,960	7,700	8,100	3,910	5,620
7.....	3,540	8,130	8,060	6,510	5,440	22.....	5,240	7,600	8,000	4,180	5,350
8.....	3,430	8,270	8,330	6,660	5,080	23.....	5,400	7,300	8,050	4,420	5,140
9.....	2,990	8,440	8,540	6,670	4,380	24.....	5,700	6,840	8,060	4,500	5,270
10.....	2,720	8,380	8,570	6,600	4,170	25.....	5,890	6,500	8,040	5,210	5,160
11.....	2,660	8,400	8,520	6,520	4,130	26.....	6,440	6,640	7,880	5,350	4,790
12.....	2,570	8,380	8,410	6,260	4,120	27.....	7,270	7,000	7,710	5,700	4,320
13.....	2,440	8,680	8,340	5,840	4,080	28.....	7,960	7,600	7,630	6,040	4,030
14.....	2,520	9,000	8,160	4,900	3,830	29.....	8,240	7,800	7,630	6,300	3,800
15.....	2,840	8,930	8,270	4,490	3,930	30.....	8,270	7,800	7,540	6,610	3,730
						31.....	7,890		7,400	6,200	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May.....	8,270	2,440	4,420	272,000
June.....	9,000	6,580	7,960	474,000
July.....	8,570	7,290	8,030	494,000
August.....	7,180	3,710	5,590	343,000
September.....	6,150	3,730	4,870	290,000
The period.....				1,870,000

NOTE.—Records include flow of Riley ditch which diverts from Snake River 1 mile above gaging station near Heise.

SNAKE RIVER NEAR SHELLEY, IDAHO

LOCATION.—Water-stage recorder in sec. 17, T. 1 N., R. 37 E., one-fourth mile above Woodville highway bridge and 3 miles north of Shelley.

RECORDS AVAILABLE.—March, 1915, to September, 1930.

EXTREMES.—Maximum discharge during year, 12,300 second-feet June 13 (gage height, 8.68 feet); minimum, 1,400 second-feet Sept. 21 (gage height, 4.60 feet).

1915-1930. Maximum discharge, 47,200 second-feet June 17, 1918 (gage height, 16.97 feet); minimum, 628 second-feet Sept. 15, 1926 (gage height, 3.53 feet).

REMARKS.—Records excellent. Discharge interpolated Apr. 6, 7, 25. Flow regulated by numerous canal diversions above station and by storage in Jackson Lake Reservoir.

Daily and monthly discharge, in second-feet, 1929-30

Day	Nov.	Apr.	May	June	July	Aug.	Sept.
1		3,590	7,470	9,470	6,000	5,270	4,980
2	3,680	3,460	6,600	8,720	5,130	6,000	4,960
3		3,520	6,130	6,510	5,270	6,310	4,700
4		3,900	6,540	5,010	6,000	6,440	4,300
5		4,250	7,400	4,400	5,630	6,310	4,270
6		4,820	7,710	3,750	5,270	6,310	4,400
7		5,400	7,640	2,860	4,650	6,220	4,790
8		5,970	7,500	2,450	4,380	5,820	4,960
9		6,570	7,330	3,590	4,400	5,540	4,540
10		7,230	6,970	7,030	5,240	5,630	3,900
11		7,640	6,380	8,470	6,510	5,880	3,240
12		7,770	5,970	9,800	6,570	6,190	3,180
13		7,940	5,420	11,700	6,470	6,900	3,180
14		8,260	5,240	10,900	6,310	7,740	2,920
15		9,080	4,840	8,220	5,600	7,840	3,180
16		8,750	4,870	6,280	5,100	7,300	3,030
17		7,600	5,240	6,100	4,840	6,970	2,530
18		6,600	4,960	6,970	4,840	6,310	1,980
19		6,060	4,650	7,980	4,840	5,540	1,640
20		6,100	4,200	8,360	5,270	4,820	1,520
21		6,600	3,830	8,120	5,570	4,270	1,460
22		7,160	4,680	8,400	5,130	3,660	1,780
23		7,640	6,280	9,730	4,820	3,200	2,500
24		8,680	5,940	10,600	4,820	2,840	2,940
25		9,540	5,070	10,200	5,100	2,510	3,300
26		10,400	4,700	8,750	5,240	2,860	3,300
27		10,200	4,170	6,970	5,330	2,390	2,840
28		9,730	4,120	6,250	5,270	2,250	2,400
29		9,330	4,680	6,600	5,100	2,480	2,210
30		8,440	5,970	6,770	4,980	3,260	2,120
31			7,640		5,130	4,700	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April	10,400	3,460	7,070	421,000
May	7,710	3,830	5,810	357,000
June	11,700	2,450	7,370	439,000
July	6,570	4,380	5,320	327,000
August	7,840	2,250	5,150	317,000
September	4,980	1,460	3,240	193,000
The period				2,050,000

SNAKE RIVER BELOW BLACKFOOT BRIDGE, NEAR BLACKFOOT, IDAHO

LOCATION.—Two water-stage recorders on different channels of river in secs. 5 and 7, respectively, T. 3 S., R. 35 E., below Blackfoot lower highway bridge and 2 miles west of Blackfoot.

RECORDS AVAILABLE.—April, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year not determined; no flow June 7-9.

1924-1930: Maximum discharge not determined; no flow for several days during several years.

REMARKS.—Records good. Discharge is total of flow in three channels. Measuring conditions are such that records can not be determined except at relatively low stages when flow is usually supplied by release of water from Jackson Lake. Station is below all diversions from Snake River above mouth of Blackfoot River.

Daily and monthly discharge, in second-feet, 1920

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1		2,420	2,410	1,950	16	2,970	2,590	6,030	634
2		1,650	3,010	1,920	17	2,060	2,240	5,760	414
3		1,320	3,910	1,860	18	2,680	1,760	5,190	104
4		2,040	4,440	1,590	19	3,080	1,200	4,480	27
5		1,860	4,450	1,970	20	4,560	1,540	3,620	15
6		1,380	4,500	2,090	21	4,480	2,200	2,740	31
7	0	975	4,410	2,560	22	4,840	1,860	1,770	22
8	0	563	3,900	2,800	23	6,200	1,280	833	205
9	0	556	3,310	2,110	24	7,320	1,200	602	463
10	1,880	858	3,270	1,640	25	7,450	1,450	223	903
11	3,860	1,850	3,150	1,080	26	6,100	2,090	117	1,040
12	4,840	2,630	3,510	779	27	4,150	2,310	100	907
13	6,610	2,700	4,370	712	28	2,620	2,420	70	689
14	7,030	2,900	5,790	600	29	2,730	2,270	369	482
15	5,030	3,280	6,530	592	30	2,960	2,140	557	73
					31		2,250	1,250	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June 7-30	7,450	0	3,920	187,000
July	3,280	556	1,860	114,000
August	6,530	70	3,050	188,000
September	2,800	15	1,020	60,700
The period				550,000

DIVERSIONS FROM SNAKE RIVER BETWEEN SHELLEY AND CLOUGH RANCH GAGING STATIONS,
IDAHO

Between Shelley and Clough ranch, 15 canals divert water from Snake River for irrigation. Records are available during a portion of each irrigation season from May, 1924, to September, 1930, showing combined discharge of all these canals. Records good except those for May, which are fair.

Daily and monthly discharge, in second-feet, 1930

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1.....	2,510	3,670	3,450	2,600	2,720	16.....	2,400	3,460	2,260	1,440	2,380
2.....	2,590	3,700	3,310	2,540	2,720	17.....	2,440	3,530	2,260	1,440	2,250
3.....	2,740	3,630	3,300	2,350	2,680	18.....	2,420	3,600	2,800	1,430	1,980
4.....	2,810	3,440	3,400	1,850	2,370	19.....	2,380	3,620	3,380	1,340	1,490
5.....	2,960	3,300	3,520	1,690	2,080	20.....	2,420	3,580	3,100	1,320	1,250
6.....	2,770	3,180	3,450	1,660	1,960	21.....	2,370	3,340	2,980	1,470	1,330
7.....	2,840	2,740	3,480	1,720	1,890	22.....	2,480	3,320	2,930	1,840	1,390
8.....	2,750	2,260	3,300	1,730	2,200	23.....	2,610	3,180	3,320	2,130	1,930
9.....	2,650	2,460	3,350	2,070	2,350	24.....	2,580	3,130	3,320	2,250	2,090
10.....	2,550	3,710	3,510	2,330	2,320	25.....	2,590	3,040	2,920	2,250	2,230
11.....	2,460	3,820	3,620	2,410	2,230	26.....	2,780	3,070	2,690	2,230	2,220
12.....	2,410	3,760	3,590	2,360	2,290	27.....	2,900	3,240	2,640	2,420	2,100
13.....	2,420	3,870	3,320	2,190	2,350	28.....	3,120	3,350	2,610	1,900	1,910
14.....	2,370	3,660	2,980	1,830	2,330	29.....	3,350	3,480	2,550	1,720	1,770
15.....	2,410	3,540	2,120	1,470	2,360	30.....	3,190	3,500	2,570	2,280	1,650
						31.....	3,560		2,570	2,710	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May.....	3,560	2,370	2,670	164,000
June.....	3,870	2,260	3,370	201,000
July.....	3,620	2,120	3,050	188,000
August.....	2,710	1,320	1,970	121,000
September.....	2,720	1,250	2,090	124,000
The period.....				798,000

SNAKE RIVER AT CLOUGH RANCH, NEAR BLACKFOOT, IDAHO

LOCATION.—Water-stage recorder in sec. 31, T. 3 S., R. 34 E., one-fourth mile below mouth of Blackfoot River and 14 miles southwest of Blackfoot.

RECORDS AVAILABLE.—June, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 8,390 second-feet Apr. 16 (gage height, 6.32 feet); minimum, 163 second-feet Sept. 21 (gage height, 0.99 foot).

1910-1930: Maximum discharge, 46,200 second-feet June 18, 1918 (gage height, 14.8 feet); minimum, 118 second-feet Aug. 25, 1919 (gage height, 1.93 feet).

REMARKS.—Records excellent. Flow regulated by storage in Jackson Lake and Blackfoot-Marsh Reservoirs. Numerous irrigation diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	2,880	2,980	3,180	2,600	2,470	2,850	3,510	5,340	4,300	2,980	2,540	2,230
2-----	3,000	3,210	3,110	2,630	2,600	2,870	3,490	4,420	5,540	2,050	3,090	2,280
3-----	2,880	*3,210	3,020	2,490	2,590	2,670	3,390	3,430	4,020	1,470	3,900	2,200
4-----	2,730	*3,210	3,250	2,320	2,680	2,710	3,490	3,110	2,200	2,050	4,460	1,840
5-----	2,650	3,210	3,110	2,620	2,730	2,900	3,960	3,920	1,150	2,120	4,690	2,110
6-----	2,570	3,180	3,070	2,070	2,750	2,920	4,260	4,500	765	1,660	4,690	2,300
7-----	2,470	3,120	3,050	2,050	2,730	2,980	4,800	4,630	265	1,380	4,650	2,820
8-----	2,360	3,110	3,180	1,970	2,710	3,090	5,210	4,820	195	702	4,200	3,180
9-----	2,340	3,210	3,520	1,570	2,850	3,070	5,700	5,050	19	594	3,680	2,710
10-----	2,380	*3,210	3,540	1,370	2,980	2,980	6,340	5,210	755	730	3,580	2,100
11-----	2,410	*3,210	3,790	1,590	3,120	3,050	6,740	4,880	3,270	1,680	3,600	1,380
12-----	2,550	*3,220	4,200	*1,700	3,120	3,020	6,910	4,500	4,630	2,700	3,960	952
13-----	*2,490	*3,220	4,590	*1,820	3,090	2,870	7,070	3,770	6,190	2,920	4,690	848
14-----	*2,420	*3,230	4,300	*1,930	3,110	3,120	7,350	3,180	7,250	3,020	5,910	872
15-----	*2,360	3,230	4,240	*2,050	3,160	3,250	7,860	3,920	5,540	3,520	6,940	765
16-----	2,300	3,250	4,160	2,160	3,300	3,270	8,310	2,780	3,540	2,920	6,460	840
17-----	*2,260	*3,220	3,960	1,940	3,340	3,340	7,400	3,040	2,350	2,570	6,150	695
18-----	*2,220	*3,190	3,720	1,500	3,390	3,340	6,240	2,980	2,670	2,170	5,770	419
19-----	2,180	*3,150	3,700	*1,460	3,600	3,360	5,340	2,780	3,680	1,450	5,030	241
20-----	*2,180	3,120	3,520	*1,420	3,640	3,230	5,010	2,350	4,610	1,570	4,240	201
21-----	*2,170	*2,820	3,210	*1,380	3,680	3,250	5,160	1,910	4,950	2,350	3,380	163
22-----	*2,170	*2,530	2,930	*1,340	3,620	3,410	5,320	1,760	5,120	2,240	2,400	198
23-----	2,170	2,230	2,850	1,300	3,750	3,520	5,650	3,090	6,150	1,680	1,340	257
24-----	*2,190	2,260	3,340	*1,410	3,540	3,900	6,190	3,900	7,300	1,310	1,030	497
25-----	*2,220	2,380	3,230	1,520	3,320	4,120	6,740	2,870	7,750	1,470	702	904
26-----	2,240	*2,960	3,120	*1,640	3,410	3,680	7,620	2,050	6,640	2,240	378	1,390
27-----	2,240	3,540	3,020	*1,770	3,200	3,410	7,940	1,210	4,800	2,440	363	1,450
28-----	2,260	3,750	2,650	*1,890	3,110	3,230	7,560	716	3,040	2,630	277	1,180
29-----	2,350	3,960	2,630	2,010	-----	3,230	7,260	538	3,070	2,460	368	952
30-----	2,520	3,450	2,880	2,160	-----	3,250	6,560	1,230	3,450	2,360	601	824
31-----	2,820	-----	2,650	2,360	-----	3,360	-----	2,460	-----	2,380	1,130	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	3,000	2,170	2,420	149,000
November-----	3,960	2,230	3,120	186,000
December-----	4,590	2,630	3,380	208,000
January-----	2,630	1,300	1,870	115,000
February-----	3,750	2,470	3,130	174,000
March-----	4,120	2,670	3,200	197,000
April-----	8,310	3,390	5,950	354,000
May-----	5,340	538	3,200	197,000
June-----	7,750	191	3,850	229,000
July-----	3,520	594	2,060	127,000
August-----	6,940	277	3,360	207,000
September-----	3,180	163	1,290	76,800
The year-----	8,310	163	3,060	2,220,000

* Interpolated.

AMERICAN FALLS RESERVOIR AT AMERICAN FALLS, IDAHO

LOCATION.—In secs. 29 and 30, T. 7 S., R. 31 E., at outlet gates of reservoir 1 mile from American Falls.

RECORDS AVAILABLE.—March, 1926, to September, 1930.

REMARKS.—American Falls Reservoir impounds water for supplemental irrigation of lands in Minidoka and North and South Side Twin Falls tracts and also stores water for some future irrigation development. Capacity 1,700,000 acre-feet between elevations 4,295.70 and 4,354.50, sea-level datum. Gage-height record and table showing storage capacity of reservoir furnished by United States Bureau of Reclamation.

Daily contents, in acre-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1....	756, 320	908, 640	849, 180	873, 120	766, 780	949, 310	1, 209, 230	1, 269, 370	1, 253, 830	1, 088, 960	763, 170	651, 440
2....	768, 220	901, 360	847, 660	879, 400	764, 610	959, 330	1, 215, 460	1, 270, 350	1, 251, 910	1, 077, 230	753, 070	645, 230
3....	778, 320	902, 980	845, 370	877, 830	762, 450	966, 840	1, 224, 580	1, 265, 960	1, 248, 080	1, 068, 270	743, 710	638, 490
4....	789, 930	890, 790	841, 560	873, 510	761, 730	973, 510	1, 223, 140	1, 264, 500	1, 238, 490	1, 059, 020	743, 440	632, 980
5....	800, 680	896, 650	836, 990	868, 420	759, 560	979, 360	1, 229, 370	1, 257, 200	1, 231, 770	1, 049, 340	733, 520	625, 900
6....	811, 430	886, 060	833, 180	869, 200	758, 840	986, 960	1, 232, 730	1, 251, 910	1, 220, 260	1, 037, 010	733, 960	620, 100
7....	822, 550	888, 810	828, 600	866, 850	757, 400	997, 690	1, 236, 090	1, 256, 710	1, 207, 810	1, 026, 450	723, 100	616, 230
8....	830, 890	888, 030	827, 080	865, 280	753, 120	1, 006, 280	1, 239, 920	1, 258, 660	1, 190, 860	1, 014, 430	723, 590	614, 670
9....	840, 040	883, 710	825, 550	859, 850	753, 170	1, 012, 720	1, 242, 320	1, 276, 190	1, 181, 440	1, 000, 700	723, 430	614, 040
10....	843, 470	878, 610	821, 440	854, 900	770, 380	1, 022, 160	1, 249, 040	1, 283, 980	1, 169, 190	984, 820	716, 510	612, 170
11....	849, 180	878, 610	824, 790	850, 710	779, 040	1, 030, 850	1, 256, 710	1, 291, 770	1, 153, 820	974, 350	712, 390	609, 040
12....	852, 990	876, 260	822, 550	846, 130	786, 970	1, 037, 900	1, 257, 680	1, 300, 540	1, 147, 830	964, 330	703, 980	607, 790
13....	857, 570	873, 120	824, 790	841, 560	795, 490	1, 045, 820	1, 260, 610	1, 307, 390	1, 142, 760	955, 570	703, 640	605, 600
14....	861, 760	869, 590	828, 980	839, 270	805, 500	1, 055, 500	1, 270, 830	1, 313, 330	1, 145, 990	946, 390	710, 690	603, 100
15....	866, 060	866, 060	831, 650	836, 230	814, 390	1, 062, 550	1, 266, 450	1, 312, 340	1, 147, 370	937, 760	715, 810	601, 540
16....	870, 380	863, 710	833, 940	832, 410	823, 660	1, 074, 080	1, 271, 810	1, 316, 300	1, 143, 680	929, 260	723, 530	597, 790
17....	874, 300	856, 800	839, 270	828, 600	833, 180	1, 083, 550	1, 277, 160	1, 317, 290	1, 130, 770	920, 770	733, 560	593, 100
18....	878, 220	857, 570	843, 850	823, 290	842, 320	1, 092, 110	1, 274, 240	1, 311, 840	1, 124, 780	911, 870	733, 930	587, 160
19....	882, 530	856, 040	847, 660	818, 840	851, 470	1, 097, 970	1, 271, 320	1, 321, 350	1, 118, 790	897, 830	743, 440	582, 240
20....	887, 630	851, 470	850, 710	814, 390	862, 140	1, 102, 930	1, 269, 860	1, 318, 280	1, 113, 760	889, 990	742, 490	576, 190
21....	891, 160	849, 560	853, 760	810, 320	871, 550	1, 116, 480	1, 262, 070	1, 306, 400	1, 110, 600	879, 000	744, 250	570, 740
22....	898, 220	843, 850	854, 140	805, 500	882, 530	1, 121, 090	1, 260, 610	1, 313, 820	1, 107, 890	866, 850	743, 090	563, 470
23....	903, 380	838, 510	855, 650	799, 940	892, 730	1, 135, 840	1, 259, 140	1, 315, 310	1, 105, 190	855, 660	733, 170	555, 600
24....	907, 430	836, 230	861, 000	794, 750	902, 170	1, 145, 060	1, 254, 310	1, 314, 810	1, 104, 290	842, 320	723, 750	552, 640
25....	911, 070	834, 700	867, 630	790, 680	913, 490	1, 153, 360	1, 255, 750	1, 314, 320	1, 110, 150	832, 030	713, 620	547, 360
26....	910, 260	835, 460	874, 690	786, 970	921, 180	1, 170, 140	1, 258, 660	1, 313, 820	1, 114, 210	820, 320	703, 290	548, 240
27....	907, 020	836, 230	879, 400	782, 280	931, 690	1, 175, 790	1, 258, 660	1, 307, 880	1, 116, 940	810, 320	703, 100	549, 120
28....	913, 490	841, 940	882, 530	778, 320	941, 800	1, 183, 320	1, 260, 120	1, 298, 100	1, 104, 290	800, 680	693, 190	549, 410
29....	915, 510	848, 420	882, 530	773, 630	-----	1, 188, 030	1, 265, 480	1, 284, 960	1, 102, 480	791, 790	673, 660	549, 700
30....	911, 470	847, 290	882, 930	770, 380	-----	1, 204, 980	1, 268, 400	1, 274, 240	1, 096, 620	782, 280	667, 710	552, 340
31....	913, 090	-----	876, 260	767, 860	-----	1, 207, 810	-----	1, 260, 610	-----	772, 910	653, 750	-----

SNAKE RIVER AT NEELEY, IDAHO

LOCATION.—Water-stage recorder in sec. 11, T. 8 S., R. 30 E., half a mile north of Neeley and 4 miles downstream from outlet of American Falls Reservoir until June 7. After that date water-stage recorder in sec. 31, T. 7 S., R. 31 E., 3 miles upstream was used.

RECORDS AVAILABLE.—March, 1906, to September, 1930.

EXTREMES.—Maximum discharge during year, 10,700 second-feet July 24 (gauge height, 3.82 feet); minimum, 130 second-feet Oct. 1-3.

1906-1930: Maximum discharge, 48,400 second-feet June 20, 1918 (gauge height, 13.5 feet); minimum, 130 second-feet Sept. 28 to Oct. 3, 1929.

REMARKS.—Records excellent except those for winter months, which are fair. Discharge estimated Oct. 1-8, Jan. 12-19. Flow regulated by operation of gates at American Falls Dam. Record June 7 to Sept. 30, 1930, is same as that obtained prior to June 7 at lower site, since all discharge measurements are made at lower site.

Daily and monthly discharge, in second-feet, 1925-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	130	7,600	6,830	6,710	6,520	1,680	3,080	7,900	9,000	9,550	9,840	8,220
2	130	7,800	7,060	6,650	6,490	1,680	3,360	7,900	9,100	9,590	9,970	8,140
3	130	7,700	7,830	6,710	6,450	1,680	3,600	7,860	9,630	9,890	9,970	7,910
4	133	7,700	7,830	6,740	6,450	1,680	3,600	7,860	9,630	10,100	9,840	7,910
5	153	7,700	7,830	6,740	6,410	1,690	4,280	7,730	9,560	10,100	9,680	7,950
6	150	7,730	7,860	6,590	6,410	1,690	4,950	6,800	9,530	10,100	9,430	7,870
7	150	7,700	7,800	6,630	6,450	1,690	5,140	5,390	9,550	10,100	9,100	6,960
8	150	7,670	7,340	6,670	6,250	1,690	5,800	4,110	9,550	10,100	8,900	6,310
9	1,620	7,700	7,470	6,680	3,970	1,690	6,160	3,600	9,020	10,200	8,860	6,050
10	3,110	7,800	7,600	6,700	1,690	1,690	6,160	3,080	8,820	10,100	8,820	6,050
11	3,060	7,830	6,590	6,710	1,690	1,690	6,160	2,910	8,900	10,000	8,620	5,700
12	3,040	7,800	7,830		1,710	1,680	6,870	2,930	8,860	9,890	8,420	4,520
13	3,040	7,800	7,440		1,710	1,640	7,440	3,810	8,980	9,890	7,640	4,520
14	3,040	7,800	5,030		1,730	1,640	8,860	4,590	9,220	9,930	6,700	4,520
15	3,040	7,830	4,860		1,770	1,640	8,920	4,970	9,340	9,930	6,230	5,560
16	3,200	7,900	4,650	6,650	1,770	1,600	8,920	4,340	9,340	9,680	5,950	5,980
17	3,130	7,960	5,000		1,770	1,590	9,420	4,080	9,550	9,630	5,770	5,980
18	3,110	7,900	4,970		1,790	1,600	9,960	4,160	9,630	9,630	5,800	6,050
19	3,110	7,830	5,030		1,710	1,640	10,000	4,440	9,680	9,800	6,020	6,160
20	3,110	7,830	5,030	6,590	1,660	1,640	10,000	5,230	9,430	10,100	6,670	6,160
21	2,710	7,730	4,970	6,520	1,640	1,640	9,960	5,620	9,220	10,300	7,180	6,160
22	2,110	7,800	5,000	6,560	1,680	1,620	9,310	5,540	9,140	10,500	7,870	6,160
23	2,140	7,800	4,700	6,520	1,680	1,620	8,960	5,480	8,740	10,600	8,180	6,160
24	2,160	7,540	2,190	6,560	1,680	1,620	9,000	5,510	8,300	10,100	8,180	6,130
25	5,030	5,300	2,190	6,520	1,690	1,640	9,000	5,800	8,110	9,550	8,180	5,110
26	4,940	5,610	2,180	6,520	1,680	2,020	9,000	7,090	8,140	10,100	8,180	4,050
27	4,860	5,760	3,860	6,450	1,680	2,040	9,030	8,030	8,620	10,100	8,180	4,050
28	4,680	2,190	5,060	6,450	1,680	2,090	8,890	8,680	9,100	9,970	8,140	4,050
29	4,760	6,160	5,340	6,520		2,130	8,470	9,000	9,140	9,760	8,140	4,050
30	5,270	7,620	5,570	6,450		2,040	8,100	8,890	9,300	9,760	8,220	2,810
31	5,490		6,710	6,450		2,240		8,960		9,800	8,260	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5,490	130	2,610	160,000
November.....	7,960	2,190	7,300	434,000
December.....	7,860	2,180	5,800	357,000
January.....	6,740	6,450	6,610	406,000
February.....	6,520	6,640	3,060	170,000
March.....	2,240	1,590	1,740	107,000
April.....	10,000	3,080	7,410	441,000
May.....	9,000	2,910	5,880	362,000
June.....	9,680	8,110	9,140	544,000
July.....	10,600	9,550	9,960	612,000
August.....	9,970	5,770	8,090	497,000
September.....	8,220	2,810	5,910	352,000
The year.....	10,600	130	6,140	4,440,000

LAKE WALCOTT NEAR MINIDOKA, IDAHO

LOCATION.—Hook gage in sec. 1, T. 9 S., R. 25 E., in backwater formed by Minidoka Dam, 6 miles southeast of Minidoka. Zero of gage 4,150.48 feet above mean sea level (4,200 feet project datum of the United States Bureau of Reclamation).

RECORDS AVAILABLE.—April, 1909, to September, 1930.

REMARKS.—Lake Walcott impounds 107,240 acre-feet between elevations 4,186.48 and 4,196.48 feet sea-level datum for power development and irrigation of lands on Minidoka project of United States Bureau of Reclamation. Gage-height record and capacity table furnished by United States Bureau of Reclamation.

Daily contents, in acre-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	97,840	73,730	73,620	73,730	73,390	64,030	61,940	94,950	90,990	92,970	93,790	94,950
2.....	91,810	74,520	73,620	74,410	73,620	64,140	62,380	94,370	94,290	91,230	94,250	95,180
3.....	86,100	74,520	73,960	73,620	73,840	64,030	62,050	93,320	90,290	91,570	94,840	95,070
4.....	80,950	75,080	74,630	73,960	73,620	63,480	61,060	92,510	90,880	92,860	95,670	94,490
5.....	75,650	75,200	74,630	73,960	73,390	63,370	60,200	92,270	91,460	93,550	95,790	94,950
6.....	70,400	73,620	74,860	73,960	73,390	62,380	60,850	92,160	92,510	93,790	95,910	95,910
7.....	66,000	75,080	74,860	73,390	73,390	63,150	61,280	94,140	93,090	94,600	95,910	96,630
8.....	60,200	75,080	74,520	73,280	72,490	62,930	61,500	93,900	93,320	94,600	95,430	95,670
9.....	55,260	75,310	74,290	72,940	70,840	62,710	62,710	95,910	94,250	95,310	94,140	94,140
10.....	53,970	75,420	74,970	73,620	68,750	62,820	63,040	96,030	93,900	95,180	94,020	93,440
11.....	54,720	74,630	73,730	73,730	67,320	62,710	62,280	96,870	92,740	95,550	93,790	92,160
12.....	55,040	75,420	74,520	73,840	66,770	62,490	61,940	95,790	91,920	95,430	93,900	90,410
13.....	55,470	75,420	75,420	73,840	66,550	62,710	62,050	93,900	88,900	95,430	95,180	86,920
14.....	56,330	75,530	74,180	73,390	66,220	62,490	63,700	93,550	90,290	95,430	96,630	83,770
15.....	56,550	75,530	72,830	73,390	66,330	62,270	66,440	93,440	90,880	95,550	96,510	81,510
16.....	56,980	75,650	70,730	73,390	66,440	62,380	70,510	94,140	91,570	95,070	95,910	81,740
17.....	57,520	75,200	72,050	73,390	66,880	62,710	73,730	93,900	91,110	94,490	94,720	82,520
18.....	57,730	73,530	71,720	73,170	66,880	62,710	78,350	91,690	91,690	93,550	94,250	83,430
19.....	58,050	75,530	71,280	73,390	67,100	62,710	81,400	91,810	92,860	91,920	92,860	85,170
20.....	58,590	75,530	71,610	73,390	67,210	61,280	85,750	91,690	94,140	92,510	91,690	86,800
21.....	60,420	74,970	71,610	73,170	67,100	62,160	89,250	89,360	95,180	92,740	91,460	88,780
22.....	61,830	74,630	71,170	72,940	66,880	61,830	91,920	90,880	96,390	93,550	91,460	90,990
23.....	62,380	74,520	71,390	73,170	66,770	60,630	93,550	91,460	97,470	94,720	92,510	91,810
24.....	62,820	72,830	70,070	73,170	66,770	61,610	92,160	91,460	97,350	95,670	93,090	94,600
25.....	62,820	71,280	67,650	73,170	66,550	60,850	92,860	90,530	97,110	93,670	93,790	96,870
26.....	68,970	71,610	66,220	73,170	65,560	61,280	93,550	92,270	95,910	93,440	93,550	97,350
27.....	70,620	71,720	66,220	73,170	65,120	61,500	93,440	92,860	95,070	94,020	93,900	97,110
28.....	69,080	71,170	69,740	73,280	64,030	61,390	93,320	92,390	92,740	94,490	93,790	96,990
29.....	69,520	67,980	71,170	73,280	-----	61,280	94,020	92,040	93,200	94,720	94,020	96,870
30.....	69,850	73,170	71,170	73,170	-----	61,830	94,840	92,270	92,970	94,600	94,250	96,390
31.....	69,520	-----	71,170	73,280	-----	60,960	-----	91,690	-----	93,900	93,900	-----

SNAKE RIVER NEAR MINIDOKA, IDAHO

LOCATION.—Water-stage recorder in sec. 2, T. 9 S., R. 25 E., 1 mile below Minidoka Dam and 6 miles southeast of Minidoka.

RECORDS AVAILABLE.—April, 1910, to September, 1930. Records prior to 1910 at Montgomerys Ferry 6 miles downstream.

EXTREMES.—Maximum discharge during year, 8,070 second-feet Dec. 13 (gage height, 7.30 feet); minimum, 1,190 second-feet Oct. 24 (gage height, 4.04 feet).

1910-1930: Maximum discharge, 45,900 second-feet June 21, 1918 (gage height, 16.02 feet); minimum, 960 second-feet Oct. 13, 1914 (gage height, 4.05 feet).

REMARKS.—Records excellent. Flow regulated by storage at American Falls and Lake Walcott Reservoirs and by diversions 1 mile upstream for irrigation in Minidoka project.

Daily and monthly discharge, in second-feet, 1927-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	2,190	5,710	6,660	6,520	7,000	2,070	2,190	6,000	6,410	6,960	7,110	5,360
2.....	2,070	7,480	6,680	7,250		1,920	2,900	6,240	6,300	7,140	7,160	5,260
3.....	2,120	7,050	7,250	7,080		2,050	3,140	6,540	6,300	6,990	7,110	5,140
4.....	2,090	7,190	7,400	6,820		2,030	3,270	6,060	6,450	6,770	7,080	5,110
5.....	2,050	7,280	7,480	6,630		2,020	3,600	5,790	6,410	6,880	7,020	5,060
6.....	1,940	7,540	7,540	6,850	6,910	2,120	3,600	5,210	6,110	7,020	6,850	4,870
7.....	2,090	7,430	7,570		6,880	2,030	3,990	4,560	6,160	7,190	6,740	4,730
8.....	2,160	7,370	7,370		5,820	2,040	4,210	2,900	6,270	7,220	6,800	4,630
9.....	2,220	7,340	7,510		4,590	1,910	4,410	2,440	6,160	7,310	6,880	4,190
10.....	2,120	7,400	7,800		3,320	1,980	4,900	2,150	6,000	7,370	6,570	4,210
11.....	2,070	7,480	6,820		2,380	1,940	4,920	2,320	6,140	7,310	6,410	4,210
12.....	2,030	7,400	7,600		2,210	1,910	4,820	3,160	6,450	7,250	6,030	4,120
13.....	1,960	7,400	7,920		2,140	1,870	4,800	3,460	6,960	7,220	5,440	4,100
14.....	1,990	7,340	6,630		2,070	1,870	4,850	3,620	6,300	7,160	5,240	4,120
15.....	2,040	7,370	5,480		2,070	1,850	5,040	4,140	6,060	7,110	5,260	4,100
16.....	2,040	7,480	4,900	6,850	1,830	1,680	5,240	3,820	6,000	7,140	4,940	3,800
17.....	2,080	7,660	5,160		1,950	1,860	5,410	3,840	6,060	7,110	4,850	3,440
18.....	2,110	7,660	5,210		1,870	1,830	5,580	3,970	6,060	7,160	4,780	3,460
19.....	2,140	7,630	5,060		1,850	1,880	5,870	3,820	6,270	7,370	4,700	3,440
20.....	1,920	7,630	5,380		2,030	1,900	5,820	4,300	6,160	7,190	4,900	3,420
21.....	1,320	7,860	5,210		2,040	1,810	5,870	4,460	6,080	7,160	4,970	3,380
22.....	1,310	7,510	4,940		2,030	1,800	5,970	4,630	6,060	7,140	4,990	3,480
23.....	1,280	7,480	5,090		1,880	1,680	6,030	4,340	6,200	7,140	4,990	3,480
24.....	1,260	6,270	4,050		2,080	1,770	6,410	4,050	6,270	7,160	4,990	3,480
25.....	1,260	5,580	2,900		2,210	1,780	6,190	3,860	6,100	7,160	5,160	3,290
26.....	2,420	5,610	2,580	6,850	2,340	1,740	6,140	4,630	6,160	7,280	5,410	3,070
27.....	3,740	5,560	2,660		2,420	1,980	6,160	5,140	6,240	7,140	5,360	3,160
28.....	4,210	4,300	4,050		2,280	1,990	6,160	5,580	6,770	7,020	5,110	3,080
29.....	4,250	3,560	4,870		-----	1,990	6,000	5,890	6,740	6,960	4,990	2,600
30.....	4,230	5,870	5,210		-----	2,030	5,690	6,140	6,800	7,080	5,140	2,380
31.....	4,360	-----	5,760		-----	1,990	-----	6,540	-----	7,140	5,280	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	4,360	1,260	2,290	141,000
November.....	7,860	3,560	6,880	409,000
December.....	7,920	2,580	5,830	358,000
January.....	-----	-----	6,850	421,000
February.....	-----	1,830	3,580	199,000
March.....	2,070	1,680	1,910	117,000
April.....	6,410	2,190	4,970	296,000
May.....	6,540	2,150	4,500	277,000
June.....	6,960	6,060	6,330	377,000
July.....	7,370	6,770	7,140	439,000
August.....	7,160	4,700	5,750	354,000
September.....	5,360	2,380	3,940	234,000
The year.....	7,920	1,260	5,000	3,620,000

SNAKE RIVER AT MILNER, IDAHO

LOCATION.—Water-stage recorder in sec. 29, T. 10 S., R. 21 E., one-fourth mile below Milner Dam at Milner.

RECORDS AVAILABLE.—May, 1909, to September, 1930.

EXTREMES.—Maximum discharge during year, 7,970 second-feet Nov. 3 (gage height, 12.2 feet); minimum, 10 second-feet May 27, 30, 31 (gage height, 1.44 feet).

1909-1930: Maximum discharge, 44,400 second-feet June 12, 1909 (gage height, 20.1 feet on old gage); minimum, 8 second-feet Aug. 22-26, 1924 (gage height, 1.50 feet).

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.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,020	4,910	6,260	4,500	5,660	122	115	13	13	13	12	12
2.....	1,740	7,200	5,940	5,230	5,660	399	105	12	14	12	11	13
3.....	1,480	7,750	5,920	5,970	5,940	282	80	19	13	14	16	13
4.....	1,060	7,580	6,210	5,770	5,770	122	80	138	13	13	15	13
5.....	419	6,560	6,210	5,360	5,720	244	76	18	426	11	16	13
6.....	426	5,990	6,320	4,130	5,720	845	63	14	17	12	13	13
7.....	485	7,500	6,230	4,760	5,770	874	65	13	14	12	11	27
8.....	324	7,360	6,340	4,830	5,820	862	66	17	11	12	11	14
9.....	329	7,260	6,320	5,720	4,500	828	66	20	16	14	12	13
10.....	377	7,090	6,350	5,640	3,480	805	66	13	13	14	13	12
11.....	788	7,090	6,130	5,900	1,950	794	59	13	11	19	13	12
12.....	1,250	7,200	5,730	5,880	1,950	602	55	13	11	148	13	12
13.....	1,220	7,190	6,630	5,750	1,060	434	52	17	11	15	1,280	13
14.....	1,320	7,140	6,040	5,740	1,060	409	52	15	178	15	402	13
15.....	1,640	7,120	4,520	5,660	1,470	308	46	51	73	14	13	14
16.....	1,700	7,090	3,780	5,550	1,770	282	46	13	13	13	13	13
17.....	1,360	6,980	3,630	5,550	1,350	105	43	12	11	12	13	348
18.....	1,590	7,090	3,960	5,440	965	105	26	12	12	11	15	946
19.....	1,770	7,510	4,110	5,550	965	105	23	12	158	11	12	1,720
20.....	1,780	7,510	4,060	5,550	934	104	24	12	16	11	11	1,390
21.....	960	7,310	3,880	5,820	680	108	27	12	16	13	11	1,070
22.....	449	7,090	3,580	5,820	1,270	108	24	13	13	13	12	592
23.....	1,310	7,090	3,580	5,440	295	392	22	19	13	12	12	468
24.....	1,280	6,260	3,100	5,600	105	392	20	15	13	12	13	489
25.....	1,180	4,470	2,080	5,440	136	282	21	12	12	15	15	493
26.....	1,430	3,960	1,280	5,550	348	108	19	16	12	11	12	122
27.....	3,170	4,060	1,000	5,770	115	108	17	10	12	75	11	46
28.....	4,060	4,130	1,950	5,770	115	108	17	11	11	12	11	59
29.....	3,930	2,740	3,280	5,720	-----	108	95	11	12	12	12	80
30.....	2,320	2,810	3,540	5,660	-----	107	17	10	13	11	12	1,430
31.....	2,270	-----	3,890	5,600	-----	109	-----	10	-----	12	11	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	4,060	324	1,430	87,900
November.....	7,750	2,740	6,370	379,000
December.....	6,630	1,000	4,580	282,000
January.....	5,970	4,130	5,510	339,000
February.....	5,940	115	2,520	140,000
March.....	874	104	341	21,000
April.....	115	17	49.6	2,950
May.....	138	10	18.9	1,160
June.....	426	11	39.0	2,320
July.....	148	11	19.2	1,180
August.....	1,280	11	66.0	4,060
September.....	1,720	12	316	18,800
The year.....	7,750	10	1,770	1,280,000

SNAKE RIVER NEAR KIMBERLY, IDAHO

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 32, T. 9 S., R. 18 E., half a mile below Twin Falls, $2\frac{1}{2}$ miles above Shoshone Falls, and 4 miles north of Kimberly.

RECORDS AVAILABLE.—July, 1923, to September, 1930.

EXTREMES.—Maximum discharge during year, 8,970 second-feet Nov. 3 (gage height, 10.0 feet); minimum, 436 second-feet May 28 (gage height, 1.19 feet).

1923-1930: Maximum discharge, 27,200 second-feet July 4, 1927 (gage height, 14.76 feet); minimum, 378 second-feet May 16-20, 1924 (gage height, 0.80 foot).

REMARKS.—Records excellent except those estimated Jan. 15-26, 28, which are good, and those for Mar. 3-6, which are fair. Practically entire flow diverted during large part of irrigation season by North and South Side Canals at Milner. Flow at such times consists of inflow and seepage between this station and the one at Milner. No diversions between the two stations.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,580	3,860	6,120	5,160	6,120	510	520	553	453	462	500	553
2.....	2,080	7,820	6,320	5,530	6,120	531	542	490	462	462	510	703
3.....	1,920	8,500	6,320	6,740	6,320	600	520	471	453	462	510	805
4.....	1,810	8,730	6,950	6,530	6,320	500	480	520	500	480	510	638
5.....	1,280	7,820	6,950	6,120	6,320	700	490	880	52 ^a	480	500	717
6.....	950	5,920	6,950	4,980	6,320	1,100	490	717	850	490	510	746
7.....	1,180	8,270	7,160	5,340	6,320	1,240	490	564	531	480	510	835
8.....	1,060	8,040	7,160	5,340	6,320	1,240	500	531	48 ^a	462	510	731
9.....	950	8,040	7,160	6,530	5,340	1,200	553	510	462	453	510	968
10.....	968	7,820	7,160	6,530	3,860	1,160	542	490	453	480	531	638
11.....	1,120	7,600	6,950	6,950	2,140	1,160	500	471	462	542	542	625
12.....	1,660	7,820	6,320	6,740	1,620	1,140	500	462	453	564	520	625
13.....	1,710	7,820	7,380	6,530	1,400	932	490	453	453	625	703	625
14.....	1,810	7,820	7,160	6,530	1,530	835	510	480	462	510	1,970	625
15.....	1,920	7,820	5,530	6,300	1,580	790	510	564	638	531	775	625
16.....	2,080	7,820	4,480	6,200	1,440	703	510	625	66 ^a	510	717	625
17.....	1,860	7,820	4,320	6,100	1,920	676	510	542	510	490	650	717
18.....	1,860	7,820	4,480	6,100	1,440	542	500	500	471	490	564	1,200
19.....	2,020	8,040	4,810	6,100	1,400	490	500	480	50 ^a	490	553	1,620
20.....	2,020	8,270	4,640	6,200	1,400	490	480	480	663	490	553	1,810
21.....	1,970	8,040	4,640	6,300	1,180	500	480	471	564	490	553	1,760
22.....	898	7,820	4,160	6,300	1,440	500	480	480	48 ^a	490	531	1,400
23.....	1,110	7,820	4,160	6,100	1,120	564	520	500	48 ^a	510	531	1,070
24.....	2,140	7,600	4,160	6,200	717	775	531	564	471	500	600	1,060
25.....	1,320	5,340	2,550	6,100	542	731	471	471	471	500	576	1,070
26.....	1,920	4,640	2,020	6,200	638	690	600	453	462	500	542	1,060
27.....	2,360	4,640	1,440	6,320	760	588	520	444	462	500	542	760
28.....	4,480	4,810	1,480	6,220	531	500	500	444	453	531	553	650
29.....	5,160	3,710	4,010	6,120	-----	510	500	444	453	531	638	650
30.....	2,780	2,660	4,010	6,120	-----	510	510	453	462	500	676	820
31.....	2,450	-----	4,480	6,120	-----	520	-----	453	-----	490	564	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5,160	898	1,880	116,000
November.....	8,730	2,660	7,020	418,000
December.....	7,380	1,440	5,210	320,000
January.....	6,950	4,980	6,150	378,000
February.....	6,320	531	2,930	163,000
March.....	1,240	490	740	45,500
April.....	600	471	508	30,200
May.....	880	444	515	31,700
June.....	850	453	508	30,200
July.....	625	453	500	30,700
August.....	1,970	500	611	37,600
September.....	1,810	553	891	53,000
The year.....	8,730	444	2,280	1,650,000

SNAKE RIVER NEAR TWIN FALLS, IDAHO

LOCATION.—Staff gage in sec. 33, T. 9 S., R. 17 E., at Perrine Bridge, 4 miles north of the city of Twin Falls and 4 miles below Shoshone Falls.

RECORDS AVAILABLE.—September, 1911, to June, 1917; May, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year (estimated), 10,000 second-feet Nov. 4; minimum, 505 second-feet Apr. 4-8, Aug. 17, 18 (gage height, 2.20 feet).

1911-1917, 1919-1930: Maximum discharge, 32,200 second-feet June 10, 1914 (gage height, 13.3 feet); minimum, 455 second-feet July 14, 1929 (gage height, 2.10 feet).

REMARKS.—Records good except those for estimated periods, Oct. 3 to Dec. 11, Dec. 21, 22, 24, 29, Jan. 18, 19, Feb. 3, 4, 11-28, Mar. 1-11, 13, 14, May 20-23, Sept. 17, 18, 21-30, which are fair. No diversions except by small ranch ditches between this station and the one at Milner, where practically entire flow is diverted during part of irrigation season.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,740	4,200	6,300	5,790	6,460	800	620	620	685	620	620	652
2	1,870	8,200	6,400	5,790	6,690	800	620	620	685	620	620	755
3	2,300	8,800	6,600	7,160	7,000	900	620	620	685	620	620	792
4	2,200	9,040	7,200	7,160	6,800	800	505	620	685	620	685	910
5	1,800	8,200	7,200	6,460	6,690	1,100	505	620	620	620	652	870
6	1,100	6,500	7,200	6,010	6,690	1,400	505	755	620	620	652	910
7	1,400	8,600	7,400	5,790	6,690	1,500	505	755	620	620	652	995
8	1,200	8,400	7,400	5,360	6,690	1,500	505	755	620	620	685	995
9	1,100	8,400	7,400	6,920	5,790	1,400	560	685	620	620	685	1,230
10	1,200	8,200	7,400	6,920	4,540	1,300	620	685	620	652	685	910
11	1,300	8,000	7,200	7,160	3,600	1,300	620	685	685	685	685	910
12	1,800	8,200	7,160	7,160	2,400	1,230	620	685	685	685	685	870
13	1,900	8,200	8,140	6,920	1,700	1,100	620	720	685	620	685	870
14	2,000	8,200	7,890	6,690	1,700	960	620	755	685	620	1,130	870
15	2,100	8,200	6,010	6,690	1,800	910	685	685	685	620	2,140	870
16	2,200	8,200	5,150	6,690	1,900	870	685	685	685	620	685	870
17	2,000	8,200	4,740	6,460	2,100	755	685	685	685	620	532	950
18	2,000	8,200	4,540	6,400	1,900	755	685	685	685	620	505	1,400
19	2,200	8,400	4,940	6,400	1,600	755	685	685	685	620	590	1,940
20	2,200	8,600	5,360	6,690	1,600	755	620	685	685	620	685	2,210
21	2,200	8,300	4,600	6,920	1,500	560	590	685	685	685	652	2,100
22	1,200	8,100	4,600	6,690	1,700	560	685	685	685	652	590	1,700
23	1,300	8,200	4,540	6,460	1,500	620	685	685	685	685	590	1,400
24	2,200	8,000	4,500	6,460	1,000	755	685	685	685	685	685	1,300
25	1,700	6,000	3,410	6,230	900	685	685	685	685	685	620	1,300
26	2,200	5,000	2,430	6,460	900	685	685	685	685	685	620	1,350
27	2,700	5,000	2,070	6,690	1,000	685	685	685	685	685	620	1,000
28	4,000	5,200	1,620	6,690	800	685	685	685	685	685	685	900
29	5,500	4,100	4,300	6,460	-----	685	685	685	685	685	720	900
30	3,500	3,200	4,340	6,460	-----	685	685	685	685	685	755	1,050
31	2,800	-----	4,940	6,460	-----	685	-----	685	-----	652	792	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	5,500	1,100	2,090	129,000
November	9,040	3,200	7,400	440,000
December	8,140	1,620	5,580	343,000
January	7,160	5,360	6,540	402,000
February	7,000	800	3,340	185,000
March	1,500	560	909	55,900
April	685	505	628	37,400
May	755	620	685	42,100
June	685	620	672	40,000
July	685	620	646	39,700
August	2,140	505	716	44,000
September	2,210	652	1,130	67,200
The year	9,040	505	2,520	1,830,000

SNAKE RIVER NEAR HAGERMAN, IDAHO

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 1, T. 8 S., R. 13 E., one-eighth mile above Owsley Bridge, just above Upper Salmon Falls, and 4 miles south of Hagerman. Zero of gage 2,873.46 feet above mean sea level.

RECORDS AVAILABLE.—August, 1912, to June, 1917; July, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 13,800 second-feet Nov. 4 (gage height, 4.91 feet); minimum, 4,800 second-feet Mar. 27–29 (gage height, 3.33 feet).

1912–1917, 1919–1930: Maximum discharge, 35,100 second-feet June 10, 1914 (gage height, 7.75 feet); minimum, 4,030 second-feet July 15 to Aug. 2, 1915 (gage height, 3.1 feet). Data insufficient in 1916 and 1917 for determination of extremes.

REMARKS.—Records good. Discharge estimated Oct. 1–4, 6, Jan. 22–24. Practically entire flow diverted during part of irrigation season by Twin Falls Canals at Milner; only minor diversions below Milner. Flow is principally from springs and waste water from irrigation.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	7,700	7,720	9,200	9,800	10,800	5,220	5,220	5,450	5,220	5,220	5,680	5,900
2-----	8,000	11,800	11,800	10,100	11,100	5,220	5,220	5,450	5,220	5,220	5,680	5,900
3-----	7,700	13,100	11,100	11,100	11,400	5,220	5,450	5,450	5,220	5,220	5,680	6,150
4-----	7,300	13,800	11,800	11,400	11,100	5,680	5,450	5,680	5,450	5,220	6,150	6,400
5-----	6,900	13,400	11,800	11,100	11,100	5,680	5,220	6,150	5,220	5,220	5,900	6,150
6-----	6,780	11,400	11,800	10,400	11,100	5,450	5,000	6,400	5,450	5,220	5,900	6,150
7-----	6,650	12,400	12,100	9,200	11,100	5,450	5,000	6,400	5,680	5,220	5,900	6,400
8-----	6,650	13,100	12,100	9,800	11,100	6,680	5,000	6,650	5,450	5,220	5,900	6,400
9-----	6,400	13,100	12,100	10,400	11,800	5,680	5,000	6,400	5,450	5,220	5,900	6,400
10-----	6,400	13,100	12,100	11,100	9,200	5,680	5,000	6,150	5,450	5,450	6,150	6,650
11-----	6,400	12,800	12,100	11,400	7,720	5,900	5,000	5,900	5,220	5,450	6,150	6,400
12-----	6,650	12,800	11,400	11,400	6,650	5,900	5,000	5,680	5,220	5,450	6,150	6,400
13-----	7,180	12,800	12,100	11,100	6,400	5,900	5,000	5,450	5,220	5,450	6,650	6,400
14-----	7,180	12,800	12,400	11,100	6,400	5,680	5,450	5,450	5,220	5,680	7,180	6,400
15-----	7,180	12,800	11,100	11,100	6,400	5,680	5,450	5,900	5,450	5,450	7,450	6,400
16-----	7,450	12,800	9,800	10,800	6,400	5,450	5,450	6,150	5,680	5,450	6,900	6,400
17-----	7,450	12,800	9,500	10,800	6,650	5,450	5,220	6,150	5,680	5,450	6,650	6,400
18-----	7,180	12,800	9,200	10,800	6,400	5,450	5,220	5,900	5,450	5,450	6,650	6,400
19-----	7,450	12,800	9,800	10,800	6,150	5,220	5,220	5,900	5,450	5,450	6,650	6,650
20-----	7,450	13,400	9,800	10,800	6,150	5,220	5,220	5,680	5,680	5,450	6,400	7,180
21-----	7,450	12,800	9,500	10,800	5,900	5,000	5,220	5,680	5,900	5,450	6,400	7,450
22-----	7,180	12,800	9,500	10,700	5,900	5,000	5,220	5,680	5,900	5,450	6,150	7,180
23-----	6,150	12,800	9,200	10,600	6,150	5,000	5,220	5,680	5,680	5,450	5,900	6,900
24-----	6,650	12,800	9,200	10,500	5,900	5,000	5,220	5,450	5,680	5,450	5,900	6,650
25-----	7,180	11,400	8,600	10,400	5,680	5,000	5,220	5,450	5,680	5,450	5,900	6,650
26-----	6,650	9,800	7,450	10,800	5,220	5,000	5,220	5,220	5,450	5,450	5,900	6,650
27-----	7,180	9,800	6,900	10,800	5,220	4,800	5,450	5,220	5,450	5,680	5,900	6,650
28-----	8,900	10,100	6,400	10,800	5,450	4,800	5,680	5,000	5,220	5,680	5,900	6,650
29-----	10,100	9,800	7,180	10,800	-----	4,800	5,680	5,000	5,220	5,680	5,900	6,400
30-----	9,200	8,000	8,900	10,800	-----	5,000	5,450	5,000	5,220	5,680	5,900	6,400
31-----	7,720	-----	9,500	10,800	-----	5,000	-----	5,000	-----	5,680	5,900	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	10,100	6,150	7,300	449,000
November-----	13,800	7,720	12,100	720,000
December-----	12,400	6,400	10,200	627,000
January-----	11,400	9,200	10,700	658,000
February-----	11,400	5,220	7,840	435,000
March-----	5,900	4,800	5,330	328,000
April-----	5,680	5,000	5,250	312,000
May-----	6,650	5,000	5,700	350,000
June-----	5,900	5,220	5,450	324,000
July-----	5,680	5,220	5,430	334,000
August-----	7,450	5,680	6,170	379,000
September-----	7,450	5,900	6,500	387,000
The year-----	13,800	4,800	7,320	5,300,000

SLAKE RIVER AT KING HILL, IDAHO

LOCATION.—Water-stage recorder in sec. 7, T. 5 S., R. 11 E., 300 feet east of Union Pacific Railroad station at King Hill and 20 miles below Big Wood River.

RECORDS AVAILABLE.—May, 1909, to September, 1930.

EXTREMES.—Maximum discharge during year, 16,300 second-feet Nov. 4 (gauge height, 8.96 feet); minimum, 6,100 second-feet Apr. 15 (gauge height, 5.43 feet).

1909-1930: Maximum discharge, 47,200 second-feet June 22, 1918 (gauge height, 16.3 feet); minimum, 4,760 second-feet July 7-9, Aug. 15, 16, 1910 (gauge height, 4.5 feet).

REMARKS.—Records excellent except those estimated, Oct. 1, 2, 4, 5 Mar. 1, 3-5, 7, 8, 28, 29, Apr. 12, which are good. Practically entire flow diverted at Milner during irrigation season and flow at King Hill is derived largely from springs and seepage water entering below Milner.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10,000	10,100	10,600	11,500	12,700	7,250	7,010	7,250	6,780	6,780	7,250	7,980
2	10,200	12,700	13,600	12,100	13,000	7,010	7,490	7,010	6,780	6,780	7,250	7,980
3	9,800	15,300	13,300	12,700	13,300	7,130	7,490	7,010	6,780	7,250	7,980	7,930
4	9,400	16,000	13,600	13,300	13,300	7,250	7,250	7,250	7,010	6,780	7,730	8,230
5	9,000	16,000	13,600	13,300	13,000	7,370	7,010	7,490	7,010	6,780	7,730	8,230
6	8,740	14,300	14,000	13,000	13,000	7,490	7,010	8,230	7,010	6,780	7,730	8,230
7	8,480	13,600	14,000	11,500	13,300	7,570	6,780	8,230	7,250	6,780	7,730	8,230
8	8,740	14,900	14,000	11,800	13,300	7,650	6,780	8,740	7,250	6,780	7,490	8,230
9	8,740	14,900	14,300	12,100	13,000	7,730	6,550	8,480	7,010	6,780	7,490	8,480
10	8,480	14,900	14,300	13,000	11,800	7,730	6,780	8,230	7,010	6,780	7,980	8,480
11	8,480	14,600	14,300	13,300	10,400	7,730	6,780	7,980	7,010	7,010	7,730	8,480
12	8,740	14,600	14,000	13,300	9,260	7,980	6,780	7,730	6,780	7,010	7,980	8,230
13	9,260	14,900	13,600	13,000	8,740	7,980	6,780	7,490	6,780	7,010	8,230	8,230
14	9,530	14,900	14,300	13,000	8,740	7,730	7,250	7,490	6,780	7,010	8,740	8,230
15	9,530	14,900	13,600	12,700	8,740	7,730	7,250	7,730	7,010	7,010	9,260	8,480
16	9,530	14,900	12,100	12,700	8,740	7,490	7,010	8,230	7,010	7,010	8,740	8,480
17	9,800	14,900	11,500	12,700	9,000	7,490	7,010	8,230	7,250	7,250	8,740	8,480
18	9,530	14,600	11,500	12,400	8,740	7,490	7,010	7,980	7,250	7,250	8,740	8,480
19	9,530	14,900	11,800	12,700	8,230	7,250	7,010	7,730	7,010	7,250	8,480	8,740
20	9,800	15,300	11,800	12,700	8,230	7,250	7,010	7,730	7,250	7,250	8,480	9,260
21	9,800	14,900	11,500	12,700	8,230	7,010	7,010	7,490	7,490	7,010	8,480	9,530
22	9,530	14,600	11,500	12,400	7,980	7,250	6,780	7,490	7,490	7,010	8,230	9,530
23	8,740	14,900	11,200	12,400	8,230	7,010	6,780	7,490	7,490	7,250	7,730	9,260
24	8,480	14,600	11,200	12,400	8,230	7,010	6,780	7,250	7,250	7,010	7,730	8,740
25	9,800	14,000	10,900	12,400	7,730	7,010	6,780	7,250	7,250	7,250	7,730	8,740
26	9,000	12,400	9,800	12,400	7,490	7,250	6,780	7,010	7,250	7,250	7,730	8,740
27	9,530	11,800	9,260	12,700	7,490	7,010	6,780	6,780	7,010	7,250	7,730	8,740
28	10,600	12,100	8,740	12,700	7,490	6,930	7,250	6,780	6,780	7,250	7,730	8,740
29	12,100	12,100	8,740	12,700	-----	6,860	7,250	6,550	6,780	7,250	7,730	8,480
30	12,100	10,900	10,900	12,700	-----	6,730	7,250	6,550	6,780	7,250	7,730	8,480
31	10,400	-----	11,200	12,700	-----	7,010	-----	6,780	-----	7,250	7,980	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	12,100	8,480	9,530	586,000
November	16,000	10,100	14,100	839,000
December	14,300	8,740	12,200	750,000
January	13,300	11,500	12,600	775,000
February	13,300	7,490	10,000	555,000
March	7,980	6,780	7,340	451,000
April	7,490	6,550	6,980	415,000
May	8,740	6,550	7,540	464,000
June	7,490	6,780	7,060	420,000
July	7,250	6,780	7,030	432,000
August	9,260	7,250	7,980	491,000
September	9,530	7,980	8,540	508,000
The year	16,000	6,550	9,240	6,690,000

SNAKE RIVER NEAR MURPHY, IDAHO

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 18, T. 2 S., R. 1 E., three-fourths mile below Swan Falls power plant and 9 miles north east of Murphy.

DRAINAGE AREA.—41,900 square miles.

RECORDS AVAILABLE.—August, 1912, to September, 1930.

EXTREMES.—Maximum discharge during year, 19,500 second-feet Nov. 20 (gage height, 6.55 feet); minimum not recorded.

1912-1930: Maximum discharge, 47,300 second-feet June 22, 1918 (gage height, 13.95 feet); minimum, about 5,000 second-feet Aug. 6, 1917 (gage height, about -2.25 feet).

REMARKS.—Records excellent except those for Oct. 1-15, Dec. 27-31, Jan. 1-6, 23-25, Mar. 24, 27, Apr. 5, 6, 8, 9, 11-16, May 29, July 8, which were estimated. Large diurnal fluctuations in stage caused by operation of gates and power plant at dam. Several pumping diversions between this station and the one at King Hill. Gage-height record furnished by Idaho Power Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	10,000	10,800	11,200	11,400	13,300	7,880	7,670	7,670	7,470	7,000	7,370	7,670
2-----	10,200	10,300	11,000	11,700	13,300	7,770	7,670	7,370	7,370	7,000	7,370	7,990
3-----	10,400	12,600	14,300	12,500	13,300	7,670	7,990	7,470	7,370	7,180	7,180	7,880
4-----	10,000	15,500	13,600	13,000	13,800	7,670	7,990	7,470	7,470	7,000	7,570	7,990
5-----	9,600	16,300	14,000	13,600	13,600	7,770	7,100	7,880	7,470	7,000	7,470	7,990
6-----	9,200	16,000	14,000	13,600	13,800	8,100	7,800	8,100	7,470	7,000	7,990	8,320
7-----	8,800	14,500	14,300	13,100	13,800	8,100	7,880	8,680	7,470	7,000	7,470	7,990
8-----	8,700	14,000	14,300	11,800	13,800	7,990	7,400	8,190	7,570	7,200	7,670	8,210
9-----	8,900	15,500	14,500	12,200	14,000	7,880	7,200	9,470	7,880	7,000	7,770	8,100
10-----	9,900	15,800	14,800	12,600	13,800	8,210	7,600	9,470	7,670	7,090	7,370	8,100
11-----	8,700	15,300	14,800	13,600	12,400	8,100	7,200	9,470	7,670	7,090	7,880	8,210
12-----	8,700	15,300	14,800	13,800	11,200	8,100	7,200	9,190	7,470	7,000	7,880	8,440
13-----	9,000	15,300	14,300	14,000	9,770	8,320	7,100	9,060	7,470	7,180	7,770	8,100
14-----	9,500	15,300	14,300	13,800	9,330	8,320	7,300	8,680	7,470	7,270	7,990	8,210
15-----	9,600	15,300	14,800	13,300	9,330	8,210	7,600	8,560	7,370	7,180	8,320	8,320
16-----	9,620	15,300	13,800	13,600	9,060	8,210	7,300	8,440	7,370	7,270	9,060	8,320
17-----	9,770	15,300	12,600	13,600	9,330	8,440	7,770	8,680	7,370	7,090	8,680	8,440
18-----	9,770	15,300	11,800	13,300	9,330	7,990	7,880	8,800	7,670	7,470	8,560	8,320
19-----	9,770	15,000	11,800	13,300	9,060	7,990	7,090	8,680	7,470	7,270	8,440	8,440
20-----	9,620	15,000	12,000	13,100	8,800	7,570	7,090	8,440	7,470	7,570	8,440	8,440
21-----	9,770	15,800	12,400	13,100	8,680	7,570	7,180	8,210	7,570	7,270	8,440	8,930
22-----	9,930	15,000	12,000	13,100	8,800	7,570	7,180	8,100	7,770	7,470	8,440	9,190
23-----	9,770	15,300	12,000	13,100	8,560	7,370	7,180	8,210	7,770	7,090	8,320	9,770
24-----	9,060	15,300	11,600	13,100	8,680	6,800	7,180	8,100	7,880	7,470	7,990	8,930
25-----	8,680	15,000	11,600	13,100	8,680	7,470	7,270	7,990	7,470	7,270	7,770	8,930
26-----	9,470	14,300	11,400	13,100	8,320	7,770	7,180	7,770	7,470	7,270	7,570	8,680
27-----	9,190	12,600	10,200	14,100	8,100	7,300	7,570	7,470	7,470	7,270	7,570	8,800
28-----	9,190	12,400	9,700	13,300	7,980	7,880	7,370	7,670	7,370	7,370	7,570	8,800
29-----	10,400	12,400	9,100	13,300	-----	7,570	7,470	7,400	7,090	7,370	7,670	8,800
30-----	12,400	12,600	9,100	13,300	-----	7,370	7,670	7,180	7,180	7,270	7,770	8,680
31-----	12,200	-----	11,000	13,300	-----	7,570	-----	7,370	-----	7,470	7,670	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	12,400	8,680	9,640	593,000
November-----	16,300	10,300	14,500	863,000
December-----	14,800	9,100	12,600	775,000
January-----	14,000	11,400	13,100	806,000
February-----	14,000	7,880	10,800	600,000
March-----	8,440	6,800	7,820	481,000
April-----	7,990	7,090	7,420	442,000
May-----	9,470	7,180	8,270	508,000
June-----	7,880	7,090	7,500	446,000
July-----	7,570	7,000	7,210	443,000
August-----	9,060	7,180	7,900	486,000
September-----	9,770	7,670	8,430	502,000
The year-----	16,300	6,800	9,590	6,940,000

SNAKE RIVER AT WEISER, IDAHO

LOCATION.—Staff gage in sec. 31, T. 11 N., R. 5 W., one-third mile above wagon bridge at Weiser. Zero of gage 2,087.22 feet above mean sea level.

RECORDS AVAILABLE.—October, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 21,100 second-feet Dec. 17; maximum gage height, 11.20 feet during ice jam Jan. 31; minimum discharge, 7,180 second-feet Aug. 1 (gage height, 1.93 feet).

1910-1930: 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).

A stage of 15.7 feet was observed Mar. 3, 1910, on old Weather Bureau gage (discharge, about 100,000 second-feet).

REMARKS.—Records good except those estimated Jan. 8-12, 23-31, Feb. 1, 2, which are fair. Flow regulated by storage reservoirs above station and by operation of Swan Falls power plant. Gage-height record furnished by United States Weather Bureau.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	12,300	15,300	14,400	12,300	18,000	12,600	14,000	15,500	18,500	8,480	7,180	7,920
2.....	10,700	13,600	14,400	13,600	20,000	12,600	13,600	15,000	19,000	7,920	7,360	8,100
3.....	10,700	13,100	14,400	14,000	20,000	12,200	13,600	15,000	16,400	7,920	7,360	7,920
4.....	10,700	13,100	14,800	14,800	18,500	11,800	14,000	16,000	15,000	7,920	7,360	8,100
5.....	10,700	15,300	15,800	15,800	18,000	12,200	15,000	18,000	14,500	8,290	7,360	8,100
6.....	10,700	18,600	15,800	16,700	18,000	14,000	15,000	18,000	14,000	8,100	7,540	8,290
7.....	11,100	18,600	16,200	16,200	18,500	16,000	15,000	18,000	13,600	7,730	7,540	8,290
8.....	10,500	18,100	16,700	15,500	19,000	13,100	16,000	18,000	14,000	7,540	7,540	8,480
9.....	10,400	16,800	16,700	14,500	19,000	13,100	15,500	18,000	15,000	7,540	7,540	8,290
10.....	10,200	15,800	16,700	14,000	18,500	12,600	14,600	17,400	16,400	7,730	7,730	8,680
11.....	10,400	15,800	17,200	14,000	18,500	12,600	15,000	16,900	15,500	7,360	8,100	8,870
12.....	10,400	18,100	18,600	14,500	18,000	12,600	13,600	16,900	16,000	7,540	7,730	9,260
13.....	10,400	17,600	18,600	15,800	16,900	12,600	14,500	16,400	15,500	7,540	8,480	9,260
14.....	10,200	17,600	18,600	15,800	16,000	12,600	14,000	16,000	13,600	7,540	8,480	9,260
15.....	10,500	17,600	19,600	15,800	16,000	13,600	14,500	16,000	12,600	7,540	8,480	9,060
16.....	10,700	17,600	20,100	15,800	16,000	13,600	15,000	16,000	11,800	7,540	9,860	9,260
17.....	10,700	17,600	21,100	14,800	16,000	14,000	12,600	16,400	11,300	7,540	9,860	9,060
18.....	11,100	18,100	19,100	14,800	16,000	15,000	12,600	16,900	11,300	7,540	10,100	9,460
19.....	11,500	17,600	17,600	14,800	16,000	13,600	12,200	17,400	11,300	7,360	9,260	9,460
20.....	11,500	17,600	15,300	14,800	16,900	13,600	11,300	17,400	11,300	7,360	8,870	9,260
21.....	11,500	17,600	14,800	14,800	18,500	13,600	10,900	18,000	10,700	7,360	8,680	9,260
22.....	11,900	17,600	14,800	14,400	17,400	12,600	11,800	17,400	10,500	7,540	8,480	10,900
23.....	11,900	17,600	14,800	14,000	17,400	13,100	12,200	17,400	10,300	7,540	8,680	10,500
24.....	11,500	17,200	14,800	14,000	17,400	14,000	13,600	16,900	10,500	7,540	8,480	10,300
25.....	11,500	17,200	14,800	14,000	16,000	14,000	15,000	16,400	10,500	7,360	8,480	10,900
26.....	11,100	17,200	14,800	14,000	15,000	13,600	16,000	15,500	10,100	7,360	7,920	10,900
27.....	11,100	16,700	13,600	14,000	15,000	14,000	16,400	15,000	9,260	7,360	7,920	10,100
28.....	11,100	15,300	13,100	14,000	14,500	15,500	16,900	15,000	8,680	7,360	7,920	10,100
29.....	11,500	14,400	11,900	15,000	-----	15,000	16,900	15,500	8,480	7,360	8,100	10,100
30.....	11,500	14,800	11,500	15,000	-----	15,000	16,000	16,400	8,480	7,540	7,920	10,100
31.....	12,300	-----	11,100	15,000	-----	15,500	-----	18,000	-----	7,540	7,730	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	12,300	10,200	11,000	676,000
November.....	18,600	13,100	16,600	988,000
December.....	21,100	11,100	15,900	978,000
January.....	16,700	12,300	14,700	904,000
February.....	20,000	14,500	17,300	961,000
March.....	16,000	11,800	13,500	830,000
April.....	16,900	10,900	14,200	845,000
May.....	18,000	15,000	16,700	1,030,000
June.....	19,000	8,480	12,800	762,000
July.....	8,480	7,360	7,610	488,000
August.....	10,100	7,180	8,190	504,000
September.....	10,900	7,920	9,250	550,000
The year.....	21,100	7,180	13,100	9,500,000

SNAKE RIVER AT OXBOW, OREG.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 16, T. 7 S., R. 48 E., at Oxbow, five-eighths mile above intake of diversion tunnel for Oxbow power plant.

