UNITED STATES DEPARTMENT OF THE INTERIOR

SURFACE WATER SUPPLY *of the* UNITED STATES 1929

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

Prepared in cooperation with the States of
IDAHO, OREGON, NEVADA, and WASHINGTON

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 693

UNITED STATES DEPARTMENT OF THE INTERIOR
RAY LYMAN WILBUR, Secretary
GEOLOGICAL SURVEY
Director

Water-Supply Paper 693

SURFACE WATER SUPPLY *of the* UNITED STATES 1929

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

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District Engineers

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SURFACE WATER SUPPLY OF SNAKE RIVER BASIN, 1929

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, 1929.

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 in the West. 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 years ending June 30, 1895–1930

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		

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 10.

Measurements of stream flow have been made at about 5,830 points in the United States and also at many points in Alaska and

the Hawaiian Islands. In July, 1929, 2,240 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 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, 1928, and ending September 30, 1929. 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.

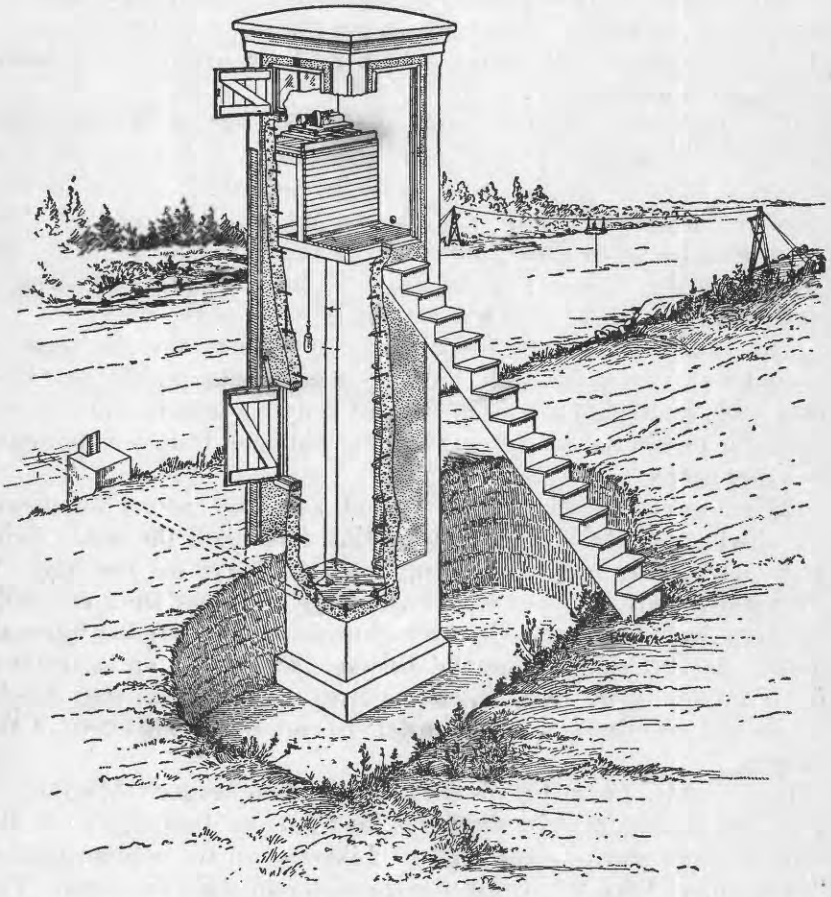

FIGURE 1.—Typical river measurement station showing concrete well and house for water-stage recorder and staff gages, cable, and car

The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the gage heights and discharge measurements in determining the daily flow. The records of stage are obtained either from direct readings on a 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 stages, 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 nonrecording 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 permanency of the stage-discharge relation and (2) on the accuracy of observation of stage, measurements of flow, and interpretation of records.

The station description gives a statement in regard to the general accuracy of the records. "Excellent" indicates that records are accurate within 5 per cent; "good," within 10 per cent; "fair," within 15 per cent; and "poor," 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 observation 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, as indicated below:

Part I. North Atlantic slope basins (St. John River to York River).
II. South Atlantic slope and eastern Gulf of Mexico basins (James River to the Mississippi).
III. Ohio River Basin.
IV. St. Lawrence River Basin.
V. Hudson Bay and upper Mississippi River Basins.
VI. Missouri River Basin.
VII. Lower Mississippi River Basin.

VIII. Western Gulf of Mexico basins.
IX. Colorado River Basin.
X. The Great Basin.
XI. Pacific slope basins in California.
XII. North Pacific slope 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 of 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., 60 Washington Street.
Albany, N. Y., 506 Broadway-Arcade Building.
Harrisburg, Pa., 366 State Capitol.
Trenton, N. J., 710 Trenton Trust Building.
Charlottesville, Va., Brooks Museum, University of Virginia.
South Charleston, W. Va., Naval Ordnance Plant.
Asheville, N. C., 210 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, 429 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, United States Geological Survey, Washington, D. C.

Stream-flow records have been obtained at more than 5,830 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 September, 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)	1895.
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. 2	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	1907–8.
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	1919–20.
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.

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.

The following table gives, by years and drainage basins, the numbers of the papers on surface water supply published from 1899 to 1929. 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 for 1910 to 1920 for any station in the area covered by Part III 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.

Numbers of water-supply papers containing results of stream measurements, 1889–1929

[For basins included see p. 5]

Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII–A	XII–B	XII–C
1899 [a]	35	[b] 35, 36	36	36	36	[c] 36, 37	37	37	[d] 37, 38	38, [e] 39	38, [f] 39	38	38	38
1900 [a]	47, [b] 48	48	48, [g] 49	49	49	49, [i] 50	50	50	50	51	51	51	51	51
1901	65, 75	65, 75	65, 75	65, 75	[k] 65, 66, 75	66, 75	[k] 65, 66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75	66, 75
1902	82	[b] 82, 83	83	[l] 82, 83	[k] 83, 85	84	[k] 83, 84	84	85	85	85	85	85	85
1903	97	[b] 97, 98	98	97	[k] 98, 99, [m] 100	99	[k] 98, 99	99	100	100	100	100	100	100
1904	[n] 124, [o] 125, [p] 126	[p] 126, 127	128	129	[k] 128, 130	130, [q] 131	[k] 128, 131	132	133	133, [r] 134	134	135	135	135
1905	[n] 165, [o] 166, [p] 167	[p] 167, 168	169	170	171	172	[k] 169, 173	174	175, [s] 177	176, [r] 177	177	178	178	[t] 177, 178
1906	[n] 201, [o] 202 [p] 203	[p] 203, 204	205	206	207	208	[k] 205, 209	210	211, [s] 213	212, [r] 213	213	214	214	214
1907–8	241	242	243	244	245	246	247	248	249	250, [r] 251	251	252	252	252
1909	261	262	263	264	265	266	267	268	269	270, [r] 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	451	452	453	454	455	456	457	458	459	460	461	462	463	464
1918	471	472	473	474	475	576	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

[a] Rating tables and index to Water-Supply Papers 35–39 contained in Water-Supply Paper 39. Tables for monthly discharge for 1899 in Twenty-first Annual Report, Part IV.
[b] James River only.
[c] Gallatin River.
[d] Green and Gunnison Rivers and Grand River above junction with Gunnison.
[e] Mohave River only.
[f] Kings and Kern Rivers and south Pacific slope basins.
[g] Rating tables and index to Water-Supply Papers 47–52 and data on precipitation, wells and irrigation in California and Utah contained in Water-Supply Paper 52. Tables for monthly discharge for 1900 in Twenty-second Annual Report, Part IV.
[h] Wissahickon and Schuylkill Rivers to James River.
[i] Scioto River.
[j] Loup and Platte Rivers near Columbus, Nebr., and all tributaries below junction with Platte.
[k] Tributaries of Mississippi from east.
[l] Lake Ontario and tributaries to St. Lawrence River proper.
[m] Hudson Bay only.
[n] New England rivers only.
[o] Hudson River to Delaware River, inclusive.
[p] Susquehanna River to Yadkin River, inclusive.
[q] Platte and Kansas Rivers.
[r] Great Basin in California, except Truckee and Carson River Basins.
[s] Below junction with Gila.
[t] Rogue, Umpqua, and Siletz Rivers only.

COOPERATION

During the year ending September 30, 1929, work in the Snake River Basin was carried on in cooperation with the States of Idaho, Oregon, Nevada, and Washington, effected under agreements made between the Director of the United States Geological Survey and the State engineers or other officials and authorized by legislative acts appropriating money.

Special acknowledgments are due to George N. Carter, commissioner of reclamation of Idaho; Rhea Luper, State engineer of Oregon; George W. Malone, State engineer of Nevada; and Earle J. Barnes, director, and R. K. Tiffany, supervisor of hydraulics, of the Department of Conservation and Development of Washington, for the efficient manner in which they represented their States in the investigations.

The Corps of Engineers, United States Army, rendered financial assistance in collecting records published herein.

Acknowledgments are due also to the United States Bureau of Reclamation and the United States Indian Service, which permitted the freest use of data gathered exclusively for them and paid for by them. The United States Weather Bureau and the United States Forest Service furnished hydrometric and climatic data.

The following municipal corporations, private companies, and individuals have aided: City of Boise, city of Pocatello, Idaho Water District No. 36, Idaho Power Co., Weiser Irrigation District, Twin Falls Canal Co., North Side Canal Co., North Fork Reservoir Co., Lake Irrigation District, Utah Power & Light Co., Pacific Light & Power Co. and subsidiary companies, Western States Utilities Co., Yellow Pine Co., Livingston Mines Corporation, Mesa Orchards Co., Peoples West Coast Hydroelectric Corporation, Warmsprings Irrigation District, Malheur, Baker, and Wallowa Counties, Eastern Oregon Light & Power Co., Inland Power & Light Co., water commissioner for Big Lost River, and local water masters for Big Wood, Little Wood, and Boise Rivers.

DIVISION OF WORK

The data for stations in Wyoming and on Snake River above Milner, Idaho, for the tributaries that enter Snake River above Idaho Falls, and on Blackfoot River near Blackfoot, Idaho, were collected under the direction of G. C. Baldwin, district engineer, and prepared for publication under the direction of G. C. Baldwin and Lynn Crandall, district engineers, assisted by C. A. McClelland, H. S. Kollenborn, D. I. Gardner, W. N. McConnel, and Helen George.

The data for stations in Idaho (except in the upper Snake River Basin), in the Salmon Falls Creek Basin in Nevada, and for the Snake River at Oxbow, Oreg., were collected and prepared for publication

under the direction of C. G. Paulsen, district engineer, assisted by Berkeley Johnson, F. M. Veatch, M. C. Boyer, F. C. Craig, W. V. Iorns, Miss E. H. Haugse, Miss A. F. Smith, 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, J. B. Ringwood, and Miss Lysle Christensen.

The data for 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, M. C. Boyer, H. C. Woster, L. I. Meyer, R. J. Swanson, and A. P. Martinson.

The records were reviewed and manuscript assembled by H. F. Hill, jr.

35673—31——2

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 gates at outlet of lake at Moran. Zero of gage, 6,700 feet above mean sea level.

RECORDS AVAILABLE.—June, 1909, to September, 1929. Records for 1909 and 1910 fragmentary.

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

Daily contents, in acre-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	591,220	612,170	622,920	581,490	595,010	616,000	614,800	594,780	746,280	846,720	693,100	459,640
2	592,400	612,890	621,970	581,730	596,440	616,710	612,890	595,960	755,000	846,210	688,100	453,280
3	591,930	613,610	620,770	581,970	597,620	617,190	610,980	596,910	763,720	847,000	673,110	448,280
4	591,930	614,320	618,860	582,200	598,810	617,910	609,070	598,100	770,190	847,480	663,900	441,910
5	591,930	615,040	617,190	582,200	599,760	618,380	607,160	599,520	776,700	845,950	656,150	436,010
6	591,460	616,000	615,280	582,200	600,710	619,100	605,250	600,950	784,960	844,170	647,680	430,370
7	591,220	616,950	613,610	582,200	601,420	619,580	603,340	601,900	791,250	841,370	640,230	425,860
8	590,980	617,910	611,930	582,200	602,140	620,060	601,420	602,860	795,010	838,830	633,010	422,030
9	590,980	618,860	610,260	582,200	602,860	620,770	599,520	604,050	798,540	836,280	626,040	417,970
10	592,400	619,820	608,590	582,200	603,580	621,250	597,620	605,250	800,810	835,260	620,060	415,260
11	593,350	620,530	606,920	582,200	604,050	621,730	595,730	606,440	802,830	833,740	613,370	413,250
12	594,300	621,250	605,250	582,200	604,770	622,200	593,830	608,110	804,350	832,210	606,680	411,240
13	595,250	621,970	606,580	582,200	605,480	622,920	591,930	610,500	809,150	830,680	598,810	410,340
14	596,200	622,860	601,900	582,440	606,200	623,400	590,270	613,130	814,700	827,630	590,740	410,120
15	597,150	623,400	600,230	582,440	606,920	623,880	588,610	616,000	821,520	824,320	582,440	410,340
16	598,100	624,120	598,570	582,680	607,640	624,360	586,710	619,820	822,800	819,000	573,220	410,120
17	599,050	624,360	597,150	582,680	608,350	625,560	584,810	624,360	824,070	812,940	565,440	410,120
18	600,000	623,880	595,730	583,150	609,070	626,760	582,680	630,370	823,820	806,120	558,610	410,120
19	600,950	623,400	594,300	583,870	609,780	627,960	583,390	636,380	823,820	799,550	550,380	408,100
20	601,900	623,160	592,880	583,870	610,500	629,160	584,340	642,630	822,800	794,010	542,660	404,750
21	602,860	622,920	591,460	584,340	611,220	630,370	585,290	650,830	824,070	788,240	534,940	401,840
22	603,810	622,920	589,800	585,050	611,930	630,370	586,240	660,510	827,120	782,470	526,770	399,380
23	604,770	622,920	588,370	585,760	612,650	630,370	587,190	670,680	829,160	775,700	518,630	395,580
24	605,720	622,920	586,950	586,710	613,130	630,370	587,900	682,860	831,700	768,200	510,960	392,680
25	606,440	622,920	585,530	587,420	613,840	629,890	586,610	698,230	834,240	759,980	503,550	390,460
26	607,400	622,920	584,340	588,610	614,320	627,720	589,320	709,770	837,300	749,270	496,620	388,250
27	608,110	622,920	583,150	589,560	615,040	625,560	590,030	717,380	840,350	740,350	490,390	390,680
28	608,830	622,920	581,970	590,740	615,520	623,160	590,980	724,530	842,900	731,450	483,700	392,010
29	609,550	622,920	581,020	591,930	-------	621,250	591,930	729,720	845,700	721,560	477,050	394,240
30	610,500	622,920	581,490	592,880	-------	619,100	593,350	734,660	847,480	711,980	471,550	395,140
31	611,460	-------	581,490	598,830	-------	616,950	-------	739,110	-------	702,160	465,820	-------

SNAKE RIVER NEAR MORAN, WYO.

LOCATION.—Water-stage recorder in sec. 17, T. 45 N., R. 114 W., 1½ miles east of Moran and 3½ miles above Pacific Creek.

DRAINAGE AREA.—820 square miles.

RECORDS AVAILABLE.—September, 1903, to September, 1929.

EXTREMES.—Maximum discharge during year, 7,770 second-feet June 12 (gage height, 7.01 feet); minimum, 30 second-feet Oct. 18 to Nov. 5 (gage height, 0.25 foot).

1903-1929: Maximum discharge, 15,100 second-feet June 12, 1918 (gage height, 10.41 feet); minimum, practically no flow during a few days in 1907 and 1909 as a result of closing gates in Jackson Lake Dam.

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

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	30	371	362	103	100	1,500	64	362	4,580	6,210	3,800
2	254	30	1,050	362	103	100	1,580	64	282	3,620	6,060	3,800
3	636	30	1,300	362	103	100	1,580	64	56	2,590	5,930	3,780
4	636	30	1,300	362	103	100	1,580	64	52	3,090	5,730	3,680
5	636	30	1,290	362	103	100	1,580	64	52	3,740	5,480	3,410
6	571	32	1,280	362	103	100	1,580	64	1,160	3,530	5,020	3,070
7	514	34	1,280	362	100	100	1,580	64	3,240	3,430	4,430	2,460
8	456	35	1,280	362	100	100	1,580	64	5,040	3,200	4,020	2,230
9	371	35	1,280	362	100	100	1,580	64	5,570	2,630	4,060	2,060
10	183	35	1,280	362	100	98	1,580	64	5,570	2,410	4,020	1,730
11	49	36	1,280	362	100	98	1,580	64	5,140	2,410	4,160	1,410
12	49	38	1,280	362	100	98	1,580	64	3,650	2,500	4,470	1,030
13	40	38	1,280	362	100	98	1,580	64	2,950	2,860	4,710	674
14	34	56	1,280	362	100	98	1,460	64	3,070	3,530	4,890	391
15	32	103	1,280	362	100	98	1,460	64	5,280	3,890	4,920	391
16	32	234	1,280	362	100	98	1,460	64	7,110	4,580	4,790	376
17	32	410	1,280	362	100	98	1,460	64	7,500	4,910	4,670	353
18	30	410	1,280	362	100	100	1,460	64	5,640	4,890	4,660	728
19	30	410	1,280	262	100	100	639	67	4,230	4,690	4,660	1,920
20	30	410	1,280	362	100	103	103	67	3,220	4,350	4,630	2,350
21	30	410	1,280	362	100	103	103	67	2,830	4,450	4,670	2,340
22	30	391	1,280	147	100	316	103	67	3,070	4,450	4,580	2,320
23	30	371	1,270	103	100	362	103	67	3,090	4,660	4,390	2,220
24	30	371	1,270	103	100	362	103	67	3,640	5,110	4,350	1,760
25	30	371	1,270	103	100	1,250	103	67	3,430	6,000	4,190	1,400
26	30	371	1,260	103	100	1,420	114	67	3,400	6,190	4,100	862
27	30	371	1,260	103	100	1,420	120	67	3,430	5,870	4,070	415
28	30	371	1,250	103	100	1,420	103	67	3,440	5,690	4,010	156
29	30	371	1,250	103	-------	1,440	78	52	3,740	5,770	3,860	34
30	30	371	1,250	103	-------	1,440	64	54	4,530	5,840	3,800	34
31	30	-------	600	103	-------	1,440	-------	58	-------	6,040	3,780	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	636	30	161	9,900
November	410	30	208	12,400
December	1,300	371	1,220	75,000
January	362	103	280	17,200
February	103	100	101	5,610
March	1,440	98	418	25,700
April	1,580	64	983	58,500
May	67	52	64.1	3,940
June	7,500	52	3,460	206,000
July	6,190	2,410	4,240	261,000
August	6,210	3,780	4,620	284,000
September	3,800	34	1,710	102,000
The year	7,500	30	1,460	1,060,000

SNAKE RIVER NEAR HEISE, IDAHO

LOCATION.—Water-stage recorder in sec. 5, T. 3 N., R. 41 E., 600 feet above Anderson Dam and 3 miles above Heise. Zero of gage, 5,016.90 feet above mean sea level.

RECORDS AVAILABLE.—September, 1910, to September, 1929.

EXTREMES.—Maximum discharge during year, 24,300 second-feet June 18 (gage height, 6.08 feet); minimum, 2,410 second-feet Mar. 17 (gage height, 0.29 foot).

1910–1929: Maximum discharge, about 60,000 second-feet May 19, 1927 (gage height, about 14.0 feet); minimum, 2,000 second-feet Feb. 10, 1927.

REMARKS.—Records good except those for period Jan. 9 to Feb. 25, which are fair. Station is above all irrigation diversions except Riley ditch (capacity about 30 second-feet), which diverts 1 mile above gage. Flow regulated by storage at Jackson Lake Reservoir.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,800	3,420	3,200	3,480		3,020	3,800	5,100	10,300	17,400	10,500	7,390
2	3,820	3,380	3,200	3,040		2,590	3,820	4,780	12,600	16,600	10,900	7,390
3	4,130	3,310	3,160	3,070		2,510	3,700	5,250	12,900	15,100	10,500	7,850
4	4,090	3,290	3,090	3,090		2,540	4,150	5,860	11,100	13,300	10,300	7,880
5	4,110	3,310	3,420	3,090		2,590	4,640	5,620	10,600	13,000	10,300	7,690
6	4,090	3,400	3,780	3,090		2,670	4,680	5,180	11,400	12,900	10,000	7,390
7	4,070	3,580	3,700	2,600		2,590	4,320	5,030	12,900	11,900	9,390	7,270
8	3,960	3,500	3,760	2,620		2,510	4,180	4,960	15,900	11,400	9,000	6,840
9	3,880	3,400	3,860			2,540	4,110	5,520	19,000	10,700	8,260	6,330
10	3,820	3,290	3,820			2,540	4,030	6,220	20,100	9,890	8,100	6,040
11	3,880	3,250	4,010			2,590	3,960	6,140	19,700	9,350	8,040	5,620
12	3,900	3,250	4,070			2,670	3,960	6,570	18,700	9,180	8,070	5,300
13	3,840	3,220	3,920		2,600	2,620	3,900	7,630	18,100	9,040	8,200	5,010
14	3,720	3,230	3,990			2,590	3,900	9,000	16,500	9,040	8,460	4,620
15	3,720	3,350	4,010			2,590	4,010	10,700	17,800	9,710	8,620	4,320
16	3,680	3,230	3,960			2,490	4,090	10,600	20,700	9,780	8,590	4,050
17	3,740	3,200	3,780			2,410	4,390	11,200	23,600	10,700	8,560	3,960
18	3,720	3,270	3,760			2,430	4,620	11,300	23,400	11,100	8,460	3,920
19	3,580	3,250	3,740			2,460	4,620	11,900	19,500	11,500	8,420	3,860
20	3,560	3,270	3,640	2,600		2,430	4,130	12,200	16,300	11,400	8,330	4,640
21	3,540	3,250	3,620			2,490	4,010	13,000	14,400	10,400	8,230	6,040
22	3,520	3,250	3,600			2,690	3,940	13,900	14,300	10,300	8,160	6,250
23	3,480	3,230	3,560			2,600	4,110	15,100	14,900	10,000	8,230	6,120
24	3,540	3,220	3,540			2,720	4,130	16,800	15,200	9,820	8,100	6,090
25	3,420	3,220	3,720			2,720	3,960	18,200	15,600	10,100	8,000	5,620
26	3,400	3,230	3,780		3,780	2,720	3,940	17,300	15,800	10,800	7,820	5,300
27	3,380	3,250	3,800		3,480	3,520	3,940	14,100	16,500	11,200	7,720	5,060
28	3,350	3,310	3,990		3,250	3,740	4,320	11,600	16,500	10,700	7,660	4,460
29	3,310	3,250	3,960		-------	3,880	5,150	9,860	16,100	10,300	7,630	4,200
30	3,290	3,230	3,920		-------	3,880	5,580	9,180	16,600	10,100	7,630	3,880
31	3,330	-------	3,840		-------	3,860	-------	9,390	---------	10,200	7,420	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4,130	3,290	3,700	228,000
November	3,580	3,200	3,290	196,000
December	4,070	3,090	3,720	229,000
January	3,480	----------	2,710	167,000
February	3,780	----------	2,700	150,000
March	3,880	2,410	2,780	171,000
April	5,580	3,700	4,200	250,000
May	18,200	4,780	9,650	593,000
June	23,600	10,300	16,200	964,000
July	17,400	9,040	11,200	689,000
August	10,900	7,420	8,630	531,000
September	7,880	3,860	5,680	338,000
The year	23,600	2,410	6,220	4,510,000

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. Of these canals, 40 divert above the mouth of Henrys Fork and 10 below. Records are available during a part of each irrigation season from June, 1919, to September, 1929, and show the combined discharge of all canals. Most of these canals are equipped with staff gages read once daily; a few have water-stage recorders. From July 6 to Sept. 23 flow was supplemented by release of water from Jackson Lake. Records good.

Daily and monthly discharge, in second-feet, 1929

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	6,460	10,000	8,200	5,890	16	7,890	8,190	6,910	4,140
2	5,970	9,950	8,280	5,890	17	6,660	8,430	6,670	4,210
3	5,650	9,470	8,050	6,050	18	5,350	8,230	6,600	4,360
4	5,280	8,640	7,960	5,870	19	4,980	8,460	6,640	4,500
5	5,500	8,670	7,790	5,730	20	5,250	8,460	6,380	4,690
6	6,440	8,580	7,660	5,570	21	5,520	7,980	6,440	5,070
7	7,190	8,050	7,580	5,530	22	6,300	8,110	6,450	4,830
8	7,680	8,010	7,580	5,260	23	6,970	8,080	6,460	4,380
9	7,860	8,070	7,280	5,060	24	7,810	7,950	6,340	4,000
10	7,880	7,300	7,130	4,660	25	8,800	8,000	6,400	3,410
11	7,990	7,070	7,010	4,570	26	9,240	8,290	6,310	3,200
12	7,920	7,160	6,920	4,490	27	9,560	8,350	6,230	3,090
13	7,960	7,140	7,010	4,340	28	9,570	8,060	6,120	3,000
14	7,820	7,570	7,060	4,140	29	9,850	8,140	6,090	2,840
15	8,480	8,090	7,080	4,130	30	9,920	8,170	6,140	2,690
					31		8,200	5,990	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June	9,920	4,980	7,320	436,000
July	10,000	7,070	8,220	505,000
August	8,280	5,990	6,930	426,000
September	6,050	2,690	4,520	269,000
The period				1,640,000

SNAKE RIVER NEAR SHELLEY, IDAHO

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

RECORDS AVAILABLE.—March, 1915, to September, 1929.

EXTREMES.—Maximum discharge during year, 24,600 second-feet June 19 (gage height, 11.70 feet); minimum, 1,260 second-feet Sept. 19 (gage height, 4.48 feet).

1915–1929: 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 except those for Apr. 28 to May 1, May 9-10, June 30, Sept. 16-18, and 20, which are good. Flow regulated by numerous canal diversions above station and by storage in Jackson Lake Reservoir.

Daily and monthly discharge, in second-feet, 1929

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	-------	6,320	6,100	10,400	3,680	3,620	16	5,180	12,700	13,800	3,200	3,180	2,190
2	-------	6,410	7,230	10,800	3,920	3,620	17	5,180	13,500	19,500	3,240	3,300	1,880
3	-------	5,940	9,510	9,690	4,350	3,730	18	5,350	14,200	23,700	3,920	3,500	1,570
4	-------	6,250	9,690	8,440	4,540	4,220	19	5,780	14,600	23,700	4,430	3,620	1,260
5	5,780	6,900	8,080	7,400	4,590	4,480	20	6,100	14,200	19,900	4,560	3,730	1,360
6	6,250	6,900	7,060	6,900	4,620	4,350	21	5,940	13,800	16,600	4,430	3,730	1,450
7	6,100	6,570	7,060	6,700	4,350	4,220	22	5,780	14,200	12,700	4,040	3,730	2,790
8	5,630	6,250	7,910	6,190	3,970	4,220	23	5,630	14,600	11,600	3,800	3,730	4,100
9	5,480	6,580	10,800	5,540	3,620	4,100	24	5,480	15,400	11,900	3,460	3,730	4,620
10	5,330	6,900	13,800	5,070	3,070	3,850	25	5,480	16,600	10,400	3,300	3,620	5,040
11	5,180	7,230	14,600	4,730	2,860	3,730	26	5,330	17,400	10,100	3,460	3,620	4,900
12	5,180	7,060	15,000	4,170	2,740	3,500	27	5,940	16,600	10,100	3,920	3,500	4,760
13	5,180	7,740	14,200	3,800	2,670	3,200	28	6,030	13,100	10,400	4,170	3,620	4,620
14	5,180	9,330	12,700	3,350	2,740	2,860	29	6,130	9,690	10,100	3,800	3,620	4,350
15	5,180	11,200	12,700	3,050	2,980	2,500	30	6,220	7,740	10,200	3,570	3,620	4,100
							31	-------	6,570	-------	3,570	3,730	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April 5-31	6,250	5,180	5,620	290,000
May	17,400	5,940	10,400	640,000
June	23,700	6,100	12,400	738,000
July	10,800	3,050	5,070	312,000
August	4,620	2,670	3,620	224,000
September	5,040	1,260	3,510	209,000
The period	-------	-------	-------	2,410,000

SNAKE RIVER BELOW BLACKFOOT BRIDGE, NEAR BLACKFOOT, IDAHO

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

RECORDS AVAILABLE.—April, 1924, to September, 1929.

EXTREMES.—Maximum discharge during year, not determined; minimum, dry Sept. 18–21.

1924–1929: Maximum discharge, not determined; minimum, dry on various days during the summers in several years.

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

Daily and monthly discharge, in second-feet, 1929

Day	July	Aug.	Sept.	Day	July	Aug.	Sept.	Day	July	Aug.	Sept.
1		664	1,370	11	1,300	541	1,370	21	710	1,350	0
2		860	1,400	12	987	560	1,210	22	611	1,420	144
3		1,210	1,440	13	739	437	974	23	423	1,380	1,680
4		1,310	1,550	14	502	437	751	24	175	1,400	1,880
5		1,470	1,670	15	198	695	455	25	58	1,340	2,060
6		1,490	1,720	16	102	809	198	26	50	1,470	2,070
7		1,490	1,650	17	2	735	38	27	216	1,530	1,990
8	1,940	1,220	1,650	18	32	1,060	0	28	640	1,500	1,920
9	1,750	1,040	1,650	19	443	1,210	0	29	772	1,560	1,850
10	1,470	760	1,460	20	656	1,290	0	30	697	1,550	1,730
								31	644	1,480	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
July 8–31	1,940	2	630	30,000
August	1,560	437	1,140	70,100
September	2,070	0	1,200	71,400
The period				172,000

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 part of each irrigation season from May, 1924, to September, 1929, showing the combined discharge of all canals. Between July 6 and Sept. 23 flow was supplemented by release of water from Jackson Lake. Records good.

Daily and monthly discharge, in second-feet, 1929

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	2,690	3,960	2,750	1,970	16	3,320	2,880	2,130	1,960
2	2,880	3,970	2,770	1,950	17	3,080	2,880	2,260	1,860
3	2,860	3,660	2,830	2,080	18	2,930	3,110	2,200	1,520
4	2,900	3,310	2,800	2,280	19	2,760	3,440	2,190	1,340
5	3,020	3,190	2,780	2,380	20	2,560	3,490	2,120	1,160
6	3,150	3,140	2,700	2,280	21	2,520	3,500	2,020	1,190
7	3,230	3,190	2,660	2,250	22	2,670	3,380	2,000	1,530
8	3,310	3,230	2,620	2,260	23	2,730	3,260	2,050	1,820
9	3,460	3,230	2,340	2,190	24	3,190	3,160	2,110	1,600
10	3,460	3,110	2,250	2,200	25	3,650	3,090	2,070	1,550
11	3,470	3,170	2,110	2,190	26	3,790	3,110	1,810	1,530
12	3,480	3,110	2,020	2,200	27	3,890	3,300	1,740	1,530
13	3,460	3,000	2,000	2,180	28	3,970	3,220	1,720	1,530
14	3,510	2,880	2,010	2,130	29	3,980	2,820	1,730	1,440
15	3,540	2,750	1,940	2,040	30	3,950	2,730	1,720	1,410
					31		2,730	1,930	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June	3,980	2,520	3,250	193,000
July	3,970	2,730	3,190	196,000
August	2,830	1,720	2,210	136,000
September	2,380	1,160	1,850	110,000
The period				635,000

SNAKE RIVER AT CLOUGH RANCH, NEAR BLACKFOOT, IDAHO

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

RECORDS AVAILABLE.—June, 1910, to September, 1929.

EXTREMES.—Maximum discharge during year, 21,400 second-feet June 19 (gage height, 9.92 feet); minimum, 185 second-feet Sept. 20 (gage height, 1.05 feet). 1910–1929: Maximum discharge, 46,200 second-feet June 18, 1918 (gage height, 14.8 feet); minimum, 118 second-feet Aug. 25, 1919.

REMARKS.—Records excellent except periods Dec. 19–21, Jan. 15–17, 22–24, Feb. 12–13, 15, Mar. 3 and 14–15, which are fair. Flow regulated by storage in Jackson Lake Reservoir on Snake River and Blackfoot-Marsh Reservoir on Blackfoot River. Numerous diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	996	3,380	4,060	4,260	2,460	2,750	4,670	6,240	3,410	5,820	709	1,500
2	1,380	3,490	3,960	4,570	2,620	2,780	4,670	6,240	3,720	6,410	888	1,570
3	1,660	3,490	3,830	4,060	2,680	2,800	4,670	5,540	5,540	6,410	1,200	1,680
4	1,680	3,490	3,360	3,620	2,760	2,820	4,780	5,430	6,990	5,580	1,450	1,870
5	1,930	3,510	3,870	3,340	3,000	2,950	5,100	6,000	5,650	3,720	1,560	2,290
6	2,230	3,700	3,620	3,320	3,140	3,070	5,540	6,360	4,360	4,000	1,650	2,440
7	2,440	3,770	3,360	3,210	3,040	3,210	5,770	6,120	3,660	3,620	1,660	2,260
8	2,380	3,890	3,340	2,760	2,760	3,430	5,430	5,770	3,790	3,290	1,430	2,220
9	2,430	3,920	3,380	2,550	2,430	3,560	5,320	5,540	5,430	2,850	1,210	2,230
10	2,380	3,850	3,660	2,350	2,050	3,770	5,100	5,650	8,760	2,220	880	2,010
11	2,510	3,770	4,060	2,140	1,690	3,960	4,990	6,240	10,300	1,870	716	1,750
12	2,850	3,730	4,160	2,140	1,680	4,060	4,780	6,360	10,900	1,330	716	1,540
13	3,250	3,540	4,670	2,110	1,660	4,160	4,670	6,360	10,700	928	640	1,260
14	3,660	3,490	5,100	2,110	1,640	4,060	4,570	7,380	9,350	667	569	969
15	3,520	4,000	4,880	2,290	1,880	3,960	4,570	8,760	8,470	383	702	730
16	3,450	3,980	4,780	2,480	2,110	3,870	4,570	10,400	9,350	245	912	497
17	3,380	4,060	4,670	2,660	2,260	3,960	4,670	10,900	12,900	212	808	295
18	3,360	3,960	4,570	2,850	2,380	3,960	4,780	11,600	18,600	205	1,070	215
19	3,380	3,870	4,030	2,760	2,490	3,870	5,210	11,600	21,000	321	1,310	191
20	3,390	3,960	3,500	2,540	2,670	3,960	5,430	11,600	19,200	653	1,400	191
21	3,320	4,060	2,960	2,280	2,750	4,060	5,430	10,600	15,400	786	1,460	198
22	3,250	4,160	2,430	2,130	2,750	3,870	5,320	10,400	11,500	793	1,600	344
23	3,210	4,160	2,350	1,970	2,670	3,810	5,210	10,600	9,410	634	1,540	1,440
24	3,160	4,160	2,320	1,820	2,670	3,790	4,990	10,600	8,680	404	1,560	2,980
25	3,230	4,160	2,700	1,660	2,680	3,870	5,100	11,400	7,300	286	1,470	3,470
26	3,230	4,160	2,630	1,710	2,730	3,870	4,990	12,600	6,290	212	1,600	3,470
27	3,200	4,160	2,730	1,730	2,760	3,870	4,780	13,300	5,700	230	1,740	3,270
28	3,200	4,160	3,750	1,590	2,750	4,570	4,780	11,600	5,820	614	1,560	3,210
29	3,160	4,160	3,720	1,800	------	4,780	4,880	8,620	6,050	936	1,790	3,110
30	3,140	4,160	4,160	2,070	------	4,780	5,430	5,880	5,700	888	1,740	2,800
31	3,250	------	4,210	2,230	------	4,780	------	4,260	------	716	1,660	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	3,660	996	2,830	174,000
November	4,160	3,380	3,880	231,000
December	5,100	2,320	3,700	228,000
January	4,570	1,590	2,550	157,000
February	3,140	1,640	2,470	137,000
March	4,780	2,750	3,770	232,000
April	5,770	4,570	5,010	298,000
May	13,300	4,260	8,390	516,000
June	21,000	3,410	8,800	524,000
July	6,410	205	1,850	114,000
August	1,790	569	1,260	77,500
September	3,470	191	1,730	103,000
The year	21,000	191	3,850	2,790,000

AMERICAN FALLS RESERVOIR AT AMERICAN FALLS, IDAHO

LOCATION.—Water-stage recorder 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, 1929.

REMARKS.—American Falls Reservoir impounds water for supplemental irrigation of lands in the Minidoka and North and South Side Twin Falls tracts and also stored water for some future irrigation development. It has a capacity of 1,700,000 acre-feet between elevations 4,295.70 and 4,354.50 feet, mean 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	965,170	869,590	1,058,140	1,160,740	1,300,540	1,400,300
2	961,410	865,670	1,064,750	1,165,900	1,307,390	1,396,770
3	957,240	864,490	1,071,370	1,171,550	1,316,300	1,398,280
4	960,160	861,000	1,077,230	1,175,790	1,323,720	1,400,300
5	960,580	862,920	1,082,640	1,179,080	1,330,650	1,406,370
6	963,500	862,920	1,089,860	1,183,320	1,337,090	1,411,510
7	954,740	862,920	1,094,820	1,184,260	1,341,050	1,417,680
8	950,150	859,850	1,097,970	1,185,680	1,346,000	1,423,850
9	945,140	857,570	1,103,390	1,187,090	1,350,950	1,426,940
10	933,310	855,280	1,108,800	1,188,030	1,358,940	1,442,870
11	946,810	856,040	1,108,350	1,187,090	1,365,000	1,456,760
12	933,310	861,760	1,113,760	1,188,500	1,369,030	1,472,470
13	924,010	864,490	1,122,010	1,188,030	1,370,040	1,486,610
14	919,960	877,830	1,124,780	1,188,970	1,369,030	1,494,460
15	917,540	888,030	1,129,390	1,188,970	1,370,040	1,500,740
16	915,110	899,400	1,137,690	1,192,740	1,369,030	1,506,500
17	911,070	908,640	1,142,300	1,198,860	1,371,050	1,512,310
18	908,640	920,370	1,145,990	1,206,870	1,373,570	1,518,170
19	905,400	930,880	1,147,830	1,213,550	1,376,090	1,521,900
20	899,010	940,180	1,147,830	1,222,180	1,376,590	1,528,290
21	897,830	950,560	1,147,830	1,227,930	1,381,130	1,530,420
22	895,080	960,580	1,149,670	1,238,490	1,384,160	1,536,800
23	892,730	970,590	1,145,990	1,244,240	1,386,180	1,536,800
24	889,590	981,030	1,143,220	1,250,950	1,390,210	1,536,270
25	885,670	992,540	1,145,990	1,257,680	1,393,240	1,535,740
26	882,930	1,003,270	1,149,670	1,264,500	1,396,770	1,536,800
27	879,400	1,014,430	1,150,600	1,268,400	1,399,290	1,537,340
28	876,260	1,031,730	1,148,750	1,275,210	1,400,300	1,537,870
29	872,730	1,043,180	1,150,600	1,282,030	----------	1,534,680
30	869,980	1,053,740	1,152,440	1,287,880	----------	1,535,740
31	867,630	----------	1,155,210	1,293,720	----------	1,530,950

Daily contents, in acre-feet, of American Falls Reservoir at American Falls, Idaho, 1928–29—Continued

Day	Apr.	May	June	July	Aug.	Sept.
1	1,528,290	1,377,600	1,436,710	1,571,660	1,231,770	911,070
2	1,525,090	1,380,630	1,422,820	1,571,660	1,220,260	902,980
3	1,515,510	1,374,070	1,421,790	1,568,880	1,209,230	894,690
4	1,506,500	1,383,150	1,420,770	1,565,620	1,195,560	889,200
5	1,493,410	1,379,120	1,417,680	1,562,360	1,188,500	884,100
6	1,475,090	1,384,160	1,412,540	1,549,050	1,178,140	877,040
7	1,467,230	1,383,660	1,408,430	1,540,530	1,168,250	872,340
8	1,459,900	1,388,190	1,398,780	1,536,270	1,157,050	865,670
9	1,446,480	1,378,110	1,393,240	1,527,220	1,147,830	859,470
10	1,441,330	1,384,660	1,390,210	1,521,900	1,136,770	853,760
11	1,431,050	1,385,170	1,396,260	1,505,980	1,127,080	845,750
12	1,418,190	1,378,610	1,404,330	1,497,600	1,114,660	838,510
13	1,408,430	1,376,090	1,413,570	1,485,030	1,102,930	835,080
14	1,396,260	1,356,420	1,416,650	1,474,560	1,089,410	827,840
15	1,386,180	1,360,460	1,423,850	1,460,950	1,076,330	824,030
16	1,385,170	1,361,970	1,432,080	1,446,990	1,065,190	816,250
17	1,382,140	1,370,040	1,435,160	1,435,160	1,054,180	808,460
18	1,383,150	1,379,120	1,455,730	1,422,320	1,042,300	798,090
19	1,382,140	1,386,680	1,476,260	1,408,430	1,029,090	788,820
20	1,380,130	1,395,250	1,512,310	1,395,250	1,019,580	779,760
21	1,382,650	1,402,310	1,529,350	1,383,150	1,009,280	771,100
22	1,380,130	1,406,370	1,550,110	1,370,740	996,840	763,890
23	1,380,130	1,412,540	1,561,830	1,356,930	988,680	753,790
24	1,381,130	1,415,620	1,568,880	1,344,020	977,690	749,520
25	1,383,150	1,416,650	1,575,400	1,332,630	970,590	743,900
26	1,383,150	1,427,960	1,568,880	1,312,340	958,490	740,040
27	1,382,140	1,441,330	1,572,680	1,297,130	949,730	738,630
28	1,381,130	1,450,590	1,568,880	1,283,490	941,800	739,330
29	1,373,570	1,454,700	1,569,970	1,269,370	932,900	743,200
30	1,372,060	1,452,650	1,570,510	1,255,750	925,620	746,000
31	----------	1,446,990	----------	1,242,800	918,340	----------

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 below American Falls Reservoir.

RECORDS AVAILABLE.—March, 1906, to September, 1929.

EXTREMES.—Maximum discharge during year, 14,500 second-feet Apr. 4 (gage height, 7.60 feet); minimum 130 second-feet Sept. 30 (gage height, not recorded).

1906–1929: Maximum discharge, 48,400 second-feet June 20, 1918 (gage height, 13.5 feet); minimum, that of Sept. 30, 1929.

REMARKS.—Records excellent except those for Dec. 23–28 and Jan. 1 to Mar. 12, which are fair. Flow regulated by operation of gates at American Falls Dam.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,300	7,800	1,650				9,100	7,630	10,780	8,440	9,560	7,830
2	5,300	7,760	3,510			5,660	11,200	7,380	10,700	8,440	9,380	7,800
3	4,530	6,960	3,510	4,500			12,200	8,640	10,140	8,960	9,140	7,800
4	3,930	5,860	3,530				13,600	8,680	9,710	9,490	9,170	7,700
5	3,900	6,740	3,530				14,400	8,610	9,780	10,070	9,100	7,600
6	5,650	7,830	3,530			3,450	14,300	8,580	9,780	10,550	9,030	7,630
7	8,070	7,800	3,560		2,340		14,100	8,580	9,740	10,480	8,960	7,600
8	8,030	7,830	3,630				14,000	8,610	9,740	10,140	8,960	7,630
9	7,960	7,860	4,240			1,700	13,900	8,680	9,710	9,450	8,960	7,630
10	8,030	7,830	4,880				13,700	8,580	9,710	9,450	8,890	7,600
11	7,830	5,650	5,680			500	13,600	10,290	9,710	9,450	8,890	7,570
12	7,830	3,800	4,720	3,240			13,400	13,030	9,600	9,450	9,140	7,150
13	7,930	2,870	4,720			2,200	13,300	12,990	9,450	9,450	9,350	6,840
14	8,030	1,760	5,770			3,700	13,100	12,990	9,450	9,380	9,280	6,800
15	8,030	1,570	5,800			3,960	10,700	11,120	9,490	9,420	9,240	6,740
16	8,030	1,660	1,800			4,110	8,610	10,070	9,170	9,450	9,240	6,870
17	8,030	1,690	5,460			4,480	8,610	10,030	8,610	9,380	9,170	7,600
18	8,000	1,750	5,770			4,480	8,610	10,290	8,510	9,350	9,170	7,600
19	7,960	1,730	5,800			4,530	8,610	10,480	8,340	9,350	9,200	7,570
20	8,000	1,710	5,800		4,000	4,580	8,610	10,510	8,370	9,630	9,170	7,540
21	7,930	1,730	5,800			4,660	8,540	10,510	8,240	9,780	9,140	7,540
22	7,930	1,730	5,800			5,330	8,510	10,550	7,860	9,740	9,060	7,470
23	7,900	1,730	5,800			6,900	8,470	10,550	7,830	9,710	9,060	7,670
24	7,900	1,760	4,550	1,660		6,900	8,440	10,630	7,860	9,710	8,960	7,730
25	7,900	1,780				6,870	8,440	10,670	8,370	9,710	8,920	7,730
26	7,860	1,820				6,840	8,440	10,630	9,000	10,030	8,890	7,730
27	7,860	1,800	5,900			6,800	8,440	10,630	8,960	10,290	8,860	6,340
28	7,830	1,800	5,900		5,600	6,840	8,440	10,630	8,680	10,290	8,720	4,610
29	7,830	1,800	5,830			8,300	8,470	10,670	8,470	10,290	8,130	4,610
30	7,830	1,820	5,890			9,140	8,470	10,670	8,470	9,960	7,830	1,640
31	7,860		5,860			9,100		10,670		9,560	7,830	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	8,070	3,900	7,320	450,000
November	7,860	1,570	3,870	230,000
December		1,650	4,750	292,000
January			2,780	171,000
February			3,290	183,000
March	9,140		4,750	292,000
April	14,400	8,440	10,700	637,000
May	13,000	7,380	10,100	621,000
June	10,800	7,830	9,140	544,000
July	10,600	8,440	9,640	593,000
August	9,560	7,830	8,980	552,000
September	7,830	1,640	7,070	421,000
The year	14,400		6,890	4,990,000

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, U.S. Bureau of Reclamation project datum).

RECORDS AVAILABLE.—April, 1909, to September, 1929.

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

Daily contents, in acre-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	91,690	88,200	82,860	91,230	-------	86,100	45,670	56,120	92,160	86,570	95,310	90,060
2	90,410	87,850	82,980	91,690	-------	85,870	48,200	54,070	92,160	84,940	95,550	88,430
3	88,660	87,500	87,380	91,920	-------	85,870	53,000	55,040	92,970	87,500	95,670	87,030
4	87,730	87,850	89,010	91,690	-------	86,220	54,830	57,840	91,690	87,030	94,840	86,330
5	86,680	87,620	89,600	91,460	78,800	76,100	55,360	56,980	91,690	87,150	94,950	85,170
6	86,920	88,200	89,830	91,460	78,470	64,580	55,360	58,480	91,920	88,080	94,600	84,700
7	86,570	88,200	89,940	91,690	81,960	49,470	56,440	58,700	92,390	88,900	94,370	85,050
8	86,450	88,200	89,940	92,040	87,030	41,020	56,230	60,630	91,920	92,040	93,670	85,520
9	87,270	88,200	89,830	91,690	87,030	34,980	54,400	59,450	91,690	92,510	92,970	86,100
10	84,700	87,960	90,060	91,570	-------	28,580	56,330	60,740	92,390	91,920	92,510	86,680
11	88,200	88,080	92,040	91,340	83,770	19,440	55,790	60,960	92,160	91,920	92,040	87,620
12	88,200	83,540	93,550	91,340	83,200	10,230	55,470	66,220	92,390	92,160	91,230	88,900
13	86,220	85,520	90,410	91,340	84,470	1,620	55,040	73,170	92,740	91,810	92,620	89,940
14	86,450	87,270	94,840	91,340	84,470	−1,330	54,830	79,140	92,040	91,340	91,920	90,530
15	86,800	85,870	93,790	91,110	84,470	−1,430	54,290	87,620	92,860	91,110	92,160	90,990
16	86,800	85,870	91,460	90,530	85,870	−1,140	54,400	88,200	93,440	90,410	92,040	91,460
17	86,800	84,820	92,860	87,730	85,870	−380	53,750	89,250	93,550	90,060	92,040	91,570
18	86,800	85,520	93,670	86,570	85,870	950	54,610	90,060	94,840	89,830	92,160	92,040
19	86,800	85,400	93,670	85,750	85,640	2,100	55,360	90,290	93,320	89,600	91,920	92,970
20	86,920	85,520	93,790	-------	85,290	3,050	55,260	89,480	95,180	89,010	92,270	93,550
21	87,500	84,940	93,790	-------	85,290	4,290	55,900	90,410	94,950	89,130	92,620	95,070
22	88,200	84,120	93,670	-------	85,290	4,770	55,900	90,990	94,720	89,710	92,860	95,430
23	88,200	83,540	93,790	-------	85,170	7,630	56,010	91,230	93,790	89,830	92,860	95,670
24	88,200	83,200	93,790	-------	85,170	12,310	55,900	91,570	92,860	90,640	92,390	96,390
25	88,200	82,980	92,270	-------	85,170	16,370	55,790	90,530	91,340	90,640	92,860	97,110
26	88,200	83,200	90,990	-------	84,940	19,950	55,690	90,880	90,180	90,180	92,620	96,870
27	88,200	83,090	92,510	-------	85,170	24,210	55,580	91,690	90,290	91,230	92,860	98,920
28	87,850	82,860	93,790	-------	86,450	26,240	55,580	92,390	90,290	92,740	92,740	100,970
29	88,200	83,770	93,670	-------	-------	27,860	54,610	92,620	89,010	93,790	92,390	101,930
30	87,730	84,240	93,900	-------	-------	35,290	54,610	92,740	87,620	95,070	91,920	102,660
31	87,620	-------	94,020	-------	-------	40,800	-------	92,740	-------	95,310	90,880	-------

NOTE.—Gage not read Jan. 20 to Feb. 4, and Feb. 10.

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, 1929. Records prior to 1910 at Montgomerys Ferry, 6 miles downstream.

EXTREMES.—Maximum discharge during year, 15,000 second-feet Apr. 5 (gage height, 9.50 feet); minimum, 1,470 second-feet Dec. 16 (gage height, 4.27 feet).

1910–1929: 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 except those for Jan. 8–11 and 20–27, which are fair. Flow regulated by storage at American Falls and Lake Walcott Reservoirs and by diversions 1 mile upstream for irrigation in the Minidoka project.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,750	7,570	1,810	4,800	2,050	5,920	7,480	8,100	7,970	6,410	6,820	5,870
2	4,660	7,570	1,810	4,870	2,020	5,760	8,730	6,350	7,930	5,230	6,680	6,060
3	4,190	7,190	2,240	4,920	1,910	5,710	11,000	6,880	7,970	5,300	6,630	6,060
4	3,340	4,660	2,870	4,920	1,990	8,130	12,800	7,890	7,190	6,520	6,540	6,030
5	3,100	5,160	3,190	4,870	2,160	9,920	14,500	7,660	6,830	6,901	6,540	5,710
6	4,120	7,310	3,270	4,850	2,190	11,800	14,400	8,070	6,830	6,960	6,540	5,380
7	7,220	7,400	3,300	4,970	2,250	9,040	14,700	7,140	6,970	7,080	6,540	5,210
8	7,190	7,220	3,360	4,970	2,370	6,630	14,700	7,160	6,830	6,990	6,520	5,060
9	7,110	7,280	3,320	4,970	2,380	6,160	14,200	7,050	6,770	6,710	6,520	5,240
10	7,400	7,140	3,600	4,970	2,360	5,610	14,800	7,340	6,870	6,660	6,460	5,090
11	7,370	6,940	4,780	4,970	2,380	5,280	14,100	7,160	6,970	6,630	6,460	4,870
12	7,480	3,970	5,480	4,970	2,820	4,900	13,900	7,220	6,770	6,770	6,520	4,590
13	7,400	2,160	3,350	4,920	4,250	4,540	13,500	7,190	6,670	6,820	6,490	4,470
14	7,340	1,870	5,480	4,920	4,230	4,360	13,400	7,160	6,630	6,630	6,430	4,540
15	7,430	1,740	7,460	5,040	4,190	4,340	11,700	7,020	6,670	6,540	6,490	4,540
16	7,430	1,700	3,400	3,780	4,120	4,340	8,130	7,050	6,770	6,820	6,520	4,780
17	7,310	1,750	5,160	2,760	4,030	4,320	8,220	6,880	6,870	6,740	6,460	5,710
18	7,310	1,710	5,660	2,370	4,010	4,360	8,280	7,220	6,870	6,710	6,410	5,380
19	7,310	1,740	5,840	2,150	4,080	4,450	8,220	7,570	6,210	6,710	6,490	5,380
20	7,160	1,950	6,000		4,100	4,560	8,340	7,570	6,870	6,770	6,490	5,480
21	7,160	2,120	6,080		4,120	4,900	8,370	7,740	6,270	6,680	6,430	5,920
22	7,340	2,030	6,110		3,950	4,660	8,280	7,720	6,170	6,820	6,460	6,240
23	7,480	1,870	6,220		4,010	4,870	8,280	7,660	6,110	6,800	6,540	6,520
24	7,480	1,810	6,630	2,150	3,970	5,040	8,310	7,770	6,370	5,770	6,540	6,520
25	7,510	1,720	4,940		4,030	5,310	8,160	7,980	6,350	6,800	6,460	6,770
26	7,570	1,710	4,160		4,050	5,410	8,130	7,830	6,710	6,850	6,490	6,140
27	7,460	1,740	5,040		4,100	5,510	8,010	7,860	6,490	6,940	6,490	4,520
28	7,250	1,720	5,690	2,150	5,110	5,560	7,950	7,920	6,410	6,800	6,350	3,480
29	7,460	1,670	5,760	2,180	-------	5,890	7,860	7,920	6,370	6,770	6,030	3,640
30	7,540	1,720	5,820	2,140	-------	6,030	8,160	8,070	6,410	6,770	5,840	2,830
31	7,480	-------	5,950	2,150	-------	6,460	-------	8,100	-------	6,740	5,820	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	7,570	3,100	6,730	414,000
November	7,570	1,670	3,740	223,000
December	7,460	1,810	4,640	285,000
January	5,040	2,150	3,570	220,000
February	5,110	1,910	3,330	185,000
March	11,800	4,320	5,800	357,000
April	14,800	7,480	10,600	631,000
May	8,100	6,350	7,490	461,000
June	7,980	6,110	6,710	399,000
July	7,080	5,230	6,670	410,000
August	6,820	5,820	6,450	397,000
September	6,770	2,830	5,270	314,000
The year	14,800	1,670	5,930	4,300,000

SNAKE RIVER AT MILNER, IDAHO

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

RECORDS AVAILABLE.—May, 1909, to September, 1929.

EXTREMES.—Maximum discharge during year, 14,900 second-feet Apr. 8 (gage height, 16.5 feet); minimum, 20 second-feet July 5 and Sept. 1 (gage height, 1.72 feet).

1909–1929: 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 American Falls and Lake Walcott Reservoirs and by diversions at Milner Dam just above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,380	6,730	236	4,780	1,170	4,780	6,180	4,990	1,170	38	70	20
2	2,240	7,060	640	4,150	1,250	5,090	7,060	3,180	1,140	40	208	21
3	2,010	7,610	2,380	4,150	1,400	5,200	8,740	1,870	1,780	416	48	21
4	1,610	4,400	2,430	3,950	1,320	5,300	10,000	3,950	1,080	25	43	22
5	783	3,750	2,150	4,250	1,170	8,980	12,400	2,640	221	20	56	22
6	1,570	5,400	2,480	3,250	1,170	9,370	12,900	4,780	171	50	65	21
7	5,300	6,400	2,570	3,450	1,170	11,800	13,700	3,160	412	51	38	21
8	5,630	5,960	2,860	3,950	1,650	6,730	14,100	2,010	154	520	43	21
9	5,410	5,960	3,050	4,360	1,650	6,180	12,900	825	275	63	36	22
10	5,740	6,950	2,860	4,570	1,570	5,410	13,500	837	203	36	38	22
11	6,180	7,060	3,150	4,150	1,480	4,360	13,300	507	197	31	54	22
12	6,070	6,000	4,360	3,950	1,480	5,630	12,900	899	571	31	63	22
13	5,850	2,570	4,360	4,050	1,650	4,360	12,400	899	464	43	70	23
14	6,290	1,920	3,250	4,050	2,860	3,950	12,400	807	78	52	50	24
15	6,620	1,210	5,960	4,050	3,050	3,950	12,000	964	104	47	28	24
16	6,070	529	5,240	3,950	3,050	3,450	8,860	625	732	40	33	25
17	5,850	116	2,790	2,480	3,050	3,350	7,610	575	251	47	57	1,500
18	6,400	390	4,570	1,740	3,050	3,450	7,060	270	310	43	75	1,320
19	6,840	1,320	4,460	1,920	3,050	3,450	5,630	1,100	70	54	28	1,610
20	6,400	1,140	4,360	1,320	3,150	3,350	5,740	931	169	32	87	1,870
21	5,740	997	4,460	1,320	3,150	3,150	6,840	1,060	52	40	34	1,700
22	5,850	1,170	4,670	1,170	3,150	4,150	6,950	931	43	39	39	2,520
23	6,290	1,170	4,880	1,250	3,150	3,550	6,510	997	43	59	34	2,760
24	6,400	1,100	4,880	1,250	3,150	3,750	6,730	515	96	54	32	3,550
25	6,400	899	5,090	1,320	3,150	4,050	6,840	262	126	50	47	3,650
26	6,180	556	4,250	1,480	3,150	4,360	5,960	997	70	31	106	3,850
27	6,070	693	3,550	1,400	3,150	4,360	5,630	1,170	84	35	270	2,950
28	5,960	766	4,670	1,400	3,150	4,460	6,070	1,280	110	62	208	1,060
29	5,850	825	5,200	1,170	-------	4,360	5,850	1,530	48	68	231	931
30	5,960	778	5,200	1,250	-------	4,780	4,360	1,610	29	65	28	1,280
31	5,740	-------	5,200	1,400	-------	5,300	-------	1,280	-------	74	24	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	6,840	783	5,220	321,000
November	7,610	116	3,050	181,000
December	5,960	236	3,750	231,000
January	4,780	1,170	2,800	172,000
February	3,150	1,170	2,310	128,000
March	11,800	3,150	4,980	306,000
April	14,100	4,360	9,040	538,000
May	4,990	262	1,530	94,100
June	1,780	29	342	20,400
July	520	20	72.8	4,480
August	270	24	72.4	4,450
September	3,850	20	1,030	61,300
The year	14,100	20	2,850	2,060,000

SNAKE RIVER NEAR KIMBERLY, IDAHO

LOCATION.—Water-stage recorder in SE. ¼ sec. 32, T. 9 S., R. 18 E., half a mile below Twin Falls and 4 miles north of Kimberly.

RECORDS AVAILABLE.—July, 1923, to September, 1929.

EXTREMES.—Maximum discharge during year, 14,700 second-feet Apr. 8 (gage height, 12.0 feet); minimum, 462 second-feet July 6 (gage height, 1.35 feet).

1923–1929: 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 for Dec. 22–24, Jan. 21 to Feb. 17, Apr. 14–15, 17–19, May 3–6, and Sept. 9–14, which are good. Practically entire flow during irrigation season is diverted by North and South Side Canals at Milner; no diversions between this station and Milner.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,450	7,600	1,200	5,530	1,700	5,530	6,320	5,530	1,580	490	625	731
2	3,030	8,270	820	4,640	1,700	6,120	7,380	4,980	1,480	490	650	717
3	2,080	8,730	1,920	4,810	1,450	6,320	8,970	2,100	1,070	880	820	576
4	2,210	6,120	3,290	4,480	1,400	6,740	10,500	4,300	2,020	731	588	717
5	1,580	5,340	2,280	4,810	1,500	9,950	12,400	3,000	985	510	600	850
6	1,760	6,740	2,660	3,860	1,400	10,700	13,100	5,100	760	471	576	638
7	4,160	8,500	3,030	4,160	1,400	11,600	13,700	3,290	690	663	576	690
8	6,120	8,040	3,030	4,640	1,800	8,270	14,000	2,360	932	1,040	576	731
9	5,920	7,820	3,290	5,160	1,800	6,740	13,100	1,660	746	1,020	553	750
10	5,530	7,820	3,290	5,160	1,700	6,530	13,400	1,240	835	650	542	750
11	7,160	8,270	3,290	4,810	1,600	5,530	13,400	968	805	612	542	750
12	6,740	8,040	4,640	4,640	1,700	5,720	13,100	968	932	638	588	800
13	6,530	3,710	5,160	4,640	2,700	5,720	12,400	1,400	2,360	531	588	800
14	6,950	2,550	3,570	4,640	3,100	4,810	12,500	1,280	760	564	612	700
15	7,600	1,860	6,120	4,620	3,300	4,640	12,400	1,320	531	588	612	588
16	7,160	1,480	6,740	4,640	3,600	4,480	9,950	1,120	663	576	553	588
17	6,530	932	2,280	3,160	3,700	4,160	9,040	1,000	1,480	520	531	1,240
18	7,160	650	4,980	1,920	3,860	4,010	8,140	932	950	500	553	1,810
19	7,820	1,220	5,160	2,020	3,710	4,160	7,230	1,000	985	564	576	1,810
20	7,600	1,660	5,160	1,920	3,710	3,860	6,320	1,620	746	564	564	2,210
21	6,530	1,440	5,340	1,500	3,860	3,570	7,160	1,480	880	520	564	2,020
22	6,530	1,400	5,200	1,400	3,860	4,480	7,820	1,620	717	500	564	2,550
23	6,950	1,620	5,100	1,400	3,860	4,160	7,160	1,480	731	510	553	3,160
24	7,160	1,530	5,300	1,500	3,860	4,160	7,160	1,480	746	510	553	4,010
25	7,160	1,530	5,530	1,300	3,860	4,480	7,380	1,220	805	531	553	4,160
26	6,950	1,200	4,640	1,350	3,860	4,810	6,530	1,400	650	531	576	4,640
27	6,740	1,200	4,160	1,400	3,860	4,980	6,320	1,760	663	520	588	3,710
28	6,740	1,240	5,160	1,600	3,860	4,980	6,530	1,760	690	520	865	1,860
29	6,740	1,280	5,920	1,700	-------	4,810	6,740	1,710	717	553	790	1,400
30	6,950	1,320	5,720	1,600	-------	5,160	4,980	1,810	542	564	775	1,530
31	6,740	-------	5,720	1,600	-------	5,530	--------	1,860	-------	638	717	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	7,820	1,580	5,850	360,000
November	8,730	650	3,970	236,000
December	6,740	820	4,180	257,000
January	5,530	1,300	3,250	200,000
February	3,860	1,400	2,780	154,000
March	11,600	3,570	5,700	350,000
April	14,000	4,980	9,500	565,000
May	5,530	932	2,020	124,000
June	2,360	531	978	58,200
July	1,040	471	597	36,700
August	865	531	610	37,500
September	4,640	576	1,580	94,000
The year	14,000	471	3,420	2,470,000

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. Outlet of Blue Lakes enters Snake River 200 feet below gage.

RECORDS AVAILABLE.—September, 1911, to June, 1917; May, 1919, to September, 1929.

EXTREMES.—Maximum discharge during year, 17,300 second-feet Apr. 7 (gage height, 9.95 feet); minimum, 455 second-feet July 14 and 24 (gage height, 2.10 feet).

1911–1917, 1919–1929: Maximum discharge, 32,200 second-feet June 10, 1914 (gage height, 13.3 feet); minimum, that of July 14 and 24, 1929.

REMARKS.—Records fair. No water is diverted from river between this station and the one at Milner, except small ranch ditches. Practically the entire flow is diverted during part of irrigation season by North and South Side Canals at Milner; flow at such times consists of inflow and seepage below Milner.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,580	7,890	1,560	6,690	1,870	5,790	6,690	6,230	1,870	560	652	910
2	3,770	8,650	e1,800	4,940	1,870	6,460	7,890	7,640	1,560	620	685	870
3	2,430	8,910	e2,000	5,150	1,680	6,460	8,390	2,430	1,390	590	685	870
4	2,900	6,920	e3,300	4,940	1,620	8,650	11,100	3,770	1,080	720	685	995
5	1,870	6,230	e2,400	4,740	1,740	11,100	13,400	3,960	1,680	685	720	910
6	1,390	6,690	e2,700	4,340	1,620	11,100	13,700	3,070	1,180	560	755	870
7	4,150	8,910	e3,100	4,150	1,560	13,700	16,900	4,150	1,940	560	755	830
8	6,920	8,390	e3,150	4,740	e1,900	8,390	15,900	2,740	1,940	685	685	830
9	6,690	8,390	e3,350	e5,200	e1,900	6,920	15,600	2,000	870	1,130	652	870
10	6,230	8,390	e3,350	e5,200	e1,800	6,920	15,300	1,230	995	2,070	620	870
11	7,640	8,140	4,340	5,150	e1,700	6,460	15,600	2,070	952	685	652	870
12	7,400	9,430	5,360	e4,800	e2,000	6,690	15,600	1,040	910	755	685	910
13	6,920	4,540	5,570	4,740	e3,000	5,570	12,500	1,560	2,580	685	755	910
14	7,640	2,900	5,790	e4,700	e3,300	4,740	11,600	1,500	1,440	455	685	870
15	8,140	2,210	6,010	e4,700	e3,500	4,740	10,800	1,340	792	685	755	755
16	7,640	1,620	6,920	4,740	e3,900	4,740	9,430	1,340	652	685	792	1,870
17	6,920	1,340	3,770	3,590	4,150	4,740	8,910	1,080	1,500	620	652	1,940
18	7,400	830	5,570	2,280	4,150	4,340	8,650	1,040	1,230	652	620	2,210
19	8,390	1,340	6,010	2,280	4,150	4,540	8,140	2,070	1,180	620	652	2,280
20	8,140	2,070	5,790	1,800	e3,900	4,340	6,690	1,870	995	560	685	2,430
21	7,160	2,000	5,570	1,680	3,960	3,960	7,890	1,560	952	620	720	2,900
22	6,920	1,620	5,360	1,560	4,150	e4,600	8,140	1,620	952	620	685	3,240
23	7,400	1,740	5,360	1,620	4,150	e4,400	7,400	1,680	830	620	652	3,770
24	7,640	1,800	5,790	1,620	4,150	4,540	7,400	1,680	870	505	620	3,960
25	7,640	1,800	6,010	1,500	4,150	4,940	7,640	1,340	830	620	685	4,540
26	7,400	1,620	5,150	1,440	3,960	5,150	7,160	1,620	870	652	652	4,940
27	7,160	1,560	4,150	1,620	3,960	5,360	6,920	2,070	720	620	685	4,740
28	e6,920	1,500	5,150	1,740	4,150	4,740	6,690	1,870	685	652	652	3,770
29	6,920	1,440	6,230	1,870	------	4,940	7,640	1,680	685	685	910	1,390
30	7,160	1,500	6,010	1,740	------	5,150	5,360	1,800	685	685	870	1,680
31	6,920	------	6,010	1,740	------	5,790	------	2,070	------	652	910	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	8,390	1,390	6,270	386,000
November	9,430	830	4,350	259,000
December	6,920	1,560	4,600	283,000
January	6,690	1,440	3,450	212,000
February	4,150	1,560	3,000	167,000
March	13,700	3,960	6,130	377,000
April	16,900	5,360	10,200	607,000
May	7,640	1,040	2,290	141,000
June	2,580	652	1,160	69,000
July	2,070	455	694	42,700
August	910	620	705	43,300
September	4,940	755	1,960	117,000
The year	16,900	455	3,730	2,700,000

e Estimated.

SNAKE RIVER NEAR HAGERMAN, IDAHO

LOCATION.—Water-stage recorder in NW. ¼ sec. 1, T. 8 S., R. 13 E., just above Upper Salmon Falls and 4 miles south of Hagerman. Elevation of zero of gage, 2,873.46 feet above mean sea level.

RECORDS AVAILABLE.—August, 1912, to June, 1917; July, 1919, to September, 1929.

EXTREMES.—Maximum discharge during year, 19,600 second-feet Apr. 9 (gage height, 5.72 feet); minimum, 5,330 second-feet July 7 (gage height, 3.40 feet).

1912–1917, 1919–1929: 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 maximum and minimum discharge.

REMARKS.—Records excellent except those for estimated periods, which are good. Practically entire flow during irrigation season is diverted by North and South Side Canals at Milner; only minor diversions below Milner.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7,640	12,200	6,650	10,900	6,890	10,300	10,900	9,640	6,650	5,750	5,750	e6,200
2	8,180	13,200	6,420	9,950	6,650	12,200	11,600	9,640	6,420	5,540	5,970	e6,220
3	7,910	13,600	6,190	9,950	6,890	12,600	12,600	7,640	6,420	5,540	5,970	e6,240
4	7,910	12,900	7,640	9,340	6,890	11,900	14,600	7,380	7,130	5,750	5,970	e6,260
5	7,640	9,950	7,640	e9,500	6,890	13,900	16,300	9,040	6,890	5,750	5,970	e6,300
6	7,130	11,200	7,380	e9,300	6,650	15,300	18,100	8,180	5,970	5,540	5,750	e6,500
7	7,640	13,200	7,910	8,750	e6,600	17,000	18,100	9,640	5,750	5,540	5,750	6,650
8	11,200	12,900	8,180	e9,200	e6,700	13,900	18,800	7,380	5,750	5,540	5,750	e6,650
9	11,200	12,900	8,180	e9,500	6,890	11,900	18,800	6,890	5,750	5,970	5,750	e6,650
10	10,600	12,900	8,460	e9,800	e6,800	10,900	18,100	6,190	5,970	5,970	5,750	e6,600
11	11,600	12,900	8,460	e9,800	e6,700	10,900	18,800	5,970	5,970	5,540	5,750	e6,600
12	12,200	13,900	9,040	9,640	e6,700	9,640	18,100	5,970	5,970	5,540	5,750	e6,600
13	11,600	10,900	10,300	9,340	e7,500	10,300	18,100	5,970	6,650	5,540	5,750	e6,400
14	11,900	8,180	9,640	e9,500	8,180	9,340	17,400	6,190	6,890	5,540	5,750	6,190
15	12,600	7,380	9,640	e9,500	8,460	9,340	17,800	5,970	5,970	5,540	5,750	e6,150
16	12,600	6,650	12,200	e9,500	8,460	9,340	16,300	5,970	6,190	5,540	5,750	e6,100
17	11,900	6,650	9,340	8,750	8,750	9,040	12,900	5,750	6,420	5,540	5,750	6,420
18	12,200	6,420	8,750	7,380	8,750	8,750	12,600	5,750	6,890	5,540	5,750	e7,200
19	12,600	5,970	e10,200	7,130	8,750	8,750	11,600	5,750	6,420	5,540	5,750	e7,500
20	12,600	6,650	e10,200	7,130	8,460	8,460	10,900	5,970	6,650	5,540	5,750	e7,800
21	11,900	6,890	e10,400	6,890	8,750	8,750	11,200	6,190	6,420	5,540	5,750	7,910
22	11,600	6,890	e10,600	6,890	8,750	8,750	12,600	6,190	6,420	5,540	5,750	e8,000
23	11,900	6,890	e10,800	6,650	8,750	9,340	11,900	6,190	6,420	5,540	5,750	e8,600
24	12,600	6,890	10,600	6,650	9,040	9,040	11,900	6,190	6,190	5,530	5,750	e9,600
25	12,600	6,890	10,600	6,650	9,040	9,040	12,200	5,970	6,190	5,540	5,750	10,300
26	12,200	6,890	10,300	6,890	8,750	9,340	11,600	5,970	5,970	5,540	5,750	e10,600
27	12,200	6,650	9,340	6,890	8,750	9,640	10,900	6,420	5,970	5,540	5,750	e9,400
28	12,600	6,650	9,640	6,890	8,750	9,640	10,900	6,420	5,750	5,540	5,970	8,180
29	12,200	6,650	10,600	6,890	-------	9,640	11,600	6,420	5,750	5,540	6,190	e7,500
30	12,200	6,650	10,900	6,650	-------	9,950	10,300	6,420	5,750	5,540	6,190	e7,700
31	12,600	-------	10,600	6,650	-------	9,950	-------	6,420	-------	5,750	6,190	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	12,600	7,130	11,100	682,000
November	13,900	5,970	9,280	552,000
December	12,200	6,190	9,250	569,000
January	10,900	6,650	8,340	513,000
February	9,040	6,600	7,830	435,000
March	17,000	8,460	10,500	646,000
April	18,800	10,300	14,200	845,000
May	9,640	5,750	6,760	416,000
June	7,130	5,750	6,250	372,000
July	5,970	5,330	5,590	344,000
August	6,190	5,750	5,830	358,000
September	10,600	6,100	7,300	434,000
The year	18,800	5,330	8,520	6,170,000

e Estimated.

SNAKE RIVER AT KING HILL, IDAHO

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

RECORDS AVAILABLE.—May, 1909, to September, 1929.

EXTREMES.—Maximum discharge during year, 21,000 second-feet Apr. 8 (gage height, 10.17 feet); minimum, 6,780 second-feet May 19 and July 21 (gage height, 5.6 feet).

1909–1929: Maximum discharge, 47,200 second-feet June 22, 1918 (gage height, 16.3 feet); minimum, 4,760 second-feet July 7–9 and Aug. 15–16, 1910 (gage height, 4.5 feet).

REMARKS.—Records excellent June to September; others good. Practically entire flow during irrigation seasons is diverted at Milner, and flow at King Hill is derived largely from springs and seepage water entering below Milner.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a 9,200	14,300	9,000	a12,900	a 9,100	12,100	13,000	a11,800	8,230	7,730	7,250	7,980
2	a 9,600	15,300	8,740	a12,400	a 9,100	14,900	13,600	a11,900	8,230	a 7,500	7,490	7,980
3	a10,100	15,300	8,230	a12,000	a 9,000	14,300	14,900	a10,200	8,230	a 7,200	7,490	7,980
4	a 9,700	15,600	8,480	a11,800	a 9,000	13,600	16,300	8,480	8,740	a 7,100	7,730	7,980
5	a 9,600	12,700	a10,100	a11,700	9,000	16,300	18,000	11,500	8,740	a 7,400	7,490	7,980
6	9,500	13,000	a 9,500	a11,200	a 8,900	17,300	19,900	11,500	7,980	a 7,600	7,490	8,230
7	a 9,400	14,900	a 9,700	a10,800	a 8,900	a19,000	20,200	8,740	7,250	a 7,200	7,490	8,480
8	13,300	15,300	a10,000	a10,800	a 8,800	a17,800	21,000	8,480	7,250	a 7,100	7,490	8,480
9	13,300	15,300	10,400	a11,100	8,740	a15,800	20,600	7,980	7,490	a 7,000	7,490	8,480
10	13,000	15,300	a10,500	a11,900	a 8,700	14,300	19,900	7,730	7,490	a 7,200	7,250	8,480
11	13,000	14,900	10,600	a11,900	a 8,600	a13,000	19,500	7,490	7,490	a 7,400	7,250	8,480
12	14,300	16,000	10,900	a11,700	a 8,700	11,500	a19,600	7,490	7,490	a 7,300	7,250	8,480
13	14,000	14,000	12,100	a11,400	a 9,200	11,500	a19,200	7,490	7,730	a 7,000	7,250	8,230
14	14,000	10,900	12,100	a11,400	a10,000	11,500	a19,000	7,490	9,260	7,010	7,250	7,980
15	14,600	10,100	11,200	a11,500	a10,400	11,500	a19,300	7,250	7,730	a 7,000	7,250	7,980
16	14,900	9,260	14,000	a11,600	a10,500	11,500	18,400	7,250	a 8,000	a 7,000	7,250	7,980
17	14,300	8,740	12,700	11,500	10,600	11,200	17,000	7,250	a 8,200	a 7,100	7,250	8,230
18	14,300	8,740	10,100	a10,000	a10,700	11,200	14,000	7,010	a 8,400	a 7,000	7,250	8,230
19	14,600	8,230	a11,700	a 9,200	a10,500	11,200	13,300	6,780	a 8,500	7,010	7,250	9,260
20	14,900	8,740	a11,700	a 8,900	a10,500	10,600	13,000	7,010	a 8,500	7,010	7,250	9,260
21	14,300	9,260	a11,800	a 8,800	a10,600	11,500	a13,000	7,250	a 8,200	7,010	a 7,300	10,100
22	14,000	9,260	a12,000	a 8,600	a10,800	11,200	a13,300	7,250	a 7,900	7,250	a 7,350	9,800
23	14,000	9,000	a12,200	a 8,500	a10,800	11,800	13,600	7,490	a 8,000	7,010	a 7,400	10,600
24	14,600	9,260	a12,600	a 8,500	10,900	11,200	a13,800	7,490	7,730	7,010	a 7,450	11,200
25	14,600	9,000	a12,400	a 8,600	10,900	11,200	a13,800	7,490	a 7,700	7,010	7,490	11,800
26	14,600	9,000	a12,100	a 8,800	10,600	11,500	a13,500	a 7,500	a 7,500	7,010	7,490	a12,200
27	14,300	9,000	a11,800	9,000	10,900	11,500	a13,000	a 7,600	a 7,700	7,010	7,490	a11,000
28	14,300	8,740	a11,500	a 9,100	11,500	11,800	a12,600	a 7,800	a 7,500	7,250	7,490	a10,500
29	14,300	8,740	a11,800	a 9,100	-------	12,100	13,000	a 8,000	a 7,600	7,250	7,730	9,800
30	14,300	8,740	a12,500	a 9,100	-------	12,100	a13,100	8,230	a 7,700	7,250	7,980	a10,000
31	14,600	-------	a12,900	a 9,100	-------	12,400	-------	8,480	-------	7,250	7,980	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	14,900	9,200	13,100	806,000
November	16,000	8,230	11,600	690,000
December	14,000	8,230	11,100	682,000
January	12,900	8,500	10,400	640,000
February	11,500	8,600	9,860	548,000
March	19,000	10,600	12,900	793,000
April	21,000	12,600	16,100	958,000
May	11,900	6,780	8,240	507,000
June	9,260	7,250	7,950	473,000
July	7,730	7,000	7,170	441,000
August	7,980	7,250	7,430	457,000
September	12,200	7,980	9,110	542,000
The year	21,000	6,780	10,400	7,540,000

a Estimated.

SNAKE RIVER NEAR MURPHY, IDAHO

LOCATION.—Water-stage recorder in NW. ¼ sec. 18, T. 2 S., R. 1 E., three-quarters of a mile below Swan Falls power plant and 9 miles northeast of Murphy.

DRAINAGE AREA.—41,900 square miles.

RECORDS AVAILABLE.—August to October, 1912; August, 1913, to September, 1929.

EXTREMES.—Maximum discharge during year, 22,900 second-feet Apr. 10 (gage height, 7.71 feet); minimum mean daily discharge, 6,600 second-feet July 21.

1912–1929: 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 estimated periods, which are good. Several small diversions between this station and one at King Hill.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9,330	15,000	e 9,000	13,100	e 9,400	11,600	12,900	13,300	8,800	7,770	6,750	7,770
2	9,620	14,500	e 9,200	12,900	e 9,400	13,800	13,300	12,000	8,930	7,670	7,570	7,770
3	9,770	15,500	e 8,700	12,600	e 9,400	16,800	14,000	12,400	8,930	7,370	7,370	7,880
4	10,400	15,800	8,560	12,000	e 9,400	15,800	15,300	10,400	8,680	7,180	7,270	7,570
5	9,770	15,500	9,060	12,000	e 9,300	15,000	17,600	9,330	8,930	7,570	7,470	7,880
6	9,980	12,900	10,400	11,800	e 9,300	17,300	19,000	11,600	9,190	7,770	7,770	7,770
7	9,470	13,300	9,770	11,600	e 9,200	18,400	20,700	10,400	9,060	7,370	e 7,050	8,210
8	9,330	15,500	10,100	11,000	e 9,100	20,100	20,700	12,600	e 8,600	e 7,300	7,470	7,990
9	12,400	15,500	10,300	11,200	e 9,000	17,600	21,300	10,100	8,100	e 7,100	7,090	8,320
10	13,300	15,300	10,400	11,600	e 8,900	e 15,000	21,300	9,330	8,210	7,270	7,270	8,210
11	13,100	15,500	10,600	12,200	e 8,900	e 14,000	20,100	8,800	8,210	7,570	7,470	8,440
12	13,600	15,300	10,800	12,200	e 8,900	e 12,800	21,000	8,210	8,210	7,470	7,180	8,210
13	14,500	16,300	11,000	11,800	e 9,500	e 11,700	20,400	8,100	8,320	e 7,100	7,370	8,320
14	14,300	14,000	12,400	11,600	e 10,200	e 11,800	20,100	8,320	8,210	7,000	7,090	8,100
15	14,300	11,000	12,200	11,800	e 10,700	e 11,800	19,800	8,440	9,620	7,180	7,090	7,990
16	15,300	10,100	11,600	11,800	e 11,000	e 11,800	19,800	8,440	8,100	e 7,200	7,180	7,990
17	15,300	9,470	14,300	11,800	11,200	e 11,800	19,000	8,440	8,930	e 7,200	7,180	7,990
18	14,800	9,060	12,600	11,600	11,200	e 11,500	16,000	8,560	8,680	e 7,200	7,270	8,100
19	14,500	8,930	10,400	10,300	11,000	e 11,500	15,800	7,990	9,060	e 7,200	7,090	8,210
20	15,300	8,680	12,200	9,330	11,000	e 11,500	14,800	8,210	8,930	e 7,200	7,270	8,930
21	15,300	8,560	12,200	9,190	11,600	e 11,000	14,000	8,440	8,800	e 6,600	7,180	e 9,200
22	14,500	e 9,500	12,400	8,930	11,200	e 11,800	14,000	8,680	8,680	e 7,500	7,370	e 10,000
23	14,300	e 9,500	12,600	8,680	11,200	e 11,500	15,300	8,680	8,560	e 7,200	7,370	e 9,800
24	14,300	e 9,200	12,900	8,680	11,200	e 12,000	15,300	8,930	8,680	e 7,100	7,180	e 11,000
25	14,800	e 9,400	12,900	8,680	11,600	e 11,500	14,800	9,060	8,560	7,000	7,270	e 11,600
26	15,000	e 9,300	12,600	e 9,100	11,400	e 11,500	14,800	8,930	8,210	7,000	7,370	e 12,000
27	14,800	e 9,300	12,600	e 9,200	11,200	e 11,800	14,500	8,930	7,990	7,000	7,470	e 12,200
28	14,800	e 9,000	11,800	e 9,400	11,200	12,400	13,600	8,800	8,210	7,000	7,270	e 11,000
29	14,800	e 8,900	11,600	e 9,400	-------	12,600	13,300	9,060	7,770	7,000	7,670	e 10,200
30	14,800	e 8,900	12,600	e 9,400	-------	12,400	13,800	8,800	7,670	7,270	7,370	e 9,800
31	14,500	-------	12,900	e 9,400	-------	12,900	-------	8,680	-------	7,180	7,770	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	15,300	9,330	13,200	812,000
November	16,300	8,560	12,000	714,000
December	14,300	8,560	11,300	695,000
January	13,100	8,680	10,800	664,000
February	11,600	8,900	10,200	566,000
March	20,100	11,000	13,300	818,000
April	21,300	12,900	16,900	1,010,000
May	13,300	7,990	9,400	578,000
June	9,620	7,670	8,560	509,000
July	7,770	6,600	7,240	445,000
August	7,770	6,750	7,310	449,000
September	12,200	7,570	8,950	533,000
The year	21,300	6,600	10,800	7,790,000

e Estimated.

SNAKE RIVER AT WEISER, IDAHO

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

RECORDS AVAILABLE.—October, 1910, to September, 1929. Fragmentary gage-height record obtained by United States Weather Bureau since 1895.

EXTREMES.—Maximum discharge during year, 31,300 second-feet Apr. 15 (gage height, 7.30 feet); minimum, 6,980 second-feet Aug. 3–4 (gage height, 1.95 feet).

1910–1929: 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. Discharge estimated Dec. 20–26 and Jan. 28–30. Flow regulated by operation of Swan Falls power plant. Some diversions for irrigation below Murphy. Gage-height record furnished by United States Weather Bureau.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,900	17,600	11,900	16,200	11,500	14,000	20,100	23,800	16,200	10,500	7,470	7,640
2	11,500	17,600	11,500	15,800	11,100	14,400	19,600	23,300	17,200	10,200	7,300	7,810
3	11,900	17,600	11,100	16,200	11,500	17,600	19,600	21,100	17,200	9,780	6,980	7,640
4	12,300	18,100	10,700	16,200	11,500	22,200	20,100	21,100	15,800	8,870	6,980	7,810
5	12,300	18,600	10,700	15,800	11,900	23,300	21,700	19,600	15,300	8,510	7,140	7,810
6	13,100	19,100	10,700	15,800	11,500	22,200	26,600	18,100	15,300	8,510	7,470	7,810
7	12,700	16,700	11,500	15,300	11,500	22,700	27,700	18,100	16,700	8,510	7,810	7,980
8	12,300	16,200	12,300	14,400	11,100	26,600	28,900	18,100	16,200	8,510	7,470	8,160
9	12,300	17,600	12,300	14,000	10,700	28,900	27,700	18,100	16,700	7,980	7,470	8,160
10	13,600	18,600	12,700	13,600	10,700	27,700	27,700	18,100	17,600	7,640	7,470	8,510
11	16,700	18,600	13,100	14,000	11,100	29,500	28,300	14,800	18,600	7,640	7,470	8,690
12	16,700	18,600	13,600	15,800	11,500	28,900	27,200	14,800	18,600	7,980	7,470	8,510
13	16,200	18,100	13,600	15,800	12,300	27,200	27,700	14,800	17,600	8,160	7,300	8,870
14	16,700	19,100	14,400	15,300	11,900	23,300	28,900	15,300	17,600	7,640	7,300	8,690
15	17,600	18,600	14,400	15,300	11,500	21,100	31,300	17,200	17,600	7,470	7,470	8,510
16	17,200	14,800	14,400	14,800	11,100	19,600	28,300	17,200	20,100	7,300	7,140	8,160
17	18,100	13,100	14,000	14,400	11,900	21,700	28,900	17,200	22,700	7,300	7,140	8,340
18	18,100	12,300	16,200	14,000	12,700	19,600	29,500	17,600	22,700	7,300	7,140	8,160
19	18,100	11,900	16,200	14,000	13,100	19,100	27,200	17,200	21,700	7,470	7,300	8,340
20	17,600	11,900	14,500	13,600	13,600	17,600	27,200	17,200	21,100	7,300	7,300	8,340
21	18,100	11,500	13,000	13,600	13,100	18,600	26,600	17,200	19,600	7,470	7,140	8,690
22	18,600	11,500	13,800	13,100	13,100	17,600	26,000	17,600	18,100	7,640	7,300	9,050
23	18,600	12,300	14,000	13,100	13,100	20,600	25,500	19,600	17,200	7,140	7,300	10,400
24	18,100	12,300	14,600	12,700	13,100	23,800	26,000	20,600	15,300	7,640	7,300	10,500
25	17,600	12,300	15,200	11,500	13,600	23,800	26,600	21,700	14,400	7,470	7,640	10,700
26	17,600	12,300	15,400	11,100	13,600	20,600	26,000	21,700	13,600	7,300	7,470	11,900
27	18,100	12,300	16,200	10,700	13,600	18,600	25,500	21,100	12,700	7,300	7,300	12,300
28	17,600	12,300	15,800	11,200	13,600	18,100	24,900	19,600	11,500	7,300	7,300	13,100
29	18,100	11,900	15,800	12,100	-------	17,200	24,400	18,600	11,500	7,140	7,300	13,100
30	17,600	11,900	15,800	11,500	-------	18,100	23,800	17,600	11,100	7,300	7,470	13,600
31	18,100	-------	16,200	10,500	-------	20,100	------	16,700	------	7,300	7,640	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	18,600	11,500	16,000	984,000
November	19,100	11,500	15,200	904,000
December	16,200	10,700	13,700	842,000
January	16,200	10,500	13,900	855,000
February	13,600	10,700	12,200	678,000
March	29,500	14,000	21,400	1,320,000
April	31,300	19,600	26,000	1,550,000
May	23,800	14,800	18,500	1,140,000
June	22,700	11,100	16,900	1,010,000
July	10,500	7,140	7,920	487,000
August	7,810	6,980	7,360	453,000
September	13,600	7,640	9,240	550,000
The year	31,300	6,980	14,900	10,800,000

SNAKE RIVER AT OXBOW, OREG.

LOCATION.—Water-stage recorder in NW. ¼ sec. 16, T. 7 S., R. 48 E., five-eighths of a mile above intake of diversion tunnel for Oxbow power plant.

RECORDS AVAILABLE.—May, 1923, to September, 1929.

EXTREMES.—Maximum discharge during year, 33,800 second-feet Mar. 11 (gage height, 13.7 feet); minimum, 7,230 second-feet parts of July 28, Aug. 15, 17–19, 21, 24 (gage height, 7.2 feet).

1923–1929: 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 good. Several small diversions for irrigation between this and the station at Weiser. Gage-height record furnished by Idaho Power Co.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11,200	18,100	12,200	16,400	12,600	14,800	22,500	26,700	18,100	12,200	7,710	7,960
2	11,500	18,100	12,200	16,400	12,600	15,600	22,000	25,700	18,100	11,500	7,710	7,960
3	11,500	18,100	12,200	16,400	12,600	17,200	21,100	23,800	18,900	11,200	7,470	7,960
4	11,800	18,100	11,800	16,400	12,600	22,000	21,100	22,500	18,100	10,500	7,710	7,960
5	12,200	18,500	11,800	15,600	12,600	24,300	22,000	22,000	17,200	9,880	7,960	8,210
6	12,900	18,900	11,500	15,200	12,600	24,300	24,800	20,200	16,800	9,290	7,470	7,960
7	12,600	18,500	11,800	14,800	12,200	23,400	27,200	18,900	17,700	11,800	7,710	8,210
8	13,300	16,400	13,300	14,800	11,800	27,600	28,100	20,200	18,500	9,290	7,960	8,210
9	12,600	17,200	12,600	14,400	11,800	28,600	28,100	18,500	18,500	9,010	7,710	8,210
10	12,900	18,900	13,300	13,700	11,200	32,200	28,100	19,800	19,400	8,740	7,710	8,470
11	16,000	18,500	13,700	14,000	11,200	32,200	28,600	17,700	20,700	8,210	7,710	8,740
12	16,000	18,500	13,700	14,400	11,200	31,700	28,100	16,400	20,700	8,470	7,470	9,010
13	16,400	18,500	14,000	15,200	11,500	29,100	27,600	16,400	20,700	8,740	7,710	9,010
14	16,800	18,900	14,000	15,200	12,200	26,700	28,100	17,200	19,800	8,470	7,710	9,010
15	17,200	19,400	14,400	14,400	12,600	22,900	30,600	18,500	20,200	8,210	7,470	8,740
16	17,200	16,800	15,600	15,200	12,600	22,000	30,600	18,900	22,000	7,960	7,710	8,740
17	17,700	14,800	15,200	15,200	12,600	20,700	29,600	18,900	24,800	7,960	7,470	8,470
18	18,100	13,700	14,800	14,800	13,700	20,700	30,100	19,400	25,300	7,710	7,470	8,470
19	18,100	12,900	17,200	14,800	14,000	20,200	30,100	18,900	25,300	7,710	7,470	8,470
20	17,700	12,600	14,800	14,400	13,700	19,800	28,600	19,400	23,400	7,960	7,470	8,740
21	17,700	12,600	13,300	13,700	13,700	20,700	29,600	19,800	22,500	7,960	7,470	8,740
22	18,500	12,200	14,400	12,600	13,700	21,600	28,600	20,700	20,700	7,960	7,470	9,290
23	18,500	12,200	14,400	11,500	14,000	22,000	27,600	22,000	19,400	7,710	7,470	9,880
24	17,700	12,900	14,800	11,800	14,000	27,600	27,600	23,400	18,100	7,710	7,470	10,500
25	17,200	12,900	15,600	10,800	14,400	26,700	28,600	24,300	16,400	7,710	7,710	10,500
26	17,700	12,900	15,600	10,500	14,000	23,800	28,600	24,300	15,600	7,710	7,710	11,200
27	18,100	12,900	16,400	11,200	14,400	21,100	27,600	22,900	14,800	7,470	7,710	12,200
28	18,100	12,900	16,000	12,200	14,400	20,200	27,200	22,000	14,000	7,470	7,710	12,600
29	18,100	12,600	16,400	13,300	-------	19,800	26,700	20,700	13,300	7,470	7,960	13,300
30	17,700	12,600	15,600	12,600	-------	19,400	26,200	19,400	12,900	7,470	7,710	13,300
31	18,100	-------	15,600	12,200	-------	20,700	-------	18,500	-------	7,470	7,960	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	18,500	11,200	15,800	972,000
November	19,400	12,200	15,700	934,000
December	17,200	11,500	14,100	867,000
January	16,400	10,500	14,000	861,000
February	14,400	11,200	12,900	716,000
March	32,200	14,800	23,200	1,430,000
April	30,600	21,100	27,200	1,620,000
May	26,700	16,400	20,600	1,270,000
June	25,300	12,900	19,100	1,140,000
July	12,200	7,470	8,670	533,000
August	7,960	7,470	7,650	470,000
September	13,300	7,960	9,330	555,000
The year	32,200	7,470	15,700	11,400,000

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, 1929.

EXTREMES.—Maximum discharge during year, 155,000 second-feet May 25 (gage height, 12.50 feet); minimum, 13,100 second-feet Sept. 9 (gage height, 0.41 foot).

1915–1922, 1928–29: 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 determined from high-water mark, as published by the United States Weather Bureau, 24.7 feet June 5, 1894; discharge, about 409,000 second-feet.

REMARKS.—Records good except those for Jan. 27 to Feb. 28, and Apr. 20, which are fair. Small diversions by pumping between this station and the one at Oxbow. Possibly slight diurnal fluctuation as result of pondage on Clearwater River at Lewiston.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18,000	26,600	20,700	23,800		22,500	41,200	70,800	87,200	61,200	17,500	14,500
2	18,500	26,600	20,100	24,500	19,000	23,100	41,200	72,000	94,200	57,600	17,000	13,400
3	18,000	26,600	20,100	24,500		24,500	40,100	70,800	90,000	52,800	17,000	14,200
4	18,500	26,600	20,100	24,500		24,500	39,100	70,800	83,300	49,200	17,000	14,900
5	18,500	26,600	20,100	23,800		25,900	41,200	68,400	79,400	45,600	17,000	14,900
6	20,700	26,600	19,000	23,800		33,300	44,500	64,800	80,700	40,100	17,500	14,900
7	20,700	26,600	16,600	22,500	18,100	38,100	45,600	63,600	88,600	35,100	17,100	15,300
8	21,300	27,400	16,100	21,900		34,200	45,600	60,000	100,000	33,300	17,100	13,800
9	21,300	26,600	16,600	19,500		37,100	45,600	61,200	107,000	35,100	17,600	13,100
10	21,900	26,600	25,200	20,100		46,800	44,500	63,600	107,000	33,300	17,100	15,300
11	22,500	26,600	18,500	21,300		50,400	43,400	63,600	112,000	31,500	17,100	15,300
12	23,800	27,400	21,300	20,700	17,500	55,200	44,500	63,600	110,000	29,800	16,700	15,700
13	25,200	27,400	21,900	20,100		48,000	43,400	70,800	107,000	29,000	15,700	15,700
14	24,500	27,400	21,900	20,100		43,400	44,500	83,300	107,000	28,200	15,700	15,700
15	24,500	27,400	22,500	21,300		40,100	44,500	90,000	107,000	25,200	15,700	15,700
16	25,200	27,400	21,900	21,900		39,100	52,800	88,600	107,000	26,600	15,700	15,300
17	25,200	27,400	22,500	21,900		38,100	54,000	88,600	121,000	25,200	15,300	15,700
18	25,900	25,900	23,100	22,500		37,100	55,200	94,200	115,000	23,100	14,900	15,300
19	27,400	23,100	21,900	22,500		37,100	58,800	95,600	108,000	23,800	14,500	15,700
20	29,000	21,900	23,100	21,900		37,100	62,400	98,800	104,000	21,900	14,500	15,300
21	28,200	21,300	21,900	21,900	19,400	37,100	66,000	105,000	91,400	22,500	14,500	15,300
22	27,400	20,700	19,500	21,300		48,000	66,000	116,000	85,900	22,500	14,500	14,900
23	26,600	20,100	19,500	21,300		46,800	67,200	129,000	83,300	21,300	14,500	14,200
24	27,400	20,700	19,500	20,700		45,600	66,000	144,000	80,700	21,300	14,500	16,100
25	27,400	20,700	20,100	20,100		44,500	68,400	155,000	91,400	19,500	14,200	16,100
26	26,600	21,300	19,500	19,500		46,800	69,600	144,000	76,800	19,500	13,800	17,000
27	25,900	21,300	21,900			41,200	68,400	121,000	74,400	19,000	14,500	17,000
28	26,600	21,300	24,500			38,100	68,400	107,000	73,200	18,500	14,900	19,000
29	26,600	21,300	23,800	19,000		38,100	70,800	92,800	68,400	18,500	14,900	19,000
30	26,600	20,700	25,200			49,200	69,600	87,200	64,800	18,000	15,300	19,500
31	25,900		25,200			41,200		83,300		18,000	14,900	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	29,000	18,000	24,100	1,480,000
November	27,400	20,100	24,600	1,460,000
December	25,200	16,100	21,100	1,300,000
January	24,500		21,400	1,320,000
February			18,800	1,040,000
March	55,200	22,500	39,100	2,400,000
April	70,800	39,100	53,800	3,200,000
May	155,000	60,000	89,900	5,530,000
June	121,000	64,800	93,500	5,560,000
July	61,200	18,000	29,900	1,840,000
August	17,500	13,800	15,600	959,000
September	19,500	13,100	15,600	928,000
The year	155,000	13,100	37,300	27,000,000

TRIBUTARY BASINS

HENRYS LAKE NEAR LAKE, IDAHO

LOCATION.—Staff gage at Henrys Lake Dam in SW. ¼ sec. 26, T. 15 N., R. 43 E., at the outlet of Henrys Lake and 4 miles south of Lake.

RECORDS AVAILABLE.—July, 1923, to September, 1929.

REMARKS.—Henrys Lake impounds water for supplemental irrigation of lands served by several canals diverting from Henrys Fork. It has a capacity of practically 80,000 acre-feet between elevations 6,620 and 6,635 feet, mean sea level datum. Gage-height record and table showing storage capacity of reservoir furnished by North Fork Reservoir Co.

Daily contents, in acre-feet, 1923–1929

Day	1923		1924				
	July	Aug.	May	June	July	Aug.	Sept.
1		40,716		47,996	45,531	27,714	5,856
2		40,323			45,072	26,752	5,709
3		39,931			44,442	26,125	5,570
4		39,595		48,970	43,754	25,132	5,445
5		39,202		48,855	43,126	23,983	5,356
6		38,866			42,509	22,720	5,273
7		38,530			41,837	21,405	5,192
8	43,926	38,138		49,438	40,884	20,255	5,125
9	44,040	37,578		49,380	40,380	19,194	5,081
10	43,926	37,030		49,262	39,931	18,200	5,073
11	43,811	36,428		49,438	39,483	17,240	
12	43,697	35,825		49,262	39,090	16,318	
13	43,640	35,223		49,146	38,810	15,453	
14	43,524	34,675		48,912	38,530	14,646	
15	43,410	34,127		48,855	38,306	13,746	
16	43,353	33,634		48,741	37,857	12,881	
17	43,238	33,306		48,626	37,468	12,080	
18	43,238	33,086		48,568	36,921	11,348	
19	43,182	32,922		48,568	36,044	10,705	
20	43,126	32,922		48,397	35,168	10,114	
21	43,070	32,922		48,110	34,237	9,563	
22	42,902	32,867		48,511	33,470	9,029	
23	42,565	32,812	47,996	47,938	32,812	8,545	
24	42,285	32,758	47,996	47,881	32,374	8,101	
25	41,893	32,703	47,996	47,824	31,941	7,688	
26	41,388	32,703		47,422	31,406	7,319	
27	41,108	32,648		47,250	30,924	6,992	
28	41,052	32,593		46,849	30,496	6,702	
29	40,996			46,390	29,962	6,444	
30	40,940			45,989	29,318	6,218	
31	40,828				28,516	6,029	

Daily contents, in acre-feet, of Henrys Lake, near Lake, Idaho, 1923–1929—Con.

Day	1925				1926				
	June	July	Aug.	Sept.	May	June	July	Aug.	Sept.
1	-------	39,875	43,070	42,678	-------	62,912	55,538	24,662	12,592
2	-------	40,267	43,014	42,678	59,116	62,609	54,471	23,774	12,217
3	-------	40,548	43,014	42,622	-------	62,548	53,418	22,886	11,801
4	29,104	40,828	43,070	-------	-------	62,548	52,364	21,998	11,449
5	29,480	41,164	43,070	-------	-------	62,670	51,311	21,130	11,141
6	29,854	41,500	43,070	-------	-------	62,609	50,257	20,429	10,833
7	30,176	41,781	43,070	-------	-------	62,609	49,204	19,779	10,525
8	30,496	42,005	43,014	-------	-------	62,300	48,168	19,129	10,261
9	30,764	42,173	42,958	-------	-------	62,300	47,365	18,528	10,217
10	30,978	42,397	42,958	-------	-------	61,880	46,734	17,978	10,217
11	31,192	42,622	42,958	42,958	-------	62,001	46,506	17,528	10,217
12	31,406	42,790	42,958	43,014	-------	60,786	46,219	17,127	10,129
13	31,626	42,958	42,958	-------	-------	60,488	45,760	16,827	10,129
14	31,834	43,126	43,126	-------	-------	60,070	44,786	16,577	10,129
15	32,155	43,238	43,182	-------	-------	59,892	43,754	16,296	10,041
16	32,703	43,296	43,182	-------	-------	59,772	42,622	16,014	10,041
17	33,196	43,238	43,182	-------	-------	59,712	41,332	15,780	9,953
18	33,689	43,238	43,182	-------	-------	59,652	40,155	15,639	9,953
19	34,127	43,238	43,126	-------	-------	59,652	39,090	15,564	9,953
20	34,510	43,238	43,070	-------	62,487	59,652	37,801	15,405	9,777
21	34,894	43,238	43,014	-------	63,216	59,652	36,537	15,264	9,605
22	35,387	43,296	42,958	-------	63,095	59,652	35,278	15,124	9,522
23	35,990	43,296	42,902	-------	63,216	59,652	34,018	14,983	9,777
24	36,537	43,296	42,846	44,040	63,459	59,593	32,758	14,796	9,863
25	37,030	43,296	42,790	-------	63,520	59,534	31,513	14,561	9,777
26	37,468	43,296	42,734	-------	63,642	59,235	30,390	14,280	9,605
27	37,857	43,238	42,790	-------	63,642	58,938	29,426	14,044	9,689
28	38,306	43,238	42,790	46,964	63,642	58,400	28,409	13,764	9,689
29	38,810	43,182	42,790	-------	62,912	57,744	27,392	13,530	9,605
30	39,315	43,182	42,734	-------	63,398	56,670	26,491	13,295	10,305
31	-------	43,126	42,678	-------	63,034	-------	25,602	13,014	-------

Day	1927			1928				1929				
	June	July	Aug.	June	July	Aug.	Sept.	May	June	July	Aug.	Sept.
1	30,818	45,072	-------	71,565	74,814	71,812	-------	56,910	59,120	64,130	40,110	18,080
2	30,871	45,588	-------	71,689	74,877	71,441	-------	-------	59,120	64,250	40,960	17,880
3	31,246	46,104	-------	71,750	74,940	71,194	-------	-------	59,300	64,130	41,240	18,330
4	31,352	46,104	-------	71,812	75,003	71,008	-------	-------	59,300	64,310	42,930	17,080
5	31,727	46,276	49,262	71,874	75,066	70,946	-------	-------	59,410	64,130	42,680	17,580
6	31,888	46,390	49,262	71,936	75,129	70,884	-------	-------	59,530	64,130	41,840	17,330
7	32,265	46,506	49,262	71,998	75,129	70,760	58,997	-------	59,300	64,430	41,220	16,580
8	32,703	46,677	49,262	72,060	75,192	70,699	-------	-------	59,360	63,520	40,600	16,200
9	32,976	47,250	49,321	72,122	74,192	70,575	-------	-------	59,360	63,700	40,440	15,870
10	33,251	47,537	49,438	72,246	75,192	70,513	-------	-------	59,590	63,700	39,880	16,340
11	34,072	47,652	49,438	72,431	75,129	70,389	-------	-------	59,890	63,520	38,750	15,870
12	34,072	48,110	49,496	72,555	75,066	70,266	-------	-------	60,190	63,400	37,630	15,640
13	35,004	48,053	49,438	72,617	75,066	70,142	-------	-------	60,310	63,220	36,540	15,730
14	35,661	48,168	49,496	72,679	75,003	69,956	-------	-------	60,490	62,910	35,330	15,870
15	36,318	48,225	49,438	72,740	74,940	69,399	-------	-------	60,790	62,730	34,070	-------
16	36,702	48,397	49,438	72,926	74,877	68,842	-------	-------	61,090	62,300	32,980	-------
17	37,359	48,397	49,438	73,302	74,877	68,223	-------	-------	61,710	61,700	31,890	-------
18	37,913	48,397	49,438	73,428	74,814	67,666	-------	-------	62,490	61,390	31,080	-------
19	38,642	48,511	49,438	73,554	74,751	67,110	-------	-------	62,910	60,790	28,680	-------
20	39,315	48,511	49,438	73,680	74,625	66,436	-------	-------	62,610	60,310	28,140	15,170
21	39,707	48,511	49,438	73,743	74,562	65,829	-------	-------	62,790	59,590	27,340	14,840
22	40,267	48,511	49,555	73,932	74,499	65,343	-------	-------	62,970	59,300	26,540	15,030
23	40,716	48,511	49,438	74,058	74,436	64,857	-------	-------	63,100	58,820	25,760	14,940
24	41,276	48,511	49,555	74,184	74,310	64,371	-------	-------	63,030	58,100	24,300	15,400
25	42,117	48,511	49,555	74,310	74,121	63,946	-------	-------	63,100	57,800	22,730	15,400
26	42,397	48,511	48,970	74,373	73,806	63,459	-------	-------	63,100	56,910	21,430	-------
27	42,790	48,511	48,798	74,499	73,554	63,034	-------	-------	63,340	56,190	20,430	-------
28	43,296	48,511	48,454	74,562	73,239	62,609	-------	59,295	63,460	54,700	19,830	-------
29	43,640	48,684	48,397	74,625	72,926	62,123	-------	-------	63,820	53,070	19,580	-------
30	44,098	-------	48,511	74,688	72,555	61,637	56,910	-------	64,130	51,600	19,080	-------
31	-------	-------	48,397	-------	72,184	61,212	-------	-------	-------	49,850	18,330	-------

NOTE.—Readings discontinued during winter and for other periods for which no record is shown.

HENRYS FORK NEAR LAKE, IDAHO

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

RECORDS AVAILABLE.—May, 1920, to September, 1929. Prior to September, 1922, record was obtained about 3 miles downstream just below mouth of Dry Creek.

EXTREMES.—Maximum discharge during year, 792 second-feet July 28 (gage height, 5.12 feet); minimum, 26 second-feet June 15 (gage height, 0.87 foot).

1920–1929: Maximum discharge, 907 second-feet June 13, 1926 (gage height, 5.40 feet); minimum, 1 second-foot on various days when reservoir gates were closed.

REMARKS.—Records good. Observations discontinued Oct. 23 to June 2. Flow controlled by operation of Henrys Lake gates.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	June	July	Aug.	Sept.	Day	Oct.	June	July	Aug.	Sept.
1	61	-------	32	754	256	16	50	27	263	553	36
2	60	-------	32	732	229	17	49	28	276	553	36
3	62	33	34	713	195	18	49	29	276	550	43
4	62	34	34	689	164	19	48	28	294	550	75
5	59	36	36	659	83	20	46	27	288	501	72
6	58	36	36	417	98	21	44	27	282	431	72
7	58	36	37	268	150	22	44	27	286	425	56
8	56	34	52	228	136	23	-------	28	277	422	36
9	55	34	62	207	114	24	-------	28	269	528	36
10	58	34	64	285	69	25	-------	27	281	560	37
11	57	34	60	543	73	26	-------	28	406	553	37
12	58	34	57	506	68	27	-------	28	533	523	37
13	56	33	127	494	41	28	-------	30	718	427	37
14	54	28	190	553	36	29	-------	31	762	357	37
15	52	26	237	560	36	30	-------	32	759	353	37
						31	-------	-------	756	349	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October 1–22	62	44	54.4	2,370
June 3–30	36	26	30.6	1,700
July	762	32	252	15,500
August	754	207	492	30,300
September	256	37	81.1	4,830

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, 1929.

EXTREMES.—Maximum discharge during year, 1,930 second-feet May 16 (gage height, 5.80 feet); minimum, 628 second-feet Feb. 6 (gage height, 3.92 feet). 1910–1915, 1918–1929: Maximum discharge, 3,540 second-feet May 18, 1927 (gage height, 7.55 feet); minimum, 482 second-feet Dec. 17, 19, and 20, 1924 (gage height, 3.50 feet).

REMARKS.—Records excellent except those for Jan. 27, Jan. 30 to Feb. 2 and Sept. 12–17, which are fair. Flow slightly regulated by operation of gates at Henrys Lake 60 miles above station. No large diversions above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	964	964	938	849	905	843	861	1,160	1,190	964	1,510	1,170
2	964	964	770	831	920	827	849	1,200	1,250	957	1,540	1,150
3	976	944	837	849	924	831	837	1,270	1,280	938	1,540	1,100
4	1,020	964	800	824	924	861	861	1,340	1,240	938	1,530	1,060
5	976	964	770	800	938	880	924	1,270	1,180	924	1,530	1,030
6	976	1,030	831	788	628	843	886	1,210	1,150	924	1,510	990
7	976	976	812	701	684	843	861	1,180	1,150	918	1,460	950
8	964	964	753	800	706	831	861	1,130	1,150	912	1,290	976
9	964	964	800	741	684	788	861	1,200	1,140	912	1,160	990
10	976	964	861	831	684	800	812	1,200	1,140	924	1,090	990
11	976	964	976	886	893	893	861	1,340	1,140	924	1,070	924
12	964	957	938	837	924	861	849	1,380	1,210	918	1,130	911
13	976	964	918	837	990	831	831	1,700	1,230	918	1,270	897
14	976	976	924	861	990	837	831	1,700	1,170	931	1,280	884
15	976	964	861	886	957	831	861	1,690	1,130	990	1,290	871
16	983	950	861	861	957	824	849	1,930	1,140	1,020	1,320	858
17	983	976	782	831	990	831	861	1,920	1,300	1,050	1,340	844
18	983	938	800	800	964	831	874	1,740	1,420	1,070	1,340	831
19	983	957	812	800	924	837	874	1,630	1,370	1,100	1,340	849
20	983	924	861	602	893	831	990	1,630	1,200	1,120	1,340	893
21	970	924	800	741	893	831	924	1,590	1,130	1,110	1,330	964
22	957	931	770	770	893	831	924	1,590	1,100	1,080	1,310	950
23	957	924	770	741	893	831	924	1,580	1,060	1,080	1,250	918
24	957	924	770	741	893	837	938	1,580	1,040	1,080	1,230	899
25	957	912	800	800	912	861	924	1,610	1,020	1,060	1,220	874
26	957	924	800	861	899	831	924	1,560	1,020	1,050	1,270	874
27	957	938	800	892	831	831	924	1,450	1,010	1,060	1,310	868
28	957	924	849	924	782	843	1,110	1,350	996	1,130	1,330	855
29	950	912	837	861	-------	861	1,200	1,280	983	1,280	1,330	855
30	950	924	886	875	-------	831	1,230	1,220	976	1,350	1,260	849
31	964	-------	861	890	-------	837	-------	1,190	-------	1,470	1,200	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,020	950	970	59,600
November	1,030	912	950	56,500
December	976	753	834	51,300
January	924	701	816	50,200
February	990	628	874	48,500
March	893	788	838	51,500
April	1,230	812	911	54,200
May	1,930	1,130	1,450	89,200
June	1,420	976	1,150	68,400
July	1,470	912	1,030	63,300
August	1,540	1,070	1,320	81,100
September	1,170	831	936	55,700
The year	1,930	628	1,010	730,000

HENRYS FORK NEAR ASHTON, IDAHO

LOCATION.—Water-stage recorder in sec. 33, T. 9 N., R. 42 E., a quarter of a mile below Ora Bridge, 3 miles below power plant of Utah Power & Light Co., and 4 miles southwest of Ashton.