RECORDS AVAILABLE.—May, 1923, to September, 1930.

EXTREMES.—Maximum discharge during year, 22,900 second-feet Feb. 1 (gage height, 11.51 feet); minimum, 7,230 second-feet July 26–29, Aug. 2, 3, 5 (gage height, 7.2 feet).

1923–1930; Maximum discharge, 70,600 second-feet Feb. 6, 1925; maximum gage height, 19.33 feet May 13, 1928; minimum discharge, 4,890 second-feet Aug. 6, 1924 (gage height, 6.30 feet).

REMARKS.—Records excellent except those for Nov. 24–29, Jan. 21–24, 26–31, Mar. 5–7, Apr. 6–11, which were estimated. Flow regulated by irrigation and power operations above station. Gage-height record furnished by Idaho Power Co.

Daily and monthly discharge, in second-feet, 1929–'30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	12,900	14,800	15,600	12,200	22,500	14,000	15,600	16,000	18,900	8,740	7,470	7,960
2.....	11,800	14,400	15,200	14,000	21,600	13,300	14,800	15,600	19,400	8,470	7,230	7,710
3.....	11,200	13,700	14,000	14,800	21,600	13,300	14,000	15,600	18,500	8,210	7,230	7,960
4.....	10,800	13,300	14,000	15,200	21,600	13,300	14,400	16,400	16,400	8,210	7,470	7,960
5.....	11,200	16,400	16,400	16,000	20,200	13,000	15,200	18,900	15,600	8,210	7,230	7,960
6.....	11,200	18,100	16,400	17,200	18,900	15,000	15,500	18,500	15,200	8,210	7,470	8,210
7.....	11,500	18,500	16,800	17,200	18,100	17,000	15,500	18,100	14,400	7,960	7,470	8,210
8.....	11,200	18,500	16,800	16,400	18,900	13,700	16,000	17,700	14,400	7,710	7,710	8,470
9.....	10,800	16,800	17,200	15,600	18,500	13,700	16,500	18,100	14,800	7,710	7,710	8,210
10.....	10,500	17,200	17,700	14,400	18,900	13,300	15,500	18,100	16,000	7,710	7,710	8,470
11.....	10,500	18,100	17,700	14,400	18,500	12,900	15,000	18,100	16,800	7,710	7,960	8,740
12.....	10,500	18,100	19,400	15,200	18,500	13,300	14,500	17,200	16,000	7,470	7,960	9,010
13.....	10,500	18,100	19,800	16,400	17,200	13,300	14,400	16,400	16,000	7,710	7,960	9,010
14.....	10,500	18,100	19,800	16,400	16,800	13,300	14,800	16,400	15,200	7,470	8,210	9,290
15.....	10,500	17,700	19,800	16,800	16,400	13,700	14,800	16,000	13,700	7,470	8,470	9,290
16.....	11,200	17,700	20,700	16,400	16,000	14,000	15,200	16,400	12,600	7,470	8,740	9,290
17.....	11,500	18,100	21,600	14,800	16,400	14,000	14,800	16,400	12,200	7,470	9,290	9,290
18.....	11,500	17,700	21,100	14,800	16,400	14,400	13,300	16,800	11,800	7,470	9,290	9,290
19.....	11,800	18,100	19,800	15,600	16,400	14,800	12,900	17,700	11,800	7,470	9,580	9,580
20.....	11,800	18,500	17,200	14,000	17,700	14,000	12,600	17,700	11,800	7,470	9,010	9,290
21.....	11,800	17,700	16,400	10,200	18,900	14,000	12,200	17,700	11,800	7,710	8,740	9,290
22.....	11,800	17,200	16,400	10,600	18,900	13,700	11,800	17,700	11,200	7,710	8,740	9,580
23.....	12,200	18,100	16,000	11,000	18,500	13,700	12,600	18,100	10,800	7,470	8,470	9,580
24.....	12,200	17,900	15,600	11,400	18,900	14,000	13,300	17,200	10,800	7,710	8,470	10,200
25.....	12,200	17,700	15,600	11,800	17,200	14,400	14,000	16,400	10,800	7,470	8,470	10,500
26.....	11,500	17,700	15,200	13,500	16,000	14,400	16,400	16,000	10,500	7,230	8,210	10,500
27.....	11,200	17,500	15,600	15,000	15,600	14,800	16,400	15,600	10,200	7,230	7,960	10,500
28.....	11,800	16,500	14,800	16,500	14,800	15,200	16,800	15,200	9,290	7,230	7,710	10,200
29.....	11,500	15,200	13,700	18,000	15,600	15,600	17,200	15,600	9,010	7,230	7,710	10,200
30.....	11,500	15,200	12,900	19,500	16,000	16,000	16,800	16,400	8,740	7,470	7,710	10,200
31.....	12,900	-----	11,800	21,000	-----	15,600	-----	17,200	-----	7,470	7,710	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	12,900	10,500	11,400	701,000
November.....	18,500	13,300	17,100	1,020,000
December.....	21,600	11,800	16,800	1,030,000
January.....	21,000	10,200	15,000	922,000
February.....	22,500	14,800	18,200	1,010,000
March.....	17,000	12,900	14,200	873,000
April.....	17,200	11,800	14,800	881,000
May.....	18,900	15,200	16,900	1,040,000
June.....	19,400	8,740	13,500	803,000
July.....	8,740	7,230	7,690	473,000
August.....	9,580	7,230	8,100	498,000
September.....	10,500	7,710	9,130	543,000
The year.....	22,500	7,230	13,500	9,790,000

SNAKE RIVER AT RIPARIA, WASH.

LOCATION.—Chain gage in sec. 31, T. 13 N., R. 38 E., at Oregon-Washington Railroad & Navigation Co.'s bridge at Riparia.

DRAINAGE AREA.—102,000 square miles.

RECORDS AVAILABLE.—October, 1915, to September, 1922; August, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 95,600 second-feet Apr. 26 (gage height, 9.02 feet); minimum, 13,100 second-feet Sept. 2 (gage height, 0.65 foot).

1915-1922, 1928-1930: Maximum discharge, 270,000 second-feet May 20, 1921 (gage height, 19.0 feet); minimum, 10,900 second-feet Aug. 28 to Sept. 5, 1919 (gage height, 0.1 foot).

Maximum stage known, 24.7 feet June 5, 1894 (discharge, 409,000 second-feet).

REMARKS.—Records good except those for period of ice effect, Jan. 14 to Feb. 11, which were estimated. Small diversions by pumping between this station and the one at Oxbow. Some diurnal fluctuation as result of pondage on Clearwater River at Lewiston.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20,100	18,500	22,500	22,500		29,000	51,600	76,000	92,400	31,900	15,500	13,900
2	20,100	20,700	21,300	23,100		26,600	49,200	74,600	81,600	31,100	15,100	13,100
3	19,000	22,500	21,300	22,500		25,900	46,800	73,200	77,400	29,500	15,500	14,700
4	18,000	20,700	20,700	23,100		24,500	46,800	78,800	74,600	28,700	14,300	14,700
5	18,000	21,300	19,500	23,100		24,500	54,000	87,600	69,000	28,000	14,300	14,300
6	18,000	20,700	20,700	23,800	26,000	23,800	56,400	86,000	73,200	27,300	15,500	14,700
7	18,000	23,800	21,900	23,800		27,400	57,600	86,000	71,800	26,600	15,500	15,100
8	18,000	25,200	23,800	23,800		28,200	61,200	78,800	70,400	25,200	15,100	15,500
9	18,500	25,900	24,500	23,800		27,400	74,400	71,800	70,400	24,500	15,500	15,100
10	18,500	24,500	24,500	22,500		26,600	76,800	70,400	73,200	23,300	13,000	15,500
11	18,500	24,500	27,400	22,500		25,900	72,000	66,200	78,800	23,300	13,900	15,100
12	18,500	25,200	30,600	21,900	26,600	25,200	70,800	62,600	83,000	24,500	14,300	15,500
13	18,500	24,500	32,400	20,100	28,200	25,900	73,200	62,600	78,800	23,300	13,500	15,500
14	18,500	24,500	33,300		29,000	29,000	75,600	61,400	70,400	22,700	13,500	17,000
15	18,500	23,800	34,200		30,600	28,200	80,700	65,000	65,000	22,100	13,500	17,500
16	18,000	24,500	40,100		32,400	28,200	83,300	69,000	59,000	21,500	17,000	17,500
17	18,500	24,500	44,500		32,400	28,200	76,800	69,000	55,400	20,300	17,500	17,000
18	18,500	23,800	37,100	18,000	34,200	28,200	68,400	69,000	55,400	19,100	17,000	16,000
19	19,000	23,800	34,200		38,100	27,400	62,400	77,400	62,000	18,500	17,500	15,500
20	19,000	23,800	32,400		41,200	28,200	63,600	77,400	49,800	19,100	17,500	16,000
21	18,500	23,800	29,800		43,400	28,200	63,600	78,800	48,700	18,500	17,500	16,000
22	19,500	24,500	28,200		41,200	28,200	66,000	87,600	54,200	18,500	17,000	16,500
23	18,500	23,100	27,400		39,100	34,200	66,000	81,600	45,400	17,500	13,000	16,500
24	18,500	21,300	26,600		36,100	40,100	82,000	77,400	43,200	17,000	13,000	15,500
25	18,500	21,300	25,200		33,300	45,600	92,800	73,200	41,200	16,500	15,100	17,500
26	18,500	23,100	25,200		31,500	52,800	95,600	70,400	41,200	16,500	13,000	17,500
27	18,000	24,500	25,200	19,000	32,400	54,000	94,000	67,600	39,200	16,500	15,500	18,000
28	18,000	24,500	25,200		30,600	52,800	94,000	67,600	38,200	16,500	14,700	18,000
29	19,000	25,200	24,500			54,000	90,800	78,800	35,400	16,000	15,100	18,000
30	20,700	24,500	22,500			52,800	83,000	83,000	35,400	16,000	15,100	18,000
31	19,000		22,500			52,800		92,400		15,500	14,300	
Month						Maximum	Minimum	Mean	Run-off in acre-feet			
October						20,700	18,000	18,700	1,150,000			
November						25,900	18,500	23,400	1,390,000			
December						44,500	19,500	27,400	1,680,000			
January						23,800		20,300	1,250,000			
February						43,400		30,900	1,720,000			
March						54,000	23,800	33,300	2,050,000			
April						95,600	46,800	71,000	4,220,000			
May						92,400	61,400	74,900	4,610,000			
June						92,400	35,400	60,800	3,620,000			
July						31,900	15,500	21,800	1,340,000			
August						18,000	13,900	15,800	972,000			
September						18,000	13,100	16,000	952,000			
The year						95,600	13,100	34,500	25,000,000			

TRIBUTARY BASINS

HENRYS LAKE NEAR LAKE, IDAHO

LOCATION.—Staff gage in SW $\frac{1}{4}$ sec. 26, T. 15 N., R. 43 E., at outlet of Henrys Lake 4 miles south of Lake post office.

RECORDS AVAILABLE.—July, 1923, to September, 1930.

REMARKS.—Henry's Lake Reservoir impounds water for supplemental irrigation of lands served by Last Chance, St. Anthony Union, Egin, Independent, Salem Union, and Consolidated Farmers Canals diverting from Henry's Fork. It has a capacity of practically 80,000 acre-feet between elevations 6,620 and 6,635 feet, United States Geological Survey datum. Gates in dam closed Oct. 11 to May 26. Gage-height record and table showing storage capacity of reservoir furnished by North Fork Reservoir Co.

Daily contents, in acre-feet, 1930

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1			30, 871	10, 129	5, 746	16		34, 072	21, 998	7, 203	
2			30, 282	9, 605	5, 785	17			21, 430	7, 045	
3			29, 748	9, 145	5, 627	18			20, 930	6, 888	
4			28, 676	9, 103	4, 720	19	31, 352		19, 579	6, 690	
5			27, 874	8, 852	4, 681	20		33, 524	18, 928	6, 651	
6			27, 339	8, 434	5, 352	21		33, 251	18, 328	6, 730	
7			27, 232	8, 015	5, 352	22		32, 703	17, 578	6, 651	
8			26, 804	7, 848	5, 391	23		33, 141	16, 677	6, 573	5, 036
9		33, 524	26, 230	7, 681	5, 430	24		33, 086	15, 874	6, 415	
10	31, 085		25, 237	7, 681	5, 233	25		33, 251	15, 077	6, 257	
11			24, 714	7, 124	4, 839	26	31, 888	33, 251	14, 374	6, 021	
12			24, 610	7, 282	5, 114	27		33, 141	13, 295	6, 140	4, 958
13			23, 826	7, 203		28		32, 612	12, 827	6, 021	
14			23, 147	7, 203		29		32, 429	11, 801	6, 021	5, 114
15			22, 520	7, 322		30		31, 566	11, 273	5, 982	
						31			10, 569	6, 140	

TRIBUTARY BASINS

HENRYS FORK NEAR LAKE, IDAHO

LOCATION.—Water-stage recorder in SW. ¼ sec. 26, T. 15 N., R. 43 E., one-fourth mile below Henrys Lake Dam and 4 miles south of Lake post office.

RECORDS AVAILABLE.—May, 1920, to September, 1930. Prior to September 1922, at a point below mouth of Dry Creek 3 miles downstream.

EXTREMES.—Maximum discharge during year, 376 second-feet July 4 (gauge height, 3.34 feet); minimum, 10 second-feet Oct. 15 (gauge height, 0.88 foot) lower discharge probably occurred during period of no record.

1920-1930: Maximum discharge, 907 second-feet June 13, 1926 (gauge height, 5.40 feet); minimum, 1 second-foot on several days when reservoir gates were closed.

REMARKS.—Records good. Flow controlled by operation of Henrys Lake gates.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	May	June	July	Aug.	Sept.	Day	Oct.	May	June	July	Aug.	Sept.
1	37		23	336	289	34	16			58	274	112	43
2	37		23	332	284	34	17			145	271	110	43
3	37		35	349	269	53	18			183	268	107	41
4	37		37	371	244	119	19			92	308	105	38
5	37		36	365	240	103	20		20	152	343	80	26
6	37		36	247	236	67	21		21	122	347	69	22
7	31		37	216	234	63	22		22	175	355	69	22
8	31		33	232	201	62	23		22	68	363	68	111
9	31		25	300	190	62	24		22	68	357	69	28
10	19		25	326	189	61	25		22	68	353	69	26
11							26		24	73	347	67	26
12	11		26	317	183	24	27		34	182	343	67	25
13	10		27	281	141	37	28		34	208	345	68	25
14	10		28	277	119	39	29		25	255	337	43	25
15	10		28	277	115	40	30		23	312	301	34	25
			28	276	115		31		23		288	35	27
Month							Maximum	Minimum	Mean	Run-off in acre-feet			
October 1-15							37	10	25.7	765			
May 19-31							34	20	24.0	619			
June							312	23	87.7	5,220			
July							371	216	313	19,200			
August							289	34	136	8,360			
September							119	22	46.1	2,740			

HENRYS FORK AT WARM RIVER, IDAHO

LOCATION.—Water-stage recorder in sec. 12, T. 9 N., R. 43 E., 1,000 feet above mouth of Warm River and half a mile from Warm River railroad station.

RECORDS AVAILABLE.—September, 1910, to March, 1915; April, 1918, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,000 second-feet Apr. 12 (gage height, 5.77 feet); minimum, 645 second-feet Dec. 1 (gage height, 3.98 feet). 1910-1915, 1918-1930: Maximum discharge, 3,540 second-feet May 18, 1927 (gage height, 7.55 feet); minimum, 482 second-feet Dec. 17, 19, 20, 1924 (gage height, 3.50 feet).

REMARKS.—Records excellent. Discharge interpolated Jan. 16, 17, Feb. 27, May 15. Flow regulated in part by operation of gates at Henrys Lake Reservoir about 60 miles upstream. No important diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	831	824	645	818	782	794	824	1,060	957	1,050	1,100	806
2	843	824	656	764	782	794	843	1,050	938	1,080	1,100	800
3	843	818	656	764	782	753	849	1,060	931	1,090	1,100	800
4	855	806	684	770	782	843	868	1,090	938	1,100	1,080	800
5	861	800	684	831	782	812	899	1,130	950	1,110	1,100	874
6	861	800	770	837	782	812	944	1,170	918	1,130	1,070	912
7	843	800	770	776	782	782	1,040	1,160	912	1,110	1,070	855
8	893	824	724	753	782	782	1,280	1,120	918	1,020	1,050	831
9	893	818	770	753	782	812	1,400	1,080	924	1,000	1,040	824
10	893	831	893	753	764	794	1,660	1,050	912	1,010	1,010	818
11	880	831	957	782	782	794	1,860	1,020	899	1,060	1,020	812
12	855	800	893	782	782	794	1,800	1,000	893	1,100	1,030	806
13	831	800	893	782	794	794	1,720	990	893	1,080	1,020	794
14	831	770	905	753	782	794	1,780	990	874	1,050	1,020	788
15	831	782	861	753	782	794	1,600	983	868	1,040	1,050	788
16	831	770	880	753	843	812	1,330	976	868	1,050	1,020	788
17	831	770	837	753	843	794	1,230	957	861	1,060	976	788
18	831	741	701	753	794	794	1,210	957	905	1,050	957	788
19	831	684	812	812	794	806	1,220	970	976	1,040	944	782
20	831	684	724	812	794	794	1,250	996	1,000	1,040	912	788
21	831	684	729	782	812	794	1,220	1,000	964	1,080	899	788
22	831	689	729	782	794	794	1,210	1,030	1,020	1,100	874	788
23	831	656	764	753	812	794	1,180	1,020	1,040	1,110	861	824
24	824	684	794	753	764	782	1,170	990	970	1,110	849	824
25	812	831	831	753	782	782	1,210	964	938	1,130	849	849
26	812	831	800	753	782	806	1,220	944	918	1,130	849	800
27	818	800	806	753	782	806	1,190	938	899	1,120	843	806
28	831	770	747	782	782	794	1,160	944	912	1,110	837	800
29	831	770	712	782	-----	794	1,140	957	976	1,110	837	800
30	831	770	724	782	-----	794	1,110	970	1,000	1,110	843	800
31	831	-----	788	782	-----	770	-----	970	-----	1,120	818	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	893	812	841	51,700
November	831	656	775	46,100
December	957	645	779	47,900
January	837	753	775	47,700
February	843	764	789	43,800
March	843	753	795	48,900
April	1,860	824	1,250	74,400
May	1,170	938	1,020	62,700
June	1,040	861	932	55,500
July	1,130	1,000	1,080	66,400
August	1,100	818	969	59,600
September	912	782	811	48,300
The year	1,860	645	901	653,000

HENRYS FORK NEAR ASHTON, IDAHO

LOCATION.—Water-stage recorder in sec. 28, T. 9 N., R. 42 E., one-fourth mile below power plant and 3 miles west of Ashton since May 4, 1930. Prior to that date water-stage recorder in sec. 33, T. 9 N., R. 42 E., one-fourth mile below Ora Bridge was used.

RECORDS AVAILABLE.—August, 1902, to June, 1909; April, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,880 second-feet Apr. 11 (gage height, 1.60 feet); minimum, 928 second-feet Nov. 22 (gage height, 0.60 foot).

1902–1909, 1920–1930: Maximum discharge, 6,220 second-feet May 7, 1925 (gage height, 3.11 feet); minimum, 575 second-feet Aug. 14, 1924.

REMARKS.—Records good. Discharge estimated Oct. 14, 15, Nov. 11–14, 25–30, Dec. 8–20, Jan. 8, 10–13, 19–25, Feb. 1–6. Flow regulated at times by operation of gates at power dam above station. No diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.		
1.....	1,180	1,170	1,080	1,080	1,120	1,120	1,180	1,640	1,290	1,280	1,380	1,060		
2.....	1,180	1,100	1,100	1,100		1,090	1,280	1,550	1,290	1,340	1,360	1,060		
3.....	1,180	1,150	1,100	1,100		1,090	1,280	1,540	1,280	1,390	1,340	1,050		
4.....	1,150	1,150	1,140	1,200		1,120	1,350	1,560	1,250	1,390	1,340	1,040		
5.....	1,140	1,150	1,100	1,100		1,120	1,500	1,600	1,250	1,390	1,330	1,080		
6.....	1,170	1,150	1,080	1,170	1,100	1,140	1,470	1,670	1,260	1,420	1,330	1,180		
7.....	1,200	1,150	1,100	1,100		1,120	1,600	1,690	1,240	1,420	1,300	1,200		
8.....	1,220	1,170	1,040	1,040		1,090	1,870	1,690	1,230	1,290	1,300	1,180		
9.....	1,250	1,150		985		1,100	1,090	2,090	1,460	1,240	1,280	1,280	1,140	
10.....	1,260	1,150		1,140		1,140	1,100	2,380	1,440	1,240	1,320	1,260	1,090	
11.....	1,260	1,170	1,120			1,080	2,680	1,440	1,250	1,320	1,200	1,090		
12.....	1,230					1,080	2,640	1,440	1,210	1,380	1,230	1,070		
13.....	1,170					1,080	2,480	1,390	1,180	1,320	1,250	1,070		
14.....	1,160					1,030	2,620	1,330	1,160	1,300	1,280	1,070		
15.....	1,150	1,200	1,040	956	1,000	1,080	2,560	1,320	1,160	1,300	1,300	1,070		
16.....	1,150	1,200		985	1,000	1,040	1,980	1,320	1,160	1,300	1,320	1,060		
17.....	1,150	1,200		1,040	1,120	1,080	1,750	1,320	1,180	1,340	1,240	1,060		
18.....	1,170	1,140		1,040	1,060	1,080	1,750	1,330	1,160	1,320	1,200	1,070		
19.....	1,150	1,140		1,060	1,060	1,100	1,780	1,330	1,160	1,320	1,190	1,050		
20.....	1,150	1,040	1,060		1,120	1,930	1,340	1,240	1,320	1,150	1,040			
21.....	1,150	985	1,140		1,000	1,120	1,870	1,360	1,300	1,320	1,100	990		
22.....	1,140	928	1,140		1,090	1,120	1,760	1,420	1,280	1,390	1,100	1,050		
23.....	1,200	985	1,140		1,000	1,120	1,840	1,450	1,320	1,390	1,120	1,050		
24.....	1,180	1,080	1,140	1,030	1,000	1,120	1,690	1,390	1,330	1,360	1,120	1,070		
25.....	1,140		1,170		1,030	1,090	1,890	1,380	1,250	1,390	1,140	1,070		
26.....	1,120	1,080	1,140	1,080	1,060	1,120	1,910	1,280	1,230	1,400	1,090	1,070		
27.....	1,140		1,140	1,100	1,060	1,120	1,840	1,260	1,240	1,390	1,080	1,070		
28.....	1,140		1,080	1,170	1,060	1,120	1,800	1,280	1,250	1,390	1,080	1,040		
29.....	1,120		1,100	1,170	1,170	1,120	1,800	1,250	1,240	1,380	1,080	1,080		
30.....	1,100		1,080	1,140		1,170	1,170	1,660	1,290	1,250	1,380	1,090	1,080	
31.....	1,150		1,080	1,140		1,150	1,290	1,380	1,090					

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,260	1,100	1,170	71,900
November.....	1,200	928	1,120	66,600
December.....	1,170	1,080	1,120	68,900
January.....	1,200	956	1,070	65,800
February.....	1,150	1,000	1,070	59,400
March.....	1,170	1,040	1,110	68,200
April.....	2,680	1,180	1,870	111,000
May.....	1,690	1,260	1,420	87,300
June.....	1,330	1,160	1,240	73,800
July.....	1,420	1,280	1,350	83,000
August.....	1,380	1,080	1,220	75,000
September.....	1,200	990	1,080	64,300
The year.....	2,860	928	1,240	895,000

**DIVERSIONS FROM HENRYS FORK BETWEEN ASHTON AND ST ANTHONY GAGING STATIONS,
IDAHO**

Between Ashton and St. Anthony stations six canals divert water from Henrys Fork for irrigation. Records available during a portion of each irrigation season from June, 1919, to September, 1930, inclusive. Records of discharge computed from daily staff-gage readings. Records good.

Daily and monthly discharge, in second-feet, 1930

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1.....	842	1, 140	770	723	542	16.....	1, 170	995	777	550	415
2.....	842	1, 120	798	705	543	17.....	1, 180	968	793	526	415
3.....	874	1, 070	768	709	552	18.....	1, 180	1, 060	789	516	358
4.....	966	1, 080	739	706	475	19.....	1, 190	1, 040	781	461	367
5.....	1, 020	1, 070	756	708	496	20.....	1, 190	976	743	458	384
6.....	1, 040	1, 010	751	653	512	21.....	1, 220	933	742	335	396
7.....	1, 040	966	742	647	466	22.....	1, 160	935	730	354	419
8.....	1, 020	1, 000	739	682	460	23.....	1, 100	827	703	493	417
9.....	1, 020	1, 080	781	705	424	24.....	1, 110	752	678	427	404
10.....	1, 020	1, 160	667	686	424	25.....	1, 140	710	697	469	391
11.....	1, 050	1, 140	762	683	416	26.....	1, 170	763	708	559	362
12.....	1, 080	1, 100	795	696	414	27.....	1, 180	740	704	629	324
13.....	1, 120	1, 050	853	626	413	28.....	1, 180	784	731	619	318
14.....	1, 150	982	595	571	380	29.....	1, 200	826	730	619	313
15.....	1, 170	1, 040	798	602	415	30.....	1, 170	771	727	612	308
						31.....	1, 150	-----	732	612	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May.....	1, 220	842	1, 090	67, 000
June.....	1, 160	710	970	57, 700
July.....	853	667	744	45, 700
August.....	723	335	592	36, 400
September.....	552	308	417	24, 800
The period.....	-----	-----	-----	232, 000

HENREYS FORK AT ST. ANTHONY, IDAHO

LOCATION.—Water-stage recorder 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 September, 1930.

EXTREMES.—Maximum discharge during year, 2,090 second-feet May 7 (gage height, 4.10 feet); minimum, 441 second-feet June 28 (gage height, 2.85 feet).
1919-1930: Maximum discharge, 9,030 second-feet May 8, 1925 (gage height, 6.70 feet); minimum, that of June 28, 1930.

REMARKS.—Records excellent. Diversions for irrigation above and below station. Flow regulated in part by operation of gates at Utah Power & Light Co.'s dam 17 miles upstream.

Daily and monthly discharge, second-feet, 1930

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1.....	1,540	1,430	532	663	524	16.....	814	772	654	894	741
2.....	1,460	1,090	608	654	540	17.....	814	906	672	848	710
3.....	1,380	928	644	663	548	18.....	848	978	634	804	741
4.....	1,610	836	672	682	532	19.....	871	848	644	804	772
5.....	1,680	928	663	692	663	20.....	860	644	672	783	741
6.....	1,900	804	710	730	783	21.....	1,130	894	672	814	634
7.....	2,030	783	720	710	848	22.....	1,900	1,030	701	825	682
8.....	1,820	860	672	692	825	23.....	1,530	1,090	710	682	701
9.....	1,510	1,120	682	682	762	24.....	1,280	1,050	682	730	848
10.....	1,370	1,320	1,090	663	772	25.....	1,080	906	692	682	965
11.....	1,240	1,450	762	608	741	26.....	952	672	701	524	978
12.....	1,110	1,660	762	634	752	27.....	1,020	524	682	501	906
13.....	940	1,280	710	762	772	28.....	1,020	455	654	509	836
14.....	848	825	825	871	720	29.....	1,060	478	634	517	894
15.....	783	644	625	906	783	30.....	1,160	501	634	517	894
						31.....	1,380		634	517	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May.....	2,030	783	1,260	77,500
June.....	1,660	455	924	55,000
July.....	1,090	532	689	42,400
August.....	906	501	691	42,800
September.....	878	524	754	44,900
The period.....				263,000

**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 during a portion of each irrigation season from June, 1919, to September, 1930. Records of discharge computed from daily staff-gage readings. Records good.

Daily and monthly discharge, second-feet, 1930

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1.....	915	1, 130	527	638	503	16.....	442	796	672	489	338
2.....	934	1, 060	581	644	504	17.....	787	902	692	462	344
3.....	937	973	657	655	461	18.....	838	941	631	447	366
4.....	965	826	718	663	439	19.....	858	823	623	459	367
5.....	986	992	700	671	364	20.....	897	685	679	471	361
6.....	1, 020	756	724	675	380	21.....	1, 010	830	683	518	357
7.....	961	635	740	596	370	22.....	1, 040	694	716	491	340
8.....	888	843	676	600	372	23.....	1, 000	757	747	491	353
9.....	898	954	686	595	372	24.....	888	716	684	509	354
10.....	903	983	800	576	377	25.....	1, 070	715	703	509	307
11.....	930	925	758	572	379	26.....	975	665	725	524	337
12.....	956	893	797	605	375	27.....	1, 030	497	696	470	336
13.....	344	832	697	455	378	28.....	1, 050	451	668	432	335
14.....	364	781	730	413	347	29.....	1, 090	530	642	449	334
15.....	384	620	667	424	370	30.....	1, 120	477	631	457	330
						31.....	1, 120	-----	631	461	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May.....	1, 120	344	890	54, 700
June.....	1, 130	451	791	47, 100
July.....	800	527	686	42, 200
August.....	675	413	530	32, 600
September.....	504	307	372	22, 100
The period.....	-----	-----	-----	199, 000

HENRYS FORK NEAR REXBURG, IDAHO

LOCATION.—Water-stage recorder in sec. 30, T. 6 N., R. 39 E., just below highway bridge 7 miles west of Rexburg and below all tributaries.

RECORDS AVAILABLE.—April, 1909, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,030 second-feet Apr. 15 (gage height, 5.70 feet); minimum, 422 second-feet July 31 (gage height, 2.02 feet).
1909-1930: Maximum discharge, 9,490 second-feet June 29, 1927 (gage height, 9.90 feet); minimum, 355 second-feet June 28, 29, 1919 (gage height, 2.00 feet).

REMARKS.—Records good. Discharge interpolated Apr. 10, 11. Flow regulated by operation of head gates of irrigation canals above station. No diversions from Henrys Fork below station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,580	1,780	-----	1,580	1,320	745	512	431	570
2.....	1,590	1,820	-----	1,630	1,180	715	494	462	562
3.....	1,570	1,790	-----	1,810	1,080	566	480	454	552
4.....	1,540	1,780	-----	1,980	1,120	512	467	458	557
5.....	1,480	1,760	-----	2,250	1,230	498	467	458	605
6.....	1,470	1,730	-----	2,300	1,390	503	467	472	819
7.....	1,460	1,740	-----	2,140	1,670	566	462	490	970
8.....	1,460	1,700	-----	2,380	1,730	548	458	508	1,070
9.....	1,510	1,710	-----	2,490	1,460	544	454	539	1,070
10.....	1,610	1,710	-----	2,600	1,220	680	630	544	1,050
11.....	1,600	1,760	-----	2,720	1,110	836	600	562	1,040
12.....	1,580	1,750	-----	2,840	988	1,000	485	562	1,030
13.....	1,560	1,650	-----	2,650	1,010	1,210	472	660	1,030
14.....	1,530	1,590	-----	2,610	1,050	912	498	970	1,040
15.....	1,510	1,770	-----	3,000	907	675	526	1,150	994
16.....	1,500	1,900	-----	2,690	792	570	476	1,210	1,060
17.....	1,530	1,920	-----	1,940	670	566	472	1,200	1,050
18.....	1,520	-----	-----	1,520	670	580	472	1,200	1,010
19.....	1,510	-----	-----	1,440	665	655	472	1,160	1,010
20.....	1,520	-----	-----	1,530	635	685	462	1,130	958
21.....	1,540	-----	-----	1,690	635	645	454	1,040	863
22.....	1,520	-----	-----	1,680	1,010	770	449	1,070	786
23.....	1,540	-----	-----	1,580	1,350	1,010	444	1,040	874
24.....	1,580	-----	-----	1,670	1,020	1,090	440	929	929
25.....	1,580	-----	-----	2,080	836	1,060	444	940	1,130
26.....	1,560	-----	-----	2,630	655	896	449	863	1,250
27.....	1,560	-----	-----	2,220	534	710	444	730	1,280
28.....	1,630	-----	-----	1,990	498	610	436	650	1,230
29.....	1,710	-----	1,630	1,870	467	570	431	645	1,190
30.....	1,750	-----	1,680	1,670	458	539	426	620	1,220
31.....	1,760	-----	1,730	-----	562	-----	422	605	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,750	1,460	1,560	95,900
November 1-17.....	1,920	1,590	1,760	59,300
April.....	3,000	1,440	2,110	126,000
May.....	1,730	458	965	59,300
June.....	1,210	498	716	42,600
July.....	630	422	473	29,100
August.....	1,210	431	766	47,100
September.....	1,280	552	960	57,100

WARM RIVER AT WARM RIVER, IDAHO

LOCATION.—Staff gage in sec. 13, T. 9 N., R. 43 E., at highway bridge half a mile above mouth and half a mile northeast of Warm River.

RECORDS AVAILABLE.—January, 1912, to March, 1915; April, 1918, to September, 1930.

EXTREMES.—Maximum discharge during year, 264 second-feet Apr. 14 (gage height, 1.50 feet); minimum, 176 second-feet Nov. 23, 24 (gage height, 1.20 feet).

1912-1915, 1918-1930: Maximum discharge, 900 second-feet June 2, 1912 (gage height, 2.30 feet on original gage); minimum, 123 second-feet Dec. 19, 1924 (gage height, 1.00 foot).

REMARKS.—Records good. Flow unaffected by regulation.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	204	198	181	184	184	193	181	231	198	187	190	190
2.....	204	198	181	184	184	193	181	225	198	187	190	190
3.....	204	198	181	184	184	198	193	225	198	187	190	190
4.....	204	201	181	184	184	204	193	219	210	187	190	190
5.....	204	198	181	184	184	193	193	231	198	187	190	196
6.....	204	198	181	184	184	193	193	237	193	187	190	196
7.....	204	198	181	178	184	207	204	213	187	187	190	190
8.....	210	198	187	178	184	201	216	231	181	181	190	187
9.....	210	198	187	178	184	201	240	213	181	184	190	187
10.....	207	204	193	181	184	213	240	213	193	190	190	187
11.....	204	198	193	181	184	213	234	213	193	190	190	187
12.....	204	216	187	181	184	193	240	207	193	190	190	187
13.....	204	198	187	181	184	187	234	207	193	184	190	187
14.....	204	198	193	181	184	187	264	207	193	184	196	187
15.....	201	187	187	181	184	193	234	201	187	184	196	184
16.....	201	198	184	181	184	198	228	210	184	184	196	184
17.....	201	198	184	181	184	184	222	204	193	184	196	184
18.....	201	198	184	181	184	184	222	204	187	184	190	184
19.....	201	187	184	181	184	196	234	204	190	190	190	184
20.....	201	193	184	181	187	196	246	204	193	193	190	184
21.....	201	176	184	181	187	184	234	210	193	187	190	184
22.....	201	187	184	181	187	181	231	204	193	187	184	184
23.....	201	176	184	181	198	181	231	204	187	187	184	184
24.....	201	176	184	181	204	181	237	210	187	187	187	184
25.....	201	187	184	181	187	181	237	204	193	187	190	184
26.....	201	187	184	181	193	181	237	204	193	187	190	184
27.....	201	181	184	181	193	184	231	204	193	187	187	184
28.....	207	181	184	181	193	178	231	204	187	187	190	184
29.....	201	176	184	181	-----	178	225	198	187	187	190	184
30.....	201	181	184	181	-----	184	219	204	181	190	190	184
31.....	201	-----	190	181	-----	184	-----	198	-----	190	190	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	210	201	203	12,500
November.....	216	176	192	11,400
December.....	193	181	185	11,400
January.....	184	178	181	11,100
February.....	204	184	187	10,400
March.....	213	178	191	11,700
April.....	264	181	224	13,300
May.....	237	198	211	13,000
June.....	210	181	191	11,400
July.....	193	184	187	11,500
August.....	196	184	190	11,700
September.....	196	184	186	11,100
The year.....	264	176	194	140,000

ROBINSON CREEK AT WARM RIVER, IDAHO

LOCATION.—Staff gage in sec. 13, T. 9 N., R. 43 E., at Oregon Short Line Railroad bridge 1,000 feet above the mouth and one-third mile northeast of Warm River.

RECORDS AVAILABLE.—January, 1912, to March, 1915, April, 1918, to September, 1930.

EXTREMES.—Maximum discharge during year, 311 second-feet Apr. 7 (gage height, 1.82 feet); minimum, 44 second-feet Nov. 21 (gage height, 0.48 foot). 1912–1915, 1918–1930: Maximum discharge, 1,140 second-feet May 28, 1912 (gage height, 4.30 feet); minimum (estimated), 32 second-feet Dec. 18–20, 1925.

REMARKS.—Records good except those for periods of ice effect, Nov. 13–18, 25–28, Dec. 6, 21, Jan. 1, 2, 5, 15–31, Feb. 1–10, which are poor. Discharge unaffected by regulation or diversions.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1.....	71	66	64	66	52	60	63	194	98	64	55	53	
2.....	69	66	64	66		80	78	194	95	60	55	53	
3.....	69	65	64	66		80	111	199	98	62	57	53	
4.....	71	66	66	66		74	98	174	102	62	55	53	
5.....	71	66	66	66		57	111	209	102	62	55	57	
6.....	69	66	66	66	52	57	114	253	98	59	55	62	
7.....	66	65	66	45		57	311	264	95	59	55	56	
8.....	80	65	64	45		55	220	199	94	59	53	53	
9.....	83	64	66	45		55	199	184	86	59	53	53	
10.....	77	69	74	45		55	199	165	83	60	53	55	
11.....	74	66	74	50	55	56	170	151	80	60	53	53	
12.....	71	60	71	53	55	56	189	142	77	62	57	53	
13.....	63	63	80	53	55	56	204	142	80	60	55	53	
14.....			69	74	45	55	56	258	130	73	59	66	53
15.....			68	66	50	55	56	199	126	66	58	92	53
16.....			69	71		55	58	177	130	69	56	64	53
17.....	69	66	55	56		174	126	73	58	69	53		
18.....	69	66	55	56		196	130	66	56	62	53		
19.....	69	66	66	55	55	58	222	126	66	58	55	52	
20.....	69	66	55	55	55	57	299	114	80	56	55	52	
21.....	69	44	56	50	55	55	253	165	77	54	53	52	
22.....	69	45	57		55	55	247	151	73	56	53	53	
23.....	69	66	55		57	55	247	130	77	56	53	62	
24.....	66	57	62		55	55	253	130	73	54	54	58	
25.....	66	60	62		55	53	296	118	73	56	55	62	
26.....	66		62	50	55	53	276	111	66	56	55	62	
27.....	66		62		55	55	253	111	66	55	53	55	
28.....	77		66		57	53	258	111	66	54	53	54	
29.....	69	64	62		50	55	231	98	64	54	53	53	
30.....	66	64	62			56	199	109	63	54	53	53	
31.....	66	66	56			50	109	50	53	53	53		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	83	66	70.1	4,310
November.....	69	44	62.5	3,720
December.....	80	55	65.2	4,010
January.....	66	45	52.5	3,230
February.....	57	50	54.1	3,000
March.....	80		57.9	3,560
April.....	311		204	12,100
May.....	264		151	9,280
June.....	102		63	4,720
July.....	64		53	3,550
August.....	92		53	3,490
September.....	62		52	3,250
The year.....	311	44	80.5	58,200

DIVERSIONS FROM FALL RIVER ABOVE GAGING STATION NEAR SQUIRREL, IDAHO

Above Squirrel gaging station three canals divert water from Fall River for irrigation. Records are available during a portion of each irrigation season from June, 1919, to September, 1930. Records of discharge computed from daily staff-gage readings and combined to show total flow of the three canals. Records good.

Daily and monthly discharge, in second-feet, 1930

Day	May	June	Aug.	Sept.	Day	May	June	Aug.	Sept.
1-----	0	106	0	0	16-----	0	261	0	45
2-----	0	106	0	0	17-----	0	261	0	45
3-----	0	130	0	0	18-----	0	261	0	45
4-----	0	130	0	0	19-----	0	260	0	45
5-----	0	163	0	0	20-----	1	258	0	45
6-----	0	183	0	0	21-----	1	256	0	45
7-----	0	190	0	0	22-----	1	143	0	0
8-----	0	177	0	17	23-----	1	22	0	0
9-----	0	197	0	34	24-----	1	18	5	0
10-----	0	216	0	43	25-----	1	16	5	0
11-----	0	238	0	44	26-----	1	251	0	44
12-----	0	244	0	45	27-----	1	236	0	44
13-----	0	246	0	45	28-----	1	172	15	44
14-----	0	253	0	45	29-----	51	48	0	44
15-----	0	261	0	45	30-----	101	0	0	44
					31-----	101	-----	0	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May-----	101	0	8.45	520
June-----	261	0	177	10,500
August-----	15	0	.81	49
September-----	45	0	26.9	1,600
The period-----				12,700

NOTE.—No water diverted during July.

FALL RIVER NEAR SQUIRREL, IDAHO

LOCATION.—Staff gage in sec. 35, T. 9 N., R. 44 E., 4 miles northeast of Squirrel and half a mile below Marysville Canal.

RECORDS AVAILABLE.—January, 1904, to June, 1909; May, 1918, to September, 1930; August, 1902, to December, 1903, at Wilson's sawmill, 3 miles upstream.

EXTREMES.—Maximum discharge during year, 2,300 second-feet June 12 (gage height, 3.68 feet); minimum, 72 second-feet Jan. 17 (gage height, 1.00 foot).

1904-1909, 1918-1930: Maximum discharge, 6,440 second-feet June 27, 1927; minimum, that of Jan. 17, 1930.

REMARKS.—Records excellent except those for periods of ice effect Nov. 22-24, Dec. 22-31, Jan. 2, 3, 10-15, 18-31, Feb. 1-16, which are poor. Diversions for irrigation above and below station.

Daily and monthly discharge, in second feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	476	394	376	288		400	376	1,070	1,860	64 ²	509	412
2.....	476	388	298	314		365	400	1,200	1,380	63 ²	495	400
3.....	476	400	316	340		325	436	1,330	1,240	60 ²	495	400
4.....	476	400	325	365		400	443	1,480	1,290	58 ²	495	400
5.....	462	412	335	376		424	495	1,480	1,070	56 ⁵	495	462
6.....	482	424	298	376		412	551	1,530	971	56 ⁵	495	462
7.....	462	400	306	199		412	610	1,310	1,180	55 ¹	462	436
8.....	488	400	335	108		412	704	1,110	1,580	530	469	443
9.....	565	382	400	164	300	412	704	1,010	1,940	53 ⁷	462	450
10.....	495	418	412			412	720	962	2,190	572	488	400
11.....	482	394	436			400	805	895	2,190	588	456	365
12.....	469	370	424	200		394	952	823	2,300	572	530	355
13.....	456	370	476			406	1,090	868	1,630	544	476	376
14.....	456	365	462			406	1,220	933	1,050	537	516	365
15.....	443	355	436			394	952	1,000	1,110	523	502	365
16.....	443	412	424	239		388	805	1,070	1,200	516	516	365
17.....	436	412	400	72	424	388	788	1,120	1,410	530	502	345
18.....	436	412	376		424	400	771	1,220	1,530	516	476	298
19.....	436	412	388		424	388	868	1,160	1,130	530	462	306
20.....	430	288	355		424	382	1,010	1,130	1,110	488	436	325
21.....	424	280	316		436	382	1,360	2,080	933	48 ⁸	430	345
22.....	424	258			436	382	1,290	1,910	1,580	48 ⁸	424	355
23.....	424	236			436	382	1,270	1,380	1,350	48 ⁸	424	388
24.....	424	214		250	424	388	1,550	1,270	1,230	47 ⁷	424	424
25.....	418	192			424	388	1,680	1,270	971	49 ⁵	424	436
26.....	469	280	300		412	365	1,450	1,220	788	48 ⁸	424	345
27.....	443	280			412	365	1,410	1,310	688	45 ⁶	424	345
28.....	495	335			412	360	1,290	1,430	656	46 ⁸	388	365
29.....	443	345				370	914	1,530	648	46 ⁸	418	376
30.....	443	355				370	1,030	1,760	656	45 ⁶	412	345
31.....	443					370		2,000		45 ⁶	412	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	565	418	457	28,100
November.....	424	192	3 ² ₃	21,000
December.....	476	298	351	21,600
January.....	376	72	2 ³	14,900
February.....	436		353	19,600
March.....	424	325	38 ⁸	23,900
April.....	1,680	376	92 ¹	55,400
May.....	2,080	823	1,2 ⁰	79,300
June.....	2,300	648	1,300	77,400
July.....	648	456	528	32,500
August.....	530	388	463	28,500
September.....	462	298	382	22,700
The year.....	2,300	72	586	425,000

DIVERSIONS FROM FALL RIVER BETWEEN SQUIRREL AND CHESTER GAGING STATIONS, IDAHO

Between Squirrel and Chester gaging stations 10 canals divert water from Fall River for irrigation. Records available during a portion of each irrigation season from June, 1919, to September, 1930. Records of discharge computed from daily staff-gage readings and combined to show total flow of the 10 canals. Records good.

Daily and monthly discharge, in second-feet, 1930

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1.....	517	790	593	506	447	16.....	550	686	416	535	373
2.....	518	748	571	518	450	17.....	573	772	422	486	373
3.....	517	694	566	557	447	18.....	603	852	422	476	324
4.....	515	626	563	513	445	19.....	635	791	433	465	335
5.....	514	662	551	523	488	20.....	664	675	418	450	346
6.....	513	627	550	513	473	21.....	695	821	415	437	375
7.....	447	651	540	487	462	22.....	631	853	472	431	374
8.....	382	758	483	432	441	23.....	577	756	483	435	416
9.....	363	823	437	483	426	24.....	528	741	476	430	309
10.....	345	862	402	500	411	25.....	582	651	495	426	273
11.....	378	886	436	503	388	26.....	587	617	497	440	292
12.....	411	888	411	523	383	27.....	607	588	494	438	314
13.....	446	817	398	511	383	28.....	661	555	481	407	311
14.....	478	735	419	531	384	29.....	732	587	498	423	307
15.....	519	620	419	539	385	30.....	763	621	483	439	306
						31.....	764		478	439	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May.....	764	345	549	33, 800
June.....	888	555	725	43, 100
July.....	593	398	475	29, 200
August.....	557	407	479	29, 500
September.....	488	273	381	22, 700
The period.....				158, 000

TRIBUTARY BASINS

FALL RIVER NEAR CHESTER, IDAHO

LOCATION.—Water-stage recorder in sec. 13, T. 8 N., R. 41 E., half a mile above mouth and 2 miles north of Chester.

RECORDS AVAILABLE.—April, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,500 second-feet July 9 (gauge height, 4.98 feet); minimum, 13 second-feet July 30 (gauge height, 0.90 foot). 1920-1930: Maximum discharge, 6,380 second-feet June 27, 1927 (gauge height, 6.60 feet); minimum, 9 second-feet Aug. 7, 1923 (gauge height, 1.1 feet).

REMARKS.—Records excellent. Discharge estimated May 1. Numerous divisions for irrigation above station.

Daily and monthly discharge, in second-feet, 1930

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1.....	990	1,290	55	15	20	16.....	600	607	133	90	
2.....	998	951	55	16	22	17.....	650	703	133	78	
3.....	1,100	792	47	18	22	18.....	768	844	125	77	
4.....	1,220	711	43	18	22	19.....	784	703	130	66	
5.....	1,250	735	41	17	49	20.....	768	407	122	58	
6.....	1,370	511	37	19	86	21.....	1,210	564	113	55	
7.....	1,380	531	36	18	95	22.....	1,620	681	69	66	
8.....	1,160	703	90	19	97	23.....	1,200	600	32	62	
9.....	1,030	1,060	233	22	80	24.....	1,040	455	32	56	
10.....	942	1,280	338	22	77	25.....	887	338	34	52	
11.....	835	1,380	208	24	68	26.....	869	163	28	52	
12.....	719	1,550	229	60	80	27.....	960	62	20	49	
13.....	635	1,210	200	56	110	28.....	960	52	19	48	
14.....	614	681	178	92	110	29.....	1,030	64	15	45	
15.....	607	551	144	150	108	30.....	1,180	56	14	36	
						31.....	1,380		14	20	

Month	Maximum	Minimum	Mean	Run-off acre-feet
May.....	1,620	600	992	64.1
June.....	1,550	52	675	40.1
July.....	338	14	95.7	5.1
August.....	150	15	47.6	2.1
September.....	242	20	93.3	5.1
The period.....				116.1

TETON RIVER NEAR TETONIA, IDAHO

LOCATION.—Water-stage recorder in sec. 3, T. 6 N., R. 44 E., $1\frac{1}{2}$ miles below State highway bridge and 6 miles northwest of Tetonia.

RECORDS AVAILABLE.—October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 668 second-feet Mar. 22 (gage height, 1.46 feet); minimum, 250 second-feet May 20 (gage height, 0.78 foot).

REMARKS.—Records good. Discharge estimated Mar. 20, 21, 24–28, Apr. 1–5, 28. Flow affected in part by diversions from tributaries several miles above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Mar.	Apr.	May	Jun.	July	Aug.	Sept.
1.				274	373	369	422	349
2.				267	327	364	438	345
3.			400	271	314	359	455	345
4.				282	301	354	438	345
5.				322	301	354	450	364
6.			490	427	289	354	438	405
7.			452	359	274	354	416	410
8.			415	331	267	359	410	394
9.			378	331	289	364	416	373
10.	361		349	327	347	369	427	364
11.			331	306	394	394	438	349
12.			335	286	514	432	484	340
13.			340	278	589	427	533	340
14.			378	274	438	416	539	327
15.			432	274	347	405	570	327
16.			359	274	347	400	514	322
17.			335	263	357	410	484	318
18.		322	306	256	389	405	450	318
19.		340	293	253	388	432	427	310
20.		450	293	250	394	432	422	301
21.		560	289	335	419	422	416	301
22.	303	668	286	479	438	416	373	310
23.		539	286	405	527	422	394	318
24.			289	345	508	410	444	318
25.	308		293	327	444	427	444	335
26.		305	293	322	405	461	416	359
27.			293	314	383	432	400	340
28.			293	314	383	416	394	331
29.			427	293	318	373	405	373
30.			422	286	327	369	400	364
31.			322		354		388	359
Month	Maximum		Minimum		Mean		Run-off in acre-feet	
March 18–31.	668				432		12,000	
April			286		346		20,600	
May	479		250		314		19,300	
June	589		267		382		22,700	
July	461		354		398		24,500	
August	570		359		437		26,900	
September	410		301		340		20,200	
The period							146,000	

TETON RIVER NEAR ST. ANTHONY, IDAHO

LOCATION.—Water-stage recorder in sec. 15, T. 7 N., R. 41 E., half a mile above Oregon Short Line Railroad bridge and 4 miles southeast of St. Anthony.

RECORDS AVAILABLE.—April, 1920, to September, 1930; April, 1903, to June, 1909, at station three-fourths mile upstream.

EXTREMES.—Maximum discharge during year, 1,780 second-feet Apr. 3 (gage height, 2.55 feet); minimum, 525 second-feet Sept. 21 (gage height, 0.41 foot).

1903–1909, 1920–1930: Maximum discharge, 7,820 second-feet June 5, 1909 (gage height, 6.90 feet); minimum, 88 second-feet Mar. 12, 1906 (gage height, 1.00 foot).

REMARKS.—Records excellent. Discharge estimated Apr. 1, 2. Some diversions for irrigation in Teton Basin 20 miles above station. No regulation.

Daily and monthly discharge, in second-feet, 1930

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1.	900	820	1,250	842	683	629	16.	745	826	956	719	842	592
2.	900	870	1,030	842	719	629	17.	673	842	1,030	719	809	587
3.	997	1,020	921	836	734	629	18.	610	842	1,090	714	766	578
4.	1,360	1,120	853	831	739	629	19.	551	853	1,040	724	729	551
5.	1,170	1,150	842	798	729	639	20.	673	859	986	729	688	538
6.	991	1,280	782	782	708	708	21.	693	1,270	1,060	703	658	546
7.	939	1,180	820	776	688	719	22.	771	1,630	1,080	693	649	542
8.	898	1,060	950	766	683	683	23.	881	1,280	1,150	693	668	556
9.	814	991	1,110	755	693	668	24.	933	1,080	1,100	678	703	560
10.	809	944	1,120	750	729	649	25.	1,180	1,040	986	678	714	564
11.	755	870	1,230	809	776	620	26.	1,190	1,060	921	708	708	601
12.	745	798	1,410	809	766	601	27.	1,080	1,120	921	698	673	582
13.	734	739	1,380	798	848	596	28.	1,030	1,230	910	673	658	564
14.	792	734	1,090	760	870	587	29.	974	1,340	876	668	639	560
15.	864	771	939	734	892	587	30.	887	1,430	836	663	634	569
							31.		1,440		658	629	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April.....	1,360	551	885	52,700
May.....	1,630	734	1,050	64,600
June.....	1,410	732	1,020	60,700
July.....	842	658	742	45,600
August.....	892	629	723	44,500
September.....	719	538	602	35,800
The period.....				304,000

DIVERSIONS FROM TETON RIVER BETWEEN ST. ANTHONY GAGING STATION AND MOUTH OF RIVER, IDAHO

Between St. Anthony and mouth of river 15 separate canals divert from Teton River for irrigation. Records available during a portion of each irrigation season from June, 1919, to September, 1930. Records of discharge computed from daily staff-gage readings and combined to show total flow of the 15 canals. Records good.

Daily and monthly discharge, in second-feet, 1930

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1.....	615	1,180	828	590	538	16.....	655	1,013	616	754	499
2.....	617	1,070	808	617	531	17.....	714	1,053	636	733	505
3.....	632	983	816	638	532	18.....	751	1,123	616	706	499
4.....	646	878	814	664	557	19.....	690	1,063	609	676	477
5.....	659	805	769	670	555	20.....	621	977	631	634	451
6.....	639	799	746	623	610	21.....	639	1,053	622	626	455
7.....	622	801	712	610	576	22.....	659	1,053	615	601	464
8.....	595	903	720	585	562	23.....	633	1,163	615	612	475
9.....	578	1,030	733	602	543	24.....	614	1,133	598	622	492
10.....	562	1,100	685	605	532	25.....	849	1,003	601	662	517
11.....	543	1,170	732	694	506	26.....	1,090	923	617	634	536
12.....	530	1,340	726	674	509	27.....	1,120	975	622	615	517
13.....	529	1,370	781	752	513	28.....	1,150	993	595	567	491
14.....	537	1,160	747	715	519	29.....	1,200	953	577	532	473
15.....	575	946	687	779	497	30.....	1,250	893	572	503	473
						31.....	1,250		566	526	
Month						Maximum	Minimum	Mean		Run-off in acre feet	
May.....						1,250	529	764		45,100	
June.....						1,370	799	1,030		61,300	
July.....						828	566	678		41,700	
August.....						779	503	639		39,300	
September.....						610	451	513		30,500	
The period.....										218,000	

BLACKFOOT RIVER NEAR BLACKFOOT, IDAHO

LOCATION.—Water-stage recorder in sec. 27, T. 3 S., R. 34 E., 2 miles above mouth and 8 miles southwest of Blackfoot.

RECORDS AVAILABLE.—July, 1913, to September, 1930.

EXTREMES.—Maximum discharge during year, 639 second-feet Aug. 15; minimum, 1 second-foot July 25.

1913-1930: Maximum discharge, 868 second-feet May 21, 1921; no flow on many days.

REMARKS.—Records good. Discharge interpolated or estimated June 1, 8-13, Aug. 3, 4, Sept. 7, 20-22. Flow regulated by storage at Blackfoot Dam. Numerous canals divert above station. No diversions from Blackfoot River below station.

Daily and monthly discharge, in second-feet, 1930

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	220	99	53	203	16	68	24	388	53
2	213	47	145	196	17	44	16	447	26
3	134	10	176	148	18	36	25	481	7
4	41	8	206	88	19	50	21	456	5
5	16	19	237	59	20	164	23	359	3
6	17	14	219	111	21	273	42	220	3
7	14	11	193	150	22	226	34	105	3
8	14	14	54	188	23	212	8	77	9
9	14	12	14	274	24	226	4	203	22
10	50	6	95	114	25	238	2	178	68
11	110	16	238	24	26	212	28	72	195
12	110	71	256	8	27	124	15	13	222
13	110	98	369	7	28	72	73	33	167
14	110	80	456	28	29	70	65	16	156
15	94	53	573	34	30	122	57	69	137
					31		37	137	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June	273	14	113	6,720
July	99	2	33.3	2,050
August	573	13	211	13,000
September	274	3	90.3	5,370
The period				27,100

MUD LAKE NEAR TERRETON, IDAHO

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 13, T. 6 N., R. 34 E., at Owsley Canal Co.'s pump house, 1 mile east of Terreton and 14 miles south west of Hamer. Zero of gage 4,775.33 feet above mean sea level.

RECORDS AVAILABLE.—April, 1921, to September, 1930.

EXTREMES.—Maximum contents during year, 26,400 acre-feet Apr. 21, 25–27 (gage height, 5.83 feet); minimum, 1,510 acre-feet July 29–31 (gage height, –1.20 feet).

1921–1930: Maximum contents, 61,660 acre-feet May 5, 1923 (gage height, 9.20 feet); minimum, that of July 29–31, 1930.

REMARKS.—Records excellent for Dec. 14 to Apr. 30; others good except those for June and July, which may be somewhat in error. Considerable water diverted from tributaries to Mud Lake and from diversions by pumping and gravity from lake during irrigation season. Gage-height record furnished by Owsley Canal Co.

Daily contents, in acre-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	3,650	3,970	4,710	8,890	* 12,300	17,100	23,300	26,000	16,700	4,430	1,550	2,700
2-----	* 3,680	3,970	4,770	* 9,160	12,400	* 17,100	23,400	25,900	* 16,300	4,170	1,660	2,720
3-----	3,720	3,990	* 4,830	9,230	12,500	17,300	23,500	25,800	15,900	3,910	1,790	2,720
4-----	3,740	4,010	4,900	9,340	12,600	* 17,700	* 23,600	25,700	15,400	3,680	1,910	2,740
5-----	3,760	4,010	4,970	* 9,440	12,700	17,800	* 23,700	* 25,500	15,000	3,480	1,980	2,750
6-----	3,780	4,030	5,050	9,580	* 12,800	* 18,000	* 23,600	25,400	14,500	3,280	2,060	2,770
7-----	3,800	4,030	5,140	9,730	12,900	* 18,100	* 24,000	* 25,200	14,100	3,110	2,120	2,790
8-----	3,800	4,050	5,230	9,870	13,000	* 18,300	* 24,200	25,000	13,600	2,940	2,180	2,800
9-----	3,820	* 4,070	5,320	* 10,100	13,100	* 18,600	* 24,400	24,700	13,200	2,770	2,240	2,820
10-----	3,840	4,090	5,410	10,200	13,200	18,700	24,900	24,500	12,700	2,620	2,270	2,840
11-----	3,840	4,090	5,510	10,200	* 13,300	* 18,800	* 25,200	24,300	12,300	2,500	2,320	2,860
12-----	3,860	4,110	5,630	10,300	13,400	19,000	* 25,500	* 24,000	11,800	2,380	2,350	2,870
13-----	3,860	4,110	5,750	10,400	* 13,500	* 19,200	* 25,500	23,600	11,400	2,270	* 2,370	2,890
14-----	3,880	4,130	* 5,900	10,500	13,600	* 19,500	* 25,500	23,300	10,900	2,160	2,400	2,910
15-----	3,880	4,150	* 6,150	10,500	* 13,800	* 19,700	* 25,700	23,000	10,500	2,080	2,420	2,940
16-----	3,880	4,170	6,330	* 10,600	* 14,000	* 19,800	25,800	* 22,700	10,000	2,000	2,430	2,960
17-----	3,890	4,190	6,490	10,700	14,200	20,100	25,900	22,400	9,580	1,920	2,450	2,980
18-----	3,890	4,210	* 6,670	10,700	* 14,400	20,300	* 26,000	22,100	9,160	1,850	2,460	2,990
19-----	3,890	4,230	* 6,860	* 10,800	* 14,600	20,600	* 26,200	21,700	8,720	1,790	2,500	3,010
20-----	3,890	4,250	7,050	10,900	* 14,700	20,900	* 26,200	21,400	8,300	1,730	2,510	3,030
21-----	3,910	4,270	7,270	11,000	* 15,000	* 21,200	* 26,400	21,000	7,880	1,690	2,530	3,060
22-----	3,910	4,290	7,470	11,100	* 15,300	* 21,800	26,300	20,700	7,440	1,650	2,540	3,090
23-----	3,910	4,330	7,650	11,200	15,500	22,100	* 26,300	20,300	7,050	1,610	2,560	3,110
24-----	3,910	* 4,370	7,830	11,300	* 15,800	22,200	26,300	20,000	6,690	1,580	2,580	3,130
25-----	3,930	4,410	* 8,020	* 11,500	* 15,800	* 22,400	* 26,400	19,600	6,330	1,550	2,590	3,160
26-----	3,930	4,450	8,170	11,600	* 16,400	* 22,500	* 26,400	19,200	5,950	1,540	2,610	3,180
27-----	3,930	4,500	8,300	11,700	* 16,700	* 22,600	* 26,400	18,800	5,600	1,520	2,620	3,210
28-----	3,950	4,540	8,390	11,800	* 17,000	22,700	* 26,200	18,500	5,300	1,520	2,640	3,250
29-----	3,950	4,600	* 8,460	12,000	-----	22,900	26,100	18,000	5,010	* 1,510	2,660	3,270
30-----	3,950	4,640	8,560	12,100	-----	23,000	26,000	17,600	4,710	1,510	2,670	3,280
31-----	3,970	-----	* 8,660	* 12,200	-----	23,100	-----	17,200	-----	1,510	2,690	-----

* Contents obtained from staff-gage observations; all others interpolated or estimated from gage-height graph drawn on basis of observations unaffected by pumping operations.

CAMAS CREEK NEAR KILGORE,¹ IDAHO

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 13, T. 11 N., R. 38 E., 2 miles north of Lone Tree Reservoir and 8 miles south of Kilgore.

DRAINAGE AREA.—216 square miles.

RECORDS AVAILABLE.—April, 1921, to September, 1927; April to July, 1930.

EXTREMES.—Maximum discharge during year, 1,030 second-feet about Apr. 8 or 9 (gauge height, 4.75 feet); minimum probably occurred during period of no record.

1921-1927, 1930: Maximum discharge, 1,550 second-feet May 21, 1922 (gauge height, 5.75 feet); minimum, 7.8 second-feet Aug. 2, 3, 1926.

REMARKS.—Records excellent except those for Apr. 10, 11, which are fair. Discharge estimated June 15-18, July 6, 7. Two stock-watering ditches divert above station. Some storage in Frazier Reservoir on West Camas Creek.

Daily and monthly discharge, in second-feet, 1930

Day	Apr.	May	June	July	Day	Apr.	May	June	July
1		52	27	15	16	94	20	12	
2		36	27	14	17	79	22	11	
3		39	27	14	18	60	24	13	
4		49	27	13	19	58	26	23	
5		55	27	13	20	57	27	26	
6		77	22	12	21	60	34	26	
7		116	19	11	22	59	52	27	
8		98	18	10	23	59	53	29	
9		74	16		24	54	39	22	
10	632	52	14		25	66	31	25	
11	420	39	14		26	95	27	22	
12	261	31	14		27	82	25	20	
13	160	24	14		28	79	24	18	
14	139	20	14		29	88	24	17	
15	139	21	13		30	69	23	16	
					31		24		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April 10-30	632	54	134	5,580
May	116	20	40.6	2,500
June	29	11	20.0	1,190
July 1-8	15	10	12.8	203
The period				9,470

¹ Previously published as near Dubois, Idaho.

LONE TREE RESERVOIR NEAR KILGORE, IDAHO

LOCATION.—Staff gage in SE. $\frac{1}{4}$ sec. 26, T. 11 N., R. 38 E., 10½ miles south of Kilgore and 18 miles northeast of Dubois.

RECORDS AVAILABLE.—April and May, 1930.

EXTREMES.—Maximum stage during period, 32.76 feet Apr. 11; minimum, 3.10 feet May 22.

REMARKS.—Records fair. Discharge from reservoir controlled by 44-inch outlet pipe which is generally open, but because of its limited capacity, storage water accumulates in reservoir during periods of high run-off. Losses in storage occur through porous lava formation in bed of reservoir, especially at times when reservoir is full. Gage-height record furnished by Owsley Canal Co.

Daily gage height, in feet, 1930

Day	Apr.	May	July	Day	Apr.	May	July	Day	Apr.	May	July
1.....		14.40	-----	11.....	32.76	10.54	-----	21.....	* 11.20	* 3.34	-----
2.....		13.20	-----	12.....	30.90	* 4.78	-----	22.....	* 10.20	* 3.10	-----
3.....		11.80	-----	13.....	28.45	* 3.69	-----	23.....	* 10.00	* 5.06	-----
4.....		9.90	-----	14.....	* 25.50	* 3.51	-----	24.....	9.91	* 3.55	-----
5.....		* 10.40	-----	15.....	23.45	* 3.81	-----	25.....	9.76	-----	-----
6.....		* 11.20	-----	16.....	21.60	* 3.27	-----	26.....	11.33	-----	-----
7.....		12.06	-----	17.....	* 19.50	* 4.37	-----	27.....	12.94	-----	-----
8.....		13.90	3.78	18.....	* 17.40	* 4.23	-----	28.....	13.56	* 3.51	-----
9.....		* 15.00	-----	19.....	* 15.30	* 3.49	-----	29.....	14.20	-----	-----
10.....	30.94	13.55	-----	20.....	13.28	* 3.58	-----	30.....	15.96	-----	-----
								31.....	-----	-----	-----

* Estimated.

CAMAS CREEK BELOW LONE TREE RESERVOIR, NEAR KILGORE, IDAHO

LOCATION.—Water-stage recorder in sec. 35, T. 11 N., R. 38 E., 600 feet below Lone Tree Reservoir and 10½ miles south of Kilgore.

RECORDS AVAILABLE.—April to July, 1930.

EXTREMES.—Maximum discharge during period of record, 160 second-feet Apr. 11; minimum, 6 second-feet May 14, 16-19, 30.

REMARKS.—Records good except those estimated or partly estimated, Apr. 18-20, 23, May 12-19, 24-28, June 25-30, July 1-7, which are fair. Flow controlled by gates in Lone Tree Reservoir. East and Woodie stock-watering ditches divert between this station and the one above reservoir.

Daily and monthly discharge, in second-feet, 1930

Day	Apr.	May	June	July	Day	Apr.	May	June	July
1.....		36		14	16.....	107	6		
2.....		33		13	17.....	101	6		
3.....		28		13	18.....	97	6		
4.....		23		12	19.....	88	6		
5.....		22		12	20.....	80	7	22	
6.....		22		11	21.....	63	10	25	
7.....		30		10	22.....	41	11	26	
8.....		36		9	23.....	39	27	31	
9.....		38			24.....	36	15	24	
10.....	120	52			25.....	37	12	24	
11.....	160	54			26.....	43	10	21	
12.....	128	20			27.....	43	8	19	
13.....	124	8			28.....	34	7	17	
14.....	117	6			29.....	36	7	16	
15.....	112	7			30.....	37	6	15	
					31.....		7		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April 10-30.....	160	34	78.2	3,260
May.....	54	6	18.3	1,130
June 20-30.....	31	15	21.8	476
July 1-8.....	14	9	11.8	187

CAMAS CREEK AT CAMAS, IDAHO

LOCATION.—Water-stage recorder in E. $\frac{1}{2}$ SE. $\frac{1}{4}$ sec. 21, T. 8 N., R. 36 E., half a mile above mouth of Beaver Creek and 350 feet above Oregon Short Line Railroad bridge at Camas.

RECORDS AVAILABLE.—April, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 92 second-feet Apr. 12; maximum gage height, 1.70 feet Mar. 16; no flow for several periods.

1925-1930: Maximum discharge, 204 second-feet May 4, 1927; maximum gage height, 2.01 feet Mar. 20, 1928; no flow June 1-7, 1926, and during periods in 1930.