RECORDS AVAILABLE.—August, 1902, to June, 1909; April, 1920, to September, 1929.

EXTREMES.—Maximum discharge during year, 3,230 second-feet May 17 (gage height, 1.80 feet); minimum, 1,120 second-feet Apr. 11 (gage height, 0.67 foot).
1902–1909, 1920–1929: Maximum discharge, 6,220 second-feet May 7, 1925 (gage height, 3.11 feet); minimum, 575 second-feet Aug. 14, 1924.

REMARKS.—Records good except those for estimated periods. Readings from staff gage used Dec. 3 to Apr. 6. Flow regulated at times by operation of gates at power dam 3 miles above station. No important diversion for irrigation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,400	1,310	1,200	1,200		1,200	1,260	1,820	1,840	1,380	1,940	1,520
2	1,400	1,330	1,200	1,220		1,200	1,260	1,760	1,940	1,310	2,060	1,590
3	1,420	1,380	1,220	1,220		1,200	1,260	1,910	2,020	1,310	2,020	1,490
4	1,420	1,330	1,180	1,220		1,300	1,260	2,090	2,000	1,310	2,000	1,360
5	1,420	1,310		1,180		1,300	1,300	2,060	1,850	1,260	2,000	1,360
6	1,400	1,360		1,150		1,200	1,300	1,800	1,780	1,310	1,930	1,330
7	1,400	1,420		1,220		1,200	1,280	1,840	1,760	1,300	1,840	1,280
8	1,400	1,420				1,170	1,220	1,780	1,780	1,300	1,710	1,280
9	1,380	1,400				1,230	1,200	1,800	1,690	1,280	1,570	1,260
10	1,370	1,360				1,230	1,170	1,910	1,750	1,280	1,430	1,330
11	1,360	1,350			[a]1,240	1,170	1,120	1,780	1,780	1,300	1,380	1,350
12	1,380	1,350				1,170	1,170	2,210	1,850	1,260	1,450	1,280
13	1,400	1,330				1,170	1,200	2,660	1,840	1,260	1,520	1,260
14	1,400	1,360				1,200	1,200	2,760	1,820	1,280	1,600	1,290
15	1,400	1,360				1,200	1,180	2,780	1,710	1,280	1,620	1,180
16	1,400	1,360				1,200	1,170	2,980	1,660	1,400	1,620	1,140
17	1,400	1,380				1,200	1,220	3,230	2,060	1,420	1,670	1,170
18	1,380	1,380	[a]1,210			1,200	1,300	2,840	2,190	1,480	1,750	[a]1,160
19	1,350	1,350				1,260	1,400	2,820	2,150	1,520	1,690	[a]1,150
20	1,350	1,350		[a]1,190		1,260	1,660	2,820	1,820	1,550	1,730	1,150
21	1,350	1,350			1,230	1,170	1,640	2,780	1,710	1,540	1,760	1,310
22	1,350	1,310			1,260	1,230	1,420	2,760	1,550	1,480	1,660	1,390
23	1,330	1,310			1,260	1,280	1,430	2,720	1,550	1,470	1,620	1,330
24	1,330	1,280			1,260	1,230	1,450	2,680	1,470	1,470	1,550	1,260
25	1,330	1,280			1,300	1,170	1,430	2,660	1,690	1,480	1,540	1,180
26	1,330	1,280			1,230	1,170	1,450	2,540	1,640	1,450	1,590	1,180
27	1,350	1,310			1,230	1,200	1,550	2,320	1,520	1,450	1,660	1,200
28	1,330	1,310			1,260	1,200	1,620	2,090	1,450	1,590	1,690	1,200
29	1,310	1,230			-------	1,200	1,750	2,000	1,400	1,640	1,730	1,170
30	1,250	1,180			-------	1,230	1,890	1,930	1,380	1,730	1,670	1,180
31	1,280	-------			-------	1,230	-------	1,800	-------	1,800	1,590	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,420	1,280	1,370	84,200
November	1,420	1,180	1,330	79,100
December	----------	----------	1,210	74,400
January	----------	----------	1,190	73,200
February	----------	----------	1,240	68,900
March	1,300	1,170	1,210	74,400
April	1,890	1,120	1,360	80,900
May	3,230	1,760	2,320	143,000
June	2,190	1,380	1,760	105,000
July	1,800	1,260	1,420	87,300
August	2,060	1,380	1,700	105,000
September	1,520	1,140	1,270	75,600
The year	3,230	1,120	1,450	1,050,000

[a] Estimated.

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

Between Ashton and St. Anthony gaging stations six canals divert water from Henrys Fork for irrigation. Records are available for a part of each irrigation season from June, 1919, to September, 1929. Discharge is determined from daily staff gage readings. Records good.

Daily and monthly discharge, in second-feet, 1929

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	1,350	1,200	902	489	16	1,020	813	667	463
2	1,230	1,060	817	481	17	930	784	662	493
3	1,110	1,030	770	482	18	798	912	667	484
4	1,190	1,020	790	476	19	839	923	540	475
5	1,270	966	786	521	20	857	945	680	424
6	1,300	912	791	451	21	1,030	948	693	407
7	1,330	949	834	448	22	1,010	867	672	419
8	1,240	937	826	448	23	1,040	860	659	407
9	1,100	884	788	437	24	1,070	885	586	404
10	1,160	781	769	392	25	1,180	823	587	419
11	1,230	823	731	235	26	1,190	886	601	389
12	1,110	876	721	232	27	1,190	920	607	319
13	1,080	928	708	380	28	1,260	877	594	297
14	1,110	951	722	387	29	1,240	694	620	294
15	1,140	816	698	423	30	1,260	681	572	292
					31		828	518	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June	1,350	798	1,130	67,200
July	1,200	681	896	55,100
August	902	518	696	42,800
September	521	232	409	24,300
The period				189,000

HENRYS FORK AT ST. ANTHONY, IDAHO

LOCATION.—Water-stage recorder in sec. 1, T. 7 N., R. 40 E., half a mile above bridge on main street in St. Anthony.

RECORDS AVAILABLE.—March, 1919, to September, 1929.

EXTREMES.—Maximum discharge during year, 5,640 second-feet June 17 (gage height, 5.57 feet); minimum, 524 second-feet July 13 (gage height, 2.98 feet).

1919–1929: Maximum discharge, 9,030 second-feet May 8, 1925 (gage height, 6.70 feet); minimum, 476 second-feet June 28, 1924 (gage height, 2.87 feet).

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

Daily and monthly discharge, in second-feet, 1929

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1	1,960	2,420	2,640	1,020	1,260	16	4,270	4,010	794	990	871
2	1,900	2,380	2,110	1,220	1,240	17	4,760	5,170	783	1,050	906
3	1,970	2,830	1,680	1,240	1,260	18	4,660	4,850	692	1,080	894
4	2,070	2,500	1,480	1,220	1,120	19	4,660	3,680	710	1,110	1,020
5	2,110	2,050	1,160	1,230	1,060	20	4,900	2,950	814	1,060	1,030
6	1,840	2,070	965	1,170	1,050	21	5,060	2,380	825	1,060	1,240
7	1,750	2,090	917	1,000	1,030	22	5,200	2,380	836	1,040	1,530
8	1,780	2,570	783	940	1,020	23	5,220	2,680	783	1,030	1,370
9	1,810	2,570	762	848	1,060	24	5,060	2,790	783	1,060	1,240
10	1,810	2,810	741	772	1,160	25	5,090	3,020	814	1,030	1,190
11	1,720	2,950	710	741	1,260	26	4,340	3,110	720	1,020	1,170
12	2,170	3,420	608	825	1,230	27	3,350	3,200	692	1,120	1,230
13	2,900	3,130	532	882	1,050	28	2,570	3,040	772	1,150	1,230
14	3,470	3,230	557	940	1,040	29	2,210	2,790	1,050	1,120	1,200
15	3,940	3,390	720	1,000	978	30	2,070	2,950	1,110	1,190	1,200
						31	1,990		1,000	1,160	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May	5,220	1,750	3,180	196,000
June	5,170	2,050	3,000	179,000
July	2,640	532	953	58,600
August	1,240	741	1,040	64,000
September	1,260	871	1,140	67,800
The period				565,000

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 are available for a part of each irrigation season from June, 1919, to September, 1929. Discharge is computed from daily staff gage readings. Records good.

Daily and monthly discharge, in second-feet, 1929

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	1,170	904	751	524	16	749	837	713	413
2	1,160	850	754	527	17	729	823	751	424
3	1,150	854	750	519	18	637	702	738	433
4	1,120	847	744	512	19	640	728	727	431
5	1,090	773	711	528	20	718	707	703	434
6	1,110	709	678	514	21	826	709	706	397
7	1,130	715	729	515	22	810	725	647	392
8	1,130	783	707	472	23	828	723	609	381
9	1,140	756	696	455	24	832	726	588	382
10	1,080	706	690	446	25	883	427	546	377
11	1,000	709	649	430	26	933	654	535	429
12	1,020	628	678	388	27	947	658	546	335
13	942	561	688	398	28	947	697	545	333
14	650	592	687	399	29	925	738	549	335
15	722	705	710	406	30	936	761	551	335
					31		752	535	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June	1,170	637	932	55,500
July	904	427	724	44,500
August	754	535	664	40,800
September	528	333	429	25,500
The year				166,000

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.

RECORDS AVAILABLE.—April, 1909, to September, 1929.

EXTREMES.—Maximum discharge during year, 6,230 second-feet June 19 (gage height, 8.95 feet); minimum, 548 second-feet July 17 (gage height, 2.64 feet).

1909–1929: Maximum discharge, 9,490 second-feet June 29, 1927 (gage height, 9.90 feet); minimum, 355 second-feet June 28 and 29, 1919 (gage height, 2.00 feet).

REMARKS.—Records good except those for estimated periods (Nov. 4–9, Apr. 5, 7–9, 11–12, and 15), which are fair. Records discontinued during winter. Flow regulated by operation of headgates of irrigation canals above station. No diversions from Henrys Fork below station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1	1,440	1,800	-------	2,110	1,760	3,200	770	1,190
2	1,510	1,880	-------	1,920	2,230	2,780	874	1,220
3	1,540	1,910	-------	1,800	2,840	2,310	1,010	1,230
4	1,650	1,940	1,980	1,850	2,520	1,940	982	1,230
5	1,690	1,970	2,160	1,970	2,030	1,800	976	1,190
6	1,720	2,000	2,340	1,900	1,700	1,550	1,010	1,200
7	1,730	2,040	2,230	1,650	1,680	1,340	952	1,200
8	1,720	2,070	2,120	1,650	1,930	1,220	874	1,170
9	1,720	2,100	2,010	1,600	2,320	1,070	775	1,220
10	1,700	2,130	1,900	1,700	2,690	988	720	1,280
11	1,710	-------	1,830	1,720	3,120	918	665	1,370
12	1,810	-------	1,760	1,730	3,490	830	660	1,410
13	1,900	-------	1,690	2,100	3,530	740	705	1,300
14	1,930	-------	1,680	2,770	3,430	680	750	1,210
15	1,930	-------	1,680	3,290	3,620	620	775	1,160
16	1,930	-------	1,670	3,770	3,940	585	780	1,040
17	1,930	-------	1,770	4,220	4,850	566	797	994
18	1,930	-------	1,840	4,760	5,920	580	814	976
19	1,900	-------	1,920	4,680	6,090	590	858	940
20	1,890	-------	2,110	4,580	5,370	640	858	1,020
21	1,880	-------	2,380	4,860	4,000	705	846	1,200
22	1,850	-------	2,090	5,140	3,140	740	863	1,520
23	1,840	-------	1,930	5,360	3,040	735	841	1,680
24	1,890	-------	1,920	5,440	3,310	700	890	1,650
25	1,920	-------	1,880	5,340	3,240	755	918	1,580
26	1,890	-------	1,840	5,360	3,270	775	934	1,540
27	1,880	-------	1,850	4,990	3,220	650	964	1,560
28	1,880	-------	1,830	3,900	3,240	620	1,040	1,670
29	1,850	-------	1,890	2,710	2,970	695	1,080	1,650
30	1,870	-------	2,050	2,020	3,000	808	1,130	1,600
31	1,890	-------	-------	1,630	-------	830	1,160	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,930	1,440	1,800	111,000
November 1–10	-------	-------	1,980	39,300
April 4–30	2,380	1,670	1,940	104,000
May	5,440	1,600	3,180	196,000
June	6,090	1,680	3,250	193,000
July	3,200	566	1,060	65,200
August	1,160	660	880	54,100
September	1,680	940	1,310	78,000

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.

DRAINAGE AREA.—144 square miles.

RECORDS AVAILABLE.—January, 1912, to March, 1915; April, 1918, to September, 1929.

EXTREMES.—Maximum discharge during year, 405 second-feet May 14 (gage height, 1.90 feet); minimum, 196 second-feet Mar. 31 and Apr. 10 (gage height, 1.22 feet).

1912–1915, 1918–1929: 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. No diversions.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	225	219	219	213	219	213	207	225	264	228	210	204
2	225	219	219	213	219	213	207	219	264	228	216	204
3	231	207	213	219	216	213	207	249	273	228	216	204
4	231	219	213	213	216	213	213	261	267	228	210	204
5	225	219	225	213	213	213	213	249	261	228	210	204
6	225	231	207	213	210	207	213	249	255	228	210	204
7	225	219	207	213	213	213	213	249	249	222	210	204
8	225	219	207	213	213	210	213	249	249	222	210	204
9	225	219	204	213	207	213	213	279	249	222	210	204
10	231	219	207	213	213	213	196	279	243	222	210	204
11	231	219	219	213	213	216	213	279	249	222	210	204
12	225	216	219	213	213	213	213	316	249	219	210	204
13	225	219	225	213	213	213	207	341	249	219	210	204
14	225	222	219	213	213	213	207	405	261	225	210	204
15	225	225	216	213	213	213	201	341	261	219	204	204
16	225	219	219	219	213	213	201	357	273	219	204	204
17	225	222	201	213	213	210	213	341	285	219	210	204
18	225	201	213	213	210	210	213	329	273	219	204	204
19	225	219	207	213	213	207	216	329	249	219	210	204
20	225	219	213	201	210	213	225	326	249	225	204	204
21	222	222	207	207	213	213	213	310	249	216	204	210
22	222	222	207	213	213	225	213	310	249	222	204	210
23	222	219	207	213	213	216	213	310	249	216	204	204
24	222	213	207	213	213	213	216	310	243	216	204	204
25	222	216	219	213	213	210	213	310	243	216	204	204
26	222	219	213	219	213	201	219	316	243	210	204	210
27	219	216	213	219	213	204	219	279	231	216	204	204
28	219	219	219	213	213	213	231	279	231	210	204	204
29	219	225	219	213	------	207	249	279	228	216	204	204
30	219	225	213	213	------	207	249	264	228	216	204	204
31	219	------	213	213	------	196	------	264	------	210	204	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	231	219	224	13,800
November	225	201	219	13,000
December	225	204	213	13,100
January	219	201	213	13,100
February	219	207	213	11,800
March	225	196	211	13,000
April	249	196	215	12,800
May	405	219	294	18,100
June	273	228	252	15,000
July	228	210	220	13,500
August	216	204	207	12,700
September	210	204	205	12,200
The year	405	196	224	162,000

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 mouth and a third of a mile northeast of Warm River.

DRAINAGE AREA.—About 41 square miles.

RECORDS AVAILABLE.—January, 1912, to March, 1915; and April, 1918, to September, 1929.

EXTREMES.—Maximum discharge during year, 695 second-feet May 22 (gage height, 2.95 feet); minimum, 62 second-feet Mar. 26 (gage height, 0.66 foot).

1912–1915, 1918–1929: Maximum discharge, 1,140 second-feet May 28, 1928 (gage height, 4.30 feet); minimum (estimated), 32 second-feet Dec. 18–20, 1925.

REMARKS.—Records good except those for Dec. 9–31, Jan. 13–22, and Jan. 24 to Feb. 26, which are fair. Discharge unaffected by regulation or diversions.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	84	81	78	66		89	71	142	390	124	83	71
2	84	78	70	77		80	71	158	403	122	86	71
3	90	78	78	74		66	77	228	384	118	86	74
4	90	78	76	71		66	83	212	359	118	83	74
5	87	78	75	71		69	80	202	329	116	84	71
6	87	100	73	66		66	77	153	335	116	81	71
7	84	84	73	66		66	66	177	329	113	81	71
8	84	81	78	66		66	69	177	317	113	78	71
9	81	81		66		66	66	222	305	111	81	71
10	90	80		70		69	66	202	293	102	73	71
11	87	78		70		74	66	231	323	102	74	71
12	87	78		71		66	69	293	253	98	73	71
13	84	80				66	66	396	317	104	73	71
14	84	81			70	66	69	473	284	107	73	71
15	84	78				66	71	441	261	100	73	69
16	84	78				64	77	473	261	100	73	69
17	84	81				65	86	524	375	100	73	69
18	84	76		68		66	95	501	387	97	74	69
19	84	76				68	98	607	302	100	74	69
20	84	76	72			66	132	641	256	92	73	69
21	81	73				66	111	644	236	94	73	87
22	78	73				69	113	695	225	95	71	87
23	78	73		66		66	113	637	204	87	71	73
24	78	70				64	105	630	194	87	71	73
25	78	73				64	105	692	176	90	71	71
26	78	73				62	113	537	176	87	71	80
27	78	76		70	86	64	113	447	160	90	73	77
28	78	76			89	69	153	384	149	87	69	73
29	78	70			-------	76	192	353	138	87	71	73
30	77	76			-------	69	167	353	134	84	71	71
31	81	-------			-------	64	-------	372	-------	83	71	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	90	78	82.9	5,100
November	100	70	77.8	4,630
December	----------	----------	72.8	4,480
January	----------	----------	69.0	4,240
February	----------	----------	71.2	3,950
March	89	62	67.8	4,170
April	192	66	94.7	5,640
May	695	142	393	24,200
June	403	134	279	16,600
July	124	83	101	6,210
August	86	69	75.2	4,620
September	87	69	72.6	4,320
The year	695	62	122	88,200

DIVERSIONS FROM FALL RIVER ABOVE GAGING STATION NEAR SQUIRREL, IDAHO

Above the Squirrel gaging station three canals divert water from Fall River for irrigation. Records are available for a part of each irrigation season from June, 1919, to September, 1929. Discharge is computed from daily staff gage readings and combined to show the total flow of the three canals. Records good.

Daily and monthly discharge, in second-feet, 1929

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	24	169	101	0	16	116	200	0	6
2	24	182	97	0	17	127	207	0	6
3	23	170	99	0	18	123	210	0	7
4	26	182	98	0	19	111	72	0	7
5	29	199	101	0	20	120	0	0	7
6	38	207	97	0	21	126	0	0	11
7	47	215	101	0	22	135	0	0	2
8	50	205	101	0	23	141	0	0	0
9	52	204	18	0	24	0	0	0	5
10	50	201	0	0	25	0	0	0	5
11	67	197	0	0	26	121	0	0	5
12	72	213	0	4	27	142	0	0	4
13	78	221	0	5	28	153	0	0	4
14	92	233	0	4	29	184	0	0	4
15	106	210	0	5	30	193	103	0	4
					31		93	0	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June	193	0	85.6	5,090
July	233	0	126	7,750
August	101	0	26.2	1,610
September	11	0	3.2	189
The period				14,600

FALL RIVER NEAR SQUIRREL, IDAHO

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

RECORDS AVAILABLE.—January, 1904, to June, 1909; May, 1918, to September, 1929. August, 1902, to December, 1903, at Wilson's sawmill, 3 miles upstream.

EXTREMES.—Maximum discharge during year, 3,540 second-feet June 30 (gage height, 4.65 feet); minimum, 382 second-feet Jan. 21 (gage height, 1.88 feet).

1904–1909; 1918–1929: Maximum discharge, 6,440 second-feet June 27, 1927; minimum, 124 second-feet Jan. 19, 1924.

REMARKS.—Records excellent except those for Dec. 4 to Jan. 17 and Feb. 13–26, which are fair. Discharge estimated June 2, 4, 6, 8, 10, 12, 14, and 16. Diversions for irrigation above and below station.

Daily and monthly discharge, in second-feet, 192?–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	640	580	537		482	424	462	588	2,150	3,090	551	516
2	610	537	456		509	450	450	572	2,020	2,430	544	516
3	656	551	456		509	476	462	632	1,880	1,880	516	565
4	640	558			495	476	476	648	1,750	1,620	502	530
5	640	558			482	462	502	664	1,620	1,310	558	530
6	625	618			469	462	476	588	1,780	990	516	530
7	625	565			476	476	462	602	1,950	920	495	537
8	610	565			482	476	462	648	2,160	850	516	523
9	595	565			443	462	450	632	2,360	720	537	516
10	595	551		460	430	462	450	632	2,500	704	572	502
11	625	551			443	488	450	640	2,640	680	558	502
12	610	551			456	488	450	850	2,600	618	558	502
13	610	551				462	450	1,060	2,570	565	558	495
14	632	551				462	450	1,350	2,720	565	551	495
15	610	565				462	462	1,510	2,860	558	544	488
16	595	551				450	450	1,770	3,090	530	544	488
17	610	551	460			450	488	2,010	3,320	551	544	476
18	625	551		456		450	502	1,940	3,020	530	530	476
19	640	551		430		462	530	2,290	2,010	558	565	476
20	610	551		418	450	462	544	2,570	1,880	720	530	476
21	595	537		382		462	530	3,160	1,880	712	537	640
22	595	537		394		462	516	3,160	1,940	696	530	632
23	565	537		418		476	530	2,940	2,010	680	530	530
24	565	537		418		476	516	2,940	2,720	664	523	516
25	551	537		418		462	502	3,090	2,790	664	523	502
26	551	537		443		450	502	2,290	3,020	664	530	602
27	551	551		456	450	450	516	1,890	3,390	664	595	530
28	551	523		469	424	450	544	1,550	3,020	664	537	502
29	565	523		469	-------	476	618	1,510	3,240	640	544	488
30	565	537		482	-------	476	680	1,550	3,540	530	558	488
31	580	-------		482	-------	462	-------	1,740	-------	530	516	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	656	551	601	37,000
November	618	523	551	32,800
December	-------	-------	462	28,400
January	-------	382	450	27,700
February	509	-------	459	25,500
March	488	424	463	28,500
April	680	450	496	29,500
May	3,160	572	1,550	95,300
June	3,540	1,620	2,480	148,000
July	3,090	530	887	54,500
August	595	495	539	33,100
September	640	476	519	30,900
The year	3,540	382	788	571,000

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 are available during a part of each irrigation season from June, 1919, to September, 1929. Discharge is computed from daily staff gage readings and combined to show the total flow of the 10 canals. Records good.

Daily and monthly discharge, in second-feet, 1929

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	604	789	565	337	16	765	515	558	429
2	599	827	560	344	17	715	493	55[illegible]	408
3	594	792	541	406	18	598	519	55[illegible]	405
4	597	798	546	423	19	555	580	550	395
5	600	708	575	424	20	433	599	54[illegible]	343
6	648	651	544	403	21	622	598	53[illegible]	311
7	697	646	521	406	22	631	592	53[illegible]	118
8	730	605	529	403	23	671	598	53[illegible]	173
9	760	606	568	393	24	689	598	53[illegible]	176
10	746	628	592	386	25	687	594	52[illegible]	157
11	732	614	580	396	26	752	599	53[illegible]	142
12	721	597	575	400	27	817	593	56[illegible]	222
13	711	569	569	397	28	813	578	53[illegible]	229
14	757	482	559	395	29	850	579	54[illegible]	229
15	775	482	559	410	30	842	557	521	228
					31		547	471	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June	850	433	690	41,100
July	827	482	611	37,600
August	592	471	548	33,700
September	429	118	330	19,600
The period				132,000

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, 1929.

EXTREMES.—Maximum discharge during year, 3,760 second-feet June 17 (gage height, 5.16 feet); minimum, 18 second-feet Aug. 9 (gage height, 0.98 foot).
1920–1929: Maximum discharge, 6,380 second-feet June 27, 1927 (gage height, 6.60 feet); minimum, 9 second-feet Aug. 7, 1923 (gage height, 1.01 feet).

REMARKS.—Records excellent. Numerous diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1929

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1	621	1,810	2,180	36	231	16	2,190	3,100	137	37	134
2	621	1,980	1,650	43	227	17	2,640	3,640	83	35	140
3	665	1,810	1,230	34	238	18	2,540	2,900	60	37	165
4	696	1,510	988	28	194	19	2,700	2,120	83	47	165
5	688	1,370	711	26	184	20	2,940	1,770	188	38	216
6	628	1,500	468	24	181	21	3,120	1,540	175	36	434
7	592	1,620	443	20	198	22	3,310	1,780	165	34	559
8	551	1,810	343	21	194	23	3,290	2,000	145	34	402
9	592	1,910	225	18	191	24	3,170	2,320	134	35	390
10	600	2,070	185	36	194	25	3,250	2,390	129	34	384
11	614	2,320	145	38	194	26	2,580	2,530	114	36	390
12	801	2,500	109	37	188	27	2,000	2,690	104	50	390
13	1,180	2,220	83	40	188	28	1,560	2,500	102	46	329
14	1,570	2,320	116	37	184	29	1,400	2,410	98	46	315
15	1,920	2,660	153	29	162	30	1,340	2,560	65	63	301
						31	1,490	-------	40	102	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May	3,310	551	1,670	103,000
June	3,640	1,370	2,190	130,000
July	2,180	40	350	21,500
August	102	18	38	2,340
September	552	134	255	15,200
The period				272,000

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, 1903, to June, 1909; April, 1920, to September, 1929.

EXTREMES.—Maximum discharge during year, 3,220 second-feet May 25 (gage height, 4.43 feet); minimum, 521 second-feet Sept. 19 (gage height, 0.45 foot).
1903–1909, 1920–1929: 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. Some diversions for irrigation in Teton Basin 20 miles above station.

Daily discharge, in second-feet, 1929

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	------	644	1,670	1,920	782	610	16	644	1,260	2,410	904	639	564
2	------	596	1,870	1,740	831	610	17	776	1,340	2,790	921	629	582
3	------	592	1,640	1,580	766	649	18	820	1,320	2,420	904	634	551
4	------	606	1,350	1,500	724	649	19	881	1,400	1,880	974	634	529
5	------	610	1,280	1,390	798	625	20	950	1,600	1,570	939	625	546
6	------	615	1,520	1,250	766	620	21	921	1,820	1,490	892	610	620
7	------	625	1,800	1,170	734	615	22	904	2,100	1,620	870	601	760
8	------	620	1,970	1,090	734	610	23	927	2,220	1,760	836	601	683
9	------	629	2,150	1,020	703	601	24	859	2,430	1,750	776	601	620
10	------	644	2,170	986	693	601	25	760	2,990	1,740	782	592	596
11	------	654	2,090	980	688	592	26	760	2,590	1,830	798	596	601
12	------	719	1,920	962	668	592	27	703	1,960	1,940	745	596	750
13	------	798	1,820	939	658	592	28	734	1,580	1,870	739	592	708
14	------	968	1,930	915	644	587	29	766	1,280	1,890	739	596	639
15	------	1,230	2,140	904	639	560	30	755	1,130	2,000	729	629	620
							31	------	1,220	-------	729	629	------

Monthly discharge, in second-feet, of Teton River near St. Anthony, Idaho, 1929

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April 16-31	950	644	811	24,100
May	2,990	592	1,250	76,900
June	2,790	1,280	1,880	112,000
July	1,920	729	1,020	62,700
August	831	592	666	41,000
September	760	529	616	36,700
The period				353,000

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 water from Teton River for irrigation. Records are available for a part of each irrigation season from June, 1919, to September, 1929. Discharge is computed from daily staff gage readings and combined to show the total flow of the 15 canals. Records good.

Daily and monthly discharge, in second-feet, 1929

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1	1,250	1,380	674	578	16	1,330	851	572	562
2	1,220	1,330	708	566	17	1,220	848	562	565
3	1,140	1,230	701	614	18	942	737	570	571
4	1,050	1,220	677	611	19	838	807	566	504
5	1,040	1,210	689	603	20	858	773	564	482
6	1,120	1,080	672	585	21	842	735	553	536
7	1,170	1,010	674	577	22	995	737	554	586
8	1,220	989	674	568	23	1,060	692	555	535
9	1,290	933	642	573	24	1,050	661	544	510
10	1,370	889	619	576	25	1,110	662	536	477
11	1,350	887	622	554	26	1,280	653	534	499
12	1,350	878	613	545	27	1,320	680	535	590
13	1,290	872	616	527	28	1,340	659	537	561
14	1,270	870	586	513	29	1,380	659	495	529
15	1,300	868	585	543	30	1,380	642	557	508
					31		654	578	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June	1,370	838	1,180	70,200
July	1,380	642	874	53,700
August	708	495	599	36,800
September	614	477	551	32,800
The period				194,000

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, 1929.

EXTREMES.—Maximum discharge during year, 625 second-feet June 19; minimum, no flow May 24.

1913–1929: Maximum discharge, 868 second-feet May 21, 1921; no flow on numerous occasions.

REMARKS.—Records good. No record Oct. 1 to May 5. Discharge estimated May 9–11 and 19–23. Flow regulated by storage at Blackfoot Dam and by numerous canal diversions above station. No diversions from Blackfoot River below station.

Daily and monthly discharge, in second-feet, 192

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1	-------	102	18	1	11	16	280	22	10	39	11
2	-------	145	12	1	36	17	293	316	4	41	1
3	-------	231	10	6	94	18	181	561	1	34	1
4	-------	244	7	8	196	19		601	2	48	1
5	-------	188	14	22	265	20		487	73	53	1
6	435	96	51	21	312	21	99	260	72	73	1
7	443	25	14	1	262	22		134	110	71	230
8	363	47	126	25	224	23		80	88	41	517
9	367	137	205	52	217	24	0	80	10	50	414
10	371	229	150	35	178	25	13	28	2	37	296
11	375	166	63	26	108	26	72	14	2	46	148
12	378	120	29	47	54	27	142	11	3	62	129
13	357	98	4	53	26	28	188	9	45	37	143
14	331	16	4	32	9	29	172	10	188	27	126
15	287	12	11	31	21	30	142	28	73	23	102
						31	-------	-------	1	16	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May 6-31	443	0	226	11,700
June	601	9	150	8,930
July	205	1	45.2	2,780
August	62	1	34.2	2,100
September	517	1	138	8,210
The period				33,700

MUD LAKE NEAR TERRETON, IDAHO

LOCATION.—Staff gage in SW. ¼ sec. 13, T. 6 N., R. 34 E., at Owsley Canal Co.'s pump house, 1 mile east of Terreton and 5½ miles southwest of Mascill ranch gage. Zero of gage, 4,775.33 feet above mean sea level.

RECORDS AVAILABLE.—April, 1921, to September, 1929.

EXTREMES.—Maximum contents during year, 32,500 acre-feet May 12 and 13 (gage height, 6.56 feet); minimum, 2,720 acre-feet Sept. 5 (gage height, −0.40 foot).

1921–1929: Maximum contents, 61,660 acre-feet May 5, 1923 (gage height, 9.20 feet); minimum, that of Sept. 5, 1929.

REMARKS.—Contents for Mar. 16–31 estimated. Considerable water diverted from tributaries and from the lake during irrigation season. No regulation except as the supply in the lake is affected. Gage-height record furnished by Owsley Canal Co.

Daily contents, in acre-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,990	6,120	8,560	12,500	17,500	22,000	28,600	31,900	29,300	15,200	4,680	2,890
2	4,030	6,200	8,660	12,600	17,700	22,100	28,800	31,900	29,100	14,500	4,600	2,820
3	4,070	6,280	8,720	12,800	17,800	22,200	29,000	32,000	28,700	13,900	4,520	2,750
4	4,110	6,360	8,820	13,000	17,900	22,300	29,200	32,000	28,200	13,300	4,480	2,740
5	4,150	6,430	8,960	13,200	18,100	22,400	29,500	32,000	27,900	12,700	4,410	2,720
6	4,150	6,510	9,099	13,300	18,200	22,500	29,700	32,000	27,400	12,000	4,370	2,740
7	4,150	6,590	9,200	13,600	18,400	22,600	30,000	32,400	27,000	11,400	4,310	2,740
8	4,130	6,690	9,340	13,800	18,600	22,700	30,100	32,400	26,400	10,900	4,250	2,750
9	4,130	6,770	9,480	14,000	18,700	23,000	30,200	32,400	25,800	10,300	4,210	2,770
10	4,130	6,860	9,580	14,200	18,900	23,300	30,400	32,400	25,200	9,800	4,150	2,800
11	4,250	6,940	9,730	14,400	19,000	23,600	30,500	32,400	24,600	9,300	4,110	2,840
12	4,350	7,020	9,870	14,600	19,100	24,000	30,700	32,500	24,200	8,820	4,070	2,870
13	4,480	7,100	10,000	14,700	19,300	24,400	30,800	32,500	23,900	8,560	4,010	2,910
14	4,680	7,190	10,100	14,800	19,400	24,700	30,800	32,400	23,600	8,230	3,970	2,940
15	4,900	7,270	10,300	14,900	19,600	24,900	30,800	32,200	22,100	7,950	3,930	2,980
16	4,970	7,360	10,400	15,100	19,800	25,100	30,800	32,100	20,700	7,710	3,880	3,010
17	5,030	7,440	10,500	15,200	19,900	25,400	31,100	32,100	20,300	7,500	3,820	3,040
18	5,100	7,500	10,700	15,300	20,100	25,600	31,200	32,000	19,900	7,270	3,780	3,090
19	5,160	7,590	10,900	15,500	20,200	25,800	31,300	32,000	20,100	7,070	3,740	3,130
20	5,230	7,680	11,000	15,700	20,300	26,000	31,400	32,000	19,800	6,860	3,680	3,180
21	5,300	7,740	11,100	15,800	20,600	26,200	31,800	31,900	19,500	6,640	3,650	3,210
22	5,370	7,830	11,250	16,000	20,800	26,400	32,200	31,800	19,200	6,460	3,590	3,270
23	5,460	7,920	11,400	16,200	21,100	26,600	32,100	31,600	19,000	6,250	3,550	3,300
24	5,530	8,020	11,500	16,300	21,400	26,900	32,000	31,400	18,700	6,050	3,520	3,340
25	5,600	8,080	11,600	16,500	21,500	27,100	32,000	31,200	18,500	5,850	3,450	3,370
26	5,680	8,170	11,700	16,700	21,600	27,300	32,000	30,900	18,200	5,630	3,370	3,430
27	5,750	8,230	11,900	16,800	20,800	27,500	31,900	30,700	18,000	5,410	3,280	3,460
28	5,820	8,330	12,000	16,900	21,900	27,700	32,000	30,400	17,300	5,230	3,210	3,520
29	5,900	8,390	12,200	17,100	-------	28,000	32,000	30,100	16,600	5,050	3,140	3,550
30	5,980	8,490	12,300	17,200	-------	28,200	31,900	29,800	15,900	4,900	3,060	3,590
31	6,050	-------	12,500	17,400	-------	28,400	-------	29,600	-------	4,790	2,980	-------

NOTE.—Daily contents determined from gage-height graph based on readings of staff gage which were made at least once weekly when pumps were not operating.

CAMAS CREEK AT CAMAS, IDAHO

LOCATION.—Water-stage recorder in E. ½ SE. ¼ 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, 1929.

EXTREMES.—Maximum discharge during year, 83 second-feet May 6 (gage height, 1.20 feet); minimum, 2.5 second-feet Sept. 7 (gage height, 0.28 foot).

1925–1929: Maximum discharge, 204 second-feet May 4, 1927; maximum gage height, 2.01 feet Mar. 20, 1928; no flow June 1–7, 1926.

REMARKS.—Records good above 10 second-feet; others fair except those for Nov. 14 to Apr. 12, Apr. 14–24, Apr. 26 to May 2, May 18, June 9–12, June 28 to July 5, July 7 to Sept. 6, and Sept. 8–30, which are poor. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.9	14						80	14	4.8		
2	5.9	18						79	9.7	4.8		
3	5.9	16						77	7.6	4.7		
4	5.6	14						81	7.2	4.7		2.8
5	5.6	16						81	6.3	4.6		
6	5.0	19						83	8.1	4.6		
7	5.3	19					12	81	6.2			2.5
8	5.9	17						80	5.6			
9	5.9	17						79	5.6			
10	5.9	15						77	5.6			
11	9.3	14						77	5.6			
12	14	14						75	5.6			
13	14	13					15	73	5.6			
14	13							69	14			2.7
15	14				6			63	9.3			
16	13		9	7		10	20	58	5.6		3	
17	13							54	5.6			
18	13							43	6.2			
19	11							32	10	4		
20	10							26	24			
21	12						35	15	25			
22	9.7	12						12	17			
23	8.5							12	8.9			
24	8.5							14	5.9			
25	8.9						44	16	4.7			3.5
26	8.9							21	4.4			
27	8.9							25	5.0			
28	9.3						60	28	5.0			
29	10							28	4.9			
30	10							25	4.9			
31	12							21				

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	14	5.0	9.29	571
November	19		13.7	815
December			9.0	553
January			7.0	430
February			6.0	333
March			10.0	615
April			27.1	1,610
May	83	12	51.1	3,140
June	25	4.4	8.54	508
July	4.8		4.14	255
August			3.0	184
September			2.98	177
The year	83		12.7	9,190

BEAVER CREEK AT DUBOIS, IDAHO

LOCATION.—Water-stage recorder in NW. ¼ 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, 1929.

EXTREMES.—Maximum discharge during year, 156 second-feet May 5 (gage height, 1.94 feet); no flow prior to Apr. 14 and subsequent to June 24.

1921–1929: Maximum discharge, 637 second-feet May 20, 1922; maximum gage height, 6.50 feet ± 0.20 foot Mar. 16, 1926; no flow Aug. 3 to Nov. 30, 1924; July 31, 1928, to Apr. 13, 1929; and June 25 to Sept. 30, 1929.

REMARKS.—Records good except those for estimated periods (Apr. 14–16, 18–21, 23–29, and June 24), which are poor. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Apr.	May	June	Day	Apr.	May	June	Day	Apr.	May	June
1	0	74	13	11	0	60	7	21	30	22	9
2	0	70	12	12	0	57	15	22	46	21	6
3	0	74	17	13	0	50	18	23		21	5
4	0	88	14	14	2	64	11	24		23	2
5	0	118	10	15	3	52	8	25		25	0
6	0	100	7	16	4	40	8	26	70	29	0
7	0	65	5	17	4	35	29	27		35	0
8	0	50	6	18	30	29	36	28		48	0
9	0	50	6	19	30	25	22	29		38	0
10	0	47	6	20	30	23	14	30	100	29	0
								31		20	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April	100	0	25.6	1,520
May	118	20	47.8	2,940
June	36	0	9.5	565
The period	118	0	7.0	5,020

NOTE.—No flow for months for which no discharge is given.

BEAVER CREEK AT CAMAS, IDAHO

LOCATION.—Staff gage in NE. ¼ sec. 21, T. 8 N., R. 36 E., a quarter of a mile northwest of Oregon Short Line Railroad station at Camas and three-eighths of a mile above confluence with Camas Creek.

RECORDS AVAILABLE.—April, 1921, to September, 1929.

EXTREMES.—Stream dry throughout the year.

1921–1929: Maximum discharge, 153 second-feet June 1, 1921, and Mar. 18 and 19, 1926; no flow past station except during spring of each year.

REMARKS.—Flow is affected by irrigation diversions above Dubois, about 14 miles above gage, and by heavy channel losses below Dubois. During the current year no flow reached the station.

LITTLE LOST RIVER NEAR HOWE, IDAHO

LOCATION.—Staff gage in sec. 3, T. 6 N., R. 28 E., a quarter of a mile above diversion dam of Blaine County Investment Co. and 7 miles northwest of Howe.

RECORDS AVAILABLE.—April, 1921, to September, 1929.

EXTREMES.—Maximum discharge during year, 138 second-feet June 17 and 18; minimum, 29 second-feet Apr. 12 (gage height, 0.64 foot).

1921–1929: Maximum discharge, 176 second-feet June 14, 1923; minimum, 13 second-feet Apr. 15 and 20, 1923 (gage height, 0.23 foot).

REMARKS.—Records good except those for May 28 and Aug. 2, which are fair. Numerous irrigation diversions above and below station. Diversions from small reservoir on Dry Creek, 40 miles above station, into Little Lost River. Gage-height record furnished by water master for Little Lost River.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1	66	47	46	110	110	59	52
2	67	42	46	110	104	58	52
3	67	39	48	117	104	57	54
4	68	38	51	110	98	55	55
5	69	34	54	98	98	53	58
6	68	32	54	104	91	55	63
7	69	30	52	110	91	53	62
8	67	31	51	98	91	58	62
9	66	32	50	124	73	58	60
10	66	35	52	131	74	55	59
11	67	34	53	131	72	52	59
12	68	29	52	124	69	51	58
13	69	34	51	124	71	53	57
14	68	34	55	124	72	50	55
15	68	41	58	131	67	50	52
16	67	41	67	131	65	50	52
17	66	41	71	138	65	53	52
18	68	46	79	138	65	50	53
19	68	48	75	131	65	49	53
20	68	49	78	131	85	48	55
21	69	48	91	117	85	47	60
22	69	50	98	117	73	47	60
23	68	51	104	117	71	46	60
24	68	51	110	117	72	46	62
25	69	50	110	117	68	47	62
26	68	48	124	110	65	48	64
27	68	48	124	110	63	50	66
28	69	45	120	110	59	52	66
29	68	45	117	110	59	52	66
30	------	45	110	110	55	66	63
31	------	------	110	------	55	60	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October 1–29	69	66	67.8	3,900
April	51	29	41.3	2,460
May	124	46	76.2	4,690
June	138	98	118	7,020
July	110	55	76.0	4,670
August	66	46	52.5	3,230
September	66	52	58.4	3,480

NOTE.—No record during winter.

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

LOCATION.—Staff gage in NW. ¼ NW. ¼ sec. 11, T. 6 N., R. 28 E., 665 feet below head gates of canal and 7 miles northwest of Howe.

RECORDS AVAILABLE.—April, 1924, to September, 1929.

EXTREMES.—Maximum discharge during year, 54 second-feet June 17–19 (gage height, 1.54 feet); canal dry during nonirrigation season.

1924–1929: Maximum discharge, 87 second-feet May 24 and 25, 1928. No flow at times during nonirrigation periods.

REMARKS.—Records fair except those for Apr. 1–11, May 28, July 19, and Aug. 2, which are poor. Canal diverts from Little Lost River in sec. 2, T. 6 N., R. 28 E., and is used for irrigation on lands in project of the Blaine County Investment Co. Gage-height record and results of one discharge measurement furnished by water master for Little Lost River. Results of one discharge measurement furnished by Lynn Crandall, engineer of Mackay.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Apr.	May	June	July	Aug.	Sept.
1	10	20	4.4	41	40	12	8.6
2	10	18	4.4	36	39	12	8.6
3	10	8.5	4.7	37	35	12	8.6
4	10	8.5	5.3	32	35	12	8.6
5	10	12	5.3	30	35	12	8.6
6	10	12	5.3	26	33	12	8.6
7	8.9	2.5	5.3	26	27	12	8.6
8	8.9	2.5	5.3	26	27	12	8.6
9	8.9	7.7	5.3	43	19	10	8.6
10	8.9	5.3	5.3	43	19	11	9.0
11	8.9	5.3	5.3	50	16	11	9.3
12	8.9	7.2	5.3	50	16	11	9.3
13	8.9	6.2	5.3	46	16	11	10
14	9.3	9.6	5.3	46	16	11	10
15	9.3	13	5.3	46	16	11	10
16	9.3	11	5.3	49	16	10	10
17	9.3	8.2	6.8	54	16	10	10
18	9.3	7.2	15	54	16	9.6	17
19	9.3	5.9	15	54	20	9.3	17
20	12	5.6	16	46	24	9.3	17
21	12	5.6	19	41	24	9.3	18
22	12	5.3	24	38	20	11	18
23	12	5.3	24	38	14	10	18
24	9.7	5.3	26	41	20	10	18
25	9.7	5.3	27	41	20	9.0	18
26	10	4.4	39	41	14	9.0	17
27	10	4.4	39	41	14	9.0	18
28	11	4.4	39	41	14	9.0	18
29	11	4.4	39	40	13	9.0	18
30	------	4.4	39	40	12	9.0	18
31	------	------	41	------	12	9.0	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October 1–29	12	8.9	9.91	570
April	20	2.5	7.50	446
May	41	4.4	15.8	972
June	54	26	41.2	2,450
July	40	12	21.2	1,300
August	12	9.0	10.4	640
September	18	8.6	12.8	762

NOTE.—No record during winter.

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, 1929.

EXTREMES.—Maximum discharge during year, 1,560 second-feet June 16 (gage height, 3.74 feet); minimum, 42 second-feet Apr. 11 (gage height, 0.86 foot).

1904–1914, 1920–1929: Maximum discharge, 3,500 second-feet June 12, 1921 (gage height, 5.94 feet); minimum, 35 second-feet Apr. 2, 1909.

ACCURACY.—Records excellent except those prior to Apr. 21 and those for estimated periods (Apr. 12–20, July 22–24, 28, and 29), which are good. No regulation. Several small diversions above station and Hammerly ditch, capacity about 20 second-feet, a quarter of a mile below station.

COOPERATION.—Water commissioner for Big Lost River furnished results of one discharge measurement.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Apr.	May	June	July	Aug.	Sept.
1	99	84	-------	108	476	635	152	121
2	97	78	-------	123	471	569	184	110
3	95	78	-------	146	425	515	156	102
4	95	-------	-------	152	425	482	142	101
5	101	-------	-------	134	504	430	132	101
6	97	-------	-------	127	617	396	125	104
7	95	-------	-------	123	732	383	119	102
8	97	-------	-------	127	772	328	112	99
9	95	-------	-------	146	739	305	108	97
10	99	-------	-------	142	680	301	108	93
11	101	-------	42	136	629	290	102	91
12	104	-------	46	165	654	290	99	90
13	99	-------	49	231	779	279	95	86
14	106	-------	53	251	932	276	93	83
15	106	-------	56	294	1,030	265	90	81
16	102	-------	60	365	1,300	251	91	79
17	101	-------	64	425	940	241	91	78
18	99	-------	67	430	700	241	156	74
19	95	-------	71	493	581	241	139	73
20	93	-------	74	599	551	225	112	74
21	91	-------	78	687	648	206	104	83
22	88	-------	79	835	746	194	97	83
23	84	-------	78	1,020	700	182	91	83
24	86	-------	73	1,100	700	171	90	88
25	83	-------	72	1,060	746	159	91	90
26	83	-------	76	793	758	162	116	95
27	81	-------	88	629	720	154	112	97
28	81	-------	112	527	713	147	102	93
29	79	-------	130	466	732	139	149	88
30	79	-------	134	425	680	132	167	88
31	84	-------	-------	455	-------	134	139	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	106	79	93.4	5,740
November 1–3	84	78	80.0	476
April 11–30	134	42	75.1	2,980
May	1,100	108	410	25,200
June	1,300	425	703	41,800
July	635	132	281	17,300
August	184	90	118	7,260
September	121	73	90.9	5,410

NOTE.—Record discontinued during winter.

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, 1929.

EXTREMES.—Maximum discharge during year, 348 second-feet June 16 (gage height, 2.14 feet); no flow Jan. 1 to May 24, Aug. 13–20, and Sept. 17–19.

1919–1929: Maximum discharge, 999 second-feet June 16, 1922 (gage height, 3.37 feet); no flow during periods in 1920 and 1923–1929.

REMARKS.—Records fair except those for Dec. 1–31, July 17 to Sept. 7 and Sept. 9–30, which are poor. Diversions for irrigation above station. This record represents a part of the natural flow of Big Lost River and taken in conjunction with the record for west channel of Big Lost River and with the record for east and west channels of Warm Spring Creek will show the entire flow of Big Lost River and practically the entire surface flow into Mackay Reservoir. Gage-height record and results of three discharge measurements furnished by water commissioner for Big Lost River.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	May	June	July	Aug.	Sept.
1	10	7.6		0	67	193		
2	10	7.6		0	76	172		
3	10	7.6	4	0	74	152		
4	10	7.6		0	66	130		3
5	10	7.2		0	73	112	2	
6	10	7.6		0	95	97		
7	9.6	7.6		0	130	84		
8	9.2	7.6	3	0	162	74		3
9	9.6	7.2		0	172	66		
10	10	7.2		0	172	58		
11	11	7.6		0	160	51	1	
12	12	7.6		0	160	41	1	
13	12	7.6	2	0	187	35	0	2
14	12	7.6		0	238	27	0	
15	12	7.2		0	287	16		
16	12	6.8		0	348	9		
17	10	7.2		0	346		0	
18	9.6	7.6		0	252	5		0
19	9.2	6.0		0	189			
20	8.4	6.0		0	154			
21	8.8	6.0		0	158		1	
22	8.8	6.0		0	195		1	1
23	8.4	6.0		0	199	4		
24	8.4	6.0	1	0	197			
25	8.4	5.7		39	202			
26	8.4	5.7		102	221		3	
27	8.0	5.5		97	212			
28	7.6	5.5		81	208	3		2
29	7.6	5.2		67	208			
30	7.6	5.0		60	212			
31	7.6	------		61	------			------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	12	7.6	9.55	587
November	7.6	5.0	6.75	402
December	------	------	2.0	123
May	102	0	16.4	1,010
June	348	66	181	10,800
July	193	------	44.4	2,730
August	------	0	1.6	98
September	------	0	1.9	113
The year	348	0	21.8	15,900

NOTE.—No flow for months for which no discharge is given.

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, 1929.

EXTREMES.—Maximum discharge during year, 188 second-feet June 17 (gage height, 1.96 feet); minimum, 18 second-feet May 17, 18, 21, 22 (gage height, 1.07 feet).

1919–1929: 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. Diversions for irrigation above station. This record represents a part of the natural flow of Big Lost River and taken in conjunction with record for east channel of Big Lost River and with the record for east and west channels of Warm Spring Creek will show the entire surface flow of Big Lost River and practically the entire flow into Mackay Reservoir. Gage-height record and results of three discharge measurements furnished by water commissioner for Big Lost River.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	41	40	34	29	25	22	21	20	41	101	31	36
2	41	40	34	29	24	22	22	20	45	95	34	36
3	41	38	34	29	24	22	22	20	48	87	34	36
4	40	38	32	29	24	22	22	20	48	82	32	36
5	40	38	32	29	24	22	22	19	48	76	32	37
6	40	38	32	29	24	22	21	19	58	71	32	37
7	40	38	31	29	24	22	20	19	69	64	34	36
8	40	38	31	29	24	22	20	19	71	59	35	36
9	40	38	31	29	24	22	20	19	80	56	35	36
10	40	38	31	28	23	22	20	19	85	51	35	36
11	40	38	31	28	23	22	20	19	85	45	35	36
12	40	38	31	28	23	22	20	19	84	42	35	36
13	40	38	31	27	23	21	20	19	91	41	35	36
14	38	38	31	27	23	21	20	19	110	38	35	36
15	38	37	31	27	23	21	20	19	138	36	35	35
16	38	36	31	27	22	21	20	19	169	35	35	35
17	40	36	31	27	22	21	20	18	188	34	34	36
18	40	36	31	27	22	21	21	18	148	34	32	36
19	40	36	31	27	22	21	21	19	111	34	32	36
20	40	36	31	27	22	21	22	19	91	34	31	36
21	38	36	31	27	22	21	22	18	87	34	30	36
22	38	35	31	27	22	21	22	18	87	32	30	36
23	38	35	31	27	22	21	21	19	101	34	30	36
24	38	35	31	27	22	21	21	19	101	34	32	36
25	38	35	31	27	22	21	21	25	101	34	32	36
26	38	35	31	27	22	21	21	46	108	32	32	36
27	38	35	30	27	22	21	21	50	108	32	34	36
28	40	35	30	26	22	21	21	50	108	31	35	36
29	40	35	30	26	------	21	21	42	108	30	37	36
30	40	35	30	26	------	21	21	41	108	30	38	36
31	42	------	30	26	------	21	------	38	------	30	37	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	42	38	39.5	2,430
November	40	35	36.8	2,190
December	34	30	31.2	1,920
January	29	26	27.5	1,690
February	25	22	22.9	1,270
March	22	21	21.4	1,320
April	22	20	20.9	1,240
May	50	18	24.1	1,480
June	188	41	93.5	5,560
July	101	30	47.4	2,910
August	38	30	33.5	2,060
September	37	35	36.0	2,140
The year	188	18	36.2	26,200

Combined daily and monthly 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	153	174	157	142	134	128	130	102	219	449	121	132
2	152	173	155	142	133	128	131	101	237	418	124	129
3	153	171	155	142	133	128	130	100	240	385	127	129
4	152	171	151	142	133	130	130	99	232	350	127	131
5	152	170	150	142	133	130	129	96	242	320	128	133
6	152	172	151	142	133	133	126	96	275	295	128	135
7	153	170	150	144	132	133	124	96	324	270	130	133
8	155	171	149	144	132	135	124	93	377	251	131	131
9	158	170	149	144	133	136	124	93	405	236	130	132
10	161	170	149	143	134	136	124	93	418	217	130	133
11	164	171	148	143	134	135	124	94	404	201	130	134
12	173	171	148	143	132	134	124	90	401	184	131	138
13	173	172	148	136	132	132	122	90	440	171	133	141
14	169	170	148	138	132	130	119	89	520	157	133	142
15	171	168	148	138	132	130	118	89	610	141	132	140
16	171	166	147	137	131	132	113	89	714	132	130	140
17	171	164	147	137	131	132	112	86	738	127	127	138
18	169	165	147	137	131	132	112	92	575	129	124	138
19	168	165	147	137	130	132	112	93	459	129	123	134
20	167	165	147	135	130	132	112	92	396	128	121	135
21	168	164	147	137	130	132	112	91	392	124	121	134
22	169	163	147	137	130	132	111	90	443	122	121	133
23	167	161	145	138	129	132	108	91	452	124	122	134
24	166	160	145	138	129	130	108	92	451	125	126	135
25	165	160	145	138	129	130	107	144	458	125	126	138
26	165	160	146	138	129	131	107	247	483	124	128	141
27	166	160	145	136	128	131	107	267	479	122	130	140
28	169	160	145	135	128	131	104	247	473	120	132	137
29	169	159	145	135	------	131	104	221	477	119	138	137
30	170	159	144	135	------	130	103	211	478	119	140	137
31	175	------	144	135	------	130	------	208	------	119	136	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	175	152	164	10,100
November	174	159	166	9,880
December	157	144	148	9,100
January	144	135	139	8,550
February	134	128	131	7,280
March	136	128	132	8,120
April	131	103	117	6,960
May	267	86	122	7,500
June	738	219	427	25,400
July	449	119	195	12,000
August	140	121	128	7,870
September	142	129	135	8,030
The year	738	86	167	121,000

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, 1929.

EXTREMES.—Maximum contents during year, 23,100 acre-feet Apr. 19 (gage height, 48.40 feet); no available storage Sept. 9–11, 16, 18–27, 30 (gage height, 7.0 feet and less).

1919–1929: Maximum contents, 40,500 acre-feet June 26, 1922 (gage height, 63.62 feet); minimum, water surface at or below bottom of outlet tunnel during periods in 1919, 1920, 1924, 1926, and 1929. (Minimum stage during these periods, 6.6 feet Aug. 24 to Sept. 2, 1919.)

REMARKS.—Capacity of reservoir is 38,400 acre-feet between gage heights 7 and 62 feet. Water is used for irrigation of about 6,700 acres of land near Arco, under the Utah Construction Co.'s Carey Act project. Owing to the porous condition of the foundation there is considerable seepage around the dam, the greater part of which reappears between the reservoir and the 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	308	7,939	13,640	17,420	19,820	22,210	22,920	18,130	7,272	1,042	180
2	48	654	8,171	13,740	17,530	19,910	22,260	22,930	17,630	6,932	1,005	155
3	47	956	8,408	13,840	17,660	20,000	22,310	22,920	17,140	6,583	958	131
4	48	1,238	8,624	13,950	17,760	20,090	22,360	22,910	16,640	6,200	901	103
5	52	1,511	8,837	14,040	17,840	20,180	22,410	22,910	16,150	5,828	852	60
6	53	1,773	9,034	14,120	17,950	20,270	22,450	22,900	15,760	5,485	810	27
7	52	2,034	9,282	14,240	18,050	20,360	22,500	22,900	15,410	5,113	778	14
8	50	2,277	9,408	14,390	18,130	20,450	22,600	22,900	15,120	4,760	735	5
9	52	2,514	9,599	14,540	18,260	20,540	22,650	22,870	14,810	4,458	699	0
10	55	2,783	9,791	14,690	18,350	20,630	22,690	22,850	14,470	4,138	668	0
11	64	3,106	9,984	14,850	18,430	20,720	22,740	22,840	14,130	3,787	592	0
12	95	3,350	10,180	15,030	18,520	20,810	22,790	22,810	13,830	3,334	547	2
13	126	3,648	10,380	15,220	18,600	20,900	22,840	22,790	13,590	2,947	505	5
14	134	3,880	10,580	15,390	18,690	20,990	22,890	22,760	13,380	2,559	470	5
15	122	4,091	10,780	15,520	18,770	21,090	22,940	22,720	13,150	2,182	441	2
16	117	4,280	10,980	15,620	18,860	21,180	22,980	22,700	13,100	1,788	407	0
17	117	4,480	11,180	15,730	18,950	21,270	23,030	22,670	13,070	1,662	371	2
18	105	4,764	11,410	15,810	19,030	21,360	23,080	22,650	12,740	1,633	334	0
19	112	5,081	11,590	15,910	19,090	21,420	23,100	22,620	12,210	1,587	302	0
20	117	5,372	11,730	16,030	19,160	21,460	23,070	22,600	11,670	1,532	278	0
21	117	5,655	11,830	16,130	19,250	21,510	23,020	22,570	11,080	1,480	260	0
22	117	5,944	11,970	16,230	19,300	21,560	23,000	22,550	10,600	1,438	242	0
23	117	6,175	12,110	16,350	19,380	21,640	23,000	22,520	10,170	1,382	231	0
24	117	6,375	12,260	16,470	19,470	21,740	22,990	22,510	9,740	1,328	217	0
25	117	6,578	12,400	16,590	19,560	21,790	22,980	22,430	9,320	1,292	200	0
26	117	6,785	12,540	16,710	19,620	21,840	22,980	21,920	8,984	1,243	180	0
27	117	6,996	12,690	16,830	19,660	21,890	22,960	21,300	8,600	1,195	157	0
28	117	7,212	12,880	16,980	19,730	21,930	22,950	20,690	8,230	1,154	140	2
29	117	7,464	13,100	17,120	-------	21,980	22,940	20,020.	7,890	1,114	215	2
30	105	7,711	13,270	17,240	-------	22,030	22,940	19,310	7,581	1,078	219	0
31	83	-------	13,470	17,340	-------	22,110	-------	18,670	-------	1,044	214	------

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, half a mile above heading of Streeter ditch, 1½ miles below Mackay Dam, and 2½ miles above Mackay.

RECORDS AVAILABLE.—December, 1903, to August, 1906; May, 1912, to April, 1913, and January, 1919, to September, 1929. From April, 1913, to March, 1915, at station 1 mile below present site and below diversion of Streeter ditch.

EXTREMES.—Maximum discharge during year, 802 second-feet June 16–18 (gage height, 3.24 feet); minimum, 35 second-feet Nov. 2 (gage height, 1.47 feet). 1903–1906, 1912–1915, 1919–1929: 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. Numerous diversions above Mackay Reservoir but Sharp ditch is only diversion between gage and reservoir. Flow past gage regulated by storage in Mackay Reservoir. Gage-height record and results of five discharge measurements furnished by water commissioner for Big Lost River.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	172	110	64	89	107	116	116	113	535	640	155	162
2	172	35	64	89	107	116	116	110	525	620	165	158
3	172	50	64	92	107	116	116	110	525	590	168	155
4	172	53	64	92	107	116	116	104	520	570	168	162
5	176	53	64	92	107	116	116	98	520	545	158	176
6	176	58	64	92	107	120	116	98	515	500	152	172
7	176	56	67	92	110	120	113	98	535	485	148	165
8	176	50	67	92	110	120	113	98	555	460	152	155
9	179	53	67	92	110	123	113	98	590	415	155	155
10	182	53	67	95	110	123	113	98	605	405	165	155
11	186	45	67	95	110	123	113	98	595	395	172	155
12	193	45	67	95	110	123	113	98	570	410	162	155
13	200	48	67	95	113	123	116	101	570	400	162	155
14	208	50	69	95	113	123	116	104	625	390	158	155
15	200	53	69	98	113	123	116	89	748	380	158	155
16	200	45	69	98	113	123	116	92	802	380	158	158
17	200	48	72	101	116	126	116	92	802	240	158	155
18	200	48	72	101	116	126	116	92	802	182	152	155
19	200	50	72	104	116	126	116	92	748	182	145	152
20	200	50	75	104	116	126	116	92	695	176	142	152
21	200	53	75	104	116	126	116	92	720	165	135	152
22	200	53	75	104	116	126	116	92	695	158	135	148
23	200	56	78	104	116	126	116	92	695	162	139	148
24	196	56	81	104	116	123	116	92	695	162	142	145
25	196	56	81	104	116	120	116	148	695	155	145	148
26	196	58	84	104	116	120	116	529	695	155	152	152
27	196	58	84	104	116	120	116	545	695	158	148	155
28	196	61	86	104	116	120	116	570	695	152	145	158
29	196	61	86	107	------	120	116	605	695	148	152	155
30	204	64	86	107	------	120	120	585	670	145	152	155
31	220	------	89	107	------	120	------	565	------	148	158	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	220	172	192	11,800
November	110	35	54.3	3,230
December	89	64	72.8	4,480
January	107	89	98.6	6,060
February	116	107	112	6,220
March	126	116	122	7,500
April	120	113	116	6,900
May	605	89	190	11,700
June	802	515	644	38,300
July	640	145	325	20,000
August	172	135	153	9,410
September	176	145	156	9,280
The year	802	35	186	135,000

WARM SPRING CREEK (EAST CHANNEL) NEAR MACKAY, IDAHO

LOCATION.—Staff gage in NE. ¼ sec. 5, T. 7 N., R. 23 E., 500 feet above junction with west channel of Warm Spring Creek and 7½ miles northwest of Mackay.

RECORDS AVAILABLE.—May, 1919, to September, 1929.

EXTREMES.—Maximum discharge during year (estimated), 60 second-feet June 17; minimum, 14 second-feet May 16 and 17.

1919–1929: Maximum discharge, 225 second-feet June 15, 1922; minimum, 9 second-feet May 8, 9, 13, and 14, 1919, and May 8–21, 1920.

REMARKS.—Records fair, based on one or more gage readings each week. Natural flow practically all diverted during irrigation season. Record represents a portion of the natural flow of Big Lost River and taken in conjunction with the record for west channel of Warm Spring Creek and east and west channels of Big Lost River will show practically the entire surface flow of Big Lost River which enters Mackay Reservoir. Gage-height record and results of three discharge measurements furnished by water commissioner for Big Lost River.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	31	28	26	25	24	26	18	25	47	18	21
2	24	31	27	25	25	23	26	17	26	46	18	20
3	25	31	27	25	25	23	25	17	28	46	19	20
4	25	31	27	25	25	24	25	17	29	41	19	20
5	25	31	26	25	25	24	25	17	30	37	20	20
6	25	31	26	25	25	25	25	17	32	32	20	21
7	26	30	26	25	25	25	25	17	34	30	20	21
8	27	30	25	25	25	26	25	16	36	28	20	20
9	28	30	25	25	25	26	25	16	40	26	19	21
0	29	30	25	25	25	26	25	16	45	24	19	22
11	30	30	25	25	25	26	25	16	45	23	19	22
12	31	30	25	25	25	26	25	16	44	21	20	23
13	31	30	25	25	25	25	25	15	48	20	20	24
14	31	29	25	25	25	25	24	15	52	20	20	25
15	31	29	25	25	25	25	24	15	57	19	20	25
16	31	29	25	24	25	25	23	14	59	18	20	25
17	31	29	25	24	25	25	23	14	60	18	20	24
18	31	29	25	24	25	25	22	19	53	18	20	24
19	31	29	25	24	24	25	22	19	47	17	19	23
20	31	29	25	24	24	25	21	18	46	17	18	23
21	31	28	25	24	24	25	21	18	44	17	18	23
22	31	28	25	24	24	25	21	18	43	17	18	23
23	30	28	25	25	24	25	20	18	44	17	19	23
24	30	28	25	25	24	25	20	19	44	17	19	24
25	29	28	25	25	24	25	19	19	45	17	19	24
26	29	28	26	25	24	26	19	25	46	17	20	25
27	29	28	26	25	24	26	19	30	47	17	20	25
28	29	28	26	25	24	26	19	29	47	17	20	25
29	29	28	26	25	------	26	19	28	48	17	20	25
30	30	28	26	25	------	26	18	27	48	17	21	25
31	30	------	26	25	------	26	------	26	------	17	21	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	31	24	28.8	1,770
November	31	28	29.3	1,740
December	28	25	25.6	1,570
January	26	24	24.8	1,520
February	25	24	24.6	1,370
March	26	23	25.1	1,540
April	26	18	22.7	1,350
May	30	14	18.9	1,160
June	60	25	43.1	2,560
July	47	17	23.7	1,460
August	21	18	19.5	1,200
September	25	20	22.9	1,360
The year	60	14	25.7	18,600

WARM SPRING CREEK (WEST CHANNEL) NEAR MACKAY, IDAHO

LOCATION.—Water-stage recorder in NE. ¼ sec. 5, T. 7 N., R. 23 E., 500 feet above junction with east channel of Warm Spring Creek and 7½ miles above Mackay.

RECORDS AVAILABLE.—May, 1919, to September, 1929.

EXTREMES.—Maximum discharge during year, 144 second-feet June 17 (gage height, 1.27 feet); minimum, 54 second-feet May 22–24 (gage height, 0.62 foot).

1919–1929: Maximum discharge, 411 second-feet June 12, 1921 (gage height, 3.38 feet); minimum, that on May 22–24, 1929.

REMARKS.—Records good. Practically entire flow diverted during irrigation season. Flow during summer represents return flow from irrigation above station. This record represents a part of the natural flow of Big Lost River and taken in conjunction with the record for east channel of Warm Spring Creek and the record for east and west channels of Big Lost River will show practically the entire surface flow of Big Lost River which enters Mackay Reservoir. Gage-height record and results of three discharge measurements furnished by water commissioner for Big Lost River.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	78	95	91	87	84	82	83	64	86	108	70	72
2	77	94	90	88	84	83	83	64	90	105	70	70
3	77	94	90	88	84	83	83	63	92	100	72	70
4	77	94	88	88	84	84	83	62	91	97	74	72
5	77	94	88	88	84	84	82	60	91	95	74	73
6	77	95	90	88	84	86	80	60	96	95	74	74
7	77	94	90	90	83	86	79	60	100	92	74	73
8	79	95	90	90	83	87	79	58	108	90	74	72
9	80	95	90	90	84	88	79	58	113	88	74	73
10	82	95	90	90	86	88	79	58	116	84	74	73
11	83	95	90	90	86	87	79	59	114	82	75	74
12	90	95	90	90	84	86	79	55	113	80	75	77
13	90	96	90	84	84	86	77	56	114	75	78	79
14	88	95	90	86	84	84	75	55	120	72	78	79
15	90	95	90	86	84	84	74	55	128	70	77	78
16	90	94	90	86	84	86	70	56	138	70	75	78
17	90	92	90	86	84	86	69	54	144	70	73	78
18	88	92	90	86	84	86	69	55	127	72	72	78
19	88	94	90	86	84	86	69	55	113	73	72	75
20	88	94	90	84	84	86	69	55	105	72	72	75
21	90	94	90	86	84	86	69	55	103	69	72	74
22	91	94	90	86	84	86	68	54	108	69	72	73
23	91	92	88	86	83	86	67	54	108	69	70	74
24	90	91	88	86	83	84	67	54	109	70	72	74
25	90	91	88	86	83	84	67	61	110	70	72	77
26	90	91	88	86	83	84	67	74	110	72	73	78
27	91	91	88	84	82	84	67	90	112	70	73	77
28	92	91	88	84	82	84	64	87	112	69	74	74
29	92	91	88	84	------	84	64	84	113	69	78	74
30	92	91	87	84	------	83	64	83	110	69	78	74
31	95	------	87	84	------	83	------	83	------	69	75	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	95	77	86.1	5,290
November	96	91	93.5	5,560
December	91	87	89.3	5,490
January	90	84	86.7	5,330
February	86	82	83.8	4,650
March	88	82	85.0	5,230
April	83	64	73.5	4,370
May	90	54	62.6	3,850
June	144	86	110	6,550
July	108	69	79.2	4,870
August	78	70	73.7	4,530
September	79	70	74.7	4,440
The year	144	54	83.1	60,200

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, 1929.

EXTREMES.—Maximum discharge during year, 28 second-feet May 12–15; no flow except for leakage through head gates Nov. 2–4, and Nov. 13 to Mar. 14. 1912–1914, 1919–1929: Maximum discharge, 42 second-feet June 23, 1921; no flow during winter and when water is shut off.

REMARKS.—Records fair. Sharp ditch diverts from east side of Big Lost River in sec. 12, T. 7 N., R. 23 E., 1 mile above gaging station on Big Lost River below Mackay Reservoir, near Mackay, Idaho. Water is used for irrigation on land northwest of Mackay and above Streeter ditch.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		4	0		18	26	22	17	15
2		0	0		18	24	22	17	15
3		0	0		18	22	23	17	15
4		0	0		18	22	23	17	15
5	16	5	0	6.5	18	22	23	17	15
6		5	0		18	22	23	17	15
7		4	0		19	21	26	17	15
8		4	0		20	22	23	17	15
9	14	4	0		23	22	23	17	15
10		3	0	6.5	25	22	23	17	15
11		2	0	6.5	26	22	23	17	15
12	11	2	0	6.5	28	22	23	17	15
13		0	0	6.5	28	22	21	17	15
14		0	0	6.5	28	22	20	17	15
15	11	0	5	6.5	28	22	20	17	15
16		0		18	26	22	20	17	15
17		0		18	26	23	13	17	15
18		0		18	26	23	18	17	15
19		0		18	24	23	19	17	15
20		0		18	23	23	19	17	15
21		0		18	22	21	19	17	15
22		0		18	22	24	19	16	15
23		0		18	22	23	19	15	15
24	11	0	7	18	22	23	18	15	15
25		0		18	22	23	18	15	15
26		0		18	22	23	18	15	15
27		0		18	22	23	18	15	15
28		0		0	22	22	18	15	15
29		0		18	22	22	18	15	15
30		0		18	22	22	18	15	15
31					23		17	15	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October			12.4	762
November		0	1.1	65
March		0	3.8	234
April	18	0	11.6	690
May	28	18	22.6	1,390
June	26	21	22.5	1,340
July	26	13	20.2	1,240
August	17	15	16.4	1,010
September	15	15	15.0	893
The period	28	0	10.5	7,620

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

PORTNEUF RIVER AT TOPAZ, IDAHO

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

RECORDS AVAILABLE.—January, 1913, to September, 1915; July, 1919, to September, 1929.

EXTREMES.—Maximum discharge during year, 372 second-feet June 18 (gage height, 2.38 feet); minimum, 134 second-feet Feb. 22 (gage height, 1.05 feet).

1913–1915, 1919–1929: Maximum discharge, 902 second-feet Apr. 3, 1913 (gage height, 6.1 feet); minimum, 116 second-feet Aug. 17 and 30, 1919 (gage height, 0.92 foot).

REMARKS.—Records good. Numerous ranch diversions upstream. Flow regulated by storage reservoir near Chesterfield. Results of eight discharge measurements furnished by Twin Falls Canal Co.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	140	162	160	153	142	142	222	240	240	240	218	166
2	140	162	145	153	149	142	222	240	240	230	222	166
3	142	164	145	157	143	140	240	216	230	240	218	162
4	142	160	149	149	143	140	222	220	240	240	218	162
5	140	160	153	145	145	143	222	222	249	240	212	155
6	140	162	151	145	143	160	222	230	249	240	206	145
7	140	155	151	140	145	166	222	240	267	249	208	147
8	142	155	151	136	151	164	214	240	258	249	212	151
9	142	153	151	149	142	178	206	240	267	249	212	155
10	143	153	151	145	142	194	202	240	267	249	208	159
11	145	153	157	143	143	206	202	258	276	249	218	162
12	147	155	155	145	143	196	210	276	276	230	208	162
13	145	155	153	143	145	186	218	276	267	230	202	162
14	145	155	153	145	143	180	206	285	285	230	200	162
15	143	155	155	145	142	190	214	294	285	230	194	182
16	147	157	153	147	140	186	214	294	310	240	194	190
17	145	157	151	147	142	186	210	294	334	230	198	186
18	145	153	151	149	143	202	214	285	372	249	194	182
19	145	153	153	147	143	210	214	258	276	267	194	186
20	145	153	153	147	142	218	214	276	258	230	198	170
21	147	153	153	149	140	294	214	285	249	230	194	218
22	147	155	157	153	134	342	218	302	258	230	192	178
23	147	155	153	153	138	310	218	310	258	230	194	178
24	147	153	149	151	140	294	218	310	258	230	198	174
25	147	151	149	147	138	267	212	310	258	230	194	170
26	151	151	149	153	142	258	210	310	258	222	196	170
27	157	155	151	151	145	249	218	318	258	214	194	170
28	157	157	153	149	142	240	222	294	258	218	194	170
29	157	153	153	147	-------	258	230	258	258	218	178	170
30	159	153	149	147	-------	276	230	258	249	220	170	170
31	160	-------	157	142	-------	222	-------	249	-------	222	166	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	160	140	146	8,980
November	164	151	156	9,280
December	160	145	152	9,350
January	157	136	147	9,040
February	151	134	142	7,890
March	342	140	211	13,000
April	240	202	217	12,900
May	318	216	269	16,500
June	372	230	267	15,900
July	267	214	235	14,400
August	222	166	200	12,300
September	218	145	169	10,100
The year	372	134	193	140,000

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, 1929; May, 1897, to October, 1899, at a station 1 mile upstream.

EXTREMES.—Maximum discharge during year, 590 second-feet May 18 and 19; maximum gage height, 5.60 feet during ice jam Dec. 22 and 24; minimum discharge, 64 second-feet July 18 (gage height, 2.47 feet).

1897–1899, 1911–1929: 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, and 18, 1898.

REMARKS.—Records good except those for Dec. 5 to Mar. 1, Mar. 3, 5, 7, 9, 11, 12, 17–19, Apr. 2, May 9, May 31 to June 4, and Aug. 7, which are fair. Numerous diversions for irrigation above station. Flow regulated by storage reservoir near Chesterfield. Results of eight discharge measurements furnished by Twin Falls Canal Co.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	120	233	243			240	477	544	229	100	76	92
2	120	235	243			251	460	521	214	98	86	97
3	120	235	237			283	444	521	199	95	76	108
4	122	233	233			315	455	544	184	90	74	105
5	122	229				326	466	544	169	89	75	101
6	124	227				336	477	532	162	92	90	103
7	122	237				368	455	510	154	92	92	105
8	122	239			200	400	444	510	147	89	95	108
9	124	231				422	433	521	140	84	90	112
10	122	227				444	433	532	142	78	89	117
11	124	227				459	422	532	138	75	89	118
12	129	227				473	411	544	142	70	90	118
13	145	225				488	400	578	138	69	89	117
14	184	225				477	400	566	129	68	87	115
15	207	245				455	400	566	120	68	84	108
16	209	243		200		444	400	555	149	66	78	106
17	205	243				441	422	521	196	66	76	106
18	207	235	210			438	444	578	219	66	78	105
19	209	227				436	477	566	213	75	78	105
20	211	227				433	499	544	184	80	80	108
21	209	241				477	499	499	158	86	81	125
22	211	247			225	544	499	488	143	84	86	171
23	211	249				555	510	455	134	86	82	209
24	213	249				555	521	444	134	80	89	192
25	215	243				510	510	422	127	78	90	175
26	215	241				466	499	400	124	74	87	171
27	215	243				444	499	357	118	74	93	181
28	213	245				444	510	336	112	74	95	215
29	211	245				455	544	284	105	72	93	209
30	215	241				477	555	259	101	72	95	204
31	223					488		244		72	93	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	223	120	174	10,700
November	249	225	236	14,000
December			214	13,200
January			200	12,300
February			212	11,800
March	555		430	26,400
April	555	400	466	27,700
May	578	244	484	29,800
June	243	101	155	9,220
July	100	66	79.4	4,880
August	95	74	85.7	5,270
September	215	92	134	7,970
The year	578	66	239	173,000

NORTH SIDE MINIDOKA CANAL NEAR MINIDOKA, IDAHO

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

RECORDS AVAILABLE.—May, 1909, to September, 1929.

EXTREMES.—Maximum discharge during year, 1,600 second-feet July 29 (gage height, 10.11 feet); no flow during winter.

1909–1929: Maximum discharge, 1,630 second-feet June 2, 1928; no flow during winter.

REMARKS.—Records excellent. Canal diverts from Snake River at Minidoka Dam in sec. 1, T. 9 S., R. 25 E. Water is used for irrigation in North Side Minidoka project.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Apr.	May	June	July	Aug.	Sept.
1	710	494	161	-------	572	1,540	1,500	1,530	1,300
2	708	493	161	-------	566	1,540	1,500	1,450	1,300
3	700	493	162	-------	570	1,550	1,530	1,440	1,290
4	698	491	163	-------	610	1,550	1,540	1,420	1,300
5	649	491	163	-------	650	1,550	1,540	1,390	1,290
6	633	493	164	-------	712	1,550	1,550	1,410	1,250
7	590	494	-------	-------	814	1,550	1,550	1,440	1,250
8	576	494	-------	-------	936	1,550	1,550	1,420	1,220
9	578	494	-------	-------	1,070	1,550	1,550	1,390	1,180
10	576	494	-------	-------	1,170	1,550	1,540	1,390	1,160
11	574	493	-------	90	1,290	1,550	1,570	1,390	1,090
12	578	371	-------	135	1,400	1,550	1,580	1,390	1,060
13	500	256	-------	227	1,480	1,550	1,580	1,390	1,060
14	500	221	-------	227	1,510	1,550	1,580	1,400	1,070
15	498	246	-------	339	1,510	1,550	1,580	1,410	1,070
16	498	244	-------	339	1,510	1,250	1,580	1,410	1,070
17	496	205	-------	340	1,510	949	1,580	1,420	1,070
18	498	166	-------	383	1,510	954	1,580	1,410	1,040
19	498	166	-------	438	1,510	952	1,580	1,410	1,020
20	496	166	-------	438	1,510	954	1,570	1,390	936
21	496	164	-------	440	1,510	1,020	1,580	1,360	806
22	498	164	-------	459	1,530	1,120	1,580	1,390	808
23	498	164	-------	486	1,550	1,160	1,580	1,410	770
24	498	164	-------	486	1,540	1,210	1,580	1,410	753
25	498	163	-------	486	1,540	1,330	1,590	1,410	755
26	498	162	-------	525	1,550	1,370	1,580	1,380	757
27	498	162	-------	572	1,550	1,420	1,580	1,330	764
28	498	161	-------	572	1,550	1,450	1,590	1,330	764
29	498	161	-------	568	1,550	1,480	1,590	1,330	759
30	496	161	-------	570	1,550	1,490	1,580	1,320	759
31	493	-------	-------	-------	1,540	-------	1,580	1,320	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	710	493	549	33,800
November	494	161	303	18,000
December 1–6	164	161	162	1,930
April 11–30	572	90	406	16,100
May	1,550	566	1,270	78,100
June	1,550	949	1,380	82,100
July	1,590	1,500	1,570	96,500
August	1,530	1,320	1,400	86,100
September	1,300	753	1,020	60,700

SOUTH SIDE MINIDOKA CANAL NEAR MINIDOKA, IDAHO

LOCATION.—Water-stage recorder in sec. 12, T. 9 S., R. 25 E., 900 feet below Minidoka Dam, and 6 miles south of Minidoka.

RECORDS AVAILABLE.—April, 1909, to September, 1929.

EXTREMES.—Maximum discharge during year, 1,110 second-feet Aug.7; no flow during winter.

1909–1929: Maximum discharge, that of July 27, 1928, and Aug. 7, 1929; no flow during winter.

REMARKS.—Records excellent. No flow Nov. 12 to May 3. Canal diverts from Snake River at Minidoka Dam in sec. 1, T. 9 S., R. 25 E. Water is used for irrigation in South Side Minidoka project.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	May	June	July	Aug.	Sept.
1	461	303	-------	1,040	1,050	1,060	1,040
2	460	301	-------	1,050	1,040	1,070	1,030
3	458	301	-------	1,050	1,030	1,080	1,030
4	403	303	102	1,030	1,030	1,100	1,030
5	458	303	179	1,060	1,010	1,090	1,030
6	456	304	209	1,080	1,010	1,090	971
7	456	304	236	1,080	1,020	1,100	954
8	456	304	254	1,070	1,010	1,090	954
9	366	304	285	1,080	1,010	1,080	962
10	364	304	417	1,080	994	1,070	962
11	362	101	543	1,080	1,000	1,060	959
12	361	-------	629	1,080	1,000	1,060	968
13	359	-------	762	1,080	994	1,070	965
14	359	-------	887	1,070	988	1,070	948
15	359	-------	988	1,070	991	1,060	937
16	357	-------	994	1,060	1,000	1,060	917
17	357	-------	1,040	1,040	1,010	1,060	881
18	356	-------	1,060	1,020	1,010	1,060	873
19	317	-------	1,070	1,010	1,020	1,060	878
20	303	-------	1,070	1,010	1,020	1,060	870
21	303	-------	1,080	1,000	1,020	1,060	760
22	303	-------	1,080	1,000	1,010	1,060	594
23	303	-------	1,070	997	1,010	1,060	493
24	303	-------	1,070	991	1,000	1,050	435
25	303	-------	1,060	994	1,000	1,050	413
26	303	-------	1,070	1,040	1,000	1,050	401
27	303	-------	1,070	1,060	1,010	1,050	374
28	303	-------	1,070	1,060	997	1,050	350
29	303	-------	1,070	1,060	1,020	1,050	348
30	303	-------	1,050	1,050	1,030	1,050	348
31	304	-------	1,050	-------	1,050	1,040	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	461	303	360	22,100
November 1–11	304	101	285	6,220
May 4–31	1,080	102	802	44,500
June	1,080	991	1,050	62,500
July	1,050	988	1,010	62,100
August	1,100	1,040	1,070	65,800
September	1,040	348	789	46,900

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, 1929.

EXTREMES.—Maximum discharge during year, 198 second-feet May 17 and May 19 (gage height, 3.35 feet); minimum, 5.5 second-feet Nov. 22 (gage height, 1.54 feet).

1911–1916, 1919–1929: 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 Nov. 1–5, 15–20, Nov. 27 to Mar. 27, Mar. 30 to Apr. 3, Apr. 12–15 and 17, which are poor. Small diversions for irrigation above station. Gage-height record furnished by Oakley Canal Co.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	11	22					76	146	122	29	12	9.8
2	11	22					72	144	116	27	13	9.3
3	12	22				25	74	142	112	26	12	9.8
4	12	22					75	148	107	25	12	10
5	13	22					85	159	100	24	14	11
6	13	22					86	166	97	24	15	12
7	13	23					75	159	93	22	12	13
8	13	24			18		71	154	83	21	10	14
9	13	24					70	150	76	19	9.3	14
10	14	23					62	147	65	17	8.8	14
11	14	23					59	154	63	14	8.4	14
12	14	23				35	57	159	70	12	7.5	14
13	14	23					55	162	67	11	6.9	14
14	19	24					54	169	66	9.8	6.6	12
15	19	24					58	175	61	8.8	6.0	12
16	19	24	19	18			64	184	65	8.8	6.9	12
17	19	24					75	194	102	9.3	9.8	11
18	21	18					86	198	102	9.8	12	10
19	21	20					104	198	86	9.8	11	9.8
20	21	23					119	193	76	9.8	12	10
21	20	26					123	191	68	16	24	12
22	19	22			20		120	189	60	16	14	16
23	19	28				50	138	184	56	16	12	19
24	19	24					158	182	50	14	11	18
25	19	26					142	177	47	14	11	17
26	21	26					134	174	44	13	11	17
27	21	25					128	172	41	12	12	16
28	21	24				68	126	167	37	12	12	16
29	21	20			-------	72	134	154	31	12	12	16
30	21	20			-------	74	142	142	27	11	12	16
31	22	-------			-------	74	-------	132	-------	12	11	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	22	11	17.1	1,050
November	28	18	23.1	1,370
December	----------	----------	19.0	1,170
January	----------	----------	18.0	1,110
February	----------	----------	18.9	1,050
March	74	----------	42.5	2,610
April	158	54	94.1	5,600
May	198	132	167	10,300
June	122	27	73.0	4,340
July	29	8.8	15.6	959
August	24	6.0	11.2	689
September	19	9.3	13.3	791
The year	198	6.0	42.8	31,000

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, 1929.

EXTREMES.—Maximum discharge during year, 45 second-feet May 25 (gage height, 2.89 feet); minimum (estimated), 7 second-feet Jan. 1–31.

1911–1916, 1919–1929: Maximum discharge, 98 second-feet May 28 and June 8, 1921 (gage height, 3.44 feet); minimum, occurs during winter.

REMARKS.—Records good except Dec. 4 to Mar. 28, Apr. 8–11, July 11, and Aug. 21, which are fair. No large diversions above station. Gage-height record furnished by Oakley Canal Co.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.8	9.3	9.7				13	24	31	16	11	9.2
2	8.8	9.3	9.8				14	24	31	15	10	9.0
3	9.0	9.3	7.8				15	26	30	15	9.7	8.8
4	9.0	9.3					15	28	29	15	10	9.0
5	9.0	9.3					16	27	27	14	9.8	9.0
6	9.0	9.7					15	27	27	14	9.7	9.3
7	9.0	9.5					14	27	26	14	9.5	9.5
8	9.0	9.5			8		13	27	25	13	9.3	9.3
9	9.0	9.3					13	29	25	13	9.3	9.3
10	9.0	9.3					13	29	26	13	9.2	9.2
11	9.2	9.3				12	13	29	27	12	9.2	9.2
12	9.3	9.5					13	30	26	12	9.2	9.2
13	9.3	9.5					13	32	24	12	9.0	9.0
14	9.3	9.5					13	34	24	12	9.0	9.0
15	9.3	9.5					14	37	22	11	9.0	9.0
16	9.3	9.3		7			16	38	29	11	9.0	9.0
17	9.3	9.3	9.0				18	39	26	11	9.2	8.8
18	9.3	9.2					19	39	24	11	9.3	8.8
19	9.3	9.3					22	39	22	11	9.2	8.8
20	9.3	9.3					20	40	21	11	9.3	9.2
21	9.2	9.3					20	41	20	11	9.2	9.7
22	9.2	9.5			10		20	42	20	10	9.2	9.7
23	9.2	9.5					24	43	19	10	9.3	9.5
24	9.2	9.5					22	44	19	10	9.5	9.3
25	9.3	9.3				14	20	44	18	9.8	9.3	9.3
26	9.3	9.5					20	44	18	10	9.3	9.3
27	9.3	9.5					20	41	17	10	9.2	9.2
28	9.3	9.5					22	37	17	9.8	9.0	9.3
29	9.3	9.3			-------	15	25	34	16	9.8	9.2	9.3
30	9.5	9.3			-------	15	25	32	16	9.8	9.0	9.2
31	9.8	-------			-------	14	-------	31	-------	10	8.8	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	9.8	8.8	9.20	566
November	9.7	9.2	9.39	559
December	----------	----------	9.01	554
January	----------	----------	7.0	430
February	----------	----------	8.9	494
March	----------	----------	12.8	787
April	25	13	17.3	1,030
May	44	24	34.1	2,100
June	31	16	23.4	1,390
July	16	9.8	11.8	726
August	11	8.8	9.35	575
September	9.7	8.8	9.18	546
The year	44	----------	13.5	9,760

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, 1929.

EXTREMES.—Maximum discharge during year, 57 second-feet at times during season (gage height, 1.96 feet); no flow during winter.

1919–1929: Maximum discharge, 64 second-feet May 11–13, 1920; no flow on numerous occasions.

REMARKS.—Records good. Water is pumped from Snake River into canal in sec. 22, T. 10 S., R. 21 E., above Milner Dam, and is used for irrigation in North Side Twin Falls tract.

Daily and monthly discharge, in second-feet, 1928–29

Day	Nov.	May	June	July	Aug.	Sept.	Day	Nov.	May	June	July	Aug.	Sept.
1	0	13	55	55	56	56	16	14	57	49	55	56	53
2	0	13	56	55	56	57	17	14	57	56	55	57	53
3	0	13	56	55	56	56	18	14	57	57	54	56	53
4	0	13	56	14	56	56	19	14	57	56	55	56	53
5	0	13	56	7	56	56	20	14	57	56	55	56	53
6	0	19	56	56	56	56	21	6	56	56	56	56	43
7	0	29	56	56	56	56	22	0	57	56	55	56	36
8	0	29	56	56	56	57	23	0	57	56	55	56	28
9	0	40	56	56	56	57	24	0	56	56	55	52	28
10	0	45	56	56	56	57	25	0	56	56	55	57	28
11	0	45	56	56	56	55	26	0	56	55	55	57	28
12	0	45	55	56	56	53	27	0	56	55	55	57	28
13	0	43	55	56	56	53	28	0	56	55	55	57	28
14	0	57	56	56	56	53	29	0	56	55	55	57	28
15	9	57	55	56	56	53	30	0	56	55	56	57	28
							31	------	56	------	55	57	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November	14	6	12.1	168
May	57	13	44.4	2,730
June	57	49	55.5	3,300
July	56	7	52.5	3,230
August	57	52	56.1	3,450
September	57	23	46.5	2,770

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

MILNER LOW LIFT CANAL NEAR MILNER, IDAHO

LOCATION.—Water-stage recorder in sec. 32, T. 10 S., R. 21 E., 600 feet below head of canal and 1½ miles southeast of Milner.

RECORDS AVAILABLE.—June, 1921, to September, 1929.

EXTREMES.—Maximum discharge during year, 170 second-feet July 23 (gage height, 2.67 feet); no flow during winter.

1921–1929: Maximum discharge, that of July 23, 1929; no flow for long periods.

REMARKS.—Records excellent. Canal diverts by pumping from Snake River above Milner Dam. Water is used for irrigation in Milner Low Lift irrigation district.

Daily and monthly discharge, in second-feet, 1928–29

Day	Nov.	Dec.	May	June	July	Aug.	Sept.
1	0	20	0	125	134	113	125
2	0	0	0	113	105	142	133
3	0	0	0	128	135	143	134
4	0	0	0	126	136	144	138
5	0	0	0	118	126	144	118
6	0		0	117	126	145	116
7	0	0	0	136	125	145	119
8	0	0	0	137	146	145	119
9	0	0	0	108	162	144	116
10	0	0	0	131	158	144	98
11	0	0	0	131	159	146	99
12	0	0	0	130	158	143	98
13	0	0	0	130	128	143	99
14	0	0	0	129	135	145	102
15	0	0	85	129	162	142	122
16	0	0	107	119	162	140	122
17	0	0	107	134	142	118	122
18	0	0	108	121	120	141	121
19	0	0	91	115	122	139	22
20	0	0	116	136	138	140	85
21	0	0	338	115	124	141	96
22	0	0	136	128	159	141	101
23	18	0	136	129	152	122	98
24	28	0	136	133	167	112	100
25	28	0	136	48	166	105	99
26	28	0	134	133	166	138	98
27	28	0	134	134	167	138	94
28	28	0	134	112	166	92	92
29	28	0	134	134	166	65	92
30	28	0	134	134	166	122	110
31	------	0	136	------	150	127	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
November	28	0	7.1	424
December	20	0	10	40
May 15–31	138	85	124	4,180
June	137	48	124	7,380
July	167	105	146	8,980
August	146	65	133	8,180
September	138	22	106	6,310

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

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 of a mile below head gates at Milner Dam.

RECORDS AVAILABLE.—May, 1909, to September, 1929.

EXTREMES.—Maximum discharge during year, 3,200 second-feet June 2 and July 23; no flow Apr. 16–17.

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

REMARKS.—Records excellent except those for Dec. 17–26 and Jan. 4 to Feb. 28, which are fair. Intake is on Snake River at Milner Dam. Water is used for stock and irrigation in Jerome and Gooding Counties.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,390	756	652	398		382	796	2,060	3,090	3,020	3,080	2,800
2	1,360	501	674	398		411	823	2,090	3,160	2,520	3,060	2,800
3	1,330	71	671	398		264	826	2,130	3,140	781	3,050	2,800
4	1,250	285	648			266	858	2,250	3,120	3,080	3,030	2,840
5	1,210	250	677			266	921	2,290	3,120	3,080	3,040	2,850
6	1,150	211	655			268	914	2,330	3,120	3,150	3,060	2,790
7	1,150	211	589			266	924	2,380	3,120	3,110	3,020	2,740
8	1,070	211	538			266	688	2,370	3,110	3,180	3,040	2,660
9	996	211	509			306	232	2,660	3,110	3,170	3,020	2,660
10	1,000	209	509			327	971	2,890	3,090	3,150	3,030	2,670
11	996	209	518			327	971	3,090	3,110	3,140	3,040	2,660
12	993	206	530			331	975	3,140	3,100	3,140	3,050	2,670
13	968	204	495			324	975	3,100	3,070	3,160	3,070	2,660
14	964	206	461			331	986	3,040	3,070	3,170	3,060	2,600
15	903	204	475		400	365	745	3,100	3,080	3,170	3,020	2,560
16	854	302	467			440	0	3,020	3,110	3,160	3,040	2,550
17	868	583		400		577	0	3,030	3,070	3,160	3,050	2,540
18	864	592				655	549	3,070	3,080	3,170	3,070	2,470
19	844	586				639	1,910	3,140	3,010	3,180	3,030	2,480
20	792	583				633	1,930	3,120	3,100	3,150	3,070	2,490
21	775	617	463			696	1,740	3,120	3,050	3,180	3,050	2,490
22	789	652				742	1,500	3,140	3,040	3,180	3,030	2,530
23	796	648				729	1,530	3,130	3,050	3,200	3,020	2,450
24	792	611				739	1,450	3,110	3,060	3,170	3,030	2,350
25	789	626				736	1,390	3,100	3,020	3,160	3,050	2,200
26	786	658				739	1,500	3,110	2,950	3,120	3,070	2,080
27	759	658	459			739	1,710	3,120	3,050	3,120	3,070	2,040
28	736	658	424			736	1,780	3,110	3,030	3,130	3,030	1,930
29	749	658	398		-------	726	1,760	3,120	3,000	3,110	3,020	1,910
30	752	652	398		-------	726	1,830	3,120	2,990	3,100	2,910	1,910
31	752	-------	398		-------	746	-------	3,090	-------	3,080	2,840	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,390	736	949	58,400
November	756	71	434	25,800
December	677	398	509	31,300
January	-------	-------	400	24,600
February	-------	-------	400	22,200
March	746	264	506	31,100
April	1,930	0	1,110	66,000
May	3,140	2,060	2,860	176,000
June	3,160	2,950	3,070	183,000
July	3,200	781	3,040	187,000
August	3,080	2,840	3,030	186,000
September	2,850	1,910	2,510	149,000
The year	3,200	0	1,580	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 headgates at Milner.

RECORDS AVAILABLE.—May, 1909, to September, 1929.

EXTREMES.—Maximum discharge during year, 3,630 second-feet July 28–30 and Aug. 1 (gage height, 10.51 feet); minimum, 105 second-feet Nov. 13 (gage height, 1.90 feet).

1909–1929: Maximum discharge, 4,600 second-feet Aug. 12, 1918; no flow Sept. 20, 1920.

REMARKS.—Records excellent except those for Dec. 5 to Mar. 6, which are fair. Canal diverts from Snake River at Milner Dam. Water is used for stock and irrigation near Twin Falls.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,770	937	676				597	1,750	3,480	3,480	3,630	3,440
2	1,750	717	676				597	1,970	3,530	3,480	3,610	3,450
3	1,770	727	686				597	2,190	3,510	3,430	3,610	3,440
4	1,640	743	689			680	612	2,200	3,500	3,480	3,610	3,370
5	1,590	743					633	2,200	3,510	3,520	3,620	3,230
6	1,470	701					633	2,080	3,530	3,590	3,620	3,160
7	1,410	692				645	618	2,060	3,530	3,550	3,600	3,060
8	1,370	627				597	609	2,800	3,540	3,590	3,600	2,930
9	1,340	606				597	571	3,020	3,510	3,590	3,600	2,890
10	1,310	606				606	523	3,270	3,510	3,590	3,600	2,720
11	1,270	355				624	526	3,410	3,530	3,580	3,610	2,540
12	1,200	107				624	523	3,460	3,250	3,580	3,620	2,310
13	1,150	105				609	526	3,410	2,600	3,600	3,620	2,250
14	780	348				609	200	3,320	3,510	3,610	3,610	2,320
15	417	1,190			680	600	237	3,390	3,530	3,600	3,580	2,340
16	1,220	1,180		680		600	514	3,390	3,440	3,590	3,600	2,340
17	1,130	960				603	523	3,390	3,330	3,600	3,610	2,340
18	812	724	680			606	548	3,420	3,320	3,610	3,620	2,210
19	630	679				606	560	3,440	3,270	3,610	3,600	2,170
20	918	648				615	565	3,430	3,320	3,580	3,620	2,160
21	1,040	652				624	557	3,440	3,250	3,600	3,610	2,080
22	1,010	661				615	592	3,460	3,290	3,600	3,600	2,030
23	917	661				606	418	3,470	3,300	3,610	3,580	1,820
24	879	661				606	795	3,490	3,320	3,600	3,580	1,600
25	859	661				606	553	3,500	3,370	3,610	3,590	1,420
26	1,110	664				600	1,120	3,480	3,360	3,590	3,610	1,340
27	1,310	670				597	1,140	3,510	3,480	3,600	3,610	1,360
28	1,310	673				600	396	3,520	3,480	3,630	3,570	1,380
29	1,310	670			-------	600	487	3,530	3,460	3,630	3,560	1,380
30	1,320	667			-------	597	1,440	3,540	3,460	3,630	3,510	1,380
31	1,340	-------			-------	603	-------	3,530	-------	3,620	3,480	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,770	417	1,200	73,800
November	1,190	105	668	39,700
December	-------	-------	680	41,800
January	-------	-------	680	41,800
February	-------	-------	680	37,800
March	-------	597	622	38,200
April	1,440	200	607	36,100
May	3,540	1,750	3,100	191,000
June	3,540	2,600	3,400	202,000
July	3,630	3,430	3,580	220,000
August	3,630	3,480	3,600	221,000
September	3,450	1,340	2,350	140,000
The year	3,630	105	1,760	1,280,000

ROCK CREEK NEAR TWIN FALLS, IDAHO

LOCATION.—Water-stage recorder on south line of sec. 36, T. 9 S., R. 16 E., 3 miles above confluence with Snake River and 3½ miles northwest of Twin Falls.

RECORDS AVAILABLE.—March, 1922, to September, 1929.

EXTREMES.—Maximum discharge during year, 749 second-feet Mar. 3 (gage height, 3.5 feet); minimum, 108 second-feet Apr. 17 (gage height, 0.80 foot). 1922–1929: Maximum discharge, 984 second-feet Sept. 21, 1927 (gage height, 4.5 feet); minimum, 90 second-feet Apr. 1 and 2, 1926.

REMARKS.—Records good except those for discharges above 300 second-feet and for estimated periods, which are fair. Normal summer flow is entirely diverted for irrigation several miles upstream. At times water from South Side Twin Falls Canal is wasted into Rock Creek about 10 miles above station. Gage-height record furnished by Murtaugh Irrigation District.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	217	514	154	a 240		435	142	156	204	264	226	501
2	224	240	145	a 240		609	139	158	213	261	229	295
3	231	196	144	236	a 350	528	140	156	213	209	233	290
4	226	190	139	224		340	145	162	211	202	233	290
5	215	190	148	266		345	150	285	209	209	231	a 400
6	211	198	a 155	283	358	345	150	206	a 212	206	229	a 435
7	202	184	190	a 285		332	146	192	a 216	211	224	528
8	200	178	209	a 285		305	150	206	a 219	213	220	637
9	206	182	211	283		271	159	222	a 223	220	220	a 640
10	209	184	220		a 360	200	164	182	226	217	215	a 640
11	215	182	215			202	166	178	231	211	217	623
12	217	188	213	a 280		a 202	166	245	226	206	220	609
13	215	184	213			a 201	168	217	252	204	217	312
14	215	159	211		370	a 200	168	224	211	211	220	257
15	209	150	204			200	168	222	215	213	217	257
16	200	156	202	285	a 370	198	119	240	302	211	217	259
17	204	308	202			164	110	242	370	213	224	257
18	200	a 257			370	168	148	247	340	222	226	278
19	190	a 207	a 235			164	252	245	335	222	224	261
20	194	156		a 320		a 150	229	249	358	213	229	264
21	200	154	338			a 150	217	240	396	209	229	281
22	204	161				162	a 192	229	409	209	226	252
23	204	161		358	a 380	166	166	238	409	206	231	249
24	200	159					158	233	383	209	233	236
25	198	159					146	231	290	206	240	229
26	196	159	a 280	a 350		a 150	136	242	340	206	252	220
27	435	158					139	249	295	200	259	215
28	488	154			396	142	138	209	320	206	264	211
29	501	150			------	a 142	145	211	308	213	269	211
30	528	151		342	------	a 142	146	204	278	222	264	206
31	542	------		a 340	------	a 142	------	206	------	226	345	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	542	190	255	15,700
November	514	150	192	11,400
December	338	139	226	13,900
January	----------	224	302	18,600
February	----------	----------	368	20,400
March	609	142	232	14,300
April	252	110	159	9,460
May	285	156	217	13,300
June	409	204	280	16,700
July	264	200	215	13,200
August	345	215	235	14,400
September	640	206	345	20,500
The year	640	110	251	182,000

a Estimated.

SALMON FALLS CREEK NEAR SAN JACINTO, NEV.

LOCATION.—Water-stage recorder in sec. 23, T. 47 N., R. 64 E., 750 feet below mouth of Shoshone Creek and 5 miles north of San Jacinto.

RECORDS AVAILABLE.—September, 1909, to September, 1916; October, 1918, to September, 1929.

EXTREMES.—Maximum discharge during year, 521 second-feet May 22, 27, and 28 (gage height, 4.90 feet); minimum, 19 second-feet Aug. 15 and 16 (gage height, 2.36 feet).

1909–1916, 1918–1929: 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 except those for estimated periods (Oct. 23–31, Nov. 1–15, and Jan. 18 to Feb. 12), which are fair. Many diversions from basin above station. Gage-height record and results of six discharge measurements furnished by Salmon River Canal Co., Ltd.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	62	68	25	50	64	195	436	280	86	25	37
2	26	62	46	53	50	66	183	450	272	77	25	35
3	28	62	60	55	50	69	198	408	277	69	23	34
4	29	62	53	53	50	74	215	392	275	58	22	33
5	29	62	53	40	50	86	235	408	25[illegible]	50	22	33
6	29	62	52	37	50	104	228	436	23[illegible]	48	22	33
7	29	62	50	40	50	102	217	422	23[illegible]	48	21	34
8	29	62	47	41	50	101	204	394	20[illegible]	50	21	35
9	29	62	44	44	50	102	191	349	20[illegible]	52	20	36
10	29	62	53	46	50	107	169	346	21[illegible]	50	20	36
11	30	62	57	46	50	115	158	376	23[illegible]	49	23	36
12	32	62	45	45	50	102	152	392	27[illegible]	47	23	33
13	33	62	56	48	52	93	142	394	27[illegible]	45	20	30
14	36	62	58	49	54	87	138	408	23[illegible]	43	19	29
15	46	62	58	50	50	87	144	422	21[illegible]	37	19	28
16	46	62	54	48	56	92	171	436	25[illegible]	35	20	28
17	47	63	46	47	57	94	235	464	31[illegible]	34	21	28
18	48	54	39	45	60	99	297	492	30[illegible]	33	23	28
19	49	57	39	45	56	101	373	492	27[illegible]	33	23	27
20	49	58	41	45	63	104	422	478	23[illegible]	33	23	29
21	49	62	43	45	66	110	464	478	19[illegible]	31	24	42
22	49	63	43	45	62	135	436	506	173	30	23	45
23	68	64	44	45	66	138	422	492	15[illegible]	29	23	44
24	68	64	45	45	64	133	422	478	133	30	23	45
25	68	66	47	45	64	126	405	492	127	31	25	46
26	68	68	48	45	45	114	386	492	120	31	29	45
27	68	68	52	45	60	110	376	521	112	29	38	44
28	68	68	54	45	62	161	368	506	101	26	39	44
29	68	56	57	45	-------	191	381	450	94	26	40	43
30	68	55	58	45	-------	189	408	378	93	25	40	42
31	68	-------	55	45	-------	191	-------	318	-------	25	37	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	----------	25	45.4	2,790
November	----------	----------	61.9	3,680
December	68	39	50.5	3,110
January	----------	----------	45.7	2,810
February	----------	----------	54.9	3,050
March	191	64	111	6,820
April	464	138	278	16,500
May	521	318	436	26,800
June	310	93	212	12,600
July	86	25	41.6	2,560
August	40	19	25	1,540
September	46	27	36.1	2,150
The year	521	19	117	84,400

BIG WOOD RIVER AT HAILEY, IDAHO

LOCATION.—Staff gage in SW. ¼ sec. 9, T. 2 N., R. 18 E., at steel highway bridge a quarter of a mile southwest of Hailey.

DRAINAGE AREA.—640 square miles.

RECORDS AVAILABLE.—June, 1915, to September, 1929.

EXTREMES.—Maximum discharge during year, 1,090 second-feet June 16 (gage height, 4.25 feet); minimum, 4.3 second-feet Sept. 8 (gage height, 0.70 foot).

1915–1929: Maximum discharge, 3,560 second-feet June 12, 1921; minimum, 0.1 second-foot Sept. 10–20 and Oct. 2–9, 1924.

REMARKS.—Records good except those for Nov. 18 to Mar. 14, which are poor. Diversions for irrigation above station. Hailey power plant diverts around gage through Big Wood Slough. Results of four discharge measurements and daily gage reading Apr. 29 to Sept. 30 furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	14					18	180	419	482	23	17
2	14	14					31	205	400	440	35	17
3	15	14					47	218	362	419	25	16
4	15	14					51	218	362	400	22	18
5	16	14					51	205	419	380	20	15
6	16	14					43	192	460	362	20	14
7	16	14					38	180	548	343	20	10
8	16	14				10	45	180	595	343	19	6.2
9	16	14					43	205	620	326	15	8.5
10	16	14					34	232	572	308	11	9.5
11	16	14					22	218	572	292	12	9.5
12	16	14					20	246	595	276	12	9.0
13	16	14					19	362	694	261	12	9.0
14	17	14					19	326	800	246	12	9.0
15	17	14			5	15	19	343	855	218	12	9.0
16	17	14	10	5		15	26	380	1,090	192	13	9.5
17	18	14				17	49	400	800	146	15	10
18	18					17	55	380	620	117	13	10
19	18					17	70	419	526	119	13	9.5
20	17					17	68	503	503	108	12	9.5
21	17					17	92	526	548	98	12	9.0
22	16					18	78	800	620	84	12	10
23	15					18	84	800	620	44	14	10
24	14	10				18	86	800	595	41	14	10
25	14					18	81	855	595	38	17	10
26	13					18	91	694	595	36	15	9.0
27	13					18	102	572	572	31	12	9.5
28	13					18	157	482	548	29	12	9.0
29	13				-------	18	157	440	572	28	13	9.0
30	13				-------	18	192	400	503	22	45	9.0
31	14	-------			-------	43	-------	400	-------	20	22	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	18	13	15.5	953
November	14	----------	12.3	732
December	----------	----------	10.0	615
January	----------	----------	5.0	307
February	----------	----------	5.0	278
March	43	----------	14.8	910
April	192	18	62.9	3,740
May	855	180	399	24,500
June	1,090	362	586	34,900
July	482	20	202	12,400
August	45	11	16.9	1,040
September	18	6.2	10.7	637
The year	1,090	6.2	112	81,000

Daily and monthly combined discharge, in second-feet, of Big Wood River and Big Wood Slough at Hailey, Idaho, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	138	163	133	115	87	133	134	312	462	550	172	143
2	130	163	120	115	87	126	141	354	440	502	210	127
3	138	163	120	115	87	133	163	375	397	474	171	120
4	138	163	120	115	93	133	174	371	399	452	154	128
5	139	163	120	115	98	133	174	344	467	425	152	125
6	139	163	126	115	98	133	159	334	5[illegible]3	400	152	137
7	132	163	126	115	98	120	142	309	6[illegible]2	381	155	133
8	132	163	126	115	104	120	161	315	657	368	151	145
9	132	163	126	115	104	126	153	358	686	342	144	150
10	132	163	126	115	109	126	138	364	6[illegible]3	322	143	142
11	132	171	120	115	109	126	138	350	598	304	138	136
12	132	171	120	115	115	120	136	388	620	285	135	132
13	132	171	120	115	115	114	135	522	720	271	135	129
14	140	171	120	115	115	109	129	190	8[illegible]0	259	116	125
15	140	171	120	115	115	114	142	507	901	258	125	119
16	174	171	120	115	115	114	155	537	1,160	232	123	116
17	175	171	120	115	115	130	184	575	841	253	122	117
18	182	167	120	115	115	127	204	551	655	246	136	117
19	175	159	120	115	115	133	245	586	560	239	136	120
20	174	152	120	115	115	133	225	663	555	221	128	116
21	166	152	120	115	115	143	215	690	630	208	122	113
22	165	152	120	115	115	128	207	967	7[illegible]3	200	119	120
23	157	152	120	115	115	128	226	926	7[illegible]0	186	124	126
24	156	152	120	115	115	128	228	926	6[illegible]3	176	127	133
25	156	152	120	115	121	128	216	994	6[illegible]8	167	143	133
26	162	152	120	115	121	134	240	801	6[illegible]8	168	131	132
27	162	145	120	115	121	141	251	657	660	160	125	126
28	162	139	120	101	121	128	292	548	633	152	125	125
29	162	139	120	101	-------	128	303	488	6[illegible]2	138	133	125
30	162	139	120	101	-------	128	327	440	5[illegible]0	138	177	125
31	163	-------	120	87	-------	131	-------	440	-------	162	175	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	182	130	151	9,280
November	171	139	159	9,460
December	133	120	121	7,440
January	115	87	113	6,950
February	121	87	109	6,050
March	143	109	127	7,810
April	327	129	191	11,400
May	994	309	532	32,700
June	1,160	397	645	38,400
July	550	138	279	17,200
August	210	116	142	8,730
September	150	113	128	7,620
The year	1,160	87	225	163,000

BIG WOOD RIVER NEAR BELLEVUE, IDAHO

LOCATION.—Water-stage recorder in sec. 20, T. 1 S., R. 18 E., 3 miles above Camas Creek and 10 miles southwest of Bellevue.

DRAINAGE AREA.—823 square miles.

RECORDS AVAILABLE.—July, 1911, to September, 1929.

EXTREMES.—Maximum discharge during year, 523 second-feet June 16 (gage height, 2.35 feet); minimum, 39 second-feet Mar. 31 and Apr. 1 (gage height, 1.24 feet).

1911–1929: Maximum discharge, 3,660 second-feet June 16, 1921 (gage height, 6.07 feet); minimum, 25 second-feet Apr. 22–24, 1920.