REMARKS.—Records good above 10 second-feet; others fair except those for Oct. 1-31, Nov. 2 to Apr. 3, which were estimated. Diversions for irrigation and stock water above station. Flow past station affected to some extent by losses through lava crevices in Lone Tree Reservoir 29 miles upstream.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		4.4					10	20	0.3	6	0	0.7
2							12	18	.1	5	0	0
3							14	17	0	4	0	0
4							16	16	0	3.6	0	0
5							18	13	1.6	3.2	0	.4
6							20	11	.9	2.9	0	4.2
7							28	12	.5	2.7	0	6.9
8							33	14	.2	2.0	.2	7.2
9							12	16	.6	1.8		6.5
10							70	17	.1	1.6		6.5
11						6	77	20	0	3.2	.5	6.1
12							85	25	0	3.2		5.7
13							83	12	0	2.9		5.0
14							78	4.0	0	3.8		4.0
15					5		74	3.2	0	5.3	1.0	3.4
16	4	4.5	5	4			72	1.7	0	4.2	.1	2.7
17							67	.9	0	3.6	13	2.5
18							63	.6	0	3.2	12	2.5
19							54	.1	0	3.2	3.8	2.5
20							51	0	0	2.9	3.2	2.7
21						7	47	0	0	2.7	2.3	1.8
22						8	36	0	4.3	2.1	2.0	.7
23						10	22	.2	7.6	.3	1.9	.2
24						8	19	5.0	9.5	0	1.8	.3
25						7	19	8.0	12	0	1.0	.7
26						8	20	4.6	9	0	2.3	1.3
27						15	21	3.2	10	0	2.1	1.2
28						10	25	2.1	9	0	1.9	1.9
29						9	23	1.4	8	0	1.9	2.0
30						10	21	1.0	7	0	1.0	1.9
31						9		.7		0	.7	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October			4.0	246
November			4.5	268
December			5.0	307
January			4.0	246
February			5.0	278
March	15		7.1	437
April	85	10	39.7	2,360
May	25	0	7.99	491
June	12	0	2.69	160
July	6	0	2.37	146
August	13	0	1.78	109
September	7.2	0	2.72	162
The year	85	0	7.20	5,210

WOODS WOODIE DITCH NEAR KILGORE, IDAHO

LOCATION.—Staff gage in SE. $\frac{1}{4}$ sec. 26, T. 11 N., R. 38 E., at bridge 120 feet north of Lone Tree Reservoir spillway and 10 miles south of Kilgore.

RECORDS AVAILABLE.—April and May, 1930.

EXTREMES.—Maximum discharge during period, 9.4 second-feet May 8; no flow during most of year.

REMARKS.—Records fair. Discharge estimated Apr. 11, 12, 18, 19, 21–23. May 5, 6, 9, 21, 25–27. Ditch diverts from right bank of Camas Creek short distance above Lone Tree Reservoir. Water used for stock-watering purposes and wasted in lava regions several miles west of creek.

Daily and monthly discharge, in second-feet, 1930

Day	Apr.	May	June	July	Day	Apr.	May	June	July
1		6.6			16	0	5.3		
2		3.5			17	0	4.9		
3		3.9			18	1.0	5.8		
4		5.3			19	2.2	6.3		
5		6.1			20	3.5	5.8	0	
6		7.0			21	3.3	6.6		
7		7.8			22	3.1	7.3		
8		9.4		0	23	2.8	7.8		
9		8.6			24	2.6	7.3		
10	3.5	7.8			25	3.0	6.6		
11	1.5	6.8			26	3.9	5.9		
12	1.7	6.8			27	3.5	5.3		
13	1.2	5.8			28	3.9	4.6		
14	1.2	4.6			29	5.8			
15	1.8	5.8			30	6.6			
					31				

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April 10–30	6.6	0	2.67	111
May 1–28	9.4	3.5	6.26	348
The period				459

WOODS NO. 1 DITCH NEAR KILGORE, IDAHO

LOCATION.—In sec. 19, T. 11 N., R. 39 E., 1 mile below head and 10 miles south of Kilgore.

RECORDS AVAILABLE.—April and May, 1930.

EXTREMES.—Maximum discharge during period (estimated), 3.4 second-feet May 3-11; no flow Apr. 10, 25, 26 and for long periods at other times during year.

REMARKS.—Records based on discharge measurements made May 11 and 28 and from frequent estimates of flow made by visiting engineers and by employees of Wood Live Stock Co. Ditch diverts from left bank of Camas Creek about 1 mile above Lone Tree Reservoir. Water used for stock-watering purposes. Ditch locally known as East Ditch.

Daily discharge, in second-feet, 1930

Day	Apr.	May
1		1.7
2		
3		
4		
5		3.4
6		
7		
8		
9		3.39
10	0	
11		1.0
12		
13		
14		
15		3.3
16		
17		
18		
19		3.19
20		
21		
22		
23		1.7
24		
25	0	
26	0	
27		3.19
28		
29		
30		
31		

BEAVER CREEK AT DUBOIS, IDAHO

LOCATION.—Water-stage recorder 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, 1930.

EXTREMES.—Maximum discharge during year, 858 second-feet Apr. 7 (gage height, 4.77 feet); no flow except during spring.

1921-1930: Maximum discharge, that of Apr. 7, 1930; maximum gage height, about 6.50 feet Mar. 16, 1926; no flow for long periods.

REMARKS.—Records good. Diversions for irrigation above station. During summer practically entire flow is diverted below gage for irrigation.

Daily and monthly discharge, in second-feet, 1930

Day	Mar.	Apr.	May	Day	Mar.	Apr.	May	Day	Mar.	Apr.	May
1		33	14	11		85	13	21	4.1	12	2.5
2		41	10	12		66	10	22	14	11	3.5
3		93	8.9	13		47	8.1	23	26	17	4.4
4		132	13	14		42	6.2	24	21	9.2	3.3
5		280	15	15		37	5.6	25	17	23	0
6		351	18	16		26	5.2	26	28	44	2.4
7		442	25	17		20	5.1	27	64	25	2.4
8		403	26	18	4.0	18	1.9	28	35	23	1.6
9		175	21	19		16	2.4	29	33	23	8
10		144	17	20	3.4	13	2.4	30	40	27	0
								31	36		0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
March 18-31	64	3.4	23.5	653
April	442	9.2	90.9	5,410
May	26	0	8.02	493
The period				6,560

NOTE.—No flow June to September.

BEAVER CREEK AT CAMAS, IDAHO

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 21, T. 8 N., R. 36 E., one-fourth mile northwest of Oregon Short Line Railroad depot at Camas and three-eighths mile above confluence with Camas Creek.

RECORDS AVAILABLE.—April, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 163 second-feet Apr. 7 (gage height, 2.88 feet); no flow except Apr. 5-16.

1921-1930: Maximum discharge, that of Apr. 7, 1930; no flow past station except for short period during spring of each year.

REMARKS.—Records good. Diversions for irrigation above Dubois, about 14 miles above gage, and by heavy channel losses below Dubois.

Daily discharge, in second-feet, 1929-30

Date	Dis-charge	Date	Dis-charge	Date	Dis-charge
Apr. 5	67	Apr. 9	123	Apr. 13	22
6	133	10	95	14	8
7	153	11	66	15	7
8	153	12	46	16	1

NOTE.—No flow except Apr. 5-16. Total run-off during year, 1,730 acre-feet.

LITTLE LOST RIVER NEAR HOWE, IDAHO

LOCATION.—Staff gage in sec. 3, T. 6 N., R. 28 E., one-fourth mile above diversion dam of Blaine County Investment Co., 6 miles northwest of Berenice, and 7 miles northwest of Howe. Zero of gage was raised 0.35 foot on Mar. 19, 1930.

RECORDS AVAILABLE.—April, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 160 second-feet Aug. 11 (gage height, 1.32 feet); minimum, 32 second-feet Mar. 19 (gage height, 0.31 foot).

1921-1930: Maximum discharge, 176 second-feet June 14, 1923 (gage height, 1.64 feet); minimum, 13 second-feet Apr. 15, 20, 1923 (gage height, 0.23 foot).

REMARKS.—Records good. Discharge interpolated Oct. 26-30, Mar. 20-31, June 30, Aug. 9. Numerous irrigation diversions above and below station. Water stored in small reservoir of Blaine County Investment Co. on Dry Creek, 40 miles upstream, and during irrigation season is released and carried through Corral and Wet Creeks to Little Lost River and diverted into company's main canal one-fourth mile below station. Gage-height record furnished by water master for Little Lost River.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	63		36	73	10'	79	47	53
2.....	60		39	69	10'	77	46	55
3.....	60		42	69	10'	77	48	51
4.....	60		49	85	10'	75	52	49
5.....	59		45	85	9'	68	57	49
6.....	58		44	85	9'	64	58	51
7.....	59		59	79	9'	66	56	57
8.....	62		68	85	10'	64	56	58
9.....	60		65	85	11'	63	62	58
10.....	62		65	77	11'	63	68	68
11.....	60		65	77	11'	71	160	57
12.....	60		65	73	11'	67	79	58
13.....	60		65	69	11'	62	77	57
14.....	56		72	69	11'	59	71	59
15.....	56		73	69	104	62	69	58
16.....	55		71	91	104	60	72	53
17.....	55		64	91	98	62	77	52
18.....	57		85	85	98	56	91	53
19.....	57		79	85	98	52	85	51
20.....	56	33	85	85	104	48	79	52
21.....	54	33	85	85	104	49	75	51
22.....	54	33	85	98	104	50	71	50
23.....	59	33	79	98	104	51	69	51
24.....	62	34	85	91	98	51	65	54
25.....	63	34	85	91	98	50	59	58
26.....	62	34	91	91	91	51	62	58
27.....	61	34	91	98	91	49	55	57
28.....	60	35	91	98	95	50	55	56
29.....	60	35	91	98	95	46	67	55
30.....	59	35	79	104	92	44	56	55
31.....	58	35		104		45	54	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	63	54	58.9	3,620
March 19-31.....	35	32	33.8	872
April.....	91	36	69.9	4,160
May.....	104	69	85.2	5,240
June.....	110	82	100	5,950
July.....	79	44	59.0	3,630
August.....	160	46	67.3	4,140
September.....	68	49	54.8	3,260

BLAINE COUNTY INVESTMENT CO.'S CANAL NEAR HOWE, IDAHO

LOCATION.—Staff gage in NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 11, T. 6 N., R. 28 E., 665 feet below head gates and 7 miles northwest of Howe.

RECORDS AVAILABLE.—April, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 36 second-feet June 18-15; maximum gage height, 1.30 feet June 13, 14; practically no flow during winter except for leakage through head gates.

1924-1930: Maximum discharge, 87 second-feet May 24, 25, 1928; no flow at times during nonirrigation periods.

REMARKS.—Records fair. Discharge interpolated Oct. 26-30, June 30, Aug. 9. Canal diverts water from Little Lost River in sec. 2, T. 6 N., R. 28 E., for irrigation on lands in project of Blaine County Investment Co. Gage-height record furnished by water master for Little Lost River.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1.....	9.3	7.6	10	26	25	6.2	7.9
2.....	9.3	7.2	6.8	27	25	6.2	7.9
3.....	9.3	4.7	7.6	29	25	6.2	7.9
4.....	9.3	5.0	11	30	24	6.5	7.9
5.....	9.0	4.1	12	26	22	6.5	6.5
6.....	9.0	4.1	12	19	24	6.8	6.5
7.....	9.0	4.4	12	19	24	7.2	6.5
8.....	9.0	5.0	13	22	18	7.2	6.5
9.....	9.0	4.1	14	31	14	7.7	9.6
10.....	9.0	4.1	14	31	14	8.2	11
11.....	9.3	4.1	14	31	14	25	10
12.....	9.3	4.1	12	32	14	15	10
13.....	9.3	4.1	10	36	13	15	10
14.....	9.0	4.1	10	36	12	15	10
15.....	9.0	5.3	10	36	11	15	10
16.....	9.0	5.3	13	34	11	15	10
17.....	11	4.1	15	34	11	15	10
18.....	11	4.1	15	34	11	15	9.3
19.....	11	21	16	34	11	15	6.5
20.....	11	22	16	35	12	15	6.8
21.....	4.1	23	16	35	12	15	6.8
22.....	4.1	25	16	35	12	15	6.8
23.....	3.8	27	16	35	12	15	6.8
24.....	9.6	27	16	35	7.2	12	6.8
25.....	9.6	27	16	35	7.2	12	6.8
26.....	9.4	20	16	32	6.8	12	6.5
27.....	9.1	20	16	30	6.8	12	6.5
28.....	8.9	21	16	29	6.8	8.2	6.5
29.....	8.7	21	18	27	6.8	8.2	6.5
30.....	8.4	10	22	26	6.8	8.2	6.5
31.....	8.2	-----	26	-----	6.2	8.2	-----
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
October.....	11	3.8	8.84	544			
April.....	27	4.1	11.6	690			
May.....	26	6.8	14.1	867			
June.....	36	19	30.7	1,830			
July.....	25	6.2	13.7	842			
August.....	25	6.2	11.4	701			
September.....	11	6.5	7.91	471			

BIG LOST RIVER AT HOWELL RANCH, NEAR CHILLY, IDAHO

LOCATION.—Water-stage recorder 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; May, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,910 second-feet June 11 (gage height, 4.10 feet); minimum (estimated), 40 second-feet Oct. 31.

1904-1914, 1920-1930: Maximum discharge, 3,500 second-feet June 12, 1921 (gage height, 5.94 feet); minimum, 35 second-feet Apr. 2, 1909.

ACCURACY.—Records good. Discharge estimated because of ice Oct. 20-29, 31. No regulation. Several small diversions above gage, and Hammerly ditch (capacity about 20 second-feet) diverts one-fourth mile below station. One discharge measurement furnished by water commissioner for Big Lost River.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1	84		365	993	575	165	119
2	83		482	880	587	159	116
3	81	67	635	752	575	152	112
4	81	79	611	700	557	152	112
5	79	86	563	623	510	152	123
6	79	112	539	850	533	154	127
7	79	144	504	1,020	504	181	127
8	90	181	460	1,470	476	159	165
9	95	206	430	1,520	450	272	146
10	93	244	401	1,610	493	349	149
11	90	258	374	1,760	471	305	146
12	90	309	357	1,660	396	336	152
13	86	332	349	1,150	344	316	146
14	86	332	365	955	332	410	142
15	84	244	430	970	324	410	136
16	84	231	420	1,100	313	301	132
17	84	212	410	1,240	297	248	132
18	86	212	440	1,170	276	238	132
19	86	206	515	985	251	218	130
20	79	225	623	807	234	193	123
21	76	286	835	732	221	181	121
22	72	420	726	752	206	170	123
23	66	471	726	700	193	156	142
24	60	687	850	661	190	142	139
25	55	700	880	599	187	139	136
26	55	648	910	617	184	134	132
27	51	563	985	654	179	130	127
28	48	488	1,440	654	170	134	125
29	45	430	1,710	581	165	123	123
30	42	392	1,520	557	156	125	123
31	40		1,150		159	121	
Month	Maximum		Minimum		Mean		Run-off in acre-feet
October	95		40		74.5		4,580
April 3-30	700		67		313		17,400
May	1,710		349		678		41,700
June	1,760		557		958		57,000
July	587		156		339		20,800
August	410		121		207		12,700
September	165		112		132		7,860

BIG LOST RIVER (EAST CHANNEL) ABOVE MACKAY RESERVOIR, NEAR MACKAY, IDAHO

LOCATION.—Water-stage recorder in sec. 32, T. 8 N., R. 23 E., 3 miles above Mackay Dam, above flow line of reservoir, and 7½ miles above Mackay.

RECORDS AVAILABLE.—May, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 706 second-feet June 12 (gage height, 3.10 feet); no flow Dec. 8 to May 16.

1919-1930: Maximum discharge, 999 second-feet June 16, 1922 (gage height, 3.37 feet); no flow for long periods.

REMARKS.—Records fair except those estimated or partly estimated, Oct. 1-29, 31, Nov. 1 to Dec. 7, July 29 to Aug. 11, which are poor. Diversions for irrigation above station. Record at this station represents a portion of natural flow of Big Lost River and taken in conjunction with record for west channel of Big Lost River (see p. 62) and with record for east and west channels of Warm Spring Creek (see pp. 66 and 67) will show entire flow of Big Lost River at this point and represents practically entire surface flow into Mackay Reservoir. Gage-height record and three discharge measurements furnished by water commissioner for Big Lost River.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	May	June	July	Aug.	Sept.
1				0	350	185	10	12
2				0	299	187	10	11
3		3		0	265	185		10
4			1	0	225	180		10
5				0	195	166		10
6				0	197	158	5	10
7				0	299	146		10
8		2	0	0	428	121		10
9			0	0	539	121	15	10
10			0	0	539	138	25	10
11		2	0	0	591	140	20	10
12			0	0	646	121	22	10
13			0	0	522	102	28	9
14			0	0	400	87	36	9
15			0	0	373	81	50	9
16			0	0	386	74	54	8
17			0	2	428	63	50	8
18			0	3	428	56	44	8
19			0	4	386	46	39	8
20			0	5	329	50	35	8
21		3	0	25	296	32	31	8
22			0	59	276	28	28	8
23			0	90	260	25	25	9
24			0	140	232	22	22	9
25			0	193	212	19	21	8
26			0	227	206	16	19	8
27		2	0	271	212	14	18	8
28			0	373	214	12	16	8
29		1	0	522	199	10	16	8
30	3	1	0	574	187	5	15	8
31	3		0	474		10	13	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October			2.5	154
November			2.4	143
December		0	2	12
May	574	0	95.5	5,870
June	646	187	337	20,100
July	187	5	83.9	5,160
August	54		22.3	1,370
September	12	8	9.1	541
The year	646	0	46.0	33,400

NOTE.—No flow during months for which no discharge is shown.

BIG LOST RIVER (WEST CHANNEL) ABOVE MACKAY RESERVOIR, NEAR MACKAY, IDAHO

LOCATION.—Water-stage recorder in sec. 5, T. 7 N., R. 23 E., 3 miles above Mackay Dam, above flow line of reservoir, and 7½ miles above Mackay.

RECORDS AVAILABLE.—May, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 372 second-feet June 12 (gage height, 2.62 feet); minimum, 18 second-feet Apr. 2-7, 17-30 (gage height, 1.08 feet).

1919-1930: Maximum discharge (estimated), 1,200 second-feet June 5-16, 1921 (gage height, 4.45 feet); minimum, 13 second-feet May 3-6, 1925 (gage height, 0.84 foot).

REMARKS.—Records excellent. Record at this station represents a portion of natural flow of Big Lost River and taken in conjunction with record for east channel of Big Lost River (see p. 61) and with record for east and west channels of Warm Spring Creek (see pp. 66 and 67) will show entire surface flow of Big Lost River at this point and represents practically entire surface flow entering Mackay Reservoir. Diversions for irrigation above station. Gage-height record and results of two discharge measurements furnished by water commissioner for Big Lost River.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37	36	34	27	27	22	19	19	206	87	37	40
2	37	36	34	27	27	22	18	19	176	89	37	40
3	37	36	34	27	26	21	18	19	164	89	37	40
4	38	36	34	27	25	22	18	19	145	87	37	38
5	38	36	34	28	25	22	18	19	128	85	37	41
6	38	36	34	28	24	21	18	20	127	84	40	41
7	38	36	34	27	23	20	18	20	171	80	40	40
8	40	36	34	27	23	20	19	20	236	78	40	41
9	40	36	32	27	23	20	19	19	282	76	46	40
10	40	36	34	27	23	20	19	19	304	80	46	40
11	38	36	31	27	23	20	19	22	326	85	45	40
12	38	36	31	27	23	20	19	24	346	80	41	41
13	38	36	30	28	23	20	19	26	296	72	41	41
14	38	36	30	28	24	20	19	28	218	67	41	41
15	38	36	30	27	25	20	19	30	196	62	45	41
16	40	36	30	28	25	21	19	31	198	59	48	41
17	40	36	30	26	24	20	18	34	218	54	50	41
18	40	36	30	28	24	20	18	35	236	48	46	38
19	37	36	29	29	24	20	18	36	217	44	45	38
20	37	36	28	28	24	20	18	40	186	41	44	38
21	38	36	28	27	22	20	18	46	156	38	44	38
22	38	36	28	28	22	20	18	60	143	37	41	38
23	38	35	29	28	22	20	18	74	148	36	41	40
24	38	35	28	29	22	20	18	85	136	36	40	40
25	38	35	28	29	23	20	18	99	125	36	41	40
26	40	35	28	29	23	20	18	121	118	36	41	40
27	41	35	28	29	23	20	18	145	118	35	40	40
28	40	35	28	28	23	19	18	200	114	35	40	40
29	38	35	28	28	-----	19	18	262	104	36	40	40
30	37	35	28	27	-----	19	18	293	86	37	42	41
31	37	-----	28	27	-----	19	-----	259	-----	37	41	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	41	37	38.4	2,360
November	36	35	35.7	2,120
December	34	28	30.5	1,880
January	29	26	27.6	1,700
February	27	22	23.8	1,320
March	22	19	20.2	1,240
April	19	18	18.3	1,090
May	293	19	69.1	4,250
June	346	89	187	11,100
July	89	35	59.5	3,660
August	50	37	41.7	2,560
September	41	38	39.9	2,370
The year	346	18	49.3	35,600

Daily and monthly 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, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	138	141	146	139	137	124	110	81	771	423	156	153
2.....	138	142	146	137	137	124	106	81	673	428	157	153
3.....	139	142	146	136	135	122	105	81	620	430	152	152
4.....	142	144	146	138	133	123	101	83	556	422	150	153
5.....	140	144	147	139	132	121	96	82	502	404	150	158
6.....	139	144	149	137	129	120	96	87	503	391	151	157
7.....	139	144	149	135	127	119	95	87	665	374	151	156
8.....	142	145	148	135	127	119	95	88	887	346	152	158
9.....	142	145	144	136	129	119	94	86	1,070	342	176	156
10.....	142	146	149	138	129	119	92	90	1,120	369	186	155
11.....	140	146	145	136	130	119	92	96	1,200	379	179	156
12.....	140	148	142	136	129	120	92	99	1,280	352	176	158
13.....	140	146	141	139	130	120	93	104	1,070	320	185	156
14.....	138	146	141	138	131	120	90	107	843	297	192	154
15.....	139	146	141	135	129	120	89	113	779	280	214	153
16.....	143	147	141	139	129	122	88	116	800	263	222	153
17.....	145	147	141	135	130	120	86	123	869	240	220	153
18.....	145	149	141	138	128	117	84	125	895	219	208	149
19.....	144	149	139	141	129	117	82	127	820	197	199	147
20.....	144	151	138	136	128	116	82	132	725	198	193	146
21.....	142	151	137	138	126	116	82	169	650	176	188	147
22.....	143	154	138	133	126	116	82	232	609	170	180	149
23.....	141	154	139	136	126	116	81	298	599	165	177	153
24.....	140	154	139	138	126	116	81	388	549	162	171	154
25.....	137	153	141	141	126	117	81	459	511	159	167	158
26.....	139	152	140	139	127	115	81	522	495	156	164	157
27.....	140	149	140	139	126	115	80	603	501	153	159	157
28.....	139	149	140	140	126	114	79	791	497	151	157	157
29.....	136	147	141	139	-----	113	80	1,050	465	151	157	159
30.....	139	147	142	137	-----	113	80	1,140	429	149	157	162
31.....	140	-----	141	137	-----	112	-----	982	-----	156	154	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	145					136			140		8,610	
November.....	154					141			147		8,750	
December.....	149					137			143		8,790	
January.....	141					135			138		8,480	
February.....	137					126			129		7,160	
March.....	124					112			118		7,260	
April.....	110					79			89.2		5,310	
May.....	1,140					81			278		17,100	
June.....	1,280					429			732		43,600	
July.....	430					149			272		16,700	
August.....	222					150			174		10,700	
September.....	162					146			154		9,160	
The year.....	1,280					79			209		152,000	

MACKAY RESERVOIR NEAR MACKAY, IDAHO

LOCATION.—Staff gage in sec. 12, T. 7 N., R. 23 E., 4 miles northwest of Mackay. Zero of gage 6,000 feet above mean sea level.

RECORDS AVAILABLE.—January, 1919, to September, 1930.

EXTREMES.—Maximum contents during year, 20,840 acre-feet May 24 (gage height, 46.00 feet); no available storage Oct. 1–7, 20, 21, 27 (gage height, 7.0 feet and less).

1919–1930: Maximum contents, 40,500 acre-feet June 26, 1922 (gage height, 63.62 feet); no available storage Aug. 1 to Oct. 19, 1919, Aug. 5, 17–27, 31, Sept. 1–5, 12–14, 18, 1920, Aug. 5, 1924, Aug. 12 to Nov. 3, 1926, Sept. 9–11, 16, 18–27, 30, Oct. 1–7, 20, 21, 27, 1929; minimum stage, 6.6 feet Aug. 24 to Sept. 2, 1919.

REMARKS.—Capacity of reservoir 38,400 acre-feet between gage heights 7.0 feet and 62.0 feet. Water used for irrigation of about 6,070 acres in 1930 near Arco, under Utah Construction Co.'s Carey Act project. Owing to porous condition of foundation, there is considerable seepage around dam, the greater part of which reappears between reservoir and station on Big Lost River below Mackay Reservoir, near Mackay. Gage-height record furnished by Utah Construction Co. through water commissioner for Big Lost River.

Daily contents, in acre-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	189	6,817	12,190	15,810	18,090	20,040	19,830	17,000	6,052	977	256
2	0	477	7,082	12,330	15,890	18,180	20,100	19,820	16,110	5,944	966	232
3	0	738	7,283	12,470	15,970	18,200	20,120	19,800	15,100	5,866	932	210
4	0	1,008	7,486	12,620	16,050	18,260	20,120	19,790	14,800	5,344	883	208
5	0	1,246	7,671	12,740	16,130	18,350	20,120	19,790	14,040	4,940	842	210
6	0	1,452	7,842	12,850	16,210	18,430	20,120	19,800	13,290	4,511	795	204
7	0	1,653	7,973	12,940	16,280	18,520	20,120	19,800	12,850	4,370	745	189
8	22	1,863	8,130	13,030	16,360	18,570	20,120	19,800	12,960	3,972	697	176
9	31	2,060	8,266	13,140	16,440	18,660	20,130	19,810	13,200	3,640	728	157
10	22	2,231	8,426	13,250	16,520	18,710	20,140	19,810	13,290	3,549	758	137
11	19	2,446	8,564	13,360	16,610	18,740	20,140	19,800	13,430	3,563	815	131
12	17	2,689	8,727	13,450	16,690	18,780	20,120	19,820	13,570	3,644	848	126
13	17	2,891	8,910	13,570	16,770	18,830	20,120	19,850	13,320	3,635	909	114
14	17	3,079	9,096	13,720	16,850	18,870	20,120	19,910	12,840	3,590	958	103
15	10	3,299	9,282	13,860	16,930	18,950	20,120	19,950	12,440	3,615	930	95
16	7	3,509	9,516	14,010	17,010	19,030	20,110	20,010	12,020	3,644	958	90
17	5	3,713	9,772	14,140	17,090	19,120	20,100	20,060	11,570	3,644	956	83
18	3	3,922	9,984	14,250	17,180	19,210	20,090	20,120	11,140	3,537	912	81
19	2	4,164	10,180	14,390	17,260	19,290	20,080	20,190	10,440	3,473	835	70
20	0	4,392	10,330	14,540	17,340	19,360	20,080	20,270	9,791	3,117	750	36
21	0	4,643	10,510	14,670	17,420	19,390	20,070	20,390	9,314	2,732	685	35
22	2	4,882	10,660	14,790	17,510	19,470	20,060	20,480	8,880	2,368	608	36
23	3	5,081	10,800	14,880	17,590	19,560	20,050	20,660	8,546	2,028	562	42
24	5	5,293	10,980	15,000	17,670	19,650	20,040	20,840	8,130	1,701	534	45
25	3	5,499	11,140	15,110	17,760	19,700	20,000	20,660	7,694	1,348	492	48
26	2	5,717	11,270	15,230	17,840	19,740	19,960	20,120	7,338	938	371	53
27	0	5,929	11,410	15,340	17,920	19,790	19,950	19,670	6,996	792	340	52
28	12	6,125	11,600	15,420	18,010	19,830	19,920	19,090	6,713	772	280	53
29	23	6,355	11,760	15,500	-----	19,870	19,900	18,790	6,578	792	266	55
30	28	6,578	11,900	15,600	-----	19,920	19,870	18,660	6,310	832	282	108
31	28	-----	12,040	15,720	-----	19,970	-----	17,950	-----	940	276	-----

BIG LOST RIVER BELOW MACKAY RESERVOIR, NEAR MACKAY, IDAHO

LOCATION.—Water-stage recorder in sec. 18, T. 7 N., R. 24 E., 450 feet below Oleson suspension bridge, 1 mile above heading of Sharp ditch, 1½ miles below Mackay Dam, and 2½ miles above Mackay.

RECORDS AVAILABLE.—December, 1903, to August, 1906; May, 1912, to March, 1915; January, 1919, to September, 1930. From April, 1913, to March, 1915, at station 1 mile below present site.

EXTREMES.—Maximum discharge during year, 1,370 second-feet May 30 (gage height, 4.25 feet); minimum, 35 second-feet Nov. 1-3 (gage height, 1.48 feet). 1903-1906, 1912-1915, 1919-1930: Maximum discharge, 2,990 second-feet June 10, 1921 (gage height, 5.79 feet); minimum, 25 second-feet Nov. 5-8, 1926 (gage height, 1.23 feet).

REMARKS.—Records good. Flow regulated by storage in Mackay Reservoir. Numerous diversions above Mackay Reservoir but Sharp ditch is only diversion between gage and reservoir. Gage-height record and two discharge measurements furnished by water commissioner for Big Lost River.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	155	78	56	81	95	107	113	104	1,250	590	145	172
2.....	155	35	56	84	95	107	113	104	1,100	525	168	172
3.....	155	37	56	84	92	107	113	104	968	510	176	172
4.....	155	42	58	84	95	107	113	104	912	620	176	165
5.....	155	45	58	84	95	107	113	104	885	640	182	176
6.....	158	42	61	84	98	110	113	104	912	615	179	176
7.....	158	40	61	86	98	110	113	104	858	585	182	172
8.....	158	45	61	86	98	110	110	101	830	570	182	176
9.....	162	45	61	89	98	110	110	101	968	540	182	176
10.....	162	45	64	92	98	110	107	101	1,080	450	176	172
11.....	165	50	64	92	98	110	104	101	1,100	390	176	172
12.....	165	56	64	92	98	110	98	98	1,160	370	179	172
13.....	165	53	67	92	101	110	95	101	1,190	356	179	168
14.....	165	50	67	92	101	113	95	101	1,100	338	190	165
15.....	165	53	67	92	101	113	95	110	995	280	248	162
16.....	162	50	67	92	101	113	98	107	1,020	272	256	158
17.....	162	45	69	95	101	113	95	104	1,100	272	272	165
18.....	162	48	69	95	101	110	95	107	1,130	272	268	155
19.....	165	42	69	95	101	110	95	104	1,220	232	256	168
20.....	165	42	72	95	101	107	95	104	1,130	361	248	165
21.....	165	45	72	95	101	110	95	107	912	390	244	158
22.....	165	45	72	95	101	110	104	193	858	366	232	158
23.....	165	50	72	95	101	110	107	252	775	370	220	165
24.....	165	50	75	95	101	110	107	316	775	356	208	165
25.....	165	50	75	95	101	110	107	670	720	366	200	168
26.....	165	53	78	95	101	113	107	775	695	380	200	172
27.....	165	53	78	92	104	113	107	858	695	236	200	176
28.....	165	56	78	95	104	113	104	995	670	172	186	176
29.....	165	56	78	92	-----	113	101	1,130	575	158	179	176
30.....	165	56	78	95	-----	113	104	1,250	610	120	158	179
31.....	165	-----	78	95	-----	113	-----	1,340	-----	129	165	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	165	155	162	9,960
November.....	78	35	48.6	2,890
December.....	78	56	67.8	4,170
January.....	95	81	91.1	5,600
February.....	104	92	99.3	5,510
March.....	113	107	110	6,760
April.....	113	95	104	6,190
May.....	1,340	98	321	19,700
June.....	1,250	575	940	55,900
July.....	640	120	382	23,500
August.....	272	145	200	12,300
September.....	179	155	169	10,100
The year.....	1,340	35	225	163,000

WARM SPRING CREEK (EAST CHANNEL) NEAR MACKAY, IDAHO

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 5, T. 7 N., R. 23 E., 500 feet above junction with west channel of Warm Spring Creek and $7\frac{1}{2}$ miles northwest of Mackay.

RECORDS AVAILABLE.—May, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year (estimated), 105 second-feet June 12; minimum, 11 second-feet Apr. 19 to May 3.

1919-1930: 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 to twice a week; discharge estimated or interpolated for days of missing gage heights. Natural flow practically all diverted during irrigation season, at which time discharge represents return flow from irrigation upstream. This record represents a portion of natural flow of Big Lost River and taken in conjunction with record for west channel of Warm Spring Creek (see p. 67) and east and west channels of Big Lost River (see pp. 61 and 62) will show practically entire surface flow of Big Lost River which enters Mackay Reservoir a short distance downstream. Gage-height record and three discharge measurements furnished by water commissioner for Big Lost River.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	25	25	28	26	27	23	19	11	75	46	26	26
2.....	25	25	28	26	27	23	19	11	65	44	27	27
3.....	25	25	28	25	26	23	18	11	63	44	27	27
4.....	25	26	28	25	26	23	16	12	62	43	26	27
5.....	25	26	28	25	25	22	15	12	58	43	26	28
6.....	25	27	28	25	25	22	15	13	59	43	26	28
7.....	25	27	28	25	24	22	15	13	61	42	26	28
8.....	25	28	28	25	24	22	16	13	65	42	27	28
9.....	26	28	28	25	24	22	16	13	80	42	27	27
10.....	26	28	28	25	24	22	17	13	100	42	28	27
11.....	26	28	28	25	24	22	17	13	101	42	28	27
12.....	26	28	28	25	24	22	17	14	105	42	29	28
13.....	26	28	28	25	24	22	16	16	95	40	30	28
14.....	26	28	28	26	24	22	15	16	77	38	31	27
15.....	26	28	28	26	24	22	14	17	70	36	32	26
16.....	27	28	28	27	24	22	14	19	72	33	33	26
17.....	27	28	27	27	24	22	13	20	75	31	33	26
18.....	27	28	27	28	24	22	12	20	77	29	32	26
19.....	27	28	26	28	25	22	11	20	72	27	31	26
20.....	27	29	26	28	25	22	11	20	68	27	31	26
21.....	26	29	26	27	25	22	11	25	64	27	31	26
22.....	25	29	26	27	25	22	11	30	62	26	31	26
23.....	25	29	26	26	25	22	11	40	60	26	31	27
24.....	24	29	27	26	25	22	11	50	57	25	30	27
25.....	23	29	27	26	24	22	11	50	55	25	28	28
26.....	23	29	28	26	24	21	11	55	54	25	27	29
27.....	23	28	28	26	23	21	11	60	54	25	26	30
28.....	24	28	28	26	23	21	11	74	53	25	26	30
29.....	25	28	27	27	-----	21	11	95	50	25	26	31
30.....	25	28	27	27	-----	20	11	101	48	25	26	31
31.....	25	-----	26	27	-----	20	-----	91	-----	26	26	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	27	23	25.3	1,560
November.....	29	25	27.7	1,650
December.....	28	26	27.4	1,680
January.....	28	25	26.1	1,600
February.....	27	23	24.6	1,370
March.....	23	20	21.9	1,350
April.....	19	11	13.9	827
May.....	101	11	31.2	1,920
June.....	105	48	68.6	4,080
July.....	46	25	34.1	2,100
August.....	33	26	28.5	1,750
September.....	31	26	27.5	1,640
The year.....	105	11	29.7	21,500

WARM SPRING CREEK (WEST CHANNEL) NEAR MACKAY, IDAHO

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 5, T. 7 N., R. 23 E., 500 feet above junction with east channel of Warm Spring Creek and $7\frac{1}{2}$ miles above Mackay.

RECORDS AVAILABLE.—May, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 191 second-feet June 12 (gage height, 1.72 feet); minimum, 50 second-feet Apr. 28 (gage height, 0.62 foot).

1919-1930: Maximum discharge, 411 second-feet June 12, 1921 (gage height, 3.38 feet); minimum, that of Apr. 28, 1930.

REMARKS.—Records good. Practically entire flow diverted during irrigation season, at which time discharge represents return flow from irrigation above station. Record at this station represents a portion of natural flow of Big Lost River and taken in conjunction with record for east channel of Warm Spring Creek (see p. 66) and record for east and west channels of Big Lost River (see pp. 61 and 62) will show practically entire surface flow of Big Lost River which enters Mackay Reservoir a short distance below. Gage-height record and two discharge measurements furnished by water commissioner for Big Lost River.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	74	77	83	86	83	79	72	51	140	105	83	75
2	74	78	83	84	83	79	69	51	133	108	83	75
3	75	78	83	84	83	78	69	51	128	112	83	75
4	77	79	83	86	82	78	67	52	124	112	82	78
5	75	79	84	86	82	77	63	51	120	110	82	79
6	74	79	86	84	80	77	63	54	120	106	80	78
7	74	79	86	83	80	77	62	54	134	106	80	78
8	75	79	86	83	80	77	60	55	158	105	80	79
9	74	79	84	84	82	77	59	54	173	103	88	79
10	74	80	87	86	82	77	56	58	179	109	87	78
11	74	80	86	84	83	77	56	61	179	112	86	79
12	74	82	83	84	82	78	56	61	185	109	84	79
13	74	80	83	86	83	78	58	62	167	106	86	78
14	72	80	83	84	83	78	56	63	148	105	84	77
15	73	80	83	82	80	78	56	66	140	101	87	77
16	73	80	83	84	80	79	55	66	144	97	87	78
17	75	80	84	82	82	78	55	67	148	92	87	78
18	75	82	84	82	80	75	54	67	154	86	86	77
19	77	82	84	84	80	75	53	67	149	80	84	75
20	77	83	84	80	79	74	53	67	142	80	83	74
21	75	83	83	84	79	74	53	73	131	79	82	75
22	77	86	84	83	79	74	53	83	128	79	80	77
23	75	87	84	82	79	74	52	94	131	78	80	77
24	75	87	84	83	79	74	52	113	124	79	79	78
25	73	86	86	86	79	75	52	117	119	79	77	82
26	73	86	84	84	80	74	52	119	117	79	77	80
27	73	84	84	84	80	74	51	127	117	79	75	79
28	72	84	84	86	80	74	50	144	116	79	75	79
29	70	83	86	84	-----	73	51	167	112	80	75	80
30	74	83	87	83	-----	74	51	173	105	82	74	82
31	75	-----	87	83	-----	73	-----	158	-----	83	74	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	77	70	74.3	4,570
November	87	77	81.5	4,850
December	87	83	84.4	5,190
January	86	80	83.9	5,160
February	83	79	80.9	4,490
March	79	73	76.1	4,680
April	72	50	57.0	3,390
May	173	51	82.1	5,050
June	185	105	139	8,270
July	112	78	94.2	5,790
August	88	74	81.6	5,020
September	82	74	77.8	4,630
The year	185	50	84.4	61,000

SHARP DITCH NEAR MACKAY, IDAHO

LOCATION.—Staff gage in sec. 12, T. 7 N., R. 23 E., 250 feet below head of ditch, half a mile below Mackay Reservoir, and 3½ miles northwest of Mackay.

RECORDS AVAILABLE.—June, 1912, to October, 1914; March, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 26 second-feet June 10–13, 17–20, 24, 30, July 5; probably no flow except for leakage through head gates during period of no record.

1912–1914, 1919–1930: Maximum discharge, 42 second-feet June 23, 1921; usually no flow during winter periods and when water is shut off.

REMARKS.—Records fair. Discharge estimated Oct. 18–30, Nov. 1–13, Apr. 1–11. Sharp ditch diverts from east side of Big Lost River in SE. ¼ sec. 12, T. 7 N., R. 23 E., 1 mile above station on Big Lost River below Mackay Reservoir, near Mackay, and half a mile below Mackay Reservoir. Water is used for irrigation on land northwest of Mackay and above Streeter ditch.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	7	-----	-----	16	25	24	20	18
2	15	7	-----	-----	16	23	24	20	18
3	15	7	-----	-----	16	24	24	20	18
4	15	7	-----	-----	16	22	24	20	18
5	15	7	-----	1	16	23	26	20	18
6	15	7	-----	-----	16	23	24	20	18
7	15	6	-----	-----	18	23	23	20	18
8	15	6	-----	-----	18	23	23	20	18
9	15	6	-----	-----	18	23	23	19	18
10	15	6	-----	4	18	26	23	20	18
11	15	4	-----	7	18	26	20	19	18
12	15	2	-----	13	18	26	23	19	18
13	15	2	-----	13	18	26	23	19	18
14	15	0	-----	13	18	24	23	19	18
15	15	0	-----	15	18	23	23	20	18
16	15	0	-----	15	19	23	23	20	18
17	14	0	-----	15	19	26	23	20	18
18	13	0	-----	15	19	26	23	20	18
19	13	0	-----	15	19	26	20	22	18
20	13	0	0.7	15	18	26	20	20	18
21	13	0	-----	16	19	23	20	20	17
22	12	0	-----	18	19	23	20	20	17
23	12	0	-----	16	19	23	20	20	17
24	12	0	-----	16	20	26	18	20	17
25	12	0	-----	16	20	25	18	20	17
26	12	0	-----	16	20	24	18	20	17
27	11	0	-----	16	20	24	18	20	17
28	11	0	-----	17	20	24	13	20	18
29	11	0	-----	16	22	24	11	20	18
30	11	0	-----	16	24	26	11	18	18
31	11	-----	-----	-----	23	-----	18	18	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	15	11	13.6	836
November	7	0	2.5	149
April	18	-----	10.4	619
May	24	16	18.6	1,140
June	26	22	24.3	1,450
July	26	11	20.8	1,280
August	22	18	19.8	1,220
September	18	17	17.8	1,060

PORTNEUF RIVER AT TOPAZ, IDAHO

LOCATION.—Staff gage in sec. 23, T. 9 S., R. 37 E., at Oregon Short Line Railroad bridge one-fourth mile west of Topaz.

RECORDS AVAILABLE.—January, 1913, to September, 1915; July, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 267 second-feet June 24 (gage height, 1.78 feet); minimum, 119 second-feet Sept. 19, 20 (gage height, 1.00 foot).

1913-1915, 1919-1930: Maximum discharge, 902 second-feet Apr. 3, 1913 (gage height, 6.1 feet); minimum, 116 second-feet Aug. 17, 30, 1919 (gage height, 0.92 foot).

REMARKS.—Records good. Flow regulated somewhat by storage in Portneuf-Marsh Valley Canal Co.'s reservoir near Chesterfield. Numerous ranch diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	162	151	151	145	142	157	176	190	166	220	132	120
2.....	162	155	151	147	142	157	176	178	174	212	132	130
3.....	159	155	155	145	142	157	172	174	186	204	140	130
4.....	155	155	155	147	142	157	176	190	186	204	140	130
5.....	151	151	155	147	142	157	172	194	194	208	140	124
6.....	151	153	155	147	142	157	172	192	190	204	132	134
7.....	151	155	155	147	142	160	172	196	198	200	140	130
8.....	151	155	151	147	142	160	178	212	198	204	140	130
9.....	155	155	155	147	145	160	180	230	166	164	151	130
10.....	155	153	159	147	149	160	176	212	155	164	140	130
11.....	155	155	159	147	153	157	176	202	159	164	140	130
12.....	157	155	159	147	153	160	180	190	174	153	132	130
13.....	159	155	159	151	160	176	184	178	170	157	194	130
14.....	160	153	159	147	168	180	200	182	186	157	132	134
15.....	160	157	155	147	168	208	192	186	190	153	174	130
16.....	168	155	155	147	172	200	192	198	198	145	170	126
17.....	176	155	155	147	180	200	192	222	206	142	174	130
18.....	178	155	151	147	188	204	194	202	214	142	174	126
19.....	178	147	151	147	200	200	194	186	230	160	155	119
20.....	176	147	151	143	208	192	194	182	226	153	151	119
21.....	168	147	151	143	196	192	194	190	230	153	151	126
22.....	157	151	151	147	192	196	178	190	230	142	140	124
23.....	149	151	151	147	184	180	170	182	249	145	140	120
24.....	149	151	151	147	176	176	170	178	267	149	147	130
25.....	149	151	151	143	164	176	196	178	230	149	151	130
26.....	147	151	151	143	164	180	192	166	226	147	142	126
27.....	151	155	151	143	160	176	196	159	230	143	138	130
28.....	147	155	147	147	160	176	196	155	230	147	138	134
29.....	147	155	147	143	-----	172	196	147	230	147	142	134
30.....	147	155	147	143	-----	184	200	140	226	155	130	130
31.....	149	-----	147	143	-----	180	-----	162	-----	140	130	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	178	147	157	9,650
November.....	157	147	153	9,100
December.....	159	147	153	9,410
January.....	151	143	146	8,980
February.....	208	142	163	9,050
March.....	208	157	176	10,800
April.....	200	170	185	11,000
May.....	230	140	185	11,400
June.....	267	155	204	12,100
July.....	220	140	165	10,100
August.....	194	130	149	9,160
September.....	134	119	129	7,680
The year.....	267	119	164	118,000

PORTNEUF RIVER AT POCATELLO, IDAHO

LOCATION.—Water-stage recorder 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, 1930; May, 1897, to October, 1899, at site 1 mile upstream.

EXTREMES.—Maximum discharge during year, 427 second-feet Feb. 20; maximum gage height, 4.91 feet Jan. 26–28; minimum discharge, 29 second-feet July 17 (gage height, 2.14 feet).

1897–1899, 1911–1930: Maximum discharge in excess of 2,000 second-feet during period May 13 to June 14, 1917; minimum, 14 second-feet July 4–11, 13, 17, 18, 1898.

REMARKS.—Records for December to April fair; others good. Numerous diversions for irrigation above station. Three discharge measurements furnished by Twin Falls Canal Co.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1.....	237	271	• 266	249	} • 235	300	290	121	69	73	48	75	
2.....	259	273	267	255		280	290	111	70	75	56	75	
3.....	265	273	• 257	265		270	280	94	71	74	• 62	76	
4.....	271	273	247	259		• 280	280	95	80	71	69	80	
5.....	269	269	• 253	• 257		290	280	101	88	70	63	75	
6.....	265	271	259	255	} • 240	• 306	311	108	84	• 63	61	76	
7.....	265	271	• 259			322	311	116	74	56	65	86	
8.....	273	269	259	} • 235		322	311	118	69	59	62	85	
9.....	294	267	• 292			• 311	260	114	67	53	84	• 86	
10.....	284	271	326			300	240	• 124	63	53	76	86	
11.....	284	273	• 315	} • 230	242	300	231	135	61	55	75	88	
12.....	273	• 264	304		• 271	• 311	197	132	58	55	74	88	
13.....	273	255	• 304		300	322	177	124	57	55	74	88	
14.....	273	253	304		• 342	364	204	127	56	48	94	84	
15.....	271	253	• 304		384	364	231	122	54	42	105	81	
16.....	269	• 253	304	} • 225	• 400	374	223	137	61	32	107	82	
17.....	271	• 253	• 304			416	353	199	• 146	63	29	107	79
18.....	267	• 253	304			416	342	193	154	58	32	105	77
19.....	255	253	294			• 422	332	184	140	63	54	101	80
20.....	265	249	• 284			427	342	164	121	74	49	93	82
21.....	263	• 276	273	} • 230	• 406	332	157	108	75	52	89	86	
22.....	261	304	• 273		384	332	135	108	77	55	84	91	
23.....	257	• 299	273		364	332	132	104	84	47	81	• 93	
24.....	255	294	• 273		• 353	311	135	100	95	48	81	• 94	
25.....	263	• 289	• 273			342	300	147	93	93	48	81	• 96
26.....	265	284	273	} • 230	• 342	322	145	93	91	50	• 81	• 97	
27.....	265	255	• 265		342	311	135	86	86	53	• 81	• 99	
28.....	273	• 260	257		322	300	134	73	81	50	81	• 100	
29.....	273	265	• 250			• 300	135	65	75	47	80	101	
30.....	273	265	243			• 300	132	57	73	48	77	101	
31.....	271		• 246			300		64		46	76		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	294	237	268	16,500
November.....	304	249	269	16,000
December.....	326	243	278	17,100
January.....	265		234	14,400
February.....	427		316	17,600
March.....	374	270	317	19,500
April.....	311	132	208	12,400
May.....	154	57	109	6,700
June.....	95	54	72.3	4,300
July.....	75	29	53.0	3,260
August.....	107	48	79.8	4,910
September.....	101	75	86.2	5,130
The year.....	427	29	190	138,000

• Estimated.

NORTH SIDE MINIDOKA CANAL NEAR MINIDOKA, IDAHO

LOCATION.—Water-stage recorder in sec. 1, T. 9 S., R. 25 E., 600 feet below head gates at Minidoka Dam and 6 miles south of Minidoka.

RECORDS AVAILABLE.—May, 1909, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,620 second-feet Apr. 26, 27, June 10, 11; maximum gage height, 10.05 feet June 10; no flow during winter.

1909-1930: Maximum discharge, 1,630 second-feet June 2, 1927; no flow during winter.

REMARKS.—Records excellent. Flow controlled by operation of head gates at Minidoka Dam. Canal diverts from Snake River at Minidoka Dam in sec. 1, T. 9 S., R. 25 E. Water used for irrigation in North Side Minidoka project.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	749	544	406	-----	370	1,370	1,550	1,610	1,560	1,400
2	749	546	410	-----	471	1,300	1,550	1,600	1,400	1,450
3	749	551	406	-----	532	1,270	1,550	1,610	1,270	1,750
4	740	551	406	-----	620	1,260	1,560	1,610	1,330	1,500
5	732	551	403	-----	668	1,100	1,580	1,610	1,360	1,400
6	734	547	403	-----	670	866	1,580	1,610	1,360	1,310
7	728	549	403	-----	799	826	1,580	1,610	1,350	1,250
8	720	549	403	-----	971	753	1,580	1,610	1,350	1,210
9	716	549	202	-----	1,040	559	1,610	1,610	1,350	1,110
10	698	546	-----	-----	1,110	423	1,620	1,610	1,260	978
11	638	544	-----	-----	1,210	377	1,610	1,610	1,180	914
12	640	546	-----	-----	1,300	377	1,620	1,610	1,160	908
13	640	546	-----	-----	1,340	410	1,580	1,560	799	901
14	642	547	-----	-----	1,310	473	1,540	1,530	466	894
15	644	547	-----	-----	1,280	475	1,510	1,580	525	890
16	650	547	-----	-----	1,300	442	1,510	1,600	650	894
17	652	544	-----	-----	1,300	440	1,530	1,600	700	897
18	636	544	-----	-----	1,300	437	1,510	1,610	698	899
19	593	546	-----	-----	1,300	437	1,530	1,590	848	883
20	597	546	-----	54	1,300	502	1,500	1,600	1,090	864
21	602	544	-----	110	1,360	532	1,350	1,610	1,290	875
22	606	542	-----	109	1,450	564	1,200	1,610	1,430	879
23	606	542	-----	109	1,550	638	1,080	1,600	1,470	831
24	608	413	-----	109	1,610	766	1,180	1,600	1,490	722
25	614	403	-----	166	1,610	903	1,280	1,600	1,490	646
26	630	403	-----	210	1,620	1,140	1,430	1,570	1,490	589
27	632	403	-----	211	1,620	1,400	1,560	1,490	1,520	561
28	632	399	-----	211	1,490	1,520	1,570	1,460	1,540	561
29	634	396	-----	264	1,400	1,550	1,590	1,460	1,540	561
30	632	403	-----	304	1,400	1,550	1,610	1,570	1,490	559
31	599	-----	-----	304	-----	1,540	-----	1,610	1,400	-----
Month				Maximum	Minimum		Mean		Run-off in acre-feet	
October				749	593		659		40,500	
November				551	396		513		30,500	
December 1-10				410	0		344		6,830	
March 20-31				304	54		180		4,290	
April				1,620	370		1,180		70,200	
May				1,550	377		845		52,000	
June				1,620	1,080		1,500		89,300	
July				1,610	1,460		1,590		97,800	
August				1,560	466		1,220		75,000	
September				1,510	559		962		57,200	

NOTE.—No flow reported Dec. 10 to Mar. 19.

SOUTH SIDE MINIDOKA CANAL NEAR MINIDOKA, IDAHO

LOCATION.—Water-stage recorder in sec. 12, T. 9 S., R. 25 E., 300 yards below head gates at Minidoka Dam and 6 miles south of Minidoka.

RECORDS AVAILABLE.—April, 1909, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,140 second-feet June 4 (gage height, 5.45 feet); no flow during winter.

1909–1930: Maximum discharge, that of June 4, 1930; no flow during winter months.

REMARKS.—Records excellent. Flow regulated by operation of gates at Minidoka Dam. Canal diverts from Snake River at Minidoka Dam in sec. 1, T. 9 S., R. 25 E. Water used for irrigation in South Side Minidoka project.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1.....	316	-----	686	1,100	1,080	1,110	1,070
2.....	316	-----	686	1,100	1,090	1,080	1,080
3.....	323	130	684	1,130	1,100	1,060	1,070
4.....	330	264	633	1,140	1,100	1,060	1,070
5.....	334	262	597	1,130	1,090	1,070	1,070
6.....	329	293	519	1,120	1,090	1,050	1,070
7.....	327	340	440	1,110	1,100	1,040	1,030
8.....	322	401	360	1,100	1,100	1,030	1,010
9.....	322	478	331	1,090	1,110	1,020	1,000
10.....	322	543	278	1,070	1,110	998	1,000
11.....	323	633	236	1,070	1,110	980	1,000
12.....	323	703	220	1,080	1,110	959	995
13.....	325	744	196	1,080	1,110	851	995
14.....	329	781	194	1,090	1,080	620	941
15.....	330	792	215	1,100	1,060	407	899
16.....	332	792	229	1,090	1,090	440	902
17.....	334	786	232	1,080	1,090	467	887
18.....	338	789	233	1,070	1,090	485	831
19.....	338	817	230	1,080	1,080	545	772
20.....	113	831	230	1,060	1,050	697	728
21.....	-----	854	258	1,060	1,040	828	678
22.....	-----	923	284	1,060	1,060	914	651
23.....	-----	1,010	319	1,030	1,070	992	553
24.....	-----	1,060	415	998	1,080	1,040	447
25.....	-----	1,070	501	995	1,080	1,030	419
26.....	-----	1,110	778	1,010	1,080	1,040	426
27.....	-----	1,060	1,070	1,030	1,080	1,050	405
28.....	-----	971	1,110	1,040	1,080	1,060	397
29.....	-----	887	1,110	1,040	1,090	1,060	360
30.....	-----	764	1,110	1,060	1,110	1,070	349
31.....	-----	-----	1,109	-----	1,100	1,070	-----
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
October 1–20.....	338	113	316	12,500			
April.....	1,110	0	670	39,900			
May.....	1,110	194	500	30,700			
June.....	1,140	995	1,070	63,700			
July.....	1,110	1,040	1,080	67,000			
August.....	1,110	407	907	55,890			
September.....	1,080	349	804	47,800			

NOTE.—No flow reported Oct. 21 to Apr. 2.

GOOSE CREEK ABOVE TRAPPER CREEK, NEAR OAKLEY, IDAHO

LOCATION.—Water-stage recorder in sec. 13, T. 15 S., R. 21 E., 5 miles above Trapper Creek and 10 miles south of Oakley.

RECORDS AVAILABLE.—April, 1911, to September, 1916; March, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 81 second-feet May 17 (gage height, 2.57 feet); minimum, 3.2 second-feet July 30 (gage height, 1.39 feet). 1911-1916; 1919-1930; Maximum discharge, 670 second-feet May 18, 1921; maximum gage height, 5.6 feet Feb. 21, 1927; minimum discharge, 1.1 second-feet Aug. 13, 1915 (gage height, 1.19 feet).

REMARKS.—Records excellent except those for estimated periods, Nov. 10 to Dec. 10, Dec. 21 to Feb. 23, which are fair. Small diversions for irrigation above station. Practically entire flow passing station is stored in Oakley Reservoir. Gage-height record furnished by Oakley Canal Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.				
1	16	22	20	20	25	32	43	37	24	12	3.9	10				
2	15	22				33	43	37	22	11	5.2	8.7				
3	14	22				34	43	34	23	9.8	4.4	8.7				
4	14	21				36	44	34	24	9.5	3.6	8.1				
5	14	22				37	44	34	25	8.4	4.3	9.8				
6	15	24	15	15	30	36	44	35	24	7.8	5.0	11				
7	16	22				35	44	39	23	7.2	5.5	11				
8	18	22				34	48	50	21	7.2	12	9.8				
9	18	21				34	53	57	21	7.2	10	9.1				
10	18	20				33	54	61	19	7.8	11	9.5				
11	17	20	31	17	40	34	56	60	19	9.5	14	9.8				
12	17	18	34			57	64	17	8.7	12	11					
13	16	18	31			35	55	70	14	8.7	15	10				
14	17	20	31			36	55	73	12	7.5	15	9.8				
15	17	20	30			36	57	75	10	6.6	12	9.8				
16	16	25	29	15	50	38	54	74	9.8	6.0	12	9.8				
17	18		28			40	49	78	9.1	5.5	14	9.1				
18	18		25			40	45	76	10	5.2	26	8.7				
19	19		26			38	40	70	18	5.0	18	8.4				
20	19		28			37	37	65	42	4.8	13	8.7				
21	19	15	25	15	43	36	36	62	25	4.8	11	8.4				
22	18					37	35	59	21	4.3	9.5	9.1				
23	18					37	34	55	21	4.3	9.8	9.1				
24	18					38	34	50	21	4.8	8.4	11				
25	18					42	40	33	42	5.7	7.5	12				
26	19	22	23	18	36	40	35	40	13	5.5	7.5	13				
27	20					38	40	39	12	5.2	7.8	14				
28	21					43	41	34	10	4.6	29	13				
29	21					42	41	29	13	3.6	15	12				
30	19					41	39	25	12	3.2	12	12				
31	20					41	28	3.6	11							
Month						Maximum	Minimum	Mean	Run-off in acre-feet							
October						21	14	17.5	1,080							
November								20.7	1,230							
December						31		24.6	1,510							
January								16.8	1,030							
February								38.4	2,130							
March						43	31	37.0	2,280							
April						57	33	44.4	2,640							
May						78	23	50.9	3,130							
June						42	9.1	18.4	1,090							
July						12	3.2	6.61	406							
August						29	3.6	11.1	682							
September						14	8.1	10.1	601							
The year						78	3.2	24.6	17,800							

TRAPPER CREEK NEAR OAKLEY, IDAHO

LOCATION.—Water-stage recorder in sec. 33, T. 14 S., R. 21 E., 1 mile from east boundary of Minidoka National Forest and 9 miles southwest of Oakley.

RECORDS AVAILABLE.—May, 1911, to September, 1916; March, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 40 second-feet Aug. 27 (gage height, 2.94 feet); minimum, 7.1 second-feet July 24, 28–31 (gage height, 2.09 feet).

1911–1916, 1919–1930: Maximum discharge, 98 second-feet May 28, June 8, 1921 (gage height, 3.44 feet); minimum probably occurred during winter.

REMARKS.—Records good except those for estimated periods, Nov. 20–26, Dec. 18–22, Jan. 7 to Feb. 23, which are fair. Few small ranch diversions above station. Practically entire flow passing gage is stored in Oakley Reservoir. Gage-height record furnished by Oakley Canal Co.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9.2	9.7	9.8	9.8		11	11	12	13	8.5	7.2	7.3
2	9.2	9.7	9.8	10		11	11	12	13	8.3	7.3	7.3
3	9.2	9.7	9.8	10		11	11	12	13	8.2	7.5	7.3
4	9.2	9.7	9.8	10		11	11	12	12	8.1	7.4	7.4
5	9.2	9.7	9.8	10		11	11	14	12	8.1	7.3	7.4
6	9.2	9.7	9.8	9.8		11	12	14	12	8.0	7.4	7.3
7	9.2	9.7	9.8			11	12	15	12	7.9	7.3	7.3
8	9.3	9.7	10			10	12	15	11	8.0	7.4	7.3
9	9.3	9.8	11			10	12	15	11	7.9	7.6	7.4
10	9.5	9.8	10			10	12	15	11	8.2	7.5	7.6
11	9.5	9.7	10	10		10	12	15	11	8.1	7.4	7.4
12	9.5	9.8	10		10	10	12	16	11	7.9	7.6	7.4
13	9.3	9.8	10			11	12	16	10	7.6	7.8	7.4
14	9.3	9.8	10			11	12	16	10	7.6	7.6	7.4
15	9.3	9.8	9.8			11	12	16	10	7.5	7.5	7.4
16	9.3	10	10			11	12	16	9.8	7.3	7.4	7.3
17	9.3	10	9.8			11	12	15	9.7	7.3	7.5	7.3
18	9.3	9.8				11	12	15	9.5	7.3	7.8	7.3
19	9.5	9.8				11	12	15	9.6	7.2	7.4	7.3
20	9.5		9.9			11	12	15	9.7	7.2	7.3	7.3
21	9.5					11	12	14	9.7	7.2	7.4	7.3
22	9.7					10	12	14	9.5	7.2	7.3	7.4
23	9.7	9.8	10	9		10	12	14	9.3	7.2	7.3	7.6
24	9.7		10		10	10	12	13	9.3	7.1	7.2	7.8
25	9.7		10		10	10	12	13	9.3	7.2	7.2	7.8
26	9.7		9.8		10	11	12	13	8.8	7.3	7.3	7.6
27	9.7	9.8	10		10	11	13	13	8.8	7.2	8.1	7.6
28	9.7	9.8	10		11	11	13	13	8.6	7.1	8.0	7.6
29	9.8	9.8	9.8			11	13	13	8.5	7.1	7.5	7.5
30	9.7	9.8	10			11	13	13	8.5	7.1	7.4	8.0
31	9.7		10			11		13		7.1	7.3	
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October	9.8					9.2			9.45		581	
November									9.78		582	
December						11			9.95		612	
January									9.47		582	
February									10.0		555	
March						11			10.7		658	
April						13			12.0		714	
May						16			14.1		867	
June						13			8.5		619	
July						8.5			7.1		466	
August						8.1			7.2		459	
September						8.0			7.3		443	
The year	16					7.1			9.86		7,140	

P. A. LATERAL NEAR MILNER, IDAHO

LOCATION.—Staff gage in sec. 22, T. 10 S., R. 21 E., 600 feet below pumping station and 2½ miles northeast of Milner.

RECORDS AVAILABLE.—April, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 63.7 second-feet July 11 (gage height, 2.03 feet); no flow during winter.

1919-1930: Maximum discharge, 64 second-feet May 11-13, 1920; no flow on numerous occasions.

REMARKS.—Records good. Flow regulated by operation of pumping plant at head of lateral that pumps water from Snake River into canal in sec. 22, T. 10 S., R. 21 E., for irrigation in North Side Twin Falls tract.

Daily and monthly discharge, in second-feet, 1929-30

Day	Nov.	Apr.	May	June	July	Aug.	Sept.
1	0	0	56	59	61	60	61
2	0	0	57	59	61	60	56
3	0	0	57	60	61	61	56
4	0	0	58	61	61	61	56
5	0	0	59	61	61	61	56
6	0	0	59	61	62	61	55
7	0	0	54	61	62	60	54
8	0	0	33	61	62	60	51
9	0	0	18	61	62	60	49
10	0	0	0	60	62	59	48
11	0	0	0	61	64	59	48
12	0	0	0	60	62	60	48
13	0	0	32	60	62	62	48
14	0	0	47	62	62	56	48
15	0	5	44	62	62	48	14
16	0	16	38	61	61	48	0
17	0	16	36	61	63	47	0
18	0	23	36	62	62	47	0
19	0	32	36	62	62	44	0
20	7	32	36	62	62	43	0
21	13	42	43	61	62	43	0
22	13	45	43	61	61	43	0
23	13	43	43	62	59	48	0
24	13	43	43	59	61	53	0
25	13	54	43	61	61	61	0
26	7	57	42	61	61	63	0
27	0	56	47	61	61	62	0
28	0	58	55	61	60	62	0
29	0	57	55	61	61	61	0
30	0	57	59	61	60	61	0
31			59		60	61	
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
November	13	0	2.63	156			
April	58	0	21.2	1,260			
May	59	0	41.5	2,550			
June	62	59	60.9	3,620			
July	64	59	61.4	3,780			
August	62	43	56.0	3,440			
September	61	0	24.9	1,480			
The year	64	0	22.5	16,300			

NOTE.—No flow during months for which no discharge is shown.

MILNER LOW LIFT CANAL NEAR MILNER, IDAHO

LOCATION.—Water-stage recorder in sec. 32, T. 10 S., R. 21 E., 60 feet below head of canal and 1½ miles south of Milner.

RECORDS AVAILABLE.—June, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 167 second-feet July 6, 7 (gage height, 3.34 feet); no flow during winter.

1921-1930: Maximum discharge, 170 second-feet July 27, 1929; no flow on numerous occasions.

REMARKS.—Records excellent. Flow controlled by operation of pumping plant that lifts water from Snake River above Milner Dam for irrigation in Milner Low Lift irrigation district.

Daily and monthly discharge, in second-feet, 1929-30

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1-----	0	109	122	146	161	120	16-----	74	0	133	151	0	76
2-----	0	74	132	146	134	119	17-----	74	0	128	154	62	80
3-----	0	49	132	133	92	116	18-----	74	0	138	154	65	79
4-----	0	40	137	146	158	108	19-----	74	0	130	156	98	79
5-----	0	0	132	118	145	100	20-----	73	0	140	157	105	85
6-----	0	0	128	167	153	80	21-----	73	0	137	157	111	91
7-----	0	0	128	167	160	68	22-----	80	0	137	159	119	70
8-----	0	0	128	166	160	87	23-----	80	19	137	154	108	53
9-----	0	0	126	146	132	87	24-----	96	26	115	147	117	73
10-----	30	0	126	162	154	86	25-----	95	27	138	161	116	74
11-----	28	0	126	153	151	106	26-----	94	53	122	160	111	76
12-----	27	0	126	154	129	108	27-----	95	72	126	159	96	78
13-----	45	0	122	154	107	108	28-----	104	78	134	158	101	79
14-----	48	0	122	154	29	83	29-----	98	91	137	146	114	80
15-----	64	0	134	150	0	71	30-----	100	97	140	162	114	81
							31-----		101		147	118	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April-----	104	0	50.9	3,080
May-----	109	0	27.0	1,660
June-----	140	120	130	7,740
July-----	167	118	153	9,410
August-----	161	0	110	6,760
September-----	120	53	86.7	5,160
The year-----				33,800

NOTE.—No flow Oct. 1 to Apr. 9.

GOODING CANAL AT MILNER, IDAHO

LOCATION.—Staff gage in sec. 20, T. 10 S., R. 21 E., half a mile north of Milner and three-fourths mile below head gates of canal.

RECORDS AVAILABLE.—May to September, 1930.

EXTREMES.—Maximum discharge during year, 384 second-feet July 23–29; no flow on several days.

REMARKS.—Owing to backwater effect from check gates during 1930, records are based on frequent current-meter measurements, many of which were furnished by United States Bureau of Reclamation and North Side Canal Co. Gooding Canal diverts water from Snake River for irrigation of 79,000 acres of lands near Shoshone and Gooding and also furnishes an auxiliary supply for lands under North Side Twin Falls project.

Daily and monthly discharge, in second-feet, 1930

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1.....	0	54	260	382	20	16.....	65	82	306	0	55
2.....	0	54	260	382	20	17.....	65	82	306	0	55
3.....	30	54	260	382	20	18.....	65	56	306	0	72
4.....	45	54	260	382	20	19.....	70	41	306	0	72
5.....	45	54	265	382	20	20.....	13	67	316	0	72
6.....	45	54	265	382	20	21.....	0	91	316	15	72
7.....	68	54	265	382	20	22.....	0	116	356	20	72
8.....	60	54	265	382	20	23.....	0	152	384	20	72
9.....	60	54	265	382	20	24.....	0	175	384	20	72
10.....	60	54	265	382	20	25.....	0	175	384	20	85
11.....	60	54	265	382	20	26.....	0	175	384	20	90
12.....	65	54	284	143	20	27.....	0	190	384	20	90
13.....	65	54	295	0	38	28.....	0	230	384	20	110
14.....	65	72	295	0	55	29.....	0	260	384	20	130
15.....	65	82	295	0	55	30.....	0	260	382	20	385
						31.....	54		382	20	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May.....	70	0	34.4	2,120
June.....	260	41	100	5,950
July.....	384	260	314	19,300
August.....	382	0	147	9,040
September.....	385	20	131.1	3,750
The period.....				40,200

NORTH SIDE TWIN FALLS CANAL AT MILNER, IDAHO

LOCATION.—Water-stage recorder in sec. 20, T. 10 S., R. 21 E., half a mile north of Milner and three-fourths mile below head gates at Milner Dam.

RECORDS AVAILABLE.—May, 1909, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,160 second-feet July 14 (gage height, 8.77 feet); no flow on several days.

1909–1930: Maximum discharge, 3,200 second-feet July 5–7, 29–31, 1921, May 15, 1928, June 2, July 23, 1929; no flow at times when gates were closed.

REMARKS.—Records excellent except those during periods of ice effect, Jan. 2, 3, 14–31, Feb. 1, 2, which are fair. Flow controlled by operation of head gates. Canal diverts from Snake River above Milner Dam. Water used for stock and irrigation of land in Jerome and Gooding Counties.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,320	303	830	844	720	1,180	0	2,960	3,050	3,080	3,110	2,280
2	679	0	816	826	720	1,010	552	2,970	3,080	3,030	3,090	2,300
3	889	0	820	809	720	964	1,880	3,030	3,090	3,070	3,110	2,280
4	900	0	816	792	719	833	2,070	3,060	3,060	3,070	3,130	2,280
5	833	0	820	706	630	765	1,990	3,060	3,110	3,030	3,120	2,290
6	813	0	762	706	611	803	1,720	2,920	3,090	3,020	3,080	2,290
7	803	0	687	726	617	837	1,840	2,320	3,050	3,050	2,990	2,200
8	809	0	677	726	620	864	2,010	896	3,020	3,080	2,920	2,210
9	813	0	677	719	614	864	2,130	1,140	3,110	3,140	2,840	2,190
10	823	0	680	726	614	886	2,210	630	3,080	3,140	2,800	2,140
11	765	0	680	729	592	889	2,310	556	2,990	3,160	2,780	2,130
12	321	0	687	719	577	900	2,410	679	2,970	3,150	2,750	2,170
13	337	0	687	713	553	906	2,420	1,000	2,990	3,150	2,710	2,160
14	213	0	690	533	896	2,530	953	3,130	3,160	2,620	2,150	
15	0	0	687	541	903	1,650	1,380	3,090	3,120	2,640	2,170	
16	0	0	687	536	900	2,750	1,700	3,020	3,070	2,580	2,080	
17	0	0	690	527	900	2,800	1,530	2,930	3,070	2,530	1,450	
18	0	0	706	571	903	2,530	1,490	3,070	3,080	2,490	1,430	
19	0	0	696	630	932	2,890	1,530	3,100	3,030	2,420	1,890	
20	0	0	696	677	957	3,030	1,650	3,100	3,140	2,390	1,880	
21	0	0	726	719	982	3,070	1,820	3,100	3,150	2,360	1,350	
22	0	0	792	769	971	3,040	2,190	3,070	3,120	2,250	1,470	
23	0	0	803	1,010	964	3,030	2,350	3,030	3,120	2,260	1,570	
24	0	0	840	1,180	1,050	3,010	2,190	3,010	3,080	2,260	1,610	
25	0	567	892	1,210	1,080	3,020	2,010	3,020	3,080	2,250	1,620	
26	0	672	861	1,390	1,210	3,000	2,090	2,960	3,070	2,260	1,630	
27	0	1,090	872	1,470	1,250	3,000	2,300	2,910	3,100	2,280	1,640	
28	0	910	886	1,410	1,190	3,020	2,480	2,850	3,120	2,260	1,500	
29	427	799	840	1,200	1,200	3,060	2,710	3,020	3,120	2,240	1,290	
30	820	816	861	1,330	1,330	3,000	2,960	3,070	3,090	2,230	0	
31	1,820	833	833	1,080	1,080	2,920	2,920	3,100	2,200	2,200	2,200	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,820	0	432	26,600
November	1,090	0	172	10,200
December	892	677	764	47,000
January	844	706	732	45,000
February	1,470	527	767	42,600
March	1,330	765	981	60,300
April	3,070	0	2,440	145,000
May	3,060	556	1,980	122,000
June	3,130	2,850	3,040	181,000
July	3,160	3,020	3,100	191,000
August	3,130	2,200	2,610	160,000
September	2,300	0	1,820	108,000
The year	3,160	0	1,570	1,140,000

SOUTH SIDE TWIN FALLS CANAL AT MILNER, IDAHO

LOCATION.—Water-stage recorder in sec. 29, T. 10 S., R. 21 E., 700 feet below head gates at Milner.

RECORDS AVAILABLE.—May, 1909, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,760 feet July 11 (gage height, 10.53 feet); minimum, 56 second-feet Feb. 26 (gage height, 1.70 feet).

1909-1930: Maximum discharge, 4,600 second-feet Aug. 12, 1918; no flow Sept. 20, 1920.

REMARKS.—Records excellent except those during periods of ice effect, Jan. 6 to Feb. 12, which are fair. Flow controlled by operation of gates. Canal diverts from Snake River at Milner Dam. Water used for stock and irrigation of land near Twin Falls.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	1,350	368	676	805	780	462	1,390	2,820	3,080	3,340	3,580	3,000
2.....	1,350	283	679	805		955	1,440	2,850	3,100	3,410	3,570	2,970
3.....	1,310	297	667	812		405	1,090	2,990	3,110	3,500	3,610	3,010
4.....	1,310	67	667	769		876	896	3,040	3,110	3,500	3,610	2,880
5.....	1,330	1,010	670	775		574	1,080	2,990	3,090	3,480	3,580	2,870
6.....	1,340	1,600	704	780	583	1,720	2,780	3,080	3,470	3,560	2,920	
7.....	1,320	517	724		574	1,780	2,550	3,060	3,550	3,530	2,880	
8.....	1,310	537	724		589	2,080	2,390	3,050	3,630	3,510	2,790	
9.....	1,330	531	720		600	2,100	2,150	3,090	3,730	3,560	2,630	
10.....	1,340	597	740		612	2,180	1,960	3,070	3,750	3,560	2,510	
11.....	1,340	639	724	780	621	2,290	1,950	3,020	3,760	3,530	2,330	
12.....	1,220	630	714		612	2,340	2,020	2,990	3,740	3,480	2,250	
13.....	1,140	673	711		772	633	2,360	2,360	3,030	3,730	2,620	2,240
14.....	1,100	704	717		673	636	2,370	2,590	3,240	3,730	2,610	2,230
15.....	1,180	704	720		580	636	2,380	2,420	3,220	3,710	3,100	2,240
16.....	1,230	708	730	780	514	636	2,400	2,340	3,130	3,670	2,950	2,260
17.....	1,230	701	717		492	636	2,420	2,300	3,040	3,660	2,790	1,900
18.....	1,150	708	743		489	645	2,400	2,290	3,110	3,650	2,800	1,640
19.....	1,060	388	752		487	658	2,420	2,350	3,170	3,630	2,660	1,540
20.....	1,030	401	746		487	652	2,490	2,360	3,150	3,700	2,550	1,670
21.....	1,030	865	749	780	560	652	2,610	2,350	3,100	3,710	2,720	1,750
22.....	1,050	831	759		658	548	2,660	2,430	3,070	3,700	2,780	1,770
23.....	1,050	736	759		664	290	2,660	2,410	3,060	3,690	2,850	1,700
24.....	945	736	762		642	292	2,810	2,200	3,030	3,680	2,830	1,700
25.....	859	717	756		532	299	2,910	2,160	3,060	3,690	2,830	1,650
26.....	821	673	756	780	174	283	2,860	2,270	3,040	3,660	2,910	1,620
27.....	862	673	762		512	484	2,860	2,680	3,020	3,680	3,140	1,650
28.....	835	673	778		433	661	2,860	2,890	2,980	3,660	3,150	1,670
29.....	782	652	762		-----	762	2,890	3,000	3,100	3,660	3,000	1,680
30.....	692	664	778		-----	749	2,850	3,020	3,280	3,630	2,970	1,660
31.....	577	-----	778	-----	-----	802	-----	2,970	-----	3,610	2,940	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	1,350	577	1,110	68,200
November.....	1,600	67	643	38,300
December.....	778	667	730	44,900
January.....	812	-----	782	48,100
February.....	-----	174	644	35,800
March.....	955	283	594	36,500
April.....	2,910	896	2,250	134,000
May.....	3,040	1,950	2,510	154,000
June.....	3,280	2,980	3,090	184,000
July.....	3,760	3,340	3,640	224,000
August.....	3,610	2,550	3,130	192,000
September.....	3,010	1,540	2,190	130,000
The year.....	3,760	67	1,780	1,290,000

ROCK CREEK NEAR TWIN FALLS, IDAHO

LOCATION.—Water-stage recorder on south line of sec. 36, T. 9 S., R. 16 E., at highway bridge 3 miles above mouth and $3\frac{1}{2}$ miles northwest of Twin Falls.

RECORDS AVAILABLE.—March, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 749 second-feet May 9 (gauge height, 3.42 feet); minimum, 86 second-feet Mar. 28 (gauge height, 0.49 foot).

1922–1930: Maximum discharge, 984 second-feet Sept. 21, 1927 (gauge height 4.5 feet); minimum, that of Mar. 28, 1930.

REMARKS.—Records good except those above 300 second-feet and those estimated, which are fair. Natural summer flow entirely diverted for irrigation several miles upstream. Waste water from South Side Twin Falls Canal, which crosses Rock Creek 10 miles upstream, causes appreciable changes in stage at times. Gauge-height record furnished by Murtaugh Irrigation District.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	206	215	231	220	345	250	514	224	220	233	252	315
2	202	184	226	222	435		582	220	217	213	245	295
3	196	194	224	217	396	217	568	233	276	257	252	285
4	198	200	229	226	358		474	252	220	249	257	422
5	196	202	229	226	345	185	300	342	211	254	251	370
6	192	194	238	213	396		130	409	220	234	245	285
7	196	204	236	204	383	153	121	396	224	215	252	281
8	220	213	236	257	370		126	568	226	220	249	281
9	245	249	242	340	358	138	130	735	224	220	254	273
10	254	273	238	340	330		138	582	222	226	278	271
11	264	269	238	340	338	156	136	422	225	236	271	264
12	293	264	240	315	300	154	130	322		240	266	261
13	271	290	238	298	300	151	144	273	229	240	358	249
14	257	233	233	285	281	148	168	290		242	293	249
15	252	233	231	290	281	146	171	383	242	242	308	249
16	271	231	231	312	264	144	169	345	242	245	582	249
17	271	231	226	322	240	144	177	273	240	254	448	249
18	273	231	229	320	188	142	180	266	242	247	315	240
19	269	231	231	170	168	140	190	266	245	240	528	229
20	265	246	229		142	142	192	252	370	236	474	229
21	261	260	226	320	173	142	188	254	342	242	345	231
22	257	274	222		175	139	177		353	247	285	233
23	254	288	224	138	173	136	186	240	288	249	273	242
24	254	283	229		168	107	185		300	249	276	240
25	254	290	229	204	138	90	206	222	261	252	276	242
26	247	257	224		278	89	225		269	250	273	240
27	254	249	220	285	278	88	245	220	229	248	276	247
28	252	240	217		285	100	254		228	247	283	247
29	252	240	222	153	151	142	240	224	226	254	285	245
30	247	238	224			153	238		224	252	281	300
31	240	226	226	226	226	226	226	226	226	249	281	281

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	293	192	244	15,000
November	290	184	240	14,300
December	242	217	230	14,100
January	—	204	294	18,100
February	435	138	280	15,600
March	—	88	156	9,590
April	582	121	230	13,700
May	735	—	310	19,100
June	383	211	250	14,900
July	254	213	241	14,800
August	582	245	307	18,900
September	422	229	267	15,900
The year	735	88	254	184,000

* Estimated.

SALMON FALLS CREEK NEAR SAN JACINTO, NEV.

LOCATION.—Water-stage recorder in sec. 23, T. 47 N., R. 64 E., in canyon 200 yards below county highway bridge, 250 yards below mouth of Fishbone Creek, and 5 miles north of San Jacinto.

RECORDS AVAILABLE.—September, 1909, to September, 1916; October, 1918, to September, 1930.

EXTREMES.—Maximum discharge during year, 376 second-feet May 13 (gage height, 4.38 feet); minimum, 19 second-feet July 24 (gage height, 2.36 feet). 1909–1916, 1919–1930: Maximum discharge, 1,280 second-feet May 22, 1912 (gage height, 7.5 feet); minimum, 10 second-feet July 25, 1919 (gage height, 2.28 feet).

REMARKS.—Records excellent. Numerous diversions for irrigation above station. Gage-height record and seven discharge measurements furnished by Salmon River Canal Co. (Ltd.).

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	42	52	60	43	55	56	106	117	167	23	29	42
2.....	42	52	58	55	62	60	99	106	189	23	22	40
3.....	43	52	54	50	67	66	93	96	200	23	20	39
4.....	43	52	53	56	68	66	92	94	177	23	20	39
5.....	43	52	52	60	68	71	92	109	159	22	21	40
6.....	44	52	58	41	72	72	86	115	140	22	23	41
7.....	45	52	56	39	74	71	84	167	117	21	23	42
8.....	45	52	56	36	73	69	86	235	98	25	23	42
9.....	46	53	56	43	78	69	92	300	84	25	26	41
10.....	47	54	58	47	76	71	98	331	76	24	38	40
11.....	47	53	58	49	74	68	93	351	74	25	36	40
12.....	47	48	57	48	74	66	93	373	69	25	34	40
13.....	49	42	57	47	74	71	99	376	60	23	33	40
14.....	49	45	56	46	77	71	112	359	56	23	30	40
15.....	50	48	56	46	78	74	119	331	53	22	35	40
16.....	50	57	57	47	78	80	127	325	50	22	41	39
17.....	49	58	56	47	77	81	135	328	48	22	50	39
18.....	49	58	57	45	77	82	126	307	44	22	64	38
19.....	49	57	62	45	77	84	115	292	45	21	45	38
20.....	49	48	61	45	77	86	109	272	50	20	41	38
21.....	48	38	53	44	74	88	106	253	47	20	39	38
22.....	48	47	60	42	73	92	101	244	44	20	41	39
23.....	49	55	57	41	73	98	98	230	42	20	40	40
24.....	49	50	57	42	73	102	98	230	40	20	38	42
25.....	49	63	57	44	72	98	104	210	36	20	37	44
26.....	50	60	57	46	71	101	110	187	33	20	37	45
27.....	50	60	46	46	69	107	120	161	30	21	38	45
28.....	52	61	45	48	66	104	129	150	27	21	40	45
29.....	50	62	52	48	-----	99	133	144	26	25	42	44
30.....	49	61	54	50	-----	101	126	154	24	25	41	45
31.....	52	-----	58	53	-----	107	-----	163	-----	24	42	-----
Month						Maximum		Minimum		Mean		Run-off in acre-feet
October.....	52						42		47.5		2,920	
November.....	63						38		53.1		3,160	
December.....	62						45		55.9		3,440	
January.....	60						36		46.4		2,850	
February.....	78						55		72.4		4,020	
March.....	107						56		81.6		5,020	
April.....	135						84		106		6,310	
May.....	376						94		229		14,100	
June.....	200						24		76.8		4,570	
July.....	25						20		22.3		1,370	
August.....	64						20		35.1		2,160	
September.....	45						38		40.8		2,430	
The year.....	376						20		72.3		52,400	

BIG WOOD RIVER AT HAILEY, IDAHO

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 9, T. 2 N., R. 18 E., at steel highway bridge one-fourth mile southwest of Hailey.

DRAINAGE AREA.—640 square miles.

RECORDS AVAILABLE.—June, 1915, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,730 second-feet June 12 (gage height, 4.92 feet); minimum discharge, 2 second-feet Nov. 14, 15, Jan. 20–26; minimum gage height, 0.59 foot Nov. 14, Jan. 21–25.

1915–1930: Maximum discharge, 3,560 second-feet June 12, 1921; minimum, 0.1 second-foot Sept. 10–20, Oct. 2–9, 1924.

REMARKS.—Records good except those for October to March, which are fair. Discharge estimated Mar. 2–8. Small diversions for irrigation above station. Water diverted around station by Hailey power plant and returned to river through natural channel known as Big Wood Slough (see page 90). Five discharge measurements and daily gage-height readings Apr. 4 to Sept. 30 furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	3	3	3	3	3	164	695	1,140	548	58	13
2	9	3	4	3	3	3	176	775	950	502	55	13
3	8	3	4	3	3	3	176	950	890	480	54	13
4	8	3	4	3	3	3	216	950	830	440	53	13
5	7	3	4	3	3	3	275	950	775	440	53	14
6	9	3	4	3	3	3	360	890	830	440	58	14
7	13	3	4	3	3	3	460	890	1,080	420	52	14
8	17	4	5	3	3	3	548	830	1,460	380	48	14
9	7	4	5	3	3	3	645	775	1,380	380	70	15
10	6	3	7	3	3	3	775	720	1,460	400	126	17
11	7	3	53	3	3	4	720	670	1,640	420	124	17
12	7	3	47	3	3	5	775	645	1,550	400	105	19
13	10	3	45	3	3	8	830	620	1,220	380	103	13
14	10	2	43	3	3	10	775	670	1,080	380	112	12
15	9	2	43	3	3	10	670	775	1,010	380	107	11
16	9	3	43	3	3	10	595	830	1,080	380	84	11
17	9	3	6	3	4	12	548	775	1,140	325	75	11
18	8	3	6	3	4	22	502	830	1,140	308	70	11
19	7	3	6	3	4	22	480	890	1,010	275	58	11
20	7	3	3	2	4	24	525	890	890	260	43	11
21	7	3	3	2	4	25	645	1,010	830	245	40	11
22	8	3	3	2	4	25	830	1,010	775	245	34	11
23	8	3	3	2	3	73	950	950	720	230	34	12
24	8	3	3	2	3	78	1,220	1,010	695	230	16	11
25	6	3	3	2	3	78	1,220	1,010	620	176	18	13
26	6	3	3	2	3	110	1,140	1,010	620	134	18	11
27	4	3	3	3	3	110	1,010	1,080	620	126	17	11
28	4	3	3	3	3	110	890	1,460	620	124	18	11
29	3	3	3	3	3	110	775	1,640	570	96	15	11
30	3	3	3	3	3	110	720	1,550	548	65	12	13
31	3	3	3	3	3	152	-----	1,300	-----	57	13	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	17	3	7.6	467
November	4	2	3.0	179
December	53	3	12.0	738
January	3	2	2.8	172
February	4	8	3.2	178
March	152	3	36.9	2,270
April	1,220	164	654	38,900
May	1,640	620	937	57,600
June	1,640	548	972	57,800
July	548	57	312	19,200
August	126	12	56.2	3,460
September	19	11	12.7	756
The year	1,640	2	251	182,000

Daily and monthly combined discharge, in second-feet, of Big Wood River and Big Wood Slough at Hailey, Idaho, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	125	113	107	107	118	126	343	707	1,160	583	211	139
2	119	113	114	107	126	126	355	784	973	564	212	155
3	112	107	114	107	126	126	363	960	905	532	203	145
4	112	107	114	107	126	126	411	960	848	508	195	148
5	111	107	114	107	126	126	462	960	792	499	185	149
6	113	107	114	107	126	126	571	900	853	486	204	153
7	136	107	127	102	126	126	651	900	1,120	466	173	137
8	133	108	154	102	126	126	759	840	1,500	425	174	146
9	130	108	192	102	129	126	794	785	1,420	425	223	147
10	122	102	245	102	126	126	805	729	1,500	452	272	146
11	117	102	224	107	126	127	745	679	1,690	472	247	159
12	117	102	211	107	126	134	795	654	1,600	452	254	165
13	120	102	187	107	126	150	846	630	1,260	423	252	162
14	120	101	185	103	126	163	788	678	1,110	426	265	154
15	113	112	192	103	126	163	683	784	1,040	430	246	146
16	113	113	200	103	132	163	607	840	1,100	432	194	143
17	113	113	141	98	133	165	559	785	1,170	377	185	131
18	112	113	141	98	133	175	511	840	1,170	349	171	134
19	106	113	141	98	133	175	489	900	1,040	313	168	140
20	117	113	132	97	133	177	533	900	910	300	156	146
21	117	113	126	92	133	178	654	1,020	844	283	150	143
22	118	113	119	92	133	178	839	1,020	805	283	135	143
23	118	113	113	97	132	242	960	960	749	267	144	165
24	118	113	113	97	126	242	1,230	1,020	721	265	126	160
25	116	107	113	102	126	249	1,230	1,020	653	244	125	188
26	116	107	113	102	126	281	1,150	1,020	665	247	119	178
27	114	107	107	103	126	281	1,020	1,090	668	236	113	171
28	114	102	107	113	126	281	899	1,470	668	228	111	171
29	113	102	107	113	-----	281	784	1,650	616	222	122	168
30	113	102	107	118	-----	281	729	1,570	585	218	119	173
31	113	-----	107	118	-----	323	-----	1,320	-----	210	133	-----
Month						Maximum	Minimum	Mean	Run-off in acre-feet			
October						136	106	117	7,190			
November						113	101	108	6,430			
December						245	107	141	8,670			
January						118	92	104	6,400			
February						133	118	128	7,110			
March						323	126	183	11,300			
April						1,230	343	719	42,800			
May						1,650	630	947	58,200			
June						1,690	585	1,000	59,500			
July						583	210	375	23,100			
August						272	111	180	11,100			
September						188	131	154	9,160			
The year						1,690	92	347	251,000			

BIG WOOD RIVER NEAR BELLEVUE, IDAHO

LOCATION.—Water-stage recorder in sec. 20, T. 1 S., R. 18 E., 1¼ miles above flow line of Magic Reservoir and 10 miles southwest of Bellevue.

DRAINAGE AREA.—823 square miles.

RECORDS AVAILABLE.—July, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,210 second-feet June 12 (gage height, 3.05 feet); minimum, 26 second-feet Mar. 29 (gage height, 1.19 feet). 1911-1930: Maximum discharge, 3,660 second-feet June 16, 1921 (gage height, 6.07 feet); minimum, 25 second-feet Apr. 22-24, 1920.

REMARKS.—Records excellent. Discharge interpolated Apr. 9, 10, Aug. 6. Numerous diversions for irrigation above station. Gage-height record and four discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929-30

	Oct.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	50		36	414	625	201	86	70
2.....			34	376	523	182	86	67
3.....			30	434	414	174	86	70
4.....			43	531	352	174	86	78
5.....			78	515	346	167	86	80
6.....			141	485	334	161	86	78
7.....			252	449	470	144	86	78
8.....			312	463	692	123	80	78
9.....			348	421	815	117	53	78
10.....			385	363	922	132	91	78
11.....			421	317	1,060	141	89	78
12.....			441	271	1,100	148	91	78
13.....			485	247	855	129	100	75
14.....			540	234	643	117	108	75
15.....			507	301	564	123	106	75
16.....			421	334	564	144	94	73
17.....			376	334	643	151	89	70
18.....			346	323	661	126	83	70
19.....			323	340	580	103	80	67
20.....			317	329	507	100	75	67
21.....			340	357	441	100	70	67
22.....			456	395	434	108	67	67
23.....			556	363	401	89	65	70
24.....			698	352	357	86	60	70
25.....			918	376	312	80	60	73
26.....			845	389	296	80	62	78
27.....			765	401	264	78	67	80
28.....			661	564	264	78	70	78
29.....		26	589	826	262	80	70	78
30.....		32	507	918	212	88	67	78
31.....		34		815		86	67	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April.....	918	30	406	24,200
May.....	918	234	427	26,300
June.....	1,100	216	533	31,700
July.....	201	78	123	7,560
August.....	108	60	80.5	4,950
September.....	80	67	74.1	4,410

MAGIC RESERVOIR NEAR RICHFIELD, IDAHO

LOCATION.—Tape gage in NE. ¼ SE. ¼ sec. 18, T. 2 S., R. 18 E., 18 miles northwest of Richfield. Observations are referred to an assumed datum which is about 137 feet below mean sea level.

DRAINAGE AREA.—1,500 square miles.

RECORDS AVAILABLE.—February, 1909, to September, 1930 (gage-height record only prior to Apr. 4, 1909). Practically no storage prior to July 14, 1909.

EXTREMES.—Maximum contents during year, 70,590 acre-feet May 13 (gage height, 4,891.90 feet); minimum, 3,208 acre-feet Oct. 13 (gage height, 4,838.74 feet).

1909-1930: Maximum contents, 192,060 acre-feet May 18, 1927 (gage height, 4,935.14 feet); no storage for several days in 1909, 1919, 1920, 1924, 1928.

REMARKS.—Water stored in this reservoir for irrigation on about 69,000 acres of land under Carey Act project of Big Wood Canal Co. (Ltd.). Capacity of reservoir about 191,000 acre-feet between gage heights 4,821.5 and 4,935.0 feet. Gage-height record furnished by water master for Big Wood and Little Wood Rivers.

Daily contents, in acre-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	4,498	5,196	3,726	5,948	6,938	12,000	26,430	62,240	54,910	30,670	11,120	5,221
2-----	4,622	5,286	3,754	5,981	6,993	12,100	27,540	62,650	54,230	29,770	9,628	5,381
3-----	4,719	5,381	3,812	6,004	7,054	12,200	28,900	62,540	53,560	29,220	8,919	5,499
4-----	4,838	5,473	4,860	6,055	7,109	12,320	29,750	62,670	51,620	28,670	8,462	5,642
5-----	4,935	5,563	3,884	6,112	7,229	12,460	30,360	63,030	50,030	28,090	7,878	5,759
6-----	5,027	5,642	3,900	6,152	7,325	12,680	31,310	64,010	48,790	27,930	7,293	5,878
7-----	5,106	5,759	3,940	6,180	7,478	12,780	32,260	65,000	48,460	27,900	7,184	6,009
8-----	4,797	5,862	3,956	6,197	7,562	13,060	33,020	66,330	47,900	27,760	7,115	6,163
9-----	4,398	5,948	3,976	6,214	7,672	13,240	34,680	67,160	47,200	27,550	7,018	6,311
10-----	4,471	5,845	4,032	6,214	7,844	13,410	36,000	68,160	47,370	27,290	6,914	6,460
11-----	4,183	5,808	4,094	6,220	7,905	13,540	37,420	69,020	47,790	26,910	6,816	6,611
12-----	3,619	5,878	4,243	6,249	8,075	13,680	38,760	69,890	49,370	26,470	6,669	6,780
13-----	3,208	5,921	4,364	6,277	8,211	14,150	40,210	70,590	50,400	25,670	6,374	6,932
14-----	3,332	5,948	4,521	6,351	8,388	14,770	41,800	70,550	50,580	23,850	5,786	7,054
15-----	3,400	6,055	4,636	6,368	8,533	15,270	43,240	70,130	50,210	22,200	5,013	7,210
16-----	3,549	6,163	4,760	6,368	8,711	15,690	45,110	69,430	49,830	21,350	4,668	7,363
17-----	3,668	6,243	4,875	6,374	9,343	16,230	46,390	68,800	49,330	20,400	4,898	7,485
18-----	3,789	6,340	4,988	6,425	9,818	16,440	47,590	68,360	48,770	19,250	5,096	7,627
19-----	3,872	6,402	5,111	6,471	10,080	16,750	48,640	67,200	48,790	18,120	5,316	7,783
20-----	3,988	6,494	5,196	6,499	10,360	17,140	49,480	66,450	48,190	16,980	5,536	7,925
21-----	4,098	6,563	5,261	6,511	10,650	17,510	50,470	65,560	47,480	16,050	5,680	8,061
22-----	4,196	6,629	5,311	6,528	10,930	17,940	51,540	64,550	46,590	15,920	5,813	8,177
23-----	4,282	6,683	5,411	6,563	11,040	18,400	52,860	63,500	44,710	15,900	5,932	8,320
24-----	4,364	6,157	5,478	6,563	11,260	18,940	54,340	63,440	42,930	15,760	5,992	8,442
25-----	4,530	5,101	5,536	6,587	11,390	19,620	55,630	61,070	41,130	15,610	6,026	8,561
26-----	4,617	4,060	5,595	6,617	11,540	20,190	57,220	60,130	39,210	15,380	5,706	8,708
27-----	4,709	3,505	5,664	6,617	11,690	21,350	58,600	59,030	37,320	15,140	5,231	8,847
28-----	4,820	3,553	5,754	6,629	11,870	22,710	59,860	57,810	35,650	14,830	4,700	9,035
29-----	4,898	3,623	5,791	6,629	-----	23,740	60,930	56,450	34,060	14,360	7,723	9,216
30-----	5,003	3,683	5,835	6,635	-----	24,870	61,710	55,920	32,240	13,960	4,875	9,350
31-----	5,106	-----	5,889	6,792	-----	25,810	-----	55,460	-----	12,620	5,062	-----

BIG WOOD RIVER BELOW MAGIC DAM, NEAR RICHFIELD, IDAHO

LOCATION.—Water-stage recorder in sec. 18, T. 2 S., R. 18 E., 1/2 a mile below Magic Dam and 18 miles northwest of Richfield.

RECORDS AVAILABLE.—April, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,380 second-feet June 22 (gage height, 4.95 feet); minimum, 4.2 second-feet Nov. 16–22, Sept. 11, 12 (gage height, 1.54 feet).

1911–1930: Maximum discharge, 5,070 second-feet May 18, 1911 (gage height, 9.2 feet); no flow reported Feb. 3, 1915.

REMARKS.—Records excellent except those for estimated periods, Jan. 12–16, 18–24, 28–31, Feb. 3–7, 9–13, 16–21, 23–28, Mar. 2–7, 9–14, Sept. 7–11, 20, which are fair. Flow completely regulated by gates at Magic Dam. Numerous ranch diversions in upper drainage area. Gage-height record and nine discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.7	4.7	28	40	24	4.7	6.0	329	1,280	750	798	4.4
2	4.7	4.7	28	40	6.4	4.7	6.0	493	1,310	444	583	4.4
3	4.7	4.7	28	40	6.1	4.7	6.4	544	1,340	430	315	4.4
4	4.7	4.7	29	40	5.8	4.7	6.4	534	1,210	421	372	4.4
5	4.7	4.7	36	40	5.5	4.7	6.4	296	951	315	376	4.4
6	4.7	4.7	41	39	5.2	4.7	6.7	119	798	180	234	4.4
7	180	4.7	41	39	5.0	4.7	6.7	119	858	198	150	4.4
8	259	5.0	39	39	4.7	4.7	6.7	119	858	214	150	4.3
9	114	33	37	39	4.7	4.7	7.0	119	744	244	147	4.3
10	94	89	36	39	4.6	4.8	7.4	119	652	325	147	4.3
11	363	43	36	39	4.6	4.9	7.4	116	498	320	163	4.2
12	367	5.0	36	39	4.5	5.0	7.4	116	493	459	262	4.2
13	44	4.4	39	39	4.4	5.1	7.4	361	703	828	434	4.4
14	4.7	4.4	39	39	4.4	5.2	7.4	636	828	951	534	4.4
15	4.4	4.4	39	39	4.4	5.2	7.4	768	798	828	402	4.4
16	4.4	4.2	39	39	4.4	5.2	7.7	920	828	508	40	4.4
17	4.4	4.2	39	39	4.5	5.2	7.7	983	828	663	5.4	4.4
18	4.4	4.2	39	39	4.5	5.2	7.7	983	828	738	5.0	4.4
19	4.4	4.2	39	39	4.6	5.2	7.7	983	920	692	4.7	4.4
20	4.4	4.2	39	39	4.6	5.2	7.7	1,020	889	581	4.7	4.4
21	4.4	4.2	39	39	4.7	5.2	7.7	1,050	983	283	4.7	4.4
22	4.4	4.2	39	39	4.7	5.2	8.0	1,050	1,210	145	4.7	4.4
23	4.4	108	40	39	4.7	5.2	8.0	1,080	1,280	160	4.7	4.4
24	4.4	555	40	39	4.7	5.2	167	1,080	1,280	174	4.7	4.4
25	4.4	608	40	39	4.7	5.4	266	1,110	1,240	171	153	4.4
26	4.4	478	40	37	4.7	5.4	273	1,110	1,240	174	353	4.4
27	4.7	109	40	36	4.7	5.4	277	1,180	1,180	195	421	4.4
28	4.7	29	40	36	4.7	5.7	277	1,180	1,050	296	150	4.4
29	4.7	29	40	36	-----	5.7	312	1,180	1,050	304	4.7	4.4
30	4.7	29	40	36	-----	6.0	341	1,210	1,020	555	4.4	4.4
31	4.7	-----	40	36	-----	6.0	-----	1,240	-----	828	4.4	-----
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October	367		4.4		49.4		3,040					
November	608		4.2		73.2		4,360					
December	41		28		37.6		2,310					
January	40		36		38.6		2,370					
February	24		4.4		5.52		307					
March	6.0		4.7		5.13		315					
April	341		6.0		69.3		4,120					
May	1,240		116		714		43,900					
June	1,340		493		972		57,800					
July	951		145		431		26,500					
August	798		4.4		201		12,400					
September	4.4		4.2		4.38		261					
The year	1,340		4.2		218		158,000					

BIG WOOD RIVER ABOVE NORTH GOODING CANAL, NEAR SHOSHONE, IDAHO

LOCATION.—Staff gage in sec. 10, T. 4 S., R. 18 E., 1 mile above North Gooding Canal and 14 miles northeast of Shoshone.

RECORDS AVAILABLE.—April, 1921, to September, 1930.

EXTREMES.—1921-1930: Maximum discharge, 3,330 second-feet June 13, 1921 (gage height, 12.79 feet); no flow for long periods.

REMARKS.—No flow during current year. Numerous diversions for irrigation above station. Since 1925 Lincoln Canal diverts entire flow around station to conserve channel losses. Flow regulated by storage in Magic Reservoir.

BIG WOOD RIVER BELOW NORTH GOODING CANAL, NEAR SHOSHONE, IDAHO

LOCATION.—Water-stage recorder in sec. 15, T. 4 S., R. 18 E., 300 yards below headworks of North Gooding Canal and 11 miles northeast of Shoshone.

RECORDS AVAILABLE.—January, 1911, to September, 1930.

EXTREMES.—Maximum discharge, estimated, 110 second-feet May 5; no flow reported throughout year except on May 5, 6.

1911-1930: Maximum discharge, 3,180 second-feet May 18, 1921 (gage height, 15.0 feet, former datum); no flow for long periods.

REMARKS.—Since completion of Lincoln Canal in 1925, most of river flow has been diverted above station. The only days on which water passed station during year ending Sept. 30, 1930, were May 5, 6 (daily discharge estimated 110 and 4 second-feet, respectively, or a total run-off for the year of 228 acre-feet).

BIG WOOD RIVER AT GOODING, IDAHO

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 31, T. 5 S., R. 15 E., 30 feet below highway bridge and half a mile north of Gooding.

RECORDS AVAILABLE.—April, 1921, to September, 1930. From June, 1896, to October, 1899, at station at approximately same site but known as Malade River at Toponis, Idaho.

EXTREMES.—Maximum discharge during year, 227 second-feet May 15 (gauge height, 2.45 feet); no flow reported prior to Apr. 27, from May 7 to 14, and after Aug. 18.

1921-1930: Maximum discharge, 2,340 second-feet May 7, 1922 (gauge height, 5.80 feet); no flow for long periods each year.

REMARKS.—Records good except those for August, which are fair. Flow regulated by operation of gates at Magic Dam and irrigation diversions above station. Gauge-height record and six discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929-30

Day	Apr.	May	June	July	Aug.	Day	Apr.	May	June	July	Aug.
1-----	0	57	26	88	38	16-----	0	73	34	41	15
2-----	0	47	22	68	35	17-----	0	39	30	43	14
3-----	0	57	24	51	39	18-----	0	20	31	42	3
4-----	0	34	22	54	36	19-----	0	15	33	53	0
5-----	0	39	24	49	31	20-----	0	33	33	57	0
6-----	0	6	27	40	22	21-----	0	31	27	50	0
7-----	0	0	32	28	19	22-----	0	33	14	36	0
8-----	0	0	29	29	12	23-----	0	36	11	20	0
9-----	0	0	35	44	17	24-----	0	35	15	35	0
10-----	0	0	35	64	18	25-----	0	34	14	43	0
11-----	0	0	36	73	17	26-----	0	34	16	34	0
12-----	0	0	39	61	15	27-----	36	32	16	34	0
13-----	0	0	23	47	20	28-----	53	35	15	34	0
14-----	0	0	39	44	16	29-----	56	35	54	28	0
15-----	0	76	36	40	16	30-----	66	24	90	59	0
						31-----		22		53	0

Month	Maximum	Minimum	Mean	Run-off in acre feet
April-----	66	0	7.0	417
May-----	76	0	27.3	1,680
June-----	90	11	29.4	1,750
July-----	88	20	46.5	2,860
August-----	39	0	12.4	762
The year-----				7,470

NOTE.—No flow during months for which no discharge is shown.

BIG WOOD RIVER NEAR GOODING, IDAHO

LOCATION.—Water-stage recorder in sec. 21, T. 6 S., R. 14 E., $3\frac{3}{4}$ miles above bridge on upper road between Bliss and Hagerman, 5 miles above diversion dam for King Hill project, and 6 miles southwest of Gooding.

RECORDS AVAILABLE.—March, 1916, to September, 1930.

EXTREMES.—Maximum discharge during year, 273 second-feet May 16 (gage height, 2.87 feet); no flow for several days within period of record and after Sept. 2.

1916-1930: Maximum discharge, 3,680 second-feet Mar. 17, 1922 (gage height, 9.00 feet); no flow for long periods each year.

REMARKS.—Records good. Flow regulated by gates at Magic Dam. Diversions for irrigation above station. Discharge estimated Apr. 5, 22, 27, May 9, 15, Aug. 18-20. Gage-height record and three discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929-30

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1.-----	71	72	19	57	24	1	16.-----	20	156	26	12	5	0
2.-----	39	50	26	33	20	1	17.-----	24	66	25	18	3	0
3.-----	10	54	30	20	25	0	18.-----	26	37	25	20	2	0
4.-----	3	33	25	25	25	0	19.-----	26	28	29	29	1	0
5.-----	0	37	18	23	19	0	20.-----	17	28	34	42	1	0
6.-----	10	26	21	16	13	0	21.-----	11	23	41	34	1	0
7.-----	8	9	16	8	10	0	22.-----	2	19	26	24	0	0
8.-----	7	13	28	6	7	0	23.-----	0	34	22	9	0	0
9.-----	7	3	29	7	6	0	24.-----	0	28	29	6	0	0
10.-----	5	0	40	24	9	0	25.-----	0	22	41	21	0	0
11.-----	6	0	23	44	7	0	26.-----	0	23	36	14	0	0
12.-----	8	0	37	33	6	0	27.-----	2	20	28	11	0	0
13.-----	8	0	18	22	7	0	28.-----	28	20	16	12	0	0
14.-----	26	0	28	20	7	0	29.-----	37	18	19	9	5	0
15.-----	26	86	30	17	3	0	30.-----	48	12	53	31	5	0
							31.-----		9		30	2	-----

Month	Maximum	Minimum	Mean	Run-off, in acre feet
April.-----	71	0	15.8	940
May.-----	156	0	30.0	1,840
June.-----	53	16	27.9	1,660
July.-----	57	6	22.0	1,350
August.-----	25	0	6.9	424
September.-----	1	0	.1	4
The period.-----	-----	-----	-----	6,220

BIG WOOD SLOUGH AT HAILEY, IDAHO

LOCATION.—Staff gage in sec. 9, T. 2 N., R. 18 E., at highway bridge one-eighth mile northeast of steel highway bridge across Big Wood River and one-eighth mile southwest of Hailey.

RECORDS AVAILABLE.—June, 1915, to September, 1930.

EXTREMES.—Maximum discharge during year, 261 second-feet Apr. 9 (gage height, 1.91 feet); minimum, 8 second-feet Apr. 20, May 14, 29 (gage height, 0.84 foot).

1915-1930: Maximum discharge, 419 second-feet June 6, 1921 (gage height, 3.00 feet); minimum, 0.9 second-foot Mar. 21-24, 1919.

REMARKS.—Records fair. Discharge estimated on account of ice and missing gage heights Jan. 14 to Feb. 1. Big Wood Slough is natural channel of Big Wood River that is utilized also as a tailrace for Hailey power plant. Flow affected by load at power plant half a mile upstream. Three discharge measurements and one daily staff-gage reading Apr. 4 to Sept. 30 furnished by water master for Big and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	116	110	104	104	115	123	179	9	17	35	153	126
2	110	110	110	104	123	123	179	9	23	62	157	142
3	104	104	110	104	123	123	187	10	15	52	149	132
4	104	104	110	104	123	123	195	10	18	68	142	135
5	104	104	110	104	123	123	187	10	17	59	132	135
6	104	104	110	104	123	123	211	10	23	46	146	139
7	123	104	123	99	123	123	191	10	45	46	126	123
8	116	104	149	99	123	123	211	10	38	45	126	132
9	123	104	187	99	126	123	149	10	37	45	153	132
10	116	99	238	99	123	123	30	9	43	52	146	129
11	110	99	171	104	123	123	25	9	48	52	123	142
12	110	99	164	104	123	129	20	9	48	52	149	146
13	110	99	142	104	123	142	16	10	35	43	149	149
14	110	99	142	100	123	153	13	8	28	46	153	142
15	104	110	149	100	123	153	13	9	28	50	139	135
16	104	110	157	100	129	153	12	10	25	52	110	132
17	104	110	135	95	129	153	11	10	33	52	110	120
18	104	110	135	95	129	153	9	10	33	41	101	123
19	99	110	135	95	129	153	9	10	25	38	110	129
20	110	110	129	95	129	153	8	10	20	40	113	135
21	110	110	123	90	129	153	9	10	14	38	110	132
22	110	110	116	90	129	153	9	10	30	38	101	132
23	110	110	110	95	129	164	10	10	29	37	110	153
24	110	110	110	95	123	164	11	10	26	35	110	149
25	110	104	110	100	123	171	10	10	33	68	107	175
26	110	104	110	100	123	171	9	11	45	113	101	167
27	110	104	104	100	123	171	9	10	48	110	96	160
28	110	99	104	110	123	171	9	13	48	104	93	160
29	110	99	104	110	171	171	9	13	46	126	107	157
30	110	99	104	115	171	171	9	24	47	153	107	160
31	110	104	115	115	171	171	18	18	153	153	120	---

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	123	99	110	6,760
November	110	99	105	6,250
December	238	104	129	7,930
January	115	90	101	6,210
February	129	115	125	6,940
March	171	123	146	8,980
April	211	8	65.0	3,870
May	24	8	10.7	658
June	48	14	31.8	1,890
July	153	35	62.9	3,870
August	157	93	124	7,620
September	175	120	141	8,390
The year	238	8	95.8	69,400

CAMAS CREEK NEAR BLAINE, IDAHO

LOCATION.—Water-stage recorder in sec. 15, T. 1 S., R. 16 E., one-fourth mile north of Macon siding on Hill City branch of Oregon Short Line Railroad, 1½ miles below railroad bridge, and 4 miles southeast of Blaine.

DRAINAGE AREA.—618 square miles.

RECORDS AVAILABLE.—May, 1912, to September, 1930. Discharge measurements only are available for 1922.

EXTREMES.—Maximum discharge during year, 525 second-feet Apr. 2 (gage height, 3.95 feet); minimum, 2.0 second-feet July 27 and Aug. 6 (gage height, 0.93 foot).

1911-1930: Maximum discharge, about 5,240 second-feet Apr. 12, 1916; maximum gage height, 12.35 feet Apr. 5, 1925; minimum discharge, 1.8 second-feet July 29, 1926.

REMARKS.—Records excellent. Many small diversions above station. No regulation. Gage-height record and results of three discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.6		466	123	136	8.9	2.1	2.3
2			480	115	130	8.6	2.1	2.3
3			374	117	113	8.6	2.1	2.3
4			284	134	108	7.8	2.1	2.3
5			245	154	96	7.0	2.1	2.3
6			240	171	84	6.4	2.1	2.4
7			230	161	76	5.6	2.1	2.8
8			232	168	69	5.1	2.1	2.8
9			232	185	60	4.2	2.1	2.8
10			225	195	52	4.0	2.1	2.8
11			212	198	51	3.8	2.1	2.8
12			202	198	47	3.8	2.1	2.8
13			200	185	45	3.6	2.3	2.8
14			205	173	43	3.4	2.4	2.7
15			210	190	39	3.2	2.7	2.7
16			202	198	33	3.0	2.6	2.6
17			192	222	26	3.0	2.6	2.6
18			171	225	18	2.8	2.4	2.4
19			154	212	15	2.6	2.3	2.3
20			143	198	16	2.6	2.3	2.3
21			136	195	12	2.6	2.3	2.3
22			136	190	10	2.4	2.3	2.4
23			136	188	10	2.3	2.3	2.4
24			161	180	10	2.3	2.3	2.6
25			171	168	10	2.3	2.3	2.7
26			171	154	11	2.2	2.3	2.8
27			168	147	10	2.2	2.3	2.8
28			166	143	10	2.2	2.3	2.8
29		438	156	138	9.6	2.2	2.3	2.8
30		388	143	136	9.6	2.2	2.3	3.2
31		360		140		2.1	2.3	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April	480	136	215	12,800
May	225	115	171	10,500
June	136	9.6	45.3	2,700
July	8.9	2.1	3.97	244
August	2.7	2.1	2.26	139
September	3.2	2.3	2.60	155

LINCOLN CANAL NEAR RICHFIELD, IDAHO

LOCATION.—Water-stage recorder in sec. 9, T. 3 S., R. 18 E., at head of canal, 100 yards east from Shoshone-Hailey highway, 5½ miles below Magic Dam, and 12 miles northwest of Richfield.

RECORDS AVAILABLE.—April, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 458 second-feet May 27 (gage height, 3.06 feet); no flow during nonirrigation season and after Aug. 16.

1925-1930: Maximum discharge, 706 second-feet May 28, 1927 (gage height, 4.00 feet); no flow for long periods each year.

REMARKS.—Records excellent except those for Apr. 25, 29, May 6-12, which are estimated. Flow regulated by gates at head of canal. Canal diverts from right bank of Big Wood River in sec. 9, T. 3 S., R. 18 E., and approximately parallels river to head of North Gooding Canal in sec. 15, T. 4 S., R. 18 E., where water is returned to Big Wood River or diverted directly into North Gooding Canal. Canal used for conserving large channel losses in natural stream bed of river. No diversions from canal above gage. Gage-height record and five discharge measurements furnished by water master for Big and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929-30

Day	Apr.	May	June	July	Aug.	Day	Apr.	May	June	July	Aug.
1.....	0	189	403	215	269	16.....	0	366	338	174	64
2.....	0	246	403	181	267	17.....	0	349	347	164	0
3.....	0	383	414	174	142	18.....	0	366	355	184	0
4.....	0	389	339	164	133	19.....	0	374	446	179	0
5.....	0	224	239	146	122	20.....	0	366	435	161	0
6.....	0	1.5	254	139	113	21.....	0	374	407	136	0
7.....	0	1.5	256	142	108	22.....	0	398	391	111	0
8.....	0	1.5	281	162	117	23.....	0	398	387	130	0
9.....	0	1.5	244	177	115	24.....	31	375	385	132	0
10.....	0	1.5	184	308	115	25.....	187	407	394	124	0
11.....	0	1.5	242	306	114	26.....	201	416	394	122	0
12.....	0	1.5	324	288	226	27.....	198	435	403	124	0
13.....	0	168	340	340	237	28.....	201	432	283	228	0
14.....	0	374	355	330	248	29.....	205	410	254	260	0
15.....	0	385	334	324	241	30.....	201	470	248	254	0
						31.....		475		288	
Month					Maximum	Minimum	Mean	Run-off in acre-feet			
April.....					205	0	40.8	2,430			
May.....					435	1.5	279	17,200			
June.....					446	184	336	20,000			
July.....					340	111	199	12,200			
August.....					269	0	84.9	5,220			
The year.....								57,000			

NOTE.—No flow during months for which no discharge is shown.

LINCOLN CANAL NEAR SHOSHONE, IDAHO

LOCATION.—Water-stage recorder in sec. 15, T. 4 S., R. 18 E., one-fourth mile above mouth of canal, 7 miles west by north from Richfield, and 11 miles north-northeast of Shoshone.

RECORDS AVAILABLE.—May, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 414 second feet June 20 (gage height, 1.90 feet); probably no flow except during periods of flow as recorded. 1925-1930: Maximum discharge, 667 second-feet May 29, 1927 (gage height, 2.48 feet); no flow for long periods each year.

REMARKS.—Records excellent. Flow regulated by gates at head of canal. Five ditches have water rights to divert 12.5 second-feet for irrigation above this station. Canal diverts from right bank of Big Wood River in sec. 9, T. 3 S., R. 18 E., and parallels river to sec. 15 T. 4 S., R. 18, E., where water is either returned to Big Wood River or diverted directly into North Goodir Canal. Canal used for conserving large channel losses in natural stream bed of river. Gage-height record and four discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1930

Day	Apr.	May	June	July	Aug.	Day	Apr.	May	June	July	Aug.
1.....	0	160	363	190	225	16.....	0	336	304	157	72
2.....	0	182	366	160	231	17.....	0	314	318	129	3
3.....	0	347	374	150	127	18.....	0	329	318	136	0
4.....	0	355	330	138	106	19.....	0	340	398	143	0
5.....	0	277	199	134	87	20.....	0	329	398	136	0
6.....	0	3	219	112	87	21.....	0	336	370	114	0
7.....	0	0	219	116	74	22.....	0	355	355	84	0
8.....	0	0	237	136	84	23.....	0	359	347	100	0
9.....	0	0	216	140	82	24.....	0	344	351	102	0
10.....	0	0	154	253	86	25.....	103	363	355	97	0
11.....	0	0	188	269	87	26.....	162	370	359	93	0
12.....	0	0	283	244	167	27.....	167	386	366	95	0
13.....	0	47	304	297	201	28.....	170	394	273	170	0
14.....	0	332	329	297	207	29.....	170	370	222	219	0
15.....	0	355	304	280	210	30.....	174	363	219	207	0
						31.....		366		234	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April.....	174	0	31.5	1,870
May.....	394	0	249	15,300
June.....	398	154	301	17,900
July.....	297	84	166	10,200
August.....	231	0	68.9	4,240
The period.....				49,500

NOTE.—Probably no flow during months for which no discharge is shown.

THORN CREEK SPILLWAY NEAR GOODING, IDAHO

LOCATION.—Water-stage recorder in sec. 6, T. 5 S., R. 16 E., 600 feet below diversion from North Gooding Canal, 900 feet above Thorn Creek, and 7½ miles northeast of Gooding.

RECORDS AVAILABLE.—April, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 159 second-feet May 3 (gage height, 1.86 feet); no flow reported prior to Apr. 26 and subsequent to Aug. 17.

1928-1930: Maximum discharge, that of May 3, 1930; no flow during nonirrigation seasons.

REMARKS.—Records excellent. Flow regulated at point of diversion from North Gooding Canal. Spillway diverts from North Gooding Canal and discharges into Thorn Creek in sec. 6, T. 5 S., R. 16 E. Gage-height record and results of seven discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929-30

Day	Apr.	May	June	July	Aug.	Day	Apr.	May	June	July	Aug.
1.....	0	108	63	127	75	16.....	0	7	78	74	38
2.....	0	102	60	104	74	17.....	0	63	75	76	13
3.....	0	101	65	97	75	18.....	0	52	76	76	0
4.....	0	83	66	95	71	19.....	0	65	78	94	0
5.....	0	69	72	91	64	20.....	0	75	78	95	0
6.....	0	3	72	75	56	21.....	0	72	63	84	0
7.....	0	0	80	70	48	22.....	0	72	55	63	0
8.....	0	0	80	78	47	23.....	0	76	55	50	0
9.....	0	0	94	92	56	24.....	0	75	55	72	0
10.....	0	0	80	110	56	25.....	0	73	55	75	0
11.....	0	0	87	113	54	26.....	97	73	55	69	0
12.....	0	0	81	98	56	27.....	104	79	55	69	0
13.....	0	0	78	85	60	28.....	110	80	64	58	0
14.....	0	42	85	79	54	29.....	112	75	116	85	0
15.....	0	74	84	76	51	30.....	125	63	132	95	0.
						31.....		67		84	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April.....	125	0	18.3	1,090
May.....	108	0	55.7	3,420
June.....	132	55	74.6	4,440
July.....	127	50	84.2	5,180
August.....	75	0	30.6	1,880
The year				16,000

NOTE.—No flow during months for which no discharge is shown.

LITTLE WOOD RIVER NEAR CAREY, IDAHO

LOCATION.—Water-stage recorder in E. ½ sec. 30, T. 1 N., R. 21 E., one-third mile above diversion of West Canal and 6 miles northwest of Carey.

DRAINAGE AREA.—312 square miles.

RECORDS AVAILABLE.—April, 1904, to May, 1905; September, 1926, to September, 1930. At station 6 miles upstream, from February, 1920, to September, 1926.

EXTREMES.—Maximum discharge during year, 456 second-feet May 29 (gage height, 2.75 feet); minimum, 19 second-feet Nov. 12 (gage height, 0.83 foot). 1904-5, 1926-1930: Maximum discharge, 1,180 second-feet Apr. 27, 1927; maximum gage height, 5.1 feet May 22, 1904; minimum discharge, 8 second-feet Aug. 16, 17, 1929 (gage height, 0.66 foot).

REMARKS.—Records good except those for estimated periods, Nov. 1, 2, 4-9, 13, 14, 20-29, Dec. 26 to Mar. 31, Apr. 1-11, 13-18, 21-25, and for discharges below 20 second-feet, which are fair. A few small ditches divert water above station for irrigation. No regulation. Gage-height record furnished by water master for Little Wood River and Little Wood River Canal Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1	26	32	50	35			200	194	304	108	44	30
2	26	32	55					205	273	105	38	32
3	26	32	79					238	241	103	34	30
4	25	33	99					255	218	97	34	29
5	25	34	99					270	194	88	33	30
6	24	34	51			40	250	298	207	86	33	31
7	25	35	52					267	252	81	34	30
8	31	35	49					279	314	76	31	54
9	31	36	45					264	324	75	32	46
10	31	36	142					350	250	330	90	62
11	31	33	116				330	232	346	101	54	40
12	30	32	97					216	350	120	55	41
13	30	25	151					210	273	97	62	41
14	31	25	101					210	230	85	65	40
15	30	26	85					282	221	76	75	39
16	30	24	107			50	260	289	221	73	61	38
17	31	37	76					230	276	238	79	52
18	31	47	68					200	270	238	68	49
19	31	43	67					179	267	200	62	47
20	31		55					177	264	179	61	43
21	31	20	58	25			200	298	162	58	38	34
22	32		65					240	298	160	55	38
23	31		71					280	286	151	51	35
24	31	50	45					325	295	140	49	35
25	31		38					325	304	128	45	35
26	31						125	298	311	128	45	32
27	31	60						270	324	128	52	29
28	32		35					258	377	126	47	37
29	32	50						232	428	118	41	37
30	32	47						207	394	108	44	33
31	32							340			41	30

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	32	24	29.7	1,830
November			37.3	2,220
December	151		68.7	4,220
January			26.6	1,640
February			35.0	1,940
March			62.9	3,870
April			265	15,800
May	428	194	280	17,200
June	350	108	217	12,900
July	120	41	72.9	4,480
August	75	29	42.5	2,610
September	54	29	37.3	2,220
The year	428	24	98.0	70,900

LITTLE WOOD RIVER NEAR RICHFIELD, IDAHO

LOCATION.—Water-stage recorder in sec. 30, T. 4 S., R. 20 E., half a mile above Jim Burn's slough and heading of Dietrich Canal and 1 mile east of Richfield.

RECORDS AVAILABLE.—January, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 202 second-feet Apr. 10 (gage height, 2.12 feet); minimum, 61 second-feet June 12 (gage height, 1.35 feet).
1911–1930: Maximum discharge, 722 second-feet May 17, 18, 1911 (gage height, 4.5 feet); minimum, 7.6 second-feet June 24, 25, 1920 (gage height, 0.52 foot).

REMARKS.—Records good. Discharge estimated Aug. 12, Sept. 11. Some water for irrigation diverted above station. Gage-height record and nine discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929–30

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1.....	180	79	84	68	73	94	16.....	187	84	68	88	70	92
2.....	170	86	85	65	73	94	17.....	178	119	68	78	70	97
3.....	170	92	84	68	77	94	18.....	157	126	68	74	75	97
4.....	168	88	82	69	79	92	19.....	138	128	72	75	79	95
5.....	170	92	82	72	75	92	20.....	119	121	70	74	77	95
6.....	170	94	81	74	74	92	21.....	102	110	72	74	79	91
7.....	178	95	81	78	78	91	22.....	98	108	77	72	79	89
8.....	173	95	77	77	81	91	23.....	95	110	77	72	88	89
9.....	180	102	75	79	78	92	24.....	95	108	74	69	86	89
10.....	200	103	72	84	77	92	25.....	94	86	74	65	88	91
11.....	197	100	70	85	72	92	26.....	86	79	74	68	86	91
12.....	192	95	65	91	74	91	27.....	82	72	70	69	91	92
13.....	180	89	64	91	77	92	28.....	77	73	69	72	91	92
14.....	185	68	65	89	74	92	29.....	81	70	68	74	91	91
15.....	197	69	68	89	73	92	30.....	82	78	68	73	92	89
							31.....		82		72	94	
Month						Maximum	Minimum	Mean	Run-off in acre-feet				
April.....						200	77	146	8,690				
May.....						128	68	93.6	5,760				
June.....						85	64	73.5	4,370				
July.....						91	65	75.7	4,650				
August.....						94	70	79.7	4,900				
September.....						97	89	92.1	5,480				
The period.....									33,800				

LITTLE WOOD RIVER AT SHOSHONE, IDAHO

LOCATION.—Water-stage recorder in sec. 2, T. 6 S., R. 17 E., just above diversion dam for town water supply and 400 feet above Shoshone-Richfield highway bridge in Shoshone.

RECORDS AVAILABLE.—April, 1922, to September, 1930.

EXTREMES.—Maximum discharge during year, 336 second-feet June 3 (gage height, 1.73 feet); minimum, 17 second-feet Aug. 22 (gage height, 0.50 foot).

1922-1930: Maximum discharge, 664 second-feet June 18, 1922 (gage height, 2.26 feet); minimum, 0.4 second-foot Sept. 3, 1924 (gage height, 0.34 foot).

REMARKS.—Records good. Discharge estimated July 2, 31. Numerous irrigation diversions above and below station. No regulation. Gage-height record and 14 discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1	70	102	44	306	238	226	56
2		91	56	321	152	260	56
3		94	63	331	65	159	56
4		86	70	321	63	60	56
5		79	67	311	63	53	54
6		81	74	130	60	60	54
7		79	67	94	53	58	54
8		79	63	99	45	49	54
9		79	63	91	44	49	54
10		86	72	84	45	47	56
11		94	74	76	47	44	56
12		91	72	84	49	42	56
13		76	67	72	100	45	58
14		70	60	191	230	98	63
15		70	107	260	242	210	65
16		79	234	268	159	143	65
17		84	238	282	60	51	65
18		74	264	273	91	45	65
19		60	255	282	107	47	65
20		49	238	286	113	44	70
21		40	214	282	104	30	67
22		37	222	286	76	30	65
23		37	199	301	51	47	63
24		45	206	321	47	53	65
25		53	218	316	45	51	65
26		51	218	296	40	49	65
27		49	218	278	44	63	67
28		44	238	250	44	94	63
29		40	255	242	45	84	54
30		44	260	242	47	58	51
31			282		140	58	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April	102	37	68.1	4,050
May	282	44	154	9,470
June	331	72	233	13,900
July	242	40	87.4	5,370
August	260	30	77.6	4,770
September	70	51	60.1	3,680

FISH CREEK ABOVE DAM NEAR CAREY, IDAHO

LOCATION.—Water-stage recorder in sec. 2, T. 1 N., R. 22 E., $1\frac{3}{4}$ miles above mouth of West Fork of Fish Creek and 14 miles northeast of Carey.

DRAINAGE AREA.—About 56 square miles.

RECORDS AVAILABLE.—May, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year, 36 second-feet May 15 (gauge height, 0.73 foot); minimum, 1.7 second-feet Oct. 5 (gauge height, 0.13 foot).

1920-1930: Maximum discharge, 158 second-feet May 6, 1922 (gauge height, 1.78 feet); no flow Sept. 9-12 and Oct. 17-27, 1926.

REMARKS.—Records good. Discharge estimated Apr. 20-25. No regulation. Several small diversions above gauge. Gauge-height record furnished by water master for Fish Creek.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1.....	3.2		18	20	8.1	2.9	3.2
2.....	2.9		17	20	8.1	2.9	3.5
3.....	2.6		15	19	7.6	3.5	3.2
4.....	1.9		19	20	7.6	4.7	3.2
5.....	1.7		23	19	7.2	4.3	4.3
6.....	1.9		23	20	6.7	4.7	4.7
7.....	1.9		21	18	6.3	4.7	4.7
8.....	2.6		25	17	5.4	4.7	4.7
9.....	2.9		27	15	3.9	4.7	4.7
10.....	2.9		27	15	4.7	5.4	5.4
11.....	3.2		26	13	7.6	5.4	5.0
12.....	2.9		23	13	10	6.7	5.0
13.....	2.9		22	13	9.0	5.4	5.0
14.....	2.9		22	13	8.6	7.6	5.0
15.....	2.9		34	13	8.1	5.9	5.0
16.....	2.9		32	12	7.6	5.0	4.7
17.....	2.9		31	10	8.1	4.3	4.3
18.....	2.9	22	29	10	7.2	4.7	3.5
19.....	2.9	21	28	10	6.7	4.7	3.9
20.....	2.9	21	29	12	6.7	4.3	3.9
21.....	2.9	21	29	12	6.3	4.3	3.9
22.....	3.2	22	27	11	5.9	4.3	3.9
23.....	3.2	22	26	6.7	5.0	3.5	3.9
24.....	3.2	22	25	6.7	4.7	3.5	3.5
25.....	3.5	23	25	7.6	4.7	2.9	3.9
26.....	3.5	23	23	7.2	4.7	2.9	4.3
27.....	3.9	23	20	6.7	4.3	3.2	4.3
28.....	3.9	24	20	8.6	3.2	3.9	4.3
29.....	3.9	22	20	8.1	2.2	3.9	4.3
30.....	3.5	19	21	8.1	2.2	3.5	4.7
31.....	3.2		21		2.2	2.9	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	3.9	1.7	3.0	184
April 18-30.....	24	19	21.9	565
May.....	34	15	24.1	1,480
June.....	20	6.7	12.8	762
July.....	10	2.2	6.1	375
August.....	7.6	2.9	4.4	270
September.....	5.4	3.2	4.3	256

FISH CREEK NEAR CAREY, IDAHO

LOCATION.—Water-stage recorder in sec. 22, T. 1 N., R. 22 E., 1½ miles below dam of Carey Valley Reservoir Co. and 11 miles northeast of Carey.

RECORDS AVAILABLE.—April, 1919, to September, 1920; May, 1923, to September, 1930. Discharge measurements only in 1921 and 1922.

EXTREMES.—Maximum discharge during year, 64 second-feet July 10 (gage height, 1.02 feet); no flow Jan. 6 to Mar. 14 and Apr. 22.

1919-20, 1923-1930: Maximum discharge, 170 second-feet May 19, 1927 (gage height, 1.91 feet); practically no flow during winter since 1920.

REMARKS.—Records good except those for estimated periods, Nov. 2 to Jan 5, Mar. 15 to Apr. 17, which are fair. Flow regulated by storage in Fish Creek Reservoir. No diversions between station and dam. Gage-height record furnished by water master for Fish Creek.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.3	3.4			0		23	38	16	39	6.1
2	6.5				0		23	44	18	29	6.1
3	6.5			3	0		25	46	16	25	5.6
4	6.5				0		24	42	16	19	4.9
5	6.5				0		28	42	19	17	6.1
6	6.5			0	0		29	39	26	19	7.4
7	6.5			0	0		31	38	43	16	4.1
8	6.1			0	0		31	37	54	13	4.1
9	6.5			0	0		31	34	63	14	4.1
10	5.3			0	0	6	32	36	63	15	4.5
11	5.3			0	0		33	37	59	11	4.1
12	5.3			0	0		34	36	50	8.8	4.5
13	4.9			0	0		35	35	51	8.8	4.1
14	4.9			0	0		35	31	53	8.3	2.4
15	4.9			0			37	27	53	7.8	1.7
16	4.1	3	3	0			40	24	53	7.8	6.1
17	3.0			0			39	24	52	8.3	9.3
18	2.7			0		7.0	39	22	53	14	8.3
19	2.7			0		7.0	39	17	53	12	6.5
20	2.7			0		7.0	39	22	53	9.8	6.1
21	2.7			0		3.5	42	27	49	5.6	6.1
22	2.7			0		0	42	27	42	7.8	5.6
23	2.7			0	6	2.6	40	26	37	11	4.9
24	2.7			0		5.6	38	26	36	11	3.4
25	2.7			0		6.1	35	24	38	8.8	4.1
26	2.7			0		11	35	24	44	8.3	4.9
27	2.7			0		25	31	23	43	6.1	4.9
28	3.0			0		35	29	20	39	5.3	4.5
29	3.4			0		37	32	19	39	5.3	4.5
30	3.4			0		27	35	18	38	5.3	4.9
31	3.4			0			36		40	5.6	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	6.5	2.7	4.4	271
November			3.0	179
December			3.0	184
January		0	0.5	31
February	0	0	0	0
March		0	3.3	203
April	37	0	9.2	547
May	42	23	33.6	2,070
June	46	17	30.2	1,800
July	63	16	42.4	2,610
August	39	5.3	12.3	756
September	9.3	1.7	5.1	303
The year	63	0	12.4	8,950

SILVER CREEK NEAR PICABO, IDAHO

LOCATION.—Water-stage recorder in sec. 1, T. 2 S., R. 20 E., $1\frac{1}{2}$ miles below mouth of drain ditch of Blaine County Drainage District No. 1 and 3 miles southeast of Picabo.

RECORDS AVAILABLE.—May, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year, 152 second-feet Aug. 20 (gage height, 1.94 feet); minimum, 78 second-feet May 13 (gage height, 1.10 feet).

1920–1930: Maximum discharge, 312 second-feet Apr. 3, 1923; minimum, 26 second-feet June 2, 1920 (gage height, 0.48 foot).

REMARKS.—Records excellent. Numerous irrigation diversion^a above station. About 270 acre-feet of water diverted around gage on right bank through small slough which heads 300 feet upstream. Gage-height record and six discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1.....	127	138	100	114	105	114	143
2.....	128	136	106	114	105	117	140
3.....		130	111	110	108	122	139
4.....		126	112	108	110	122	139
5.....		122	121	106	112	120	141
6.....		122	124	• 104	114	119	141
7.....		120	118	103	117	119	139
8.....		112	125	101	120	122	138
9.....		110	128	100	125	121	• 138
10.....		110	127	100	128	120	137
11.....		110	118	99	134	121	136
12.....		109	114	96	138	124	137
13.....		108	92	• 100	135	126	138
14.....		117	80	103	131	130	137
15.....		133	95	103	130	134	135
16.....		130	115	102	124	135	135
17.....		123	111	100	117	140	137
18.....		120	122	97	119	144	136
19.....		120	111	96	117	147	135
20.....		118	100	105	• 116	149	134
21.....		117	95	111	114	151	135
22.....		114	89	109	114	148	132
23.....		113	91	111	112	146	133
24.....		114	89	• 110	109	144	136
25.....		111	90	109	112	142	135
26.....		105	88	106	116	140	134
27.....		99	91	105	117	142	134
28.....		101	95	102	117	142	135
29.....		105	96	100	116	146	138
30.....		96	101	103	113	147	140
31.....			109		113	146	
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
April.....	138	96	116	6,900			
May.....	128	80	105	6,460			
June.....	114	96	104	6,190			
July.....	138	105	118	7,260			
August.....	151	114	134	8,240			
September.....	143	132	137	8,150			

^a Interpolated.

TRIBUTARY BASINS

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KING HILL CANAL NEAR HAGERMAN, IDAHO

LOCATION.—Staff gage 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 below heading of canal, and $3\frac{1}{2}$ miles north of Hagerman.

RECORDS AVAILABLE.—March to September, 1930.

EXTREMES.—Maximum discharge during year, 301 second-feet June 7 (gage height, 2.70 feet); practically no flow at times prior to Mar. 23.

REMARKS.—Records fair. Gage-height record furnished by King Hill Irrigation District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....			139	288	298	289	278	267
2.....			139	288	300	289	278	267
3.....			146	288	300	289	275	267
4.....			165	288	300	287	275	269
5.....			178	287	300	289	275	268
6.....		5	213	283	300	289	275	267
7.....			237	261	301	288	274	267
8.....			250	234	293	288	276	267
9.....			263	225	292	288	275	265
10.....			269	225	293	288	275	264
11.....		1. 8	275	225	292	288	276	262
12.....			280	225	289	288	276	259
13.....			274	225	288	287	270	257
14.....			252	225	288	287	274	252
15.....			250	225	287	287	271	247
16.....			265	225	291	233	270	247
17.....			271	225	291	180	269	237
18.....			273	234	292	180	269	231
19.....			275	257	292	179	269	231
20.....			278	270	292	187	230	238
21.....			280	278	291	269	183	235
22.....			285	284	291	283	215	240
23.....		113	288	285	289	280	259	237
24.....		113	283	289	289	275	258	228
25.....		113	280	293	288	274	255	228
26.....		113	280	294	288	274	255	226
27.....		113	282	296	287	275	256	226
28.....		113	283	298	287	278	257	226
29.....		139	288	298	291	282	258	226
30.....		139	288	300	291	279	262	223
31.....		139		300		279	265	
Month	Maximum		Minimum		Mean		Run-off in acre-feet	
April.....	288		139		251		14,900	
May.....	300		225		265		16,300	
June.....	301		287		292		17,400	
July.....	289		179		269		16,500	
August.....	278		183		263		16,200	
September.....	269		223		247		14,700	

EAST FORK OF JARBIDGE RIVER NEAR THREE CREEK, IDAHO

LOCATION.—Water-stage recorder in sec. 24, T. 16 S., R. 9 E., 2 miles above confluence with Jarbidge River and 10½ miles southwest of Three Creek.