REMARKS.—Records good. Discharge estimated Apr. 22–25, Apr. 27 to May 2 and May 9. Numerous diversions for irrigation above station. Gage-height record and results of four discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1		43	98	75	158	60	60
2		46	109	73	135	62	60
3		46	120	75	132	65	57
4		46	129	73	117	60	60
5		48	141	73	105	60	65
6		50	138	73	103	52	73
7		48	132	70	97	50	70
8		50	114	94	100	50	65
9		60	142	151	91	52	62
10	57	57	171	89	91	55	60
11		57	158	178	91	52	60
12		57	148	178	91	55	57
13		57	185	193	89	57	57
14		57	208	247	86	50	52
15		57	216	340	89	48	52
16		55	221	470	91	48	52
17		52	225	427	91	48	52
18		50	216	256	91	50	52
19		52	204	189	91	50	52
20		57	212	154	89	52	52
21		55	189	148	86	52	55
22		54	201	201	80	52	55
23		52	291	216	73	55	52
24		50	329	208	65	52	52
25		48	340	208	62	52	52
26		46	301	230	60	55	52
27		56	252	221	55	57	52
28		67	189	193	57	57	52
29	60	77	132	189	60	60	52
30	52	88	100	182	60	55	52
31	46	------	89	------	60	57	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
March 29–31	60	46	52.7	314
April	88	43	54.6	3,250
May	340	89	184	11,300
June	470	70	186	11,100
July	158	55	88.6	5,450
August	65	48	54.2	3,330
September	73	52	56.5	3,360
The period				38,100

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. Recorded observations are at an assumed datum about 137 feet below mean sea level datum.

DRAINAGE AREA.—1,500 square miles.

RECORDS AVAILABLE.—February, 1909, to September, 1929. Gage-height record only prior to Apr. 4, 1909. Practically no storage prior to July 14, 1909.

EXTREMES.—Maximum contents during year, 56,990 acre-feet May 11 (gage height, 4,884.47 feet); minimum, 30 acre-feet Nov. 21, 22, and 23 (gage height, 4,821.76 feet).

1909–1929: 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, and 1928.

REMARKS.—Stored water is used for irrigation on about 69,000 acres of land, under Carey Act project of the Big Wood Canal Co., Ltd. Available storage, 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	39	38	3,900	6,243	8,150	12,770	49,880	30,220	13,060	2,378	------
2	36	34	38	4,000	6,385	8,211	13,070	51,170	27,830	12,480	2,431	------
3	36	35	188	4,094	6,431	8,286	13,370	52,250	26,240	12,260	2,487	------
4	35	34	348	4,213	6,557	8,490	13,710	53,200	25,510	12,110	2,532	2,934
5	35	33	448	4,316	6,635	8,554	14,230	54,180	25,250	11,990	2,192	2,980
6	37	37	554	4,415	6,737	8,668	15,000	54,930	25,190	11,830	1,864	3,053
7	38	44	702	4,507	6,804	8,703	15,560	55,480	25,150	11,680	1,766	3,109
8	37	38	1,007	4,558	6,835	8,804	16,190	55,800	24,980	11,460	1,718	3,188
9	36	36	1,177	4,604	6,859	8,862	16,620	55,900	24,960	11,280	1,864	3,259
10	36	35	1,341	4,654	6,871	8,999	17,020	55,920	24,920	11,120	1,960	3,318
11	36	33	1,559	4,668	6,902	9,107	17,670	56,990	24,980	10,970	2,109	3,393
12	37	33	1,761	4,682	7,024	9,171	18,170	56,050	24,600	10,820	2,262	3,429
13	38	33	2,000	4,709	7,067	9,320	18,590	55,800	24,260	10,660	2,300	3,483
14	38	32	2,187	4,852	7,073	9,396	18,960	55,030	23,930	10,500	2,343	3,527
15	37	32	2,249	4,880	7,079	9,463	19,620	54,060	23,610	9,636	2,354	3,575
16	37	31	2,343	4,998	7,146	9,538	20,400	53,250	23,460	8,847	2,368	3,593
17	36	31	2,420	5,013	7,293	9,651	22,000	52,470	24,070	8,129	2,378	3,634
18	36	31	2,641	5,131	7,542	9,749	23,940	51,410	24,530	7,453	2,395	3,668
19	36	31	2,760	5,196	7,594	9,863	26,160	50,320	24,760	5,867	2,409	3,715
20	35	31	2,916	5,321	7,608	9,971	28,640	49,080	24,800	4,260	2,426	3,750
21	34	30	2,977	5,366	7,614	10,120	32,240	47,790	24,780	2,980	2,445	3,789
22	34	30	3,004	5,468	7,660	10,430	35,650	46,340	24,070	2,507	2,457	3,832
23	34	30	3,083	5,510	7,724	10,550	38,570	44,900	22,850	2,524	2,471	3,888
24	33	32	3,165	5,536	7,816	10,670	40,630	43,660	21,740	2,493	2,504	3,928
25	32	33	3,255	5,552	7,959	10,790	42,450	42,310	20,880	2,457	2,532	3,960
26	32	33	3,343	5,589	8,075	10,950	43,940	40,900	19,480	2,423	2,580	4,000
27	32	35	3,433	5,578	8,088	11,160	45,240	39,390	17,940	2,368	2,620	4,036
28	31	36	3,530	5,916	8,129	11,410	46,480	37,760	16,450	2,316	2,650	4,144
29	32	38	3,579	6,055	------	11,800	47,570	36,040	15,140	2,262	2,694	4,265
30	31	38	3,711	6,095	------	12,090	48,620	34,150	13,870	2,295	2,742	4,389
31	37	------	3,800	6,197	------	12,410	--------	32,270	--------	2,327	-------	------

BIG WOOD RIVER BELOW MAGIC DAM, NEAR RICHFIELD, IDAHO

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

RECORDS AVAILABLE.—April, 1911, to September, 1929.

EXTREMES.—Maximum discharge during year, 1,220 second-feet June 1 (gage height, 4.74 feet); minimum, 3.6 second-feet Aug. 9–12 (gage height, 1.55 feet).

1911–1929: Maximum discharge, 5,070 second-feet May 18, 1911 (gage height, 9.2 feet); no flow Feb. 3, 1915.

REMARKS.—Records good except those for Dec. 15–21, 23–30, and Jan. 1 to Apr. 3, which are fair. Numerous diversions several miles upstream. Flow completely regulated by gates in outlet tunnel at Magic Dam. Gage-height record and results of nine discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	77	86	92					6.7	1,180	489	59	45
2	77	84	45				5.0	7.0	1,020	334	55	44
3	77	81	68					7.3	627	223	55	44
4	79	77	34				4.5	7.7	347	198	218	43
5	83	77	94				4.5	8.0	160	201	258	43
6	84	90	56	32	29	26	4.5	188	160	191	240	45
7	83	98	30				4.5	198	168	194	70	45
8	81	90	31				4.7	291	176	207	3.8	45
9	79	83	31				4.7	338	191	213	3.8	45
10	79	79	32				4.5	363	204	198	3.6	45
11	79	77	32				4.5	355	261	188	3.6	43
12	83	75	32				4.0	438	406	191	18	43
13	86	73	30				4.0	700	410	188	48	42
14	86	75	30		28		4.3	829	424	437	48	42
15	84	77		31		25	4.3	829	415	524	48	42
16	83	77					4.5	799	306	504	48	42
17	81	77					4.7	860	188	499	49	42
18	81	72	32				4.7	891	179	769	49	42
19	79	72					5.4	955	182	1,050	49	42
20	79	72					5.4	988	191	829	49	43
21	77	72					5.7	1,020	391	551	51	43
22	77	79	33				6.7	1,020	628	136	49	43
23	77	84			27		6.7	1,050	757	133	46	43
24	77	88					7.0	1,120	799	131	43	43
25	77	88					7.0	1,150	829	119	41	39
26	75	92	32	30		24	7.0	1,180	1,020	121	42	35
27	73	94					6.7	1,150	1,020	121	48	30
28	73	96					6.7	1,150	923	121	49	3.8
29	73	94			-------		6.7	1,150	829	78	48	3.8
30	75	92			-------		6.7	1,120	672	57	45	3.8
31	81	-------	32		-------	19	-------	1,150	-------	59	45	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	86	73	79.2	4,870
November	98	72	82.4	4,900
December	94	30	38.1	2,340
January	-------	-------	31.0	1,910
February	-------	-------	28.0	1,560
March	-------	-------	24.8	1,520
April	7.0	4.0	5.32	317
May	1,180	6.7	688	42,300
June	1,180	160	502	29,900
July	1,050	57	299	18,400
August	258	3.6	60.7	3,730
September	45	3.8	38.5	2,290
The year	1,180	3.6	157	114,000

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, 1929.
EXTREMES.—1921–1929: 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 has diverted 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., 900 feet below North Gooding Canal and 11 miles northeast of Shoshone.
RECORDS AVAILABLE.—January, 1911, to September, 1929.
EXTREMES.—1911–1929: Maximum discharge, 3,180 second-feet May 18, 1921 (gage height, 15.0 feet); no flow for long periods.
REMARKS.—No flow during current year. Numerous diversions above station. North Gooding and Richfield Canals divert water between station and Magic Dam. Lincoln Canal diverts 7 miles upstream.

BIG WOOD RIVER AT GOODING, IDAHO

LOCATION.—Water-stage recorder in NE. ¼ NE. ¼ 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, 1929. From June, 1896, to October, 1899, at station at about the same site, known as "Malade River at Toponis, Idaho."
EXTREMES.—Maximum discharge during year, 65 second-feet June 14 (gage height, 1.86 feet); no flow prior to May 9 and subsequent to July 31.
1921–1929: Maximum discharge, 2,340 second-feet May 7, 1922 (gage height, 5.80 feet); no flow for long periods each year.
REMARKS.—Records good. Numerous diversions for irrigation above and below station. Flow regulated by operation of gates at Magic Dam. Gage-height record and results of six discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929

Day	May	June	July	Day	May	June	July	Day	May	June	July
1	0	38	33	11	47	33	36	21	44	29	20
2	0	38	23	12	41	40	36	22	45	35	22
3	0	38	24	13	38	61	40	23	37	38	21
4	0	22	32	14	37	59	40	24	40	42	16
5	0	32	38	15	33	53	41	25	40	38	12
6	0	31	40	16	41	55	38	26	42	40	18
7	0	32	38	17	38	41	33	27	45	38	10
8	0	36	38	18	42	47	28	28	42	42	9
9	27	38	41	19	42	38	31	29	42	44	7
10	35	50	40	20	45	36	24	30	40	45	7
								31	40		3

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May	47	0	29.8	1,830
June	61	22	40.3	2,400
July	41	3	27.1	1,670
The period				5,900

BIG WOOD RIVER NEAR GOODING, IDAHO

LOCATION.—Water-stage recorder in sec. 21, T. 6 S., R. 14 E., 5 miles above diversion dam for King Hill project and 6 miles southwest of Gooding.

RECORDS AVAILABLE.—March, 1916, to September, 1929.

EXTREMES.—Maximum discharge during year, 87 second-feet Apr. 1 (gage height, 1.75 feet); no flow during several periods.

1916–1929: Maximum discharge, 3,680 second-feet Mar. 17, 1922 (gage height, 9.00 feet); no flow for long periods each year.

REMARKS.—Records good. Discharge estimated July 28, Aug. 8 and 11. Many diversions for irrigation above station. Flow regulated by storage reservoirs upstream. Gage-height record and results of two discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	74	0	13	16	0	0
2	0	68	4	18	12	0	0
3	0	53	6	20	7	0	0
4	0	35	4	16	42	0	0
5	9	25	3	11	27	0	0
6	0	19	4	9	20	0	0
7	0	16	5	9	17	0	0
8	0	14	4	4	15	1	0
9	0	11	6	3	24	0	0
10	0	6	30	11	20	0	0
11	0	7	30	18	24	1	0
12	0	27	35	10	18	0	0
13	0	20	21	27	23	0	0
14	0	17	22	32	24	0	0
15	0	10	24	26	21	0	0
16	0	5	54	33	32	0	0
17	0	2	30	23	17	0	8
18	0	0	23	22	14	0	0
19	0	0	23	19	14	0	0
20	0	8	25	19	11	0	0
21	0	19	20	12	10	0	0
22	0	22	19	4	8	0	0
23	0	28	20	7	4	0	0
24	0	24	18	20	6	0	0
25	0	27	16	15	7	0	0
26	28	14	22	13	8	0	11
27	25	12	27	19	2	0	11
28	25	8	17	20	1	0	13
29	40	2	19	19	0	0	8
30	34	0	14	23	0	0	8
31	30	------	11	------	0	0	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
March 26–31	40	25	30.3	361
April	74	0	19.1	1,140
May	54	0	17.9	1,100
June	33	3	16.5	982
July	42	0	14.0	861
August	1	0	.1	4
September	13	0	2.0	119
The period				4,570

BIG WOOD SLOUGH AT HAILEY, IDAHO

LOCATION.—Staff gage in sec. 9, T. 2 N., R. 18 E., at highway bridge an eighth of a mile southwest of Hailey.

RECORDS AVAILABLE.—June, 1915, to September, 1929.

EXTREMES.—Maximum discharge during year, 199 second-feet May 22 (gage height, 1.80 feet); minimum, 8 second-feet July 13 (gage height, 0.86 foot).

1915–1929: 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 Dec. 17–25, Jan. 5–12 and 18–26. Big Wood Slough is a natural channel of Big Wood River that is utilized also as a tailrace for the Hailey power plant. Flow affected by load on power plant. Results of 4 discharge measurements and daily staff-gage reading Apr. 29 to Sept. 30 furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	123	149	123	110	82	123	116	132	43	68	149	126
2	116	149	110	110	82	116	110	149	40	62	175	110
3	123	149	110	110	82	123	116	157	35	55	146	104
4	123	149	110	110	88	123	123	153	37	52	132	110
5	123	149	110		93	123	123	139	48	45	132	110
6	123	149	116		93	123	116	142	53	38	132	123
7	116	149	116		93	110	104	129	64	38	135	123
8	116	149	116		99	110	116	135	62	25	132	139
9	116	149	116	110	99	116	110	153	63	16	129	142
10	116	149	116		104	116	104	132	41	14	132	132
11	116	157	110		104	116	116	132	23	12	126	126
12	116	157	110		110	110	116	142	25	9	123	123
13	116	157	110	110	110	104	116	160	26	10	123	120
14	123	157	110	110	110	99	110	164	40	13	104	116
15	123	157	110	110	110	99	123	164	48	40	113	110
16	157	157	110	110	110	99	129	157	66	40	110	107
17	157	157		110	110	113	135	175	41	107	107	107
18	164	157			110	110	149	171	35	129	123	107
19	157	149			110	116	175	167	31	120	123	110
20	157	142			110	116	157	160	52	113	116	107
21	149	142	110		110	126	123	164	82	110	110	104
22	149	142		110	110	110	129	167	93	116	107	110
23	142	142			110	110	142	126	90	142	110	116
24	142	142			110	110	142	126	88	135	113	123
25	142	142			116	110	135	139	93	129	126	123
26	149	142	110		116	116	149	107	93	132	116	123
27	149	135	110	110	116	123	149	85	88	129	113	116
28	149	129	110	96	116	110	135	66	85	123	113	116
29	149	129	110	96	------	110	146	48	90	110	120	116
30	149	129	110	96	------	110	135	40	77	116	132	116
31	------	------	110	82	------	88	------	40	------	142	153	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	164	116	135	8,300
November	157	129	147	8,750
December	123	----------	111	6,820
January	----------	----------	108	6,640
February	116	82	104	5,780
March	126	88	113	6,950
April	175	104	128	7,620
May	175	40	133	8,180
June	93	25	58.6	3,490
July	142	9	77.1	4,740
August	175	104	125	7,690
September	142	104	117	6,960
The year	175	9	113	81,900

CAMAS CREEK NEAR BLAINE, IDAHO

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

DRAINAGE AREA.—618 square miles.

RECORDS AVAILABLE.—May, 1912, to September, 1929. Discharge measurements only are available for 1911 and 1922.

EXTREMES.—Maximum discharge during year, 1,800 second-feet Apr. 20 (gage height, 7.06 feet); minimum, 2.1 second-feet July 20 (gage height, 0.94 foot).

1912–1929: Maximum discharge, 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 good except those for periods Mar. 27 to Apr. 11, Apr. 21–25, May 1, 2, and 4–9, which are fair. Many small diversions above station. Water passing stations is used for storage in Magic Reservoir. Results of three discharge measurements and gage-height record furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1			450	58	4.8	2.6	2.7
2				51	4.8	2.6	2.6
3			349	45	4.6	2.6	2.6
4				35	4.4	2.6	2.6
5				32	4.4	2.4	2.7
6		150	275	31	4.2	2.6	3.0
7				28	4.0	2.4	3.2
8				25	3.8	2.4	3.4
9				22	3.8	2.3	3.4
10			195	23	3.6	2.3	3.2
11			192	24	3.6	2.3	3.0
12		147	183	23	3.2	2.3	2.8
13		161	180	19	3.2	2.3	2.8
14		205	175	18	3.0	2.3	2.8
15		354	161	18	2.8	2.3	2.8
16		600	154	20	2.8	2.3	2.7
17		1,040	150	21	2.8	2.3	2.6
18	20	980	143	18	2.8	2.3	2.6
19	20	1,260	138	16	2.8	2.3	2.6
20	30	1,550	130	18	2.6	2.3	2.6
21	56		123	18	2.6	2.3	2.7
22	60		119	13	2.6	2.4	2.8
23	61	1,000	117	11	2.6	2.6	3.0
24	68		119	10	2.6	2.6	2.8
25	70		115	8.9	2.6	2.6	3.0
26	66	570	112	7.2	2.4	2.7	3.2
27		540	108	6.7	2.3	2.7	3.4
28		495	104	6.2	2.4	2.8	3.4
29	75	525	93	5.6	2.4	2.8	3.4
30		540	81	5.1	2.4	2.8	3.4
31		-------	69	-------	2.6	2.8	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
March 18–31	----------	20	59.0	1,640
April	----------	----------	521	31,000
May	----------	69	189	11,600
June	58	5.1	21.2	1,260
July	4.8	2.3	3.21	197
August	2.8	2.3	2.48	152
September	3.4	2.6	2.93	174
The period	----------	----------	----------	46,000

NOTE.—No record Oct. 1 to Mar. 17.

LINCOLN CANAL NEAR RICHFIELD, IDAHO

LOCATION.—Water-stage recorder in sec. 9, T. 3 S., R. 18 E., at head of canal, 300 feet east of Shoshone-Hailey highway and 12 miles northeast of Richfield.

RECORDS AVAILABLE.—April, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, 444 second-feet May 25 (gage height, 3.00 feet); no flow during nonirrigation season nor after Aug. 6.

1925–1929: 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 Oct. 1–10, July 31, Aug. 1, 3, and 4, 6, which are good. Flow regulated by gates at head of canal. Canal diverts from Big Wood River in sec. 9, T. 3 S., R. 18 E., approximately paralleling the river to head of North Gooding Canal in sec. 15, T. 4 S., R. 18 E., where water is either returned to Big Wood River or diverted directly into North Gooding Canal. Canal is used for conserving large channel losses in the natural stream bed of the river. Gage-height record and result of one discharge measurement furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	May	June	July	Aug.	Day	Oct.	May	June	July	Aug.
1	46	0	419	249	2	16	0	351	128	97	0
2		0	419	200	2	17	0	372	134	89	0
3		0	342	170	2	18	0	394	126	125	0
4		0	334	142	2	19	0	400	123	289	0
5		0	117	136	2	20	0	405	122	285	0
6	47	63	103	134	1	21	0	417	126	234	0
7		120	108	132	0	22	0	423	129	73	0
8		219	111	137	0	23	0	417	129	63	0
9		275	123	139	0	24	0	403	140	63	0
10		302	142	132	0	25	0	417	140	57	0
11	47	298	142	116	0	26	0	421	253	52	0
12	0	266	150	114	0	27	0	412	317	51	0
13	0	292	147	114	0	28	0	414	305	50	0
14	0	320	147	118	0	29	0	414	299	31	0
15	0	355	140	110	0	30	0	419	278	2	0
						31	0	419	-------	2	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	-------	-------	46.5	1,010
May	423	0	290	17,900
June	419	103	190	11,300
July	289	2	120	7,380
August	2	0	.4	22

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

LINCOLN CANAL NEAR SHOSHONE, IDAHO

LOCATION.—Water-stage recorder in sec. 15, T. 4 S., R. 18 E., a quarter of a 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, 1929.

EXTREMES.—Maximum discharge during year, 410 second-feet June 2 (gage height, 1.89 feet); no flow for long periods during winter and subsequent to Aug. 30.

1925–1929: Maximum discharge, 667 second-feet May 29, 1927 (gage height, 2.48 feet); no flow for long periods each year.

REMARKS.—Records excellent. Discharge estimated Oct. 1–10. Five ditches divert about 12.5 second-feet for irrigation above station. Canal diverts from Big Wood River in sec. 9, T. 3 S., R. 18 E., paralleling river to sec. 15, T. 4 S., R. 18 E., where water is either returned to Big Wood River or diverted directly into North Gooding Canal. Canal is used for conserving large channel losses in the natural stream bed of the river. Gage-height record and results of four discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	May	June	July	Day	Oct.	May	June	July
1		0	390	244	16	0	314	118	93
2		0	394	188	17	0	332	121	86
3	33	0	340	160	18	0	359	118	112
4		0	322	136	19	0	366	114	276
5		0	134	127	20	0	366	110	266
6		5	100	123	21	0	382	116	207
7		79	102	123	22	0	390	118	89
8	34	174	106	125	23	0	382	127	58
9		240	116	127	24	0	366	125	56
10		273	134	125	25	0	378	129	56
11	34	280	131	108	26	0	390	204	50
12	0	237	140	108	27	0	378	304	44
13	0	260	140	108	28	0	382	283	44
14	0	283	138	110	29	0	382	283	41
15	0	322	136	104	30	0	386	260	2
					31	0	382		0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October 1-11			33.5	731
May	390	0	261	16,000
June	394	100	179	10,700
July	276	0	113	6,950

NOTE.—No flow during months for which no discharge in given.

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, 1929.

EXTREMES.—Maximum discharge during year, 127 second-feet May 9 (gage height, 1.67 feet); no flow prior to May 8 (except Oct. 22) and subsequent to Aug. 1.

1928–29: Maximum discharge, that of May 9, 1929; no flow during nonirrigation season.

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

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	May	June	July	Aug.	Day	Oct.	May	June	July	Aug.
1	0	0	82	67	0.3	16	0	76	91	66	0
2	0	0	82	78	0	17	0	78	86	63	0
3	0	0	78	72	0	18	0	81	84	55	0
4	0	0	61	67	0	19	0	82	76	49	0
5	0	0	68	81	0	20	0	82	72	40	0
6	0	0	72	78	0	21	0	82	68	36	0
7	0	0	67	78	0	22	19	82	72	35	0
8	0	70	70	81	0	23	0	84	78	36	0
9	0	84	74	82	0	24	0	86	74	33	0
10	0	72	82	81	0	25	0	84	86	32	0
11	0	82	60	70	0	26	0	88	84	28	0
12	0	73	91	72	0	27	0	88	94	24	0
13	0	73	101	76	0	28	0	88	89	21	0
14	0	70	96	76	0	29	0	88	89	20	0
15	0	74	98	79	0	30	0	88	81	14	0
						31	0	84	-------	2.6	0

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October 22	19	0	0.61	375
May	88	0	62.5	3,840
June	101	60	80.2	4,770
July	82	2.6	54.6	3,360
August	.3	0	.01	.6

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

LITTLE WOOD RIVER NEAR CAREY, IDAHO

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

DRAINAGE AREA.—312 square miles.

RECORDS AVAILABLE.—April, 1904, to May, 1905; September, 1926, to September, 1929. At station 6 miles upstream, February, 1920, to September, 1926, records comparable except during spring run-off.

EXTREMES.—Maximum discharge during year, 289 second-feet May 25 (gage height, 2.27 feet); minimum, 8 second-feet Aug. 16 and 17 (gage height, 0.66 foot).

1904–1905, 1926–1929: Maximum discharge, 1,180 second-feet Apr. 27, 1927; maximum stage, 5.1 feet May 22, 1904; minimum, that of Aug. 16 and 17, 1929.

REMARKS.—Records good except those for Nov. 17–30, Mar. 1–19, 23, 25–29, Mar. 31 to Apr. 6, Apr. 8–16, 18–20, 25–27, May 11, and discharges below 20 second-feet, which are fair. Small diversions above station for irrigation. Gage-height record furnished by water master for Little Wood River and Little Wood River Canal Co.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	51		70	151	126	105	21	31
2	26	50		75	149	128	95	23	28
3	27	49	50	80	151	120	83	20	26
4	32	49		75	151	114	76	19	28
5	34	49		65	147	120	71	16	28
6	34	59		60	136	136	65	15	32
7	32	59		58	128	156	61	14	32
8	32	55		55	124	158	57	13	30
9	32	52		60	124	151	52	12	29
10	33	54		60	116	145	50	12	28
11	34	54		60	120	130	47	12	25
12	36	54		70	124	134	45	11	24
13	37	54	60	80	138	149	43	10	22
14	38	55		90	140	177	40	10	21
15	39	57		110	147	200	39	9	20
16	40	49		130	158	235	36	8	20
17	40			149	165	192	34	8	20
18	43			149	167	149	37	10	19
19	43			150	179	128	44	12	19
20	41	35	71	151	192	120	36	10	20
21	40		78	151	192	128	34	9	25
22	40		86	151	213	140	31	10	26
23	40		70	149	252	140	26	10	25
24	39		52	156	273	134	24	10	26
25	38	40	50	160	264	136	24	11	26
26	38		55	165	224	136	22	14	26
27	37		60	165	192	128	20	15	26
28	37		65	170	167	122	19	10	26
29	37	35	70	172	145	120	18	30	26
30	39		79	167	128	110	18	47	26
31	45	-------	75	-------	124	-------	18	38	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	45	25	36.4	2,240
November	59	-------	45.5	2,710
March	86	-------	61.3	3,770
April	172	55	113	6,720
May	273	116	164	10,100
June	235	110	142	8,450
July	105	18	44.2	2,720
August	47	8	15.1	928
September	32	19	25.3	1,510

NOTE.—Records discontinued during winter.

LITTLE WOOD RIVER NEAR RICHFIELD, IDAHO

LOCATION.—Water-stage recorder in sec. 30, T. 4 S., R. 20 E., half a mile above heading of Dietrich Canal and 1 mile east of Richfield.

RECORDS AVAILABLE.—January, 1911, to September, 1929.

EXTREMES.—Maximum discharge during year, 153 second-feet Mar. 27 (gage height, 1.85 feet); minimum, 55 second-feet May 27 (gage height, 1.32 feet).

1911–1929: Maximum discharge, 722 second-feet May 17 and 18, 1911 (gage height, 4.5 feet); minimum, 7.6 second-feet June 24 and 25, 1920 (gage height, 0.52 foot).

REMARKS.—Records good except those for Mar. 28–31, Aug. 24 and Sept. 22, which are fair. Diversons above station. Gage-height record and results of nine discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1		146	126	61	68	74	84
2		142	132	64	65	77	82
3		142	124	65	66	79	81
4		142	130	66	66	79	85
5		142	130	68	69	78	85
6		144	132	66	74	75	88
7		142	130	66	75	74	89
8		138	128	69	75	73	94
9		132	119	68	77	73	95
10		132	115	72	79	70	94
11		130	113	73	81	70	94
12		128	113	73	81	72	91
13		128	108	75	78	70	88
14		126	105	77	79	70	86
15		126	100	74	77	70	84
16		126	88	77	78	70	82
17		124	78	82	77	68	82
18		122	70	84	74	68	86
19		124	68	79	75	69	86
20		136	65	77	75	69	88
21		146	69	77	77	69	89
22		140	64	74	73	72	92
23		134	63	74	75	70	95
24		132	61	75	74	72	98
25		134	59	74	74	74	100
26		134	60	70	77	75	100
27	153	126	60	70	75	78	102
28		122	59	72	74	84	105
29	150	121	60	68	74	88	100
30		126	61	66	74	86	100
31			61		73	86	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
March 27–31	153		151	1,500
April	146	121	133	7,910
May	132	59	91.9	5,650
June	84	61	71.9	4,280
July	81	65	74.5	4,580
August	88	68	74.3	4,570
September	105	81	90.8	5,400
The period				33,900

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, 1929.

EXTREMES.—Maximum discharge during year, 367 second-feet May 15; maximum gage height, 1.67 feet June 30; minimum discharge, 18 second-feet Aug. 9 (gage height, 0.38 foot).

1922–1929: 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, except periods Mar. 28–31, July 1 and Aug. 3–7, which are fair. Diversions for irrigation above and below station. Small ditch for Shoshone water supply diverts immediately below gage. Gage-height record and results of 16 discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1		139	65	311	115	39	53
2		124	79	331	79	39	49
3		110	84	331	72	38	49
4		102	79	199	63	42	51
5		94	76	63	47	42	54
6		84	79	37	44	42	53
7		84	81	33	45	36	49
8		91	79	38	45	30	53
9		84	65	39	49	28	60
10		70	58	39	49	33	54
11		76	49	40	47	33	60
12		76	42	48	49	32	56
13		79	38	56	45	33	53
14		81	210	81	42	33	51
15		81	326	81	40	34	53
16		86	301	86	45	33	49
17		84	278	79	51	33	47
18		79	246	63	53	32	45
19		74	255	51	84	32	47
20		74	264	45	278	31	47
21		91	260	44	255	31	51
22		97	246	45	148	33	51
23		91	226	110	37	32	56
24		91	242	246	51	32	56
25		91	246	268	39	36	58
26		86	273	282	38	39	63
27	139	79	291	296	39	39	65
28		70	301	301	39	42	65
29	140	63	301	291	39	51	70
30		63	301	316	38	54	70
31			291		39	53	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
March 27–31			140	1,390
April	139	63	86.5	5,150
May	326	38	185	11,400
June	331	33	142	8,450
July	278	37	67.9	4,180
August	54	28	36.7	2,260
September	70	45	54.6	3,250
The period				36,100

FISH CREEK ABOVE DAM NEAR CAREY, IDAHO

LOCATION.—Water-stage recorder in sec. 2, T. 1 N., R. 22 E., 1¾ miles above West Fork of Fish Creek, and 14 miles northeast of Carey.

DRAINAGE AREA.—About 56 square miles.

RECORDS AVAILABLE.—May, 1920, to September, 1929.

EXTREMES.—Maximum discharge during year, 32 second-feet May 3 (gage height, 0.62 foot); minimum, 0.4 second-foot Aug. 2 (gage height 0.07 foot).

1920–1929: Maximum discharge, 158 second-feet May 6, 1922 (gage height, 1.78 feet); no flow Sept. 9–12 and Oct. 17–27, 1926.

REMARKS.—Records good. Several small diversions above gage. Gage-height record furnished by water master for Fish Creek.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	May	June	July	Aug.	Sept.	Day	Oct.	May	June	July	Aug.	Sept.
1	2.6	------	17	5.4	0.5	0.9	16	------	12	14	2.2	0.5	1.9
2	1.9	------	17	5.4	.4	.9	17	------	17	15	2.6	.5	1.9
3	2.9	30	17	5.0	.5	.9	18	------	18	14	2.6	.5	1.9
4	4.3	28	15	5.0	.5	.7	19	------	19	14	2.2	.5	1.9
5	5.4	26	14	4.7	.5	.7	20	------	21	14	2.2	.5	2.2
6	5.0	25	14	4.3	.5	.7	21	------	21	12	.9	.5	2.2
7	4.7	22	15	3.9	.5	.9	22	------	22	11	.7	.5	2.2
8	------	20	15	3.9	.5	.7	23	------	22	9.5	.5	.5	2.2
9	------	18	15	3.5	.5	.7	24	------	22	9.0	.9	.5	2.2
10	------	18	15	3.2	.5	.7	25	------	22	7.6	.9	.5	2.6
11	------	18	15	2.9	.5	.9	26	------	22	7.6	.9	.5	2.9
12	------	15	15	2.9	.5	1.4	27	------	20	7.2	.9	.5	3.2
13	------	15	14	2.6	.5	1.9	28	------	20	6.7	.9	.5	3.2
14	------	15	14	2.6	.5	1.9	29	------	19	6.3	.9	.7	3.2
15	------	13	14	2.2	.5	1.9	30	------	17	5.9	.5	.9	3.2
							31	------	16	-------	.5	.9	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October 1–7	5.4	1.9	3.83	53
May 3–31	30	12	19.8	1,140
June	17	5.9	12.7	756
July	5.4	.5	2.51	154
August	.9	.4	.53	33
September	3.2	.7	1.76	105

FISH CREEK NEAR CAREY, IDAHO

LOCATION.—Water-stage recorder in sec. 22, T. 1 N., R. 22 E., 1½ miles below Carey Valley Reservoir Co.'s dam and 11 miles northeast of Carey.

RECORDS AVAILABLE.—April, 1919, to September, 1920; May, 1923, to September, 1929. Discharge measurements only, 1921 and 1922.

EXTREMES.—Maximum discharge during year, 61 second-feet July 21 and 22 (gage height, 0.99 foot); no flow during nonirrigation season.

1919–20, 1923–1929: Maximum discharge, 170 second-feet May 19, 1927 (gage height, 1.91 feet); no flow for long periods.

REMARKS.—Records excellent. Flow regulated by storage reservoir. Gage-height record furnished by water master for Fish Creek.

Daily and monthly discharge, in second-feet, of Fish Creek near Carey, Idaho, 1928–29

Day	Oct.	May	June	July	Aug.	Sept.	Day	Oct.	May	June	July	Aug.	Sept.
1	7.4	------	35	28	32	9.3	16	------	17	33	35	17	9.3
2	7.0	------	39	32	32	8.3	17	------	23	30	32	20	6.5
3	8.8	8.3	37	26	30	6.1	18	------	28	30	29	16	7.4
4	9.8	7.4	35	23	30	5.6	19	------	29	30	31	14	8.3
5	10	7.0	36	23	30	7.8	20	------	25	32	42	7.4	8.3
6	10	6.5	36	29	35	9.3	21	------	25	32	55	6.1	8.3
7	------	6.5	36	32	36	7.0	22	------	32	32	57	6.1	8.3
8	------	6.5	37	35	35	6.1	23	------	33	32	47	11	8.3
9	------	6.5	39	33	31	5.6	24	------	33	31	40	11	7.4
10	------	6.1	36	33	26	6.1	25	------	34	36	38	10	6.5
11	------	19	49	34	19	7.8	26	------	35	41	38	5.3	6.5
12	------	20	51	38	19	12	27	------	35	41	38	7.0	6.5
13	------	17	57	47	16	12	28	------	32	44	31	13	6.5
14	------	19	48	49	16	12	29	------	35	48	28	13	6.5
15	------	19	38	42	15	12	30	------	39	34	32	9.3	6.5
							31	------	38	------	37	8.3	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October 1–6	10	7.4	8.83	105
May 3–31	39	6.1	22.1	1,270
June	57	30	37.8	2,250
July	57	23	35.9	2,210
August	36	5.3	18.6	1,140
September	12	5.6	7.94	472

WEST FORK OF FISH CREEK NEAR CAREY, IDAHO

LOCATION.—Staff gage in sec. 3, T. 1 N., R. 22 E., 1¾ miles above confluence with Fish Creek and 14 miles northeast of Carey.

DRAINAGE AREA.—About 12.5 square miles.

RECORDS AVAILABLE.—May, 1920, to September, 1929 (discharge measurements only in 1923).

EXTREMES.—Maximum discharge during year, 0.6 second-foot May 12–19 (gage height, 0.12 foot); minimum, 0.1 second-foot June 30 and July 1–31.

1920–1922, 1924–1929: Maximum discharge, 42.8 second-feet Apr. 22, 1922 (gage height, 0.93 foot); no flow for long periods each year.

REMARKS.—Records fair. One small diversion above station. Gage-height record furnished by water master for Fish Creek.

Daily and monthly discharge, in second-feet, 1929

Day	May	June	July	Day	May	June	July	Day	May	June	July
1	------	0.2	a0.1	11	a0.5	0.2	a0.1	21	a0.5	a0.2	a0.1
2	------	.2	.1	12	.6	.2	a.1	22	.4	.2	a.1
3	0.3	.2	a.1	13	a.6	.2	a.1	23	.3	.2	.1
4	a.3	a.2	a.1	14	a.6	.2	a.1	24	a.2	a.2	
5	a.2	.2	a.1	15	.6	.2	a.1	25	.2	a.2	
6	a.2	.2	a.1	16	a.6	.2	a.1	26	.2	a.2	
7	a.2	a.2	a.1	17	a.6	a.2	a.1	27	.2	.2	a.1
8	a.2	.2	a.1	18	.6	a.2	a.1	28	.3	a.2	
9	a.2	.2	.1	19	.6	.2	.1	29	.2	a.2	
10	a.3	.2	a.1	20	a.5	a.2	a.1	30	.2	a.1	
								31	.2	------	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May 3–31	0.6	0.2	0.37	21
June	.2	.1	.20	12
July	.1	.1	.10	6.1
The period				39

a Estimated.

SILVER CREEK NEAR PICABO, IDAHO

LOCATION.—Water-stage recorder in sec. 1, T. 2 S., R. 20 E., 1½ miles below mouth of ditch of Blaine County Drainage District No. 1 and 3 miles southeast of Picabo.

RECORDS AVAILABLE.—May, 1920, to September, 1929.

EXTREMES.—Maximum discharge during year, 231 second-feet Mar. 29 (gage height, 2.58 feet); minimum, 74 second-feet May 17 (gage height, 1.04 feet).

1920–1929: Maximum discharge, 312 second-feet Apr. 3, 1923; minimum, 26 second-feet June 2, 1920 (gage height, 0.48 foot).

REMARKS.—Records excellent. Numerous diversions for irrigation above station. Some water is diverted around station by slough heading 300 feet above gage. Gage-height record and results of six discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

Daily and monthly discharge, in second-feet, 1929

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1		180	134	92	96	106	109
2		179	134	95	92	107	106
3		180	133	95	96	107	106
4		180	131	95	101	106	109
5		186	134	95	110	104	110
6		184	133	93	108	103	113
7		170	139	94	110	102	114
8		163	131	95	111	99	114
9		165	130	98	111	99	112
10		163	128	102	114	98	111
11		162	128	105	114	100	110
12		162	127	107	113	98	108
13		162	126	108	113	97	106
14		160	120	105	113	96	100
15		164	114	104	113	96	98
16		164	109	106	111	95	98
17		160	92	111	108	93	108
18		152	92	107	108	95	112
19		159	89	106	108	96	110
20		173	95	104	109	97	112
21		165	88	102	107	98	119
22		157	86	102	106	97	123
23		153	86	103	107	96	124
24		161	85	104	106	97	123
25		164	82	103	106	98	124
26		154	84	100	106	105	127
27		148	88	99	105	112	135
28		142	88	102	102	116	128
29	229	140	89	101	102	116	126
30	217	134	90	97	103	114	126
31	191		92		104	112	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
March 29–31	229	191	212	1,260
April	186	134	163	9,700
May	139	82	109	6,700
June	111	92	101	6,010
July	114	92	107	6,580
August	116	93	102	6,270
September	135	98	114	6,780
The period				43,300

MOUNTAIN HOME FEEDER CANAL NEAR MOUNTAIN HOME, IDAHO

LOCATION.—Water-stage recorder in sec. 36, T. 2 S., R. 6 E., 75 feet below point of diversion from Canyon Creek and 5 miles north of Mountain Home.

RECORDS AVAILABLE.—April, 1924, to September, 1929.

EXTREMES.—Maximum discharge, 152 second-feet Mar. 21 (gage height, 1.50 feet); no flow prior to irrigation season and subsequent to Sept. 16.

1924–1929: Maximum discharge, 226 second-feet Feb. 21, 1927 (gage height, 2.18 feet); no flow for long periods each year.

REMARKS.—Records good, except periods Apr. 29, May 9–11, July 14, 15 and Sept. 16, which are fair. Regulated by head gate in Canyon Creek and by storage in Long Tom Reservoir. Canal diverts from Canyon Creek in sec. 36, T. 2 S., R. 6 E.; water used for irrigation on about 5,000 acres included in the project of the Mountain Home Irrigation District. Gage-height record furnished by Mountain Home Irrigation District.

Daily and monthly discharge, in second-feet, 1929

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1		68	54	104	66	66	45
2		65	51	84	88	65	46
3		68	49	81	93	65	44
4		76	47	78	108	65	44
5		82	46	78	118	64	44
6		75	44	78	120	65	44
7		69	40	77	120	63	43
8		65	39	76	121	61	41
9		62	44	77	118	49	39
10		57	50	76	117	51	37
11	91	56	55	76	115	50	33
12	88	54	60	75	114	50	42
13	77	53	70	64	111	51	39
14	69	56	70	62	107	63	34
15	65	60	80	62	104	64	18
16	69	69	78	64	100	64	8
17	74	78	77	62	106	65	0
18	69	82	86	47	129	63	0
19	72	75	86	46	142	65	0
20	74	61	83	45	136	65	0
21	118	57	89	44	131	65	0
22	145	62	89	44	124	66	0
23	125	72	100	43	121	72	0
24	105	72	101	43	92	71	0
25	88	68	113	44	81	72	0
26	78	65	109	44	78	72	0
27	75	63	109	53	77	63	0
28	82	63	110	54	75	62	0
29	88	59	108	54	69	52	0
30	83	55	105	63	65	51	0
31	75		105		66	46	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
March 11–31	145	65	86.2	3,590
April	82	53	65.6	3,900
May	113	39	75.7	4,650
June	104	43	63.3	3,770
July	142	65	104.0	6,400
August	72	46	61.5	3,780
September	46	0	20.0	1,190
The period				27,300

MOUNTAIN HOME COOPERATIVE CANAL NEAR MOUNTAIN HOME, IDAHO

LOCATION.—Water-stage recorder in sec. 36, T. 2 S., R. 6 E., at the Lamberton weir, 250 feet below point of diversion in Mountain Home feeder canal and 4½ miles north of Mountain Home.

RECORDS AVAILABLE.—April, 1924, to September, 1929.

EXTREMES.—Maximum discharge during year, 97 second-feet July 7 (gage height, 1.53 feet); no flow subsequent to Sept. 16.

1924–1929: Maximum discharge, 109 second-feet July 16, 1925 (gage height, 1.69 feet); no flow usually during nonirrigation periods.

REMARKS.—Records good except those for Apr. 25, 26, July 14, 15, and Aug. 27, 28, which are fair. Regulated at head of canal and by operation of gates in Long Tom Reservoir. Canal is fed by Mountain Home feeder canal which diverts from Canyon Creek in sec. 36, T. 2 S., R. 6 E. Water is used for irrigation on about 5,000 acres of the Mountain Home irrigation district. Gage-height record furnished by Mountain Home Irrigation District.

Daily and monthly discharge, in second-feet, 1929

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	------	36	86	63	62	40	16	------	62	59	78	54	1.4
2	------	35	71	78	62	39	17	------	63	59	78	54	
3	------	35	70	82	60	34	18	------	68	46	78	54	
4	------	34	69	90	52	35	19	------	69	44	78	55	
5	------	32	67	94	38	36	20	------	68	43	75	55	
6	------	31	66	96	39	36	21	------	71	42	74	55	
7	------	31	66	96	38	36	22	------	70	41	75	56	
8	------	29	65	85	37	35	23	------	78	40	77	61	
9	------	34	66	82	37	34	24	29	78	39	74	61	
10	------	40	67	82	38	33	25	32	85	40	71	61	
11	------	41	67	82	39	31	26	35	86	40	69	62	
12	------	46	66	82	42	37	27	39	86	50	68	56	
13	------	53	58	81	43	36	28	44	87	50	66	50	
14	------	54	57	80	52	31	29	43	87	50	61	44	
15	------	62	58	79	53	7.0	30	41	86	58	59	44	
							31	------	85	------	60	41	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April 24–30	44	29	37.6	522
May	87	29	58.8	3,620
June	86	39	56.7	3,370
July	96	59	77.2	4,750
August	62	37	50.2	3,090
September	40	0	16.7	994
The period				16,300

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, 1929.

EXTREMES.—Maximum discharge during period, 584 second-feet May 25 (gage height, 3.54 feet); minimum, about 5.1 second-feet Nov. 29.

REMARKS.—Records good except those for Nov. 29, 30, Jan. 11 to Feb. 27, Apr. 14-16, and May 12-15, which are fair. No diversions for irrigation above the station. Gage-height record and results of eight discharge measurements furnished by Salmon River Canal Co. (Ltd.).

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		10	10	8.3		8.3	39	82	194	178	25	9.0
2		10	6.7	10		8.1	40	85	178	163	25	9.0
3		10	10	10		7.1	49	106	163	151	21	9.2
4		10	9.5	10		8.5	57	123	165	143	20	9.5
5		10	9.2	10		12	57	105	182	132	20	9.5
6		11	7.9	9.8		17	48	90	219	118	18	10
7		12	7.9	9.5		23	40	96	244	111	17	10
8		10	8.5	9.5		29	38	114	261	98	16	10
9		10	9.0	9.2		27	34	143	258	88	15	10
10		9.8	8.8	7.9		30	29	138	247	82	14	9.8
11		9.5	8.5			34	29	120	222	77	14	9.5
12		9.5	7.1			33	25	145	194	72	14	9.0
13		9.5	10			27	27	171	199	68	12	8.5
14		9.8	9.0			24	40	196	258	64	12	8.5
15		10	9.0		8	21	52	222	310	60	12	8.1
16		9.5	7.7			22	64	247	402	57	12	7.9
17		9.0	7.9			37	76	256	300	54	12	7.5
18	15	7.9	7.9			47	77	244	219	54	14	7.5
19	14	9.0	9.2			44	82	261	192	51	12	7.5
20	12	9.0	8.1			36	72	297	192	47	11	7.9
21	12	9.8	8.8	8		59	63	316	238	44	11	9.8
22	11	9.5	9.2			63	63	359	279	39	10	9.8
23	11	10	9.5			48	62	421	273	36	11	9.5
24	11	9.0	9.5			38	57	432	253	34	11	9.5
25	10	8.3	10			34	57	535	244	32	12	9.5
26	10	7.9	9.2			29	56	370	244	31	12	9.5
27	10	8.8	7.3			27	60	264	236	29	10	9.5
28	10	9.5	7.1		8.3	39	83	206	228	28	10	9.8
29	10	10	9.2		-------	60	102	176	214	26	10	9.8
30	10		9.0		-------	55	95	169	194	25	10	9.5
31	11	-------	9.0		-------	44	-------	199	-------	25	9.5	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October 18-31	15	10	11.2	311
November	----------	----------	9.61	572
December	10	6.7	8.70	535
January	10	----------	8.46	520
February	----------	----------	8.01	445
March	63	7.1	32.0	1,970
April	102	25	55.8	3,320
May	535	82	216	13,300
June	402	163	233	13,900
July	178	25	71.5	4,400
August	25	9.5	14.0	861
September	10	7.5	9.14	544
The period	----------	----------	----------	40,700

OWYHEE RIVER AT MOUNTAIN CITY, NEV.

LOCATION.—Water-stage recorder (staff gage prior to Sept. 21, 1929), 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, 192°, to September, 1929.

EXTREMES.—Maximum discharge during year, 706 second-feet May 1 (gage height, 4.68 feet); minimum, 2 second-feet Aug. 29 to Sept. 8 (gage height, 1.30 feet).

1913, 1926–1929: Maximum discharge, 1,510 second-feet Mar. 26, 1928 (gage height, 7.0 feet); minimum, 2 second-feet Sept. 12, 1928, and Aug. 29 to Sept. 8, 1929.

REMARKS.—Records fair except those for Nov. 18 to Mar. 19, which are estimated. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	13					249	706	183	26	3	2
2	8	13				10	271	595	186	24	3	2
3	9	14					286	568	183	20	4	2
4	9	14					364	616	168	18	4	2
5	9	14					333	563	172	16	4	2
6	9	15					229	471	164	15	4	2
7	9	15					190	466	153	13	4	2
8	9	15					213	457	142	12	5	2
9	9	15					194	481	142	12	4	3
10	9	15					149	471	145	10	4	3
11	9	15				25	157	405	168	9	4	3
12	10	15					149	433	161	8	4	3
13	10	15					176	466	134	7	4	3
14	10	15					198	461	121	7	3	3
15	10	15			10		286	452	126	6	3	3
16	10	14	10	10			423	442	164	6	3	3
17	11	14					563	437	164	5	3	3
18	11						638	428	134	4	4	3
19	12						611	414	113	4	4	3
20	12					95	633	395	104	4	4	4
21	12					377	616	377	90	4	4	4
22	12					311	627	382	64	4	4	4
23	12					176	600	359	64	4	3	4
24	12	12				172	521	346	59	4	3	4
25	12					164	526	337	55	4	3	4
26	12					153	542	320	46	4	3	4
27	12					149	537	329	41	4	3	4
28	12					138	552	286	35	4	3	5
29	12					190	584	245	32	4	2	5
30	12					241	633	213	29	3	2	5
31	13					229		190		3	2	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	13	8	10.5	646
November	15		13.4	797
December			10	615
January			10	615
February			10	555
March	377		91.1	5,600
April	638	149	402	23,900
May	706	190	423	26,000
June	186	29	118	7,020
July	26	3	8.6	529
August	5	2	3.5	215
September	5	2	3.2	190
The year	706	2	92.1	66,700

OWYHEE RIVER BELOW OWYHEE DAM, OREG.

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

RECORDS AVAILABLE.—February to September, 1929.

EXTREMES.—Maximum discharge during period, 12,100 second-feet Mar. 23 (gage height, 11.56 feet); minimum, 88 second-feet Aug. 20 (gage height, 1.17 feet).

REMARKS.—Records excellent, except those for Feb. 25 to Mar. 3, which are fair. 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

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			3,700	2,600	1,040	286	108	104
2		300	2,800	2,600	980	271	110	98
3			2,200	2,500	920	244	105	105
4		1,380	2,350	2,400	830	228	102	101
5		1,660	3,230	2,300	800	222	101	97
6		3,010	3,460	2,250	720	212	102	98
7		4,580	3,580	2,160	670	198	104	102
8		4,060	2,700	2,060	620	198	110	101
9		3,580	2,200	1,900	620	192	105	104
10		3,010	1,820	1,780	598	185	104	104
11		3,340	1,620	1,660	598	170	104	98
12		3,820	1,480	1,580	555	162	108	105
13		2,900	1,380	1,550	645	150	110	102
14		1,940	1,300	1,520	695	152	108	98
15		1,410	1,270	1,520	620	146	105	110
16		1,130	1,380	1,550	598	146	100	112
17		1,100	2,700	1,550	598	148	97	114
18		1,200	3,460	1,520	598	144	100	117
19		1,480	3,230	1,480	670	135	101	117
20		1,860	3,010	1,440	598	133	98	119
21		2,300	3,120	1,410	555	135	101	119
22		3,230	3,340	1,380	535	136	102	117
23		9,900	3,230	1,340	555	129	100	117
24		6,250	3,230	1,300	495	127	98	124
25		4,190	3,700	1,270	455	120	102	119
26	200	3,120	3,120	1,200	438	115	102	124
27		2,450	2,700	1,200	402	101	102	129
28		2,020	2,600	1,200	355	108	104	135
29		1,900	2,600	1,130	328	107	108	136
30		3,820	2,600	1,100	304	107	107	136
31		4,860		1,070		104	105	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
March	9,900		2,790	172,000
April	3,700	1,270	2,640	157,000
May	2,600	1,070	1,060	102,000
June	1,040	304	613	36,500
July	286	101	162	9,960
August	110	97	104	6,400
September	136	97	112	6,660
The period				491,000

OWYHEE RIVER NEAR OWYHEE, OREG.

LOCATION.—Chain gage in sec. 2, T. 21 S., R. 46 E., at county bridge 1½ miles southwest of Owyhee and 3 miles above mouth of river.

DRAINAGE AREA.—About 11,100 square miles.

RECORDS AVAILABLE.—March, 1890, to December, 1893; January, 1895, to October, 1896; August, 1903, to September, 1916; May, 1920, to July, 1929, when station was discontinued.

EXTREMES.—Maximum discharge during period October, 1927, to July, 1929, 13,900 second-feet Mar. 23 (gage height, 9.78 feet); minimum (estimated), 5 second-feet July 26.

1890–1893, 1895–96, 1903–1916, 1920–1929: Maximum discharge, 23,200 second-feet Mar. 2, 1910 (gage height, 12.9 feet); no flow July 7, 19, Aug. 14–16, 1924, and July 5 and 6, 1926.

REMARKS.—Records poor. Owyhee Canal diverts practically entire low-water flow about 6 miles upstream. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Mar.	Apr.	May	June	July
1	49	58	-------	3,900	2,380	700	32
2	90	58	-------	2,980	2,380	700	32
3	68	58	980	2,660	2,250	700	-------
4	49	58	3,500	2,820	2,250	635	-------
5	49	58	980	3,150	2,010	575	-------
6	49	68	2,250	3,500	2,010	515	-------
7	49	68	8,120	2,980	3,320	460	-------
8	49	68	4,960	2,660	3,320	405	-------
9	49	68	4,740	2,130	1,660	405	-------
10	49	68	3,500	2,010	1,550	405	-------
11	49	79	3,320	1,890	1,450	378	-------
12	49	79	4,520	1,890	1,350	340	-------
13	49	79	2,660	1,350	1,250	315	-------
14	49	79	2,010	1,250	1,250	405	-------
15	49	79	1,450	1,160	1,250	460	-------
16	49	175	980	1,160	1,250	515	-------
17	49	175	1,070	4,520	1,250	575	-------
18	49	175	1,160	3,320	1,250	635	-------
19	49	175	1,350	3,320	1,250	575	-------
20	49	175	1,450	3,320	1,250	515	-------
21	49	175	1,550	3,150	1,070	460	-------
22	49	175	1,160	3,150	980	405	-------
23	49	175	13,000	3,320	980	340	-------
24	49	-------	8,400	3,500	980	340	-------
25	49	-------	6,480	3,500	980	290	-------
26	49	-------	3,500	3,320	900	242	5
27	58	-------	2,660	2,660	900	203	-------
28	58	-------	2,250	2,660	900	137	-------
29	58	-------	3,150	2,520	900	86	-------
30	58	-------	2,980	2,380	900	64	-------
31	58	-------	6,480	-------	765	-------	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	90	49	52.4	3,220
November 1–23	175	58	105	4,790
March 3–31	13,000	980	3,470	200,000
April	4,520	1,160	2,740	163,000
May	3,320	765	1,490	91,600
June	700	64	426	25,300

OWYHEE CANAL NEAR OWYHEE, OREG.

LOCATION.—Water-stage recorder in SE. ¼ sec. 31, T. 20 S., R. 46 E., 2 miles below head of canal and 5 miles southwest of Owyhee.

RECORDS AVAILABLE.—October, 1911, to September, 1916; and irrigation seasons 1904, 1905, and 1920 to 1929.

EXTREMES.—Maximum discharge during year, 278 second-feet May 23 (gage height, 3.82 feet); no flow during winter and June 11–21.

1904–5, 1911–1916, 1920–1929: Maximum discharge, 333 second-feet May 17, 1921, and May 10 and 11, 1922 (gage height, 4.3 feet); no flow at times each year.

REMARKS.—Records good except those for Aug. 24–30 and Sept. 4–15 which are fair. Canal diverts from Owyhee River in sec. 18, T. 21 S., R. 46 E. Water is used for irrigation of about 11,000 acres of land in the vicinity of Owyhee, Nyssa, and Ontario. Waste water is returned to river between this and the station on Owyhee River near Owyhee. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1929

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	0	209	272	238	94	98	16	0	272	0	136	98	102
2	0	226	272	243	106	94	17	0	272	0	136	102	106
3	0	232	266	232	98	91	18	0	272	0	134	94	110
4	0	243	266	204	91		19	0	266	0	130	98	114
5	0	243	266	193	84		20	56	278	0	126	98	118
6	0	248	260	193	88		21	134	272	0	122	102	122
7	0	248	260	173	98		22	158	278	55	118	102	122
8	0	248	254	168	102		23	163	278	220	118	102	122
9	0	248	266	163	94		24	178	278	220	118	102	126
10	0	254	155	158	102	96	25	131	278	238	114		126
11	0	248	0	144	98		26	94	278	254	110		130
12	0	254	0	139	94		27	198	232	198	106	100	134
13	0	254	0	134	102		28	209	278	226	91		134
14	0	266	0	134	98		29	204	278	193	94		144
15	0	272	0	134	98		30	204	278	226	91		144
							31		272		94	98	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April	209	0	57.6	3,430
May	278	209	260	16,000
June	272	0	146	8,690
July	243	91	145	8,920
August			98.2	6,040
September	144		110	6,550
The period				49,600

BOISE RIVER NEAR TWIN SPRINGS, IDAHO

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

DRAINAGE AREA.—830 square miles.

RECORDS AVAILABLE.—March, 1911, to September, 1929.

EXTREMES.—Maximum discharge during year, 5,320 second-feet May 24 (gage height, 5.81 feet); minimum, 195 second-feet Dec. 4 (gage height, 1.70 feet).