RECORDS AVAILABLE.—October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 282 second-feet June 12 (gauge height, 2.74 feet); minimum, 5.0 second-feet Mar. 7 (gauge height, 0.66 foot).
1928-1930: Maximum discharge, 584 second-feet May 25, 1929 (gauge height, 3.54 feet); minimum, that of Mar. 7, 1930.

REMARKS.—Records excellent. Discharge estimated Jan. 17-24, Feb. 4-9, July 10, 11. No diversions for irrigation above station. Gauge-height record and 10 discharge measurements furnished by Salmon River Canal Co. (Ltd.).

Daily and monthly discharge, in second-feet, 1929-'30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	9.8	10	8.8	7.8	8.4	8.4	18	50	151	74	12	9.0
2.....	9.8	9.8	7.8	8.6	11	9.0	19	57	134	64	13	8.8
3.....	9.0	10	8.2	8.4	10	9.5	23	71	121	62	16	8.6
4.....	9.0	9.5	9.0	8.6	10	9.5	28	85	114	61	15	8.6
5.....	8.8	9.5	8.2	8.4	10	9.5	35	102	126	57	13	8.6
6.....	9.0	9.5	9.0	6.7	10	8.6	50	100	161	54	13	8.6
7.....	9.2	9.5	8.0	6.7	10	8.4	61	95	209	51	16	8.4
8.....	10	8.6	8.6	7.2	10	10	63	90	236	47	12	8.2
9.....	10	9.2	9.2	8.4	10	10	60	92	222	45	17	8.4
10.....	10	10	9.8	8.4	10	9.0	61	116	219	41	18	8.8
11.....	9.8	9.8	9.5	7.8	11	9.8	60	149	238	38	15	10
12.....	9.5	7.4	9.0	7.8	10	11	64	138	261	34	14	9.8
13.....	9.5	8.0	8.8	7.8	10	14	63	124	212	30	14	9.2
14.....	9.2	9.2	8.8	7.8	10	14	56	141	169	29	14	9.2
15.....	9.2	10	8.6	8.0	10	14	48	138	153	26	12	9.0
16.....	9.2	9.8	8.8	8.4	10	14	44	132	159	25	12	8.6
17.....	9.2	9.2	8.6	8.0	10	14	39	128	169	25	12	8.2
18.....	9.8	9.0	8.8	7.5	11	12	37	128	163	22	12	8.0
19.....	9.8	8.8	16	8.0	11	12	36	132	143	21	11	7.8
20.....	9.8	7.0	13	8.0	11	12	38	147	141	20	10	7.8
21.....	9.5	7.0	8.2	7.0	11	13	53	192	132	19	10	8.0
22.....	9.0	8.4	10	7.0	11	14	71	165	121	18	9.5	8.6
23.....	9.2	9.0	9.8	8.0	10	15	82	141	111	18	9.2	14
24.....	9.2	8.4	8.6	8.0	10	15	106	136	102	18	9.0	12
25.....	9.2	9.8	9.5	8.4	8.8	16	92	151	95	17	9.0	12
26.....	9.2	9.8	8.2	8.2	10	17	81	169	89	16	9.0	11
27.....	9.8	9.0	7.0	8.2	9.5	16	71	196	88	15	9.2	10
28.....	10	9.0	8.4	8.2	8.4	15	63	247	86	14	9.2	10
29.....	10	8.6	8.6	-----	-----	16	57	261	81	13	9.5	10
30.....	9.0	8.6	8.4	8.2	-----	20	54	238	76	12	9.2	11
31.....	10	-----	8.4	8.2	-----	20	-----	185	-----	12	9.0	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	10	8.8	9.47	582
November.....	10	7.0	9.05	539
December.....	16	7.0	9.08	558
January.....	8.6	6.7	7.93	488
February.....	11	8.4	10.1	561
March.....	20	8.4	12.8	787
April.....	106	18	54.4	3,240
May.....	261	50	139	8,550
June.....	261	76	149	8,870
July.....	74	12	32.2	1,980
August.....	18	9.0	12.0	738
September.....	14	7.8	9.34	556
The year.....	261	6.7	37.9	27,400

OWYHEE RIVER AT MOUNTAIN CITY, NEV.

LOCATION.—Water-stage recorder in SE. ¼ sec. 36, T. 46 N., R. 53 E., at Mountain City, half a mile below California Creek.

DRAINAGE AREA.—350 square miles.

RECORDS AVAILABLE.—May to December, 1913; November, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, 409 second-feet May 10 (gage height, 3.39 feet); minimum, 2 second-feet Sept. 3 (gage height, 1.05 feet).

1913, 1926-1930: Maximum discharge, 1,510 second-feet Mar. 26, 1928 (gage height, 7.0 feet); minimum, 2 second-feet in September, 1928, 1929, 1930.

REMARKS.—Records fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	8				58	133	97	98	11	8	4
2	4	9				52	137	88	100	9	8	3
3	4	9			10	48	143	121	100	9	8	2
4	5	10				48	145	203	88	8	8	3
5	6	10	9			45	133	266	78	8		4
6	6	11				42	141	295	69	8		5
7	6	13				38	143	295	60	6		6
8	7					36	139	324	57	5	10	6
9	7					32	133	336	49	5		6
10	7		8		20	31	123	388	46	5		7
11	6	12	8			36	113	349	43	5		8
12	6		8			45	103	320	37	5		8
13	6		8			62	101	290	33	5	11	9
14	6		7			84	109	266	33	5	11	10
15	7		7			88	115	249	31	4	11	12
16	7		7	8	65	84	113	251	27	5	11	12
17	8		9		58	78	103	282	23	5	11	12
18	8		10		55	62	88	242	22	5	11	10
19	7		31		53	58	89	210	24	5	11	9
20	7		26		52	76	88	188	26	6	12	9
21	7		23		45	95	88	180	22	7	12	8
22	7		21		45	123	86	178	20	7	12	8
23	6	10	16		45	111	86	159	18	8	12	9
24	6		11		43	111	99	141	16	9	11	10
25	6				42	129	109	129	16	9	10	10
26	6				48	170	107	117	15	9	8	10
27	6				52	168	131	112	15	8	8	9
28	6		10		52	141	121	102	13	9	6	10
29	6					145	113	96	13	9	6	10
30	7					182	109	96	12	8	5	10
31	7					145		102		8	4	
Month					Maximum	Minimum	Mean	Run-off in acre feet				
October					8	4	6.3	387				
November							10.5	625				
December					31		11.3	695				
January							8	492				
February							32.3	1,790				
March					182	31	84.6	5,200				
April					145	86	115	6,840				
May					388	88	209	12,900				
June					100	12	40.1	2,390				
July					11	4	6.9	424				
August						4	9.5	584				
September					12	2	8.0	476				
The year					388	2	45.2	32,800				

OWYHEE RIVER BELOW OWYHEE DAM, OREG.

LOCATION.—Water-stage recorder in sec. 17, T. 22 S., R. 45 E., three-fourths mile below Owyhee Dam. Zero of gage, 2,343.67 feet above mean sea level.

RECORDS AVAILABLE.—February, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,020 second-feet Mar. 24 (gage height, 5.12 feet); minimum, 60 second-feet Jan. 8 (gage height, 0.85 foot). 1929-30: Maximum discharge, 12,100 second-feet Mar. 23, 1929 (gage height, 11.56 feet); minimum, that of Jan. 8, 1930.

REMARKS.—Records good. Diversions for irrigation above station. Records furnished by United States Bureau of Reclamation and State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	136	170	178	187	• 207	575	920	263	495	135	100	104
2	143	170	176	180	• 230	495	890	257	515	130	100	105
3	145	172	174	178	• 360	455	800	265	535	130	97	105
4	145	174	• 176	197	• 340	404	745	244	515	125	97	105
5	141	174	• 178	212	• 330	394	695	241	535	120	93	105
6	143	176	180	217	370	370	645	252	515	119	92	105
7	141	178	176	220	495	366	620	277	495	118	93	105
8	145	180	176	202	435	408	598	384	471	118	98	112
9	146	182	180	• 196	439	800	598	555	435	110	101	112
10	145	187	182	• 191	483	695	670	830	401	107	100	110
11	145	182	180	• 186	515	598	620	770	362	112	101	114
12	143	182	180	180	695	575	575	1,160	327	109	100	119
13	150	185	185	180	575	555	555	1,480	297	107	97	118
14	150	185	182	515	535	515	1,300	232	106	98	119	119
15	150	190	187	535	670	459	1,160	263	106	113	119	119
16	150	182	185	800	1,070	423	1,070	249	104	104	120	120
17	152	182	209	890	1,300	• 409	1,010	230	101	101	122	122
18	152	176	222	920	1,240	• 394	950	217	95	101	120	120
19	154	178	249	1,130	1,300	380	920	194	95	102	122	122
20	150	244	1,100	1,200	356	860	199	101	101	122	122	122
21	154	230	1,010	1,040	356	890	192	98	100	119	119	119
22	154	220	890	920	336	860	192	102	101	119	119	119
23	148	230	830	1,160	309	800	180	104	95	119	119	119
24	148	246	745	1,620	291	745	174	105	97	120	120	120
25	155	227	695	1,780	279	670	167	106	97	122	122	122
26	159	176	214	1,010	1,440	277	645	161	106	102	122	122
27	159	176	214	830	1,480	271	645	157	105	101	128	128
28	154	174	214	645	1,580	274	598	143	105	98	125	125
29	161	176	207	1,440	285	535	139	102	100	125	125	125
30	165	178	200	1,200	268	515	138	100	101	128	128	128
31	167	194	1,010	1,010	515	515	100	102	102	128	128	128
Month	Maximum			Minimum			Mean			Run-off in acre-feet		
October	167	136	150	9,220								
November	190	178	10,600									
December	249	174	12,300									
January	220	183	11,300									
February	1,130	207	35,800									
March	1,780	366	56,900									
April	920	268	29,400									
May	1,480	241	43,000									
June	535	138	18,200									
July	135	95	6,700									
August	113	92	6,120									
September	128	104	6,900									
The year	1,780	92	340	246,000								

• Estimated.

BOISE RIVER NEAR TWIN SPRINGS, IDAHO

LOCATION.—Water-stage recorder in sec. 27, T. 4 N., R. 6 E., one-fourth mile above Birch Creek and 4 miles below Twin Springs.

DRAINAGE AREA.—830 square miles.

RECORDS AVAILABLE.—March, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,860 second-feet May 29 (gage height, 5.0 feet); minimum, 161 second-foot Nov. 22.

1911-1930: Maximum discharge, 10,300 second-feet May 17, 1927 (gage height, 8.30 feet); minimum, about 142 second-foot Nov. 13, 1916.

REMARKS.—Records good except those for estimated periods, Nov. 22, 23, Dec. 29-31, Jan. 9 to Feb. 6, Sept. 21-26, which are fair. No diversions above station. Results of two discharge measurements furnished by water master for Boise River and board of control for Boise project.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	295	285	275	407	390	443	1,020	1,750	2,380	969	346	265
2	290	316	265	389	440	419	1,130	1,870	2,040	952	346	265
3	285	305	260	348	420	431	1,330	2,400	1,840	918	346	265
4	280	285	280	371	410	461	1,490	2,470	1,780	867	346	260
5	285	295	285	407	440	467	1,620	2,330	1,660	819	335	265
6	285	305	290	354	460	467	1,940	2,400	1,840	788	340	270
7	290	280	280	285	473	437	2,470	2,260	2,500	758	346	275
8	316	270	275	211	479	455	2,470	2,130	3,200	713	330	290
9	343	280	321	230	498	443	2,540	1,940	3,040	692	390	275
10	321	316	935	250	473	425	2,540	1,810	3,280	728	467	275
11	305	285	953	270	492	449	2,400	1,690	3,540	706	390	384
12	300	203	710	270	511	485	2,470	1,580	3,350	650	437	407
13	300	175	953	265	504	550	2,540	1,510	2,640	622	425	340
14	295	228	770	260	557	613	2,620	1,580	2,210	587	473	320
15	290	280	718	255	606	606	2,200	1,750	2,150	554	413	305
16	290	290	1,110	250	592	635	1,810	1,810	2,200	534	378	295
17	285	285	850	245	537	642	1,630	1,940	2,400	528	356	285
18	295	295	650	250	550	620	1,500	2,060	2,260	497	340	280
19	295	280	500	260	628	635	1,500	2,200	1,940	479	340	270
20	290	242	420	250	688	695	1,480	2,200	1,760	467	325	270
21	290	175	400	240	770	725	1,690	2,620	1,700	449	310	270
22	295	180	400	230	695	755	2,130	2,400	1,640	437	305	280
23	295	260	430	250	650	740	2,400	2,130	1,510	425	300	330
24	290	256	450	280	592	725	2,920	2,000	1,430	413	290	380
25	290	338	450	310	530	710	3,000	2,000	1,300	401	285	340
26	290	360	383	320	530	818	2,760	2,130	1,250	390	280	320
27	305	285	316	325	504	901	2,540	2,400	1,250	384	275	305
28	338	280	305	320	485	884	2,260	3,080	1,200	373	275	300
29	310	285	310	320	-----	971	2,000	3,680	1,100	362	275	295
30	290	280	321	330	-----	1,140	1,810	3,490	1,010	356	270	295
31	290	-----	425	350	-----	1,050	-----	2,820	-----	346	265	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	343	280	297	0.358	0.41	18,300
November	360	175	273	.329	.37	16,200
December	1,110	260	493	.594	.68	30,300
January	407	211	294	.354	.41	18,100
February	770	390	532	.641	.67	29,500
March	1,140	419	639	.770	.89	39,300
April	3,000	1,020	2,070	2.50	2.79	123,000
May	3,680	1,510	2,210	2.66	3.07	136,000
June	-----	1,010	2,050	2.47	2.76	122,000
July	969	346	586	.706	.81	36,000
August	473	265	342	.412	.48	21,000
September	407	260	299	.360	.40	17,800
The year	3,680	175	839	1.01	13.74	608,000

ARROWROCK RESERVOIR AT ARROWROCK, IDAHO

LOCATION.—Staff gage in E. ½ sec. 13, T. 3 N., R. 4 E., at Arrowrock, 22 miles by road east of Boise. Gage reads sea-level elevations.

RECORDS AVAILABLE.—October, 1917, to September, 1930.

EXTREMES.—Maximum contents during year, 279,500 acre-feet June 15-18 (gage height, 3,212.0 feet); natural flow passing through reservoir Oct. 20-31, 1917-1930: Maximum contents, 286,100 acre-feet May 19, 20, 1925 (gage height, 3,214.2 feet); natural flow passing through reservoir Sept. 13-17, Sept. 20 to Oct. 1, 1919; Sept. 13 to Oct. 10, 1920; Sept. 19 to Oct. 22, 1922; Aug. 19 to Oct. 15, 1924; Sept. 16 to Oct. 15, 1926; Oct. 1-15, 1927; Oct. 8-21, 1928; Oct. 20-31, 1929.

REMARKS.—Capacity of reservoir 276,500 acre-feet between elevations 2,967.0 and 3,211.0 feet. Stored water used for irrigation of land in Boise Valley. Gage-height record and table of contents furnished by United States Bureau of Reclamation.

Daily contents, in acre-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.-----	5,400	645	9,670	18,940	50,480	61,170	100,600	211,800	274,700	252,000	131,000	33,560
2.-----	5,620	2,745	8,605	20,270	51,800	61,560	104,000	213,200	276,200	248,400	127,000	30,180
3.-----	5,804	3,405	7,890	21,410	53,120	62,210	106,900	214,500	276,500	244,700	122,800	26,580
4.-----	5,896	4,545	7,610	22,540	53,780	62,600	110,500	219,000	277,100	241,600	119,200	23,100
5.-----	5,988	5,850	7,610	23,840	54,240	63,250	114,300	223,900	276,800	237,700	115,400	20,070
6.-----	6,080	7,080	7,750	25,130	54,840	64,420	119,300	228,900	276,500	233,600	111,500	19,670
7.-----	6,695	8,460	7,778	26,250	55,200	65,200	125,700	234,100	276,800	229,400	107,700	19,180
8.-----	7,475	9,515	7,778	26,770	55,920	64,940	132,400	238,800	277,400	224,700	103,800	18,940
9.-----	8,315	10,620	7,778	27,290	56,400	64,550	139,400	241,900	277,400	220,000	100,400	18,800
10.-----	9,143	11,760	8,030	28,090	56,400	63,900	147,000	244,000	277,700	215,800	97,030	18,700
11.-----	9,918	12,960	11,200	29,260	56,280	63,250	153,500	245,000	277,400	211,500	94,750	18,650
12.-----	10,780	14,060	13,320	30,460	55,800	62,600	159,000	246,100	277,400	207,200	92,300	19,080
13.-----	11,520	14,910	14,170	31,760	55,200	61,950	164,000	245,800	278,800	202,700	90,060	19,520
14.-----	10,620	15,870	15,300	32,800	54,600	61,690	168,600	244,700	279,400	198,300	87,500	19,770
15.-----	9,360	16,240	15,870	33,800	54,840	61,950	173,300	244,500	279,500	193,800	85,400	19,770
16.-----	8,030	16,660	16,660	34,970	55,200	62,340	176,400	245,300	279,500	189,400	83,150	19,570
17.-----	6,570	17,100	18,370	35,770	55,200	62,600	178,400	246,400	279,500	186,000	80,900	19,470
18.-----	4,750	17,540	18,700	36,570	55,440	62,990	179,500	249,200	279,500	182,300	78,740	19,470
19.-----	2,035	18,460	18,230	37,460	55,440	63,250	179,900	251,700	279,000	178,600	76,360	19,420
20.-----		17,910	17,770	38,270	55,680	63,510	179,000	254,800	277,400	175,100	74,120	19,420
21.-----		16,450	16,540	39,000	56,640	64,160	180,400	257,600	275,900	171,600	71,700	19,330
22.-----		15,140	15,780	39,900	57,240	64,940	181,200	261,300	274,400	168,200	68,970	19,230
23.-----		13,690	15,110	40,710	58,320	68,190	183,500	263,900	272,600	164,600	65,850	19,180
24.-----		12,780	14,750	41,520	59,040	71,050	186,000	265,700	270,600	161,300	62,470	19,620
25.-----		12,400	14,520	42,420	59,400	74,260	190,600	266,500	268,900	157,700	58,800	20,020
26.-----		11,990	14,250	43,500	59,760	77,480	195,000	267,100	266,500	154,200	55,080	20,170
27.-----		11,760	13,880	44,700	60,000	81,500	199,300	267,700	263,900	150,800	51,140	20,270
28.-----		11,420	13,950	45,900	60,520	85,700	202,900	269,400	261,300	147,000	47,400	20,120
29.-----		11,070	15,380	47,100		89,420	207,000	273,500	258,400	143,200	43,700	18,800
30.-----		10,520	16,280	48,300		93,900	210,200	276,200	255,400	139,200	40,440	17,460
31.-----			17,320	49,160		98,050		276,500		135,000	36,890	

BOISE RIVER AT DOWLING RANCH, NEAR ARROWROCK, IDAHO

LOCATION.—Water-stage recorder in sec. 15, T. 3 N., R. 4 E., at Dowling Ranch, three-fourths mile above Moore Creek and 4 miles below Arrowrock.

DRAINAGE AREA.—2,230 square miles.

RECORDS AVAILABLE.—March, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 7,050 second-feet May 30, 31 (gage height, 6.50 feet); minimum (estimated), 10 second-feet Mar. 22–30.

1911–1930: Maximum discharge, 17,600 second-feet May 11, 1918 (gage height, 9.55 feet); minimum (estimated), 5 second-feet Nov. 2–10, Dec. 21–31, 1924, Jan. 1–6, Mar. 26–29, 1925.

REMARKS.—Records excellent April to September; others good except those partly estimated, Dec. 28 to Feb. 2, Mar. 22–30, which are fair. Flow regulated by storage in Arrowrock Reservoir. No diversions for irrigation above station. Gage-height record furnished by United States Bureau of Reclamation. Sixteen discharge measurements furnished by water master for Boise River and board of control for Boise project.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	528	403	896	55	95	594	703	2,660	5,090	3,680	2,660	2,230
2.....	495	264	767	150	95	574	905	2,900	3,990	3,590	2,660	2,230
3.....	500	196	607	140	345	574	905	2,820	3,990	3,500	2,660	2,230
4.....	500	180	495	120	450	574	998	2,520	3,880	3,590	2,590	2,160
5.....	480	162	500	120	490	581	1,060	2,160	3,880	3,680	2,590	1,100
6.....	394	157	533	120	544	658	978	2,160	3,880	3,780	2,590	759
7.....	318	146	581	150	635	834	1,160	1,960	4,410	3,780	2,590	703
8.....	306	157	562	150	735	1,040	1,310	2,230	5,830	3,680	2,590	650
9.....	323	120	581	130	852	1,210	1,270	2,590	5,830	3,590	2,440	607
10.....	327	95	809	130	978	1,200	1,300	2,820	6,090	3,500	2,160	581
11.....	380	104	914	130	1,060	1,250	1,700	2,980	6,490	3,500	2,020	568
12.....	340	146	978	130	1,120	1,290	1,960	3,230	5,830	3,500	2,090	544
13.....	594	151	1,080	130	1,170	1,290	2,300	3,500	4,860	3,500	2,090	528
14.....	1,060	154	1,120	130	1,120	1,260	2,440	3,590	4,300	3,500	2,020	588
15.....	1,060	160	1,060	130	1,080	1,180	2,440	3,590	3,990	3,320	1,960	680
16.....	1,060	168	1,100	135	1,100	1,170	2,370	3,400	4,200	3,060	1,890	642
17.....	1,260	174	1,230	135	1,080	1,170	2,440	3,140	4,300	2,900	1,890	600
18.....	1,460	445	1,290	135	1,080	1,170	2,520	2,980	4,410	2,820	1,820	581
19.....	1,410	826	1,310	135	905	1,180	2,590	2,980	4,410	2,740	1,890	562
20.....	635	1,040	1,310	135	998	1,200	2,660	3,060	4,300	2,740	1,890	555
21.....	620	1,080	1,300	140	941	1,200	2,820	3,230	3,990	2,660	2,020	568
22.....	614	1,010	1,260	140	914	430	2,900	3,400	3,880	2,660	2,090	588
23.....	607	950	1,140	140	896	10	3,140	3,590	3,780	2,590	2,230	516
24.....	594	896	960	140	896	10	3,320	3,680	3,680	2,590	2,300	480
25.....	607	834	969	140	896	10	3,230	3,880	3,590	2,590	2,370	538
26.....	600	809	960	145	896	10	3,140	4,090	3,680	2,590	2,440	607
27.....	607	784	695	145	727	10	2,900	4,300	3,590	2,660	2,520	650
28.....	650	745	95	145	642	10	2,520	4,300	3,680	2,660	2,440	1,060
29.....	650	792	95	135	-----	10	2,160	5,090	3,680	2,740	2,370	1,310
30.....	607	887	105	125	-----	230	2,440	6,630	3,680	2,660	2,300	1,360
31.....	511	-----	65	120	-----	495	-----	7,060	-----	2,660	-----	-----
Month	Maximum					Minimum		Mean		Run-off in acre-feet		
October.....	1,460					306		648		39,800		
November.....	1,080					95		468		27,800		
December.....	1,310					65		818		50,300		
January.....	150					55		132		8,120		
February.....	1,170					95		812		45,100		
March.....	1,290					10		723		44,500		
April.....	3,320					703		2,090		124,000		
May.....	7,050					1,960		3,440		212,000		
June.....	6,490					3,590		4,370		260,000		
July.....	3,780					2,590		3,130		192,000		
August.....	2,660					1,820		2,270		140,000		
September.....	2,230					480		892		53,100		
The year.....	7,050					10		1,650		1,200,000		

BOISE RIVER AT NOTUS, IDAHO

LOCATION.—Staff gage in sec. 34, T. 5 N., R. 4 W., at steel highway bridge one-fourth mile south of Notus and 7 miles northwest of Caldwell.

RECORDS AVAILABLE.—April, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,880 second-feet Feb. 3 (gage height, 4.50 feet); minimum, 25 second-feet Aug. 29–31 (gage height, 0.28 foot).

1920–1930: Maximum discharge, 14,500 second-feet May 19, 20, 1921; maximum gage height, 7.4 feet May 12, 1928; minimum discharge, 10 second-feet Aug. 18, 1920.

REMARKS.—Records good. Discharge estimated Jan. 22, 23. Station is below all diversions for irrigation in Boise Valley. Flow regulated by storage in Arrowrock Reservoir. Numerous diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	109	415	435	545	630	520	810	34	3,650	44	34	26
2	109	435	475	570	2,790	498	770	177	700	49	33	26
3	107	435	475	600	3,880	475	700	71	340	89	34	28
4	89	455	475	630	2,790	498	630	323	300	56	34	28
5	85	455	475	570	770	498	630	358	177	44	34	28
6	73	475	475	545	770	520	498	126	150	44	34	28
7	78	475	475	520	850	545	475	153	65	56	34	32
8	78	475	498	520	850	498	435	153	700	52	34	31
9	82	475	498	475	770	475	323	177	1,340	52	38	32
10	82	475	520	520	770	475	230	130	1,850	50	44	34
11	78	475	520	520	940	475	87	89	2,590	56	126	36
12	52	475	520	570	850	555	71	56	2,490	34	122	71
13	78	475	520	475	770	630	89	71	1,100	32	109	56
14	82	475	520	520	850	665	570	71	475	34	113	56
15	85	475	520	520	770	700	665	323	150	32	109	54
16	95	498	520	630	700	700	475	290	50	32	93	49
17	109	520	545	570	630	700	230	153	30	34	89	44
18	117	435	545	520	630	700	109	101	50	38	56	38
19	122	475	570	520	570	735	71	71	71	34	49	34
20	177	498	665	435	520	700	89	56	71	34	38	36
21	244	520	630	395	520	700	101	44	130	34	36	38
22	290	520	630	500	520	735	64	42	160	34	34	40
23	230	545	600	500	520	700	64	38	80	33	32	42
24	230	520	570	630	520	735	71	34	50	32	34	44
25	242	520	545	520	545	770	89	34	40	34	32	46
26	259	498	520	520	520	850	89	36	34	34	29	49
27	259	475	498	520	520	850	230	44	34	34	28	49
28	274	475	520	520	520	850	358	48	20	36	26	51
29	358	475	545	520	-----	850	109	130	20	35	25	56
30	376	475	570	630	-----	895	71	1,850	20	34	25	56
31	395	-----	570	630	-----	850	-----	3,210	-----	29	25	-----
Month	Maximum						Minimum		Mean		Run-off in acre-feet	
October	395						78		164		10,100	
November	545						415		480		28,600	
December	665						435		530		32,600	
January	630						395		537		30,000	
February	3,880						520		939		52,100	
March	895						475		656		40,300	
April	810						64		307		18,300	
May	3,210						34		274		16,800	
June	3,650						26		567		33,700	
July	89						29		40.8		2,510	
August	126						25		51.1		3,140	
September	71						26		41.3		2,460	
The year	3,880						25		388		274,000	

DIVERSIONS FROM BOISE RIVER, IDAHO

Below mouth of Moore Creek and between gaging stations at Dowling Ranch and Notus, 27 principal canals and a number of small farm laterals divert water from Boise River for use in irrigation. Records available from 1919 to 1930. 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, water master for Boise River.

Total amount of water, in acre-feet, diverted by each canal during irrigation season of 1930

Main canal of United States Bureau of Reclamation.....	552, 000
Penitentiary.....	1, 480
Ridenbaugh.....	128, 000
Bubb.....	3, 530
Cruzen.....	8, 510
Boise City No. 1.....	8, 860
Settlers.....	35, 300
Thurmans Mill.....	8, 680
Farmers Union (includes Boise Valley diversion).....	55, 900
Little Union.....	3, 530
Dry Creek.....	17, 000
Ballantine.....	3, 310
7 Eagle Island canals.....	12, 200
Middleton Water Co.....	25, 700
Middleton Mill Ditch.....	17, 000
Phyllis.....	108, 000
Eureka No. 1.....	6, 740
Pioneer.....	8, 510
Canyon County.....	18, 800
Caldwell High Line.....	17, 400
Riverside No. 2.....	46, 600
Farmers' Cooperative.....	84, 200
Canyon (Campbell).....	4, 490
Seibenberg.....	3, 000
Pioneer Dixie.....	9, 220
Eureka No. 2.....	11, 900
Upper Center Point.....	2, 930
Lower Center Point.....	2, 600
Miscellaneous.....	8, 140
	1, 210, 000

Combined monthly discharge of canals diverting from Boise River, Idaho, 1930

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April.....	4, 170	773	2, 670	159, 000
May.....	5, 280	3, 170	4, 180	257, 000
June.....	5, 290	4, 420	4, 950	295, 000
July.....	4, 540	3, 130	3, 830	236, 000
August.....	3, 270	2, 470	2, 870	176, 000
September.....	2, 860	1, 110	1, 540	91, 600
The period.....				1, 210, 000

SOUTH FORK OF BOISE RIVER NEAR LENOX, IDAHO

LOCATION.—Water-stage recorder in sec. 24, T. 2 N., R. 6 E., 1½ miles above mouth of Smith Creek and 4 miles west of discontinued Lenox post office.

DRAINAGE AREA.—1,090 square miles.

RECORDS AVAILABLE.—March, 1911, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,440 second-feet May 30 (gage height, 6.33 feet); minimum, 177 second-feet Nov. 22.

1911-1930: Maximum discharge, 9,200 second-feet May 15, 1917 (gage height, 9.53 feet); minimum, 142 second-feet Dec. 31, 1915 (gage height, 1.92 feet).

REMARKS.—Records good except those for estimated periods, Nov. 19-25, Jan. 6-31, Apr. 14-18, which are fair. No diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	243	259	259	312	292	334	898	1,480	2,480	810	302	201
2	243	265	252	316	312	323	928	1,520	2,160	799	298	204
3	232	278	229	285	326	330	1,060	1,800	1,980	771	298	204
4	226	272	214	292	309	359	1,220	2,070	1,890	732	302	204
5	223	259	234	334	309	393	1,370	1,980	1,940	700	312	209
6	220	268	249	230	326	393	1,560	1,940	1,940	658	323	212
7	217	275	256	180	344	363	1,800	1,850	2,120	628	309	209
8	234	259	252	180	348	344	1,890	1,800	2,540	598	292	214
9	285	259	262	180	348	352	1,980	1,720	2,540	569	285	220
10	268	268	505	200	305	348	2,070	1,600	2,600	564	471	223
11	268	285	928	210	312	355	2,020	1,520	2,660	603	419	256
12	259	252	588	215	326	381	2,070	1,440	2,660	560	366	316
13	259	214	613	210	352	419	2,120	1,400	2,260	532	344	298
14	259	209	618	205	400	463	2,150	1,400	1,980	523	400	278
15	259	243	532	200	463	476	1,800	1,760	1,800	497	385	265
16	259	265	684	200	423	501	1,600	1,940	1,760	476	363	256
17	259	259	628	200	393	528	1,400	1,890	1,800	463	341	249
18	259	259	467	200	389	505	1,300	1,890	1,800	435	330	249
19	262	250	443	200	393	501	1,220	1,890	1,680	404	319	249
20	262	220	404	180	408	541	1,260	1,940	1,640	389	305	243
21	262	190	337	180	435	574	1,370	2,160	1,480	378	295	243
22	262	190	326	180	415	618	1,680	2,220	1,370	370	281	243
23	259	220	348	180	423	664	1,940	2,070	1,330	359	275	278
24	259	240	374	180	393	633	2,260	1,980	1,220	355	265	316
25	259	270	334	200	352	674	2,480	1,980	1,160	355	252	302
26	259	285	312	250	366	839	2,320	2,070	1,090	341	246	295
27	262	278	295	270	381	898	2,160	2,220	1,060	337	237	288
28	275	262	249	270	359	839	1,940	2,660	990	330	226	278
29	285	262	252	260	-----	839	1,760	3,170	928	326	220	275
30	265	262	246	270	-----	990	1,560	3,300	868	319	217	275
31	256	-----	298	280	-----	990	-----	2,970	-----	309	207	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	285	217	254	0.233	0.27	15,600
November	285	190	253	.232	.26	15,100
December	928	214	387	.355	.41	23,800
January	334	180	227	.208	.24	14,000
February	463	292	364	.334	.35	20,200
March	990	323	541	.496	.57	33,300
April	2,480	898	1,710	1.57	1.75	102,000
May	3,300	1,400	1,990	1.83	2.11	122,000
June	2,660	868	1,790	1.64	1.83	107,000
July	810	309	500	.459	.53	30,700
August	471	207	306	.281	.32	18,800
September	316	201	252	.231	.26	15,000
The year	3,300	180	714	.655	8.90	518,000

LITTLE CAMAS RESERVOIR NEAR BENNETT, IDAHO

LOCATION.—Staff gage near left end of dam in NE. $\frac{1}{4}$ sec. 9, T. 1 S., P. 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, 1930.

EXTREMES.—Maximum stage during year, 4,948.7 feet Apr. 16, 21; practically no storage after June 15.

1924-1930: Maximum stage, 4,965.5 feet May 26, 1928; practically no storage after irrigation season of each year.

REMARKS.—Records poor. Gages in dam opened about Apr. 16 and closed about June 15. Capacity of reservoir 22,300 acre-feet between elevation 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.

Daily gage height, in feet, 1930

Day	Apr.	May	June	Day	Apr.	May	June	Day	Apr.	May	June
1.....				11.....				21.....	4,948.7		
2.....				12.....				22.....			
3.....	4,947.8	4,941.3		13.....		4,946.6		23.....			
4.....				14.....				24.....		4,944.7	
5.....		4,939.5		15.....				25.....			
6.....	4,947.5			16.....	4,948.7			26.....	4,948.6		
7.....				17.....		4,946.3		27.....		4,943.9	
8.....				18.....				28.....	4,948.4		
9.....				19.....				29.....			
10.....	4,947.0			20.....		4,945.6		30.....			
								31.....		4,942.8	

LITTLE CAMAS CANAL AT HEADING, NEAR BENNETT, IDAHO

LOCATION.—Water-stage recorder in sec. 9, T. 1 S., R. 9 E., 400 feet below Little Camas Reservoir and 4 miles northeast of Bennett.

RECORDS AVAILABLE.—June to November, 1917; April, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 60 second-feet May 20–29, June 5–7, 10; no flow except from about Apr. 16 to June 14.

1917, 1924–1930: Maximum discharge, 77 second-feet Apr. 27–30, May 1, 3, 9, 1924; no flow in canal during nonirrigation season.

REMARKS.—Records fair. No diversions above gage. Flow regulated by head gates at Little Camas Reservoir. Canal diverts from Little Camas Reservoir in sec. 9, T. 1 S., R. 9 E., and discharges into Long Tom Basin, where water is collected in Long Tom Reservoir for release for irrigation on about 5,000 acres of land in vicinity of Mountain Home. Gage-height record furnished by Mountain Home Irrigation District.

Daily and monthly discharge, in second-feet, 1930

Day	Apr.	May	June	Day	Apr.	May	June	Day	Apr.	May	June
1.....		• 44	• 59	11.....		• 53	• 59	21.....		26	• 60
2.....		• 45	• 59	12.....		• 54	58	22.....		• 28	• 60
3.....		46	59	13.....		55	• 57	23.....		• 30	• 60
4.....		• 48	• 59	14.....		• 56	55	24.....		• 31	60
5.....		50	• 60	15.....		• 56		25.....		• 33	• 60
6.....		• 50	• 60	16.....		24	• 57	26.....		35	• 60
7.....		• 51	60	17.....		• 24	58	27.....		• 38	60
8.....		• 51	58	18.....		• 25	• 59	28.....		40	• 60
9.....		• 52	• 59	19.....		• 25	• 59	29.....		• 41	• 60
10.....		52	60	20.....		• 26	60	30.....		• 42	• 59
								31.....			59
Month				Maximum		Minimum		Mean		Run-off in acre-feet	
April 16–30.....				42		24		31.2		928	
May.....				60		44		55.3		3,400	
June 1–14.....				60		55		58.7		1,630	
The year.....										5,960	

• Interpolated.

NOTE.—Probably no flow during months for which no discharge is shown.

MOORE CREEK NEAR ARROWROCK, IDAHO

LOCATION.—Staff gage in sec. 21, T. 3 N., R. 4 E., at bridge on Boise-Arrowrock highway, one-fourth mile above mouth and 3 miles southwest of Arrowrock.

DRAINAGE AREA.—426 square miles.

RECORDS AVAILABLE.—October, 1914, to September, 1930 (discharge measurements only prior to December, 1915).

EXTREMES.—Maximum discharge during year, 730 second-feet Apr. 7 (gage height, 2.70 feet); minimum discharge, 15 second-feet Aug. 28-30, Sept. 1-3; minimum gage height, 0.20 foot Aug. 28-30.

1915-1930: Maximum discharge, 3,140 second-feet Apr. 11, 1916 (gage height, 6.3 feet); minimum, 7.9 second-feet Aug. 13-15, 17, 18, 19²⁴ (gage height, 0.09 foot).

REMARKS.—Records fair. Discharge estimated on account of ice Jan. 12-27. No important diversions above station. Gage-height record furnished by United States Bureau of Reclamation. Seventeen discharge measurements furnished by water master for Boise River and board of control for Boise project.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	29	43	60	78	59	180	500	327	272	65	19	15
2.....	35	43	58	90	66	222	500	327	272	60	19	15
3.....	36	42	64	73	78	238	550	367	272	60	19	15
4.....	38	39	60	83	78	193	550	455	222	58	19	16
5.....	38	42	58	101	83	208	605	455	208	51	19	16
6.....	36	46	60	66	94	238	605	478	208	47	19	16
7.....	36	46	60	54	94	222	730	410	193	45	19	16
8.....	42	48	66	49	109	208	665	410	193	45	18	16
9.....	36	48	121	80	117	222	665	367	193	45	18	17
10.....	36	54	238	73	109	193	605	347	180	42	39	17
11.....	48	49	272	54	111	193	550	367	180	42	29	22
12.....	48	39	208	52	144	208	550	347	167	39	25	36
13.....	45	29	289	50	167	222	550	327	156	36	25	30
14.....	45	29	238	45	156	238	550	308	156	35	34	29
15.....	43	36	208	50	208	254	550	308	129	34	34	28
16.....	45	38	388	45	180	289	410	347	129	34	33	26
17.....	46	38	308	40	180	347	367	308	109	34	28	25
18.....	48	42	222	50	193	347	327	347	109	29	26	23
19.....	46	46	180	45	208	347	367	308	98	29	22	21
20.....	43	40	156	45	238	388	327	308	98	29	21	22
21.....	43	30	134	40	367	388	327	347	96	27	19	21
22.....	42	32	129	35	327	432	367	367	94	27	19	20
23.....	41	38	129	50	367	478	367	327	90	26	18	25
24.....	40	36	127	55	308	478	455	289	87	25	17	28
25.....	40	48	117	60	289	500	455	289	82	25	17	32
26.....	40	49	96	60	272	605	455	254	82	24	17	29
27.....	43	60	89	55	222	605	455	254	73	24	16	29
28.....	46	60	89	49	222	550	410	272	73	22	15	28
29.....	42	66	85	60	-----	605	367	272	71	22	16	28
30.....	42	65	71	58	-----	665	367	272	70	19	16	29
31.....	43	-----	82	60	-----	550	-----	289	-----	19	16	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October.....	48	29	41.3	0.097	0.11	2,540
November.....	66	29	44.0	.103	.11	2,620
December.....	388	58	144	.338	.36	8,850
January.....	101	35	58.2	.137	.16	3,580
February.....	367	59	180	.423	.44	10,000
March.....	665	180	349	.819	.94	21,500
April.....	730	327	485	1.14	1.27	28,900
May.....	478	254	337	.791	.91	20,700
June.....	272	70	145	.340	.38	8,630
July.....	65	19	36.1	.085	.10	2,220
August.....	39	15	21.6	.051	.06	1,330
September.....	36	15	23.0	.054	.06	1,370
The year.....	730	15	155	.364	4.92	112,000

MALHEUR RIVER NEAR DREWSEY, OREG.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 3, T. 22 S., R. 36 E., half a mile above flow line of Warm Springs Reservoir and 10 miles below Drewsey.

RECORDS AVAILABLE.—April to September, 1923; June, 1926, to September, 1930; June to December, 1920, and April to September, 1921, at station 7 miles upstream.

EXTREMES.—Maximum discharge during year, 1,020 second-feet Feb. 13 (gage height, 4.52 feet); minimum, 1 second-foot July 26 to Aug. 27.

1920–21, 1923, 1926–1930: Maximum discharge, 3,050 second-feet Mar. 27, 1928 (gage height, 7.30 feet); minimum, 1 second-foot Aug. 8, 1926, Aug. 19 to Sept. 6, 1929, and July 26 to Aug. 27, 1930.

REMARKS.—Records good except those estimated, Jan. 7 to Feb. 1, Apr. 5–18, Aug. 28, which are fair. Several small diversions above station. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	35	61	63	100	146	255	37	23	4	1	7
2	6	34	61	63	110	134	240	34	21	4	1	7
3	6	35	62	63	138	122	228	32	21	4	1	7
4	6	35	62	64	160	116	210	31	21	4	1	7
5	6	36	61	65	182	114		30	23	3	1	7
6	8	36	60	66	190	114		29	23	3	1	6
7	9	36	59		200	114		28	24	3	1	6
8	10	36	59		222	114		26	23	3	1	6
9	12	37	60		240	122		24	23	3	1	6
10	18	37	61		260	124		23	21	3	1	5
11	23	37	65		262	126	136	22	20	3	1	5
12	23	39	71		294	138		21	18	3	1	5
13	23	41	72		396	152		20	17	3	1	5
14	25	41	74		775	160		20	15	3	1	5
15	26	41	74		728	162		19	14	3	1	4
16	27	41	78		605	156		27	13	3	1	4
17	28	42	84		488	156		49	12	3	1	4
18	29	43	87		396	160		54	11	3	1	4
19	29	46	84	50	330	166	63	56	10	3	1	4
20	29	48	81		288	178	60	54	9	2	1	4
21	30	48	74		268	188	55	51	9	2	1	4
22	30	48	72		245	188	51	48	8	2	1	4
23	31	48	71		225	190	46	47	8	2	1	4
24	31	47	71		212	192	42	46	7	2	1	4
25	31	48	70		190	198	37	42	7	2	1	4
26	31	48	70		175	210	35	40	6	1	1	4
27	32	52	66		166	238	34	36	6	1	1	6
28	34	57	66		158	262	34	34	5	1	3	7
29	33	60	65			268	35	30	4	1	5	9
30	35	60	64			268	37	26	4	1	8	10
31	34		64			265		24		1	8	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	35	6	22.6	1,390
November	60	34	43.1	2,560
December	87	59	68.7	4,220
January			52.7	3,240
February	775	100	286	15,900
March	268	114	169	10,400
April	255	34	112	6,660
May	56	19	34.2	2,100
June	24	4	14.2	845
July	4	1	2.5	154
August	8	1	1.6	98
September	10	4	5.5	327
The year	775	1	66.2	47,900

WARMSPRINGS RESERVOIR NEAR RIVERSIDE, OREG.

LOCATION.—Tape gage in SE. $\frac{1}{4}$ sec. 8, T. 23 S., R. 37 E., on Malheur River 4 miles above junction with South Fork and 4 miles above Riverside. Elevation of zero of gage, 3,327.00 feet above mean sea level.

RECORDS AVAILABLE.—January, 1920, to September, 1930.

EXTREMES.—Maximum contents during year, 34,280 acre-feet Apr. 18, 19; practically no storage Oct. 1 to Nov. 1.

1920-1930: Maximum contents, 177,900 acre-feet May 19, 1922 (gage height, 75.75 feet); no storage Sept. 18 to Nov. 1, 1929.

REMARKS.—Reservoir stores water for Warm Springs Irrigation District which embraces 31,618 acres of irrigable land on either side of Malheur River, extending from mouth of canyon above Vale to Ontario. Capacity of reservoir was increased in 1930 to 190,000 acre-feet at gage height 79.0 feet. Records furnished by State engineer of Oregon.

Monthly stage and contents, 1929-30

Date	Gage height in feet	Contents in acre-feet	Change in contents during month (acre-feet)	Date	Gage height in feet	Contents in acre-feet	Change in contents during month (acre-feet)
Sept. 30.....	-----	0	-----	May 31.....	29.12	27,240	-5,100
Oct. 31.....	-----	0	0	June 30.....	22.76	16,660	-10,580
Nov. 30.....	-----	-----	-----	July 31.....	13.74	5,770	-10,890
Dec. 31.....	15.98	7,980	* +7,980	Aug. 31.....	9.20	2,230	-3,550
Jan. 31.....	18.43	10,920	+2,940	Sept. 30.....	4.86	700	-1,520
Feb. 28.....	25.89	21,420	+10,500				
Mar. 31.....	31.04	31,080	+9,660	The year.....	-----	-----	+700
Apr. 30.....	31.67	32,340	+1,260				

* For 2 months.

MALHEUR RIVER BELOW WARMSPRINGS RESERVOIR, NEAR RIVERSIDE, OREG.

LOCATION.—Hook gage in SW. $\frac{1}{4}$ sec. 17, T. 23 S., R. 37 E., 1 mile below Warm-springs Dam, 3 miles above South Fork, and 4 miles northwest of Riverside.

DRAINAGE AREA.—About 1,100 square miles.

RECORDS AVAILABLE.—December, 1914, to July, 1917; March, 1919, to September, 1930. At Riverside, 4 miles downstream, January, 1906, to March, 1907; December, 1908, to May, 1910.

EXTREMES.—Maximum discharge during year, 343 second-foot June 30 (gage height, 4.53 feet); minimum, 0.5 second-foot Sept. 24-30.

1906-7, 1908-1910, 1914-1917, 1919-1930: Maximum discharge, 5,490 second-foot Mar. 2, 1910; practically no flow during August, 1910.

REMARKS.—Records excellent except those for period Oct. 14 to Apr. 17, which were estimated. Diversions for irrigation above station. Flow completely regulated by operation of gates in Warm-springs Dam. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1.....	4	1	1	1	1	1	1	119	127	318	39	39
2.....	5	1	1	1	1	1	1	117	127	318	39	39
3.....	4	1	1	1	1	1	1	117	122	318	39	52
4.....	3	1	1	1	1	1	1	117	117	318	39	58
5.....	2	1	1	1	1	1	1	137	107	318	39	58
6.....	2	1	1	1	1	1	1	147	94	318	39	58
7.....	2	1	1	1	1	1	1	134	94	313	39	58
8.....	2	1	1	1	1	1	1	129	94	214	39	58
9.....	2	1	1	1	1	1	1	129	117	177	39	43
10.....	2	1	1	1	1	1	1	129	132	177	39	30
11.....	2	1	1	1	1	1	1	129	117	165	39	30
12.....	2	1	1	1	1	1	1	152	117	150	39	24
13.....	2	1	1	1	1	1	1	181	155	150	39	17
14.....	1	1	1	1	1	1	1	168	202	150	44	17
15.....	1	1	1	1	1	1	1	150	174	139	50	17
16.....	1	1	1	1	1	1	1	132	174	119	50	17
17.....	1	1	1	1	1	1	1	112	177	119	45	17
18.....	1	1	1	1	1	1	1	66	195	127	39	17
19.....	1	1	1	1	1	1	1	90	66	195	139	17
20.....	1	1	1	1	1	1	1	90	66	195	139	17
21.....	1	1	1	1	1	1	1	90	58	198	139	17
22.....	1	1	1	1	1	1	1	105	40	206	100	17
23.....	1	1	1	1	1	1	1	129	40	266	43	17
24.....	1	1	1	1	1	1	1	129	40	270	39	.5
25.....	1	1	1	1	1	1	1	129	38	238	39	.5
26.....	1	1	1	1	1	1	1	147	53	238	39	.5
27.....	1	1	1	1	1	1	1	158	112	238	39	.5
28.....	1	1	1	1	1	1	1	158	127	238	39	.5
29.....	1	1	1	1	-----	1	1	129	127	238	39	.5
30.....	1	1	1	1	-----	1	1	119	127	252	39	.5
31.....	1	-----	1	1	-----	1	-----	127	-----	39	39	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5	1	1.7	105
November.....	1	1	1.0	60
December.....	1	1	1.0	61
January.....	1	1	1.0	61
February.....	1	1	1.0	56
March.....	1	1	1.0	61
April.....	158	1	50.2	2,990
May.....	181	38	109	6,700
June.....	270	94	174	10,400
July.....	318	39	154	9,470
August.....	50	39	40.1	2,470
September.....	58	.5	24.6	1,460
The year.....	318	.5	46.8	33,900

MALHEUR RIVER NEAR HOPE, OREG.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 5, T. 19 S., R. 43 E., half a mile above intake of Vines Canal and $6\frac{1}{2}$ miles west of Hope.

RECORDS AVAILABLE.—May, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, probably in excess of 1,200 second-feet Feb. 13 or 14; minimum, 10 second-feet Aug. 16–21.

1919–1930: Maximum discharge, 8,100 second-feet Feb. 5, 1925; minimum, 3.5 second-feet Sept. 2, 1919 (gage height, 0.02 foot).

REMARKS.—Records good except those estimated, which are poor. Several small diversions upstream. Flow regulated to large extent by storage in Warm-springs Reservoir. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	71	81		116	118	157	139	173	25	15
2	49	74			132	107	149	149	218	24	19
3	51	77			134	102	144	152	238	22	24
4	51	78			142	95	147	157	242	22	25
5	53	78	* 72		132	83	149	157	246	21	24
6	54	78		* 147	127	77	149	147	242	19	29
7	54	78			132	71	176	132	238	19	33
8	48	78			125	70	190	116	263	17	38
9	41	78	109		120	66	157	105	200	16	34
10	41	78	91		109	65	130	100	113	15	48
11	47	77	96		118	63	118	116	111	14	55
12	48	78	116		125	61	127	105	122	14	50
13	51		100		127	59	120	86	122	13	37
14	53		96	462	125	56	144	86	144	12	44
15	54		107	290	122	45	162	137	167	11	42
16	54	* 70	107	267	127	35	182	139	105	11	37
17	54		113	228	137	36	214	127	86	10	35
18	55		122	194	125	33	185	125	86	10	31
19	55		109	137	113	32	162	132	93	10	20
20	56		116	120	113	30	130	144	98	10	19
21	57	71	100	116	116	30	118	149	109	11	37
22	57		91	132	116	59	111	154	93	12	33
23	57		100	162	118	96	102	162	84	13	24
24	63		98	185	116	118	86	173	78	15	17
25	67		100	160	116	130	75	249	65	16	16
26	66	* 83		147	118	134	67	197	45	16	16
27	67			147	116	149	47	191	34	16	14
28	70			130	132	176	39	179	33	15	20
29	71		* 72		125	176	43	179	31	15	24
30	71	84			118	185	109	176	29	13	25
31	71				116		139		27	12	
Month				Maximum	Minimum	Mean	Run-off in acre-feet				
October				71	41	55.8	3,430				
November						76.7	4,560				
December				122		89.9	5,530				
January						* 60	3,690				
February				462		171	9,500				
March				142	109	123	7,560				
April				185	30	85.2	5,070				
May				214	39	129	7,930				
June				240	86	145	8,630				
July				263	27	127	7,810				
August				25	10	15.1	928				
September				55	14	29.5	1,760				
The year				462	10	91.7	66,400				

* Estimated.

MALHEUR RIVER BELOW NEVADA DAM, NEAR VALE, OREG.

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ sec. 21, T. 18 S., R. 45 E., 300 feet below Nevada Dam and head gate of Nevada Canal and $1\frac{1}{2}$ miles below Vale. Datum of gage lowered 1.00 foot on Apr. 25, 1930.

RECORDS AVAILABLE.—May, 1926, to September, 1930. At station at Vale, $1\frac{1}{2}$ miles upstream and above Nevada Canal, March, 1890, to September, 1891; January, 1895, to July, 1897; May, 1903, to March, 1907; May, 1908, to October, 1914; March to September, 1919.

EXTREMES.—Maximum discharge during year, 1,610 second-feet Feb. 14 (gage height, 3.08 feet); minimum, probably less than 0.2 second-foot at times during April to September.

1890-91, 1895-1897, 1903-1907, 1908-1914, 1919, 1926-1930: Maximum discharge, 22,800 second-feet Mar. 2, 1910 (gage height, 19.5 feet); minimum, that of April to September, 1930.

REMARKS.—Records good except those estimated, which are poor. Several diversions for irrigation above gage. Flow regulated by storage in Warm-springs Reservoir. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
1.	6.2	8.8	a 90	80	83	54	7.0	
2.	15	7.6	85	98	83	34	7.6	
3.	15	5.4	83	98	98	29	7	
4.	16	11	76	94	106	22	7	
5.	17	15	64	108		25	7	a .5
6.	14	17	74	98		27	7.6	
7.	12	16	98	83	a 196	38	7	
8.	8.2	16	91			33	6.6	
9.	a 8.5	19	108			26	6.2	
10.	8.8	21	106		368	23	6.2	10
11.	7	19	103		353	21	6.6	5
12.	8.8	18	110		312	22	6.2	9.4
13.	7.6	16	118		456	19	6.2	7.6
14.	7.6	38	103		872	33	5.4	28
15.	5.8	74	110		570	31	5.4	18
16.	6.6	80	110		438	26		2.6
17.	11	80	116		353	26		2.7
18.	7	87	123		298	12		4.2
19.	7.6	94	129	a 58	286	12		5.8
20.	7.6	87	106		265	11	a 2	5.8
21.	8.8	98	91		219	11		2.7
22.	11	89	64		238	21		2.6
23.	9.4	76	87		227	28		2.6
24.	10	98	98		234	21		2.6
25.	11	87	98		216	19	.2	2.6
26.	9.4	98	100		202	13		2.6
27.	9.4	103	76		188	10		2.5
28.	9.4	116	a 66		94	7	a 3	a .5
29.	9.4	116	a 62			7.6		a .5
30.	9.4	94	a 62			7.6		a .5
31.	9.4		a 72			7		a .5

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	17	5.8	9.80	603
November	116	5.4	56.8	3,380
December	129	62	92.9	5,710
January	103		66.0	4,060
February	872	83	269	14,900
March	54	7.0	21.8	1,340
April	7.6	.2	3.96	236
May	28	.5	3.93	242
June			a .5	30
July			a .5	31
August			a .5	31
September			a .5	30
The year	872		42.3	30,600

a Estimated.

NORTH FORK OF MALHEUR RIVER NEAR BEULAH, OREG.

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ sec. 22, T. 19 S., R. 37 E., 1 mile below Beulah and 14 miles north of Juntura.

RECORDS AVAILABLE.—June, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, 188 second-feet Feb. 14 (gage height, 2.27 feet); minimum, 15 second-feet July 30.

1926-1930: Maximum discharge, 1,410 second-feet Mar. 11, 1928; minimum, 14 second-feet July 30, 1926.

REMARKS.—Records good except those estimated Nov. 15-26, Dec. 5-7, 27-31, Jan. 6 to Feb. 5, Apr. 4-6, 16-18, May 18-23, June 13, 14, which are poor. Small diversions for irrigation above station; practically entire summer flow diverted below station and above Juntura. Records furnished by State Engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.				
1-----	30	47	46	40	54	67	97	65	67	33	22	31				
2-----	28	47	42	46		62	93	64	72	33	22	32				
3-----	26	45	40	52		72	83	66	69	32	24	34				
4-----	24	42	38	51		75	86	68	66	32	23	34				
5-----	23	45	35	56		81	90	70	67	32	20	35				
6-----	24	45	36	34	70	84	94	65	62	31	22	34				
7-----	26	44	39		70	71	98	64	55	26	23	34				
8-----	26	44	47		73	83	95	61	49	27	23	33				
9-----	26	46	56		70	76	91	58	43	27	28	32				
10-----	31	47	81		65	76	90	57	40	29	32	33				
11-----	40	44	71	34	73	90	78	55	38	29	31	36				
12-----	41	38	61		76	114	80	55	37	28	32	39				
13-----	42	34	71		95	116	72	55	36	28	33	39				
14-----	43	31	61		138	97	95	58	34	28	33	39				
15-----	44	34	68		111	93	96	118	33	29	31	39				
16-----	43		80	96	92	90	118	34	29	26	39					
17-----	42		54	95	91	84	98	33	29	26	39					
18-----	44		57	84	90	78	78	34	27	23	38					
19-----	44		44	84	93	71		33	25	18	36					
20-----	44		58	104	99	71		33	25	18	37					
21-----	44	34	54	34	99	100	66	78	37	25	23	39				
22-----	44		57		100	108	63		37	25	25	40				
23-----	43		50		97	105	65		35	25	20	42				
24-----	43		53		71	100	71		59	35	23	43				
25-----	45		53		85	111	71		57	34	22	46				
26-----	46	34	49	35	75	126	77	50	34	22	22	43				
27-----	45		53		69	126	77	50	34	20	25	39				
28-----	47		49		60	118	75	47	35	19	30	37				
29-----	45		47		112	117	72	44	36	17	31	37				
30-----	45		45			112	67	61	34	17	31	32				
31-----	46		35			106	74	74	20	32	32	32				
Month						Maximum	Minimum	Mean					Run-off in acre-feet			
October						47	23	38.2					2,350			
November						53		40.0					2,380			
December						81		50.8					3,120			
January						56		36.4					2,240			
February						138		79.6					4,420			
March						126	62	95.2					5,850			
April						98	63	81.2					4,830			
May						118	44	67.9					4,180			
June						72	33	42.9					2,550			
July						33	17	26.3					1,620			
August						33	18	25.5					1,570			
September						46	31	37.0					2,200			
The year						138	17	51.5					37,300			

SOUTH FORK OF PAYETTE RIVER NEAR GARDEN VALLEY, IDAHO

LOCATION.—Staff gage in sec. 1, T. 8 N., R. 4 E., at Garden Valley ranger station, 300 feet above mouth of Station Creek and 5 miles southeast of Garden Valley.

DRAINAGE AREA.—779 square miles.

RECORDS AVAILABLE.—May, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,060 second-feet May 30; minimum, 230 second-feet Nov. 22, 23.

1921-1930: Maximum discharge, 10,600 second-feet May 26, 1928 (gage height, 8.0 feet); minimum, that of Nov. 22, 23, 1929.

REMARKS.—Records good except those for estimated periods, which are fair. Practically no diversions above station. Gage-height record furnished by United States Forest Service.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	* 400	* 330	398	* 477	426	455	940	2,030	2,800	1,300	578	426
2		320	371	* 469	366	455	* 1,020	2,280	2,530	1,250	578	398
3		* 325	351	* 462	371	455	1,110	3,400	2,280	* 1,220	545	398
4		* 290	351	455	398	455	1,250	* 3,100	2,280	1,200	578	398
5		* 310	351	484	426	484	1,300	2,800	* 2,280	1,160	545	398
6	371	* 310	351	* 375	455	484	1,680	2,800	2,280	1,160	545	398
7	371	* 310	330	* 300	455	484	1,910	2,530	2,800	* 1,110	545	* 412
8	371	* 290	330	* 250	455	484	2,030	* 2,340	3,400	1,060	545	426
9	* 400	* 290	340	* 275	455	484	2,150	2,150	3,090	* 1,060	545	426
10	371	301	1,560	* 300	484	484	2,150	2,030	3,090	1,060	545	426
11	371	301	862	* 325	484	484	2,030	2,030	3,400	1,020	545	578
12	371	292	* 1,000	484	484	484	2,280	1,790	3,400	* 980	545	514
13	371	292	1,160	484	514	2,400	1,790	2,800	2,800	* 940	750	455
14	371	292	862	484	514	2,530	* 1,950	2,530	2,530	900	680	426
15	371	301	980	484	514	2,030	* 2,120	1,790	1,790	* 875	610	426
16	371	320	1,350	* 350	484	514	1,910	2,280	1,790	* 850	578	398
17	398	330	* 1,190	484	514	1,790	2,280	2,280	1,680	825	* 562	398
18	398	340	* 1,030	484	545	1,560	2,530	2,530	1,680	* 788	545	398
19	398	351	* 868	514	545	1,560	2,800	2,800	1,680	750	545	398
20	398	330	* 707	* 325	545	545	* 1,680	2,940	1,510	* 715	514	371
21	* 398	273	545	* 300	545	610	1,790	3,240	1,510	680	514	371
22	398	230	545	* 275	545	645	2,280	2,800	* 1,500	680	514	398
23	398	230	545	* 300	545	645	2,530	2,530	* 1,480	* 662	514	484
24	398	256	514	* 325	514	680	* 2,810	2,530	* 1,460	645	514	484
25	371	426	* 499	* 350	484	680	3,090	2,530	* 1,460	* 628	484	455
26	371	426	484	* 375	455	680	2,940	* 2,660	* 1,440	610	484	426
27	371	426	426	* 400	455	715	2,060	2,800	* 1,420	* 610	455	426
28	* 380	* 419	426	* 425	455	715	2,530	3,400	* 1,420	610	426	426
29	361	* 412	371	* 425	-----	788	2,150	3,720	1,400	578	426	426
30	361	* 405	* 428	* 425	-----	900	2,030	4,060	1,350	578	426	455
31	340	-----	484	426	-----	900	-----	3,400	-----	578	426	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October		340	382	0.490	0.56	23,500
November		230	324	.416	.46	19,900
December	1,560	330	645	.828	.95	39,700
January	484	250	365	.469	.54	22,400
February	545	366	472	.606	.63	26,200
March	900	455	576	.739	.85	35,400
April	3,090	940	2,000	2.57	2.87	119,000
May	4,060	1,790	2,630	3.38	3.90	162,000
June	3,400	1,350	2,120	2.72	3.04	126,000
July	1,300	578	874	1.12	1.29	53,700
August	750	426	536	.688	.79	35,000
September	578	371	428	.549	.61	25,500
The year	4,060	230	947	1.22	16.49	686,000

* Estimated.

SOUTH FORK OF PAYETTE RIVER NEAR BANKS, IDAHO

LOCATION.—Water-stage recorder in sec. 28, T. 9 N., R. 3 E., 1 mile above junction with North Fork of Payette River and 1½ miles northeast of Banks. Zero of gage 2,812.00 feet above mean sea level.

DRAINAGE AREA.—1,200 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,590 second-feet May 30 (gage height, 4.8 feet); minimum, 332 second-feet Nov. 21, Jan. 7.

1921–1930: Maximum discharge, 13,800 second-feet May 17, 1927 (gage height, 10.6 feet); minimum, 322 second-feet Dec. 30, 1925 (gage height, 0.13 foot).

REMARKS.—Records excellent except those for estimated periods, which are fair. Small diversions only for irrigation above station. No regulation.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			471	612	• 480	652	1,420	2,820	3,570	1,510	635	481
2			441	600	• 480	606	1,510	2,980	3,210	1,470	623	486
3			456	556	• 500	640	1,720	3,810	2,980	1,470	612	481
4			513	578	• 500	670	1,900	3,940	2,760	1,420	618	471
5			584	646	• 540	694	2,040	3,810	2,650	1,340	623	471
6			562	572	• 540	737	2,440	3,690	2,700	1,300	618	471
7			492	446	• 560	676	2,980	3,450	3,150	1,260	600	476
8			471	393	• 560	688	3,040	3,210	3,690	1,230	584	513
9			567		• 580	658	3,150	2,980	3,690	1,190	600	513
10			1,600		• 580	652	3,150	2,760	3,690	1,190	688	508
11		481	1,420		• 600	664	2,980	• 2,670	3,940	1,190	676	606
12		389	1,230		• 600	712	3,090	• 2,580	3,940	1,120	706	664
13		• 410	1,740		623	781	3,330	2,490	3,450	1,080	743	589
14		436	1,840		682	826	3,450	2,650	2,980	1,000	846	550
15		456	1,880		762	866	2,980	2,820	2,760	970	756	529
16		456	2,140		762	880	2,600	2,920	2,700	935	664	518
17		461	1,420		756	900	2,340	2,980	2,820	900	658	502
18		492	1,080		749	900	2,190	3,210	2,760	873	623	492
19		446	970		762	935	2,190	3,330	2,540	853	618	486
20		466	866		935	1,000	2,240	3,330	2,340	833	595	486
21		412	737		1,120	1,040	2,440	3,810	2,290	807	567	481
22		• 400	737		970	1,150	2,920	3,570	2,140	794	562	492
23		• 400	749		900	1,150	3,210	3,330	2,040	774	545	562
24		• 450	700		840	1,120	3,110	3,090	1,950	756	534	562
25			670		768	1,080	4,200	2,980	1,860	737	523	529
26			652		768	1,150	3,940	3,090	1,720	718	518	529
27			529		706	1,230	3,690	3,330	1,720	700	513	518
28			492		688	1,190	3,450	3,810	1,680	688	502	508
29			508			1,260	3,150	4,330	1,740	682	497	502
30			492			1,470	2,870	4,590	1,550	658	486	502
31			606			1,380		4,200		640	481	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October			475	0.396	0.46	29,200
November		389	458	.382	.43	27,300
December	2,140	441	859	.716	.83	52,800
January	646	393	483	.402	.46	29,700
February	1,120	480	690	.575	.60	35,800
March	1,470	606	915	.762	.88	56,300
April	4,200	1,420	2,810	2.34	2.61	167,000
May	4,590	2,490	3,310	2.76	3.18	204,000
June	3,940	1,550	2,700	2.25	2.51	161,000
July	1,610	640	1,000	.833	.96	61,600
August	846	481	607	.506	.58	37,300
September	664	471	516	.430	.48	30,700
The year	4,590	389	1,240	1.03	13.98	895,000

• Estimated.

PAYETTE RIVER NEAR HORSESHOE BEND, IDAHO

LOCATION.—Water-stage recorder in SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 14, T. 7 N., R. 2 E., 100 feet east of tracks of Idaho Northern Branch of Oregon Short Line Railroad and $1\frac{1}{2}$ miles northeast of Horseshoe Bend.

DRAINAGE AREA.—2,230 square miles.

RECORDS AVAILABLE.—February, 1906, to September, 1916; July, 1919, to September, 1930. Prior to November, 1912, at old site 2 miles upstream in sec. 2.

EXTREMES.—Maximum discharge during year, 8,570 second-feet May 30 (gage height, 5.46 feet); minimum, 515 second-feet Nov. 24 (gage height, 0.62 foot). 1906–1916, 1919–1930: Maximum discharge, 22,100 second-feet June 9, 1921 (gage height, 9.57 feet); minimum, 365 second-feet Dec. 18, 1924 (gage height, 0.30 foot).

REMARKS.—Records excellent except those estimated Nov. 13–15, 18–23, Jan. 19 to Feb. 13, Aug. 28–30, Sept. 1, 2, which are fair. Flow slightly regulated by storage in Payette Lake and Lake Fork Reservoir. Several diversions for irrigation from tributaries above station. Gage-height record furnished by Idaho Power Co.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	670	664	640	968		1,280	3,200	6,120	7,800	2,140	941	851
2	664	670	622	968		1,210	3,200	5,900	7,060	2,070	932	832
3	652	684	582	923		1,200	3,370	7,060	6,580	2,000	914	812
4	646	652	588	932		1,260	3,630	7,800	6,010	1,870	923	804
5	640	658	616	1,010		1,360	3,810	7,800	5,470	1,810	941	796
6						1,350	4,080	5,560	5,360	1,730	941	796
7	640	677	652	846	900	1,230	4,750	7,060	5,680	1,670	932	796
8	640	670	646	733		1,240	4,950	6,580	6,350	1,600	932	812
9	652	646	646	599		1,210	5,160	6,120	6,350	1,480	959	812
10	712	646	719	664		1,190	5,050	5,680	6,120	1,510	1,060	796
11	691	658	1,740	796								
12		684	664	2,200	854	1,180	4,850	5,260	5,900	1,530	1,040	896
13		677	628	2,200	923	1,270	4,950	5,050	5,790	1,510	1,050	1,000
14		664	632	3,280	941	1,370	5,160	4,850	5,160	1,430	1,100	941
15		658	637	3,040	880	1,120	4,460	4,950	4,560	1,380	1,190	896
16		646	642	2,070	896	1,250	4,470	5,050	5,160	4,360	1,330	862
17												
18		646	646	3,990	932	1,320	4,480	5,360	4,650	1,300	950	828
19		646	646	3,040	812	1,390	4,490	4,270	5,680	4,750	1,270	914
20		684	638	2,140	764	1,410	4,480	3,990	6,120	4,650	1,220	871
21		677	631	1,720	725	1,430	4,510	3,900	6,350	4,360	1,190	846
22		664	624	1,460	700	1,740	4,650	3,990	6,580	3,810	1,170	812
23												
24		658	616	1,310	650	2,350	4,180	7,060	3,460	1,130	796	733
25		652	609	1,200	600	2,140	4,650	7,300	3,120	1,090	896	726
26		658	602	1,250	650	1,940	2,280	5,160	6,820	3,120	1,060	941
27		658	594	1,240	700	1,700	2,350	6,120	6,580	3,120	1,030	950
28		652	664	1,190	750	1,570	2,280	7,060	6,350	2,960	1,000	968
29												
30		652	733	1,150	800	1,510	2,570	7,060	6,120	2,640	1,010	1,020
31		664	691	932	800	1,370	3,040	6,820	6,350	2,420	1,100	1,020
		712	664	828	775	1,350	2,800	6,820	7,300	2,280	1,130	983
		712	664	820	775		2,960	6,820	7,800	2,350	1,090	946
		677	658	719	850		3,370	6,580	8,310	2,280	1,020	908
		664		896	850		3,280		8,310		977	871

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	712	640	665	0.298	0.34	40,900
November	733	594	650	.291	.32	38,700
December	3,990	582	1,420	.637	.73	87,300
January	1,010	599	809	.363	.42	49,700
February	2,350		1,260	.565	.59	70,000
March	3,370	1,180	1,790	.803	.93	110,000
April	7,060	3,200	4,960	2.22	2.48	295,000
May	8,310	4,850	6,490	2.91	3.36	399,000
June	7,800	2,280	4,620	2.07	2.31	275,000
July	2,140	977	1,380	.619	.71	84,800
August	1,190	796	953	.427	.49	58,600
September	1,000	705	799	.358	.40	47,500
The year	8,310	582	2,150	.964	13.08	1,560,000

PAYETTE RIVER NEAR EMMETT, IDAHO

LOCATION.—Water-stage recorder in sec. 22, T. 7 N., R. 1 W., three-eighths mile below Black Canyon Dam and 5 miles northeast of Emmett.