1911–1929: Maximum discharge, 10,300 second-feet May 17, 1927 (gage height, 8.30 feet); minimum, about 142 second-feet Nov. 13, 1916 (gage height, 1.73 feet).

REMARKS.—Records good except those estimated, which are fair. 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	335	401	351			a 350		1,700	2,330	1,690	425	265
2	335	378	290					1,640	2,200	1,560	461	270
3	346	362	231			373		1,700	2,000	1,490	425	270
4	368	368	213					1,820	1,810	1,370	407	270
5	431	368	226				a 725	1,640	1,870	1,230	383	285
6	443	395	295			a 500		1,480	2,130	1,130	377	305
7	390	401						1,360	2,470	1,050	365	295
8	373	368			a 300		622	1,390	2,840	980	354	285
9	362	356					587	1,700	3,000	910	348	285
10	356	362				664	534	1,700	3,080	858	343	a 288
11	356	a 360	a 350				567	1,760	a2,920	818	338	290
12	362	a 357					522	2,140	2,760	778	326	290
13	362	a 355					548	2,630	2,920	748	321	285
14	356	a 353				a 650	580	2,790	3,160	725	321	275
15	356	a 351					643	2,960	3,420	695	310	270
16	356	a 348		a 300			735	3,060	4,220	665	305	265
17	362	346				657	884	3,160	3,420	628	305	265
18	362	270					1,060	3,000	2,620	620	321	265
19	351	236					1,300	3,000	2,200	613	310	256
20	346	320				a 700	1,470	3,330	2,060	571	300	260
21	346	384	a 300				1,380	3,860	2,130	544	290	280
22	340	362					1,300	4,400	2,400	524	285	300
23	346	362			a 325		1,300	4,940	2,330	498	280	300
24	351	362				580	1,390	5,130	2,260	498	275	316
25	351	330					1,290	4,760	2,260	479	285	310
26	351	356					1,360	3,680	2,400	467	305	310
27	346	362				a 600	1,640	2,840	2,200	455	300	305
28	346	310	a 375				2,070	2,400	2,060	449	290	300
29	340	270					2,140	2,130	2,060	437	285	300
30	340	275					2,070	2,060	1,870	419	285	295
31	401	------			------	622	------	2,200	------	413	270	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	443	335	360	0.434	0.50	22,100
November	401	236	348	.419	.47	20,700
December		213	323	.389	.45	19,900
January			300	.361	.42	18,400
February			312	.376	.39	17,300
March			590	.711	.82	36,300
April	2,140	522	1,040	1.25	1.40	61,900
May	5,130	1,360	2,660	3.20	3.69	164,000
June	4,220	1,810	2,510	3.02	3.37	149,000
July	1,690	413	784	.945	1.09	48,200
August	461	270	329	.396	.46	20,200
September	316	256	285	.343	.38	17,000
The year	5,130		821	.989	13.44	595,000

aEstimated.

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, 1929.

EXTREMES.—Maximum stage during year, 3,213.85 feet June 17 (contents, 285,000 acre-feet); minimum consisted of natural flow passing through dam Oct. 8–21.

1917–1929: 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.

REMARKS.—Reservoir has a capacity of 276,500 acre-feet between elevations 2,967 and 3,211 feet. Water is 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,477	15,540	8,373	46,700	87,660	100,800	114,800	203,100	264,800	278,000	149,800	36,570
2	3,513	17,060	8,344	47,900	89,420	101,100	117,900	204,600	265,100	276,700	146,200	33,870
3	3,622	18,840	7,946	49,600	91,000	101,300	121,100	206,000	264,800	272,900	142,800	31,180
4	3,770	20,370	7,890	51,250	92,140	101,300	124,900	207,800	264,800	270,000	139,400	28,360
5	3,441	21,890	8,605	52,460	93,100	101,600	129,100	208,800	264,200	266,800	136,200	25,630
6	3,405	23,380	9,732	53,340	93,900	101,400	132,800	208,800	263,400	263,600	132,800	22,990
7	2,394	24,950	10,810	54,120	94,380	101,100	135,000	207,500	263,900	259,600	129,900	20,580
8	-------	25,130	12,090	55,200	94,380	100,400	136,600	205,800	265,100	255,600	126,100	18,230
9	-------	24,830	13,620	56,280	94,380	99,580	137,800	204,600	267,400	251,400	122,300	15,910
10	-------	24,070	15,220	57,360	94,540	99,580	138,200	203,600	270,000	247,000	118,400	13,320
11	-------	23,100	17,140	58,800	94,700	104,000	137,600	202,400	272,600	242,700	114,500	11,920
12	-------	22,050	18,840	60,260	94,860	107,200	138,200	201,500	275,000	238,200	110,500	11,160
13	-------	20,840	20,370	61,300	95,670	107,900	137,400	201,900	277,000	233,600	106,400	10,140
14	-------	19,720	22,050	63,120	96,520	107,700	136,400	203,900	279,200	228,900	102,100	8,990
15	-------	19,040	23,610	64,550	97,370	107,200	136,200	206,000	281,800	224,500	97,540	7,750
16	-------	-------	25,190	66,110	98,220	106,700	136,600	208,800	284,300	219,800	93,420	7,340
17	-------	17,140	26,510	67,540	98,900	106,400	138,600	211,200	285,000	215,500	89,420	6,898
18	-------	16,280	27,820	69,100	99,750	106,400	141,800	213,800	284,000	210,500	85,400	6,320
19	-------	15,220	29,050	70,530	100,400	106,400	146,200	216,800	283,100	205,800	81,650	5,896
20	-------	14,210	30,030	71,960	100,800	106,400	151,800	219,000	282,500	201,200	77,760	5,735
21	-------	13,690	30,960	73,280	100,900	106,600	157,700	222,600	282,300	196,400	73,840	5,620
22	1,445	13,280	31,980	74,540	100,800	108,600	163,200	227,800	282,600	192,000	69,750	5,400
23	3,405	12,640	33,110	75,940	100,400	110,300	168,000	235,100	282,600	187,400	65,720	4,960
24	4,545	12,120	34,340	77,340	100,600	110,800	172,400	243,400	282,500	183,000	61,820	4,855
25	5,735	11,660	35,610	78,460	100,600	111,100	177,100	252,000	282,500	178,600	57,600	4,750
26	7,340	11,100	37,380	79,580	100,600	110,500	181,200	259,300	282,400	174,000	54,000	4,855
27	8,605	10,750	38,840	81,200	100,800	109,800	185,800	263,100	282,400	169,700	50,810	5,070
28	9,670	10,170	39,900	82,700	100,800	109,400	190,800	265,100	282,000	165,500	47,800	5,180
29	10,780	9,546	42,420	84,200	-------	109,600	195,700	265,700	281,000	161,500	44,800	5,246
30	12,260	8,870	44,000	85,550	-------	109,800	200,300	265,400	279,800	157,500	41,880	5,400
31	13,910	-------	45,400	86,600	-------	111,600	-------	264,800	-------	153,500	39,270	-------

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 of a 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, 6,910 second-feet June 17 (gage height, 6.45 feet); minimum (estimated), 10 second-feet Dec. 5–18, Jan. 11–29, Apr. 1–4.

1911–1929: Maximum discharge, 17,600 second-feet May 11, 1928 (gage height, 9.55 feet); minimum (estimated), 5 second-feet Nov. 2–10, Dec. 21–31, 1924, Jan. 1–6, and Mar. 26–29, 1925.

REMARKS.—Records excellent except those for estimated periods, which are fair. Flow regulated by storage in Arrowrock Reservoir. No diversions above the station. Results of 15 discharge measurements furnished by water master for Boise River and board of control for the Boise project. Gage-height record furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	650		743			607		2,900	4,300	4,090	2,660	1,890
2	658		727			642		3,060	4,090	4,090	2,590	1,890
3	658	a 30	620		a 300	680	a 10	3,060	3,990	3,990	2,440	1,890
4	759		325			688		3,230	4,090	3,880	2,370	1,890
5	896	55		a 90		695	110	3,400	3,990	a3,880	2,300	1,820
6	1,030	79				1,030	417	3,590	4,090	a3,880	2,300	1,820
7	1,250	367				1,230	860	3,780	4,090	a3,880	2,300	1,760
8	950	809				1,330	988	3,880	4,090	3,880	2,440	1,760
9	767	1,120				1,460	1,120	3,990	4,090	3,880	2,520	1,820
10	735	1,300				a 500	1,260	4,200	3,880	3,780	2,660	1,580
11	727	1,320	a 10			a 300	1,360	4,300	3,780	3,780	2,590	860
12	727	1,230				a 900	1,580	4,300	3,990	3,680	2,590	1,020
13	759	1,250				1,360	1,700	4,300	4,090	3,680	2,660	1,040
14	735	1,160			a 550	1,460	1,700	4,410	4,200	3,590	2,660	998
15	711	1,210				1,520	1,520	4,410	4,410	3,500	2,660	834
16	703	1,160				1,520	1,100	4,410	6,090	3,500	2,520	703
17	688	1,120				1,520	800	4,520	6,490	3,500	2,440	688
18	672	1,100				1,460	607	4,520	5,330	3,500	2,440	680
19	642	1,080				1,520	431	4,520	4,300	3,500	2,440	581
20	516	1,040	a 75	a 10		1,520	380	a4,520	3,880	3,400	2,520	506
21	528	1,010				1,460	436	a4,520	3,680	3,320	2,520	650
22	436	1,080			680	1,360	533	a4,300	3,990	3,230	2,520	695
23	264	1,120			a 600	1,460	834	4,300	3,990	3,140	2,520	672
24	285	1,080			516	1,520	988	4,300	3,780	3,140	2,440	628
25	230	1,040			642	1,520	a1,000	4,410	3,780	3,140	2,370	574
26	245	1,010	a 60		650	1,580	a1,200	4,520	3,880	3,060	2,300	544
27	289	1,060			574	1,580	1,290	4,520	3,780	2,980	2,160	550
28	310	1,060			607	1,520	1,640	4,520	3,780	2,900	2,090	555
29	175	941			-------	1,460	2,090	4,410	3,990	2,740	2,090	555
30	a 65	809		a 120	-------	1,520	2,520	4,410	3,990	2,740	1,960	555
31		-------			-------	a 250	-------	4,410	-------	2,740	1,890	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,250	----------	585	36,000
November	1,320	----------	858	51,100
December	743	----------	110	6,760
January	----------	----------	42.9	2,640
February	----------	----------	520	28,900
March	1,580	----------	1,200	73,800
April	2,520	----------	950	56,500
May	4,520	2,900	4,130	254,000
June	6,490	3,680	4,200	250,000
July	4,090	2,740	3,480	214,000
August	2,660	1,890	2,420	149,000
September	1,890	506	1,070	63,700
The year	6,490	----------	1,640	1,190,000

a Estimated.

BOISE RIVER AT NOTUS, IDAHO

LOCATION.—Staff gage in sec. 34, T. 5 N., R. 4 W., at steel highway bridge a quarter of a mile south of Notus.

RECORDS AVAILABLE.—April, 1920, to September, 1929.

EXTREMES.—Maximum discharge during year, 4,180 second-feet June 17 (gage height, 4.45 feet); minimum, 19 second-feet July 17, 18, Aug. 9, 19 (gage height, 0.22 foot).

1920–1929: Maximum discharge, 14,500 second-feet May 19 and 20, 1921 (gage height, 7.0 feet); minimum, 10 second-feet Aug. 18, 1920.

REMARKS.—Records good. 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	52	655	472	582	429	1,100	472	391	205	26	21	23
2	55	522	472	582	582	1,240	655	233	391	24	22	29
3	55	472	472	582	655	1,100	744	200	245	28	22	28
4	70	472	472	552	700	1,240	1,100	124	95	26	24	27
5	115	472	552	522	655	910	744	178	87	24	23	26
6	277	472	552	472	582	797	700	277	87	37	22	26
7	429	472	522	429	582	744	655	233	95	34	20	24
8	582	472	522	429	582	700	655	178	77	24	20	23
9	429	472	497	522	655	744	582	142	77	23	19	22
10	410	472	472	582	744	850	582	152	356	22	20	23
11	391	472	472	522	700	1,390	522	178	356	29	20	24
12	391	472	472	472	618	1,100	472	216	262	23	24	23
13	410	472	522	472	582	744	497	152	227	24	26	22
14	410	497	497	429	552	744	522	175	178	23	23	23
15	429	522	472	429	522	655	522	262	233	22	22	23
16	552	522	497	429	497	655	522	655	910	20	20	22
17	582	522	472	429	522	655	497	472	4,180	19	20	23
18	582	522	429	429	497	618	472	391	3,700	19	20	29
19	655	522	391	429	472	582	522	356	3,240	20	19	55
20	850	522	391	429	472	582	850	262	2,220	20	20	106
21	970	522	356	410	522	582	429	233	2,410	22	21	178
22	910	522	356	410	582	618	391	205	522	23	20	106
23	850	522	356	429	655	655	429	98	292	29	20	110
24	744	522	374	410	744	655	522	60	178	24	22	128
25	655	522	374	410	970	582	522	42	96	26	22	152
26	850	522	472	391	582	552	292	178	55	23	32	189
27	655	497	552	472	655	522	128	292	64	22	26	205
28	655	497	655	429	700	522	152	233	32	23	26	178
29	582	472	655	429	------	497	233	178	32	22	28	152
30	744	472	655	410	------	497	292	128	24	20	27	128
31	744	------	618	410	------	472	------	77	------	22	27	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	970	52	519	31,900
November	655	472	502	29,900
December	655	356	485	29,800
January	582	391	462	28,400
February	970	429	608	33,800
March	1,390	472	752	46,200
April	1,100	128	523	31,100
May	655	42	224	13,800
June	4,180	24	698	41,500
July	37	19	24.0	1,480
August	32	19	22.5	1,380
September	205	22	71.1	4,230
The year	4,180	19	405	293,000

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.

Daily gage-height records were obtained, frequent discharge measurements made, and records summarized under direction of W. E. Welsh, water master for Boise River.

Records are available from 1919 to 1929. Record of daily diversions subsequent to 1915 is on file in the office of Idaho commissioner of reclamation.

Total amount of water, in acre-feet, diverted by each canal during irrigation season of 1929

Main canal of United States Bureau of Reclamation	610,000	Phyllis	95,100
Penitentiary	1,640	Eureka No. 1	5,670
Ridenbaugh	120,000	Pioneer	8,670
Bubb	3,660	Canyon County	18,000
Cruzen	6,750	Caldwell High Line	17,400
Boise City No. 1	8,920	Riverside No. 2	40,900
Settlers	41,200	Farmers Cooperative	68,400
Thurmans mill	9,700	Canyon (Campbell)	3,810
Farmers Union (includes Boise Valley diversion	51,600	Seibenberg	2,560
Little Union	3,930	Pioneer Dixie	8,550
Dry Creek	15,800	Eureka No. 2	10,000
Ballantine	3,350	Upper Center Point	2,500
7 Eagle Island canals	11,400	Lower Center Point	2,990
Middleton Water Co	21,400	Miscellaneous	7,520
Middleton Mill ditch	17,900		1,220,000

Combined monthly discharge of canals diverting from Boise River, Idaho, during irrigation season of 1929

Month	Discharge in second-feet			Run-off in acre-feet
	Maximum	Minimum	Mean	
April	3,540	8	1,450	86,300
May	5,560	3,900	5,130	315,000
June	5,320	4,500	4,900	292,000
July	4,720	3,150	4,110	253,000
August	3,230	2,360	2,900	178,000
September	2,350	891	1,600	95,200
The period				1,220,000

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, 1929.

EXTREMES.—Maximum discharge during year, 3,660 second-feet May 25 (gage height, 6.48 feet); minimum (estimated), 150 second-feet Dec. 4.

1911–1929: Maximum discharge, 9,200 second-feet May 15, 1917 (gage height, 9.53 feet); minimum, 142 second-feet Dec. 31, 1925 (gage height, 1.92 feet).

REMARKS.—Records good except those for Oct. 3 to Feb. 18, May 7–17, and Aug. 28 to Sept. 2, which are poor. No diversions for irrigation 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	271					309	658	1,760	1,760	1,020	295	194
2	271					330	679	1,720	1,760	959	309	192
3						348	749	1,800	1,680	898	309	189
4						352	839	1,800	1,600	839	292	189
5						381	928	1,680	1,600	771	278	194
6						404	839	1,600	1,760	722	268	196
7						415	738		1,980	679	252	246
8		300				431	690		2,160	648	246	249
9						467	653		2,260	608	246	240
10					275	560	598	1,500	2,320	574	240	243
11						664	588		2,260	546	240	237
12						579	564		2,260	523	234	232
13						497	555		2,320	505	232	226
14						463	584		2,420	480	226	220
15						471	679		2,600	459	220	209
16	300		250	250		484	765	2,000	2,600	443	217	209
17						528	928		2,220	427	214	209
18						550	1,090	2,260	1,850	412	214	209
19					281	550	1,300	2,320	1,600	404	214	207
20					305	569	1,400	2,420	1,480	400	209	209
21					316	754	1,400	2,660	1,440	385	204	209
22					305	898	1,440	3,040	1,480	370	204	220
23		275			309	705	1,440	3,370	1,440	363	207	223
24					305	638	1,600	3,440	1,370	352	207	234
25					309	584	1,440	3,440	1,330	337	207	234
26					298	546	1,520	2,970	1,330	323	207	240
27					295	532	1,680	2,420	1,260	312	207	240
28					305	593	1,760	2,160	1,220	305	204	240
29					------	695	1,720	1,940	1,160	298	202	240
30					------	738	1,680	1,760	1,090	292	199	243
31		------			------	674	------	1,760	------	292	197	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	------	------	298	0.273	0.31	18,300
November	------	------	288	.264	.29	17,100
December	------	------	250	.229	.26	15,400
January	------	------	250	.229	.26	15,400
February	------	------	285	.261	.27	15,800
March	898	309	539	.494	.57	33,100
April	1,760	555	1,050	.963	1.07	62,500
May	3,440	------	2,110	1.94	2.24	130,000
June	2,600	1,090	1,790	1.64	1.83	107,000
July	1,020	292	514	.472	.54	31,600
August	309	197	232	.213	.25	14,300
September	249	189	221	.203	.23	13,200
The year	3,440	------	653	.599	8.12	474,000

LITTLE CAMAS RESERVOIR NEAR BENNETT, IDAHO

LOCATION.—Staff gage in NE. ¼ sec. 9, T. 1 S., R. 9 E., 4 miles northeast of Bennett and 22 miles northeast of Mountain Home.

DRAINAGE AREA.—31.8 square miles.

RECORDS AVAILABLE.—March, 1924, to September, 1929.

EXTREMES.—Maximum stage during year, 4,961.5 feet May 25; minimum, 4,942.7 feet Sept. 5.

1924–1929: Maximum stage, 4,965.5 feet May 26, 1928; no storage May 29, 1924, and July 9, 1926.

REMARKS.—Reservoir gates closed prior to May 23 and subsequent to Sept. 5. Capacity of reservoir 22,300 acre-feet between elevations 4,926.5 and 4,965.0 feet. Water used for irrigation of about 5,000 acres of land near Mountain Home. Gage-height record furnished by Mountain Home Irrigation District.

Daily elevation, in feet, 1929

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1		4,961.1				16					
2						17				4,949.0	
3				4,952.2		18					
4						19					
5					4,942.7	20			4,954.9		
6			4,957.1			21					
7						22		4,959.2			
8		4,960.7				23					
9						24				4,947.1	
10				4,950.7		25	4,961.5	4,958.75			
11						26					
12						27			4,953.6		
13			4,956.0			28					
14						29		4,958.2			
15		4,960.0				30			4,952.7		
						31				4,944.8	

NOTE.—Elevations referred to datum of Mountain Home Irrigation District.

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, 1927; April, 1924, to September, 1929.

EXTREMES.—Maximum discharge during year, 69 second-feet Aug. 29 (gage height, 2.43 feet); no flow prior to May 23 and subsequent to Sept. 5.

1917, 1924–1929: Maximum discharge, 77 second-feet Apr. 27–30, May 1, 3, and 9, 1924; no flow except during irrigation seasons.

REMARKS.—Records good. Canal diverts from Little Camas Reservoir in sec. 9, T. 1 S., R. 9 E., discharges into Long Tom Basin, and is collected in Long Tom Reservoir for release for irrigation of 5,000 acres of land near Mountain Home. Gage-height record furnished by Mountain Home Irrigation District.

Daily and monthly discharge, in second-feet, 1929

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1	------	52	64	63	67	16	------	65	65	68	0
2	------	53	64	62	65	17	------	65	65	68	0
3	------	53	64	64	66	18	------	65	65	63	0
4	------	56	64	65	66	19	------	65	66	64	0
5	------	58	64	64	21	20	------	64	66	63	0
6	------	58	65	65	0	21	------	64	65	63	0
7	------	59	66	66	0	22	------	64	65	62	0
8	------	61	66	65	0	23	4	64	66	60	0
9	------	62	66	63	0	24	25	64	66	60	0
10	------	62	66	63	0	25	30	65	66	67	0
11	------	64	66	64	0	26	37	65	65	65	0
12	------	65	65	62	0	27	44	65	65	63	0
13	------	65	65	64	0	28	46	65	65	65	0
14	------	65	65	65	0	29	46	65	65	67	0
15	------	65	65	66	0	30	49	65	65	67	0
						31	49	------	64	67	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May 23–31	49	0	36.7	655
June	65	52	62.3	3,710
July	66	64	65.1	4,000
August	67	60	64.7	3,980
September	67	0	9.5	565
The period				12,900

MOORE CREEK NEAR ARROWROCK, IDAHO

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

DRAINAGE AREA.—426 square miles.

RECORDS AVAILABLE.—October, 1914, to September, 1929 (discharge measurements only, prior to December, 1915).

EXTREMES.—Maximum discharge during year, 1,040 second-feet Apr. 24 and 29; maximum gage height, 2.90 feet Apr. 29; minimum discharge, 16 second-feet Aug. 23 (gage height, 0.11 foot).

1915–1929: Maximum discharge, 3,140 second-feet Apr. 11, 1916 (gage height, 6.3 feet); minimum, 7.9 second-feet Aug. 13–15, 17, and 18, 1924 (gage height, 0.09 foot).

REMARKS.—Records good. No large diversions above station. Results of 13 discharge measurements furnished by water master for Boise River and board of control for Boise project. Gage-height record furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	46	87	89	59	83	85	272	838	388	156	31	18
2	47	80	64	59	96	85	308	800	432	144	33	18
3	52	78	58	62	98	99	327	800	347	136	31	17
4	62	85	56	64	101	113	410	800	347	125	29	17
5	82	83	48	54	98	121	525	765	347	119	26	18
6	99	101	58	45	92	121	410	635	347	115	23	21
7	83	96	45	47	65	127	327	578	367	107	23	22
8	68	87	64	58	51	156	327	550	388	103	22	40
9	73	87	51	58	51	193	308	550	410	99	22	30
10	66	83	56	62	62	254	254	578	478	92	21	41
11	68	83	75	64	65	367	289	578	432	94	20	40
12	68	83	59	70	66	289	289	635	410	82	20	36
13	78	82	89	70	68	208	289	698	388	76	19	35
14	66	89	76	75	68	193	272	765	367	71	18	36
15	64	94	65	80	71	222	432	730	367	68	18	22
16	70	90	53	80	71	289	500	730	478	66	18	22
17	70	90	43	78	73	327	605	698	550	56	18	22
18	65	68	35	83	71	327	698	605	410	52	18	22
19	65	70	35	85	71	327	838	635	367	58	18	22
20	64	75	35	85	70	347	995	665	327	53	18	21
21	60	78	35	78	80	410	955	665	289	49	17	19
22	60	89	36	71	80	605	915	730	272	48	17	19
23	59	85	36	75	83	455	955	730	254	47	16	19
24	62	85	36	75	83	388	1,040	765	238	45	17	19
25	65	85	46	78	80	327	875	730	238	40	18	19
26	60	87	47	78	82	272	875	605	208	38	27	27
27	60	89	47	75	70	254	955	525	208	36	25	20
28	64	89	75	80	83	327	995	455	156	35	21	23
29	59	75	78	82	-------	347	1,040	432	156	32	20	26
30	64	80	73	80	-------	347	955	410	156	31	19	27
31	78	-------	66	80	-------	289	-------	432	-------	29	19	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	99	46	66.0	0.155	0.18	4,060
November	101	68	84.4	.198	.22	5,020
December	89	35	55.8	.131	.15	3,430
January	85	45	70.6	.166	.19	4,340
February	101	51	76.1	.179	.19	4,230
March	605	85	267	.627	.72	16,400
April	1,040	254	608	1.43	1.60	36,200
May	838	410	649	1.52	1.75	39,900
June	550	156	337	.791	.88	20,100
July	156	29	74.3	.174	.20	4,570
August	33	16	21.4	.050	.06	1,320
September	41	17	24.6	.058	.06	1,460
The year	1,040	16	195	.458	6.20	141,000

MALHEUR RIVER NEAR DREWSEY, OREG.

LOCATION.—Water-stage recorder in SE. ¼ sec. 3, T. 22 S., R. 36 E., half a mile above flow line of Warmsprings Reservoir and 10 miles below Drewsey.

RECORDS AVAILABLE.—April to September, 1923; June, 1926, to September, 1929. June to December, 1920, and April to September, 1921, at station 7 miles upstream.

EXTREMES.—Maximum discharge during year, 2,100 second-feet Mar. 6 (gage height, 6.00 feet); minimum, 1 second-foot Aug. 19 to Sept. 6.

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

REMARKS.—Records good, except those for Dec. 9 to Mar. 1, and those above 400 second-feet or below 3 second-feet, which are fair. Several small diversions above station. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	43	22			200	160	331	78	16	4	1
2	6	43	21			705	165	301	91	14	4	1
3	7	43	19			775	192	292	91	13	3	1
4	8	47	18			800	215	262	75	12	3	1
5	10	50	16			625	225	268	68	10	3	1
6	14	50	14			786	205	256	66	10	3	1
7	18	48	13			825	175	215	64	9	3	2
8	27	47	13			785	175	188	75	8	3	2
9	35	47				364	170	162	91	7	3	2
10	32	47				475	152	146	103	7	3	2
				a 25								
11	31	49				605	132	137	120	6	2	2
12	34	50				361	139	126	101	5	2	2
13	35	49				220	128	130	84	5	2	2
14	39	50				202	143	137	70	5	2	2
15	39	52			a 60	220	283	141	72	4	2	2
16	41	51				235	301	132	103	4	2	2
17	42	50				245	328	124	150	4	2	2
18	42	49				230	283	124	128	4	2	2
19	40	41				225	280	124	101	4	1	2
20	39	41	a 30			215	358	128	87	4	1	2
21	39	47		a 53		235	370	130	77	4	1	2
22	39	50				398	346	141	60	4	1	2
23	39	49				304	346	160	51	4	1	2
24	39	50				245	367	168	43	4	1	2
25	42	49				210	346	182	32	4	1	2
26	42	35		a 50		190	331	188	26	4	1	2
27	41	30				175	331	175	25	4	1	2
28	40	26				180	328	143	24	4	1	2
29	40	24			-------	220	358	155	21	4	1	2
30	41	22			-------	210	367	139	18	4	1	2
31	42	-------			-------	192	-------	99	-------	4	1	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	42	5	31.9	1,960
November	52	22	44.3	2,640
December	----------	----------	26.6	1,640
January	----------	----------	34.0	2,090
February	----------	----------	60.0	3,330
March	825	175	376	23,100
April	370	128	257	15,300
May	331	99	174	10,700
June	150	18	73.2	4,360
July	16	4	6.3	387
August	4	1	2.0	123
September	2	1	1.8	107
The year	825	1	90.8	65,700

a Estimated.

WARMSPRINGS RESERVOIR NEAR RIVERSIDE, OREG.

LOCATION.—Tape gage in SE. ¼ sec. 8, T. 23 S., R. 37 E., on Malheur River 4 miles above junction with South Fork of Malheur River and 4 miles above Riverside. Zero of gage, 3,327.00 feet above mean sea level.

RECORDS AVAILABLE.—January, 1920, to September, 1929.

EXTREMES.—Maximum contents during year, 86,400 acre-feet May 2 (gage height, 51.80 feet); no storage Sept. 18–30.

1920–1929: Maximum contents, 177,900 acre-feet May 19, 1922 (gage height, 75.75 feet); minimum contents, that of Sept. 18–30, 1929.

REMARKS.—Reservoir stores water for Warmsprings irrigation district, which embraces 31,618 acres of irrigable land on either side of Malheur River, extending from the mouth of canyon above Vale to Ontario. Capacity of reservoir at gage height 74.0 feet is 170,000 acre-feet. Records furnished by State engineer of Oregon.

Monthly stage and contents, 1928–29

Date	Gage height	Contents	Change in contents	Date	Gage height	Contents	Change in contents
	Feet	*Acre-feet*	*Acre-feet*		*Feet*	*Acre-feet*	*Acre-feet*
Sept. 30	38.85	49,100	----------	May 2	[a] 51.80	86,400	----------
Oct. 31	36.89	44,200	−4,900	May 31	46.06	69,200	−16,800
Nov. 30	38.31	47,800	+3,600	June 30	41.22	55,000	−14,200
Dec. 31	39.49	50,700	+2,900	July 31	27.75	24,600	−30,400
Jan. 31	40.78	54,000	+3,300	Aug. 31	----------	[b] 6,800	−17,800
Feb. 28	42.17	57,500	+3,500	Sept. 30	----------	0	−6,800
Mar. 31	47.49	73,500	+16,000				
Apr. 30	51.65	86,000	+12,500	The year	----------	----------	−49,100

[a] Maximum for year.
[b] Estimated.

MALHEUR RIVER BELOW WARMSPRINGS RESERVOIR, NEAR RIVERSIDE, OREG.

LOCATION.—Hook gage in SW. ¼ sec. 17, T. 23 S., R. 37 E., 1 mile below Warmsprings Dam, 3 miles above South Fork of Malheur River, and 4 miles northwest of Riverside.

DRAINAGE AREA.—About 1,100 square miles.

RECORDS AVAILABLE.—December, 1914, to July, 1917; March, 1919, to September, 1929. At Riverside, 4 miles downstream from January, 1906, to March, 1907; December, 1908, to May, 1910.

EXTREMES.—Maximum discharge during year, 570 second-feet July 1 and 2 (gage height, 5.00 feet); minimum, 1 second-foot when gates in dam were closed. 1906–7, 1908–1910, 1914–1917, 1919–1929: Maximum discharge, 5,490 second-feet Mar. 2, 1910; no flow during August, 1910.

REMARKS.—Records good. Discharge estimated Oct. 14 to Apr. 25. Diversions for irrigation above station. Flow completely regulated by operation of gates in Warmsprings Dam. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	337	1	1	1	1	1	1	232	406	460	250	305
2	305	1	1	1	1	1	1	282	406	515	250	305
3	305	1	1	1	1	1	1	377	406	473	250	305
4	305	1	1	1	1	1	1	394	394	473	250	309
5	305	1	1	1	1	1	1	345	345	515	250	325
6	305	1	1	1	1	1	1	345	345	520	250	325
7	305	1	1	1	1	1	1	345	337	520	250	325
8	305	1	1	1	1	1	1	369	290	520	250	297
9	270	1	1	1	1	1	1	406	250	520	250	250
10	165	1	1	1	1	1	1	406	250	520	250	165
11	165	1	1	1	1	1	1	406	250	520	250	111
12	165	1	1	1	1	1	1	464	250	520	250	68
13	131	1	1	1	1	1	1	545	250	520	250	45
14	1	1	1	1	1	1	1	545	250	520	310	27
15	1	1	1	1	1	1	1	545	250	520	455	18
16	1	1	1	1	1	1	1	545	250	520	385	16
17	1	1	1	1	1	1	1	545	228	520	377	9
18	1	1	1	1	1	1	1	545	214	515	345	1
19	1	1	1	1	1	1	1	437	214	496	345	4
20	1	1	1	1	1	1	1	373	214	492	345	4
21	1	1	1	1	1	1	1	406	214	473	345	4
22	1	1	1	1	1	1	1	406	228	473	345	4
23	1	1	1	1	1	1	1	406	267	473	345	4
24	1	1	1	1	1	1	1	406	267	392	345	4
25	1	1	1	1	1	1	1	406	267	232	345	4
26	1	1	1	1	1	1	93	406	309	232	345	4
27	1	1	1	1	1	1	232	406	482	232	341	4
28	1	1	1	1	1	1	232	406	406	232	325	5
29	1	1	1	1	-------	1	232	406	415	232	317	4
30	1	1	1	1	-------	1	232	406	450	236	305	4
31	1	-------	1	1	-------	1	-------	406	-------	250	305	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	337	1	109	6,700
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	232	1	34.9	2,080
May	545	232	417	25,600
June	450	214	303	18,000
July	520	232	440	27,100
August	455	250	306	18,800
September	325	1	108	6,430
The year	545	1	145	105,000

MALHEUR RIVER AT NAMORF, OREG.

LOCATION.—Water-stage recorder in NE. ¼ sec. 6, T. 21 S., R. 41 E., half a mile below proposed diversion dam to main canal of Vale project of United States Bureau of Reclamation and 1 mile above Namorf.

RECORDS AVAILABLE.—June, 1926, to September, 1929. At station 2 miles upstream May, 1913, to December, 1923.

EXTREMES.—Maximum discharge during year, 760 second-feet May 18 (gage height, 2.99 feet); minimum, 58 second-feet Nov. 20.

1913–1923, 1916–1929: Maximum discharge, 8,450 second-feet Feb. 7, 1916; minimum, 4 second-feet July 25, 1919.

Discharge of flood of Mar. 1, 1910 (estimated), 12,600 second-feet (gage height, 11.3 feet at former gage). The floods of Mar. 7 and 9, 1894, are said to have been about 0.3 foot higher.

REMARKS.—Records poor. Numerous diversions for irrigation above station. Flow regulated by storage in Warmsprings Reservoir. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	350	73	73	------		139	404	538	468	196	252
2	344	76	------	------		137	381	538	468	187	262
3	311	76	------	------	e310	137	460	520	486	184	265
4	302	76	------	------		141	582	520	434	181	259
5	299	76	------	------		144	565	486			265
6	299	78	------	------	478	139	530	451		e180	286
7	299	80	------	------	348	132	512	451			283
8	293	76	------	------	260	134	512	434			265
9	290	73	------	------	222	130	530	393		187	252
10	247	76	------	------	275	125	548	374		190	175
11	152	73	------	------	305	119	548	400		193	123
12	128	70	------	------	260	123	548	374		196	
13	138	70	------	------	e215	116	620	350		204	
14	141	68	------	------	170	134	722	341	e520	201	
15	90	70	------	------	165	163	741	350		293	
16	86	70	------	------	160	266	741	417		400	
17	83	70	------	------	175	290	741	434		367	
18	83	70	------	92	190	290	760	374		334	
19	80	73	------	------	188	254	741	328		334	
20	80	66	------	------	185	251	684	315		328	
21	83	66	------	------	190	275	538	290		321	e39
22	83	73	------	------	225	296	574	268		308	
23	80		------	------	240	257	592	293		199	
24	80		------	------	185	248	610	324		302	
25	80	e78	------	------	160	235	628	328	370	302	
26	80		------	------	156	220	647	315	201	308	
27	78		------	------	146	278	647	417	187	308	
28	78		------	------	146	414	592	503	184	296	
29	78	83	------	------	148	425	574	451	178	280	
30	78	73	------	------	158	414	503	451	175	265	
31	76	------	------	------	146	------	538	------	181	246	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	350	76	160	9,840
November	83	66	74.1	4,410
December	------	------	e65.0	4,000
January	------	------	e75.0	4,610
February	------	------	e85.0	4,720
March	------	146	227	14,000
April	425	116	214	12,700
May	760	381	591	36,300
June	538	268	401	23,900
July	------	175	443	27,200
August	400	------	253	15,600
September	286	------	114	6,780
The year	760	------	227	164,000

e Estimated.

MALHEUR RIVER NEAR HOPE, OREG.

LOCATION.—Water-stage recorder in SW. ¼ sec. 5, T. 19 S., R. 43 E., half a mile above intake of Vines Canal and 6½ miles west of Hope.

RECORDS AVAILABLE.—May, 1919, to September, 1929.

EXTREMES.—Maximum discharge during year, 633 second-feet May 19 (gage height, 2.48 feet); minimum, 36 second-feet Sept. 27 (gage height, 0.63 foot). 1919–1929: 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 for Oct. 7, Nov. 23–26, Nov. 29 to Mar. 9, and Mar. 17, which are fair. Several small diversions upstream. Flow regulated to a large extent by storage in Warmsprings Reservoir. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	356	90					140	342	475	430	176	233
2	356	90					134	333	486	425	176	237
3	337	90					134	347	465	497	176	237
4	347	90					134	435	455	455	172	233
5	361	90				390	145	486	450	450	172	251
6	375	90					145	455	400	492	169	266
7	375	90					134	440	385	497	169	270
8	375	90					142	420	420	502	172	274
9	375	92					142	410	380	502	172	255
10	375	93				230	134	460	361	497	176	227
11	294	92				410	129	445	375	492	182	172
12	255	93				328	124	430	347	492	185	129
13	255	93				220	129	470	315	486	189	103
14	237	90				176	127	574	306	486	189	87
15	192	92			90	145	220	603	324	492	262	72
16	124	92	70	80		127	255	609	356	486	324	63
17	105	92				146	306	609	390	486	315	58
18	100	92				166	302	621	361	492	302	49
19	98	92				176	262	627	298	492	281	44
20	93	92				176	240	541	294	470	281	41
21	90	92				179	251	460	274	470	281	40
22	90	92				196	270	497	262	450	281	39
23	90	92				255	240	514	244	445	277	38
24	90	92				206	230	519	281	435	274	38
25	90	92				153	220	536	281	400	285	37
26	90	92				160	202	546	266	237	285	37
27	90	93				156	196	546	262	199	285	37
28	90	93				145	298	530	460	179	277	39
29	90	90			-------	142	356	497	385	176	266	39
30	90	80			-------	160	352	450	385	172	255	40
31	90	-------			-------	153	-------	475	-------	166	237	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	375	90	206	12,700
November	----------	----------	91.1	5,420
December	----------	----------	70.0	4,300
January	----------	----------	80.0	4,920
February	----------	----------	90.0	5,000
March	----------	127	249	15,300
April	356	124	203	12,100
May	627	333	491	30,200
June	486	244	358	21,300
July	502	166	418	25,700
August	324	169	234	14,400
September	274	37	123	7,320
The year	627	37	43.5	159,000

MALHEUR RIVER BELOW NEVADA DAM, NEAR VALE, OREG.

LOCATION.—Water-stage recorder in SW. ¼ sec. 21, T. 18 S., R. 45 E., 300 feet below Nevada Dam and head gate of Nevada Canal and 1½ miles below Vale.

RECORDS AVAILABLE.—May, 1926, to September, 1929. At station at Vale, 1¼ 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 1,300 second-feet Mar. 4 (gage height, 2.85 feet); minimum, 2 second-feet Sept. 23 (gage height, −0.06 foot).

1890–1, 1895–1897, 1903–1907, 1908–1914, 1919, 1926–1929: Maximum discharge, 22,800 second-feet Mar. 2, 1910 (gage height, 19.5 feet); minimum, that of Sept. 23, 1929.

REMARKS.—Records good, except those for July to September and for estimated periods, which are fair. Several diversions for irrigation above station. Flow regulated by storage in Warmsprings Reservoir. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	160	35	90	108	94	145	160	56	49	24	8	18
2	164	34	86	101	88	252	151	48	67	14	8	18
3	167	35	86	99	86	264	140	45	62	23	8	15
4	167	36	84		90	560	142	59	77	30	8	15
5	170	36	88		96	846	157	145	77	25	7	15
6	183	38	68		88	732	154	102	67	77	7	15
7	192	38	68			596	145	59	53	79	8	19
8	199	37	66			392	142	52	63	70	8	19
9	220	37	64	a 90		340	151	50	145	63	8	19
10	223	40	66			312	145	50	164	41	8	12
					a 78							
11	209	37	68			506	134	50	140	30	8	21
12	145	41	75			494	129	50	157	23	8	18
13	123	41	81			312	137	70	120	22	8	18
14	123	52	81			223	132	108	137	23	14	17
15	92	77			96	199	189	173	137	22	22	17
16	88	99		84	108	179	264	173	a 170	25	20	16
17	88	104		84	101	176	345	164	202	24	18	14
18	88	99		88	108	183	335	170	203	32	18	7
19	88	96		88	111	192	321	176	175	43	18	3
20	88	104			106	192	273	160	170	43	14	
21	86	86	a 78		104	196	252	48	151	40	13	3
22	88	86		a 88	99	192	285	45	90	36	13	3
23	88	96			96	264	252	43	53	28	14	2
24	a 62	101			116	264	223	43	45	25	14	2
25	35	104			132	223	176	43	a 45	23	17	3
26	35	106		88	160	199	94	55	45	19	199	3
27	35	108		81	123	183	66	58	a 45	14	19	3
28	36	104		88	123	164	66	50	42	12	19	3
29	37	101	94	90	-------	151	126	43	42	8	20	3
30	37	94	101	99	-------	164	96	42	30	8	20	2
31	37	-------	101	99	-------	157	-------	43	-------	8	20	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	223	35	115	7,070
November	108	34	70.1	4,170
December	101	----------	79.3	4,880
January	108	----------	90.5	5,560
February	160	----------	98.2	5,450
March	846	145	298	18,300
April	345	66	179	10,700
May	176	42	79.8	4,910
June	206	30	102	6,070
July	79	8	30.8	1,890
August	22	7	13.4	824
September	21	2	11.2	666
The year	846	2	97.3	70,500

a Estimated.

NORTH FORK OF MALHEUR RIVER NEAR BEULAH, OREG.

LOCATION.—Water-stage recorder in SE. ¼ sec. 22, T. 19 S., R. 37 E., 1 mile below Beulah and 14 miles north of Juntura.

RECORDS AVAILABLE.—June, 1926, to September, 1929.

EXTREMES.—Maximum discharge during year, 422 second-feet Mar. 10 (gage height, 3.76 feet); minimum, 17 second-feet Aug. 28.

1926–1929: Maximum discharge, 1,410 second-feet Mar. 11, 1928 (gage height, 7.30 feet); minimum, 14 second-feet July 30, 1926 (gage height, 0.53 foot).

REMARKS.—Records fair. Small diversions for irrigation above station; below, practically entire summer flow is diverted above Juntura. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	42	57	65		65	99	194	143	56	25	
2	43	57	43		75	106	173	138	54	28	
3	45	61	45		85	111	180	130	49	28	
4	47	64			90	117	194	121	45	24	
5	55	63			100	114	201	117	47	23	
6	53	60			99	99	180	110	44	23	
7	51	58			90	87	166	116	44	23	19
8	49	55			98	100	154	124	44	22	
9	48	62			132	94	147	129	44	23	
10	46	61			295	86	143	166	42	23	
11	48	60			152	99	137	155	38	24	
12	50	59		65	94	83	146	139	36	23	
13	52	58			97	92	160	129	34	23	20
14	54	64			92	101	173	124	32	22	18
15	55	61			96	122	180	173	31	22	18
16	60	58			115	112	180	180	30	22	18
17	58	54	50		124	117	180	143	30	22	18
18	54	42			122	118	173	130	29	23	18
19	52	45			120	134	173	118	27	23	18
20	52	55			124	157	180	101	26	23	20
21	53	58			180	160	194	97	24	23	20
22	53	60		68	180	160	208	90	25	23	21
23	55	65		60	132	173	222	84	25	24	23
24	53	63		72	112	173	244	83	23	24	24
25	54	66		62	112	180	252	76	21	23	29
26	54	65		73	101	194	229	70	23	21	33
27	54	64		60	97	201	208	68	22	21	37
28	55	56		67	112	215	180	60	21	17	35
29	55	47		-------	115	215	166	58	23	18	33
30	55	47		-------	104	201	154	58	24	19	31
31	59	-------		-------	101	-------	138	-------	25	19	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	60	42	52.1	3,200
November	66	42	58.2	3,460
December	----------	----------	[a] 50.1	3,080
January	----------	----------	[a] 60.0	3,690
February	----------	----------	[a] 65.2	3,620
March	295	65	116	7,130
April	215	86	134	7,970
May	252	137	181	11,100
June	180	58	114	6,780
July	56	21	33.5	2,060
August	28	17	22.6	1,390
September	37	----------	22.1	1,320
The year	295	17	75.8	54,800

[a] Estimated.

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, 1929.

EXTREMES.—Maximum discharge during year (estimated), 4,800 second-feet May 25; minimum (estimated), 320 second-feet Dec. 4.

1921–1929: Maximum discharge, 10,600 second-feet May 26, 1928 (gage height, 8.0 feet); minimum probably less than 300 second-feet Dec. 18, 1924.

REMARKS.—Records fair. Practically no diversions above station. Gage-height record furnished by United States Forest Service.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a 550	a 520	a 420	426	a 420	398	514	a 1,400	2,800	a 1,920	645	426
2	a 550	a 510	a 400	484	426	398	514	1,350	a 2,700	a 1,800	610	426
3	578	a 500	351	484	484	398	578	1,460	2,280	a 1,690	610	426
4	a 650	a 510	a 320	a 480	455	398	680	1,460	2,150	a 1,590	610	426
5	a 710	a 500	a 360	a 460	426	426	645	1,350	2,400	a 1,490	610	426
6	a 650	a 495	a 390	a 450	426	426	578	1,200	a 2,740	a 1,400	578	426
7	a 600	a 490	426	a 450	371	426	545	1,160	3,090	a 1,340	578	426
8	a 570	484	a 455	a 460	a 360	426	545	a 1,240	3,400	a 1,280	545	426
9	a 550	484	484	a 460	a 350	455	578	a 1,460	3,400	a 1,220	a 545	426
10	a 540	a 475	455	a 470	a 360	610	484	a 1,410	3,720	1,160	514	426
11	a 530	a 475	484	a 470	a 370	610	545	1,460	3,560	a 1,110	514	426
12	a 520	a 470	455	a 470	a 400	514	514	a 1,750	3,400	1,060	a 514	426
13	a 520	a 470	484	a 460	a 410	484	514	a 2,000	3,560	1,020	514	a 425
14	a 520	a 470	455	a 460	a 420	484	545	a 2,200	3,720	1,000	514	398
15	a 520	a 470	426	a 440	426	484	610	2,280	3,890	a 980	514	398
16	a 520	a 450	a 420	a 420	426	545	680	2,530	4,760	980	514	398
17	a 530	a 440	a 430	a 410	426	545	825	2,530	3,720	900	484	371
18	a 530	426	a 420	a 400	426	545	900	2,530	a 3,190	a 875	484	371
19	a 520	371	a 410	a 400	371	545	980	2,530	2,660	a 850	484	371
20	a 510	a 450	a 400	a 390	426	545	1,020	2,800	2,530	825	484	371
21	a 510	a 500	a 390	a 390	426	610	a 980	3,400	2,530	a 806	455	371
22	a 500	484	a 390	a 390	398	578	a 940	3,720	2,660	788	455	a 380
23	a 490	484	a 390	a 390	426	545	1,020	4,400	a 2,630	750	455	a 400
24	a 490	484	a 400	a 390	398	484	1,020	4,760	a 2,600	750	455	a 410
25	484	a 460	a 410	a 400	371	484	980	a 4,800	a 2,560	715	a 484	a 420
26	a 480	a 480	a 430	a 400	361	484	1,060	a 3,900	a 2,520	680	514	a 420
27	a 475	484	a 450	a 410	398	484	1,300	2,940	a 2,430	680	455	a 420
28	a 475	a 460	a 480	a 410	371	545	1,460	2,530	a 2,310	680	426	a 430
29	a 475	a 430	a 470	a 410	------	610	1,680	2,400	a 2,180	a 662	426	a 430
30	a 490	a 400	a 450	a 410	------	578	1,460	2,530	a 2,070	645	426	a 430
31	a 530	------	a 420	a 420	------	514	------	2,530	------	645	455	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	710	475	534	0.685	0.79	32,800
November	520	371	471	.605	.68	28,000
December	484	320	423	.543	.63	26,000
January	484	390	431	.553	.64	26,500
February	484	350	405	.520	.54	22,500
March	610	398	503	.646	.74	30,900
April	1,680	514	823	1.06	1.18	49,000
May	4,800	1,160	2,390	3.07	3.54	147,000
June	4,760	2,070	2,940	3.77	4.21	175,000
July	1,920	645	1,040	1.34	1.54	64,000
August	645	426	512	.657	.76	31,500
September	430	371	411	.528	.59	24,500
The year	4,800	320	908	1.17	15.84	658,000

a 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, 1929.

EXTREMES.—Maximum discharge during year, 6,200 second-feet May 25 (gage height, 5.9 feet); minimum (estimated), 420 second-feet Dec. 4.

1921–1929: 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, Oct. 30 to Nov. 3, Nov. 26 to Dec. 4, Dec. 6 to Feb. 27, Mar. 2–16, Sept. 14–16, 18-21, 23-28, and 30, which are fair. Small diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	626	660	520	580	560	505	770	2,110	3,380	2,360	734	515
2	626	650	500	600	570	510	783	2,110	3,380	2,200	710	505
3	674	630	460	600	580	520	842	2,200	3,140	2,060	704	510
4	716	638	420	590	590	530	975	2,310	2,970	1,960	686	505
5	891	632	451	570	580	550	1,050	2,110	2,970	1,830	656	505
6	863	638	490	560	560	570	940	1,920	3,260	1,740	650	505
7	752	644	530	570	530	600	835	1,830	3,620	1,610	638	500
8	722	614	560	580	510	700	822	1,880	3,980	1,570	626	495
9	698	614	590	590	500	800	783	2,200	4,240	1,480	608	495
10	686	632	600	590	500	900	722	2,160	4,370	1,440	596	490
11	674	626	610	590	520	1,000	752	2,200	4,240	1,400	590	485
12	662	602	580	590	530	970	728	2,630	4,110	1,320	574	480
13	662	602	590	590	540	850	734	3,260	4,110	1,280	562	480
14	662	626	600	580	540	780	816	3,500	4,240	1,200	552	471
15	662	620	570	570	540	760	1,050	3,500	4,370	1,160	546	462
16	662	584	540	560	540	820	1,090	3,620	5,040	1,120	546	454
17	668	596	560	530	550	828	1,240	3,740	5,180	1,090	540	445
18	668	546	550	520	540	802	1,360	3,620	4,110	1,050	552	450
19	650	510	530	510	510	790	1,570	3,740	3,500	975	552	460
20	650	568	520	500	530	822	1,830	3,980	3,260	975	540	470
21	638	644	510	490	540	940	1,740	4,370	3,140	975	530	480
22	632	602	500	490	540	940	1,650	4,900	3,140	898	530	500
23	626	602	500	490	530	822	1,740	5,460	3,140	870	520	503
24	626	602	510	500	510	758	1,830	6,050	3,030	849	520	506
25	620	568	530	500	500	722	1,780	6,050	2,970	822	525	509
26	608	580	560	510	490	692	1,830	5,040	2,970	809	562	511
27	608	590	590	520	510	698	2,060	4,240	2,920	776	557	514
28	608	560	630	520	510	790	2,460	3,620	2,740	764	530	517
29	608	530	610	520	-------	891	2,580	3,260	2,630	746	520	520
30	630	500	590	530	-------	870	2,520	3,140	2,580	728	520	520
31	680	-------	560	540	-------	796	-------	3,140	-------	716	520	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	891	608	670	0.558	0.64	41,200
November	660	500	600	.500	.56	35,700
December	630	420	544	.453	.52	33,400
January	600	490	548	.457	.53	33,700
February	590	490	534	.445	.46	29,700
March	1,000	505	759	.632	.73	46,700
April	2,580	722	1,330	1.11	1.24	79,100
May	6,050	1,830	3,350	2.79	3.22	206,000
June	5,180	2,580	3,560	2.97	3.31	212,000
July	2,360	716	1,250	1.04	1.20	76,900
August	734	520	581	.484	.56	35,700
September	520	445	492	.410	.46	29,300
The year	6,050	420	1,190	.992	13.43	859,000

PAYETTE RIVER AT BANKS, IDAHO

LOCATION.—Staff gage in SE. ¼ sec. 29, T. 9 N., R. 3 E., three-eighths of a mile below confluence of North and South Forks of Payette River and a fifth of a mile above Banks.

DRAINAGE AREA.—2,120 square miles.

RECORDS AVAILABLE.—May, 1922, to September, 1929 (station discontinued).

EXTREMES.—Maximum discharge during year, 11,400 second-feet May 25 (gage height, 9.2 feet); minimum (estimated), 630 second-feet Dec. 4.

1922–1929: Maximum discharge, 22,900 second-feet May 26, 1928 (gage height, 13.7 feet); minimum, 455 second-feet Dec. 18, 1924.

REMARKS.—Records good except those for estimated periods (Dec. 3–9, 16–25, Jan. 12 to Feb. 28, Mar. 2, 10–13, Apr. 20 to May 12, June 24 to July 5, Aug. 18–24, Sept. 29 and 30), which are fair. Several diversions for irrigation above station. Flow slightly regulated at outlet of Payette Lake and Lake Fork Reservoir. Between the station at Banks and Horseshoe Bend the river leaves the granite and enters a lava formation, and a loss occurs, which ranges from 2 per cent to about 4 per cent of the mean annual flow.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	915	1,020	738	844	850	863	1,450	4,600	6,200	3,800	1,130	888
2	915	990	717	844	870	863	1,520	4,200	5,700	3,500	1,100	863
3	1,020	965	650	844	850	863	1,660	4,200	5,530	3,100	1,080	863
4	1,060	990	630	844	870	888	1,980	4,200	5,330	2,800	1,020	839
5	1,500	1,020	650	867	880	913	1,980	4,000	5,190	2,600	1,020	839
6	1,270	1,060	700	844	800	939	1,860	3,900	5,700	2,340	1,020	815
7	1,180	1,020	750	844	760	965	1,620	3,800	6,600	2,250	1,020	792
8	1,120	990	800	844	710	992	1,450	3,700	7,030	2,160	1,020	792
9	1,060	1,020	850	867	680	1,050	1,420	3,800	7,430	2,070	992	769
10	1,040	1,040	940	844	680	1,500	1,310	3,800	7,800	1,900	992	769
11	1,020	1,090	965	800	720	1,500	1,450	3,800	8,230	1,780	992	769
12	990	1,150	940	790	780	1,500	1,450	4,400	8,030	1,740	992	746
13	990	1,210	915	790	810	1,500	1,450	5,190	8,200	1,660	1,020	724
14	990	965	890	780	820	1,220	1,590	5,190	8,050	1,590	1,020	724
15	990	1,020	867	780	820	1,250	1,780	5,530	8,200	1,560	1,020	702
16	965	965	830	780	820	1,310	1,980	5,710	8,600	1,520	1,020	702
17	990	940	860	780	820	1,420	2,340	5,890	8,900	1,480	992	681
18	990	890	850	750	810	1,310	2,730	5,890	8,200	1,450	970	681
19	965	844	830	730	810	1,380	3,060	6,450	8,050	1,420	960	660
20	940	844	800	710	810	1,480	3,800	7,840	7,430	1,420	950	660
21	915	890	800	700	810	1,700	4,000	8,260	7,030	1,380	950	660
22	940	915	800	690	810	1,590	4,100	8,900	6,200	1,340	960	681
23	940	965	800	690	820	1,420	4,400	10,000	5,530	1,310	940	681
24	940	940	800	700	820	1,380	4,600	10,900	5,000	1,250	930	681
25	940	890	800	700	810	1,310	4,300	11,400	4,800	1,220	965	702
26	940	1,020	915	710	810	1,280	4,300	10,000	4,700	1,190	965	702
27	940	1,020	965	720	820	1,280	4,700	9,120	4,600	1,190	939	702
28	915	890	1,040	730	830	1,480	5,000	7,030	4,500	1,190	939	724
29	915	758	990	750	------	1,660	5,200	6,830	4,400	1,160	913	700
30	965	738	844	760	------	1,590	5,300	6,640	4,100	1,160	913	700
31	1,040	------	844	780	------	1,520	------	6,450	------	1,130	888	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,500	915	1,010	62,100
November	1,210	738	969	57,700
December	1,040	630	831	51,100
January	867	690	778	47,800
February	880	680	804	44,700
March	1,700	863	1,290	79,300
April	5,300	1,310	2,790	166,000
May	11,400	3,700	6,180	380,000
June	8,900	4,100	6,530	389,000
July	3,800	1,130	1,800	111,000
August	1,130	888	988	60,800
September	888	660	740	44,000
The year	11,400	630	2,060	1,490,000

PAYETTE RIVER NEAR HORSESHOE BEND, IDAHO

LOCATION.—Water-stage recorder in SW. ¼ SW. ¼ sec. 14, T. 7 N., R. 2 E., 100 feet east of tracks of Idaho Northern Branch of Oregon Short Line Railroad and 1½ miles northeast of Horseshoe Bend.

DRAINAGE AREA.—2,230 square miles.

RECORDS AVAILABLE.—February, 1906, to September, 1916; July, 1919, to September, 1929. Prior to November, 1912, at station in sec. 2, 2 miles upstream.

EXTREMES.—Maximum discharge during year, 11,100 second-feet May 25 (gage height, 6.44 feet); minimum, 505 second-feet Dec. 3 (gage height, 0.60 foot).

1906–1916, 1919–1929: 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 for Dec. 22 to Mar. 8 and Mar. 10–12, which are fair. Several diversions for irrigation above station; none between this station and one at Banks. Flow slightly regulated at outlet of Payette Lake and Lake Fork Reservoir. Between the stations at Banks and Horseshoe Bend, the river leaves the granite and enters a lava formation, which probably is the cause for the loss in flow between these stations. Gage-height record furnished by Idaho Power Co.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	828	977	796				1,440	4,460	6,350	3,630	1,040	846
2	837	959	719			800	1,480	3,990	6,120	3,370	1,040	828
3	896	923	566				1,580	3,990	5,470	2,960	1,020	804
4	977	923	610				1,810	3,990	5,260	2,640	986	788
5	1,160	941	594				1,940	3,810	5,260	2,420	968	788
6	1,270	977	658			900	1,810	3,720	5,680	2,220	959	788
7	1,150	986	698				1,640	3,540	6,350	2,070	986	780
8	1,090	950	748				1,490	3,460	6,820	2,000	977	772
9	1,040	941	788			950	1,470	3,630	7,300	1,940	950	756
10	1,000	959	923				1,400	3,630	7,800	1,810	950	740
11	977	977	941			1,500	1,370	3,630	7,800	1,710	959	733
12	950	995	880				1,370	4,080	7,800	1,600	968	719
13	932	1,010	862			1,210	1,350	4,850	7,550	1,540	968	719
14	932	995	888			1,210	1,470	5,360	7,550	1,490	977	698
15	932	941	804		800	1,220	1,710	5,580	7,800	1,460	986	684
16	923	932	764	750		1,270	1,810	5,790	8,330	1,410	950	670
17	923	950	812			1,340	2,140	6,010	8,330	1,400	923	664
18	932	837	804			1,340	2,500	5,900	8,050	1,410	932	652
19	914	705	772			1,320	3,040	6,120	7,800	1,430	923	646
20	896	788	756			1,350	3,540	6,580	7,300	1,410	905	634
21	880	923	740			1,470	3,810	7,300	6,580	1,360	905	628
22	871	914				1,570	3,900	8,570	6,120	1,280	923	658
23	871	914	750			1,470	4,270	9,640	5,580	1,230	905	652
24	888	905				1,360	4,460	10,500	4,950	1,210	888	664
25	880	871				1,320	4,180	10,800	4,650	1,170	905	664
26	880	905				1,250	4,180	9,920	4,560	1,140	950	664
27	880	923				1,240	4,360	9,100	4,460	1,150	941	698
28	871	862	1,000			1,370	4,850	8,310	4,360	1,160	896	719
29	871	772			------	1,530	5,050	7,060	4,180	1,110	888	691
30	871	698			------	1,590	5,160	6,580	3,900	1,060	896	677
31	950	------			------	1,520	------	6,350	------	1,040	888	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,270	828	944	58,000
November	1,010	698	912	54,300
December	----------	----------	810	49,800
January	----------	----------	750	46,100
February	----------	----------	800	44,400
March	----------	----------	1,240	76,200
April	5,160	1,350	2,690	160,000
May	10,800	3,460	6,010	370,000
June	8,830	3,900	6,370	379,000
July	3,630	1,040	1,700	105,000
August	1,040	888	947	58,200
September	846	628	714	42,500
The year	10,800	----------	1,990	1,440,000

PAYETTE RIVER NEAR EMMETT, IDAHO

LOCATION.—Water-stage recorder in sec. 22, T. 7 N., R. 1 W., three-eighths of a mile below Black Canyon Dam and 5 miles northeast of Emmett.

RECORDS AVAILABLE.—June, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, 11,600 second-feet May 25 (gage height, 8.94 feet); minimum, 135 second-feet January 26 (gage height, 1.45 feet).

1925–1929: 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. Diversions for irrigation above station. Flow slightly regulated by operation of gates in Black Canyon Dam and by storage in reservoirs upstream. Gage-height record furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	522	1,080	1,010	909	927	909	1,480	4,790	6,050	3,160	674	530
2	538	1,080	1,030	828	963	936	1,870	4,130	6,050	2,950	674	465
3	575	1,020	1,040	1,080	864	1,040	1,640	4,130	5,130	2,550	658	444
4	682	972	981	927	1,020	1,110	1,380	4,130	4,960	2,170	605	465
5	794	963	802	819	1,020	1,140	2,360	3,970	4,960	2,050	538	451
6	1,150	1,030	746	714	936	1,260	2,050	3,820	5,310	1,870	560	444
7	909	1,100	746	642	828	1,380	1,430	3,600	5,860	1,760	590	451
8	846	1,090	810	730	828	1,380	1,380	3,440	6,630	1,700	598	458
9	828	1,020	927	846	706	1,480	1,640	3,600	7,230	1,540	575	451
10	778	990	1,030	927	706	2,230	1,810	3,670	7,640	1,480	545	404
11	794	1,020	1,090	945	819	2,950	1,700	3,520	7,640	1,430	590	391
12	690	1,040	1,100	873	909	1,990	1,700	3,970	7,640	1,330	590	404
13	714	1,040	1,110	891	909	1,700	1,540	4,790	7,640	1,170	590	404
14	754	1,110	1,170	909	909	1,330	2,110	5,490	7,640	1,100	598	378
15	936	1,050	1,080	909	891	1,120	2,290	5,860	7,850	1,110	620	378
16	972	1,040	1,010	900	882	1,590	2,360	6,050	8,920	981	598	384
17	945	990	999	900	990	1,590	2,680	6,050	8,920	1,010	568	391
18	954	963	990	900	963	1,330	3,020	6,050	8,060	1,100	530	378
19	972	1,210	990	918	900	1,270	3,520	6,050	7,850	1,090	552	378
20	963	1,100	999	945	864	1,330	4,130	6,630	7,030	1,040	590	372
21	963	1,140	954	855	1,010	1,330	4,450	7,430	6,630	1,010	545	391
22	927	1,240	819	855	918	1,760	4,290	8,480	6,050	936	530	391
23	909	1,260	698	746	900	1,990	4,620	9,580	5,490	837	560	417
24	936	1,330	682	730	909	1,810	4,960	10,700	4,620	819	545	430
25	963	1,230	674	794	936	1,700	4,620	11,000	4,290	770	530	417
26	981	1,180	762	882	918	1,540	4,620	10,000	4,130	746	598	417
27	927	1,230	1,040	981	963	1,260	4,790	9,140	4,050	746	642	424
28	909	1,200	1,170	936	936	1,220	5,130	8,060	3,820	786	575	472
29	936	1,110	1,200	810	-------	1,700	5,310	7,030	3,670	770	538	500
30	909	963	1,260	786	-------	1,810	5,670	6,240	3,520	666	560	458
31	954	-------	1,100	864	-------	1,810	-------	6,050	-------	650	538	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,150	522	859	52,800
November	1,330	963	1,090	64,900
December	1,260	674	968	59,500
January	1,080	642	863	53,100
February	1,020	706	904	50,200
March	2,950	909	1,520	93,500
April	5,670	1,380	3,020	180,000
May	11,000	3,440	6,050	372,000
June	8,920	3,520	6,180	368,000
July	3,160	650	1,330	81,800
August	674	530	581	35,700
September	530	372	425	25,300
The year	11,000	372	1,980	1,440,000

DEADWOOD RIVER AT BEAVER CREEK RANGER STATION, NEAR LOWMAN, IDAHO

LOCATION.—Water-stage recorder in NE. ¼ 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, 1929.

EXTREMES.—Maximum discharge during year, 1,040 second-feet May 23 and 24 (gage height, 4.3 feet); minimum, 35 second-feet Nov. 15 (gage height, 1.40 feet).

1926–1929: Maximum discharge, 2,150 second-feet May 26, 1928 (gage height, 5.67 feet); minimum, that of Nov. 15, 1928.

REMARKS.—Records good except those for Nov. 15 to Apr. 20, which are fair. No regulation or diversions above station. Gage-height record and results of three discharge measurements furnished by United States Bureau of Reclamation.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	72	66				40	70	196	548	256	94	59
2	70	62				40	70	215	501	240	94	56
3	84	62				40	70	243	448	228	91	55
4	85	62	40			50	80	233	448	215	86	55
5	114	65				50	90	210	488	203	84	56
6	99	65				50	80	208	544	191	82	58
7	86	60				50	70	210	595	184	84	58
8	84	60		60		50	70	243	620	178	80	58
9	80	63				60	60	273	645	171	80	58
10	76	63				70	60	259	670	162	78	58
11	73	62				80	70	299	605	156	78	55
12	70	63				70	60	363	615	152	76	58
13	70	62			60	70	60	437	620	144	73	56
14	69	62				60	70	468	635	140	73	55
15	69	50				60	80	480	660	156	70	51
16	69	50				70	80	509	779	130	69	51
17	70	60				70	80	522	630	125	67	51
18	70	40				70	90	509	522	121	69	50
19	67	40				70	90	553	464	121	65	50
20	66		50			70	90	620	441	118	63	50
21	65					70	91	713	430	116	63	55
22	63					70	101	814	419	111	62	56
23	63					70	129	910	401	109	60	56
24	65			50		60	130	975	380	106	59	62
25	63	55			40	60	138	880	370	104	63	60
26	62				40	60	164	680	353	99	76	60
27	62				40	60	200	566	330	96	66	66
28	60				40	70	222	505	311	94	62	60
29	60					70	251	472	296	93	62	59
30	60					70	218	480	273	90	60	59
31	65					70		522		91	62	

Month	Maximum	Minimum	Mean	Run-off per square mile	Run-off Inches	Run-off Acre-feet
October	114	60	72.0	0.667	0.77	4,430
November	66	40	57.4	.531	.59	3,420
December			47.7	.442	.51	2,930
January			54.8	.507	.58	3,370
February			57.1	.529	.55	3,170
March	80	40	61.9	.573	.66	3,810
April	251	60	104	.963	1.07	6,190
May	975	196	470	4.35	5.02	28,900
June	779	273	501	4.64	5.18	29,800
July	256	90	145	1.34	1.54	8,920
August	94	59	72.6	.672	.77	4,460
September	66	50	56.4	.522	.58	3,360
The year	975		142	1.31	17.82	103,000

DEADWOOD RIVER NEAR LOWMAN, IDAHO

LOCATION.—Water-stage recorder in sec. 29, T. 9 N., R. 7 E., 700 feet above mouth of river and 2½ miles west of Lowman.

DRAINAGE AREA.—201 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1929.

EXTREMES.—Maximum discharge during year, 1,800 second-feet May 24; maximum gage height, 4.20 feet Dec. 9; minimum discharge, 65 second-feet Nov. 19 (gage height, 1.15 feet).

1921–1929: Maximum discharge, 4,230 second-feet May 9, 1928 (gage height, 5.17 feet); minimum, that of Nov. 19, 1928.

REMARKS.—Records good except those for Nov. 19 to Feb. 24, Feb. 26 to Mar. 2, and Mar. 4, which are fair. No regulation or diversions above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	126	129				90	129	400	920	405	157	111
2	124	124				90	135	432	874	380	155	107
3	140	122				95	145	489	794	356	152	105
4	150	124	80			100	152	495	769	338	145	105
5	220	124				107	157	432	812	320	140	105
6	180	126				109	143	400	883	303	138	107
7	152	120				113	133	405	960	287	135	109
8	145	109		110		109	131	454	1,000	275	135	107
9	140	122				113	129	558	1,030	265	133	105
10	133	120				140	124	525	1,090	255	131	101
11	131	118				165	131	577	990	241	129	101
12	129	115				135	124	744	980	232	124	101
13	129	126			110	133	129	910	980	223	124	101
14	129	124				120	138	910	990	214	122	101
15	129	107				124	157	920	1,030	208	124	99
16	131	113				129	143	970	1,230	205	122	101
17	133	115				133	200	990	1,030	200	120	99
18	133	89				131	220	960	874	194	122	97
19	131	75	100			129	251	1,020	769	197	120	97
20	126					133	275	1,140	712	186	115	97
21	124					143	268	1,330	690	180	115	103
22	120					143	261	1,510	668	175	111	111
23	122					129	279	1,640	646	173	111	113
24	129			100		124	291	1,740	611	167	109	118
25	124	110			93	122	279	1,600	590	165	115	120
26	122				90	118	324	1,250	564	160	135	118
27	120				90	120	400	1,020	525	157	126	124
28	120				90	131	471	901	501	157	118	122
29	120				-------	145	519	838	471	155	122	120
30	120				-------	140	477	820	432	152	120	115
31	129	-------			-------	129	-------	883	-------	152	115	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	220	120	134	0.667	0.77	8,240
November	129	75	114	.567	.63	6,780
December	----------	----------	95.5	.475	.55	5,870
January	----------	----------	105	.522	.60	6,460
February	----------	----------	107	.532	.55	5,940
March	165	90	124	.617	.71	7,620
April	519	124	224	1.11	1.24	13,300
May	1,740	400	879	4.37	5.04	54,000
June	1,230	432	814	4.05	4.52	48,400
July	405	152	228	1.13	1.30	14,000
August	157	109	127	.632	.73	7,810
September	124	97	107	.532	.59	6,370
The year	1,740	----------	256	1.27	17.23	185,000

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, 1929 (fragmentary).

EXTREMES.—Maximum stage during year, 6.05 feet July 6; minimum, probably occurred in September.

1923–1929: Maximum stage, that of July 6, 1929; minimum, —0.27 foot Sept. 17, 1924.

REMARKS.—Water has been stored in Payette Lake since 1919 and used for irrigation in Payette Valley. Gage-height record furnished by United States Forest Service.

Daily gage height, in feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1									3.95		
2					1.59						
3		1.40	1.41			1.52					4.65
4											4.48
5				1.54							
6							1.60	2.14		6.05	
7											
8	1.58								4.90		
9						1.47					
10		1.40	1.38					2.20			
11											
12				1.52	1.50						3.60
13	1.50						1.61			6.00	
14										5.92	
15			1.41						5.10		
16						1.52				5.80	3.06
17		1.46			1.48						2.90
18								3.16			2.90
19				1.50					5.40		
20	1.56						1.71			5.00	
21											
22			1.36						5.28		
23		1.43			1.46	1.57					
24											2.00
25								4.75			
26				1.52							
27	1.48						1.78			5.10	
28											
29			1.48						5.75		
30						1.56					
31											1.20

NOTE.—From inspection of outflow records collected at gaging station quarter of a mile below, flashboards were evidently installed on Oct. 15, May 31, June 20, 21, 23, 25, 26, 28, 30, July 1, 6, 7, 8, 19, and Sept. 16. Outflow was increased by release of storage water by removal of some of the flashboards on Oct. 19, June 25, 26, 29, July 5, 6, 7, 14, Aug. 17, 18, 19, 21, 22, and 24. No gage readings during September.

NORTH FORK OF PAYETTE RIVER AT LARDO, IDAHO

LOCATION.—Water-stage recorder in sec. 8, T. 18 N., R. 3 E., a quarter of a mile below Lardo.

DRAINAGE AREA.—131 square miles.

RECORDS AVAILABLE.—September, 1908, to June, 1917; May, 1919, to September, 1929.

EXTREMES.—Maximum discharge during year, 2,430 second-feet May 25 (gage height, 5.85 feet); minimum (estimated), 1.5 second-feet Sept. 17–30.

1908–1917, 1919–1929: Maximum discharge, 4,250 second-feet June 5, 1909 (gage height, 7.5 feet); minimum, 1.4 second-feet Oct. 22, 24, and 25, 1926 (gage height, 0.87 foot).

REMARKS.—Records excellent except those estimated, which are fair. Since 1919 flow partly regulated at outlet of Payette Lake during irrigation season. No diversions above station. Gage-height record furnished by United States Forest Service.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	35	30	22	41	a 59	40	48	203	626	159	164	a 232
2	34	30	22	44	61	43	48	216	820	50	186	a 218
3	36	28	22	49	61	43	48	229	840	57	210	a 203
4	38	27	22	50	a 59	42	54	243	875	72	243	a 188
5	42	27	a 22	48	a 56	41	62	254	945	118	a 260	a 173
6	40	27	a 23	a 47	a 54	39	66	269	1,090	175	a 280	a 159
7	40	24	a 23	a 45	a 52	38	66	265	1,290	162	a 300	144
8	40	23	a 23	a 44	a 49	37	75	277	1,420	84	a 310	135
9	39	25	a 24	a 42	a 47	37	74	281	1,540	61	a 330	126
10	39	25	24	a 41	a 45	45	70	297	1,590	61	a 350	118
11	38	24	24	a 39	a 42	49	a 69	317	1,540	60	a 370	110
12	31	24	24	38	40	49	a 69	345	1,500	59	390	106
13	30	24	a 24	a 38	40	49	68	495	1,500	55	a 365	a 98
14	29	25	a 24	a 38	a 39	48	68	650	1,460	195	a 345	91
15	18	27	24	a 38	a 38	47	a 73	775	1,460	321	a 320	86
16	7.6	28	24	a 38	a 37	45	a 78	875	1,860	301	297	54
17	6.7	30	a 24	a 38	36	44	a 83	980	2,100	269	305	
18	5.7	27	a 23	a 38	36	43	a 88	1,060	1,950	265	313	
19	36	26	a 22	38	a 36	42	a 93	1,130	1,770	216	341	
20	55	26	a 20	38	a 36	44	98	1,290	1,500	166	337	
21	52	25	a 19	a 39	a 35	53	a 103	1,500	1,090	156	321	
22	47	25	19	a 40	a 35	53	a 109	1,720	485	144	321	
23	44	24	a 18	a 41	35	52	a 114	2,050	552	137	297	
24	42	24	a 18	a 42	34	52	a 119	2,330	552	131	281	a 1.5
25	40	24	a 19	a 43	35	50	a 124	2,380	540	a 140	281	
26	38	23	a 20	44	35	49	a 130	2,140	552	a 190	a 275	
27	37	24	a 25	a 46	43	47	135	1,820	614	197	a 270	
28	35	22	a 30	a 49	39	46	149	1,590	557	226	a 264	
29	34	20	35	a 51	------	49	191	1,380	525	219	a 258	
30	32	20	38	a 54	------	48	200	1,290	515	197	a 253	
31	31	------	41	a 56	------	49	------	1,060	------	180	247	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	55	5.7	34.6	0.264	0.30	2,130
November	30	20	25.3	.193	.22	1,510
December	41	18	23.9	.182	.21	1,470
January	56	38	43.1	.329	.38	2,650
February	61	34	43.4	.331	.34	2,410
March	53	37	45.6	.348	.40	2,800
April	200	48	92.4	.705	.79	5,500
May	2,380	203	958	7.31	8.43	58,900
June	2,100	485	1,120	8.55	9.54	66,600
July	321	50	156	1.19	1.37	9,590
August	390	164	293	2.24	2.58	18,000
September	232	----------	75.4	.576	.64	4,490
The year	2,380	----------	243	1.85	25.20	176,000

a Estimated.

LAKE FORK OF PAYETTE RIVER ABOVE RESERVOIR NEAR McCALL, IDAHO

LOCATION.—Staff gage in NW. ¼ sec. 8, T. 18 N., R. 4 E., 700 feet above highway bridge, three fourths of a mile below power plant, and 5 miles east of McCall.

RECORDS AVAILABLE.—May, 1926, to September, 1929.

EXTREMES.—Maximum discharge during year, 1,000 second-feet May 22 (gage height, 4.50 feet); minimum, 12 second-feet Sept. 16–20 (gage height, 0.30 foot).

1926–1929: Maximum discharge, 1,620 second-feet June 8, 1927 (gage height, 6.10 feet); minimum, 9 second-feet Aug. 15, 1926.

REMARKS.—Records good except those for Apr. 30, May 1–9, Sept. 21–30 and those above 650 second-feet, which are fair. Diurnal fluctuations at low stages are due to operation of power plant above. No diversions for irrigation above station. Gage-height record furnished by Lake Irrigation District.

Daily and monthly discharge, in second-feet, 1929

Day	Apr.	May	June	July	Aug.	Sept.	Day	Apr.	May	June	July	Aug.	Sept.
1	------	130	439	184	27	14	16	------	439	814	55	16	12
2	------	140	359	149	27	13	17	------	412	583	51	16	12
3	------	160	296	149	26	14	18	------	439	439	47	15	12
4	------	175	346	126	24	14	19	------	495	385	45	15	12
5	------	160	524	112	24	14	20	------	644	346	43	15	12
6	------	135	613	106	23	14	21	------	850	359	39	14	13
7	------	120	583	99	22	14	22	------	1,000	359	37	14	13
8	------	120	583	86	22	14	23	------	962	359	36	14	14
9	------	130	439	86	20	13	24	------	924	359	34	14	14
10	------	141	308	74	19	13	25	------	583	359	32	14	15
11	------	194	467	72	19	13	26	99	412	308	32	14	15
12	------	271	495	67	18	13	27	112	333	296	32	14	16
13	------	385	583	64	18	13	28	141	296	296	31	14	15
14	------	385	524	60	16	13	29	184	308	259	31	14	14
15	------	385	676	55	16	13	30	155	333	214	27	14	13
							31	------	412	------	27	14	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
April 26–30	184	99	138	1,370
May	1,000	120	383	23,600
June	814	214	432	25,700
July	184	27	67.4	4,140
August	27	14	17.8	1,090
September	16	12	13.5	803
The period				56,700

LAKE FORK RESERVOIR NEAR McCALL, IDAHO

LOCATION.—Staff gage in NW. ¼ NW. ¼ sec. 13, T 18 N., R. 3 E., 3 miles east of McCall. Gage set to read elevation above mean sea level.

RECORDS AVAILABLE.—April, 1926, to September, 1929.

EXTREMES.—Maximum contents during year, 15,230 acre-feet May 24 and June 18 (gage height, 5,115.9 feet); minimum, 336 acre-feet Sept. 10 and 11 (gage height, 5,101.7 feet).

1926–1929: Maximum contents that of May 24 and June 18, 1929; no storage Sept. 26–30, 1927, and Sept. 22–30, 1928.

REMARKS.—Elevation at bottom of outlet tunnel, 5,097.0 feet. Stored water is used for irrigation on 6,800 acres of land near Norwood. Gage-height record furnished by Lake Irrigation District.

Daily contents, in acre-feet, of Lake Fork Reservoir near McCall, Idaho, 1929

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1		14,000	14,460	6,652	969	16		14,920	10,970	3,534	
2		14,150	14,310	6,418	872	17	11,420	15,080	10,670	3,372	
3		14,310	14,150	6,186	726	18		15,230	10,390	3,129	
4		14,620	14,000	5,954	579	19	12,930	15,080	10,100	2,887	
5		14,620	13,850	5,722	481	20	13,540	14,920	9,666	2,665	
6		14,620	13,690	5,606	432	21	13,850	14,770	9,379	2,525	
7		14,620	13,540	5,394	384	22	14,460	14,770	9,108	2,455	
8		14,620	13,390	5,182	384	23	14,920	14,620	8,838	2,175	
9		14,620	13,080	4,970	384	24	15,230	14,620	8,703	1,983	
10	7,147	14,620	12,930	4,758	336	25	14,770	14,620	8,298	1,861	
11		14,620	12,470	4,547	336	26	14,460	14,460	7,903	1,739	
12	8,028	14,620	12,020	4,359		27	14,150	14,310	7,525	1,497	
13	8,703	14,620	11,870	4,173		28	13,850	14,150	7,275	1,391	
14		14,620	11,720	3,987		29	13,690	14,000	7,147	1,179	
15		14,620	11,270	3,708		30	13,690	14,000	7,021	1,179	
						31	13,850		6,769	1,126	

LAKE IRRIGATION DISTRICT CANAL NEAR McCALL, IDAHO

LOCATION.—Staff gage in SW. ¼ sec. 13, T. 18 N., R. 3 E., 600 feet below head of canal and 3 miles east of McCall.

RECORDS AVAILABLE.—May, 1926, to September, 1929.

EXTREMES.—Maximum discharge during year, 113 second-feet July 15 (gage height, 4.67 feet); no flow during nonirrigation season.

1926–1929: Maximum discharge, 114 second-feet June 15, 1928 (gage height, 4.72 feet); no flow for long periods each year during nonirrigation seasons.

REMARKS.—Records good. Flow is regulated at head gate of canal. Canal diverts from Lake Fork of Payette River in SW. ¼ sec. 13, T. 18 N., R 3 E., and is used for irrigation of 8,600 acres of land near McCall and Norwood. Gage-height record furnished by water master for Lake Irrigation District.

Daily and monthly discharge, in second-feet, 1929

Day	May	June	July	Aug.	Sept.	Day	May	June	July	Aug.	Sept.
1		74	97	94	50	16		97	112	74	
2		a 81	97	a 88	a 45	17		97	112	74	
3		85	97	85	42	18		97	112	74	
4		85	97	85	42	19		97	112	74	
5		85	97	a 78	42	20	12	a 81	a 110	74	
6		85	97	74	a 25	21	12	74	109	74	
7		85	97	74	16	22	a 17	a 81	109	74	
8		85	a 101	74	16	23	20	85	109	74	
9		85	103	74	16	24	a 32	85	a 101	74	
10		a 92	103	74	16	25	38	85	97	74	
11		97	a 109	74	16	26	38	85	97	74	
12		97	112	74		27	a 43	85	97	74	
13		97	112	74		28	46	85	97	a 59	
14		97	112	74		29	a 54	85	97	50	
15		97	111	74		30	a 66	85	a 95	50	
						31	74		94	50	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May 20–31	74	12	37.7	897
June	97	74	87.7	5,220
July	112	94	103	6,330
August	94	50	73.1	4,490
September 1–11	50	16	29.6	646
The period				17,600

a Estimated.

WEISER RIVER ABOVE CRANE CREEK, NEAR WEISER, IDAHO

LOCATION.—Water-stage recorder in sec. 10, T. 11 N., R. 4 W., 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, 1929.

EXTREMES.—Maximum discharge during year, 5,690 second-feet Mar. 11 (gage height, 6.2 feet); minimum, 14 second-feet Sept. 4 and 5 (gage height, 0.85 foot).

1920–1929: Maximum discharge, about 13,500 second-feet Feb. 4, 1925 (gage height, 10.65 feet); minimum, 10 second-feet July 31, Aug. 1, and 6–18, 1924 (gage height, 0.80 foot).

REMARKS.—Records excellent October, November, and Mar. 11 to July 7; others good except those for Dec. 3 to Mar. 10, and July 9–13, which are fair. Numerous diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	61	117	138	150	175	200	643	1,700	1,160	291	28	16
2	75	114	148				602	1,480	1,170	264	25	16
3	84	111	125				615	1,440	1,040	256	26	14
4	95	111					678	1,390	966	252	26	14
5	111	108					1,010	1,330	932	155	25	14
6	132	114				450	974	1,240	867	148	22	15
7	111	117					875	1,120	875	129	20	16
8	114	120					843	1,050	915	102	23	16
9	123	123				1,200	924	1,070	958		25	16
10	108	135				2,000	940	1,080	1,060	70	26	16
11	100	158				4,140	1,100	1,080	1,020		26	17
12	100	148				2,500	1,340	1,190	949		22	19
13	97	155				1,920	1,210	1,460	891		20	20
14	97	155	160			2,110	2,370	1,760	867	36	20	21
15	95	179				1,980	3,580	1,640	851	35	18	22
16	95	175				1,980	2,300	1,580	1,360	35	16	22
17	97	168				2,110	2,040	1,580	1,520	50	14	22
18	97	168				1,870	1,810	1,520	1,270	50	15	23
19	97	148				1,870	1,870	1,520	1,080	46	15	23
20	97	129				1,640	2,370	1,590	949	46	15	24
21	95	142	140			1,920	2,580	1,760	851	46	15	25
22	92	145				1,810	2,110	1,980	782	44	16	26
23	95	145				1,270	1,920	2,110	722	43	16	33
24	100	145				1,050	1,870	2,240	664	44	16	41
25	100	145				974	1,760	2,040	602	43	16	44
26	100	145	200			843	1,700	1,640	538	43	17	50
27	102	148				775	1,700	1,420	490	36	17	53
28	108	152				820	1,810	1,250	440	29	17	44
29	108	152			-------	875	1,980	1,140	381	26	17	39
30	105	142			-------	820	2,040	1,130	327	26	16	38
31	111	-------			-------	722	-------	1,150	-------	26	16	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	132	61	100	6,150
November	179	108	140	8,330
December	----------	----------	154	9,470
January	----------	----------	150	9,220
February	----------	----------	175	9,720
March	4,140	----------	1,290	79,300
April	3,580	602	1,590	94,600
May	2,240	1,050	1,470	90,400
June	1,520	327	883	52,500
July	291	26	85.5	5,260
August	28	14	19.5	1,200
September	53	14	25.3	1,510
The year	4,140	14	508	368,000

LOST VALLEY RESERVOIR NEAR TAMARACK, IDAHO

LOCATION.—Staff gage in sec. 28, T. 19 N., R. 1 W., 4 miles west of Tamarack and 16 miles north of Council.

DRAINAGE AREA.—30 square miles.

RECORDS AVAILABLE.—May to September, 1924, and May, 1926, to September, 1929.

EXTREMES.—Maximum stage during year, 20.6 feet June 5; no storage subsequent to October and prior to Mar. 25.

1924, 1926–1929: Maximum stage, that of June 5, 1929; minimum, gage not read when reservoir is nearly empty.

REMARKS.—Water from reservoir is used for irrigation in Weiser Valley. Capacity of reservoir is about 6,000 acre-feet between gage heights 0.0 and 21.4 feet. Gage-height record furnished in part by Mesa Orchards Co.

Daily gage height, in feet, 1928–29

Day	Oct.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								12.20
2							15.69	
3	7.03							
4							15.38	
5					20.60			
6								
7				14.70		19.50		
8							14.65	
9								
10				17.20				
11								
12								
13						19.45		
14				20.10				
15							13.50	9.42
16								9.22
17							13.20	
18					20.00			
19				20.40				
20								7.83
21								
22			8.32				12.65	
23								6.13
24								6.08
25								4.29
26								3.04
27								
28						16.60		
29		5.29	9.22					
30								
31						15.80		

LOST CREEK NEAR TAMARACK, IDAHO

LOCATION.—Water-stage recorder in sec. 28, T. 19 N., R. 1 W., a quarter of a 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, 1920, to September, 1921; May, 1924, to September, 1929.

EXTREMES.—Maximum discharge during year, 206 second-feet May 28 (gage height, 2.66 feet); minimum, 0.5 second-foot Sept. 15 (gage height, 0.56 foot).

1910–1914, 1920–21, 1924–1929: Maximum discharge, 688 second-feet May 17 and 18, 1921 (gage height, 4.29 feet); no flow at times gates in dam were closed.

REMARKS.—Records good. No diversions between gage and reservoir; practically entire flow is diverted below during irrigation season. Flow regulated at Lost Valley Reservoir. Gage-height record furnished in part by Mesa Orchards Co.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	May	June	July	Aug.	Sept.	Day	Oct.	May	June	July	Aug.	Sept.
1	a 29	------	157	19	42	21	16	------	------	a 20	56	34	52
2	a 28	------	152	19	38	30	17	------	a 13	a 21	52	30	62
3	27	------	150	17	38	30	18	------	------	21	51	25	61
4	------	------	85	17	41	34	19	------	15	a 21	51	25	57
5	------	------	17	a 17	52	50	20	------	------	a 21	50	25	64
6	------	------	a 17	a 17	52	50	21	------	------	a 22	50	25	72
7	------	------	a 18	17	51	48	22	------	------	a 22	50	20	66
8	------	------	a 18	a 17	45	47	23	------	a 70	a 22	51	16	65
9	------	------	a 18	a 16	40	46	24	------	------	22	50	16	61
10	------	------	a 19	a 15	40	41	25	------	------	22	50	16	38
11	------	------	a 19	a 14	40	44	26	------	------	22	51	16	19
12	------	------	a 19	13	39	43	27	------	128	22	51	16	9.2
13	------	------	a 19	33	39	43	28	------	148	22	52	16	7.9
14	------	11	a 20	66	39	42	29	------	189	21	51	16	7.3
15	------	a 13	a 20	61	36	38	30	------	172	20	50	16	7.1
							31	------	157	------	50	16	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October 1–3	29	27	28.0	167
May 14–31	189	11	75.7	2,700
June	157	17	35.6	2,120
July	66	13	37.9	2,330
August	52	16	31.0	1,910
September	72	7.1	41.8	2,490

a 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 3 miles below head gates.

RECORDS AVAILABLE.—May to September, 1924; May, 1928, to August, 1929.

EXTREMES.—Maximum discharge during year, 32 second-feet July 19; no flow during nonirrigation season.

1924, 1928–29: Maximum discharge, 35 second-feet May 24, 25, 27, and 28, 1924; no flow Sept. 5 and 6, 1924, and during nonirrigation seasons.

REMARKS.—Records fair. Canal diverts from Middle Fork of Weiser River in SE. ¼ NW. ¼ sec. 9, T. 15 N., R. 1 E. Water used for irrigation on the Mesa Orchards and for domestic purposes in the village of Mesa. Gage-height record furnished by Mesa Orchards Co.

Daily and monthly discharge, in second-feet, 1929

Day	July	Aug.	Day	July	Aug.	Day	July	Aug.
1		20	11		16	21	e31	16
2		22	12	29	17	22	30	
3		20	13		17	23	28	
4		e18	14		17	24	e27	
5		17	15		17	25	26	
6		19	16	e30	e16	26	e26	
7		20	17		16	27	25	
8		18	18		e15	28	e24	
9		e18	19	32	14	29	e22	
10		18	20	e31	e15	30	21	
						31	20	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
July 12–31	32	20	27.6	1,090
August 1–21	22	14	17.4	725

e Estimated.

TAILRACE OF RUSH CREEK POWER PLANT 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 to September, 1929.

EXTREMES.—Maximum discharge during period, 4.8 second-feet on several days from June 25 to Aug. 17 (gage height, 0.54 foot); minimum, 2.1 second-feet June 6, Sept. 14-23, 30 (gage height, 0.32 foot).

REMARKS.—Records fair. Diurnal fluctuations due to operation of power plant. Record represents flow used by the Rush Creek power plant. During the low-water period for about nine months of the year the record also represents the entire flow of Rush Creek at the plant except for leakage through diversion dam 1 mile above, amounting to 0.5 to 1.0 second-foot. Gage-height record furnished by Peoples West Coast Hydroelectric Corporation.

Daily and monthly discharge, in second-feet, 1929

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1		3.5	3.6	3.0	16	2.9	3.6	3.6	2.8
2		3.5	3.6	3.0	17	3.4	3.6	3.6	2.6
3		3.5	3.6	3.0	18	3.4	3.6	3.2	2.6
4		3.2	3.2	3.0	19	3.4	3.6	3.5	2.6
5	3.4	3.5	3.6	3.0	20	3.4	3.6	3.2	2.6
6	3.2	3.5	3.6	3.0	21	3.4	2.5	3.4	2.6
7	3.4	3.1	3.6	3.0	22	3.4	3.6	3.4	2.6
8	3.4	3.6	3.6	3.0	23	3.0	3.6	3.4	2.8
9	2.9	3.6	3.6	3.0	24	3.4	3.6	3.4	2.9
10	3.4	3.6	3.6	3.0	25	3.5	3.6	3.2	2.9
11	3.4	3.6	3.4	3.0	26	3.5	3.6	3.2	2.9
12	3.4	4.2	3.6	2.9	27	3.5	3.6	3.2	2.9
13	3.4	3.6	3.6	2.9	28	3.5	3.2	3.2	2.9
14	3.4	3.1	3.6	2.8	29	3.5	3.6	3.1	2.9
15	3.4	3.6	3.6	2.8	30	3.1	3.6	3.1	2.6
					31		3.6	3.0	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
June 5-30	3.5	2.9	3.35	173
July	4.2	2.5	3.51	216
August	3.6	3.0	3.42	210
September	3.0	2.6	2.85	170
The period				769

CRANE CREEK RESERVOIR NEAR MIDVALE, IDAHO

LOCATION.—Staff gage in SE. ¼ sec. 19, T. 12 N., R. 2 W., 10 miles southeast of Midvale.

DRAINAGE AREA.—269 square miles.

RECORDS AVAILABLE.—November, 1923, to September, 1929.

EXTREMES.—Maximum stage during year, 40.5 feet Apr. 16 and 17; no storage Oct. 1 to Feb. 28 and Sept. 25–30.

1923–1929: Maximum stage, 56.3 feet Feb. 22, 1927; no storage Sept. 23, 1928, to Feb. 28, 1929, and Sept. 25–30, 1929.

REMARKS.—Capacity of reservoir is about 60,000 acre-feet at gage height 55 feet. Water is used for irrigation in the lower Weiser Valley. Gage-height record furnished by Crane Creek Reservoir Administration Board.

Daily gage height, in feet, 1929

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1				40.40	39.70	39.15	34.14	25.10
2		6.5	35.8		39.65	39.15	33.90	24.50
3				40.20	39.65		33.60	24.10
4		10.9	36.0	40.20		39.05		23.70
5				40.20	39.60	39.00	33.20	
6		13.2	36.4	40.20	39.60	38.90		22.75
7					39.60		33.00	22.10
8		15.8	36.9	40.10	39.50	38.70	32.90	21.80
9				40.10		38.60	32.60	
10		19.4	37.5	40.10	39.50	38.35	32.30	21.00
11		28.6	38.0	40.10	39.50	38.25	32.00	20.50
12		29.2	38.7	40.10	39.50		31.70	20.00
13		28.8	39.0	40.10	39.50	37.70		19.60
14		28.4	39.5	40.10		37.50	31.30	19.20
15		29.3	40.3	40.10	39.50	37.30	30.80	18.70
16		30.5	40.5	40.10		37.00	30.60	
17		31.6	40.5		39.60	36.80	30.40	17.70
18		32.3	40.35	40.00	39.55	36.70	30.00	17.00
19		33.0	40.1	40.00	39.50	36.50	29.65	16.50
20		33.6	40.4	40.00	39.50	36.40	29.40	15.90
21		34.0	40.4	40.00	39.50			15.00
22			40.2	40.00	39.45		28.40	14.70
23	4.7	34.8	40.0	39.95	39.45	35.65	28.20	13.00
24			40.1	39.95	39.45	35.50	27.70	10.00
25		35.2	40.2	39.90	39.40	35.35		
26			40.3	39.90	39.40		27.10	
27		35.4		39.80	39.35	35.00	26.70	
28			40.3	39.80	39.30	34.90	26.45	
29			40.4	39.80	39.25	34.90	26.10	
30		35.6	40.4	39.75	39.20	34.60	25.90	
31				39.70		34.40	25.50	

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, 1929.

EXTREMES.—Maximum discharge during year, 615 second-feet Mar. 11 and 12 (gage height, 3.08 feet); no flow Oct. 1 to Mar. 9, Mar. 16 to Apr. 14, May 9, 10, Sept. 26–30.

1910–1916, 1924–1929: Maximum discharge, 4,240 second-feet Dec. 3, 1910 (gage height, 8.9 feet); no flow at times when gates in dam are closed.

REMARKS.—Records good. Flow regulated by storage in Crane Creek Reservoir. No large diversions above station. Gage-height record furnished by Crane Creek Reservoir Administration Board.

Daily and monthly discharge, in second-feet, 1929

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	40	12	11	144	120
2	0	0	40	12	11	110	119
3	0	0	40	12	11	109	119
4	0	0	41	12	11	107	119
5	0	0	40	12	17	106	118
6	0	0	40	12	58	104	116
7	0	0	40	12	75	103	112
8	0	0	21	12	78	119	92
9	0	0	0	12	110	141	91
10	261	0	0	12	162	141	88
11	594	0	5	12	144	139	87
12	615	0	12	12	165	139	83
13	563	0	12	12	165	139	82
14	283	0	12	12	162	158	81
15	71	101	12	12	163	176	80
16	0	237	12	12	162	174	78
17	0	286	12	12	171	172	70
18	0	286	12	11	163	163	65
19	0	283	12	11	146	155	63
20	0	283	12	11	131	169	60
21	0	283	12	12	127	178	58
22	0	286	12	12	124	176	55
23	0	127	12	12	116	155	50
24	0	26	12	12	84	139	42
25	0	26	12	12	84	135	22
26	0	28	12	12	86	131	0
27	0	40	9	11	86	133	0
28	0	40	1	11	88	131	0
29	0	40	6	11	110	130	0
30	0	40	23	11	114	125	0
31	0	-------	23	-------	151	122	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
March	615	0	77.0	4,730
April	286	0	80.4	4,780
May	41	0	17.7	1,090
June	12	11	11.8	702
July	171	11	106	6,520
August	178	103	139	8,550
September	120	0	69.0	4,110
The period	615	0	42.1	30,500

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

CRANE CREEK AT MOUTH, NEAR WEISER, IDAHO

LOCATION.—Water-stage recorder in sec. 14, T. 11 N., R. 4 W., just below steel highway bridge, a quarter of a mile above mouth, and 10 miles northeast of Weiser.

DRAINAGE AREA.—312 square miles.

RECORDS AVAILABLE.—July, 1920, to September, 1929.

EXTREMES.—Maximum discharge during year (estimated), 750 second-feet Mar. 12; minimum, 0.3 second-foot May 29 (gage height, 1.37 feet).

1920–1929: Maximum discharge, about 2,350 second-feet about Feb. 7, 1925 (gage height, 6.80 feet); minimum, that of May 29, 1929.

REMARKS.—Records excellent except those estimated, which are good. Small diversions above station. Flow is regulated by head gates at Crane Creek Reservoir.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.4	3.7	5.4			[a] 10	7.4	41	9.0	7.7	140	119
2	5.2	3.3	5.0		[a] 5.0	11	5.4	41	6.2	5.4	107	119
3	5.2	4.0	5.0	[a] 5.5	5.2	12	4.7	42	5.9	4.5	103	116
4	4.5	7.1	6.4			14	5.0	42	4.7	4.5	103	118
5	4.7	7.1	7.1			15	17	41	5.0	5.0	102	116
6	4.2	4.7	4.7	5.9		22	32	38	5.0	32	102	115
7	4.0	5.9	5.0			21	13	38	5.7	66	101	113
8	3.8	7.1	7.7			37	13	36	5.7	67	103	96
9	3.8	4.0	7.7			104	32	6.7	5.7	81	131	93
10	4.0	4.5	7.4		[a] 5.0	407	75	2.0	6.4	146	131	91
11	3.2	6.7	7.7			[a] 700	89	1.4	6.4	128	131	89
12	3.3	7.7	7.1			[a] 750	59	2.8	7.0	152	130	88
13	4.0	5.7	6.7	[a] 5.0		[a] 650	33	6.7	6.7	154	131	84
14	4.7	5.0	6.7			[a] 500	84	6.7	7.4	152	141	82
15	5.0	7.1	5.9			[a] 300	101	6.2	10	150	165	80
16	4.7	7.1	4.7			[a] 200	255	6.4	14	148	167	79
17	4.0	6.7	5.0		5.4	79	328	5.7	12	154	167	75
18	3.5	6.7	4.2			76	328	6.4	12	156	165	66
19	3.5	7.4				56	332	6.4	12	140	141	66
20	3.2	6.4		4.0		46	349	6.2	12	120	154	63
21	2.8	5.9			[a] 5.0	72	342	5.9	12	119	173	60
22	2.8	6.2				42	332	6.4	10	115	173	57
23	2.8	4.2				24	161	6.7	11	113	156	56
24	2.8	6.2		[a] 4.5	4.5	25	35	7.0	10	84	133	49
25	2.8	6.2	[a] 5.0			23	32	7.4	12	81	134	34
26	3.2	6.7			[a] 6.0	18	31	7.7	11	84	130	12
27	5.4	5.9		5.0		14	44	7.0	10	84	128	4.7
28	4.5	6.2				13	46	5.0	8.3	86	128	3.8
29	4.2	6.2		[a] 5.0		12	46	1.3	8.6	103	126	3.5
30	4.0	6.4				9.6	44	1.9	8.6	101	125	3.5
31	4.5	------				8.3	------	23.0	------	140	119	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	5.4	2.8	3.99	245
November	7.7	3.3	5.93	353
December	7.7	------	5.63	346
January	------	------	4.98	306
February	------	------	5.15	286
March	750	8.3	138	8,480
April	349	4.7	109	6,490
May	42	1.3	14.9	916
June	14	4.7	8.68	516
July	156	4.5	96.2	5,920
August	173	101	134	8,240
September	119	3.5	71.7	4,270
The year	750	1.3	50.2	36,400

[a] Estimated.

WEISER IRRIGATION DISTRICT CANAL NEAR WEISER, IDAHO

LOCATION.—Water-stage recorder in sec. 32, T. 11 N., R. 4 W., 1½ miles below head works of canal and 7 miles east of Weiser.

RECORDS AVAILABLE.—April, 1920, to September, 1929.

EXTREMES.—Maximum discharge during year, 212 second-feet May 24 (gage height, 3.39 feet); no flow for long periods during winter.

1920–1929: Maximum discharge, 219 second-feet May 5, 1926 (gage height, 3.43 feet); no flow except during irrigation season.

REMARKS.—Records excellent. One farm lateral diverts above gage. Canal diverts from Weiser River in sec. 3, T. 10 N., R. 4 W., 1½ miles above gage, and furnishes water for irrigation of about 7,000 acres, included in projects of the Weiser and Weiser Bench irrigation districts near Weiser. Gage-height record furnished by Weiser Irrigation District.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					202	196	169	114
2					199	185	116	113
3					195	175	140	110
4					192	172	138	111
5				54	195	150	132	109
6				114	190	158	126	118
7				116	190	171	123	119
8				117	189	156	121	98
9				144	194	148	149	90
10				153	194	196	150	91
11				164	187	180	153	91
12				168	186	184	146	91
13				175	183	192	142	90
14				186	180	174	144	87
15				196	167	166	163	82
16				200	168	169	163	82
17				200	184	195	159	84
18				200	177	203	155	72
19		0.2		203	175	190	148	72
20				202	172	166	146	70
21				202	171	159	165	77
22				203	171	144	162	81
23				207	168	140	155	81
24				207	163	114	128	91
25				203	157	105	128	92
26	87.8			200	156	110	128	77
27				199	170	114	125	71
28				200	183	113	125	53
29				203	183	123	127	47
30			0.02	126	191	126	126	46
31				110		160	116	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
May 5–31	207	54	172	9,210
June	202	156	181	10,800
July	203	105	159	9,780
August	169	116	141	8,670
September	114	46	87.0	5,180
The period				43,600

BURNT RIVER NEAR HEREFORD, OREG.

LOCATION.—Water-stage recorder in sec. 26, T. 12 S., R. 36 E., a quarter of a mile above mouth of canyon and 6 miles west of Hereford.

RECORDS AVAILABLE.—March, 1915, to September, 1916; October, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 468 second-feet Mar. 21 (gage height, 3.05 feet); minimum, 7 second-feet Sept. 18.

1915–16, 1918–1929: Maximum discharge, 926 second-feet Apr. 27, 1916 (gage height, 5.18 feet at old gage); minimum, 2.5 second-feet Aug. 24, 1915.

REMARKS.—Records good except those for Nov. 28–30 and June 23 to July 16, which are fair. No record during winter. A canal having a capacity of about 3 second-feet diverts water around gage; about 7,000 acres irrigated from tributaries above station. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		30	61	115	206	61		19	10
2		29	47	145	195	58		18	10
3		31	53	185	190	42		16	10
4		31	68	200	190	38		16	10
5		31	80	173	193	36		13	10
6		31	88	135	158	41		14	9
7		31	73	133	145	44		15	12
8		32	76	111	137	56		13	13
9		34	113	111	137	73	17	12	12
10		33	139	86	135	62		12	12
11		33	99	78	133	42		12	13
12		31	79	62	143	35		10	13
13		32	82	71	162	35		10	13
14		34	82	82	164	38		9	11
15		33	90	122	153	51		9	11
16		34	111	129	145	64		10	11
17		34	135	156	141	49	17	10	8
18		35	145	167	129	38	18	10	7
19		38	151	211	125	31	22	9	8
20		33	171	285	120	26	21	10	9
21		35	364	296	111	21	23	10	9
22	21	35	314	265	101	17	23	11	10
23	21	35	185	292	97		22	12	10
24	21	37	137	275	125		22	12	10
25	23	38	120	278	118		24	12	13
26	21	39	104	292	82	17	24	13	13
27	21	39	101	292	61		23	13	10
28	22		158	296	57		23	12	9
29	22	39	171	278	51		23	12	11
30	27		139	268	51		23	12	12
31	29		120		50		22	11	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October 22–31	29	21	22.8	452
November		29	34.2	2,040
March	364	47	124	7,620
April	296	62	186	11,100
May	206	50	129	7,930
June	73		36.5	2,170
July	24		19.4	1,190
August	19	9	12.2	750
September	13	7	10.6	631

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, 1929.

EXTREMES.—Maximum discharge during period, 383 second-feet Mar. 10 (gage height, 2.42 feet); minimum, 0.3 second-foot Aug. 25–27.

REMARKS.—Records good, except those for Dec. 4 to Feb. 28, and September, 1929, which are poor. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		2.6	28	52			127	198	241	50	18	2.0	0.9
2		4.5	28	58			137	185	226	56	18	24	.9
3		6.6	26	23			127	172	226	60	16	3.2	.8
4		6.6	26				137	185	172	54	15	1.8	.8
5		6.6	31			60	160	226	172	53	12	1.7	.8
6		7.6	31				172	226	172	54	11	1.7	.8
7		9.8	37				198	226	172	56	11	1.5	.8
8		7.6	40				226	198	140	58	11	1.3	.9
9		7.6	42			52	287	198	117	60	9.8	1.1	1.3
10		7.6	47				383	172	100	64	8.6	.9	1.5
11		7.0	48				350	172	80	66	7.0	.9	1.7
12		6.6	48				334	147	78	56	6.2	.8	1.5
13	0.9	7.6	52				287	134	80	56	5.7	.8	1.7
14	1.3	7.0	52				241	142	70	56	5.3	.8	2.0
15	1.7	9.2	52				212	160	74	56	4.9	.7	2.2
16	.9	10	48		52		212	134	80	70	4.1	.8	2.4
17	1.1	11	48	53			198	160	91	110	4.5	.9	2.8
18	1.3	9.2	46				212	160	87	66	4.1	1.3	3.6
19	1.3	10	47			76	212	172	72	54	4.5	1.7	3.2
20	1.5	12	47				226	198	68	56	4.5	1.3	3.6
21	2.0	12	44				212	226	58	56	4.5	.8	4.1
22	2.0	13	40				256	256	53	54	3.6	.6	4.5
23	1.8	16	44				302	287	48	53	2.8	.5	4.5
24	2.4	18	37				350	287	52	41	2.6	.5	4.9
25	2.8	23	40				318	287	56	36	2.4	.3	5.3
26	2.6	23	54				256	272	56	31	2.2	.3	5.3
27	3.2	24	56				226	256	64	27	2.0	.3	6.2
28	2.6	26	56				198	256	62	23	2.0	.6	5.7
29	3.2	24	52				185	256	53	20	2.0	.6	6.2
30	3.2	21	54				185	241	47	22	1.7	.8	6.6
31		24					226		47		1.8	.8	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	26	2.6	12.3	756
November	56	26	43.4	2,580
December			52.2	3,210
January			52.0	3,200
February			70.6	3,920
March	383	127	231	14,200
April	287	134	206	12,300
May	241	47	100	6,150
June	110	20	52.5	3,120
July	18	1.7	6.74	414
August	24	.3	1.78	109
September	6.6	.8	2.92	174
The year	383	.3	69.2	50,100

POWDER RIVER AT SALISBURY, OREG.

LOCATION.—Staff gage in sec. 30, T. 10 S., R. 40 E., three-fourths of a mile below railroad siding at 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, 1929.

EXTREMES.—Maximum discharge during year, 550 second-feet May 23–25 (gage height, 3.2 feet); minimum, 5 second-feet Aug. 18–23, and Sept. 18.

1903–1914, 1928: Maximum discharge, 1,660 second-feet Mar. 20, 1910 (gage height, 6.65 feet); no flow on Aug. 31, 1909.

REMARKS.—Records good except those for Nov. 18–24, 27–30, and July 1–6, which are fair. No record during winter. Diversions for irrigation above station. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	20	225	100	270	270		14	7
2	7	19	295	104	270	225		17	7
3	8	20	308	124	236	203		15	7
4	8	20	320	134	214	182	39	14	6
5	9	20	371	138	203	182		14	6
6	9	20	345	120	192	172		13	6
7	8	19	345	102	172	172	21	11	6
8	8	20	320	88	150	236	20	7	6
9	8	21	308	81	161	258	20	7	6
10	8	20	225	72	161	247	20	7	6
11	9	20	192	82	161	236	18	6	6
12	9	20	172	72	225	225	16	6	6
13	10	20	140	72	320	225	14	6	6
14	10	22	100	89	371	225	15	6	6
15	12	22	84	104	371	247	17	6	6
16	13	20	106	111	371	345	17	6	6
17	13	20	102	120	371	247	16	6	6
18	14		118	140	398	214	17	5	5
19	13		225	161	398	182	16	5	6
20	11		203	225	427	161	15	5	6
21	12	17	398	225	487	150	14	5	6
22	12		270	214	517	140	14	5	6
23	11		192	236	550	122	13	5	6
24	12		150	270	550	102	13	6	6
25	13	22	106	282	550	95	13	6	6
26	13	22	111	295	457	88	13	7	8
27	12		115	308	371	81	13	7	7
28	12	17	126	371	270	81	13	8	7
29	12		115	345	225	61	14	9	7
30	13		118	295	203	55	14	9	7
31	17	-------	109	-------	203	-------	14	7	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	17	7	10.7	658
November	22	----------	19.1	1,140
March	398	84	204	12,500
April	371	72	169	10,100
May	550	150	317	19,500
June	345	55	181	10,800
July	----------	13	20.1	1,240
August	17	5	8.1	498
September	8	5	6.3	375

POWDER RIVER NEAR ROBINETTE, OREG.

LOCATION.—Staff gage in NW. ¼ sec. 22, T. 9 S., R. 46 E., 3 miles northwest of Robinette.

RECORDS AVAILABLE.—September, 1928, to September, 1929.

EXTREMES.—Maximum discharge during period, 2,920 second-feet Mar. 10 (gage height, 5.46 feet); minimum, 33 second-feet Aug. 24.

REMARKS.—Records good, except those estimated, which are fair. Numerous diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		67	150	160	171		182	542	770	720	542	46	39
2		67	140	150	171		419	542	720	675	500	65	39
3		88	140	113	171		500	542	675	630	459	65	39
4		88	150	102	160		770	585	675	630	400	59	41
5		100	150	113	140	a 180	825	585	585	630	362	65	41
6		102	140	113	160		770	585	542	720	344	59	44
7		104	150	150	182		720	521	500	770	294	59	41
8		102	150	a 140	171	188	770	521	459	940	294	56	39
9		97	150	a 150	182		1,370	500	400	1,000	248	51	41
10		88	150	182	171		2,810	459	380	1,140	220	51	41
11		97	150	182	171		2,100	459	419	1,140	220	51	44
12		104	140	171	182		1,210	459	542	1,070	194	51	44
13		100	150	171	207		880	439	770	1,070	182	51	46
14		99	160	160	207		770	521	940	1,140	160	46	46
15	78	99	160	131	182	a 180	770	521	825	1,540	160	41	46
16	78	102	171	160	a 170		770	521	770	2,200	140	41	39
17	76	109	171	160	a 170		770	542	770	1,630	150	39	41
18	72	113	160	140	a 170		1,070	542	770	1,540	122	35	41
19	68	a 108	160	131	a 170		720	630	880	1,210	113	35	46
20	65	104	171	131	171		770	675	1,000	1,070	106	35	51
21	68	106	160	122	a 160		1,290	675	1,210	1,140	102	35	46
22	72	a 114	160		a 160		1,210	630	1,450	1,000	99	39	46
23	64	122	160		160	171	940	675	1,630	1,070	85	35	46
24	61	122	160		171	160	825	675	1,720	1,000	92	33	48
25	62	122	160	a 140		171	825	720	1,450	880	81	39	51
26	65	122	160			140	770	720	1,070	770	72	39	54
27	67	122	171			171	675	770	880	675	68	39	51
28	62	122	160		a 170	182	675	880	770	675	68	39	51
29	67	131	150			-------	630	940	720	630	65	46	51
30	68	122	140	182		-------	630	825	675	585	51	44	54
31	-------	140	-------	171		-------	585	-------	720	-------	51	39	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	140	67	106	6,520
November	171	140	155	9,220
December	182	102	145	8,920
January	207	140	172	10,600
February	----------	140	177	9,830
March	2,810	182	904	55,600
April	940	439	607	36,100
May	1,720	380	829	51,000
June	2,200	585	996	59,300
July	542	51	195	12,000
August	65	33	46.1	2,830
September	54	39	44.9	2,670
The year	2,810	33	365	265,000

a Estimated.