RECORDS AVAILABLE.—June, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 12,100 second-feet May 10 (gage height, 9.1 feet); minimum, 245 second-feet Oct. 31 (gage height, 1.69 feet). 1925-1930: Maximum discharge, 22,000 second-feet May 27, 1928 (gage height, 12.75 feet); minimum, 56 second-feet Mar. 3, 1926 (gage height, 1.17 feet).

REMARKS.—Records excellent. Discharge estimated Jan. 20, 21, 23-28. Flow affected at times by operation of gates in Black Canyon Dam and by storage of water in reservoirs upstream. Diversions for irrigation above station. Gage-height record furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1-----	437	1,020	605	1,210	891	1,760	2,810	6,050	7,430	1,700	522	479
2-----	437	972	754	873	936	1,700	2,420	5,860	6,330	1,540	582	508
3-----	451	936	635	1,040	990	1,480	3,230	7,030	6,240	1,590	568	530
4-----	430	936	628	1,070	972	1,480	3,740	8,270	5,490	1,540	515	472
5-----	398	936	635	1,170	846	1,700	3,900	8,270	5,130	1,430	560	444
6-----	410	900	642	945	936	1,990	4,130	7,850	4,790	1,330	598	458
7-----	451	900	620	738	1,160	1,810	4,960	7,230	5,130	1,250	545	472
8-----	451	927	819	666	738	1,760	5,130	6,830	5,860	1,200	552	472
9-----	508	918	730	530	762	1,480	5,130	6,240	5,860	1,120	635	472
10-----	500	846	1,040	582	873	1,280	5,130	5,670	5,860	1,040	666	486
11-----	515	900	2,420	746	990	1,330	4,790	5,130	5,490	1,130	714	500
12-----	458	918	2,420	909	900	1,330	4,960	4,960	5,130	1,120	635	635
13-----	479	786	2,480	990	1,330	1,380	4,960	4,790	4,790	1,010	698	682
14-----	486	620	3,020	954	1,480	1,810	5,310	4,450	4,050	1,020	794	605
15-----	530	612	2,950	864	1,760	1,810	5,130	5,130	3,820	990	770	538
16-----	682	658	3,670	918	1,760	1,810	4,450	5,130	4,130	909	590	538
17-----	722	837	3,900	802	1,760	1,810	4,130	5,490	4,290	873	522	508
18-----	738	770	3,230	682	1,810	1,810	3,820	6,050	4,290	837	486	493
19-----	746	690	1,760	635	1,590	1,810	3,670	6,240	3,970	794	479	486
20-----	778	658	1,810	620	2,230	1,760	3,670	6,630	3,440	786	465	451
21-----	794	598	1,330	600	2,880	1,870	3,900	7,030	3,020	754	424	442
22-----	927	628	1,280	674	2,620	1,990	4,450	7,430	2,680	698	451	430
23-----	990	486	1,180	650	2,620	2,290	4,790	6,830	2,680	650	590	437
24-----	927	365	1,380	690	2,290	2,480	5,860	6,430	2,740	628	575	493
25-----	927	545	1,330	770	1,990	2,550	7,430	6,050	2,620	598	560	472
26-----	846	794	1,330	830	1,990	2,550	7,030	6,050	2,290	582	628	465
27-----	837	682	1,170	830	1,700	2,950	7,030	6,050	2,050	582	682	437
28-----	855	746	999	800	1,700	3,160	7,030	7,030	1,870	698	635	404
29-----	855	794	722	864	-----	3,020	7,030	7,640	1,870	714	612	410
30-----	855	837	738	891	-----	3,440	6,430	8,060	1,930	642	560	424
31-----	794	-----	746	909	-----	3,230	-----	8,060	-----	582	522	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October-----	990	398	652	40,100
November-----	1,020	365	774	46,100
December-----	3,900	605	1,520	93,500
January-----	1,210	530	821	50,500
February-----	2,880	738	1,520	84,400
March-----	3,440	1,280	2,020	124,000
April-----	7,430	2,420	4,880	290,000
May-----	8,270	4,450	6,450	397,000
June-----	7,430	1,870	4,200	250,000
July-----	1,700	582	978	60,100
August-----	794	424	585	36,000
September-----	682	404	488	29,000
The year-----	8,270	365	2,070	1,500,000

DEADWOOD RIVER NEAR BERNARD, IDAHO

LOCATION.—Water-stage recorder in sec. 35, T. 14 N., R. 7 E., one-fourth mile above East Fork of Deadwood River and 1½ miles north of Bernard post office.

DRAINAGE AREA.—10.4 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 136 second-feet June 10; no flow for short intervals during October to March and July to September.

REMARKS.—Records fair except those for April and May, which are poor. Discharge estimated November, 19–24, January 8–25, February 28, May 30. Flow regulated by small reservoir 1 mile above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	3	5	8	6	6	7	42	74	30	8	6
2	5	3	5	6	6	5	7	59	67	28	9	5
3	4	7	5	6	6	3	7	67	62	27	10	4
4	4	7	4	6	6	8	9	59	61	25	11	4
5	4	7	4	7	7	9	11	57	69	25	10	5
6	4	6	4	6	6	6	16	54	83	22	9	6
7	4	7	7	5	7	7	21	46	97	18	8	6
8	5	4	3	4	6	7	23	42	99	20	8	6
9	5	1	3	4	8	7	26	40	100	18	8	6
10	5	2	17	5	5	5	28	38	108	17	9	6
11	5	6	12	5	7	5	30	38	108	16	10	9
12	5	6	12	5	7	6	32	40	95	16	10	8
13	5	8	9	5	7	6	32	45	81	16	10	8
14	5	12	8	5	6	6	29	56	75	15	10	6
15	5	5	10	5	7	6	22	59	74	15	10	6
16	5	5	11	5	7	8	20	63	77	14	10	6
17	5	5	7	5	8	7	18	67	75	12	9	5
18	5	5	7	5	6	7	17	77	67	11	9	6
19	5	4	6	5	7	6	17	75	61	11	9	6
20	4	4	6	5	7	7	21	76	61	11	8	6
21	4	3	6	5	6	7	27	77	57	11	9	6
22	4	5	6	5	6	8	33	61	53	12	8	6
23	4	5	7	6	7	6	42	55	51	11	8	6
24	5	5	7	6	6	6	57	54	50	10	7	6
25	5	5	5	7	7	7	57	59	45	10	6	4
26	5	5	5	6	6	8	54	65	43	9	6	6
27	6	5	6	6	6	8	47	78	40	9	6	7
28	5	5	7	5	6	7	41	87	38	8	6	8
29	5	5	2	7	—	8	37	101	34	8	8	7
30	5	5	5	5	—	7	37	95	31	8	7	8
31	5	—	5	6	—	7	—	87	—	8	7	—

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	6	4	4.7	0.452	0.52	289
November	12	1	5.2	.500	.56	309
December	17	2	6.6	.635	.73	406
January	8	4	5.5	.529	.61	338
February	8	5	6.5	.625	.65	361
March	9	3	6.6	.635	.73	406
April	57	7	27.5	2.64	2.94	1,640
May	101	38	61.9	5.95	6.86	3,810
June	108	31	67.9	6.53	7.29	4,040
July	30	8	15.2	1.46	1.68	935
August	11	6	8.5	.817	.94	523
September	9	4	6.1	.587	.65	363
The year	108	1	18.5	1.78	24.16	13,400

DEADWOOD RIVER AT BEAVER CREEK RANGER STATION, NEAR LOWMAN, IDAHO

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 17, T. 11 N., R. 7 E., immediately below dam site at lower end of Deadwood Basin, 900 feet above mouth of Wilson Creek, and 15 miles north of Lowman.

DRAINAGE AREA.—108 square miles.

RECORDS AVAILABLE.—October, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, 820 second-feet May 3 (gage height, 3.95 feet); minimum, 33 second-feet Nov. 1 (gage height, 1.35 feet).

1926-1930: Maximum discharge, 2,150 second-feet May 26, 1928 (gage height, 5.67 feet); minimum, that of Nov. 1, 1929.

REMARKS.—Records good except those for estimated periods, Nov. 12 to Dec. 9, Dec. 20 to Mar. 31, which are fair. No regulation or diversions above station. Gage-height record and 12 discharge measurements furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	57	52	50	55	50	50	134	445	544	158	74	47
2	55	54					156	496	496	154	73	45
3	55	40					178	686	445	160	73	52
4	53	51					205	615	430	144	78	50
5	53	49	45	40	50	50	228	576	419	138	78	50
6	52	56					281	548	456	136	76	50
7	52	53					363	496	514	132	74	50
8	57	48					380	460	544	132	74	58
9	59	50	225	40	50	50	394	434	531	134	76	55
10	60	54					384	408	540	140	79	60
11	55	52					394	394	544	132	76	65
12	54	200					419	390	501	130	80	75
13	54	45	208	45	65	65	456	401	437	127	86	67
14	54	125					464	437	394	123	80	63
15	53	125					384	445	370	123	72	62
16	53	200					353	464	360	119	69	60
17	57	50	200	65	65	80	330	496	356	109	69	59
18	59	120					308	548	330	106	67	57
19	54	120					327	553	302	104	67	56
20	53						353	562	299	102	67	55
21	52		80	45	55	80	408	640	287	99	66	54
22	52						480	553	259	96	67	60
23	51	35					522	501	248	98	60	70
24	51						665	480	243	94	60	65
25	49		50	50	55	110	660	480	228	91	57	60
26	51						620	501	215	90	54	57
27	60						548	540	205	88	53	54
28	62	65					509	620	196	82	51	52
29	53		50	50	55	110	456	670	182	79	49	52
30	51						430	691	162	78	48	53
31	53							615		76	48	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acro-feet
October	62	49	54.3	0.503	0.58	3,340
November			49.8	.461	.51	2,960
December	225		96.4	.893	1.03	5,930
January			45.0	.417	.48	2,770
February			58.2	.511	.53	3,070
March			71.8	.665	.77	4,410
April	665	134	393	3.64	4.06	23,400
May	691	390	521	4.82	5.56	32,000
June	544	162	368	3.41	3.80	21,900
July	158	76	115	1.06	1.22	7,070
August	86	48	67.8	.628	.72	4,170
September	75	45	57.1	.529	.59	3,400
The year	691		158	1.46	19.85	114,000

DEADWOOD RIVER NEAR LOWMAN, IDAHO

LOCATION.—Water-stage recorder in sec. 29, T. 9 N., R. 7 E., 707 feet above confluence with South Fork of Payette River and 2½ miles west of Lowman.

DRAINAGE AREA.—201 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,510 second-feet May 3; maximum gage height, 4.50 feet Jan. 19; minimum discharge, 57 second-feet Nov. 11, 12 (gage height, 1.10 feet).

1921-1930: Maximum discharge, 4,230 second-feet May 9, 1928 (gage height, 5.17 feet); minimum, that of Nov. 11, 12, 1929.

REMARKS.—Records good except those estimated Nov. 13 to Dec. 14, Dec. 28 to Mar. 8, which are fair. No regulation or diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	113	97	100	110	100	268	812	829	268	133	101	
2.....	109	111										
3.....	107	97										
4.....	105	87										
5.....	103	105	80	100	110	584	1,100	653	229	131	95	
6.....	101	111										
7.....	101	87										
8.....	111	97										
9.....	118	101	550	80	107	803	812	760	208	131	105	
10.....	115	115										
11.....	111	84										
12.....	109	71										
13.....	107	70	421	133	109	794	705	760	208	143	129	
14.....	107	70										
15.....	105											
16.....	103											
17.....	105	100	538	133	129	584	910	495	165	124	101	
18.....	111											307
19.....	107											238
20.....	103											211
21.....		183	120	143	597	910	465	162	124	99		
22.....	103											
23.....	101											
24.....	99											
25.....	99	70	165	160	752	1,030	448	162	115	97		
26.....	99										167	
27.....	105										165	
28.....	115										108	
29.....	105	125	143	189	1,140	778	333	145	107	109		
30.....	95										115	
31.....	101										105	
											100	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acres-feet
October-----	118	95	106	0.527	0.61	6,520
November-----	-----	-----	95.9	.477	.53	5,710
December-----	-----	-----	200	.995	1.15	12,300
January-----	-----	-----	90.0	.448	.52	5,530
February-----	-----	-----	108	.537	.56	6,000
March-----	261	-----	148	.736	.85	9,100
April-----	1,230	268	762	3.79	4.23	45,300
May-----	1,240	682	892	4.44	5.12	54,800
June-----	829	279	550	2.74	3.06	32,700
July-----	268	133	186	.925	1.07	11,400
August-----	160	101	124	.617	.71	7,620
September-----	131	95	106	.527	.59	6,310
The year-----	1,240	-----	281	1.40	19.00	203,000

PAYETTE LAKE AT LARDO, IDAHO

LOCATION.—Staff gage in sec. 8, T. 18 N., R. 3 E., at outlet of lake at Lardo.
Zero of gage 4,984.17 feet above mean sea level.

DRAINAGE AREA.—131 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1930, fragmentary.

EXTREMES.—Maximum stage during year, 6.10 feet June 21, 28, July 5; minimum, 0.08 foot Oct. 7.

1921-1930: Maximum stage, that of June 21, 28, July 5, 1930; minimum, —0.27 foot Sept. 17, 1924.

REMARKS.—No diversions above station. Water has been stored in Payette Lake since 1919 for irrigation in Payette Valley 100 miles downstream.
Gage-height record furnished by United States Forest Service.

Daily gage height, in feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					1.60							
2		0.16									4.25	
3	0.10					1.70		4.10				
4	.11			1.45								
5	.11						2.00			6.10		
6												
7	.08		0.26						3.30	6.06		
8					1.84					6.03		
9		.16				1.69					3.70	
10		.15						3.60				
11				1.54			2.58					
12	.14						2.69		5.63	5.85		
13												0.68
14			.62						5.92			
15					1.70	1.68						
16		.16							5.70		3.50	.47
17								4.00				
18				1.58								.37
19	.16						3.08			5.40		
20												.38
21			1.16				3.14		6.10			
22						1.69						
23		.18			1.75			4.30			2.96	
24				1.58								
25												
26	.16						4.30			4.75		
27										4.60		.28
28								3.90	6.10			
29			1.35			1.72		4.00				
30		.18									1.82	
31								4.00				

NORTH FORK OF PAYETTE RIVER AT LARDO, IDAHO

LOCATION.—Water-stage recorder in sec. 8, T. 18 N., R. 3 E., one-fourth mile below Lardo and outlet of Payette Lake.

DRAINAGE AREA.—131 square miles.

RECORDS AVAILABLE.—September, 1908, to June, 1917; May, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,740 second-feet May 30 (gage height, 5.22 feet); minimum, 0.4 second-foot Nov. 7-11 (gage height, 0.74 foot).

1908-1917, 1919-1930: Maximum discharge, 4,250 second-feet June 5, 1909 (gage height, 7.5 feet); minimum, that of Nov. 7-11, 1929.

REMARKS.—Records excellent except those for estimated periods, Oct. 1, 2, Dec. 26 to Jan. 3, Jan. 5-10, Mar. 5-8, which are fair. Flow partly regulated by storage in Payette Lake. No diversions above station. Gage-height record furnished by United States Forest Service.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.2	0.5	2.9	20	50	76	94	1,060	1,530	184	195	233
2	1.2	.5	4.1	20	53	74	103	1,060	1,400	170	220	229
3	1.2	.5	11	21	54	69	114	1,170	1,280	170	214	223
4	1.2	.5	16	22	54	68	127	1,210	1,130	170	210	223
5	1.2	.5	9.2	24	57	68	142	1,210	1,020	138	220	220
6	1.2	.5	6.0	26	56	69	164	1,170	985	116	264	210
7	1.2	.4	6.0	28	56	70	198	1,130	1,020	107	260	198
8	1.3	.4	7.6	30	57	71	246	1,060	654	118	240	192
9	1.3	.4	12	32	57	72	303	950	950	175	223	192
10	1.3	.4	18	34	60	70	351	880	45	181	220	189
11	1.3	.4	5.5	37	68	68	371	815	50	192	160	184
12	1.2	.5	7.3	38	65	66	420	802	87	195	43	175
13	1.1	.8	8.6	38	70	66	475	796	375	207	42	162
14	1.1	1.0	8.6	38	81	66	542	848	950	226	42	152
15	1.1	1.2	19	38	78	66	592	880	1,100	214	40	142
16	1.1	1.2	18	42	75	64	602	985	1,020	214	39	133
17	1.2	1.4	11	42	70	62	586	1,100	985	223	38	127
18	1.2	1.5	7.0	42	68	61	575	1,210	564	210	80	122
19	1.2	1.7	7.9	44	69	60	575	1,320	267	140	257	116
20	1.2	2.4	14	48	78	61	580	1,320	233	162	307	49
21	1.1	7.0	9.2	48	82	65	619	1,440	510	162	335	31
22	1.1	8.2	18	47	82	72	720	1,440	586	152	351	30
23	1.1	5.7	15	47	92	72	880	1,320	520	164	430	30
24	1.1	8.9	14	47	91	76	1,100	1,240	236	292	450	27
25	1.1	7.6	14	47	87	80	1,280	1,400	131	393	406	25
26	1.0	5.5	14	47	86	80	1,360	1,530	186	367	380	24
27	1.1	4.3	15	46	82	80	1,360	1,530	327	274	343	22
28	1.0	3.4	16	46	78	80	1,320	1,570	351	220	303	22
29	.7	2.7	17	47	-----	81	1,240	1,660	311	189	278	21
30	.6	2.4	18	48	-----	87	1,130	1,740	246	198	250	20
31	.5	-----	19	48	-----	91	-----	1,660	-----	195	233	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	1.3	0.5	1.1	0.008	0.01	68
November	8.9	.4	2.4	.018	.02	143
December	19	2.9	11.9	.091	.10	732
January	48	20	38.1	.291	.34	2,340
February	92	50	69.9	.534	.56	3,880
March	91	60	71.3	.544	.63	4,380
April	1,360	94	606	4.63	5.17	36,100
May	1,740	796	1,210	9.24	10.65	74,400
June	1,530	45	607	4.63	5.17	36,100
July	393	107	197	1.60	1.73	12,100
August	450	38	228	1.74	2.01	14,000
September	233	20	124	.947	1.06	7,380
The year	1,740	.4	265	2.02	27.45	192,000

LAKE FORK OF PAYETTE RIVER ABOVE RESERVOIR NEAR McCALL, IDAHO

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 8, T. 18 N., R. 4 E., 700 feet above highway bridge, three-fourths mile below power plant, and 5 miles east of McCall.

RECORDS AVAILABLE.—May, 1926, to September, 1930 (fragmentary).

EXTREMES.—Maximum discharge during year, 643 second-feet May 30 (gage height, 3.50 feet); minimum, 8 second-feet Sept. 8.

1926-1930: Maximum discharge, 1,620 second-feet June 8, 1927, May 26, 1928; minimum not determined.

REMARKS.—Records fair. Stream subject to some diurnal fluctuations at low stages by operation of power plant above station. No diversions for irrigation above station. Gage-height record furnished by Lake Irrigation District.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1			292	390	120	23	9
2			364	364	128	23	9
3			613	292	105	22	9
4	12		443	280	98	22	9
5			390	269	91	20	9
6			390	339	86	19	9
7			315	498	81	19	9
8			269	498	73	18	8
9			236	470	73	18	11
10			247	498	73	20	11
11			226	498	68	20	14
12		339	258	416	59	20	14
13			292	339	54	20	14
14			364	315	52	21	13
15			416	292	50	22	13
16			443	315	45	18	12
17			498	315	41	17	-----
18			498	269	39	16	-----
19			470	236	37	13	-----
20			498	247	35	18	-----
21			584	247	33	18	-----
22			416	216	31	16	-----
23			364	196	30	16	-----
24			364	178	29	16	-----
25			339	169	29	15	-----
26			390	160	28	14	-----
27			470	152	26	13	-----
28			613	144	24	12	-----
29			613	128	23	12	-----
30			643	120	23	11	-----
31			390	-----	23	10	-----
Month	Maximum	Minimum	Mean	Run-off in acre-feet			
May	643	226	410	25,200			
June	498	120	295	17,600			
July	128	23	55.1	3,390			
August	23	10	17.6	1,080			
September 1-16	14	8	10.8	343			

LAKE FORK RESERVOIR NEAR McCALL, IDAHO

LOCATION.—Staff gage in NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 13, T. 18 N., R. 3 E., 3 miles east of McCall. Gage set to read mean sea level elevation.

RECORDS AVAILABLE.—April, 1926, to September, 1930.

EXTREMES.—Maximum contents during year, 17,250 acre-feet June 3-5 (gage height, 5,117.2 feet); no storage for considerable time prior to Apr. 8.

1926-1930: Maximum contents, that of June 3-5, 1930; no storage Sept. 26-30, 1927, Sept. 22-30, 1928, and for a considerable period prior to Apr. 8, 1930.

REMARKS.—Water stored in this reservoir is used for irrigation of 6,800 acres of land near Norwood. Elevation of gate sill of outlet 5,097.0 feet. Gage-height record furnished by Lake Irrigation District.

Daily contents, in acre-feet, 1930

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	-----	13,850	16,940	15,700	7,147	1,497	16	2,105	16,630	16,940	12,170	3,210	-----
2	-----	14,620	17,100	15,540	6,769	1,444	17	-----	16,630	16,940	11,870	3,048	-----
3	-----	15,700	17,250	15,390	6,418	1,391	18	2,455	16,630	16,940	11,570	2,887	-----
4	-----	16,160	17,250	15,230	6,302	1,338	19	-----	16,630	16,940	11,120	2,665	-----
5	-----	16,630	17,250	15,080	6,070	1,285	20	-----	16,630	16,940	10,670	2,595	-----
6	-----	16,630	17,100	14,920	5,722	1,232	21	2,807	16,630	16,940	10,390	2,525	-----
7	0	16,630	17,100	14,770	5,394	-----	22	3,801	16,630	16,780	10,100	2,455	-----
8	-----	16,470	17,100	14,460	5,076	-----	23	4,547	16,630	16,630	9,810	2,315	-----
9	481	16,470	17,100	14,000	4,652	-----	24	5,182	16,630	16,630	9,522	2,105	-----
10	-----	16,630	17,100	13,850	4,453	-----	25	5,722	16,630	16,470	9,243	1,983	-----
11	1,497	16,630	17,100	13,540	4,359	-----	26	6,652	16,630	16,320	8,973	1,861	-----
12	-----	16,630	17,130	13,390	4,173	-----	27	8,028	16,630	16,160	8,703	1,800	-----
13	-----	16,630	17,100	13,080	3,894	-----	28	9,666	16,780	16,160	8,298	1,739	-----
14	1,800	16,630	17,100	12,780	3,615	-----	29	10,820	16,780	16,010	8,028	1,678	-----
15	-----	16,630	16,940	12,470	3,453	-----	30	12,620	16,780	15,860	7,903	1,617	-----
							31	-----	16,780	-----	7,525	1,557	-----

LAKE IRRIGATION DISTRICT CANAL NEAR McCALL, IDAHO

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 13, T. 18 N., R. 3 E., 600 feet below head of canal, half a mile south of Lake Fork Reservoir, and 3 miles east of McCall.

RECORDS AVAILABLE.—May, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, 121 second-feet July 7 (gage height, 4.91 feet); no flow during nonirrigation season.

1926–1930: Maximum discharge, that of July 7, 1930; no flow for long periods each year during nonirrigation seasons.

REMARKS.—Records in excess of 50 second-feet good; others fair. Flow regulated at head gate of canal. No diversions between head of canal and station. Lake Irrigation District Canal diverts water from right bank of Lake Fork of Payette River in SW. $\frac{1}{4}$ sec. 13, T. 18 N., R. 3 E., for irrigation of 6,800 acres contained in project of Lake Irrigation District situated in vicinity of McCall and Norwood. Gage-height record furnished by water master for Lake Irrigation District.

Daily and monthly discharge, in second-feet, 1929–30

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1.....		46	120	102	56	16.....		99	120	78	-----
2.....		46	120	102	56	17.....		102	120	74	-----
3.....		56	120	102	56	18.....		102	120	71	-----
4.....		68	120	102	56	19.....		102	120	66	-----
5.....		74	120	96	56	20.....		102	120	61	-----
6.....		78	120	90	56	21.....		102	120	58	-----
7.....		78	120	90	-----	22.....		106	120	58	-----
8.....		78	120	90	-----	23.....		114	120	58	-----
9.....		78	120	90	-----	24.....		114	120	58	-----
10.....		87	120	90	-----	25.....		116	117	58	-----
11.....		96	120	90	-----	26.....	13	117	114	58	-----
12.....		93	120	90	-----	27.....	20	117	112	58	-----
13.....		96	120	90	-----	28.....	27	117	114	58	-----
14.....		96	120	90	-----	29.....	36	119	108	56	-----
15.....		96	120	87	-----	30.....	46	120	102	56	-----
						31.....	46	-----	102	56	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May 26-31.....	46	13	31.3	372
June.....	120	46	93.9	5,590
July.....	120	102	118	7,260
August.....	102	56	76.9	4,730
September 1-6.....	56	56	56.0	666
The period.....	-----	-----	-----	18,600

WEISER RIVER ABOVE CRANE CREEK, NEAR WEISER, IDAHO

LOCATION.—Water-stage recorder in sec. 10, T. 11 N., R. 4 V., 1 mile above mouth of Crane Creek and 9 miles northeast of Weiser.

DRAINAGE AREA.—1,160 square miles.

RECORDS AVAILABLE.—July, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,500 second-feet Feb. 20 (gage height, 4.90 feet); minimum, 12 second-feet Aug. 28, 29 (gage height, 0.81 foot).

1920-1930: Maximum discharge, about 13,500 second-feet about Feb. 4, 1925 (gage height, 10.65 feet); minimum, 10 second-feet July 31, Aug. 1, 6-18, 1924 (gage height, 0.80 foot).

REMARKS.—Records excellent except those for estimated periods, Oct. 26, 28-31, Nov. 2, 4, 17-21, 25-30, Dec. 1-11, Dec. 27 to Feb. 16, June 19, 20, 24, 25, July 14-19, Aug. 18-20, which are fair. Numerous diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	41	54	100	120	190	820	875	1,230	622	70	18	16
2.....	39	58			200	760	859	1,180	570	54	20	16
3.....	34	61			200	715	883	1,420	556	41	20	18
4.....	34	63			200	678	924	1,870	514	45	18	18
5.....	32	65	130		220	1,160	949	1,570	479	46	15	19
6.....	32	65			220	1,760	1,000	1,460	445	45	19	20
7.....	32	63			230	1,250	1,140	1,330	434	37	19	21
8.....	34	70			250	1,120	1,240	1,200	423	48	19	22
9.....	34	70			290	1,130	1,280	1,090	413	56	19	20
10.....	36	79	100	330	1,030	1,220	974	381	52	24	18	
11.....	36	79		360	1,020	1,150	915	342	48	26	28	
12.....	36	79	291	380	1,140	1,130	851	318	45	28	39	
13.....	37	74	361	400	1,250	1,140	820	286	45	28	39	
14.....	37	72	371	450	1,120	1,150	820	269	28	28	43	
15.....	39	74	323	550	966	1,110	851	243	30	28	28	45
16.....	39	97	685	900	891	974	851	216		31	43	
17.....	41	95	745	1,030	867	875	867	193		31	41	
18.....	41	90	456	983	798	805	899	204		28	37	
19.....	43	90	366	1,260	768	798	867	198	26	37		
20.....	43	85	318	2,650	760	782	851	192	15	23	37	
21.....	43	80	243	2,720	782	798	899	186	21	21	34	
22.....	43	77	224	2,110	805	875	875	200	25	22	34	
23.....	43	82	243	3,100	820	949	775	186	28	25	31	
24.....	43	79	224	2,040	775	1,159	708	167	28	19	31	
25.....	43	90	208	1,500	745	1,590	692	148	26	18	32	
26.....	46		208	130	1,270	722	1,350	685	129	28	14	36
27.....	48		190	140	1,040	768	1,340	671	111	24	13	37
28.....	49		170	150	899	814	1,310	671	89	19	12	39
29.....	50		140	160	790	790	1,420	643	87	19	12	39
30.....	52	53	140	170	883	1,300	643	89	19	13	41	
31.....	53		150	180	907	907	671	671	19	16		

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	53	32	40.4	2,480
November.....	-----	54	78.0	4,640
December.....	745	-----	237	14,600
January.....	-----	-----	121	7,440
February.....	3,100	190	928	51,500
March.....	1,760	678	929	37,100
April.....	1,590	782	1,080	64,300
May.....	1,870	643	963	59,200
June.....	622	87	290	17,300
July.....	70	15	34.9	2,150
August.....	31	12	21.1	1,300
September.....	45	16	31.0	1,840
The year.....	3,100	12	392	284,000

LOST VALLEY RESERVOIR NEAR TAMARACK, IDAHO

LOCATION.—Staff gage in sec. 28, T. 19 N., R. 1 W., short distance above outlet gates near left end of dam, 4 miles west of Tamarack, and 16 miles north of Council.

DRAINAGE AREA.—30 square miles.

RECORDS AVAILABLE.—May to September, 1924; May, 1926, to September, 1930.

EXTREMES.—Maximum stage during year, 23.10 feet Apr. 28; no storage prior to some time in March.

1924, 1926-1930: Maximum stage, that of Apr. 28, 1930; gage not read when reservoir was nearly empty.

REMARKS.—Stored water from this reservoir used for irrigation in Weiser Valley. Capacity of reservoir about 11,000 acre-feet between gage heights 0.00 and 25.14 feet. Gage-height record furnished in part by Mesa Orchard's Co.

Daily gage height, in feet, 1930

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1.			22.86		22.45		
2.			22.84				
3.			22.80			16.57	
4.	0.12		22.78	22.68			
5.			22.75		22.08		10.70
6.			22.70		21.93		
7.			22.68				
8.		17.70	22.60				
9.			22.60				
10.		18.60	22.60				
11.			22.58				
12.		19.45	22.56				
13.			22.50				
14.			22.50				
15.							
16.		20.72	22.60				
17.					20.10		
18.		21.30	22.50				
19.					19.62		
20.			22.72				
21.						13.55	
22.		22.00					
23.							
24.		22.50					
25.					18.35		
26.		22.90					
27.		23.00				12.50	
28.		23.10			17.90	12.40	
29.	13.85	23.00					
30.		22.50	22.70			11.80	
31.							

LOST CREEK NEAR TAMARACK, IDAHO

LOCATION.—Water-stage recorder in sec. 28, T. 19 N., R. 1 W., one-fourth mile below dam of Lost Valley Reservoir and 4 miles west of Tamarack.

DRAINAGE AREA.—30 square miles.

RECORDS AVAILABLE.—January, 1910, to August, 1914; May, 1921, to September, 1921; May, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 109 second-feet Apr. 29 (gage height, 2.20 feet); practically no flow at times when gates in dam were closed. 1910-1914, 1920-21, 1924-1930: Maximum discharge, 688 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. No diversions between gage and reservoir; practically entire flow diverted below station during irrigation season. Flow regulated by head gates at dam. Gage-height record furnished in part by Mesa Orchards Co.

Daily and monthly discharge, in second-feet, 1929-'30

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	6.4	5.7	-----	* 2.9	89	19	17	62	47
2.....	6.2	6.4	-----	* 2.9	84	20	31	62	47
3.....	6.2	5.9	-----	* 2.9	84	19	30	57	46
4.....	5.9	5.2	-----	* 2.9	82	19	30	50	46
5.....	5.7	5.9	-----	* 2.9	79	18	43	49	34
6.....	5.9	6.4	-----	* 5.8	76	16	57	48	26
7.....	5.9	6.2	-----	8.6	73	16	57	48	26
8.....	6.2	5.9	-----	7.6	70	14	57	47	26
9.....	7.6	5.7	-----	6.8	50	14	56	47	25
10.....	6.8	6.6	-----	5.9	46	13	56	47	25
11.....	6.4	6.2	-----	5.9	46	12	55	47	25
12.....	6.2	5.0	-----	5.9	43	10	55	47	25
13.....	6.2	5.0	-----	5.9	41	9.5	55	47	25
14.....	5.9	5.2	-----	5.7	19	8.9	54	47	24
15.....	5.9	5.0	-----	5.7	* 17	8.3	54	47	24
16.....	5.9	5.0	-----	3.6	15	7.9	54	46	23
17.....	5.9	2.4	-----	1.6	* 12	7.3	58	46	23
18.....	5.9	1.4	-----	1.5	10	7.1	69	46	23
19.....	5.9	8.9	-----	1.4	* 16	6.6	69	44	23
20.....	5.9	6.8	-----	1.4	23	8.6	68	44	23
21.....	* 5.9	6.4	-----	1.4	27	9.5	68	41	22
22.....	* 5.9	6.4	-----	1.3	27	9.2	66	39	22
23.....	* 5.9	6.4	-----	1.3	26	8.9	66	39	22
24.....	* 5.9	-----	-----	5.0	26	8.3	65	38	22
25.....	* 5.9	-----	-----	13	24	7.6	55	38	22
26.....	* 5.9	-----	-----	28	23	7.1	48	38	22
27.....	5.9	-----	-----	50	22	6.8	48	40	21
28.....	5.5	-----	-----	89	21	6.4	54	49	21
29.....	5.2	-----	2.9	99	20	5.7	63	48	13
30.....	5.2	-----	* 2.9	99	20	5.5	63	48	4.7
31.....	5.5	-----	* 2.9	-----	21	-----	62	48	-----

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	7.6	5.2	5.99	368
November 1-23.....	8.9	1.4	5.65	258
April.....	99	1.3	15.8	940
May.....	89	10	39.7	2,440
June.....	20	5.5	11.0	655
July.....	69	17	54.3	3,340
August.....	62	38	46.6	2,870
September.....	47	4.7	25.9	1,540

* Estimated.

MESA ORCHARDS CANAL NEAR MESA, IDAHO

LOCATION.—Staff gage in sec. 14, T. 15 N., R. 1 W., 1,700 feet above end of flume, 1½ miles northeast of Mesa, and about 3 miles below point of diversion.

RECORDS AVAILABLE.—May to September, 1924; May to September, 1928; July to September, 1930.

EXTREMES.—Maximum discharge during year, 29 second-feet July 14 (gage height, 2.16 feet); no flow during nonirrigation season.

1924, 1928, 1930: Maximum discharge, 35 second-feet May 24-28, 1924; no flow during nonirrigation season.

REMARKS.—Records fair. Flow regulated by operation of gates in diversion dam and by waste gates in flume above gage. Canal diverts water from Middle Fork of Weiser River in SE. ¼ NW. ¼ sec. 9, T. 15 N., R. 1 E., for irrigation in Mesa orchards and for domestic supply in village of Mesa. Gage-height record furnished by Mesa Orchards Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Mar.	May	July	Aug.	Sept.	Day	Mar.	May	July	Aug.	Sept.
1.				20	• 11	16.			• 28	14	• 10
2.				18	• 11	17.			• 28	• 14	10
3.				• 18	11	18.			• 28	13	11
4.			21	18	11	19.			28	12	• 11
5.			20	16	• 11	20.			24	14	• 11
6.			• 20	17	11	21.			26	12	• 11
7.			• 20	16	• 11	22.			• 26	13	• 12
8.			• 20	15	• 11	23.			25	11	• 12
9.			• 20	13	• 11	24.			23	• 11	• 12
10.			• 20	• 14	• 11	25.			22	11	• 12
11.			• 20	• 16	• 11	26.		22	20	11	12
12.			• 20	17	• 11	27.			• 20	12	
13.			• 15	15	• 11	28.			• 20	11	
14.			27	16	• 11	29.			• 20	12	
15.			• 28	16	11	30.			• 20	11	
						31.	4		19	• 11	
Month						Maximum	Minimum	Mean	Run-off in acre-feet		
July 4-31.						28	15	22.4	1,240		
August.						20	11	14.1	867		
September 1-26.						12	10	11.1	572		

• Estimated.

RUSH CREEK POWER PLANT TAILRACE NEAR CAMBRIDGE, IDAHO

LOCATION.—Staff gage on line between sec. 27 and 28, T. 16 N., R. 3 W., 200 feet below Rush Creek power plant, 500 feet above junction with Rush Creek, and 8 miles north of Cambridge.

RECORDS AVAILABLE.—June, 1929, to December, 1930 (discontinued.)

EXTREMES.—Maximum discharge during period, 5.7 second-feet July 8, 9 (gage height, 0.60 foot); minimum, 0.8 second-foot Nov. 20, 1929 (gage height, 0.18 foot).

1929-30: Maximum discharge, that of July 8, 9, 1930; minimum, that of Nov. 20, 1929.

REMARKS.—Records fair. Flow subject to diurnal fluctuations caused by operation of power plant and by temperature changes. This record represents flow used by Rush Creek power plant, and during low water period for about nine months of year record also represents entire flow of Rush Creek at plant except for leakage through diversion dam 1 mile above station, amounting to 0.5 to 1.0 second-foot. Gage-height record furnished by Peoples West Coast Hydro-Electric Corporation.

Daily discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1929-30												
1-----	2.6	2.9	2.3	2.8	2.4	2.3	3.6	4.0	4.0	4.0	3.2	2.5
2-----	2.6	2.9	2.4	2.8	2.5	2.3	3.4	4.0	4.0	4.1	3.2	2.5
3-----	2.6	2.8	2.0	2.8	2.4	2.3	3.6	4.0	4.0	4.1	2.9	2.4
4-----	2.6	2.8	2.2	2.8	2.5	2.3	3.6	3.8	4.1	4.1	3.1	2.3
5-----	2.6	2.9	2.0	2.8	2.5	2.2	3.5	4.0	4.1	4.1	3.0	2.4
6-----	2.6	2.8	2.2	2.8	2.5	2.3	3.7	4.0	4.0	4.1	3.0	2.4
7-----	2.6	2.6	2.2	2.7	2.5	2.1	3.7	4.0	4.0	4.1	3.0	2.3
8-----	2.8	2.8	2.2	2.7	2.4	2.3	3.7	4.0	4.0	4.2	3.0	2.4
9-----	2.9	2.6	2.3	2.6	2.4	2.2	3.7	4.1	4.0	4.2	3.1	2.4
10-----	2.9	2.6	2.0	2.6	2.5	2.3	3.7	4.1	4.1	4.1	3.2	2.3
11-----	2.6	2.4	2.8	2.6	2.5	2.4	3.7	4.0	4.1	4.1	3.0	2.3
12-----	2.8	2.1	2.8	2.6	2.5	2.4	3.7	4.0	4.1	4.0	3.0	2.5
13-----	2.9	2.4	2.9	2.5	2.5	2.5	3.7	4.0	4.1	4.0	3.0	3.1
14-----	2.8	2.4	2.9	2.5	2.5	2.5	3.6	4.0	4.0	4.0	3.0	2.3
15-----	2.8	2.3	2.8	2.5	2.5	2.5	3.8	4.0	4.0	4.1	3.1	2.8
16-----	2.6	2.2	2.9	2.5	2.4	2.5	3.7	4.0	4.1	4.1	3.0	2.6
17-----	2.8	2.5	2.8	2.6	2.5	2.5	3.7	4.0	4.2	4.1	2.9	2.6
18-----	2.6	2.5	2.8	2.6	2.5	2.5	3.8	3.8	4.0	4.1	2.7	2.7
19-----	2.5	1.7	2.8	2.4	2.6	2.6	3.8	4.1	4.1	4.1	2.7	2.4
20-----	2.8	.9	2.8	2.5	2.6	2.7	3.8	4.1	4.1	4.0	2.9	2.3
21-----	2.8	1.2	2.8	2.5	2.6	2.7	3.8	4.1	4.1	4.0	2.8	2.2
22-----	2.8	1.1	2.7	2.5	2.6	2.7	3.8	4.1	4.0	3.8	2.8	2.2
23-----	2.6	1.2	2.7	2.5	2.4	2.7	4.0	4.1	4.0	3.8	2.7	2.3
24-----	2.4	1.5	2.7	2.5	2.6	2.7	4.0	4.1	4.0	3.8	2.7	2.4
25-----	2.3	2.4	2.7	2.5	2.4	2.7	3.8	4.2	4.0	3.6	2.7	2.6
26-----	2.6	2.2	2.7	2.5	2.4	3.4	4.0	4.2	4.0	3.7	2.7	2.6
27-----	2.6	2.2	2.8	2.5	2.2	3.5	3.8	4.1	4.0	3.6	2.7	2.4
28-----	2.5	2.4	2.9	2.4	2.3	3.6	3.8	4.1	4.0	3.4	2.7	2.5
29-----	1.9	2.4	2.8	2.5	-----	3.6	4.0	4.1	3.8	3.2	2.7	2.4
30-----	2.6	2.3	2.9	2.5	-----	3.6	4.0	4.1	4.1	3.2	2.7	2.4
31-----	2.6	-----	2.9	2.5	-----	3.5	-----	4.0	-----	3.2	2.6	-----

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1930											
1-----	2.4	2.2	2.3	11-----	2.5	2.6	2.0	21-----	2.4	2.6	1.8
2-----	2.5	1.8	2.4	12-----	2.4	2.6	2.1	22-----	2.2	2.5	1.6
3-----	2.5	2.0	2.4	13-----	2.3	2.1	2.0	23-----	2.2	2.4	1.9
4-----	2.5	1.8	2.2	14-----	2.4	1.2	2.0	24-----	2.4	2.5	1.9
5-----	2.4	1.7	2.3	15-----	1.4	1.6	2.1	25-----	2.5	2.6	1.8
6-----	2.4	2.0	2.2	16-----	1.3	2.3	2.2	26-----	2.0	2.6	1.7
7-----	2.6	2.1	2.1	17-----	1.5	3.0	2.2	27-----	2.1	2.4	1.6
8-----	2.4	2.0	2.0	18-----	1.7	2.8	2.4	28-----	1.7	2.4	1.6
9-----	2.9	2.5	2.3	19-----	2.2	2.2	2.2	29-----	1.9	2.6	1.6
10-----	2.7	2.4	1.9	20-----	2.5	2.6	2.1	30-----	2.5	2.4	1.7
								31-----	2.4	-----	1.7

CRANE CREEK RESERVOIR NEAR MIDVALE, IDAHO

LOCATION.—Staff gage in SE. $\frac{1}{4}$ sec. 19, T. 12 N., R. 2 W., 10 miles southeast of Midvale.

DRAINAGE AREA.—269 square miles.

RECORDS AVAILABLE.—November, 1923, to September, 1930.

EXTREMES.—Maximum stage during year, 45.45 feet May 20–25; practically no storage during October.

1923–1930: Maximum stage, 56.3 feet Feb. 22, 1927; no usable storage Sept. 23, 1928, to Feb. 28, 1929, Sept. 25 to about Dec. 1, 1929.

REMARKS.—Stored water from this reservoir used for irrigation in lower Weiser Valley. Capacity of reservoir about 60,000 acre-feet between gage heights 8.0 and 55.0 feet. Gage-height record furnished by Crane Creek Reservoir Administration Board.

Daily gage height, in feet, 1929–30

Day	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	10.65	-----	-----	17.80	39.90	44.58	44.75	45.30	-----	39.35	34.10
2.....	-----	-----	-----	-----	40.60	44.75	44.75	45.25	43.85	39.00	33.95
3.....	-----	-----	-----	-----	40.20	-----	44.90	45.25	43.50	38.80	33.80
4.....	-----	-----	-----	-----	40.90	44.60	45.10	45.20	43.40	-----	33.70
5.....	-----	-----	17.30	-----	41.30	44.60	45.20	-----	43.25	38.40	33.60
6.....	-----	-----	-----	-----	41.70	44.60	45.20	45.20	43.10	38.15	33.40
7.....	-----	-----	-----	-----	42.00	44.60	45.20	45.20	42.90	37.95	33.30
8.....	-----	-----	-----	19.50	42.40	-----	45.20	45.10	42.75	37.65	33.10
9.....	-----	-----	-----	-----	42.80	44.60	45.25	-----	-----	37.45	-----
10.....	-----	-----	-----	-----	43.10	44.60	45.30	45.10	42.50	37.30	33.10
11.....	-----	-----	17.40	-----	43.20	-----	45.30	45.05	42.35	37.15	33.00
12.....	-----	-----	-----	22.30	43.25	44.60	45.30	45.05	42.10	36.90	33.00
13.....	-----	-----	-----	-----	43.50	44.60	-----	-----	42.00	36.75	-----
14.....	-----	13.50	-----	-----	43.70	-----	45.30	45.00	41.90	36.55	32.95
15.....	-----	-----	-----	26.10	43.85	44.60	45.30	44.95	41.80	36.40	32.90
16.....	-----	-----	-----	-----	44.00	44.60	45.35	-----	41.65	36.20	32.85
17.....	-----	-----	-----	-----	44.05	-----	-----	44.90	41.50	36.00	32.80
18.....	-----	-----	17.40	30.00	-----	44.60	45.40	44.85	41.32	35.85	-----
19.....	-----	-----	-----	32.90	44.20	44.60	45.40	44.85	41.15	-----	32.70
20.....	-----	-----	-----	34.70	44.25	44.60	45.45	44.80	-----	35.70	-----
21.....	-----	15.40	-----	35.70	44.30	44.60	45.45	44.80	41.00	35.60	32.60
22.....	-----	-----	-----	36.10	44.35	44.60	45.45	44.75	40.85	35.50	32.55
23.....	-----	-----	-----	37.40	44.40	-----	45.45	44.70	40.65	35.40	32.55
24.....	-----	-----	-----	37.90	-----	44.60	45.45	44.65	40.45	35.25	32.50
25.....	-----	-----	17.40	38.60	44.40	44.65	45.45	44.65	40.20	35.10	32.45
26.....	-----	-----	-----	38.90	-----	-----	45.40	44.60	-----	-----	32.40
27.....	-----	-----	-----	39.40	44.40	44.60	45.40	44.50	40.05	34.85	-----
28.....	-----	16.90	-----	39.60	44.45	44.70	45.40	44.45	39.95	34.70	32.35
29.....	-----	-----	-----	-----	44.50	-----	45.40	44.15	39.90	34.61	32.30
30.....	-----	-----	-----	-----	-----	44.70	45.40	44.05	39.75	34.50	32.25
31.....	-----	-----	-----	-----	44.55	-----	45.40	-----	39.50	34.40	-----

Monthly discharge, in second-feet, of Rush Creek power plant tailrace near Cambridge, Idaho, 1929-30

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1929-30				
October.....	2.9	1.9	2.64	162
November.....	2.9	.9	2.27	135
December.....	2.9	2.0	2.60	160
January.....	2.8	2.4	2.58	159
February.....	2.6	2.2	2.47	137
March.....	3.6	2.1	2.66	164
April.....	4.0	3.4	3.75	223
May.....	4.2	3.8	4.04	248
June.....	4.2	4.0	4.04	240
July.....	4.2	3.2	3.90	240
August.....	3.2	2.6	2.90	178
September.....	3.1	2.2	2.45	146
The year.....	4.2	.9	3.03	2,190
1930				
October.....	2.9	1.3	2.25	138
November.....	3.0	1.2	2.28	136
December.....	2.4	1.6	2.01	124
The period.....				398

CRANE CREEK AT MOUTH, NEAR WEISER, IDAHO

LOCATION.—Water-stage recorder in sec. 14, T. 11 N., R. 4 W., one-fourth mile above mouth and 10 miles northeast of Weiser.

DRAINAGE AREA.—312 square miles.

RECORDS AVAILABLE.—July, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year, 875 second-feet Feb. 22 (gage height, 5.2 feet); minimum, 0.7 second-foot Oct. 25 (gage height, 1.46 feet).

1920-1930: Maximum discharge, about 2,350 second-feet about Feb. 7, 1925 (gage height, 6.80 feet); minimum discharge, 0.3 second-foot May 29, 1929; minimum gage height, 1.30 feet Jan. 21, 1922.

REMARKS.—Records good except those for estimated periods, Nov. 21-23, Jan. 11, 13-31, Feb. 1, Apr. 6-27, which are fair. Flow regulated by storage in Crane Creek Reservoir. Several small ditches divert water for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	3.5	2.4	4.1	5.0	5.0	20	3.1	6.0	7.6	130	167	106
2.....	3.5	2.2	3.9	5.0	5.5	19	3.3	5.2	7.9	131	167	98
3.....	3.1	2.2	4.1	4.8	5.5	19	3.5	9.1	9.1	130	184	76
4.....	2.7	1.9	4.1	4.8	5.0	23	3.5	9.4	8.5	130	186	66
5.....	2.7	1.3	4.1	5.5	4.8	159	3.3	6.0	7.9	128	186	64
6.....	2.5	1.4	4.3	4.8	4.8	72		5.2	7.9	128	186	64
7.....	2.5	1.6	4.1	3.7	5.2	40		4.5	8.8	130	186	63
8.....	2.4	1.8	4.3	4.1	7.0	33		4.5	8.5	131	186	63
9.....	1.8	2.5	4.5	4.1	9.1	28		4.1	7.0	133	188	63
10.....	1.4	2.7	5.0	4.1	8.5	25		4.1	6.0	131	143	62
11.....	1.0	2.4	5.8	3.5	7.3	24		3.7	3.9	131	138	36
12.....	1.2	2.0	5.5	2.9	8.2	27	3.0	1.9	2.4	131	136	25
13.....	5.8	2.4	4.8		9.7	23		1.6	4.1	106	133	24
14.....	1.8	2.5	4.5		24	16		1.6	3.9	99	131	23
15.....	1.2	2.7	6.0		57	13		3.5	3.7	98	116	23
16.....	1.2	2.7	9.1	2.5	52	11		5.5	3.7	98	103	23
17.....	1.2	2.7	6.5		78	9.4		6.0	3.9	96	91	22
18.....	1.0	2.7	5.8		69	8.2		4.8	7.9	95	69	22
19.....	1.0	2.7	6.0		239	7.3		4.8	29	95	66	21
20.....	1.0	2.4	5.2		281	7.3		4.5	32	96	66	21
21.....	.9	2.6	5.0		79	7.0		4.8	32	95	66	21
22.....	.9	2.8	5.0		102	6.8		5.5	30	93	66	21
23.....	1.0	3.1	4.8		156	6.5	5.0	5.8	30	92	66	21
24.....	.9	3.5	4.8	3.5	54	6.5		5.8	30	92	66	21
25.....	.8	3.5	4.8		36	5.5		5.5	28	92	66	21
26.....	1.0	3.5	5.0		38	4.8		5.5	30	91	66	21
27.....	1.3	3.5	4.3		33	5.0		5.5	78	91	66	21
28.....	1.9	3.9	4.5		26	5.2	5.5	5.8	92	93	66	21
29.....	1.8	3.9	4.5	5.0		4.5	6.5	6.2	96	111	70	21
30.....	1.8	3.9	4.8			3.7	6.5	7.6	131	163	78	21
31.....	2.2		5.0			3.1		7.6		163	102	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	5.8	0.8	1.84	113
November.....	3.9	1.3	2.65	158
December.....	9.1	3.9	4.97	306
January.....			3.82	235
February.....	281	4.8	50.3	2,790
March.....	159	3.1	20.7	1,270
April.....	6.5		3.97	236
May.....	9.4	1.6	5.21	320
June.....	131	2.4	25.0	1,490
July.....	163	91	114	7,010
August.....	188	66	116	7,130
September.....	106	21	39.2	2,330
The year.....	281	.8	32.3	23,400

CRANE CREEK NEAR MIDVALE, IDAHO

LOCATION.—Water-stage recorder in SE. ¼ sec. 19, T. 12 N., R. 2 W., 400 feet below Crane Creek Dam and 10 miles southeast of Midvale.

DRAINAGE AREA.—269 square miles.

RECORDS AVAILABLE.—October, 1910, to April, 1916; May, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 186 second-feet Aug. 3 (gauge height, 1.85 feet); no flow Oct. 1 to Apr. 17, May 3-13.

1910-1916, 1924-1930: Maximum discharge, 4,240 second-feet Dec. 3, 1910 (gauge height, 8.9 feet); no flow reported at times each year when gates in dam are closed.

REMARKS.—Records good. Discharge interpolated Sept. 9, 13, 18, 27. Flow regulated by storage in Crane Creek Reservoir. No large diversions above station. Gauge-height record furnished by Crane Creek Reservoir Administrative Board.

Daily and monthly discharge, in second-feet, 1929-30

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1.....	0	8	11	141	169	107	16.....	0	11	8	99	106	22
2.....	0	8	11	141	171	84	17.....	0	11	8	97	83	22
3.....	0	5	11	139	186	70	18.....	0	10	26	97	70	22
4.....	0	0	11	138	184	64	19.....	14	11	38	96	68	21
5.....	0	0	11	138	184	64	20.....	14	11	38	96	68	22
6.....	0	0	11	138	182	64	21.....	12	11	38	97	68	22
7.....	0	0	11	138	182	64	22.....	8	11	38	96	68	21
8.....	0	0	11	136	182	62	23.....	8	11	38	96	69	22
9.....	0	0	11	136	178	62	24.....	8	11	38	95	69	22
10.....	0	0	2	135	139	62	25.....	8	11	38	95	69	22
11.....	0	0	6	135	138	22	26.....	8	11	48	93	68	22
12.....	0	0	8	128	138	23	27.....	8	11	90	93	68	22
13.....	0	0	8	102	138	22	28.....	8	11	104	93	68	22
14.....	0	7	8	99	136	22	29.....	8	11	110	127	68	22
15.....	0	11	8	99	113	22	30.....	8	11	148	165	91	21
							31.....		11		167	109	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April.....	14	0	4.0	238
May.....	11	0	6.9	424
June.....	148	2	31.6	1,880
July.....	167	93	118	7,260
August.....	186	68	117	7,190
September.....	107	21*	38.0	2,260
The year.....	186	0	26.6	19,300

NOTE.—No flow during months for which no discharge is shown.

WEISER IRRIGATION DISTRICT CANAL NEAR WEISER, IDAHO

LOCATION.—Water-stage recorder in sec. 32, T. 11 N., R. 4 W., $1\frac{1}{2}$ miles below headworks of canal and 7 miles east of Weiser.

RECORDS AVAILABLE.—April, 1920, to September, 1930.

EXTREMES.—Maximum discharge during year, 209 second-feet Apr. 25 (gage height, 3.25 feet); practically no flow for long periods during winter.

1920-1930: Maximum discharge, 219 second-feet May 5, 1926 (gage height, 3.43 feet); usually no flow except during irrigation season.

REMARKS.—Records excellent. Discharge estimated Apr. 3. One farm lateral diverts water one-fourth mile above gage. Flow regulated at Luck waste gate half a mile above, which in practice forms head of canal, although actual diversion from Weiser River is located $1\frac{1}{2}$ miles above station. Water from waste gate returns to Weiser River through slough which formerly was main channel of river. Canal furnishes water for irrigation on about 7,000 acres included in projects of Weiser Irrigation District and Weiser Bench Irrigation District near Weiser.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1	41	0	187	187	182	164	119
2	41	0	187	169	167	166	107
3	36	40	189	186	163	172	85
4	36	90	195	184	160	181	80
5	30	101	184	185	159	181	82
6	30	129	183	187	161	185	83
7	30	133	184	187	152	182	83
8	26	152	181	184	156	183	82
9	26	171	179	183	166	191	81
10	26	187	176	181	163	171	82
11	26	191	173	181	169	153	81
12	26	199	169	178	163	150	67
13		168	177	175	147	151	58
14		42	183	169	133	151	60
15		90	183	154	130	148	63
16		172	181	133	126	132	63
17		190	181	116	119	129	61
18		182	185	124	114	97	57
19		178	182	138	110	93	56
20		184	182	139	107	87	56
21		186	184	157	105	84	54
22		188	183	174	110	84	53
23		187	176	171	112	84	51
24		202	164	165	114	80	50
25		203	160	149	112	79	53
26		190	158	143	112	77	57
27		189	169	161	112	72	55
28		189	181	161	110	72	57
29		192	183	150	112	71	57
30		189	187	171	162	78	57
31			187		163	104	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	41	26	31.2	743
April	203	0	150	8,930
May	195	158	180	11,100
June	187	116	165	9,820
July	182	105	138	8,480
August	191	71	127	7,810
September	119	50	68.3	4,060

BURNT RIVER NEAR HEREFORD, OREG.

LOCATION.—Water-stage recorder in SE $\frac{1}{4}$ sec. 22, T. 12 S., R. 37 E. (erroneous section and range previously published), in canyon $1\frac{1}{2}$ miles below mouth of South Fork of Burnt River and 6 miles west of Hereford.

RECORDS AVAILABLE.—March, 1915, to September, 1916; October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 370 second-feet Mar. 22 (gauge height, 2.75 feet); minimum, 5 second-feet Sept. 22.

1915-16, 1928-1930: Maximum discharge, 926 second-feet Apr. 27, 1916 (gauge height, 5.18 feet at old gauge); minimum, 2.5 second-feet Aug. 24, 1915.

REMARKS.—Records good except those estimated, which are poor. Canal with capacity of about 3 second-feet diverts water around gauge; diversions for irrigation of about 7,000 acres from tributaries above station. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	21	46				146	44	34	17	14	9
2	12	21					133	37	51	17	14	8
3	13	21	a 41				128	50	41	17	14	7
4	13	21				a 70	121	46	39	17	14	7
5	12	21					112	37	36	17	14	7
6	13	22	36				109	32	29	18	14	7
7	13	23	36		a 40		112	29	30	17	15	7
8	14	22	42			70	119	25	33	14	15	6
9	14	21	43			73	119	23	33	15	16	8
10	14	23	51			77	101	22	29	16	19	10
11	18	23	55			88	83	18	22	20	18	11
12	17		56	a 30		121	74	15	19	21	17	11
13	18		60			129	74	15	19	19	16	9
14	20		59		65	124	96	17	20	18	17	8
15	20		60		68	110	84	23	19	17	16	8
16	20		63		69	109	69	25	16	17	16	7
17	19		51		70	124	58	43	13	17	15	7
18	20		49		73	150	60	33	18	17	15	7
19	19	a 20	56		73	199	64	28	17	17	15	7
20	20		56			269	58	33	22	16	15	6
21	20		61			235	65	36	21	16	14	5
22	18		48			314	67	36	19	16	13	5
23	16		48			263	63	30	18	16	12	5
24	15		48		a 89	212	54	27	17	16	9	6
25	20		47	a 20		282	52	23	17	15	8	7
26	20		48			322	64	21	17	14	7	7
27	21	28				296	87	16	16	14	6	10
28	22	30		a 20		235	77	15	15	15	6	10
29	21	34	a 45			241	60	14	17	15	8	13
30	22	47				218	59	29	17	14	9	13
31	21					170		39		14	9	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	22	12	17.3	1,060
November	47		22.6	1,340
December	63	36	48.6	2,990
January			27.7	1,700
February			59.2	3,290
March			159	9,780
April	322			
May	146	52	85.6	5,090
June	50	14	28.4	1,750
July	51	13	23.8	1,420
August	21	14	16.4	1,010
September	19	6	13.2	812
	13	5	7.9	470
The year	322	5	42.4	30,700

a Estimated.

BURNT RIVER AT HUNTINGTON, OREG.

LOCATION.—Staff gage in NE. ¼ sec. 14, T. 13 S., R. 44 E., half a mile northwest of Huntington.

RECORDS AVAILABLE.—September, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 226 second-feet Mar. 28 (gage height, 1.90 feet); no flow July 26 to Sept. 30.
1928-1930: Maximum discharge, 383 second-feet Mar. 10, 1929 (gage height, 2.42 feet); no flow at times.

REMARKS.—Records good Feb. 14 to Apr. 30; others poor. Discharge estimated Nov. 21, 22, Dec. 31, Jan. 8 to Feb. 11. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1	7.0	12	39	110	62	98	185	16	19	4.1
2	7.6	12	42	100		100	185	16	18	3.6
3	8.1	12	35	108		110	160	18	16	4.1
4	8.6	11	54	96		112	132	19	16	3.2
5	9.2	12	64	83		110	103	18	15	2.8
6	9.8	16	74	66	62	103	80	17	15	3.2
7	10	19	78	62		103	68	16	14	2.4
8	11	22	72			103	54	15	13	2.2
9	10	24	72			103	37	13	12	1.1
10	9.8	26	68			103	21	12	11	.9
11	10	24	68		90	100	14	11	8.6	.8
12	11	35	74			94	13	9.8	9.8	.7
13	12	33	76			95	91	9.8	9.8	.7
14	15	39	72			85	96	12	8.1	.8
15	16	44	85			87	112	11	7.0	.5
16	14	39	76		44	98	127	11	7.6	.4
17	16	42	78			115	124	11	8.6	.5
18	16	44	80			117	117	10	8.6	.6
19	17	50	80			122	117	9.2	7.6	.7
20	16	58	83			134	127	7.6	8.6	.8
21	16	60	89		137	147	11	13	8.6	.6
22	15	62	89			142	185	12	7.6	.5
23	13	64	83			147	212	12	7.6	.3
24	12	60	76			160	226	12	8.6	.1
25	13	44	74			172	212	14	7.0	.1
26	11	44	76		137	212	16	11	7.0	0
27	11	46	64			112	198	17	5.7	0
28	11	41	64			103	226	21	8.1	0
29	11	40	68				226	22	6.6	0
30	11	37	87				226	21	18	4.5
31	11		98				226		13	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	17	7.0	11.9	732
November	64	11	35.7	2,120
December	98	35	72.2	4,440
January	110		54.2	3,330
February	172		97.7	5,430
March	226	91	145	8,790
April	185	7.6	43.2	2,570
May	19	6.6	13.1	306
June	19	4.5	10.0	595
July	4.1	0	1.15	71
The year	226	0	400	28,900

NOTE.—No flow during August and September.

POWDER RIVER AT SALISBURY, OREG.

LOCATION.—Staff gage in sec. 30, T. 10 S., R. 40 E., three-fourths mile below railroad siding of Salisbury and 8½ miles south of Baker. Zero of gage, 3,628.33 feet above mean sea-level.

DRAINAGE AREA.—230 square miles.

RECORDS AVAILABLE.—December, 1903, to August, 1914; October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 233 second-feet Apr. 27 (gage height, 1.98 feet); minimum, 3 second-feet Sept. 4-6.

1903-1914, 1928-1930: Maximum discharge, 1,660 second-feet Mar. 20, 1910 (gage height, 6.65 feet); no flow Aug. 31, 1909.

REMARKS.—Records good except those estimated Nov. 7-9, and those for periods of ice effect, Nov. 12 to Dec. 6, Dec. 27 to Feb. 14, which are poor. Diversions for irrigation above station. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	6	6				56	137	137	111	20	6	4
2.....	7	6				54	137	137	119	19	5	4
3.....	7	6				40	147	188	103	14	6	4
4.....	6	6	6	29		49	137	167	103	13	5	3
5.....	6	6				56	137	147	90	13	4	3
6.....	6	7				59	147	137	87	11	4	3
7.....	7	7	6		50	54	167	127	80	11	6	4
8.....	6	7	13			51	178	127	80	9	6	4
9.....	7	8	15			51	199	115	80	9	5	4
10.....	6	10	17			51	188	107	62	9	7	4
11.....	6	9	20			64	178	99	60	10	6	4
12.....	6		30			87	178	95	50	9	7	4
13.....	6		28			91	178	91	54	8	6	4
14.....	7		28			80	188	95	51	7	6	4
15.....	7		34		56	70	167	137	49	7	6	4
16.....	7		34		65	64	147	157	44	7	8	4
17.....	8		28		75	67	127	167	44	6	6	4
18.....	8		24		84	77	107	147	34	6	6	4
19.....	7		22		84	80	107	137	45	6	6	4
20.....	8		22		157	87	111	147	51	6	5	4
21.....	8	8	22		137	95	103	147	62	7	5	4
22.....	8		24		95	107	107	157	51	6	5	4
23.....	9		26		91	103	137	137	49	6	5	4
24.....	9		24		80	103	199	119	45	6	4	4
25.....	10		28		64	99	199	113	38	6	4	4
26.....	10		30		62	107	210	103	40	5	4	4
27.....	11				60	127	233	99	36	4	4	4
28.....	11				59	147	188	95	34	4	4	4
29.....	11		28			157	167	99	28	4	4	5
30.....	11					167	147	119	22	4	4	6
31.....	6					147		137		5	4	
Month	Maximum		Minimum		Mean		Run-off in acre-feet					
October.....	11		6		7.7		474					
November.....					7.7		458					
December.....	34				21.0		1,290					
January.....					25.0		1,540					
February.....	157				66.8		3,710					
March.....	167		40		85.4		5,250					
April.....	233		103		158		9,400					
May.....	188		91		129		7,930					
June.....	119		22		60.7		3,610					
July.....	20		4		8.3		510					
August.....	8		4		5.3		326					
September.....	6		3		4.0		238					
The year.....	233		3		48.0		34,700					

POWDER RIVER NEAR ROBINETTE, OREG.

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 22, T. 9 S., R. 46 E., 3 miles northwest of Robinette.

RECORDS AVAILABLE.—September, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 770 second-feet Feb. 20 (gage height, 3.00 feet); minimum, 27 second-feet Aug. 8.

1928-1930: Maximum discharge, 2,920 second-feet Mar. 10, 1929; minimum, that of Aug. 8, 1930.

REMARKS.—Records good except those for Jan. 9 to Feb. 9, which were estimated because of ice. Numerous diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	57	83	122	171	175	344	362	380	439	182	30	30
2.	58	85	122	160		327	344	480	439	182	30	29
3.	57	90	100	160		327	362	720	419	171	29	30
4.	57	93	104	171		327	344	630	400	171	30	30
5.	57	95	113	182		380	327	542	380	150	30	31
6.	52	95	131	131	248	419	380	521	400	140	30	32
7.	58	92	131	100		362	500	459	521	122	30	31
8.	59	92	131	81		327	521	419	585	100	29	32
9.	65	93	150			327	542	419	542	97	29	36
10.	68	100	171			327	521	400	585	102	31	38
11.	70	99	171	80	248	310	500	380	630	106	34	72
12.	75	90	171		234	327	500	362	542	90	37	86
13.	76	81	182		248	344	521	362	500	78	37	75
14.	78	83	194		278	310	542	459	419	76	37	67
15.	75	97	207		380	310	500	480	400	59	37	64
16.	75	102	327	80	380	294	400	675	380	58	37	61
17.	68	109	234		419	278	344	585	419	56	37	56
18.	68	104	234		500	278	310	585	362	48	37	58
19.	65	86	207		585	278	294	585	344	46	35	53
20.	72	76	171		770	278	263	585	521	44	35	54
21.	68	76	182	80	675	294	310	542	480	42	34	48
22.	65	73	171		585	294	419	439	362	42	35	45
23.	65	95	171		542	294	480	400	344	41	35	44
24.	65	100	182		500	294	630	380	294	41	35	47
25.	67	131	171		419	294	585	400	294	41	37	48
26.	70	150	194	80	419	362	585	380	278	40	36	50
27.	73	140	150		380	362	585	419	248	38	37	49
28.	73	140	111		362	344	500	585	248	39	36	47
29.	75	140	122			362	459	542	220	38	33	47
30.	76	122	122			380	400	585	207	38	31	47
31.	80		160			380		480		35	30	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	80	52	67.3	4,140
November.....	150	73	100	5,950
December.....	327	100	165	10,100
January.....	182	-----	96.6	5,940
February.....	770	-----	348	19,300
March.....	419	278	327	20,100
April.....	630	263	444	26,400
May.....	720	362	490	30,100
June.....	630	207	407	24,200
July.....	182	35	81.1	4,990
August.....	37	29	33.5	2,060
September.....	86	29	47.9	2,850
The year.....	770	29	216	156,000

IMNAHA RIVER AT IMNAHA, OREG.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 16, T. 1 N., R. 48 E., at Imnaha, one-eighth mile below mouth of Sheep Creek.

RECORDS AVAILABLE.—June, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,190 second-feet June 11 (gage height, 2.90 feet); minimum, 37 second-feet Nov. 21 (gage height, estimated, 0.16 foot).

1928-1930: Maximum discharge, 2,330 second-feet June 16, 1929 (gage height, 4.00 feet); minimum, 28 second-feet Dec. 4-8, 1927.

REMARKS.—Records fair except those estimated, Jan. 5 to Feb. 1, which are poor. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	119	108	106	147	200	262	542	615	642	390	121	81
2.....	119	108	82	140	278	200	615	615	670	410	121	77
3.....	117	108	86	145	245	214	642	950	700	370	119	74
4.....	104	108	95	149	172	214	642	870	730	370	117	74
5.....	104	108	114		135	230	615	800	730	350	117	71
6.....	99	108	104		135	245	765	765	730	332	117	81
7.....	99	112	114		159	230	950	730	870	296	117	95
8.....	104	117	104		135	230	990	765	950	296	112	93
9.....	117	117	147		128	214	990	642	910	278	112	89
10.....	110	117	200		133	230	990	615	950	296	119	88
11.....	112	117	200		135	230	870	615	1,030	296	112	164
12.....	108	117	154		142	245	870	615	950	278	106	162
13.....	108	81	214		152	278	835	615	835	278	102	119
14.....	108	84	278		164	278	835	642	765	262	99	112
15.....	108	112	313		182	262	765	700	700	230	99	106
16.....	108	108	730		200	245	670	765	730	230	104	99
17.....	108	104	370	80	245	245	615	800	765	214	102	95
18.....	112	108	332		313	245	615	870	700	200	99	95
19.....	117	104	278		410	245	615	800	615	200	97	95
20.....	112	81	214		498	278	590	835	835	185	95	95
21.....	112	37	200		520	278	590	800	765	175	95	95
22.....	110	56	185		475	296	670	700	642	164	91	95
23.....	108	56	200		390	313	730	615	590	159	89	95
24.....	108	95	172		313	313	800	590	542	159	82	95
25.....	108	130	169		313	332	870	590	520	149	81	95
26.....	108	133	175		313	350	870	615	498	142	81	95
27.....	112	117	149		278	410	870	730	498	140	81	95
28.....	108	102	137		278	430	765	835	475	137	81	95
29.....	108	106	140			498	730	800	410	133	81	95
30.....	108	110	135			520	670	835	410	124	81	97
31.....	108		164			542		700		119	81	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	119	99	109	6,700
November.....	133	37	102	6,070
December.....	730	82	196	12,100
January.....			88.4	5,440
February.....	520	128	251	13,900
March.....	542	200	294	18,100
April.....	990	542	753	44,800
May.....	950	590	724	44,500
June.....	1,030	410	705	42,000
July.....	410	119	237	14,600
August.....	121	81	100	6,150
September.....	164	71	97.2	5,780
The year.....	1,030	37	304	220,000

SALMON RIVER BELOW VALLEY CREEK, AT STANLEY, IDAHO

LOCATION.—Water-stage recorder in SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 34, T. 11 N., R. 13 E., three-fourths mile below mouth of Valley Creek and $\frac{1}{4}$ miles northeast of new Stanley. Zero of gage 6,189.24 feet above mean sea level.

DRAINAGE AREA.—535 square miles.

RECORDS AVAILABLE.—July, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, 2,580 second-feet June 11 (gage height, 3.03 feet); minimum (estimated), 100 second-feet Nov. 20-27.

1925-1930: Maximum discharge, 5,020 second-feet June 27, 1927 (gage height, 4.41 feet); minimum, that of Nov. 20-30, 1929.

REMARKS.—Records good except those for estimated periods, which are poor. Few diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	242	247				*160	242	990	*1,670	1,000	332	271
2	242	262				145	257	1,050	*1,570	990	332	266
3	238	247					281	1,190	1,460	970	326	257
4	238	242					332	1,200	*1,400	950	332	252
5	238	252					376	1,180	1,340	920	356	262
6	234	257				*150	475	1,180	1,530	890	343	262
7	234	234					596	1,140	1,830	860	332	262
8	262	238			*150		691	1,110	2,040	840	326	291
9	271	238				148	802	1,020	2,190	802	389	276
10	266	262					792	950	2,420	802	409	281
11	257	238					821	890	2,500	821	403	332
12	247	219				*150	910	850	2,190	754	453	326
13	242	242					990	821	1,970	718	498	308
14	238	252					930	840	1,760	682	498	303
15	238	252					880	920	1,760	646	468	291
16	230	252	*220	*140		153	736	940	1,830	621	431	281
17	234	242					745	950	1,900	596	389	276
18	238	242					736	1,010	1,760	554	409	276
19	234	242					792	1,050	1,700	514	396	276
20	234					*160	880	1,120	1,550	483	382	271
21							940	1,500	1,440	468	362	266
22	*240				*160		1,050	1,480	1,390	446	349	276
23						155	1,130	1,330	1,320	423	337	314
24	252						1,280	1,270	1,250	403	332	303
25	247	*100				*200	1,360	1,250	1,180	389	326	303
26	247						1,320	1,280	1,160	369	314	297
27	266					230	1,230	1,390	1,150	356	303	291
28	281					230	1,150	1,630	1,130	349	297	286
29	257					238	1,030	1,970	1,100	343	291	281
30	242					252	970	*1,870	1,020	337	286	276
31	252					230		*1,770		332	281	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	281	230	246	0.460	0.53	15,100
November	262		192	.359	.40	11,400
December			220	.411	.47	13,500
January			140	.262	.30	8,610
February			155	.290	.30	8,610
March	252		171	.320	.37	10,500
April	1,360	242	824	1.54	1.72	49,000
May	1,970	821	1,200	2.24	2.58	73,800
June	2,500	1,020	1,620	3.03	3.36	96,400
July	1,000	332	633	1.18	1.38	38,900
August	498	281	364	.680	.79	22,400
September	332	252	284	.531	.59	16,900
The year	2,500		504	.942	12.78	365,000

* Estimated.

SALMON RIVER BELOW YANKEE FORK, NEAR CLAYTON, IDAHO

LOCATION.—Water-stage recorder in sec. 20, T. 11 N., R. 15 E., one-fourth mile below Sunbeam Dam and mouth of Yankee Fork and 18 miles above Clayton.

DRAINAGE AREA.—841 square miles.

RECORDS AVAILABLE.—October, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,760 second-feet May 30, June 11, 12 (gage height, 6.3 feet); minimum (estimated), 160 second-feet Nov. 25-30.

1921-1930: Maximum discharge (estimated), 8,000 second-feet June 27, 1927 (gage height, about 9.65 feet); minimum, that of Nov. 25-30, 1929.

REMARKS.—Records good except those for estimated periods, which are poor. No diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.		
1.....	342	336	200			250	353	1,600	1,340	1,360	506	381		
2.....	346	378					417	1,820	2,510	1,360	486	381		
3.....	342	332					482	2,080	2,360	1,320	486	374		
4.....	342	319					570	2,080	2,260	1,290	548	370		
5.....	342	346					662	2,030	2,080	1,260	548	374		
6.....	334	367	240			250	842	1,980	2,160	1,220	527	378		
7.....	342	305					1,010	1,860	2,510	1,190	506	381		
8.....	392	319					1,130	1,780	3,050	1,160	486	388		
9.....	399	322					1,220	1,630	3,160	1,130	570	385		
10.....	396	381					1,290	1,520	3,400	1,220	592	403		
11.....	374	332	400				1,290	1,420	3,640	1,190	638	459		
12.....	367	240					1,420	1,360	3,640	1,070	615	432		
13.....	360	266					1,600	1,390	3,160	1,010	662	410		
14.....	356	312					1,520	1,490	2,830	952	711	406		
15.....	350	332					548	1,260	1,630	2,610	898	711	392	
16.....	346	322	400	230			1,100	1,660	2,510	815	662	385		
17.....	353	329					1,070	1,740	2,610	762	615	370		
18.....	364	319					1,040	1,860	2,610	711	592	356		
19.....	346	288					1,070	1,940	2,510	686	570	353		
20.....	346	250					1,190	2,030	2,360	662	527	350		
21.....	346	234	385			312	1,360	2,720	2,210	638	506	346		
22.....	339	262					1,660	2,510	2,030	615	486	346		
23.....	332	245					1,820	2,360	1,900	592	470	410		
24.....	336	228					2,080	2,410	1,820	570	455	388		
25.....	342						2,210	2,410	1,700	548	447	385		
26.....	342	160	350			320	2,160	2,360	1,630	527	432	367		
27.....	374						1,940	2,410	1,600	527	417	367		
28.....	392						1,780	2,830	1,560	527	403	370		
29.....	356							332	1,630	3,400	1,490	527	399	370
30.....	325							339	1,520	3,760	1,420	506	392	374
31.....	353					346		3,400		506	388			

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acro-feet
October.....	399	325	354	0.421	0.49	21,800
November.....	381		277	.329	.37	16,500
December.....			352	.419	.48	21,600
January.....			230	.273	.32	14,100
February.....			250	.297	.31	13,900
March.....			284	.338	.39	17,500
April.....	2,210	353	1,290	1.53	1.71	76,800
May.....	3,760	1,360	2,110	2.51	2.89	130,000
June.....	3,640	1,420	2,420	2.88	3.21	144,000
July.....	1,360	506	882	1.05	1.21	54,200
August.....	711	388	528	.628	.72	32,500
September.....	459	346	382	.454	.51	22,700
The year.....	3,760		781	.929	12.61	566,000

* Estimated.

SALMON RIVER NEAR CHALLIS, IDAHO

LOCATION.—Water-stage recorder in sec. 7, T. 12 N., R. 19 E., 250 feet below mouth of Bayhorse Creek and 9 miles south of Challis.

DRAINAGE AREA.—1,740 square miles.

RECORDS AVAILABLE.—October, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 6,210 second-feet June 12 (gauge height, 6.36 feet); minimum, 331 second-feet Nov. 21 (gauge height, 1.16 feet).
1929-30: Maximum discharge, that of June 12, 1930; minimum, that of Nov. 21, 1929.

REMARKS.—Records excellent except those for estimated periods, which are fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	579	520	467			520	558	2,080	4,320	2,200	830	670
2	558	558	436			484	579	2,320	3,880	2,140	830	670
3	558	538	422			501	646	2,700		2,140	802	646
4	558	501	422			520	746	2,900		2,140	990	646
5	558	520	436	a 500	a 550	538	830		a 3,500	2,030	860	646
6	558	538	484			538	990			1,980	860	670
7	558	520	452			520	1,290			1,920	830	670
8	579	484	436			501	1,520	e 2,400	4,700	1,860	802	670
9	623	501	501			520	1,660		4,900	1,810	860	646
10	623	538				520	1,810		5,220	2,140	990	646
11	601	520	a 800	467		467	1,760		5,760	e 2,000	990	720
12	601	452		484		484	1,920	1,810	5,760	a 1,850	1,210	746
13	579	408		501		a 496	2,140	1,760	4,900	1,710	1,170	695
14	579	467		a 485		a 508	2,140	1,860	4,140	1,660	1,380	670
15	579	501		a 470	570	520	1,810	2,030	3,800	1,560	1,210	670
16	579	501	a 900	a 455		520	1,520	2,200		1,470	1,100	646
17	579	501		436		501	1,420	2,200		1,420	1,060	646
18	579	501				501	1,380	2,320	a 3,600	1,340	990	646
19	579	484			623	501	1,340	2,500		1,250	955	623
20	558	422			579	520	1,470	2,630		1,170	891	623
21	558	383			579	520	1,710	3,400	3,260	1,100	830	601
22	558	396			538	538	2,140	3,480	3,180	1,060	830	623
23	538	452			538	520	2,500	3,180	3,040	1,020	802	695
24	538	436		a 500	a 538	501	2,830	3,040	2,900	990	773	695
25	538	484	a 550	a 538	a 538	520	3,110	3,040	2,630	955	773	670
26	538	484			a 538	558	3,040	3,110	2,560	923	746	670
27	558	484			538	538	2,760	3,400	2,500	891	720	670
28	601	484			538	538	2,500	4,060	2,500	860	720	670
29	558	484				538	2,290	4,900	2,380	890	695	646
30	538	484				601	2,030	5,430	2,200	830	670	646
31	538					558		5,000		802	670	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	623	538	569	0.327	0.38	35,000
November	558	383	485	.279	.31	28,900
December		422	618	.355	.41	38,000
January		436	493	.283	.33	30,300
February			557	.520	.33	30,900
March	601	467	520	.299	.34	32,000
April	3,110	558	1,750	1.01	1.13	104,000
May	5,430	1,760	2,840	1.63	1.88	175,000
June	5,760	2,200	3,670	2.11	2.35	218,000
July	2,200	802	1,490	.856	.99	91,600
August	1,380	670	898	.516	.59	55,200
September	746	601	662	.380	.42	39,400
The year	5,760	383	1,210	.695	9.46	878,000

a Estimated.

SALMON RIVER AT SALMON, IDAHO

LOCATION.—Water-stage recorder installed Oct. 21, 1929, in sec. 6, T. 21 N., R. 22 E., just above Lemhi River and three-eighths mile below highway bridge at Salmon. Staff gage near same site used prior to Oct. 21, 1929.

DRAINAGE AREA.—3,600 square miles.

RECORDS AVAILABLE.—April, 1912, to September, 1916; July, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 6,030 second-feet June 12 (gage height, 4.86 feet); minimum, 516 second-feet Jan. 8 (gage height, 1.87 feet). 1912-1916, 1919-1930: Maximum discharge, 16,400 second-feet June 12, 1921; minimum, that of Jan. 8, 1930.

REMARKS.—Records good except those for estimated periods, which are fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	850	880	910	931	} a 900	890	890	2,210	5,150	2,440	964	860
2.....	890	910	890	890		850	910	2,300	4,650	2,320	964	860
3.....	900	900	} a 800	890		860	975	2,580	4,290	2,300	942	860
4.....	890	900		800		850	1,040	3,120	3,810	2,270	931	860
5.....	880	880		860		900	1,070	3,120	3,690	2,230	975	860
6.....	870	910	} 900	964	} a 900	931	1,150	3,010	3,460	2,170	997	880
7.....	880	920		770		910	1,380	2,900	3,690	2,100	964	880
8.....	900	890		622		890	1,700	2,790	4,410	2,010	953	870
9.....	931	880	} a 1,200	598		870	1,890	2,580	4,900	1,990	942	870
10.....	964	900		639		890	2,060	2,420	5,020	2,080	1,050	860
11.....	953	953		711	} a 1,100	900	2,100	2,280	5,520	2,480	1,160	870
12.....	942	931	740	942		2,050	2,150	5,780	2,280	1,160	931	
13.....	931	880	820	997		2,190	2,060	5,520	2,030	1,390	964	
14.....	942	840	800	1,010		2,440	2,030	4,900	1,920	1,470	920	
15.....	931	900	750	986		2,340	2,120	4,410	1,790	1,420	900	
16.....	931	890	} a 1,600	693	} a 1,000	2,010	2,300	4,170	1,680	1,360	880	
17.....	931	942		614		1,780	2,340	4,290	1,600	1,340	880	
18.....	931	931		} a 850		1,700	2,440	4,410	1,520	1,300	880	
19.....	953	920	} a 1,100			1,640	2,680	4,290	1,450	1,260	870	
20.....	942	880				1,040	1,590	2,790	4,050	1,360	1,200	860
21.....	942	760		975	} a 880	1,680	3,120	3,930	1,310	1,140	860	
22.....	910	702	910	860		1,980	3,930	3,690	1,260	1,080	870	
23.....	900	666	953	860		2,440	3,810	3,460	1,220	1,050	931	
24.....	900	} a 880	1,010	840		2,790	3,460	3,340	1,180	997	953	
25.....	880		997	931		830	3,340	3,340	3,120	1,140	1,010	942
26.....	890		931	} a 900	890	850	3,460	3,340	2,900	1,120	975	931
27.....	900	910	910		910	a 847	3,230	3,460	2,790	1,040	942	931
28.....	910	890	790		900	844	2,900	3,930	2,790	1,020	900	920
29.....	942	920	780		840	2,680	4,650	2,680	997	890	900	
30.....	942	910	780		890	2,360	5,520	2,580	986	880	890	
31.....	900	800	800		880	880	5,650	975	870	870	870	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October.....	964	850	915	0.254	0.29	56,300
November.....	953	666	870	.242	.27	51,800
December.....		780	1,070	.297	.34	65,800
January.....			816	.227	.26	50,200
February.....			961	.267	.28	53,400
March.....			910	.253	.29	56,000
April.....	3,460	890	1,990	.553	.62	118,000
May.....	5,650	2,030	3,050	.847	.98	188,000
June.....	5,780	2,580	4,060	1.13	1.26	242,000
July.....	2,480	975	1,690	.469	.54	104,000
August.....	1,470	870	1,080	.300	.35	66,400
September.....	964	860	891	.248	.28	53,000
The year.....	5,780	666	1,520	.422	5.76	1,100,000

a Estimated.

SALMON RIVER AT WHITEBIRD, IDAHO

LOCATION.—Chain gage in sec. 22, T. 28 N., R. 1 E., at highway bridge just above Whitebird Creek and 1 mile southwest of Whitebird.

DRAINAGE AREA.—13,600 square miles.

RECORDS AVAILABLE.—August, 1910, to September, 1917; October, 1919, to September, 1930.

EXTREMES.—Maximum discharge during year, 40,600 second-feet May 30 (gage height, 12.86 feet); minimum, 2,340 second-feet Nov. 23 (gage height, 1.08 feet).

1910-1917, 1919-1930: Maximum discharge, 88,800 second-feet June 9, 1921 (gage height, 21.2 feet); minimum, 2,150 second-feet Jan. 1, 1926 (gage height, 0.94 foot).

Maximum stage known, 27.5 feet in June, 1894 (discharge, about 120,000 second-feet).

REMARKS.—Records good except those for October and November, which are fair. Amount of water diverted for irrigation above station negligible.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,400	3,300	3,440	3,440	3,440	4,060	5,910	19,200	35,300	11,600	4,400	3,160
2			3,440	3,740	3,590	4,060	5,910	23,200	30,200	11,300	4,400	3,300
3			3,160	3,590	3,440	3,740	6,310	25,700	28,400	11,100	4,230	3,160
4			2,900	3,590	3,440	3,740	6,940	25,300	26,200	10,200	4,400	3,300
5			2,900	3,590	3,440	3,740	7,580	25,700	24,000	9,960	4,400	3,160
6	3,400	3,300	2,900	3,740	3,590	4,060	8,700	25,300	23,600	9,440	4,400	3,300
7			3,030	3,440	3,740	3,900	10,500	23,600	26,200	8,460	4,230	3,300
8			3,440	3,030	4,060	3,900	13,400	21,600	29,700	8,240	4,230	3,440
9			3,590	2,440	4,060	3,900	14,700	20,400	32,500	8,020	3,900	3,590
10			3,440	4,060	2,440	3,740	15,300	19,600	34,800	7,580	4,230	3,590
11	3,500	3,400	5,320	2,440	3,900	3,740	15,000	17,400	35,800	7,580	4,400	3,740
12			3,590	6,520	2,780	3,900	15,300	16,700	35,300	8,020	4,580	4,230
13			3,030	6,940	2,780	3,900	4,230	16,700	16,400	32,000	8,460	4,580
14			2,900	6,940	2,660	4,060	4,230	18,100	17,400	27,500	7,580	5,130
15			2,900	7,150	2,660	4,230	4,580	17,000	18,900	25,700	7,360	3,900
16	3,400	3,300	3,160	8,020	2,660	4,400	4,580	15,000	21,200	24,400	7,150	5,320
17			3,300	7,580	2,660	4,580	4,400	13,100	23,200	24,000	6,730	4,940
18			3,440	6,310	2,780	4,760	4,400	12,200	25,300	23,200	5,910	4,760
19			3,440	5,710	2,780	4,940	4,230	11,900	26,600	21,600	6,110	4,580
20			3,160	5,130	2,900	5,320	4,400	12,200	27,900	21,200	6,310	4,400
21	3,400	3,300	2,780	4,940	2,900	5,510	4,580	15,300	30,600	21,200	5,710	4,400
22			2,440	4,230	3,030	5,510	4,940	16,400	30,600	19,200	5,710	4,230
23			2,340	4,230	3,300	5,130	5,130	21,200	28,800	17,800	5,510	4,060
24			2,550	4,230	3,300	4,940	5,130	22,000	26,200	17,000	5,320	3,900
25			3,160	4,400	3,440	4,760	4,940	29,300	24,900	16,000	5,320	3,740
26	3,400	3,300	3,440	4,230	3,440	4,580	5,510	28,400	24,400	15,000	5,130	3,590
27			3,740	4,060	3,440	4,400	5,910	24,900	25,700	14,400	4,940	3,590
28			3,740	3,590	3,300	4,060	5,710	22,800	30,200	12,800	4,760	3,740
29			3,590	3,590	3,300	-----	5,510	22,000	30,200	12,200	4,580	3,440
30			3,440	3,160	3,440	-----	5,910	20,000	40,100	11,900	4,580	3,300
31			-----	3,160	3,440	-----	6,110	-----	39,600	-----	4,400	3,440

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	-----	-----	3,430	0.252	0.29	211,000
November	3,740	2,340	3,220	.237	.26	192,000
December	8,020	2,900	4,590	.338	.39	282,000
January	3,740	2,440	3,110	.229	.26	191,000
February	5,510	3,440	4,270	.314	.33	237,000
March	6,110	3,740	4,550	.335	.39	280,000
April	29,300	5,910	15,500	1.14	1.27	922,000
May	40,100	16,400	24,900	1.83	2.11	1,530,000
June	35,800	11,900	24,000	1.76	1.96	1,430,000
July	11,600	4,400	7,200	.529	.61	443,000
August	5,320	3,300	4,260	.313	.36	262,000
September	4,400	3,160	3,580	.263	.29	213,000
The year	40,100	2,340	8,550	.629	8.52	6,190,000

VALLEY CREEK AT STANLEY, IDAHO

LOCATION.—Staff gage in sec. 3, T. 10 N., R. 13 E., one-fourth mile above confluence with Salmon River and three-fourths mile above old Stanley post office.

DRAINAGE AREA.—176 square miles.

RECORDS AVAILABLE.—December, 1910, to October, 1913; May, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 631 second-feet May 30 (gage height, 2.50 feet); minimum (estimated), 40 second-feet Nov. 17-30. 1910-1913, 1921-1930: Maximum discharge, 1,850 second-feet May 29, 1921 (gage height, 4.4 feet); minimum, that of Nov. 17-30, 1929.

REMARKS.—Records fair for April to September; others poor. Few ranch diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1.....							* 113	303	463	231	* 88	* 74
2.....							* 126	338	415	* 236	* 89	* 73
3.....							* 139	390	390	242	91	72
4.....							153	415	357	* 232	* 100	* 73
5.....							* 196	390	* 363	* 222	* 109	* 74
6.....							238	366	* 363	213	117	75
7.....							303	* 337	363	* 218	* 110	* 76
8.....							338	* 307	440	* 223	104	78
9.....							519	277	* 432	227	* 108	75
10.....							466	261	* 421	* 221	113	* 98
11.....							348	254	415	* 215	* 115	122
12.....							519	254	* 415	209	117	* 107
13.....							546	* 270	* 415	* 199	* 130	92
14.....							307	286	415	189	142	* 88
15.....							* 309	* 286			122	85
16.....							311	286			* 118	* 82
17.....							* 288	348			113	* 79
18.....							265	348			* 108	75
19.....							361	366			148	104
20.....							415	390			* 139	* 100
21.....							366	602	* 293	* 130	* 96	* 76
22.....							338	466	283	120	92	78
23.....							366	366	* 277	* 115	* 90	* 77
24.....							66	492	390	* 267	* 110	87
25.....							* 70	466	390	* 253	104	* 85
26.....							75	415	* 382	* 243	* 102	* 83
27.....							63	390	* 374	233	100	82
28.....							70	338	366	* 243	* 100	* 82
29.....							* 80	294	519	254	100	82
30.....							* 90	294	631	* 243	* 94	* 78
31.....							100		519		87	75

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acres-feet
October.....			73.7	0.419	0.48	4,530
November.....			61.3	.348	.39	3,650
December.....			70.0	.398	.46	4,300
January.....			50.0	.284	.33	3,070
February.....			60.0	.341	.36	3,330
March.....			71.7	.407	.47	4,410
April.....	546	113	334	1.90	2.12	19,900
May.....	631	254	370	2.10	2.42	22,800
June.....	466	238	346	1.97	2.20	20,600
July.....	242	87	168	.955	1.10	10,300
August.....	142	75	101	.574	.66	6,210
September.....	122	72	80.7	.459	.51	4,800
The year.....	631		149	.847	11.50	108,000

* Estimated.

YANKEE FORK OF SALMON RIVER NEAR CLAYTON, IDAHO

LOCATION.—Staff gage in sec. 20, T. 11 N., R. 15 E., at Sunbeam Dam, 350 feet above confluence with Salmon River and 18 miles west of Clayton.

DRAINAGE AREA.—195 square miles.

RECORDS AVAILABLE.—May, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,120 second-feet May 30, 31 (gage height, 4.6 feet); minimum, 27 second-feet Oct. 24 (gage height, 0.87 foot).

1921-1930: Maximum discharge, 3,360 second-feet June 12, 1921 (gage height, 6.79 feet, present datum); minimum (estimated), 10 second-feet Dec. 5, 6, 1927.

REMARKS.—Records good except those for estimated periods, which are fair. No diversions or regulation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.		
1	57	63	* 40	68			71	359	800	208	88	70		
2	53	* 63		69			75	526	666	* 197	93	69		
3	51	* 64		65			111	593	593	* 192	93	* 68		
4	53	64		62			117	547	464	187	93	68		
5	53	68	50	58			136	504	504	187	105	* 68.		
6	50	68	50				212	504	593	180	105	68		
7	48	66	79				248	464	641	172	99	* 68		
8	55	53	88				292	445	744	172	88	68		
9	58	58	93				330	391	800	180	93	69		
10	58	61	258				691	330	691	180	111	70		
11	58	* 45	187	* 40	* 45	* 50	617	292	* 600	172	93	* 74		
12	51		143				617	292		157	136	78		
13	53		150				292	304		157	157	76		
14	53		124	* 40	* 45	* 50	248	464		150	124	70		
15	51	105	304				484	445	136	124	68			
16	50	99	220				504	570	124	124	68			
17	51	99	212				641	547	124	111	67			
18	51	93	93				195	593	526	117	117	64		
19	50	99	203				593	464	* 117	99	64			
20	48	93	220				641	445	117	99	* 65.			
21	48	68				464	986	408	76	93				
22	47	82				617	691	344	111	* 93				
23	46	88				570	641	317	111	93				
24	29	93	* 85			641	617	269	111	93				
25	* 38	* 40				* 85	* 680	641	258	64	82	67		
26	48					* 77	547	593	269	99	* 80	* 67		
27	49		69			* 45			464	744	258	99	78	* 68
28	50	68	48						426	921	269	99	78	68
29	47	74	60						172	* 986	248	99	76	64
30	50	69	66						304	1,050	220	93	72	63
31	58		70			66		1,120		93	72			

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	58	29	50.4	0.258	0.30	3,100
November	68		49.3	.253	.28	2,930
December	258		90.7	.465	.54	5,580
January	69		44.9	.230	.27	2,760
February			45.0	.231	.24	2,500
March	66		51.3	.263	.30	3,150
April	691	71	343	1.76	1.96	20,400
May	1,120	292	596	3.06	3.53	36,600
June	800	220	492	2.52	2.81	29,300
July	203	64	138	.708	.82	8,480
August	157	72	98.8	.507	.58	6,080
September	78		67.9	.348	.39	4,040
The year	1,120		173	.887	12.02	125,000

* Estimated.

EAST FORK OF SALMON RIVER NEAR CLAYTON, IDAHO

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 1, T. 10 N., R. 18 E., at highway bridge 4 miles above confluence with Salmon River, 7 miles southeast of Clayton.

RECORDS AVAILABLE.—September, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,400 second-feet June 11-13; minimum, 46 second-feet Dec. 27, 29, 30 (gage height, 0.62 foot).

1928-1930: Maximum discharge, that during June 11-13, 1930; minimum, 29 second-feet Dec. 3, 1928 (gage height, 0.40 foot).

REMARKS.—Records good except those for January, February, March, which are fair. Several small irrigation diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	89	83	64	55		64	69	234	955	520	175	141
2	89	80	64	62		64	80	270	656	520	175	141
3	86	80	64	69		69	* 76	252	583	460	175	137
4	86	80	64	* 63		64	72	234	585	405	150	137
5	86	80	64	57	* 75	67	86	203	616	405	150	137
6	80	77	67	67		64	106	218	726	405	150	132
7	86	80	67	77		64	128	234	915	405	175	128
8	80	80	72		86	64	141	218	998	* 462	175	141
9	80	80	83		77	64	160	234	1,126	520	175	132
10	80	80	106		72	64	175	234	1,226	552	203	128
11	86	80	109	* 70	69	64	189	234	1,406	650	218	124
12	86	77	109		77	64	203	270	1,406	720	207	124
13	86	92	106		83	64	189	234	1,406	583	234	124
14	89	102	92		77	64	175	252	1,126	520	234	124
15	86	99	86		89	64	175	234	835	405	270	124
16	89	106	89		89	64	175	252	955	355	252	124
17	86	95	89		89	69	162	270	998	310	234	124
18	86	92	92		102	64	150	270	1,120	310	234	120
19	86	83	89		95	62	150	310	955	310	234	120
20	83	77	89	* 65	99	62	150	332	1,040	270	234	120
21	83	77	86		89	64	162	405	875	270	218	124
22	83	72	89		77	62	189	552	720	270	189	120
23	82	69	89		72	64	234	490	650	270	175	128
24	83	72	89		64	60	270	520	650	234	150	124
25	86	67	77		69	60	355	520	583	234	150	120
26	89	67	69		64	67	380	583	583	234	150	120
27	83	64	46		69	64	355	650	583	234	146	124
28	83	64	48		64	64	355	835	520	234	150	124
29	83	64	46	* 75		69	290	1,080	520	203	150	124
30	80	64	46			74	234	1,120	583	203	150	124
31	86		48			74		1,080		175	146	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	89	80	84.7	0.170	0.20	5,210
November	106	64	79.4	.160	.18	4,720
December	109	46	77.3	.156	.18	4,750
January		55	68.1	.137	.16	4,190
February		64	78.5	.158	.16	4,360
March	74	60	64.9	.131	.15	3,990
April	380	69	188	.378	.42	11,206
May	1,120	203	414	.833	.96	25,500
June	1,400	520	862	1.73	1.93	51,300
July	720	175	376	.757	.87	23,100
August	270	146	190	.382	.44	11,700
September	141	120	127	.256	.29	7,560
The year	1,400	46	217	.437	5.94	158,000

* Estimated.

BIG BOULDER CREEK NEAR CLAYTON, IDAHO

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 15, T. 9 N., R. 17 E., below tailrace for power plant of Livingston Mines Corporation, half a mile above junction with East Fork of Salmon River, and 10 miles southwest of Clayton.

DRAINAGE AREA.—27 square miles.

RECORDS AVAILABLE.—May, 1926, to January, 1930 (discontinued).

EXTREMES.—Maximum discharge during period, 11 second-feet Dec. 15 (gage height, 0.65 foot); minimum, 4 second-feet Dec. 4 (gage height, 0.43 foot). 1926-1930: Maximum discharge, 206 second-feet June 26, 1927 (gage height, 2.04 feet); minimum, 4 second-feet Mar. 31, Dec. 4, 1929.

REMARKS.—Records fair. Stream subject to diurnal fluctuations caused by operation of power plant immediately upstream. No diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

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

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	8	6	7.3	0.270	0.31	449
November	10	6	7.0	.259	.29	417
December	10	5	7.0	.259	.30	430
January 1-19	6	5	5.7	.211	.15	215
The period						1,510

PAHSIMEROI RIVER NEAR MAY, IDAHO

LOCATION.—Staff gage in W. $\frac{1}{2}$ sec. 25, T. 16 N., R. 20 E., one-fourth mile above confluence with Salmon River and 10 miles northwest of May.

RECORDS AVAILABLE.—October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during period, 279 second-feet Dec. 10–14, 16, 17; minimum, 111 second-feet June 17, 18.

REMARKS.—Records good except those for estimated periods Jan. 17–19 and 22–24, which are fair. Numerous diversions above station for irrigation.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.		228	266	240	228	240	215	135	141	128	137	143
2.		228	266	240	228	240	202	135	143	120	126	143
3.		228	266	240	228	240	202	128	141	120	117	143
4.		240	266	240	228	240	190	139	132	117	124	143
5.		253	266	240	228	240	190	128	130	118	124	154
6.		253	266	240	228	240	190	143	126	118	126	154
7.		253	266	228	228	240	190	139	122	118	130	154
8.		253	266	228	228	240	190	139	120	118	128	166
9.		253	266	228	228	240	190	143	122	122	130	166
10.		253	279	228	228	240	166	143	120	132	154	166
11.		266	279	228	228	240	166	143	118	132	154	166
12.		253	279	228	228	240	143	141	117	130	154	166
13.		253	279	228	240	240	143	132	117	128	154	166
14.		253	279	228	240	240	143	132	115	132	154	166
15.		253	266	228	240	240	143	132	115	132	143	166
16.		253	279	228	253	228	143	130	117	130	143	166
17.		253	279		253	228	143	122	111	126	143	166
18.		253	266	228	253	215	143	124	111	122	143	166
19.		253	266		253	215	154	124	113	120	143	166
20.		253	266	228	253	215	154	122	110	120	141	178
21.		253	253	228	253	215	143	122	120	122	141	178
22.	215	253	253		253	215	143	120	113	124	141	190
23.	215	253	253	234	253	215	143	122	113	128	137	215
24.	215	253	253		253	215	143	118	117	128	141	202
25.	215	253	253	240	253	215	130	122	117	128	141	190
26.	215	253	253	240	253	215	122	120	117	128	139	190
27.	215	253	253	228	253	215	122	120	113	128	143	190
28.	215	266	253	240	253	215	130	120	113	126	141	190
29.	215	266	253	228		215	128	122	113	124	143	190
30.	228	266	253	228		215	130	122	126	124	143	202
31.	228		253	228		215		128		130	141	
Month	Maximum				Minimum				Mean		Run-off in acre-feet	
October 22–31	228				215				218		4,320	
November	266				228				252		15,000	
December	279				253				264		16,200	
January	240				228				232		14,300	
February	253				228				241		13,400	
March	240				215				228		14,000	
April	215				122				158		9,400	
May	143				118				129		7,930	
June	143				111				121		7,200	
July	132				117				125		7,690	
August	154				117				139		8,550	
September	215				143				171		10,200	
The period											128,000	

LEMHI RIVER AT SALMON, IDAHO

LOCATION.—Staff gage in sec. 10, T. 21 N., R. 22 E., 250 feet below highway bridge, 1,000 feet above Kirtly Creek, and 1 mile southeast of Salmon.

RECORDS AVAILABLE.—August, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 373 second-feet Feb. 8 (gage height, 2.00 feet); minimum, 40 second-feet July 30 (gage height, 0.98 foot). 1928-1930: Maximum discharge (estimated), 1,400 second-feet June 16, 1929; minimum, that of July 30, 1930.

REMARKS.—Records good except those for estimated periods, which are fair or poor. Many diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1.....	a 270	278	268	199	a 300	215	232	145	278	118	42	73	
2.....		288	268	215		215	241	142	250	108	48	73	
3.....		278	259	223		223	250	148	259	98	50	70	
4.....		259	268	278		241	207	278	155	223	93	53	70
5.....		278	259	232		215	288	148	199	96	63	73	
6.....	a 270	283	259	250	a 300	223	298	142	183	98	63	81	
7.....		278	259	241		207	308	142	183	103	64	73	
8.....		268	259	191		373	207	308	136	241	98	59	70
9.....		268	268	183		340	215	298	136	259	93	59	70
10.....		278	278	176		340	215	288	136	259	124	85	77
11.....	288	278	298	183	318	241	278	136	308	113	81	89	
12.....	a 278	241	288	176	250	268	268	136	268	124	106	98	
13.....	268	250	288	183	241	288	259	113	268	130	124	118	
14.....	a 270	298	278	148	232	268	250	103	223	118	148	118	
15.....		268	308	162	223	268	250	77	191	118	142	118	
16.....		268	308	a 170	223	268	241	73	183	113	148	124	
17.....		278	288	148	232	259	232	73	199	105	148	124	
18.....		268	259	a 200	268	241	223	73	191	98	142	124	
19.....	259	250	288		250	215	73	183	98	148	130		
20.....	246	259	268		268	207	66	183	77	152	130		
21.....	268	223	223	a 150	241	268	199	71	176	70	142	130	
22.....	268	219	250	a 200	223	250	191	103	183	70	130	136	
23.....	268	219	259		223	254	183	113	183	63	118	155	
24.....	268	268	268		215	250	183	121	199	63	118	183	
25.....	278	259	241		207	250	241	113	169	59	113	183	
26.....	268	268	241		207	268	215	115	148	53	93	191	
27.....	268	259	250	207	250	199	113	133	50	89	191		
28.....	278	268	250	207	250	191	136	136	48	81	191		
29.....	278	268	223	a 200	250	183	191	124	42	77	199		
30.....	278	268	223		250	169	254	113	40	73	199		
31.....	288	223	223		250	268	268	268	42	70	199		
Month					Maximum	Minimum	Mean		Run-off in acre-feet				
October.....					298	219	272		16,700				
November.....					308	223	265		15,800				
December.....					308	223	262		16,100				
January.....					308	223	186		11,400				
February.....					308	223	265		14,700				
March.....					288	207	244		15,000				
April.....					308	169	239		14,200				
May.....					268	66	127		7,810				
June.....					308	113	203		12,100				
July.....					130	40	87.7		5,390				
August.....					152	42	97.7		6,010				
September.....					199	70	122		7,260				
The year.....							40		197		142,000		

a Estimated.

NORTH FORK OF SALMON RIVER AT NORTH FORK, IDAHO

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 17, T. 24 N., R. 21 E., one-fourth mile above mouth, 450 feet above bridge on Salmon River highway, and 1,000 feet from North Fork.

RECORDS AVAILABLE.—October, 1929, to September, 1930. At site 6 miles upstream and above Spring Creek from April to September, 1912.

EXTREMES.—Maximum discharge during year, 418 second-feet Apr. 24, 25, May 29 (gage height, 2.76 feet); minimum, 28 second-feet Nov. 21 (gage height, 1.40 feet).

REMARKS.—Records good except those for estimated periods, which are fair. No diversions.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		36	36			36	48	210	321	68	38	34
2		37				38	53	267	285	64	39	34
3		36				46	58	328	250	61	38	34
4		36	*35	*35	*34	34	64	321	220	58	38	34
5		36				35	68	302	200	58	40	34
6		38				36	71	279	187	61	40	35
7		38	37			34	87	256	225	61	40	35
8		37	36			34	92	235	225	58	38	36
9		34	36	34		34	118	215	225	58	37	36
10		38	38			34	113	196	225	92	47	36
11		37	61			36	107	179	225	83	44	37
12		34	46	*33	*36	37	113	162	215	68	44	39
13		34	43			36	124	155	205	61	44	36
14		36	43			36	118	171	200	58	44	37
15		36	43			36	118	183	179	56	44	36
16		38	41			37	113	200	152	51	42	36
17		37	36			37	102	230	148	48	41	36
18		36	36			41	96	240	134	46	40	36
19		36	36			35	44	250	127	46	39	36
20		34	40			35	43	96	250	121	46	36
21		28	34	*31		35	43	96	302	116	46	38
22	34	31	36			35	48	179	279	116	46	37
23	34	35	38			36	44	250	256	107	46	37
24	35		34			35	44	389	240	110	44	37
25	36		36			35	44	411	240	104	43	37
26		*36	36			35	53	374	245	96	41	36
27	36		36			36	51	348	245	85	40	35
28	36		35			46	285	334	83	38	35	38
29	36	36	36	*34		48	262	404	83	38	36	38
30	37	36	*35			48	245	396	78	38	35	35
31	36		*35			46		367		38	35	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acres-feet
October 22-31	37	34	35.7	0.167	0.06	708
November	38	28	35.7	.167	.19	2,120
December	61	34	37.9	.177	.20	2,350
January			33.0	.154	.18	2,030
February	37		35.5	.166	.17	1,970
March	53	34	40.6	.190	.22	2,500
April	411	48	156	.729	.81	9,280
May	404	155	256	1.20	1.38	15,700
June	321	78	169	.790	.88	10,100
July	92	38	53.5	.250	.29	3,290
August	47	35	39.1	.183	.21	2,400
September	41	34	36.4	.170	.19	2,170
The period						54,600

* Estimated.

MIDDLE FORK OF SALMON RIVER NEAR CAPE HORN, IDAHO

LOCATION.—Water-stage recorder in about sec. 34, T. 13 N., R. 11 E., 1,100 feet downstream from Little Beaver Creek and 1½ miles northwest of Cape Horn.

DRAINAGE AREA.—150 square miles.

RECORDS AVAILABLE.—September, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 946 second-feet May 30 (gage height, 4.77 feet); minimum (estimated), 35 second-feet Nov. 26–30.

1928–1930: Maximum discharge, 1,010 second-feet May 24, 1929; minimum, that of Nov. 26–30, 1929.

REMARKS.—Records good except those for estimated periods, which are poor. No diversions above station.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	81	72					62	509	723	237	113	89
2.....	81	74					64	551	652	231	111	* 88
3.....	80	67					71	628	578	225	109	* 87
4.....	80	68					78	605	534	215	115	86
5.....	81	68					89	582	504	206	109	86
6.....	78	68					109	578	530	197	117	86
7.....	81	66					132	530	628	191	111	91
8.....	101	69	* 90	* 55			158	492	723	186	107	94
9.....	101	69					188	459	723	191	119	87
10.....	91	69					197	435	748	203	123	98
11.....	86	63					222	427	772	188	141	134
12.....	84						264	427	723	177	161	113
13.....	82						295	463	628	171	177	101
14.....	80						288	509	556	169	153	98
15.....	78				* 50	* 55	244	534	513	156	132	94
16.....	78						212	564	500	153	125	91
17.....	84						200	605	492	148	121	89
18.....	82	* 45					194	652	467	143	121	87
19.....	78						200	652	435	139	111	86
20.....	76						241	675	419	139	107	86
21.....	76						309	796	392	134	103	84
22.....	75						403	699	361	132	101	92
23.....	72						484	628	357	132	100	105
24.....	72		* 80	* 50			605	605	338	132	96	98
25.....	74						628	605	316	127	96	94
26.....	74						582	628	295	123	94	92
27.....	84						547	699	284	121	94	91
28.....	81	* 35					471	796	270	119	94	89
29.....	75						435	896	257	119	92	87
30.....	75					59	467	946	247	113	91	87
31.....	72					59		821		113	89	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October.....	101	72	80.4	0.536	0.62	4,940
November.....	74		51.9	.346	.39	3,090
December.....			84.8	.565	.65	5,210
January.....			52.4	.349	.40	3,220
February.....			50.0	.333	.35	2,780
March.....			55.3	.369	.43	3,400
April.....	628	62	281.0	1.87	2.09	16,700
May.....	946	427	613.0	4.09	4.72	37,700
June.....	772	247	499.0	3.33	3.72	29,700
July.....	237	113	162.0	1.08	1.24	9,900
August.....	177	89	114.0	.760	.88	7,010
September.....	134	84	93.0	.620	.69	5,530
The year.....	946		179.0	1.19	16.18	129,000

* Estimated.

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 above mouth, and 7 miles northwest of Cape Horn.

DRAINAGE AREA.—180 square miles.

RECORDS AVAILABLE.—September, 1921, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,160 second-feet Apr. 25 (gage height, 3.30 feet); minimum, 46 second-feet Nov. 12 (gage height, 1.01 feet).

1921-1930: Maximum discharge, 3,120 second-feet May 26, 1928 (gage height, 5.3 feet); minimum, 44 second-feet Aug. 1, 2, 5, 6, 1926 (gage height, 1.03 feet).

REMARKS.—Records excellent except those for estimated periods, which are fair. No regulation or diversion above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	90	86						725		226	108	88
2	90	94						876	* 850	218	108	86
3	88	82						1,040		211	105	84
4	86	80						1,000	644	200	105	84
5	86	84						932	613	194	112	86
6												
7	86	90						932	638	184	110	88
8	86	76						758	687	177	103	90
9	103	86						675	732	171	101	103
10	117	84						644	719	171	108	101
11	112	101					* 310	607	712	184	135	108
12												
13	101	69						595	719	181	132	137
14	96	82						619	681	168	140	137
15	94	110						607	595	162	168	119
16	94	112						668	542	154	181	110
17	92	110						662	508	148	148	105
18												
19	92	105	* 110	* 70	* 65	* 80		681	480	142	132	101
20	96							706	469	140	127	98
21	108							777	442	137	122	96
22	98							790	410	135	117	92
23	92							770	400	132	108	92
24												
25	90							632	918	405	129	105
26	90							796	876	359	127	103
27	88							855	738	340	124	98
28	86	* 80						970	706	330	124	96
29	84							1,040	681	308	122	94
30												
31	86							985	706	285	117	94
	96							822	269	114	92	98
	110							744	256	112	92	96
	90							619	* 850	244	112	90
	88							607	237	110	90	92
	90									108	88	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	117	84	93.7	0.521	0.60	5,760
November	112		85.7	.476	.53	5,100
December			110	.611	.70	6,760
January			70	.389	.45	4,300
February			65	.361	.38	3,610
March			80	.444	.51	4,920
April	1,040		476	2.64	2.94	28,300
May	1,040	595	772	4.29	4.95	47,500
June		237	519	2.88	3.21	30,900
July	226	108	153	.850	.98	9,410
August	181	88	113	.628	.72	6,950
September	137	84	99.8	.554	.62	5,940
The year	1,040		220	1.22	16.59	159,000

* Estimated.

SOUTH FORK OF SALMON RIVER NEAR KNOX, IDAHO

LOCATION.—Staff gage in NW. $\frac{1}{4}$ sec. 11, T. 15 N., R. 6 E., one-eighth mile below Curtis Creek, $1\frac{1}{4}$ miles southwest of Knox cabin, and 21 miles north-east of Cascade.

DRAINAGE AREA.—92 square miles.

RECORDS AVAILABLE.—September, 1928, to September, 1930.

EXTREMES.—1928-1930: Maximum discharge not determined; minimum (estimated), 25 second-feet Dec. 4, 1929.

REMARKS.—Records fair except those for December to February, May to July, which are poor. No diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	* 34	43				* 40	89				* 46	
2.....	34	* 48				* 40	* 130				* 45	
3.....	* 35	53				* 40	195				* 44	
4.....	36	* 52				41	* 280		* 400	* 115	* 43	
5.....	* 36	* 51				* 40	* 290				* 43	
6.....	* 35	* 50				* 39	* 340				* 43	
7.....	34	50				38	* 380		402		41	
8.....	* 35		* 60	* 50	* 45	* 37	402		* 460	89	43	
9.....	* 37					* 36	* 390		* 520		43	* 41
10.....	* 39					* 35	* 370		* 550		43	
11.....	39					34	* 350		* 560		45	
12.....	* 41					* 35	* 320		* 480		66	
13.....	* 41					36	286		361		50	
14.....	41	* 35				* 37	* 260				58	
15.....	* 42					* 38	* 250				55	
16.....	* 42					* 39	* 240	* 500			45	
17.....	* 42					* 41	* 230				45	
18.....	43					43	* 220			* 75	43	33
19.....	* 45					* 49	* 210				43	31
20.....	48					53	209				43	
21.....	* 49				* 40	* 52			* 220		41	
22.....	* 49					* 51					39	
23.....	* 50		* 55	* 45		* 50					39	
24.....	* 50					* 50					38	
25.....	50	* 30				50		* 600			36	* 32
26.....	* 52					* 64					36	
27.....	* 54					82					34	
28.....	45					* 84				49	34	
29.....	* 45					* 85				* 48	33	
30.....	* 45					* 86				* 47	33	
31.....	* 44					* 88				* 47	* 33	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October.....	54	34	42.3	0.461	0.53	2,600
November.....	53		36.7	3.99	.45	2,180
December.....			57.4	.624	.72	3,530
January.....			47.4	.515	.59	2,910
February.....			42.5	4.62	.48	2,360
March.....	88	34	49.5	.538	.62	3,040
April.....		89	381	4.14	4.62	22,700
May.....			500	5.43	6.26	30,700
June.....	560		316	3.43	3.83	18,800
July.....		47	81.0	.880	1.01	4,980
August.....	66	33	42.7	.464	.53	2,630
September.....			37.1	4.03	.45	2,210
The year.....			136	1.48	20.09	98,600

* Estimated.

EAST FORK OF SOUTH FORK OF SALMON RIVER AT STIBNIT^a, IDAHO

LOCATION.—Water-stage recorder in about sec. 14, T. 18 N., R. 9 E., 30 feet below mouth of Meadow Creek and half a mile northeast of Stibnite post office.

DRAINAGE AREA.—19.5 square miles.

RECORDS AVAILABLE.—June, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 242 second-feet June 10 (gage height, 3.70 feet); minimum (estimated), 7 second-feet during parts of November, December, January, February, March.

1928-1930: Maximum discharge, that of June 10, 1930; minimum (estimated), 6 second-feet during parts of February, March, April, 1929.

REMARKS.—Records good except those for estimated periods, which are fair. No diversions above station. Gage-height record furnished by Yellow Pine Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	10	8					40		43	14	11
2	8	8						39		38	14	10
3	8	9	a 7	a 8			a 8	a 57	13c	35	14	10
4	8	11						a 74		33	14	11
5	8	8	7	8	a 7	a 7	8	a 90	11c	32	15	11
6	8	8	7						9c	31	14	11
7	8		7						197	30	15	11
8	8		7	a 8			a 14	a 75	208	28	14	13
9	9		8						21c	28	15	13
10	9		13	8	7	7	20	59	242	31	15	15
11	8	a 8	a 12				a 16		208	29	17	17
12	8		a 10	a 7			13		230	28	18	15
13	8		9		a 7		15	a 64	137	26	18	13
14	8		8				20		10c	25	18	12
15	8		10	7	7		23	68	128	22	15	12
16	8					a 7						
17	8						18		11c	22	15	12
18	8			a 7	a 7		17	a 77	128	22	14	11
19	8						a 18		110	22	14	11
20	8			7	7		a 19		110	21	13	10
21	8	a 7					21	86	110	21	13	10
22	8								110	21	13	10
23	8				a 7		20	a 90	102	21	13	11
24	8		a 9				20		9c	20	12	12
25	8				7		a 33		7c	20	12	11
26	8			a 7		a 8	46	92	7c	18	12	11
27	8	7					41		59	18	12	10
28	9	7			a 7		37		59	18	12	10
29	8	7					a 38	a 115	55	16	11	10
30	8	7					a 39		5c	16	11	10
31	10	7					42		47	15	11	10
	8					8		135		14	11	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	10	8	8.2	0.421	0.49	504
November	11		7.7	.395	.44	458
December	13		8.7	.446	.51	535
January			7.3	.374	.43	449
February			7.0	.359	.37	389
March			7.4	.380	.44	455
April	46		21.1	1.08	1.20	1,260
May	135	39	81.9	4.20	4.84	5,040
June	242	47	124	6.36	7.10	7,380
July	43	14	24.6	1.26	1.45	1,510
August	18	11	13.8	.708	.82	848
September	17	10	11.5	.590	.66	684
The year	242		26.9	1.38	18.75	19,500

^a Estimated.

EAST FORK OF SOUTH FORK OF SALMON RIVER NEAR STIBNITE, IDAHO

LOCATION.—Staff gage in about sec. 34, T. 19 N., R. 9 E., 200 feet below mouth of Sugar Creek and 3 miles north of Stibnite post office.

DRAINAGE AREA.—42.5 square miles.

RECORDS AVAILABLE.—June, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year (estimated), 460 second-feet June 11; minimum not determined.

1928-1930: Maximum discharge, that of June 11, 1930; minimum not determined.

REMARKS.—Records good except those for estimated periods, October to May, which are poor. No diversions above station. Gage-height record furnished by Yellow Pine Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....									390	95	30	19
2.....									330	89	30	19
3.....									280	79	30	19
4.....									220	76	30	19
5.....									190	65	30	19
6.....									162	65	30	19
7.....							50		240	63	29	19
8.....									350	58	29	22
9.....									400	58	29	23
10.....									440	79	28	28
11.....					16		63	150	460	58	28	32
12.....									380	55	34	29
13.....									300	55	34	25
14.....									204	53	32	21
15.....									200	51	30	20
16.....	20	18	22	16		17			200	50	28	19
17.....									220	48	28	19
18.....									210	43	26	19
19.....									190	39	25	19
20.....									170	39	25	19
21.....									160	39	24	18
22.....									160	38	22	18
23.....							60		150	38	22	18
24.....									150	38	22	18
25.....									140	38	22	18
26.....									140	38	22	18
27.....									130	37	20	18
28.....									120	34	20	18
29.....									113	33	19	19
30.....									99	32	19	18
31.....										31	19	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October.....			20	0.471	0.54	1,230
November.....			18	.424	.47	1,070
December.....			22	.518	.60	1,350
January.....			16	.376	.43	984
February.....			16	.376	.39	889
March.....			17	.400	.46	1,050
April.....			55.4	1.31	1.46	3,300
May.....			150	3.53	4.07	9,220
June.....	460	99	230	5.41	6.04	13,700
July.....	95	31	52.1	1.23	1.42	3,200
August.....	34	19	26.3	.619	.71	1,620
September.....	32	18	20.3	.478	.53	1,210
The year.....			53.6	1.26	17.12	38,800

EAST FORK OF SOUTH FORK OF SALMON RIVER NEAR YELLOW PINE, IDAHO

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 27, T. 19 N., R. 8 E., 200 feet above Forest Service highway bridge, $1\frac{1}{2}$ miles above Quartz Creek, and $1\frac{1}{2}$ miles east of Yellow Pine.

RECORDS AVAILABLE.—August, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 920 second-feet June 10 (gage height, 3.62 feet); minimum, 26 second-feet Oct. 30.

1928-1930: Maximum discharge, that of June 10, 1930; minimum, that of Oct. 30, 1929.

REMARKS.—Records good except those for estimated periods, which are fair. No diversions or regulation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	43						239	605	245	100	55
2	48	44						298	535	241	95	55
3	47	39						401	492	227	93	54
4	46	43					° 110	367	446	214	93	52
5	45	43						343	437	207	93	57
6	45	42						335	525	194	91	57
7	44	40					166	298	690	188	93	57
8	50	55			° 40	° 35		266	772	178	85	72
9	57							239	772	201	91	66
10	55						° 200	223	800	204	93	75
11	48							211	830	185	100	83
12	47							208	745	172	111	68
13	47							223	662	166	106	61
14	44							242	573	160	109	57
15	44							194	328	154	95	54
16	43		° 50	° 40				164	367	565	142	89
17	46					32		149	418	570	145	87
18	45							139	468	516	140	83
19	44							139	473	469	132	79
20	43	° 35						156	459	446	129	75
21	43					° 34		205	609	415	123	72
22	43					° 35		287	502	384	118	70
23	43							347	432	376	113	66
24	43					36		414	401	363	111	63
25	43							405	405	331	106	63
26	43							359	454	319	102	61
27	54					° 45		316	551	304	100	61
28	50							280	658	292	102	60
29	45							242	812	277	100	58
30	40							256	860	263	100	55
31	44					51			718		95	54

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	57	40	46.1	0.443	0.51	2,830
November	55		37.3	.359	.40	2,220
December			50	.481	.55	3,070
January			40	.385	.44	2,460
February			37.7	.362	.38	2,090
March	51	32	37.2	.358	.41	2,290
April	414		211	2.03	2.26	12,600
May	860	208	414	3.98	4.59	25,500
June	830	263	511	4.91	5.48	30,400
July	245	95	155	1.49	1.72	9,530
August	111	54	82.1	.789	.91	5,050
September	83	48	57.6	.554	.62	3,430
The year	860			1.35	18.27	101,000

° Estimated.

JOHNSON CREEK AT YELLOW PINE, IDAHO

LOCATION.—Water-stage recorder in NE. ¼ sec. 29, T. 19 N., R. 8 E., 700 feet above mouth and one-fourth mile southwest of Yellow Pine post office.

RECORDS AVAILABLE.—August, 1928, to September, 1930.

EXTREMES.—Maximum discharge during year, 1,980 second-feet May 29 (gage height, 4.69 feet); minimum, 26 second-feet Nov. 12 (gage height, 0.63 foot). 1928-1930: Maximum discharge, 2,200 second-feet May 23, 1929 (gage height, 4.95 feet); minimum, that of Nov. 12, 1929.

REMARKS.—Records excellent. Discharge interpolated Nov. 24-28, Dec. 12, Apr. 15. No diversions or regulation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	66	51	51	77	62	60	87	895	1,270	363	104	64
2.....	64	60	46	73	63	55	94	1,140	1,140	343	104	64
3.....	63	52	44	72	60	59	111	1,410	1,020	324	100	62
4.....	60	49	47	77	62	63	131	1,240	955	305	98	62
5.....	59	58	45	73	64	63	148	1,200	985	284	98	60
6.....	59	60	50	70	64	63	199	1,170	1,140	267	96	63
7.....	58	45	48	54	62	57	264	985	1,340	248	100	64
8.....	60	51	48	51	66	63	313	865	1,410	235	94	70
9.....	72	55	58	67	57	59	371	780	1,410	238	92	75
10.....	72	62	94	67	57	58	411	752	1,450	302	104	81
11.....	67	54	98	67	66	60	465	742	1,480	254	104	111
12.....	66	35	104	67	60	60	540	780	1,340	226	136	113
13.....	63	42	109	62	60	62	610	835	1,140	214	146	98
14.....	60	49	100	60	63	62	681	985	985	196	156	89
15.....	59	53	115	62	63	62	564	1,020	955	188	131	81
16.....	58	53	161	64	62	60	447	1,110	985	177	115	78
17.....	59	53	102	57	60	59	424	1,200	985	174	106	73
18.....	64	53	87	57	62	60	393	1,300	865	164	102	72
19.....	64	43	91	57	64	64	388	1,270	774	158	96	70
20.....	62	37	85	55	70	66	438	1,300	742	153	91	69
21.....	60	33	70	55	69	69	565	1,420	725	148	85	66
22.....	59	42	85	55	69	73	774	1,200	648	143	83	66
23.....	58	42	83	54	69	69	925	1,080	615	138	78	77
24.....	58	43	80	54	63	69	1,170	1,080	610	134	77	78
25.....	58	45	78	62	60	70	1,200	1,110	545	131	75	77
26.....	58	47	72	63	63	75	1,140	1,170	505	126	73	75
27.....	60	49	62	62	59	77	1,020	1,340	475	120	72	73
28.....	67	51	63	60	60	75	895	1,600	447	117	70	72
29.....	58	53	63	62	-----	78	774	1,760	411	115	70	70
30.....	47	51	72	60	-----	83	747	1,800	384	111	69	69
31.....	57	-----	77	62	-----	81	-----	1,480	-----	106	67	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October.....	72	47	61.1	0.287	0.33	3,760
November.....	62	33	49.0	.230	.26	2,920
December.....	161	44	77.0	.362	.42	4,730
January.....	77	51	62.5	.293	.34	3,840
February.....	70	57	62.8	.295	.31	3,490
March.....	83	55	65.6	.308	.36	4,080
April.....	1,200	87	543	2.55	2.84	32,300
May.....	1,800	742	1,160	5.45	6.28	71,300
June.....	1,480	384	925	4.34	4.84	55,000
July.....	363	106	200	.939	1.08	12,300
August.....	156	67	96.5	.453	.52	5,930
September.....	113	60	74.7	.351	.39	4,440
The year.....	1,800	33	282	1.32	17.97	204,000

GRANDE RONDE RIVER AT RONDOWA, OREG.

LOCATION.—Water-stage recorder in NW. ¼ sec. 23, T. 3 N., R. 40 E., 500 feet below mouth of Wallowa River at Rondowa.

RECORDS AVAILABLE.—October, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, 4,170 second-feet May 3 (gage height, 4.09 feet); minimum, 270 second-feet Nov. 21 (gage height, 0.80 foot). 1926-1930: Maximum discharge, 15,600 second-feet Mar. 11, 1928 (gage height, 7.70 feet); minimum, that of Nov. 21, 1929.

REMARKS.—Records fair except those estimated, Jan. 8 to Feb. 13, June 12-21, Aug. 11-26, Aug. 28 to Sept. 30, which are poor. Many irrigation diversions above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1.....	442	442	423	507	2,000	1,240	3,020	2,940	2,800	1,350	400
2.....	435	442	399	528		1,170	2,870	3,100	2,720	1,320	395
3.....	423	435	364	528		1,120	2,800	3,920	2,640	1,260	412
4.....	417	435	390	521		1,130	2,720	3,660	2,570	1,170	422
5.....	411	429	454	514		1,500	2,720	3,340	2,500	1,120	412
6.....	399	448	461	429	2,000	1,800	3,020	3,100	2,640	1,050	395
7.....	405	435	454	331		1,740	3,340	2,870	3,020	1,000	385
8.....	411	429	474	360		1,740	3,740	2,640	3,260	934	395
9.....	448	429	514			1,680	3,740	2,500	3,180	889	395
10.....	448	423	549			1,620	3,580	2,280	3,340	907	422
11.....	442	417	578			1,740	3,420	2,210	3,580	916	390
12.....	435	399	563			2,000	3,500	2,140	3,100	856	
13.....	435	364	630	2,000	2,070	3,660	2,210	800			
14.....	429	370	660	3,420	2,000	3,660	2,350	768			
15.....	429	381	698	3,260	1,870	3,420	2,720	712			
16.....	429	393	840	360	3,100	1,740	3,180	2,180	668	390	
17.....	429	423	744		2,800	1,620	2,940	3,340	2,600		610
18.....	429	417	660		2,720	1,500	2,720	3,340	562		
19.....	429	381	630		2,940	1,500	2,640	3,180	523		
20.....	429	342	585		3,180	1,740	2,570	3,340	504		
21.....	423	310	549	360	2,940	2,070	2,800	3,260	2,140	486	
22.....	423	381	528		2,570	2,640	3,180	2,870	1,940	462	
23.....	423	381	542		2,280	2,720	3,420	2,640	1,940	444	
24.....	423	400	535		1,940	2,940	4,000	2,570	1,800	439	
25.....	423	448	542		1,680	3,260	3,830	2,500	1,740	422	
26.....	423	461	549	360	1,560	3,500	3,740	2,420	1,620	406	
27.....	487	442	521		1,430	3,420	3,740	2,640	1,620	406	
28.....	487	442	487		1,320	3,340	3,660	3,100	1,560	406	
29.....	454	448	448		360	3,340	3,340	3,100	1,446	417	
30.....	448	448	454			3,340	3,100	3,180	1,390	417	
31.....	442	-----	521			3,180	-----	2,940	-----	400	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	487	399	433	26,600
November.....	461	310	413	24,600
December.....	840	364	540	33,200
January.....	528	-----	387	23,800
February.....	-----	-----	2,260	126,000
March.....	3,500	1,120	2,140	132,000
April.....	4,000	2,570	3,270	195,000
May.....	3,920	2,140	2,890	178,000
June.....	3,580	1,390	2,470	147,000
July.....	1,350	400	730	44,900
August.....	422	-----	391	24,000
September.....	-----	-----	370	22,000
The period.....	4,000.	310	1,360	977,000

CATHERINE CREEK NEAR UNION, OREG.

LOCATION.—Staff gage in SW. $\frac{1}{4}$ sec. 34, T. 4 S., R. 40 E., 5 miles southeast of Union.

RECORDS AVAILABLE.—February, 1918, to August, 1919; October, 1925, to September, 1930. May, 1906, to May, 1907, at station in sec. 3, T. 5 S., R. 40 E.; August, 1911, to December, 1912, and March to September, 1915, at station in SW. $\frac{1}{4}$ sec. 1, T. 5 S., R. 40 E.

EXTREMES.—Maximum discharge during year, 335 second-feet May 3 (gage height, 3.60 feet); minimum, 5 second-feet Nov. 19, 20.

1906-7, 1911-12, 1915, 1918-19, 1925-1930: Maximum discharge, 1,240 second-feet May 21, 1912; minimum, that of Nov. 19, 20, 1929.

REMARKS.—Records fair except those for February and March, which are poor. Station is above practically all diversions. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	23	26	8	14	55	23	153	181	190	62	12	10	
2	23	26	8	12	60	12	153	241	181	60	12	10	
3	23	26	8	11	126	40	153	335	172	58	12	11	
4	23	27	9	11	26	40	162	286	163	55	12	11	
5	23	29	9	12	24	46	192	241	163	53	12	12	
6	24	24	9	14	21	44	224	220	154	51	12	12	
7	24	21	10	12	21	42	235	220	154	49	12	12	
8	26	20	11	11	26	44	263	220	146	45	12	13	
9	29	18	12	13	21	44	252	220	146	43	12	13	
10	24	14	12	14	20	46	263	220	146	41	11	13	
11	24	13	12	18	20	46	263	200	146	39	11	13	
12	24	12	12	18	18	48	263	181	138	37	11	14	
13	24	12	14	20	33	53	263	181	130	35	11	14	
14	24	10	21	21	42	58	274	163	130	35	11	16	
15	24	9	38	24	38	46	263	164	130	33	11	16	
16	24	7	48	* 24	40	46	241	181	122	33	11	16	
17	24	7	29		42	42	220	220	122	31	11	16	
18	24	7	24		44	36	200	200	114	29	11	17	
19	24	5	21		55	46	172	200	114	29	11	17	
20	24	5	20		76	70	164	200	200	27	11	17	
21	24	* 7	20	* 24	55	63	181	190	200	26	11	19	
22	24		20		55	60	220	190	172	24	11	19	
23	24		20		52	65	230	181	163	22	11	19	
24	24		18		27	46	310	181	154	20	11	19	
25	24	10	18	29	43	84	286	172	130	19	11	19	
26	24	7	14	55	38	110	274	172	114	17	10	19	
27	25	7	12	38	26	126	263	163	99	14	10	20	
28	25	8	12	36	15	126	220	154	85	14	10	20	
29	25	7	12	29	* 30	135	200	172	73	13	10	20	
30	25	7	12	29		144	200	220	68	13	10	22	
31	25	14	* 30	* 7	* 30	144	200	200	200	13	10	-----	
Month						Maximum	Minimum		Mean		Run-off in acre-feet		
October						29	23		24.2		1,490		
November						29	5		13.2		786		
December						48	8		16.4		1,010		
January						55	11		22.4		1,380		
February						126	15		40.6		2,250		
March						144	12		64.4		3,960		
April						310	153		225		13,400		
May						335	154		202		12,400		
June						200	68		141		8,390		
July						62	13		33.5		2,060		
August						12	10		11.1		682		
September						22	10		15.6		928		
The year						335	5		67.3		48,700		

* Estimated.

WALLOWA RIVER ABOVE WALLOWA LAKE, NEAR JOSEPH, OREG.

LOCATION.—Water-stage recorder in NE. $\frac{1}{4}$ sec. 29, T. 3 S., R. 45 E., 600 feet below junction of East and West Forks of Wallowa River and 6 miles south of Joseph.

RECORDS AVAILABLE.—February, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 440 second-feet June 10 (gage height, 1.99 feet); minimum, 13 second-feet Mar. 24 (gage height, 0.57 foot). 1924-1930: Maximum discharge, 1,250 second-feet June 26, 1927 (gage height, 2.65 feet); minimum, that of Mar. 24, 1930.

REMARKS.—Records good. Water diverted from East Fork for power purposes is returned to river above station; no other diversions above gage. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	23	21	20	25	26	22	25	119	195	238	56	35
2.....	23	21	20	27	25	22	28	159	176	250	58	34
3.....	21	21	20	26	22	21	33	199	159	238	58	33
4.....	21	21	20	25	22	21	35	165	146	234	56	32
5.....	21	21	20	26	28	20	41	146	146	234	55	35
6.....	21	22	21		24	20	53	130	180	238	56	35
7.....	21	23	21		25	19	78	116	268	222	55	38
8.....	23	22	21		25	18	98	108	327	210	55	34
9.....	24	22	24		24	18	103	100	346	206	56	34
10.....	24	22	33		23	17	116	100	382	222	56	33
11.....	23	22	30	23	22	17	113	98	392	202	56	42
12.....	23	22	34		22	17	127	100	377	191	60	38
13.....	23	22	47		23	17	146	105	322	183	56	35
14.....	22	22	48		25	17	142	127	299	180	51	33
15.....	22	21	50		23	17	119	169	313	172	48	32
16.....	22	21	51	18	23	16	103	218	366	162	48	31
17.....		20	41		23	15	96	234	382	139	50	32
18.....		20	37		24	16	93	238	327	124	48	32
19.....		20	37		24	16	91	242	308	113	48	30
20.....		19	34	17	27	17	96	263	372	103	47	31
21.....		19	33		25	18	113	234	341	96	44	31
22.....		18	31		23	18	146	195	281	93	42	32
23.....		18	31	19	21	19	176	169	246	91	41	31
24.....		17	28	18	26	19	206	165	230	86	40	31
25.....		20	27	18	20	20	183	165	234	86	38	31
26.....		20	30	17	22	21	176	172	250	84	37	30
27.....	23	20	31	17	25	21	156	218	272	80	37	28
28.....	23	20	27	17	23	22	139	294	268	69	37	28
29.....	22	21	26	19		23	122	294	234	67	37	28
30.....	21	20	26	20		24	110	281	230	65	35	30
31.....	22		25	20		24		230		58	35	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	24	17	21.5	1,320
November.....	23	20	20.6	1,230
December.....	51	20	30.5	1,880
January.....	28	20	20.8	1,280
February.....	27	20	23.8	1,320
March.....	24	15	19.1	1,170
April.....	206	25	109	6,490
May.....	294	98	179	11,000
June.....	392	146	279	16,600
July.....	250	58	153	9,410
August.....	60	35	48.3	2,970
September.....	42	28	32.6	1,940
The year.....	392	15	78.2	56,600

• Estimated.

EAST FORK OF WALLOWA RIVER NEAR JOSEPH, OREG.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ sec. 29, T. 3 S., R. 45 E., one-fourth mile above mouth, 1 mile above Wallowa Lake, and 6 miles south of Joseph.

RECORDS AVAILABLE.—July, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 58 second-feet June 20 (gage height, 1.40 feet); minimum, 0.1 second-foot Dec. 7 (gage height, 0.20 foot).
1924–1930: Maximum discharge, 203 second-feet June 26, 1927 (gage height, 2.20 feet); minimum, that of Dec. 7, 1929.

REMARKS.—Records fair except those estimated, which are poor. Practically entire low-water flow diverted 1 mile upstream for power use.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	4.5	3.2	2.4	1.4		0.8	.7	9.7	24	25		3.5
2.....	4.5	3.2	1.7	1.2		1.0	.8	13	26	26		3.5
3.....	4.3	3.2	1.4	1.0		.9	.8	21	23	24		5.3
4.....	4.5	3.5	.6	1.0		1.0	.9	20	21	24		5.3
5.....	2.9	2.7	.3			.8	.9	16	20	22	16	8.2
6.....	4.5	3.3	.5			.6	4.4	15	21	23		4.6
7.....	4.0	3.2	.1			.8	7.9	14	22	22		4.4
8.....	4.3	2.9	2.2		a 1.0	.8	8.2	13	24	20	8.6	4.9
9.....	4.9	3.6	1.0			1.1	8.6	11	26	27	9.0	4.6
10.....	4.9	3.6	3.5			.7	8.2	10	30	23	7.9	3.5
11.....	4.3	3.5	2.1			.8	7.2	11	27	32	7.9	7.6
12.....	4.3	a 3.0	2.7			.6	7.9	11	33	20	7.9	7.9
13.....	4.3		3.5			.7	9.3	11	38	21	7.6	5.3
14.....	4.2		3.5			.7	8.6	11	33	20	7.6	6.2
15.....	3.8		4.4			.8	6.5	14	40	19	7.2	4.0
16.....	3.8		3.5		1.3	.9	7.2	20	44	18	7.2	4.0
17.....	4.5		2.9		1.0	.6	6.5	21	50	18	7.2	5.8
18.....	4.5		2.5		1.1	.6	7.9	20	44	17	7.2	4.4
19.....	4.2		2.7		1.1	.7	7.2	21	43	17	6.5	5.8
20.....	4.3	a 2.0	2.9		1.0	.6	9.0	26	56	18	5.1	3.5
21.....	4.3		2.7		1.0	.7	10	23	47	14	4.9	4.4
22.....	4.2		2.1		.8	.8	11	21	38	13	4.4	4.0
23.....	4.0		1.0		1.1	.8	12	21	36	12	5.8	3.5
24.....	3.8		1.9		.6	.7	21	21	28	12	7.2	3.4
25.....	3.8		2.1		.7	.8	17	20	27	11	6.2	3.5
26.....	3.8		2.4		.8	.8	15	20	26	15	5.8	3.5
27.....	4.5		2.1		1.0	.7	15	20	28	20	6.5	2.7
28.....	4.2	2.4	1.7		.7	.8	13	23	29	a 18	6.5	4.0
29.....	4.0	2.1	2.1			.8	10	26	30	a 16	6.2	4.2
30.....	3.8	1.9	1.2			1.0	10	26	26	a 16	5.6	2.9
31.....	3.8		1.7			.9		23		a 16	3.7	
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	4.9					2.9			4.18		257	
November.....	3.6								2.51		149	
December.....	4.4					.1			2.11		130	
January.....									a 1.0		61	
February.....									.97		54	
March.....						1.1			.78		48	
April.....						21			.7		501	
May.....						26			9.7		1,090	
June.....						56			20		1,900	
July.....						32			11		1,190	
August.....									3.7		539	
September.....						8.2			2.7		274	
The period.....	56					.1			8.57		6,190	

a Estimated.

WALLOWA FALLS POWER PLANT TAILRACE NEAR JOSEPH, OREG.

LOCATION.—Staff gage in SE. $\frac{1}{4}$ sec. 29, T. 3 S., R. 45 E., one-fourth mile above point where channel discharges into West Fork of Wallowa River and 6 miles south of Joseph.

RECORDS AVAILABLE.—August, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 13 second-feet Sept. 29 (gage height, 0.74 foot); no flow at times.

1924-1930: Maximum discharge, 16 second-feet Jan. 9, 17, 1928 (gage height, 0.80 foot).

REMARKS.—Records fair. Flow regulated by discharge through nozzle for impulse wheel in power house. Water diverted at dam on East Fork of Wallowa River into conduit 1 mile above power house and discharged into West Fork one-fourth mile downstream.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	6.7	7.1	7.1	8.0	7.8	7.8	8.0	7.6	6.5	8.5	0	7.1
2.....	6.7	7.8	8.5	7.8	7.4	7.4	7.8	7.6	7.8	8.5	0	7.8
3.....	7.6	6.7	8.0	7.8	7.8	8.0	7.8	7.6	7.6	8.5	0	8.0
4.....	6.7	8.0	8.2	7.4	7.6	8.0	6.7	7.1	7.8	7.4	0	7.8
5.....	6.7	7.1	8.5	7.4	7.1	7.8	7.8	7.6	7.8	7.8	0	8.0
6.....	6.7	6.9	8.0	8.0	7.1	7.8	7.1	8.0	7.6	6.9	2.5	7.8
7.....	6.7	8.0	8.5	8.0	8.0	7.6	7.8	8.2	8.2	8.5	7.8	7.4
8.....	7.8	7.6	7.4	8.0	7.8	7.8	8.0	8.2	6.9	8.5	7.8	8.2
9.....	6.7	7.1	8.7	7.8	7.4	7.1	7.6	8.2	8.0	4.9	8.0	8.2
10.....	6.9	6.7	8.5	7.8	8.0	7.8	7.8	8.5	7.4	8.0	7.4	8.7
11.....	6.7	7.1	8.5	7.8	8.0	7.8	7.8	6.9	8.0	3.3	8.0	8.2
12.....	6.7	8.0	8.2	7.4	8.0	7.6	8.0	7.6	8.5	8.2	8.0	7.8
13.....	6.7	7.1	8.5	7.8	8.0	7.8	7.1	8.0	8.2	4.3	8.0	8.5
14.....	6.7	7.6	7.6	6.9	7.8	7.8	8.2	8.0	8.2	8.5	7.8	6.8
15.....	6.7	7.6	6.9	7.8	7.8	7.8	8.2	8.0	6.7	8.5	6.9	8.2
16.....	6.9	7.6	8.2	7.8	7.4	7.1	8.0	8.0	7.8	8.5	8.0	8.2
17.....	6.7	6.7	8.5	8.0	7.6	7.6	8.2	8.2	7.8	8.5	7.8	8.2
18.....	6.7	7.1	8.5	8.0	7.8	7.6	8.2	6.9	7.8	8.5	8.2	8.0
19.....	6.9	7.6	8.5	8.0	7.6	7.4	8.0	8.0	7.8	8.7	8.5	8.0
20.....	6.7	7.6	8.0	8.0	7.6	7.8	6.9	8.2	7.4	6.9	8.2	8.2
21.....	6.7	7.6	7.6	8.0	7.6	7.8	8.2	8.0	7.6	8.2	8.2	6.9
22.....	6.7	8.0	7.6	8.0	7.8	6.2	8.0	7.8	6.9	8.2	8.5	8.0
23.....	7.6	8.2	8.2	8.0	7.4	7.1	8.0	7.6	7.8	7.8	8.2	8.2
24.....	6.9	7.4	8.0	8.0	7.8	6.7	7.8	7.4	8.2	7.8	7.1	8.5
25.....	6.9	8.2	6.9	8.0	8.0	8.0	7.8	6.7	8.2	7.6	8.5	8.5
26.....	7.1	8.0	7.6	7.6	7.8	7.6	7.8	7.8	8.0	2.7	8.5	8.2
27.....	6.7	8.0	8.5	8.0	7.6	7.6	6.9	8.0	8.0	0	8.2	8.5
28.....	7.1	7.6	8.0	8.0	7.6	7.6	7.8	7.8	8.2	0	8.0	7.4
29.....	7.1	8.0	7.1	8.0	-----	7.6	7.8	8.0	6.9	0	8.0	8.5
30.....	7.1	8.2	8.2	8.0	-----	7.1	7.4	7.1	6.9	0	8.2	8.5
31.....	7.1	-----	8.5	8.0	-----	8.0	-----	7.4	-----	0	6.9	-----
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	7.8					6.7			6.89		424	
November.....	8.2					6.7			7.54		440	
December.....	8.7					6.9			8.03		494	
January.....	8.0					6.9			7.84		482	
February.....	8.0					7.1			7.69		427	
March.....	8.0					6.2			7.57		465	
April.....	8.2					6.7			7.75		461	
May.....	8.5					6.7			7.74		476	
June.....	8.5					6.5			7.68		457	
July.....	8.7					0			6.25		384	
August.....	8.5					0			6.49		399	
September.....	8.7					6.8			8.01		477	
The year.....	8.7					0			7.45		5,400	

HURRICANE CREEK NEAR JOSEPH, OREG.

LOCATION.—Water-stage recorder in NE. ¼ sec. 3, T. 3 S., R. 44 E., 175 feet above intake of Moonshine ditch and 3½ miles southwest of Joseph.

RECORDS AVAILABLE.—April to September, 1915; April, 1924, to September, 1930.

EXTREMES.—Maximum discharge during year, 403 second-feet June 10 (gage height, 2.02 feet); minimum, 12 second-feet Jan. 9, 23–31.

1915, 1924–1930: Maximum discharge, 716 second-feet May 26, 1928 (gage height, 2.65 feet); minimum, 12 second-feet Feb. 19, Mar. 15–18, 1929, Jan. 9, 23–31, 1930.

REMARKS.—Records good except those estimated, which are fair. No diversions above station. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	17	14	14	14		22		119	185	49	28
2	22	17	14	14	15		26		112	182	47	27
3	21	17	14	14	16	14	28		101	170	44	26
4	22	16	14	14	17		30		99	168	42	26
5	20	15	14	16	18		32	97	101	173	39	29
6	19	15	14	16	16	14	43		144	165	38	28
7	18	15	14	16	16		55		228	151	38	28
8	22	16	14	14	16		63		238	143	38	28
9	22	16	15	12	16		65		241	148	38	27
10	20	16	16	13	15	14	67	71	300	165	38	29
11	21	17	17	13	14		73	69	300	138	39	35
12	21	17	18	13	14		87	75	265	143	39	
13	20	18	20	14	15	14	94	91	232	135	39	
14	19	18	22	14	17	14	89	109	208	130	39	30
15	18	18	24		17	14	80	136	235	117	39	
16	18	18	25		19	14	69	166	282	106	39	
17	18	18	22		20	14	67	176	248	95	38	24
18	18	18	19	13	20	14	65	176	212	86	38	24
19	18	18	19		20	15	69	166	202	78	36	23
20	18	18	18		20	16	73	182		72	36	23
21	17	18	16			17	89	153		68	35	22
22	17	18	16			19	114	130		65	34	22
23	17	17	15	12			136	122	198	65	34	21
24	17	17	14		18		150	119		61	32	21
25	17	17	14				144	122		57	32	20
26	16	16	14	12		20	144	133		57	32	18
27	20	15					139	185	193	54	31	18
28	18	14			15		134	222	179	52	31	20
29	18	14	14				128	195	170	52	29	21
30	18	14					123	169	170	52	29	21
31	17			12		21		139		50	28	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	22	16	19.0	1,170
November	18	14	16.6	988
December	25		16.3	1,000
January			13.2	812
February			17.0	944
March			16.2	996
April	150	22	83.3	4,960
May	222		128	7,870
June	300	99	199	11,800
July	185	50	109	6,700
August	49	28	36.8	2,260
September	35	18	25.3	1,510
The year	300		56.7	41,000

LOSTINE RIVER NEAR LOSTINE, OREG.

LOCATION.—Water-stage recorder in NW. $\frac{1}{4}$ sec. 34, T. 1 S., R. 43 E., 10 miles above mouth and $3\frac{1}{2}$ miles south of Lostine.

RECORDS AVAILABLE.—August, 1912, to March, 1914; April to September, 1915; July, 1925, to September, 1930.

EXTREMES.—Maximum discharge during year, about 1,090 second-feet June 11 (gage height, 5.12 feet); minimum, 12 second-feet Nov. 18, Dec. 3.

1912-1914, 1915, 1925-1930: Maximum discharge, 2,540 second-feet May 27, 1913; minimum, 12 second-feet Nov. 18, 1928, Nov. 19, Dec. 3, 1929.

REMARKS.—Records good except those estimated, which are fair. No large diversions above station. Flow regulated to small extent by storage in Minam Lake Reservoir. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	• 25	22	17	23	23	38	81	• 428	400	338	61	26
2.....	• 24	23	16	23	28	34	83	• 466	• 381	325	56	26
3.....	• 23	22	14	24	29	31	83	505	• 362	293	55	26
4.....	22	21	16	24	32	29	83	375	• 344	281	55	26
5.....	22	20	16	22	36	25	110	325	325	276	60	28
6.....	22	22	18	17	39	26	155	290	430	269	73	• 26
7.....	21	20	18	18	38	30	236	261	640	236	77	• 25
8.....	24	20	18	17	• 37	34	281	228	7 5	218	77	• 24
9.....	29	20	20	17	• 36	35	278	202	745	218	76	23
10.....	26	20	25	18	• 34	35	272	188	848	232	75	26
11.....	23	19	23		32	36	290	183	935	206	71	34
12.....	23	15	24		30	39	350	197	• 772	201	66	41
13.....	22	14	29		29	39	400	243	610	193	62	33
14.....	21	18	34		30	37	362	325	530	176	• 55	30
15.....	20	19	43		37	37	350	445	610	157	48	28
16.....	20	19	49		38	38	312	580	635	147	46	26
17.....	21	15	36		39	38	• 260	610	670	134	43	25
18.....	23	13	32		43	41	208	655	535	126	41	25
19.....	22	12	31		46	42	204	565	535	120	39	25
20.....	22		30		51	41	210	565	730	110	39	25
21.....	21		24	• 18	53	44	• 288	490	530	99	37	24
22.....	20	• 16	28		50	51	• 366	430	475	94	36	24
23.....	20		26		49	49	445	375	415	88	34	• 24
24.....	20		26		47	49	505	362	670	83	32	25
25.....	20		25		44	53	430	362	338	86	31	25
26.....	20	21	24		44	58	430	430	470	82	31	25
27.....	26	• 20	22		44	60	375	595	470	77	30	24
28.....	26	• 19	22		38	62	312	745	375	76	30	23
29.....	23	18	20			64	• 351	700	325	74	29	27
30.....	20	18	22			73	• 389	595	325	72	28	26
31.....	22		21			73		475		67	27	
Month	Maximum			Minimum			Mean			Run-off in acre-feet		
October.....	29			20			22.4			1,380		
November.....	23			18.2			18.2			1,080		
December.....	49			14			24.8			1,520		
January.....	24			18.7			18.7			1,150		
February.....	53			23			38.4			2,130		
March.....	73			25			43.3			2,660		
April.....	505			81			283			16,800		
May.....	745			183			426			26,200		
June.....	935			325			539			32,100		
July.....	338			67			166			10,200		
August.....	77			27			49.0			3,010		
September.....	41			23			26.5			1,580		
The year.....	935			138			138			99,800		

BEAR CREEK NEAR WALLOWA, OREG.

LOCATION.—Water-stage recorder in NW. ¼ sec. 3, T. 1 S., R. 42 E., at bridge 5½ miles southwest of Wallowa.

RECORDS AVAILABLE.—April, 1924, to September, 1930. April to September, 1915, at site half a mile downstream.

EXTREMES.—Maximum discharge during year, 580 second-feet about June 10 (gage height, 3.05 feet); minimum, 4.9 second-feet Nov. 20 (gage height, 0.81 foot).

1915, 1924-1930: Maximum discharge, 1,480 second-feet June 8, 1927 (gage height, 4.55 feet); minimum, that of Nov. 20, 1929.

REMARKS.—Records fair. No diversions above station. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	8.0	8.5	8.5	19	61	41	108		264	96	15	7.7
2.....	7.9		9.8	19	137	40	112		231	94	15	7.3
3.....	7.8		11	18	115	38	123		222	83	14	6.9
4.....	7.7		14	18	60	37	130		202	77	14	6.9
5.....	7.7	8.3	9.8		60	38	160		196	72	14	6.9
6.....	7.7		7.7		67	38	222	225	205	67	14	9.0
7.....	8.1	8.1	6.9	13		37	256		256	60	15	8.1
8.....	9.8	9.8	7.7			38	299		378	54	14	7.7
9.....	12	10	11			39	295		400	52	14	
10.....	9.8	9.8	12		66	39	264	145	430	54	14	
11.....	9.4	9.4	11	10		42	253	140	450	42	13	
12.....	9.4	11	14			49	279	153	350	41	12	
13.....	9.0	12	16		63	64	299	184	249	40		8.8
14.....	9.0	16	16		85	66	275	218	238	37		
15.....	8.5	16	20		87	63	218	338	238	33		
16.....	8.5	16	19		85	53	178	400	264	29		
17.....	9.4	14	20		89	49	155	410	231	27	11	
18.....	9.4	12	20		87	46	140	378	196	25		
19.....	9.4	10	20		92	45	142	360	175	25		7.3
20.....	9.8	9.0	20		94	53	161	430	264	23		7.3
21.....	9.4		20	12	85	60	222	338	225	22		7.3
22.....	9.4		19		78	78	299	271	184	21	9.4	7.3
23.....	9.4		19		70	87	338	249	158	20	9.8	7.7
24.....	9.4		18		67	89	400	253	142	20	9.8	8.5
25.....	9.4	9.0	18		57	91	328	249	137	20	9.8	8.5
26.....	9.8		18		52	98	303	271	137	19	9.4	8.5
27.....	15		17		48	102	275	351	135	18	9.4	8.1
28.....	11		16		43	104	235	440	128	18	8.5	11
29.....	9.8	9.0	22			108	202	396	106	17	8.1	12
30.....	9.0	9.0	33			117	225	338	98	16	8.1	11
31.....	9.0		19			112		301		16	7.7	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	15	7.7	9.32	573
November.....	16		10.1	601
December.....	33	6.9	15.9	978
January.....	19		13.0	799
February.....	137	43	74.2	4,120
March.....	117	37	63.3	3,890
April.....	400	108	230	13,700
May.....	440		279	17,200
June.....	450	98	230	13,700
July.....	96	16	39.9	2,450
August.....	15	7.7	11.5	707
September.....	12	6.9	8.43	502
The year.....	440	6.9	81.6	59,200

• Estimated.

ASOTIN CREEK NEAR ASOTIN, WASH.

LOCATION.—Staff gage in sec. 20, T. 10 N., R. 45 E., half a mile above Washington Water Power Co.'s diversion and 8 miles west of Asotin.

DRAINAGE AREA.—171 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1930. At practically same site March, 1904, to November, 1906, August, 1910, to October, 1911.

EXTREMES.—Maximum discharge during year, 160 second-feet May 3 (gage height, 1.67 feet): minimum (estimated), 19 second-feet Jan. 18, 21, 22.

1904-1906, 1910-11, 1928-1930: Maximum discharge, 1,180 second-feet Apr. 15, 1904 (gage height, 4.3 feet, former datum); minimum, that of Jan. 18, 21, 22, 1930.

REMARKS.—Records good except those for period of ice effect, Jan. 10 to Feb. 1, which are poor. No important diversion or regulation above station. Results of several discharge measurements furnished by Washington Water Power Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept.
1.....	31	31	30	36	36	55	87	85	63	40	27	25
2.....	31	31	30	36	60	55	81	85	63	40	27	25
3.....	30	31	31	36	53	48	81	157	61	38	28	24
4.....	30	30	29	35	51	48	81	140	61	38	28	24
5.....	30	31	31	35	47	51	75	136	53	36	26	26
6.....	30	33	31	35	47	50	77	133	53	34	26	26
7.....	30	31	31	35	51	50	85	118	53	32	26	28
8.....	30	31	31	36	53	48	98	110	50	34	26	28
9.....	33	31	35	34	65	46	95	95	47	34	26	27
10.....	31	33	36		65	41	85	91	46	36	26	28
11.....	31	31	39		83	41	81	89	45	35	26	30
12.....	30	31	39		83	46	81	85	45	34	26	30
13.....	30	30	39	25	81	47	81	81	43	33	26	28
14.....	30	30	50		89	48	103	81	42	32	26	28
15.....	30	30	67		57	48	100	81	42	32	26	28
16.....	30	30	62		73	50	100	81	45	32	30	28
17.....	30	31	55		98	46	93	81	45	32	28	28
18.....	31	33	50		95	43	81	77	41	32	28	27
19.....	31	33	46		95	46	81	77	40	31	28	27
20.....	31	29	44	20	110	42	77	77	45	31	28	26
21.....	31	29	42		105	43	79	73	47	32	28	26
22.....	30	29	41		98	56	87	71	46	31	27	34
23.....	30	35	39		87	57	87	68	47	30	27	33
24.....	30	30	39		89	60	105	66	48	31	26	32
25.....	30	33	39		68	62	110	63	43	30	26	32
26.....	30	33	39		65	89	105	62	42	30	27	30
27.....	30	33	37	25	65	93	118	59	41	30	26	30
28.....	33	33	37		56	93	113	57	42	29	24	31
29.....	30	33	37			91	98	57	42	28	25	36
30.....	31	31	36			91	91	66	40	28	24	34
31.....	31		36			91		63		28	24	
Month	Maximum					Minimum			Mean		Run-off in acre-feet	
October.....	33					30			30.5		1,880	
November.....	35					29			31.2		1,860	
December.....	67					29			39.6		2,430	
January.....	36								26.7		1,640	
February.....	110					36			72.3		4,020	
March.....	93					41			57.3		3,520	
April.....	118					75			90.5		5,390	
May.....	157					57			86.0		5,290	
June.....	63					40			47.0		2,800	
July.....	40					28			32.7		2,010	
August.....	30					24			26.5		1,630	
September.....	36					24			28.6		1,700	
The year.....	157								47.2		34,200	

SELWAY RIVER NEAR LOWELL, IDAHO

LOCATION.—Staff gage in sec. 30, T. 32 N., R. 8 E., at O'Hara ranger station, one-fourth mile above O'Hara Creek and 7 miles above Lowell post office.

DRAINAGE AREA.—1,510 square miles.

RECORDS AVAILABLE.—April, 1911, to September, 1912; October, 1929, to September, 1930.

EXTREMES.—Maximum discharge during year, 14,600 second-feet Apr. 24, 25 (gage height, 6.80 feet); minimum discharge (estimated), 270 second-feet Jan. 10–15; minimum gage height, 0.10 foot Nov. 21, Dec. 4.

REMARKS.—Records good except those estimated, Jan. 10 to Feb. 23, which are fair. No diversions.

Daily and monthly discharge, in second-feet, 1929–30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept
1		530	530	750	1,500	1,110	3,000	8,600	9,160	3,000	710	410
2		530	470	692		890	3,000	9,160	8,880	2,820	710	410
3		565	360	635		840	3,180	12,100	8,050	2,640	710	410
4		530	310	670		1,050	3,960	10,900	7,240	2,470	710	440
5		500	410	750		1,050	4,160	10,000	6,720	2,300	795	470
6		530	750	710	1,500	995	5,250	11,200	7,510	2,300	750	500
7		530	600	600		940	6,720	8,880	9,160	2,140	670	530
8		500	530	530		940	7,510	7,780	10,600	1,980	670	530
9		470	530	410		890	7,780	7,510	9,440	1,830	635	600
10		500	840			890	7,510	6,720	9,160	1,830	670	670
11		530	995	270	1,700	840	7,510	6,460	10,300	1,690	750	890
12		470	840			1,110	7,780	6,980	8,880	1,290	670	840
13		410	1,050			1,360	8,880	7,510	7,510	1,550	710	795
14	470	385	1,110			1,290	10,600	8,600	6,460	1,420	750	710
15	470	440	1,980			1,230	10,000	10,300	5,960	1,360	750	635
16	500	470	2,470	400	1,700	1,170	8,050	10,900	6,460	1,290	710	600
17	500	530	1,690			1,170	7,240	11,500	6,980	1,290	670	530
18	500	500	1,290			1,170	6,460	12,100	5,960	1,170	635	530
19	530	530	1,050			1,290	7,510	10,900	5,250	1,110	635	500
20	470	410	940			1,420	7,240	11,500	5,020	1,050	635	470
21	470	310	750	450	1,550	1,550	8,600	12,100	5,250	995	600	470
22	470	470	750			2,300	11,500	10,000	4,800	995	600	470
23	470	600	840			2,300	13,000	8,880	4,160	940	565	600
24	470	530	840			1,690	2,140	14,600	8,600	4,370	940	530
25	470	750	750			1,550	3,370	14,600	8,600	3,760	940	500
26	470	670	795	450	1,420	3,960	13,000	8,050	3,560	890	470	635
27	600	600	750			1,230	3,760	12,100	8,320	3,370	840	470
28	750	565	670			1,170	3,180	11,500	10,600	3,760	795	470
29	670	530	635				3,000	9,730	11,800	3,370	795	440
30	565	500	500				3,180	8,880	12,700	3,000	750	440
31	530		840				3,000		11,800		750	410

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acres-feet
October 14–31	750	470	521	0.345	0.23	18,600
November	750	310	513	.340	.38	30,500
December	2,470	310	867	.574	.66	53,300
January			462	.306	.35	28,400
February			1,580	1.05	1.09	87,800
March	3,960	840	1,720	1.14	1.31	106,000
April	14,600	3,000	8,360	5.54	6.18	497,000
May	12,700	6,460	9,710	6.43	7.41	597,000
June	10,600	3,000	6,470	4.28	4.78	385,000
July	3,000	750	1,500	.993	1.14	92,200
August	795	410	627	.415	.48	38,600
September	890	410	582	.385	.43	34,600
The period						1,970,000

CLEARWATER RIVER AT KAMIAH, IDAHO

LOCATION.—Chain gage in sec. 1, T. 33 N., R. 3 E., at highway bridge at Kamiah, 6 miles below mouth of South Fork of Clearwater River.

DRAINAGE AREA.—4,850 square miles.

RECORDS AVAILABLE.—August, 1910, to September, 1930.

EXTREMES.—Maximum discharge during year, 31,000 second-feet Apr. 25 (gage height, 10.45 feet); minimum, 330 second-feet Nov. 22 (gage height, 1.28 feet).

1910-1930: Maximum discharge, 76,600 second-feet May 26, 1913 (gage height, 16.1 feet); minimum, that of Nov. 22, 1929.

REMARKS.—Records good except those estimated, Jan. 11 to Feb. 2, Mar. 31, Apr. 2-4, which are fair. Practically no diversions or regulation above station. Gage-height record furnished by United States Weather Bureau.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun?	July	Aug.	Sept.
1	1,180	1,290	1,120	1,640	1,100	2,480	7,110	19,800	23,100	6,530	1,640	970
2	1,120	1,290	1,120	1,520	1,500	2,330	9,000	19,300	22,500	6,530	1,520	970
3	1,070	1,180	1,120	1,400	1,770	2,330		21,400	22,000	5,980	1,520	970
4	1,020	1,180	1,180	1,400	1,900	2,330		23,100	18,800	5,210	1,520	970
5	970	1,070	1,180	1,460	2,330	2,330	10,500	22,500	17,300	4,740	1,520	970
6	970	1,180	1,180	1,520	3,890	2,970	12,000	21,400	18,800	4,300	1,520	1,020
7	970	1,180	1,240	1,180	3,690	2,480	15,900	19,800	22,000	4,300	1,620	1,070
8	1,020	1,640	1,180	1,120	3,500	2,480	17,300	17,300	22,000	3,890	1,520	1,070
9	1,070	1,180	1,240	1,020	2,800	2,330	18,300	15,900	18,800	3,690	1,520	1,070
10	1,290	1,070	1,290	920	2,800	2,330	16,800	14,500	18,300	3,690	1,460	1,180
11	1,290	1,120	2,180	600	2,970	2,330	16,800	14,100	16,800	3,690	1,460	1,640
12	1,340	1,120	2,040		2,970	2,330	18,300	14,500	14,100	3,320	1,460	1,460
13	1,400	1,120	2,330		2,970	2,180	23,100	15,900	13,700	3,140	1,460	1,400
14	1,180	1,120	2,330		2,970	2,480	24,200	15,900	12,400	2,970	1,400	1,340
15	1,120	1,120	3,690		3,140	2,800	23,600	15,900	11,200	2,800	1,400	1,340
16	1,180	1,070	4,090	700	3,500	2,800	23,100	17,300	11,200	2,640	1,400	2,180
17	1,020	1,070	4,970		5,720	2,970	23,100	17,300	11,200	2,640	1,400	2,180
18	1,020	1,070	5,210		5,460	2,970	20,300	18,800	10,100	2,640	1,400	1,400
19	1,020	970	2,480		5,460	2,970	15,400	18,800	10,100	2,480	1,400	1,180
20	1,070	920	2,180		5,460	2,970	15,900	22,000	10,100	2,330	1,180	1,120
21	1,020	530	2,040	1,000	5,460	3,320	18,800	22,000	10,100	2,330	1,180	1,900
22	1,020	330	1,900		5,460	5,210	23,100	23,600	9,000	2,040	1,070	1,640
23	1,020	495	1,900		5,460	4,970	27,800	18,300	8,000	2,040	1,070	1,520
24	1,020	1,070	2,040		5,210	4,970	29,700	16,800	8,600	2,040	1,070	1,520
25	1,020	1,340	1,900		5,210	5,460	31,000	17,300	8,600	1,900	1,070	1,520
26	1,070	1,340	1,900	1,300	4,090	6,820	29,700	17,300	8,330	1,900	1,020	1,520
27	1,180	1,340	1,900		3,500	10,800	29,700	18,300	7,400	1,770	1,020	1,520
28	1,400	1,460	1,770		2,800	5,460	29,700	19,800	7,110	1,640	970	1,520
29	1,400	1,400	1,640		5,460	21,400	21,400	21,400	6,530	1,640	970	1,520
30	1,400	1,180	1,520		-----	8,040	20,900	22,000	6,200	1,640	970	1,240
31	1,240	-----	1,520	-----	-----	7,580	-----	22,500	-----	1,640	970	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	1,400	970	1,130	0.233	0.27	69,500
November	1,640	330	1,110	.225	.26	86,000
December	5,210	1,120	2,040	.421	.49	125,000
January	1,640	-----	1,040	.214	.25	64,000
February	5,720	1,100	3,680	.755	.79	204,000
March	10,800	2,180	3,850	.794	.92	237,000
April	31,000	7,110	19,700	4.06	4.53	1,170,000
May	23,600	14,100	18,900	3.90	4.50	1,160,000
June	23,100	6,250	13,500	2.78	3.10	803,000
July	6,530	1,640	3,160	.652	.75	194,000
August	1,640	970	1,310	.270	.31	80,600
September	2,180	970	1,360	.280	.31	80,900
The year	31,000	330	5,880	1.21	16.48	4,250,000

CLEARWATER RIVER AT SPALDING, IDAHO

LOCATION.—Water-stage recorder in lot 22, sec. 22, T. 36 N., R. 4 W., one-eighth mile below mouth of Lapwai Creek and one-fourth mile north of Spalding post office.

DRAINAGE AREA.—9,570 square miles.

RECORDS AVAILABLE.—March, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, 52,600 second-feet Apr. 25 (gage height, 12.57 feet); minimum, 850 second-feet Nov. 24 (gage height, 1.39 feet).

1926-1930: Maximum discharge, 109,000 second-feet June 9, 1927; maximum gage height, 25.6 feet Jan. 5, 1928; minimum discharge, that of Nov. 24, 1929.

REMARKS.—Records excellent. Discharge estimated Jan. 11 to Feb. 9. No diversions or regulation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,200	2,280	2,200	3,590	2,500	6,220	18,400	33,300	29,400	9,020	3,000	1,830
2	2,200	2,200	2,120	3,490	3,000	5,690	17,900	34,000	26,200	8,680	2,900	1,830
3	2,120	2,200	2,040	3,190	3,300	5,060	18,400	40,300	28,100	8,680	2,810	1,900
4	2,040	2,280	1,700	2,900	4,500	5,060	20,500	42,500	25,600	8,020	2,810	1,900
5	1,970	2,200	1,400	3,100	4,200	5,560	22,700	37,400	22,700	7,700	2,810	1,830
6	1,970	2,040	1,510	3,390	4,700	7,090	24,400	36,000	22,200	7,240	3,000	1,830
7	2,040	2,200	2,280	3,190	7,300	6,790	29,400	34,000	23,900	6,790	3,100	2,040
8	2,040	2,360	2,630	2,720	7,000	6,080	34,700	30,000	26,800	6,500	2,900	2,120
9	2,120	2,200	2,540	2,450	7,000	5,950	36,700	27,500	26,200	6,220	2,720	1,970
10	2,630	2,120	2,630	2,120	9,020	5,560	34,000	25,600	24,400	6,360	2,540	2,120
11	2,900	2,200	4,020	1,500	8,680	5,300	32,000	24,400	25,000	6,790	2,540	2,450
12	2,540	2,280	4,820	1,200	7,860	5,820	32,600	23,900	24,400	6,080	2,630	3,490
13	2,200	2,120	4,020	1,000	6,790	7,090	35,400	24,400	21,000	5,690	2,630	4,580
14	2,120	1,760	5,430	1,000	5,690	7,240	41,000	26,800	18,400	5,300	2,630	3,590
15	2,040	1,610	9,370	950	5,430	6,640	44,000	29,400	16,900	5,060	2,720	3,000
16	2,040	1,510	12,400	1,200	5,820	6,360	39,600	32,000	16,000	4,820	2,810	2,630
17	2,040	1,760	13,300	1,000	7,540	6,080	33,300	32,600	16,400	4,580	2,720	2,450
18	2,040	1,970	8,350	1,300	9,720	6,080	30,000	32,600	16,000	4,470	2,640	2,360
19	2,200	2,200	5,690	1,300	10,800	6,220	30,000	30,600	18,900	4,360	2,640	2,200
20	2,120	1,900	4,940	1,400	13,300	6,640	32,000	30,600	18,400	4,360	2,540	2,120
21	2,040	1,510	4,580	1,500	16,000	7,860	32,000	34,700	15,000	4,360	2,450	2,120
22	2,040	1,200	3,910	1,600	13,300	14,600	37,400	33,300	14,600	4,020	2,360	2,120
23	2,040	1,240	3,700	1,700	11,600	17,900	43,300	28,700	12,800	3,910	2,280	2,200
24	1,970	1,340	4,130	1,700	10,800	15,000	47,800	26,800	12,000	3,800	2,200	3,100
25	1,970	1,900	4,240	1,800	9,370	23,900	51,000	26,200	12,800	3,590	2,040	3,100
26	1,970	2,540	4,020	2,000	8,350	27,500	47,100	24,400	11,200	3,490	2,040	2,810
27	2,040	2,720	4,020	2,200	7,390	25,600	42,500	23,900	10,400	3,390	1,970	2,540
28	3,190	2,630	3,700	2,600	6,640	22,200	43,300	26,200	10,400	3,290	1,970	2,450
29	4,240	2,450	3,290	2,500	-----	21,000	41,000	29,400	11,200	3,190	1,900	2,360
30	3,190	2,360	3,100	2,500	-----	21,600	36,000	32,600	10,100	3,100	1,900	2,360
31	2,540	-----	2,810	2,500	-----	20,000	-----	32,600	-----	3,000	1,900	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	4,240	1,970	2,280	0.238	0.27	140,000
November	2,720	1,200	2,040	.213	.24	121,000
December	13,300	1,400	4,350	.455	.52	267,000
January	3,590	950	2,080	.217	.25	128,000
February	16,000	2,500	7,770	.812	.85	432,000
March	27,500	5,060	11,000	1.15	1.33	676,000
April	51,000	17,900	34,300	3.58	3.99	2,040,000
May	42,500	23,900	30,500	3.19	3.68	1,880,000
June	29,400	10,100	18,900	1.97	2.20	1,120,000
July	9,020	3,000	5,350	.559	.64	328,000
August	3,100	1,900	2,510	.262	.30	154,000
September	4,580	1,830	2,450	.256	.29	146,000
The year	51,000	950	10,300	1.08	14.56	7,430,000

LOCHSA RIVER NEAR LOWELL, IDAHO

LOCATION.—Staff gage in NE. $\frac{1}{4}$ sec. 28, T. 33 N., R. 7 E., one-fourth mile below Pete King Creek, $\frac{1}{4}$ miles by river north of Lowell post office, and $1\frac{1}{2}$ miles above mouth.

DRAINAGE AREA.—1,180 square miles.

RECORDS AVAILABLE.—October, 1929, to September, 1930. From November, 1910, to August, 1912, at approximately same site.

EXTREMES.—Maximum discharge during year, 11,800 second-feet Apr. 24 (gage height, 6.30 feet); minimum, 147 second-feet Nov. 21 (gage height, 0.48 foot).

REMARKS.—Records good except those for Jan. 11 to Feb. 18. which were estimated. No diversions.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....		400	365	730		990	2,690	6,720	6,160	1,930	570	317
2.....		430	261	610		810	2,860	7,600	5,890	1,930	570	317
3.....		430	240	570		855	2,690	9,250	5,890	1,930	610	317
4.....		365	220	610		900	3,790	7,910	5,630	1,790	535	305
5.....		335	272	690		990	4,000	7,300	5,630	1,660	610	347
6.....		430	400	650	1,400	945	5,630	7,910	5,630	1,300	570	341
7.....		400	465	570		770	5,890	6,720	5,890	1,410	535	335
8.....		365	430	535		855	6,720	5,890	6,160	1,410	535	359
9.....		335	465	400		770	6,720	5,630	5,890	1,410	500	500
10.....		365	810	341		810	6,160	5,630	5,890	1,300	500	500
11.....		430	855			855	6,160	5,630	5,890	1,190	500	690
12.....	400	317	810			1,190	6,720	6,160	4,900	1,300	500	730
13.....	365	225	945			1,090	7,600	5,890	4,440	1,190	500	690
14.....	347	178	1,410			1,040	8,900	5,890	3,790	1,140	570	650
15.....	341	225	2,370		1,500	990	8,560	6,720	3,590	945	610	535
16.....	335	240	2,860			990	7,010	7,300	3,790	900	535	500
17.....	353	305	1,790			990	6,160	7,600	3,790	855	535	465
18.....	365	365	1,300			990	5,890	7,010	3,400	810	500	400
19.....	353	365	1,190		1,790	990	6,720	7,600	3,030	810	465	400
20.....	341	317	1,040		2,070	1,190	6,720	7,910	3,400	810	465	365
21.....	335	147	810		2,070	1,780	7,300	7,910	3,210	770	465	380
22.....	323	200	900		1,800	2,370	8,900	6,720	2,860	730	430	400
23.....	317	220	900	300	1,530	1,930	9,970	5,890	2,690	730	430	610
24.....	311	305	900		1,300	1,930	11,800	5,890	2,690	730	365	610
25.....	305	535	878		1,300	3,590	10,700	5,890	2,530	730	365	535
26.....	299	465	855		1,300	4,220	9,970	5,630	2,370	650	353	570
27.....	690	465	770		1,090	3,030	9,440	5,890	2,370	650	341	500
28.....	730	430	690		990	2,860	8,900	7,010	2,690	650	335	465
29.....	570	400	570	400		3,030	7,600	7,300	2,370	610	323	465
30.....	430	365	570			2,690	6,720	7,600	2,070	610	305	465
31.....	400		730			2,690		7,300		570	317	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October 12-31.....	730	299	396	0.336	0.25	15,700
November.....	535	147	345	.292	.33	20,500
December.....	2,860	220	873	.740	.85	53,700
January.....			391	.331	.38	24,000
February.....			1,470	1.25	1.30	81,600
March.....	4,220	770	1,580	1.34	1.54	97,200
April.....	11,800	2,690	6,960	5.90	6.58	414,000
May.....	9,250	5,630	6,820	5.78	6.66	419,000
June.....	6,160	2,070	4,150	3.52	3.93	247,000
July.....	1,930	570	1,080	.920	1.06	66,400
August.....	610	305	476	.403	.46	29,300
September.....	730	305	469	.397	.44	27,900
The period.....						1,500,000

SOUTH FORK OF CLEARWATER RIVER NEAR GRANGEVILLE, IDAHO

LOCATION.—Staff gage in SE. ¼ NW. ¼ sec. 30, T. 30 N., R. 4 E., below power house of Washington Water Power Co. and 6 miles southeast of Grangeville.

DRAINAGE AREA.—865 square miles.

RECORDS AVAILABLE.—November, 1910, to September, 1916; April, 1923, to September, 1930.

EXTREMES.—Maximum discharge during year, 3,130 second-feet Apr. 24, 25 (gage height, 6.69 feet); minimum, 46 second-feet Nov. 22 (gage height, 2.29 feet).

1910-1916, 1923-1930: Maximum discharge, 9,830 second-feet May 30, 1912 (gage height, 9.7 feet); minimum, 40 second-feet Sept. 24, 1924.

REMARKS.—Records good except those estimated, Jan. 16-29, which are fair. Diurnal fluctuations caused by operation of power plant just above station. No diversions for irrigation. Gage-height record furnished by Washington Water Power Co.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	167	144	176	204	272	254	1,080	2,160	1,660	602	170	96
2.....	131	147	176	173	272	220	1,150	2,160	1,750	602	167	98
3.....	153	179	144	179	331	237	1,220	2,500	1,950	575	164	102
4.....	134	188	126	185	220	237	1,480	2,270	1,750	521	173	96
5.....	126	136	188	204	291	254	1,480	2,160	1,660	495	173	90
6.....	117	161	188	167	272	272	1,750	2,270	1,570	469	188	153
7.....	129	204	188	158	272	237	2,160	2,050	1,660	444	176	129
8.....	126	176	179	170	311	254	2,160	1,950	1,660	420	161	120
9.....	188	176	188	188	291	237	2,160	1,850	1,570	397	150	124
10.....	237	173	220	179	291	237	1,950	1,660	1,570	469	144	142
11.....	188	188	254	104	291	237	1,850	1,660	1,570	420	147	204
12.....	167	158	254	108	272	291	1,850	1,570	1,400	374	144	397
13.....	144	66	331	102	237	291	2,050	1,570	1,310	352	144	254
14.....	142	92	444	102	237	311	2,160	1,570	1,230	331	129	188
15.....	129	188	685	94	237	311	2,160	1,750	1,150	311	158	153
16.....	136	173	715		291	291	1,850	1,660	1,080	291	153	142
17.....	142	220	469		331	272	1,750	1,660	1,080	272	147	122
18.....	164	188	272	80	374	291	1,660	1,750	1,000	272	136	134
19.....	155	176	272		469	311	1,850	1,660	935	254	136	124
20.....	147	124	272		495	331	1,950	1,750	1,080	254	136	120
21.....	136	78	204		469	352	2,050	2,050	1,080	237	129	120
22.....	126	106	220		420	420	2,270	1,950	935	237	122	124
23.....	122	155	237	110	420	420	2,270	1,850	870	220	108	220
24.....	134	131	220		352	420	2,870	1,850	1,000	220	113	188
25.....	131	204	220		311	935	2,870	1,950	935	237	104	182
26.....	129	220	220		311	1,660	2,380	1,660	775	220	98	158
27.....	161	204	188		291	1,660	2,380	1,660	715	204	102	144
28.....	291	204	185	130	272	1,400	2,500	1,850	775	204	106	134
29.....	220	188	158			1,310	2,500	1,850	715	185	104	124
30.....	185	182	161	204		1,310	2,270	1,950	630	188	104	142
31.....	142		204	237		1,150		1,850		170	98	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October.....	291	117	155	0.179	0.21	9,530
November.....	220	66	164	.190	.21	9,760
December.....	715	126	257	.297	.34	15,800
January.....	237		136	.157	.18	8,360
February.....	495	220	318	.368	.38	17,700
March.....	1,660	220	529	.612	.71	32,500
April.....	2,870	1,080	2,000	2.31	2.58	119,000
May.....	2,500	1,570	1,870	2.16	2.49	115,000
June.....	1,950	630	1,240	1.43	1.60	73,800
July.....	602	170	337	.390	.45	20,700
August.....	188	98	138	.160	.18	8,480
September.....	397	90	151	.175	.20	8,980
The year.....	2,870	66	608	.703	9.53	440,000

NORTH FORK OF CLEARWATER RIVER NEAR AHSAHKA, IDAHO

LOCATION.—Staff gage in SE. $\frac{1}{4}$ sec. 26, T. 37 N., R. 1 E., at Bruce's Eddy, $1\frac{1}{2}$ miles northeast of Ahsahka and 2 miles above mouth.

DRAINAGE AREA.—2,440 square miles.

RECORDS AVAILABLE.—August, 1926, to September, 1930.

EXTREMES.—Maximum discharge during year, 19,600 second-feet Apr. 25 (gage height, 13.0 feet); minimum (estimated), 600 second-feet Jan. 12-19; minimum gage height, -0.16 foot Nov. 20.

1926-1930: Maximum discharge, 40,300 second-feet May 10, 1928 (gage height, 21.2 feet); minimum, 490 second-feet Jan. 7, 1929 (gage height, -0.5 foot).

REMARKS.—Records good except those estimated, Nov. 15, Jan. 7-31, Feb. 1-5, 8-28, Mar. 5, which are poor. No diversions or regulation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept.
1.....	935	935	820	1,420	1,400	2,160	9,580	11,800	8,769	2,720	1,260	800
2.....	935	875	820	1,420		2,440	9,920	11,800	8,120	2,720	1,260	800
3.....	935	875	725	1,350		1,980	12,000	13,600	9,089	2,720	1,260	800
4.....	935	820	875	1,350		1,810	11,800	15,100	9,089	2,620	1,260	800
5.....	935	820	935	1,280		2,220	12,200	12,400	8,449	2,530	1,260	800
6.....	935	820	1,000	1,280	2,710	2,620	12,200	12,200	7,657	2,440	1,260	800
7.....	935	820	1,000	900	1,500	2,340	12,500	12,200	6,337	2,340	1,190	860
8.....	935	820	1,060			2,160	14,200	10,800	6,057	2,250	1,190	860
9.....	1,140	920	1,060			2,160	16,100	9,580	5,247	2,160	1,120	860
10.....	1,420	820	1,060			2,160	14,000	9,750	5,117	2,160	1,120	880
11.....	1,200	820	1,140	600	2,500	2,160	15,000	8,920	5,117	2,530	1,120	920
12.....	1,000	820	1,140			2,620	14,400	8,400	4,989	2,250	1,120	1,640
13.....	935	820	1,140			2,620	14,800	8,280	4,857	2,160	1,120	1,900
14.....	935	770	2,250			2,620	15,900	7,800	4,720	2,160	1,050	1,340
15.....	935	650	6,250			2,620	17,900	7,800	4,720	1,980	1,050	1,120
16.....	875	820	4,050	4,500		2,620	17,900	8,440	4,600	1,900	1,050	1,050
17.....	935	820	4,050			2,720	15,700	8,440	4,000	1,810	1,050	1,050
18.....	935	875	3,830			3,120	13,100	8,760	3,550	1,720	1,050	1,050
19.....	935	875	3,400			3,120	12,200	10,300	3,889	1,640	1,050	1,050
20.....	935	725	2,160			3,220	15,900	10,900	4,720	1,640	1,050	985
21.....	1,000	725	1,740	800		3,550	16,100	10,400	4,249	1,720	1,050	920
22.....	1,060	820	1,740			6,900	15,900	10,100	3,550	1,640	1,050	920
23.....	1,200	935	1,660			6,330	16,100	9,750	3,557	1,560	985	1,120
24.....	1,580	1,000	1,420			7,500	18,500	8,920	3,559	1,560	985	1,480
25.....	1,660	875	1,280			6,900	19,600	8,600	3,559	1,480	985	1,560
26.....	1,660	770	1,350	1,000	4,000	7,800	16,500	8,440	3,440	1,480	920	1,410
27.....	1,740	725	1,350			8,760	15,900	8,440	3,020	1,410	920	1,260
28.....	1,740	770	1,420			9,240	14,000	8,440	2,920	1,410	920	1,190
29.....	1,660	820	1,420			9,410	14,000	8,440	2,820	1,340	860	1,050
30.....	1,580	875	1,420			8,280	11,800	8,440	2,820	1,340	860	985
31.....	1,060	-----	1,420	-----	-----	8,280	-----	8,440	-----	1,260	860	-----

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October.....	1,740	875	1,150	0.471	0.54	70,700
November.....	1,000	650	824	.338	.38	49,000
December.....	6,250	725	1,770	.725	.84	109,000
January.....	-----	-----	903	.370	.43	57,200
February.....	-----	-----	3,100	1.27	1.32	172,000
March.....	9,410	1,810	4,270	1.75	2.02	263,000
April.....	19,600	9,580	14,500	5.94	6.63	863,000
May.....	15,100	7,800	9,860	4.04	4.66	606,000
June.....	9,080	2,820	5,080	2.08	2.32	302,000
July.....	2,720	1,260	1,960	.803	.93	120,000
August.....	1,260	860	1,070	.439	.51	65,800
September.....	1,900	800	1,070	.439	.49	63,700
The year.....	19,600	-----	3,790	1.55	21.07	2,740,000

TUCANNON RIVER NEAR POMEROY, WASH.

LOCATION.—Staff gage in sec. 13, T. 11 N., R. 40 E., at bridge at Marengo, 7½ miles southwest of Pomeroy.

DRAINAGE AREA.—109 square miles.

RECORDS AVAILABLE.—August, 1913, to June, 1915; March, 1924, to September, 1930 (discontinued).

EXTREMES.—Maximum discharge during year, 345 second-feet Feb. 1 (gage height, 4.9 feet); minimum discharge occurred during period of ice effect.

1913-1915, 1924-1930: Maximum discharge, 1,630 second-feet Jan. 13, 1928 (gage height, 6.4 feet); minimum, 25 second-feet Dec. 24, 1914 (gage height, 1.2 feet).

REMARKS.—Records good except those for Jan. 9-31, which were estimated because of ice. Several small diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	58	60	63	71	345	120	205	165	108	58	42	42
2.....	56	59	63	71	130	114	193	165	104	58	44	42
3.....	56	59	63	71	114	111	189	177	101	58	45	44
4.....	56	60	62	69	111	108	189	185	98	56	45	44
5.....	56	60	62	71	137	114	173	177	92	56	45	44
6.....	56	63	62	69	144	120	177	165	90	54	44	44
7.....	58	63	63	67	148	111	189	158	87	52	42	47
8.....	59	63	67	60	165	114	205	151	87	52	42	49
9.....	59	63	77	193	117	201	137	84	52	42	52	52
10.....	58	63	81	185	114	189	137	81	52	44	52	52
11.....	58	63	83	259	114	177	137	78	52	42	54	54
12.....	56	62	87	246	117	181	130	78	49	42	56	56
13.....	56	62	91	205	117	185	130	76	49	41	54	54
14.....	56	62	110	55	218	117	214	127	73	49	41	52
15.....	55	62	122	205	114	197	124	73	49	41	52	52
16.....	55	62	122	228	114	181	120	70	49	42	49	49
17.....	55	63	106	250	111	165	120	68	47	42	49	49
18.....	56	63	91	254	104	158	120	65	47	42	47	47
19.....	56	63	87	250	98	154	120	63	47	42	47	47
20.....	56	60	81	264	98	158	127	68	49	42	47	47
21.....	56	56	79	236	104	165	124	81	49	44	47	47
22.....	56	62	79	210	173	181	120	76	49	44	47	47
23.....	58	62	77	193	193	181	117	73	47	44	49	49
24.....	58	63	75	65	177	241	205	114	73	47	44	52
25.....	58	63	75	158	277	214	114	70	45	42	52	52
26.....	58	65	73	148	315	201	108	68	45	42	52	52
27.....	58	65	73	137	310	228	104	65	45	42	52	52
28.....	60	65	73	130	282	205	98	65	45	42	56	56
29.....	62	63	71	180	288	189	95	63	44	44	65	65
30.....	62	63	71	250	177	114	63	44	44	44	61	61
31.....	60	73	236	117	117	117	117	117	42	44	44	44

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October.....	62	55	57.3	3,520
November.....	65	56	62.1	3,700
December.....	122	62	79.4	4,880
January.....			73.8	4,540
February.....	345	111	195	10,800
March.....	315	98	158	9,720
April.....	228	154	188	11,200
May.....	185	95	132	8,120
June.....	108	63	78.0	4,640
July.....	58	42	49.6	3,050
August.....	45	41	42.8	2,630
September.....	65	42	50.0	2,980
The year.....	345		96.3	69,800

TUCANNON RIVER NEAR STARBUCK, WASH.

LOCATION.—Staff gage in sec. 23, T. 12 N., R. 38 E., three-fourths mile below Petaha Creek and 5½ miles east of Starbuck.

RECORDS AVAILABLE.—August, 1928, to September, 1930; November, 1914, to September, 1917, at station one-fourth mile upstream.

EXTREMES.—Maximum discharge during year (estimated), 6,000 second-feet Feb. 2 (gage height, 8.08 feet); minimum, 15 second-feet July 11, 12.

1914-1917, 1928-1930: Maximum discharge, that of Feb. 2, 1930; minimum, that of July 11, 12, 1930.

REMARKS.—Records fair. Discharge (estimated), Jan. 8-31, Feb. 2-8. Many small diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929-30

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.....	53	60	60	73	740	166	294	186	107	40	16	20
2.....	53	60	60	73		146	286	179	100	40	20	16
3.....	47	60	56	68		118	251	194	102	40	20	34
4.....	47	56	60	68		115	226	218	97	36	20	34
5.....	47	60	60	73	500	126	218	210	84	31	20	38
6.....	50	60	60	73		146	210	186	77	27	20	47
7.....	47	64	60	68		118	218	152	72	24	20	38
8.....	47	64	60			118	226	149	74	24	26	47
9.....	50	64	73		226	113	226	146	72	21	22	51
10.....	50	64	75		218	123	218	146	67	18	26	60
11.....	50	60	87	50	358	123	218	149	53	15	29	60
12.....	50	60	112		335	129	210	146	54	15	29	60
13.....	53	64	112		303	129	210	135	45	115	29	60
14.....	56	60	112		294	123	218	126	32	51	34	56
15.....	56	60	134		268	123	210	107	33	47	34	60
16.....	50	60	134		303	118	202	87	31	47	34	60
17.....	53	60	129		335	118	186	84	34	42	34	60
18.....	53	60	107		335	123	179	92	35	38	29	56
19.....	53	64	107		335	118	179	87	31	29	34	51
20.....	53	64	97	60	358	118	186	90	47	38	29	56
21.....	53	53	97		312	118	179	87	63	34	29	56
22.....	50	56	87		312	152	179	87	67	34	29	51
23.....	50	56	82		260	560	179	87	57	29	29	51
24.....	47	56	82		226	480	172	97	49	29	29	56
25.....	47	60	77		210	505	186	87	49	26	26	60
26.....	50	60	77		202	480	210	80	45	26	26	51
27.....	56	60	77	130	179	358	218	77	45	26	22	51
28.....	64	60	77		172	312	210	72	45	22	20	60
29.....	56	60	73			312	194	74	45	20	20	65
30.....	56	56	73			312	186	80	40	20	20	65
31.....	56		73			303		107		16	20	
Month					Maximum	Minimum	Mean	Run-off in acre-feet				
October.....					64	47	51.7	3,180				
November.....					64	53	60.0	3,570				
December.....					134	56	84.8	5,210				
January.....							77.9	4,790				
February.....						172	349	19,400				
March.....					560	113	207	12,700				
April.....					294	172	209	12,400				
May.....					218	72	123	7,560				
June.....					107	31	58.9	3,500				
July.....					115	15	32.9	2,020				
August.....					34	16	25.6	1,570				
September.....					65	16	51.0	3,030				
The year.....							15	109				

MISCELLANEOUS DISCHARGE MEASUREMENTS^a

In addition to the records of flow obtained at the gaging stations and reported in the preceding pages, miscellaneous measurements were made at other points, as shown by the following table:

Miscellaneous discharge measurements in Snake River drainage basin during the years ending September 30, 1929 and 1930

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
1930				<i>Feet</i>	<i>Sec.-ft.</i>
May 19	Targee Creek	Henrys Lake	1 mile above Henrys Lake, Idaho.		23.6
19	Dry Creek	do.	do.		4.5
19	Howard Creek	do.	do.		.6
19	Duck Creek	do.	do.		.8
Apr. 12	Camas Creek	Mud Lake	Sec. 19, T. 10 N., R. 38 E., at Jacoby Ranch 11 miles east of Dubois, Idaho.		130
24	do.	do.	do.		45.6
25	do.	do.	do.		40.5
26	do.	do.	do.		43.7
May 11	do.	do.	do.		47.7
28	do.	do.	do.		6.55
June 20	do.	do.	do.		15.6
Apr. 5	do.	do.	NW $\frac{1}{4}$ sec. 36, T. 7 N., R. 35 E., at highway bridge 5 miles southwest of Hamer, Idaho.	4.82	65.1
9	do.	do.	do.	5.46	
13	do.	do.	do.	5.48	135
23	do.	do.	do.	5.27	66.6
27	do.	do.	do.	5.15	
May 9	do.	do.	do.	4.90	42.9
27	do.	do.	do.		27.8
July 9	do.	do.	do.	3.34	9.20
Aug. 12	do.	do.	do.		17.0
June 20	Wood's Lucky Strike ditch.	Diverts from Camas Creek.	Sec. 36, T. 12 N., R. 38 E., 3 miles below head and 5 miles south of Kilgore, Idaho.		0
May 28	Hoppes ditch	do.	Sec. 10, T. 10 N., R. 38 E., near head, 14 miles northeast of Dubois, Idaho.		0
28	Jacoby ditch	do.	Sec. 17, T. 10 N., R. 38 E., one-fourth mile below head and 11 miles east of Dubois, Idaho.		0.75
27	Spring Creek	Mud Lake	Sec. 28, T. 7 N., R. 35 E., at Jackett's Ranch, 8 miles west of Hamer, Idaho.		4.74
27	Dead Line Lake outflow plus flow from several springs.	do.	SE $\frac{1}{4}$ sec. 27, T. 7 N., R. 35 E., in canal half a mile below outlet of Dead Line Lake and 6 miles southwest of Hamer, Idaho.		10.0
1929					
Nov. 2	Birch Creek	Marsh Creek	Sec. 28, T. 12 S., R. 36 E., opposite power plant, 10 miles north of Malad, Idaho.	.17	.78
2	Birch Creek power plant tailrace	Birch Creek	Sec. 28, T. 12 S., R. 36 E., 10 miles north of Malad, Idaho.	.52	7.46
Mar. 13	Blue Lakes outlet	S Snake River	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28, T. 9 S., R. 17 E., 200 feet below highway bridge at Blue Lakes Ranch 4 miles north of Twin Falls, Idaho.	.94	207
Apr. 10	do.	do.	do.	.94	202
July 12	do.	do.	do.	1.00	198
Aug. 14	do.	do.	do.	1.04	197
Apr. 18	West Fork of Fish Creek.	Fish Creek	Near Carey, Idaho.	.06	1.30
June 10	do.	do.	do.	.06	.30
July 7	do.	do.	do.	.06	.26
Sept. 13	do.	do.	do.	.06	.10
Mar. 10	Mountain Home Feeder Canal.	Diverts from Canyon Creek.	Sec. 36, T. 2 S., R. 6 E., at heading, 5 miles north of Mountain Home, Idaho.	— .18	14.4
May 31	do.	do.	do.	1.12	83.2
June 8	do.	do.	do.	.84	59.8
May 31	Ake No. 2 Lateral.	Diverts from Mountain Home Feeder Canal.	Sec. 36, T. 2 S., R. 6 E., 5 miles north of Mountain Home, Idaho.		4.31
June 8	do.	do.	do.		4.00

^a Estimated.

Miscellaneous discharge measurements in Snake River drainage basin during the years ending September 30, 1929 and 1930—Continued

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Discharge
1929				<i>Feet</i>	<i>Sec.-ft.</i>
May 31	Mountain Home Cooperative Canal.	Diverts from Mountain Home Feeder Canal.	Sec. 36, T. 2 S., R. 6 E., at Lamber-ton Weir, 250 feet below heading, and 4½ miles north of Mountain Home, Idaho.	1.29	81.6
June 8	do.	do.	do.	1.02	52.0
May 17	Walters Butte Spring Creek.	S Snake River	Sec. 9, T. 1 S., R. 2 W., 50 feet below springs, 4 miles southwest of Melba, Idaho.	2.12	16.9
17	do.	do.	do.	2.12	17.5
Nov. 14	Payette River	do.	SE. ¼ sec. 29, T. 9 N., R. 3 E., three-eighths mile below confluence of North and South Forks of Payette River, and one-fifth mile above railroad depot at Banks, Idaho.	1.43	641
Oct. 26	Deadwood River	South Fork of Payette River.	Sec. 35, T. 14 N., R. 7 E., 370 feet below diversion dam for Deadwood Mine power plant, 2 miles north of Bernard (Deadwood Mine), and 12 miles southeast of Knox, Idaho.		5.38
10	Middle Fork of Payette River.	do.	Sec. 36, T. 13 N., R. 5 E., above mouth of Bull Creek, Idaho.		12.2
16	do.	do.	Sec. 9, T. 11 N., R. 5 E., above mouth of Silver Creek, Idaho.		45.4
10	Bull Creek	Middle Fork of Payette River.	Sec. 36, T. 13 N., R. 5 E., at mouth, Idaho.		16.1
23	Silver Creek	do.	Sec. 36, T. 12 N., R. 5 E., 2 miles below Peace Valley Creek, Idaho.		10.8
16	do.	do.	Sec. 9, T. 11 N., R. 5 E., at mouth, Idaho.		12.4
1930					
May 3	North Side Canal of Emmett Irrigation District.	Diverts from Payette River.	Sec. 22, T. 7 N., R. 1 W., at Black Canyon Dam, 5½ miles northeast of Emmett, Idaho.	4.92	272
3	South Side Canal of Emmett Irrigation District.	do.	do.		• 9.0
July 12	do.	do.	do.	.72	90.0
1929					
Aug. 1	Rush Creek	Weiser River	Sec. 28, T. 16 N., R. 3 W., just below power plant diversion and 9 miles north of Cambridge, Idaho.		• 5.0
1	do.	do.	Sec. 28, T. 16 N., R. 3 W., opposite power plant and 8½ miles north of Cambridge, Idaho.		1.79
July 12	do.	do.	Sec. 28, T. 16 N., R. 3 W., 270 feet below power plant tailrace and 8½ miles north of Cambridge, Idaho.		11.9
1930					
Mar. 28	do.	do.	Sec. 28, T. 16 N., R. 3 W., opposite power plant and 8½ miles north of Cambridge, Idaho.		1.12
July 5	do.	do.	do.		4.05
19	do.	do.	do.		1.25
1929					
Apr. 29	Rush Creek power plant tailrace.	Rush Creek	Sec. 28, T. 16 N., R. 3 W., 150 feet below power plant and 8½ miles north of Cambridge, Idaho.		3.65
Dec. 8	Sheep Creek	Imnaha River	At mouth at Imnaha, Oreg.		45.1
1930					
Mar. 3	do.	do.	do.		61
Apr. 13	do.	do.	do.		204
May 28	do.	do.	do.		212
June 18	do.	do.	do.		164
Sept. 2	do.	do.	do.		31.5
26	Panther Creek	Salmon River	Sec. 22, T. 21 N., R. 19 E., 100 feet above Napias Creek, near Forney, Idaho.		35.1
June 21	do.	do.	Sec. 21, T. 21 N., R. 19 E., one fourth mile below Napias Creek, near Forney, Idaho.		174

• Estimated.

Miscellaneous discharge measurements in Snake River drainage basin during the years ending September 30, 1929 and 1930—Continued

Date	Stream	Tributary to or diverting from—	Locality	Gage height	Dis-charge
1930				<i>Feet</i>	<i>Sec.-ft.</i>
Sept. 26	Napias Creek.....	Panther Creek....	Sec. 22, T. 21 N., R. 19 E., 300 feet above mouth, near Forney, Idaho.	-----	18.2
July 17	Middle Fork of Salmon River.	Salmon River.....	Sec. 17, T. 16 N., R. 11 E., half a mile below mouth of Pistol Creek, near Cascade, Idaho.	-----	768
1929					
Oct. 25	Elk Creek.....	Bear Valley Creek.	In approximately sec. 35, T. 13 N., R. 8 E., three-eighths mile below mouth of Beaver Creek, 2½ miles west of Elk Creek ranger station, and 14 miles west of Cape Horn, Idaho.	1.80	27.8
1930					
July 10	do.....	do.....	do.....	2.42	83.8
Aug. 2	do.....	do.....	do.....	2.00	40.4
Sept. 22	do.....	do.....	do.....	1.90	27.4
1929					
Oct. 25	Beaver Creek.....	Elk Creek.....	In approximately sec. 34, T. 13 N., R. 8 E., just below mouth of Bearskin Creek, 4 miles west of Elk Creek ranger station, and 15 miles west of Cape Horn, Idaho.	1.82	8.70
1930					
July 10	do.....	do.....	do.....	2.15	20.6
Aug. 2	do.....	do.....	do.....	1.96	12.6
Sept. 22	do.....	do.....	do.....	1.90	9.78
July 9	Sulphur Creek.....	Middle Fork of Salmon River.	Sec. 13, T. 14 N., R. 9 E., 1 mile above mouth, near Cascade, Idaho.	-----	55.5
15	Rapid River.....	do.....	Sec. 32, T. 16 N., R. 11 E., 100 feet above mouth, near Cascade, Idaho.	-----	121
17	Pistol Creek.....	do.....	Sec. 17, T. 16 N., R. 11 E., 150 feet above mouth, near Cascade, Idaho.	-----	121
21	Marble Creek.....	do.....	Sec. 33, T. 17 N., R. 12 E., 1½ miles above mouth, near Meyers Cove, Idaho.	-----	45.6
Aug. 2	Loon Creek.....	do.....	Sec. 3, T. 15 N., R. 14 E., 400 feet above Warm Springs Creek, near Meyers Cove, Idaho.	-----	85.4
3	do.....	do.....	Sec. 18, T. 17 N., R. 14 E., above Cache Creek, three-fourths mile above mouth, near Meyers Cove, Idaho.	-----	143
2	Warm Springs Creek.	Loon Creek.....	Sec. 3, T. 15 N., R. 14 E., 400 feet above mouth, near Meyers Cove, Idaho.	-----	28.4
18	Camas Creek.....	Middle Fork of Salmon River.	Sec. 5, T. 17 N., R. 17 E., at Meyers Cove, Idaho, one-fourth mile above Silver Creek and three-eighths mile above West Fork of Camas Creek.	-----	45.7
June 21	do.....	do.....	Sec. 6, T. 17 N., R. 17 E., at Meyers Cove, Idaho, 500 feet below West Fork of Camas Creek.	-----	219
Aug. 8	do.....	do.....	Sec. 14, T. 18 N., R. 14 E., one-half mile above mouth, near Meyers Cove, Idaho.	-----	104
18	Silver Creek.....	Camas Creek.....	Sec. 5, T. 17 N., R. 17 E., at Meyers Cove, Idaho, one-fourth mile above mouth.	-----	6.02
18	West Fork of Camas Creek.	do.....	Sec. 6, T. 17 N., R. 17 E., at Meyers Cove, Idaho, 500 feet above mouth.	-----	10.9
Sept. 15	Big Creek.....	Middle Fork of Salmon River.	Sec. 17, T. 21 N., R. 11 E., 400 feet above Monumental Creek, near Edwardsburg, Idaho.	-----	116
8	do.....	do.....	Sec. 2, T. 20 N., R. 13 E., 600 feet above mouth of Cougar Creek, near Edwardsburg, Idaho.	-----	212
15	Crooked Creek.....	Big Creek.....	Sec. 17, T. 21 N., R. 11 E., at mouth, near Edwardsburg, Idaho.	-----	6.82
15	Monumental Creek.	do.....	Sec. 17, T. 21 N., R. 11 E., at mouth, near Edwardsburg, Idaho.	-----	38.8
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