IMNAHA RIVER AT IMNAHA, OREG.

LOCATION.—Staff gage in SW. ¼ sec. 16, T. 1 N., R. 48 E., at Imnaha, one-eighth of a mile below mouth of Sheep Creek.

RECORDS AVAILABLE.—June, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 2,330 second-feet June 16 (gage height, 4.00 feet); minimum (estimated), 28 second-feet Dec. 4–8.

1928–29: Maximum discharge, that of June 16, 1929; minimum, that of Dec. 4–8, 1928.

REMARKS.—Records good, except those for October, August, and September, and for estimated periods, which are fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928-29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	128	130	108	119		124	452	950	1,110	730	185	121
2	128	130	88	124	e 100	140	410	990	1,280	800	185	117
3	142	126	59	117		130	110	990	1,660	670	169	119
4	142	135		114	142	126	475	1,030	1,030	670	147	117
5	175	135		76	140	147	452	910	870	670	149	117
6	159	130	e 35	54	154	164	430	870	1,030	565	117	119
7	142	126		124	95	182	390	870	1,110	e 532	135	121
8	147	126		135	126	200	350	870	1,190	498	139	117
9	142	126	130		99	200	296	870	1,280	452	130	117
10	142	145	149			520	278	910	1,370	430	137	117
11	149	135	140	e 100	e 100	590	296	950	1,190	410	159	110
12	142	133	117			498	296	1,280	1,080	410	126	106
13	147	137	154			390	296	1,460	1,080	350	142	106
14	142	135	175	128	124	332	313	1,460	1,280	332	162	102
15	142	145	117	133		313	390	1,560	1,370	332	147	104
16	147	152	10x	112		350	498	1,560	2,330	313	154	104
17	142	145	104	140		390	590	1,370	1,560	313	154	106
18	142	128	66	e 134	e 110	390	700	1,370	1,280	313	152	106
19	140	126	60	128		390	800	1,460	1,280	296	140	104
20	135	135	63	e 100		410	835	1,560	1,080	313	140	102
21	135	121	68	e 80		475	950	1,560	990	262	133	102
22	130	130	63	140		475	950	1,760	1,110	245	137	106
23	126	130		159	101	452	950	1,870	1,190	262	121	110
24	126	121			102	390	990	1,870	1,110	245	128	119
25	130	121	e 60		106	332	990	1,660	1,110	230	128	124
26	126	117			124	313	1,030	1,370	1,190	214	124	124
27	126	124		e 90	119	313	1,110	1,280	1,190	214	124	124
28	126	121			117	332	1,280	1,030	1,030	214	123	124
29	126	117	147		-------	498	1,370	950	950	214	128	119
30	126	91	167		-------	498	1,110	910	1,030	185	128	119
31	135	-------	128		-------	475	-------	1,030	-------	185	124	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	175	126	138	8,480
November	152	91	129	7,680
December	175	----------	89.4	5,500
January	159	54	108	6,640
February	154	95	112	6,220
March	590	124	340	20,900
April	1,370	278	656	39,000
May	1,870	870	1,240	76,200
June	2,330	870	1,210	72,000
July	800	185	383	23,600
August	185	117	141	8,670
September	124	102	113	6,720
The year	2,330	----------	389	282,000

e Estimated.

SALMON RIVER BELOW VALLEY CREEK, AT STANLEY, IDAHO

LOCATION.—Water-stage recorder in SE. ¼ SE. ¼ sec. 34, T. 11 N., R. 13 E., three-quarters of a mile below mouth of Valley Creek and 1¼ 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, 1929.

EXTREMES.—Maximum discharge during year, 2,340 second-feet June 16 (gage height, 2.9 feet); minimum (estimated), 160 second-feet Dec. 5.

1925–1929: Maximum discharge, 5,020 second-feet June 27, 1927 (gage height, 4.41 feet); minimum, that of Dec. 5, 1928.

REMARKS.—Records good except those estimated, which are poor. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928-29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	331	a 340	a 260	a 230	a 240	a 230	a 200	672	1,160	1,320	337	247
2	320	a 320	a 220	a 240	a 270	a 230	a 230	764	1,200	1,270	332	242
3	331	a 320	a 200	a 260	a 270	a 220	270	669	1,130	1,190	320	238
4	331	a 325	a 180	a 240	a 220	a 220	266	651	1,050	1,130	314	234
5	390	320	a 160	a 220	a 260	a 220	a 265	556	1,050	1,050	303	234
6	371	a 320	a 180	a 200	a 240	a 220	a 265	579	1,140	970	297	234
7	354	310	a 180	a 210	a 210	a 210	262	a 620	1,280	890	286	234
8	348	a 280	a 200	a 230	a 190	a 210	a 250	672	1,420	830	286	234
9	342	a 310	a 205	a 250	a 200	a 220	a 240	726	1,510	792	276	234
10	348	a 315	a 215	a 240	a 230	a 230	a 220	651	a 1,500	727	276	230
11	348	a 300	a 220	a 230	a 240	a 250	262	704	a 1,520	682	271	230
12	342	a 285	a 215	a 230	a 260	a 240	a 230	786	a 1,600	646	266	226
13	337	a 310	a 220	a 235	a 260	a 230	a 270	852	a 1,700	630	257	222
14	337	a 300	a 210	a 235	a 260	a 230	274	860	a 1,800	612	a 257	219
15	342	a 260	a 200	a 235	a 240	a 230	a 290	900	a 2,000	587	252	219
16	342	a 270	a 185	a 230	a 240	a 230	a 260	960	2,340	562	247	219
17	354	a 290	a 200	a 220	a 240	a 240	a 270	1,000	2,190	554	252	219
18	354	a 230	a 195	a 240	a 230	a 240	a 300	990	1,830	538	252	219
19	348	a 200	a 190	a 230	a 220	a 220	a 320	1,060	1,630	530	247	215
20	348	a 240	a 190	a 210	a 220	a 220	a 330	1,150	1,390	498	247	219
21	337	a 270	a 190	a 190	a 215	a 230	351	1,260	1,340	475	247	230
22	325	a 260	a 190	a 210	a 205	a 220	a 350	1,440	1,380	446	242	234
23	325	a 260	a 190	a 220	a 220	a 200	a 340	1,620	1,380	423	247	247
24	a 330	a 250	a 200	a 230	a 220	a 180	a 310	1,760	1,380	403	242	242
25	a 330	a 250	a 220	a 250	a 220	a 190	a 400	1,900	1,400	396	238	238
26	a 330	a 260	a 205	a 255	a 220	a 200	a 450	1,700	1,460	389	242	242
27	a 330	a 265	a 200	a 255	a 210	a 205	a 560	1,490	1,450	382	238	242
28	a 330	a 240	a 270	a 230	a 220	a 210	a 570	1,340	1,420	369	238	238
29	a 330	a 220	a 260	a 240	------	a 220	a 540	1,220	1,430	356	252	238
30	331	a 220	a 250	a 250	------	a 200	a 520	1,130	1,400	343	266	238
31	a 335	------	a 250	a 240	------	169	------	1,130	--------	343	262	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	390	320	340	0.636	0.73	20,900
November	340	200	278	.520	.58	16,500
December	270	160	208	.389	.45	12,800
January	260	190	232	.434	.50	14,300
February	270	190	231	.432	.45	12,800
March	250	169	218	.407	.47	13,400
April	570	200	323	.604	.67	19,200
May	1,900	556	1,030	1.93	2.22	63,300
June	2,340	1,050	1,480	2.77	3.09	88,100
July	1,320	343	656	1.23	1.42	40,300
August	337	238	267	.499	.58	16,400
September	247	215	232	.434	.48	13,800
The year	2,340	160	458	.856	11.64	332,000

a Estimated.

SALMON RIVER BELOW YANKEE FORK, NEAR CLAYTON, IDAHO

LOCATION.—Water-stage recorder in sec. 20, T. 11 N., R. 15 E., a quarter of a 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, 1929.

EXTREMES.—Maximum discharge during year, 3,440 second-feet June 16 (gage height, 6. 05 feet); minimum, 260 second-feet Dec. 4 (gage height, 1.59 feet).

1921–1929: Maximum discharge (estimated), 8,000 second-feet June 27, 1927; minimum, 249 second-feet Oct. 30, 31, 1926, and Feb. 11, 12, 1927 (gage height, 1.42 feet).

REMARKS.—Records excellent May to September; others good except those estimated, which are fair. No diversions above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	447	443	354	a340	a370	a370	a320	739	1,940	1,820	496	358
2	447	419	310	a360	a400	a360	343	895	1,940	1,740	483	343
3	443	419	307	a380	a400	a340	a380	922	1,820	1,620	467	343
4	447	427	282	a360	a400	a350	a390	815	1,740	1,540	455	340
5	504	423	278	a330	404	a360	381	739	1,820	1,470	435	347
6	496	431	282	a300	a370	358	373	715	2,030	1,320	431	347
7	471	400	285	a330	a330	a340	a366	739	2,300	1,260	419	347
8	463	381	292	358	a290	a340	358	868	2,440	1,160	416	340
9	451	427	307	a380	a320	a360	362	978	2,490	1,100	408	343
10	455	431	317	a360	a350	a380	307	868	2,590	1,040	404	343
11	455	396	336	a340	366	396	362	922	2,590	950	396	332
12	451	385	321	a360	a400	a370	340	1,160	2,690	922	388	325
13	447	423	336	a360	a400	a360	412	1,360	2,690	868	381	317
14	443	412	332	a360	a400	a360	392	1,430	2,900	841	377	307
15	443	354	321	358	a360	a350	427	1,510	3,000	789	373	299
16	447	369	310	a350	a380	a370	381	1,660	3,330	764	366	296
17	463	392	325	a320	a380	396	416	1,740	3,110	715	366	299
18	459	307	317	a380	360	a390	447	1,700	2,690	715	373	292
19	451	292	314	a340	a340	a360	467	1,820	2,300	715	362	292
20	451	369	310	a310	a340	a370	471	1,990	2,120	668	354	296
21	439	381	307	a290	a340	a380	508	2,210	2,080	645	351	328
22	427	369	310	a320	a330	a370	512	2,590	2,120	645	343	328
23	419	366	310	a340	a350	a350	504	3,000	2,080	601	343	340
24	435	351	321	a340	358	314	504	3,220	2,030	580	336	343
25	435	340	343	a360	a360	a330	580	3,220	2,080	580	340	340
26	431	366	307	a370	a360	a330	691	2,690	2,120	554	358	343
27	423	381	314	a370	a340	a340	764	2,400	2,080	537	347	351
28	427	332	a420	a330	a360	a350	815	2,080	2,030	524	336	343
29	427	314	a400	a350	-------	a370	764	1,860	1,990	512	351	336
30	427	310	a390	a370	-------	a340	668	1,780	1,940	496	392	336
31	431	-------	381	350	-------	a300	-------	1,820	-------	491	369	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	504	419	447	0.532	0.61	27,500
November	443	292	380	.452	.50	22,600
December	420	278	324	.385	.44	19,900
January	380	290	347	.413	.48	21,300
February	404	290	363	.432	.45	20,200
March	396	300	357	.424	.49	22,000
April	815	307	467	.555	.62	27,800
May	3,220	715	1,630	1.94	2.24	100,000
June	3,330	1,740	2,300	2.73	3.05	137,000
July	1,820	491	909	1.08	1.24	55,900
August	496	336	388	.461	.53	23,900
September	358	292	330	.392	.44	19,600
The year	3,330	278	687	.817	11.09	498,000

a 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.

RECORDS AVAILABLE.—October, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 5,540 second-feet June 16 (gage height, 6.1 feet); minimum, 339 second-feet Dec. 5 (gage height, 1.22 feet).

REMARKS.—Records excellent below 1,000 second-feet and good above except those estimated (Oct. 1-11, Nov. 4-10, 13-26), which are fair. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	670	695	601	601	670	573	558	955	2,700	2,900	802	601
2	680	670	501	623	695	579	579	1,020	2,760	2,700	802	579
3	670	646	467	670	695	558	601	1,210	2,560	2,560	773	579
4	680	650	452	623	670	558	601	1,290	2,500	2,440	746	579
5	720	650	436	538	646	601	601	1,170	2,500	2,260	720	579
6	710	650	484	484	623	623	579	1,100	2,830	2,080	720	579
7	700	640	484	538	538	601	538	1,060	3,260	1,980	695	579
8	700	630	520	601	501	601	579	1,130	3,560	1,810	670	558
9	695	670	538	646	558	601	579	1,380	3,720	1,710	670	558
10	695	690	558	623	601	623	520	1,290	3,800	1,560	646	558
11	695	695	623	601	601	646	538	1,250	3,800	1,520	646	558
12	695	670	601	623	646	623	538	1,520	3,800	1,470	623	558
13	695	650	601	623	646	601	558	1,860	3,970	1,380	623	538
14	695	670	646	623	646	601	558	1,980	4,320	1,380	623	538
15	695	660	601	623	579	579	558	2,080	4,700	1,340	601	520
16	695	630	579	601	623	579	579	2,200	5,220	1,290	601	520
17	720	640	601	558	623	601	601	2,380	4,700	1,210	601	520
18	746	560	623	646	579	601	646	2,260	3,970	1,210	601	520
19	695	530	579	623	558	579	695	2,380	3,400	1,250	579	501
20	695	570	538	558	558	579	695	2,700	3,110	1,170	579	520
21	670	610	538	520	558	601	670	3,110	3,110	1,100	558	538
22	670	620	558	579	538	601	695	3,560	3,260	1,060	558	558
23	670	610	558	601	558	579	720	4,230	3,180	1,020	558	558
24	670	600	558	601	558	538	720	4,510	3,180	955	558	579
25	570	600	601	623	558	558	695	4,700	3,180	955	558	579
26	670	610	646	670	558	558	746	3,970	3,330	891	579	579
27	670	623	670	670	538	558	860	3,330	3,260	891	579	579
28	670	579	720	601	558	601	1,020	2,970	3,180	860	558	579
29	670	520	695	646	-------	623	1,100	2,700	3,260	830	579	579
30	646	538	670	670	-------	579	1,100	2,500	3,110	802	623	579
31	670	-------	670	646	-------	538	-------	2,500	-------	802	623	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	746	646	687	42,200
November	695	520	626	37,200
December	720	436	578	35,500
January	670	484	608	37,400
February	695	501	596	33,100
March	646	538	589	36,200
April	1,100	520	668	39,700
May	4,700	955	2,270	140,000
June	5,220	2,500	3,440	205,000
July	2,900	802	1,460	89,800
August	802	558	634	39,000
September	601	501	558	33,200
The year	5,220	436	1,060	768,000

SALMON RIVER AT SALMON, IDAHO

LOCATION.—Staff gage in sec. 6, T. 21 N., R. 22 E., just above Lemhi River and a quarter of a mile below highway bridge at Salmon.

DRAINAGE AREA.—3,600 square miles.

RECORDS AVAILABLE.—April, 1912, to September, 1916; July, 1919, to September, 1929.

EXTREMES.—Maximum discharge during year, 5,840 second-feet June 17 (gage height, 5.9 feet); minimum (estimated), 620 second-feet Dec. 5.

1912–1916, 1919–1929: Maximum discharge, 16,400 second-feet June 12, 1921 (gage height, 9.35 feet); minimum, 595 second-feet Aug. 17-19, 25–31, Sept. 1–5, Dec. 18, 1924, and Aug. 4–7, 1926.

REMARKS.—Records good Mar. 12 to Sept. 30; others fair except those for Oct. 7, 19, 20, Nov. 26, 30, Dec. 4–6, 8–17, Jan. 1, and Jan. 3 to Mar. 11, which are poor. Diversions above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	945	1,140	1,020	950	900	960	990	1,430	2,770	3,200	990	750
2	982	1,100	1,020	945	925	990	1,030	1,290	3,050	3,050	1,030	720
3	982	1,140	945	900	1,000	1,020	1,030	1,380	3,050	2,910	990	690
4	1,020	1,100	750	860	1,000	1,070	1,030	1,530	2,910	2,770	952	690
5	982	1,100	620	830	970	1,090	1,030	1,640	2,770	2,630	915	720
6	982	1,100	650	800	920	1,080	1,030	1,430	2,910	2,360	880	720
7	1,000	1,140	680	740	850	1,060	990	1,430	3,350	2,230	880	720
8	1,020	1,140	720	780	780	1,050	990	1,380	3,820	2,100	845	720
9	1,060	1,180	750	820	760	1,050	990	1,430	4,160	1,980	845	750
10	1,060	1,140	770	810	800	1,050	990	1,740	4,330	1,860	812	750
11	1,060	1,180	830	800	850	1,060	915	1,530	4,330	1,740	812	720
12	1,060	1,140	880	820	870	1,070	990	1,530	4,330	1,640	812	750
13	1,100	1,100	900	840	900	1,160	990	1,740	4,510	1,640	780	720
14	1,060	1,180	880	840	950	1,200	990	2,100	4,690	1,530	750	720
15	1,060	1,140	880	840	940	1,160	952	2,230	5,060	1,530	750	720
16	1,100	1,140	850	840	900	1,110	990	2,230	5,440	1,530	750	720
17	1,060	1,100	850	820	930	1,110	990	2,500	5,840	1,430	720	690
18	1,100	1,060	800	840	940	1,070	990	2,500	5,060	1,380	720	690
19	1,100	945	768	820	920	1,110	1,070	2,500	4,160	1,430	720	690
20	1,100	982	800	800	900	1,160	1,110	2,630	3,820	1,430	690	690
21	1,100	1,100	735	780	900	1,160	1,160	3,050	3,500	1,340	690	720
22	1,100	1,100	735	820	890	1,160	1,110	3,500	3,500	1,290	690	720
23	1,100	1,100	735	860	910	1,110	1,160	4,160	3,500	1,240	660	720
24	1,100	1,060	735	870	920	1,160	1,160	4,870	3,500	1,200	660	750
25	1,100	1,060	945	890	920	1,160	1,110	5,060	3,500	1,160	660	780
26	1,100	1,080	945	950	920	1,030	1,160	4,870	3,500	1,160	690	780
27	1,100	1,100	1,180	950	910	1,030	1,160	4,160	3,500	1,070	720	812
28	1,100	1,060	1,230	875	930	1,110	1,290	3,500	3,500	1,070	690	812
29	1,100	1,020	1,180	850	------	1,160	1,430	3,200	3,350	1,030	690	780
30	1,100	1,020	1,060	850	------	1,160	1,530	2,910	3,350	990	720	780
31	1,140	------	1,060	875	------	1,070	------	2,770	------	990	750	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	1,140	945	1,060	65,200
November	1,180	945	1,100	65,500
December	1,230	620	868	53,400
January	950	740	847	52,100
February	1,000	760	904	50,200
March	1,200	960	1,090	67,000
April	1,530	915	1,080	64,300
May	5,060	1,290	2,520	155,000
June	5,840	2,770	3,840	228,000
July	3,200	990	1,710	105,000
August	1,030	660	783	48,100
September	812	690	733	43,600
The year	5,840	620	1,380	997,000

SALMON RIVER AT WHITEBIRD, IDAHO

LOCATION.—Chain gage in sec. 22, T. 28 N., R. 1 E., at highway bridge near Whitebird and just above Whitebird Creek.

DRAINAGE AREA.—13,600 square miles.

RECORDS AVAILABLE.—August, 1910, to September, 1917; October, 1919, to September, 1929.

EXTREMES.—Maximum discharge, 48,200 second-feet May 25 (gage height, 14.4 feet); minimum, 2,900 second-feet Dec. 6–11, Jan. 12 and 13.

1910–1917, 1919–1929: 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 known stage, 27.5 feet June, 1894 (discharge, 120,000 second-feet).

REMARKS.—Records good except those for January, February, and June to September, and periods Nov. 30 to Dec. 2, Dec. 9, 10–30, which are fair. Amount of water diverted for irrigation above station negligible.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4,060	4,400	4,000	3,740	3,600	3,440	5,320	6,730	26,600	20,400	5,400	3,600
2	4,060	4,400	3,600	3,900	3,700	3,440	5,130	6,730	27,500	18,900	6,000	3,400
3	4,060	4,230	3,300	3,900	3,800	3,590	5,130	7,150	26,600	17,000	5,800	3,050
4	4,400	4,230	3,030	3,740	3,700	3,740	5,130	7,360	27,500	16,400	5,500	3,050
5	4,400	4,230	3,030	3,740	3,500	3,740	5,320	7,360	25,700	14,600	5,300	3,100
6	4,400	4,230	2,900	3,590	3,400	3,740	5,320	7,580	28,400	13,900	5,100	3,300
7	4,580	4,230	2,900	3,440	3,200	3,900	5,130	7,580	29,300	13,200	4,800	3,300
8	4,580	4,060	2,900	3,440	3,100	3,900	4,760	7,800	36,700	12,800	4,600	3,250
9	4,580	4,060	2,900	3,160	3,200	4,060	4,760	7,360	37,200	11,100	4,400	3,200
10	4,400	4,230	2,900	3,160	3,200	4,060	4,760	7,800	38,200	10,500	4,400	3,400
11	4,580	4,230	2,900	3,030	3,300	4,060	4,940	9,440	38,700	10,500	4,400	3,700
12	4,400	4,230	3,160	2,900	3,400	4,230	4,940	11,600	38,700	9,950	4,100	3,500
13	4,400	4,230	3,160	2,900	3,400	4,230	4,580	12,200	39,600	9,450	3,900	3,600
14	4,230	4,230	3,440	3,160	3,400	4,400	4,400	12,800	40,100	8,950	3,900	3,700
15	4,580	4,060	3,440	3,440	3,400	4,400	5,130	14,400	41,600	8,450	3,900	3,400
16	4,580	4,230	3,590	3,440	3,500	4,400	5,320	15,300	46,600	8,200	3,900	3,400
17	4,760	4,060	3,440	3,440	3,600	4,400	5,510	18,100	44,100	8,000	3,750	3,300
18	4,940	4,060	3,440	3,440	3,500	4,400	5,710	19,200	39,600	7,450	3,600	3,200
19	4,760	4,060	3,440	3,300	3,500	4,400	5,910	19,200	34,300	8,000	3,450	3,200
20	4,760	4,060	3,440	3,000	3,500	4,400	5,910	20,000	31,100	8,000	3,350	3,200
21	4,580	4,060	3,740	3,200	3,590	4,400	6,110	27,000	29,300	8,000	3,300	3,200
22	4,760	4,060	3,740	3,300	3,440	4,400	6,110	32,000	29,300	7,900	3,300	3,500
23	4,580	4,060	3,900	3,200	3,440	4,400	6,110	42,600	27,900	7,700	3,150	3,500
24	4,580	4,060	4,060	3,200	3,440	4,400	5,130	47,000	27,500	7,500	3,050	3,500
25	4,580	4,060	4,060	3,500	3,300	4,760	5,510	48,200	27,000	7,200	3,050	3,700
26	4,400	4,060	4,060	3,600	3,440	4,760	5,710	41,100	27,500	6,800	3,050	4,000
27	4,400	4,060	4,230	3,600	3,300	4,760	5,910	33,900	26,600	6,400	3,300	4,300
28	4,400	4,060	4,400	3,400	3,440	4,760	5,910	29,700	24,400	6,000	3,400	4,400
29	4,230	4,230	4,400	3,500	-------	4,940	6,110	24,900	24,400	5,600	3,200	4,200
30	4,230	3,800	4,000	3,500	-------	4,940	6,310	24,400	22,400	5,400	3,100	4,100
31	4,230	-------	3,740	3,600	-------	5,320	-------	24,900	-------	5,400	3,200	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	4,940	4,060	4,470	275,000
November	4,400	3,800	4,140	246,000
December	4,400	2,900	3,520	216,000
January	3,900	2,900	3,400	209,000
February	3,800	3,100	3,440	191,000
March	5,320	3,440	4,280	263,000
April	6,310	4,400	5,400	321,000
May	48,200	6,730	19,400	1,190,000
June	46,600	22,400	32,100	1,910,000
July	20,400	5,400	9,990	614,000
August	6,000	3,050	4,020	247,000
September	4,400	3,050	3,510	209,000
The year	48,200	2,900	8,150	5,890,000

VALLEY CREEK AT STANLEY, IDAHO

LOCATION.—Staff gage in sec. 3, T. 10 N., R. 13 E., a quarter of a mile above confluence with Salmon River and three-quarters of a mile above old Hanley post office.

DRAINAGE AREA.—176 square miles.

RECORDS AVAILABLE.—December, 1910, to October, 1913; May, 1921, to September, 1929.

EXTREMES.—Maximum discharge during year, 689 second-feet June 16 (gage height, 2.60 feet); minimum (estimated), 63 second-feet Sept. 17–20.

1910–1913, 1921–1929: Maximum discharge, 1,850 second-feet May 29, 1921 (gage height, 4.4 feet); minimum, 41 second-feet Sept. 7, 1924 (gage height, 0.84 foot).

REMARKS.—Records fair October, November, and April to September; others poor. Diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	94	82				95	202	380	334	104	66
2	109	93	72				90	338	320	320	104	65
3	115	88	68		80	75	85	254	303	297	102	65
4	120	84	64				82	254	284	275	96	64
5	110	86	70			85	83	242	326	254	93	67
6	101	88	74			80	82	254	337	234	90	68
7	97	89				89	85	254	390	216	86	67
8	93	80				90	87	258	415	205	84	66
9	90	87				90	84	300	466	194	83	68
10	86	90				85	81	294	466	183	81	68
11	86	88				82	82	366	466	176	81	67
12	87	86				81	80	440	479	170	79	67
13	87	88					79	390	492	167	77	66
14	87	89	80				78	329	530	164	76	65
15	88	80					78	294	600	160	75	65
16	89	83		80			79	390	639	150	74	64
17	90	84			75		87	390	578	147	73	63
18	91	70					96	366	436	150	74	63
19	90	72					104	390	415	144	74	63
20	90	90				80	110	440	366	137	74	63
21	89	88					117	492	330	130	72	65
22	85	86					122	519	400	122	70	66
23	82	85	75				126	574	415	119	69	68
24	85	84					130	546	492	113	70	70
25	87	83					153	546	390	109	79	74
26	86	87					183	466	378	108	82	77
27	86	87					231	428	366	107	77	80
28	88	79	80			90	231	390	336	105	69	79
29	91	74			------	100	214	390	336	104	68	76
30	92	78			------	105	196	390	350	103	67	74
31	93	------			------	100	------	357	------	103	67	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	120	82	92.6	0.526	0.61	5,690
November	94	70	84.7	.481	.54	5,040
December	64	64	77.6	.441	.51	4,770
January	----------	----------	80.0	.455	.52	4,920
February	----------	----------	75.9	.431	.45	4,220
March	----------	----------	83.1	.472	.54	5,110
April	231	78	114	.648	.72	6,780
May	574	202	372	2.11	2.43	22,900
June	689	294	420	2.39	2.67	25,000
July	334	103	171	.972	1.12	10,500
August	104	67	79.7	.453	.52	4,900
September	80	63	68.0	.386	.43	4,050
The year	689	63	144	.818	11.06	104,000

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, 1929.
EXTREMES.—Maximum discharge, 921 second-feet May 25 and June 16 (gage height, 4.30 feet); minimum, 18 second-feet Apr. 10 (gage height, 0.69 foot). 1921–1929: Maximum discharge, 3,360 second-feet June 12, 1921 (gage height, 6.79 feet); minimum (estimated), 10 second-feet Dec. 5 and 6, 1927.
REMARKS.—Records good except those for Oct. 1, 2, 14–20, Nov. 17 to Dec. 4, 6–17, 25, Jan. 3 to Mar. 5, Mar. 28, May 1, 22–24, June 5, 28, Aug. 20, Sept. 13–15, and 20, which are fair. No diversions or regulation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	61	55	49	45	40	46	125	504	280	88	58
2	70	61	50	51	45	45	29	150	504	269	93	57
3	69	52	45	50	50	40	42	180	464	248	88	58
4	65	61	40	45	45	45	57	195	408	229	88	58
5	72	57	42	35	45	50	51	164	500	220	88	57
6	71	61	45	35	35	38	50	143	593	212	82	58
7	69	63	50	45	30	42	50	150	666	203	78	58
8	68	44	50	50	40	49	48	157	718	187	76	58
9	62	67	50	50	45	49	32	187	744	172	74	58
10	69	61	55	45	45	51	20	172	691	172	78	57
11	65	63	50	45	45	50	26	195	744	157	74	57
12	63	42	45	45	45	44	40	258	800	157	70	53
13	61	53	50	45	45	48	49	238	800	150	68	53
14	60	52	50	45	40	42	46	359	859	143	68	52
15	65	44	45	45	40	34	49	359	800	136	68	52
16	70	44	45	45	40	36	51	408	859	130	66	52
17	75	40	45	45	40	40	53	464	859	124	67	53
18	80	35	50	45	40	42	70	445	593	124	64	51
19	70	40	49	45	40	44	72	484	504	124	64	58
20	60	55	49	35	40	50	73	570	464	124	63	56
21	61	60	48	40	40	58	58	691	445	117	62	53
22	58	60	46	45	40	48	71	740	445	105	62	59
23	57	55	46	40	45	42	78	800	445	105	60	56
24	61	55	42	45	40	48	73	840	408	105	58	55
25	63	50	43	45	40	42	73	859	408	105	61	53
26	61	55	43	45	40	46	105	718	375	99	66	58
27	61	55	50	40	40	49	130	570	391	99	62	58
28	69	50	49	40	40	45	157	464	370	93	58	57
29	67	45	50	45	------	42	164	426	344	93	59	58
30	67	50	50	40	------	31	157	375	317	88	60	58
31	65	------	53	45	------	32	------	464	------	88	60	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	80	57	65.9	0.338	0.39	4,050
November	67	35	53.0	.272	.30	3,150
December	55	40	47.7	.245	.28	2,930
January	51	35	44.0	.226	.26	2,710
February	50	30	41.6	.213	.22	2,310
March	58	31	43.9	.225	.26	2,700
April	164	20	67.3	.345	.38	4,000
May	859	125	398	2.04	2.35	24,500
June	859	317	567	2.91	3.25	33,700
July	280	88	150	.769	.89	9,220
August	93	58	70.1	.359	.41	4,310
September	59	51	56.1	.288	.32	3,340
The year	859	20	134	.687	9.31	96,900

EAST FORK OF SALMON RIVER NEAR CLAYTON, IDAHO

LOCATION.—Staff gage in NW. ¼ sec. 1, T. 10 N., R. 18 E., at highway bridge 4 miles above confluence with Salmon River and 7 miles southeast of Clayton.
RECORDS AVAILABLE.—September, 1928, to September, 1929.
EXTREMES.—Maximum discharge during period, 1,300 second-feet June 16 (gage height, 3.20 feet); minimum, 29 second-feet Dec. 3 (gage height, 0.40 foot).
REMARKS.—Records good between 70 and 800 second-feet; others fair. The discharge on Sept. 28–30, 1928, was 97 second-feet for each day. Small irrigation diversions above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	95	106	99	68	68	67	82	109	355	685	162	99
2	95	104	99	72	68	67	83	118	432	720	150	92
3	95	99	29	72	69	68	86	124	432	685	146	92
4	97	99	40	65	73	70	83	124	380	650	146	92
5	97	99	45	40	60	75	83	124	460	552	141	89
6	97	104	52	50	50	73	86	124	520	432	128	92
7	99	89	56	60	40	70	77	117	685	460	128	92
8	97	84	60	70	45	72	80	106	685	405	141	92
9	97	104	70	72	50	75	80	100	685	380	128	89
10	106	107	85	72	60	80	83	126	616	355	137	92
11	109	104	87	70	65	105	74	126	616	355	124	92
12	109	92	70	70	66	100	74	132	720	355	128	92
13	107	102	73	70	68	86	80	175	758	332	117	92
14	111	102	85	70	64	67	80	175	795	310	113	92
15	109	104	75	68	66	64	83	203	1,080	310	106	92
16	111	102	70	68	70	77	86	234	1,120	290	106	92
17	113	102	71	65	70	72	83	270	875	310	99	92
18	111	104	75	70	65	74	80	270	616	290	109	92
19	109	102	68	70	64	72	80	310	520	332	109	92
20	109	104	66	50	65	77	80	332	583	290	99	92
21	109	104	65	50	66	70	89	432	650	270	92	92
22	106	102	66	70	66	77	92	583	720	270	92	92
23	106	99	67	55	70	77	92	720	720	234	92	92
24	106	97	69	60	68	60	86	685	685	218	95	89
25	106	99	70	70	65	77	89	758	758	203	92	89
26	104	99	85	71	64	74	92	616	835	189	89	89
27	104	99	90	69	66	77	92	490	835	189	92	89
28	104	102	88	60	67	83	109	460	758	175	92	89
29	104	102	80	65	-------	86	118	355	875	175	99	92
30	104	102	75	60	-------	74	124	332	758	150	99	89
31	104	-------	72	63	-------	74	-------	355	-------	150	99	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	113	95	104	6,400
November	107	84	101	6,010
December	99	29	71.0	4,370
January	72	40	64.7	3,980
February	73	40	63.5	3,530
March	105	60	75.5	4,640
April	124	74	86.9	5,170
May	758	100	296	18,200
June	1,120	355	684	40,700
July	720	150	346	21,300
August	162	89	115	7,070
September	99	89	91.4	5,440
The year	1,120	29	175	127,000

BIG BOULDER CREEK NEAR CLAYTON, IDAHO

LOCATION.—Staff gage in NE. ¼ sec. 15, T. 9 N., R. 17 E., 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 September, 1929.
EXTREMES.—Maximum discharge during year, 115 second-feet June 16 (gage height, 1.52 feet); minimum, 4 second-feet Mar. 31 (gage height, 0.44 foot). 1926–1929: Maximum discharge, 206 second-feet June 26, 1927 (gage height, 2.04 feet); minimum, that of Mar. 31, 1929.
REMARKS.—Records fair except those for Dec. 4 to Feb. 13, which are poor. Stream is subject to diurnal fluctuations caused by operation of power plant immediately above. No diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	12	11	8	6	6	5	6	42	74	14	10
2	14	10	8	7	6	6	6	7	36	67	14	9
3	14	11	8	7	6	6	6	8	30	64	14	9
4	14	10	7	8	6	6	6	8	35	57	14	8
5	16	12	6	7	6	6	6	8	41	51	15	8
6	15	12	8	8	6	6	6	8	53	47	15	8
7	15	8	7	8	6	6	6	7	62	41	14	8
8	15	12	7	8	6	6	6	7	64	33	12	8
9	15	12	7	8	6	6	6	8	57	33	11	8
10	15	12	7	7	6	6	6	7	50	32	10	8
11	14	11	6	7	6	6	6	7	44	32	10	7
12	14	12	6	7	6	6	8	9	47	31	10	7
13	15	10	6	8	6	6	6	12	57	31	9	6
14	14	10	5	7	6	6	6	14	79	30	10	6
15	14	10	5	7	6	6	6	15	82	29	9	7
16	14	11	5	7	6	6	6	18	104	27	8	7
17	13	10	6	7	6	6	7	20	62	27	8	7
18	12	9	6	6	6	6	6	23	44	28	10	6
19	13	10	5	6	6	5	7	26	37	31	9	7
20	12	12	5	6	6	6	7	35	41	28	9	7
21	12	11	5	6	6	6	6	55	48	26	9	8
22	13	11	5	6	6	6	6	76	51	23	8	7
23	12	11	5	6	6	6	6	85	55	20	8	7
24	12	12	5	6	6	5	6	87	63	20	8	7
25	12	10	6	6	6	6	6	72	64	20	9	8
26	14	12	6	6	6	6	7	47	67	19	9	8
27	13	12	7	6	6	6	7	37	72	18	8	7
28	12	12	7	6	6	6	8	27	82	18	10	7
29	13	7	7	6	------	6	8	27	87	16	10	7
30	10	11	8	6	------	6	8	26	79	14	12	7
31	12	------	8	6	------	5	------	33	------	16	10	------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	16	10	13.5	0.500	0.58	830
November	12	7	10.8	.400	.45	643
December	11	5	6.5	.241	.28	400
January	8	6	6.8	.252	.29	418
February	6	6	6.0	.222	.23	333
March	6	5	5.9	.219	.25	363
April	8	5	6.4	.237	.26	381
May	87	6	26.6	.985	1.14	1,640
June	104	30	57.8	2.14	2.39	3,440
July	74	14	32.4	1.20	1.38	1,990
August	15	8	10.5	.389	.45	646
September	10	6	7.5	.278	.31	446
The year	104	5	15.9	.589	8.01	11,500

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 Kirtley Creek and 1 mile southeast of Salmon.
RECORDS AVAILABLE.—August, 1928, to September, 1929.
EXTREMES.—Maximum discharge during period (estimated), 1,400 second-feet June 16; minimum, 53 second-feet Aug. 22–29.
REMARKS.—Records fair except those for January, February, August, and September, 1929, which are poor. Many diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	105	184		270			270	288	318	400	431	100	70
2	------	110	190		250			278	330	322	390	414	130	63
3	------	115	195		222			329	370	325	373	397	130	66
4	------	111	199	300	200			330	409	329	340	374	130	70
5	------	107	250		190			350	400	329	350	352	118	73
6	------	100	240		200			335	397	340	370	329	118	81
7	------	90	235	303	203			325	380		391	304	111	85
8	------	90	230		209			315	360	340	433	278	105	89
9	------	90	225		216			308	340		498	278	98	91
10	------	94	222		222			400		340	568	241	96	93
11	------	104	230		256			498			643	228	95	108
12	------	127	255		239			440		340	682	199	93	118
13	------	150	270	300	222			385			720	172	87	121
14	------	184	284		224			325		340	760	183	81	124
15	------	174	290		226		260	268			885	178	81	130
16	------	174	295		227	240		278	340		1,400	172	70	124
17	------	174	300		229			643			1,200	148	63	118
18	------	174	303		231			600			1,060	136	61	124
19	------	174	303	294	226			400		350	970	155	58	130
20	------	175			222			340			800	169	56	136
21	------	176			222			300			720	164	54	142
22	------	177			222			280			682	160	53	162
23	------	181		295	222			268		362	608	155	53	182
24	------	181			222			261	340	368	533	142	53	203
25	------	181	300		222			254		373	533	133	53	223
26	------	181						264	330	365	498	136	53	250
27	------	181						300		350	498	118	53	270
28	------	181		294	260			400		335	466	106	53	250
29	94	182		275			------	500		318	466	89	53	254
30	95	183		265			------	433	318	278	449	89	66	250
31	98	------		------			------	298	------	278	------	89	70	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1928				
August 29–31	98	94	95.7	569
September	184	90	148	8,810
The period	----------	----------	----------	9,380
1928–29				
October	----------	184	268	16,500
November	----------	265	296	17,600
December	----------	190	231	14,200
January	----------	----------	240	14,800
February	----------	----------	260	14,400
March	643	254	354	21,800
April	409	288	345	20,500
May	373	278	339	20,800
June	1,400	340	623	37,100
July	431	89	210	12,900
August	130	53	80.5	4,950
September	270	63	140	8,330
The year	1,400	53	282	204,000

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 below Little Beaver Creek and 1½ miles northwest of Cape Horn.
DRAINAGE AREA.—150 square miles.
RECORDS AVAILABLE.—September, 1928, to September, 1929.
EXTREMES.—Maximum discharge during period, 1,010 second-feet May 24 (gage height, 4.75 feet); minimum, 48 second-feet Apr. 10 (gage height, 2.20 feet).
REMARKS.—Records good except those for Sept. 9, 10, 12, 13, 15–30, Oct. 1–8, 10–22, 24–27, Oct. 30 to Nov. 25, Nov. 27 to Dec. 3, Dec. 5–31, 1928 and Jan. 1 to Mar 31, 1929, which are poor. No diversions above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	-------	97	95					89	105	629	316	117	81
2	-------	96	93	80				76	122	629	298	115	81
3	-------	97	94			80	75	72	144	578	278	109	81
4	-------	100	94	78				74	146	560	264	107	82
5	-------	120	95					71	131	583	247	105	84
				75									
6	-------	117	93					68	124	629	234	103	84
7	-------	110	91					69	136	698	222	100	84
8	157	105	88		85			67	166	745	212	98	84
9	153	103	86					67	188	792	206	96	84
10	150	101	92					68	175	816	194	94	84
11	146	100						63	220	816	188	92	82
12	132	99						69	304	816	183	91	82
13	119	99						66	364	816	174	89	80
14	105	99						64	407	816	169	87	78
15		98						64	484	839	166	87	76
16		98						66	542	935	156	87	76
17		102				75		68	551	804	151	87	76
18		105	85				80	71	569	677	156	87	76
19		101		80				75	629	573	153	86	76
20		98						74	652	513	143	84	76
21		97						71	722	504	139	82	89
22	90	96						74	816	504	134	82	84
23		96			80			76	887	484	130	82	86
24		97						78	935	467	127	81	86
25		95						78	887	451	127	84	84
26		92	84					86	768	439	123	86	86
27		92						100	652	415	121	84	86
28		92	84					118	601	388	117	82	84
29		92				-------		120	556	368	115	86	82
30		92				-------		111	560	342	113	87	82
31	-------	93	-------			-------		-------	597	-------	113	84	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
1928						
September 8-30	157	-------	104	0.693	0.59	4,740
1928–29						
October	120	92	99.3	0.662	0.76	6,110
November	95	-------	87.2	.581	.65	5,190
December	-------	-------	79.5	.530	.61	4,890
January	-------	-------	82.4	.549	.63	5,070
February	-------	-------	75.9	.506	.53	4,220
March	-------	-------	79.2	.528	.61	4,870
April	120	63	77.1	.514	.57	4,590
May	935	105	456	3.04	3.50	28,000
June	935	342	621	4.14	4.62	37,000
July	316	113	176	1.17	1.35	10,800
August	117	81	91.6	.611	.70	5,630
September	89	76	81.9	.546	.61	4,870
The year	935	63	168	1.12	15.14	121,000

BEAR VALLEY CREEK NEAR CAPE HORN, IDAHO

LOCATION.—Water-stage recorder in about sec. 31, T. 13 N., R. 10 E., 250 feet below mouth of Fir Creek, 5 miles above mouth, and 7 miles northwest of Cape Horn.

DRAINAGE AREA.—180 square miles.

RECORDS AVAILABLE.—September, 1921, to September, 1929.

EXTREMES.—Maximum discharge during year, 1,540 second-feet May 25 (gage height, 3.73 feet); minimum (estimated), 65 second-feet Dec. 1–7.

1921–1929: Maximum discharge, 3,120 second-feet May 26, 1928 (gage height, 5.3 feet); minimum, 44 second-feet Aug. 1, 2, 5, and 6, 1926 (gage height, 1.03 feet).

REMARKS.—Records excellent except those for Nov. 11 to Apr. 3 and Aug. 19–26, which are poor. No diversions above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	110	113					75	151	796	345	132	82
2	108	106					76	160	706	326	129	80
3	120	106				65	78	181	625	308	124	80
4	128	108					80	190	644	298	119	82
5	170	110	65				82	177	681	285	114	84
6	167	110					78	162	725	269	110	84
7	141	104					78	162	777	260	108	86
8	133	97		90			82	194	796	248	105	88
9	128	110					78	237	836	237	103	88
10	125	106					76	237	1,040	226	101	88
11	123						78	269	890	211	98	88
12	115						78	364	855	200	96	88
13	115				85		76	463	820	187	94	86
14	115						78	519	838	184	92	86
15	113	100					78	595	869	177	90	84
16	113						78	700	1,200	171	86	84
17	120						84	738	1,040	165	88	84
18	125						88	738	829	162	88	82
19	118	80				75	94	829	700	165	88	82
20	113		80				96	940	632	160	89	84
21	110						98	1,080	607	154	89	92
22	106						105	1,240	577	148	90	96
23	106						112	1,360	542	145	90	92
24	108			80			114	1,400	514	142	91	96
25	106						117	1,360	497	140	91	96
26	104	90			65		127	962	463	137	92	98
27	104						140	764	436	132	92	101
28	104						165	700	415	132	90	96
29	104				-------		181	681	389	129	88	92
30	104				-------		168	700	364	127	88	90
31	106	-------			-------		-------	784	-------	124	86	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	170	104	118	0.656	0.76	7,260
November	113	-------	97.0	.539	.60	5,770
December	-------	-------	76.6	.426	.49	4,710
January	-------	-------	84.8	.471	.54	5,210
February	-------	-------	82.1	.456	.47	4,560
March	-------	-------	73.4	.408	.47	4,510
April	181	75	97.9	.544	.61	5,830
May	1,400	151	614	3.41	3.93	37,800
June	1,200	364	703	3.91	4.36	41,800
July	345	124	197	1.09	1.26	12,100
August	132	86	98.1	.545	.63	6,030
September	101	80	88.0	.489	.55	5,240
The year	1,400	-------	195	1.08	14.67	141,000

SOUTH FORK OF SALMON RIVER NEAR KNOX, IDAHO

LOCATION.—Staff gage in NW. ¼ sec. 11, T. 15 N., R. 6 E., one-eighth of a mile below Curtis Creek and 1¼ miles southwest of Knox cabin.
RECORDS AVAILABLE.—September, 1928, to September, 1929.
EXTREMES.—Maximum discharge during period (estimated), 600 second-feet May 24; minimum (estimated), 25 second-feet Dec. 4.
REMARKS.—Records fair because of fragmentary gage heights. No diversions above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		42	41					42	115	470	210	47	34
2		46	39	38	36			45	122	420	205	50	34
3		50	41			35	34	46	145	350	197	50	33
4		52		25				43	160	380	180	48	32
5		54		30	30		34	42	145	420	165	45	34
6		53			30		36	40	130	480	155	43	36
7		52		35		30	38	39	125	511	140	42	34
8	38	51					38	38	131	520	135	41	33
9	40	49					38	36	170	500	130	40	33
10	43	47					42	37	159	449	122	40	33
11	47	45	40										
12	50	44		37		34	38	39	170	430	113	40	34
13	52	43					34	40	190	440	104	39	34
14	54	43					35	41	230	449	95	39	33
15	49	44			36		36	42	260	450	89	39	31
16	46	45					35	42	270	460	84	39	32
17	43	48					36	43	280	540	78	38	34
18	41	46	32				36	50	295	450	73	36	33
19	39	44	32			33	35	57	320	409	68	35	33
20	39	43		35			34	62	360	370	62	34	33
21	39	42					34	61	400	332	57	33	34
22	39	41					34	60	449	330	56	32	35
23	38	41					35	72	480	330	55	31	35
24	38	41					35	84	511	310	54	30	35
25	38	39	38				35	95	600	295	53	29	36
26	37	40			35	34	35	102	560	280	53	31	37
27	37	41					36	114	450	280	52	34	37
28	36	40		38			43	125	370	278	51	33	38
29	37	38				-------	50	140	340	227	51	30	40
30	40	38				-------	51	155	320	220	50	31	39
31	-------	39	-------			-------	45	144	380	215	49	33	38
							38	-------	440	-------	48	33	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1928				
September 8–30	54	36	41.7	1,900
1928–29				
October	54	38	44.5	2,740
November	41	32	38.8	2,310
December	----------	25	35.8	2,200
January	----------	30	35.3	2,170
February	----------	----------	33.5	1,860
March	51	----------	37.2	2,290
April	155	36	65.9	3,920
May	600	115	293	18,000
June	540	215	386	23,000
July	210	48	97.9	6,020
August	50	29	37.6	2,310
September	40	31	34.6	2,060
The year	600	25	95.1	68,900

EAST FORK OF SOUTH FORK OF SALMON RIVER AT STIBNITE, IDAHO

LOCATION.—Staff gage in about sec. 14, T. 18 N., R. 9 E., 30 feet below mouth of Meadow Creek and half a mile northeast of Stibnite.

RECORDS AVAILABLE.—June, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 155 second-feet June 16 (gage height, 3.43 feet); minimum (estimated), 6 second-feet Feb. 1 to Mar. 13, Mar. 16–23, 25–28, and Apr. 2–11.

1928–29: Maximum and minimum discharge occurred during 1929.

REMARKS.—Records good except those for Nov. 12 to Apr. 11, which are poor. No diversions above station. Gage-height record furnished by Yellow Pine Co.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	10				6	7	10	64	57	13	9
2	11	10				6	6	11	63	50	14	9
3	11	10				6	6	12	58	47	14	9
4	11	10				6	6	12	55	44	13	9
5	10	10				6	6	11	62	42	13	9
6	11	10				6	6	10	79	38	12	9
7	11	10				6	6	10	106	34	12	9
8	12	10				6	6	10	119	31	12	9
9	11	10				6	6	12	121	29	11	9
10	11	10				6	6	12	133	27	11	9
11	10	11				6	6	13	124	25	11	9
12	10					6	7	17	122	24	11	9
13	10					6	7	23	124	24	11	9
14	11					7	7	24	138	23	11	9
15	11				6	7	7	22	149	22	11	8
16	11		8	7		6	7	29	155	20	10	8
17	14					6	7	31	133	20	10	8
18	10					6	7	32	114	18	11	8
19	10					6	8	40	89	18	10	8
20	10					6	8	61	89	18	10	8
21	10	9				6	8	77	86	17	10	8
22	10					6	8	84	89	17	10	8
23	10					6	7	111	86	16	9	9
24	10					7	7	117	83	16	10	9
25	10					6	8	104	82	15	10	9
26	10					6	8	79	82	15	11	9
27	9					6	9	69	79	14	10	9
28	9					6	10	59	72	14	10	9
29	10				-------	7	11	49	67	14	10	9
30	10				-------	7	10	49	62	14	10	9
31	10	-------			-------	7	-------	58	-------	14	9	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	14	9	10.5	646
November	----------	----------	9.4	559
December	----------	----------	8.0	492
January	----------	----------	7.0	430
February	----------	----------	6.0	333
March	7	6	6.2	381
April	11	6	7.3	434
May	117	10	40.6	2,500
June	155	55	96.2	5,720
July	57	14	25.1	1,540
August	14	9	11.0	676
September	9	8	8.7	518
The year	155	----------	19.6	14,200

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.

RECORDS AVAILABLE.—June, 1928, to September, 1929.

EXTREMES.—Maximum discharge during year, 314 second-feet June 16 (gage height, 2.04 feet); minimum, 10 second-feet Apr. 7 (gage height, 0.36 foot). 1928–29: Maximum and minimum discharge occurred in 1929.

REMARKS.—Records fair except those for estimated periods, which are poor. No diversions above station. Gage-height record furnished by Yellow Pine Co.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27					a 13	a 14	a 25	a 150	132	84	a 20
2	27					a 13	a 12	24	a 145	117	a 84	a 20
3	27					a 13	a 13	a 30	a 140	108	83	19
4	27					a 13	a 14	a 35	a 140	104	a 83	a 19
5	27					a 13	a 13	30	164	98	a 83	a 19
6	27					a 13	13	26	a 180	87	83	a 19
7	27					a 13	a 10	a 25	a 200	81	82	a 19
8	27	a 22				a 13	a 12	a 25	a 220	77	84	a 19
9	27					a 13	a 13	a 40	a 225	71	22	a 18
10	27					a 13	a 15	a 45	246	a 69	23	a 18
11	27					a 13	a 16	52	262	a 67	24	a 18
12	27					a 13	a 18	a 62	262	a 65	22	a 18
13	27					a 14	17	a 72	a 260	63	22	a 17
14	27					a 14	a 17	82	a 280	60	24	15
15	27				a 13	a 14	a 18	a 90	296	57	24	a 16
16	27		a 16	a 14		a 14	a 18	a 98	314	53	22	a 16
17	32					a 14	a 19	a 105	a 288	54	24	a 16
18	29					a 13	a 19	113	262	a 50	a 24	a 16
19	26					a 13	a 20	a 140	189	a 50	a 24	16
20	25					a 14	20	167	176	a 45	a 23	a 16
21	a 25					a 15	a 18	a 216	176	43	a 23	a 18
22	a 24					a 14	17	264	176	38	a 23	a 18
23	a 24	a 18				a 14	a 18	a 269	176	a 38	a 22	a 18
24	a 23					a 14	20	274	176	a 37	a 22	a 18
25	a 23					a 14	a 21	246	176	36	a 22	a 18
26	a 23					a 13	a 22	189	176	34	a 22	a 18
27	a 22					a 13	a 23	164	164	34	a 21	a 19
28	a 22					a 15	a 24	132	164	34	a 21	a 21
29	a 21					a 15	25	a 125	153	33	a 21	a 21
30	21					a 15	26	a 125	142	31	a 21	a 18
31	a 21					a 15		140		32	a 20	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	32	21	25.6	1,570
November			20.0	1,190
December			16.0	984
January			14.0	861
February			13.0	722
March	15	13	13.6	836
April	26	10	17.5	1,040
May	274	24	111	6,820
June	314	140	203	12,100
July	132	31	61.2	3,760
August	34	20	24.9	1,530
September	21	15	18.0	1,070
The year	314	10	44.8	32,500

a Estimated.

EAST FORK OF SOUTH FORK OF SALMON RIVER NEAR YELLOW PINE, IDAHO

LOCATION.—Water-stage recorder in NE. ¼ sec. 27, T. 19 N., R. 8 E., 200 feet above Forest Service highway bridge and 1½ miles east of Yellow Pine.
RECORDS AVAILABLE.—August, 1928, to September, 1929.
EXTREMES.—Maximum discharge during period, 844 second-feet May 23 (gage height, 3.55 feet); minimum (estimated), 27 second-feet Dec. 4.
REMARKS.—Records good except those for periods Aug. 14 to Sept. 6, Sept. 8–22, 24–30, Oct. 2–7, 9–13, Nov. 15 to Dec. 31, 1928, and Jan. 1 to Apr. 6, 1929, which are fair.

Daily and monthly discharge, in second-feet, 1928–29

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	62	55	50	41	37	36	35	35	78	380	294	98	57
2	------	61	60	46	38	38	37	36	37	89	339	273	100	56
3	------	60	65	48	38	38	38	35	39	103	301	252	94	56
4	------	59	69	47	27	35	37	36	42	103	305	239	89	56
5	------	58	68	47	31	31	36	38	38	89	355	223	85	57
6	------	57	67	46	33	33	32	36	35	80	464	211	84	57
7	------	56	67	43	35	39	30	36	33	77	541	199	80	57
8	------	56	66	42	37	38	34	36	33	87	582	191	80	56
9	------	57	65	45	38	37	36	41	31	103	642	182	77	56
10	------	58	63	47	39	36	36	46	32	100	614	172	77	55
11	------	60	61	43	39	37	36	43	32	119	587	166	74	54
12	------	64	59	43	37	37	36	40	32	177	625	159	72	52
13	80	69	57	44	39	37	36	38	31	239	658	156	70	51
14	79	73	55	44	39	37	35	36	29	242	692	149	70	50
15	78	69	56	40	37	37	34	37	30	239	710	144	69	48
16	77	64	60	41	36	36	35	38	35	280	739	139	68	48
17	76	61	72	41	38	37	35	39	46	294	620	134	68	47
18	75	59	63	33	38	37	35	36	52	294	526	134	68	47
19	74	58	59	35	36	36	34	37	60	343	468	134	66	47
20	73	57	56	46	35	34	35	39	59	423	432	128	64	47
21	72	56	54	41	35	36	35	41	56	526	450	122	63	52
22	71	55	54	41	36	37	34	38	55	625	459	117	63	51
23	70	54	54	40	35	35	36	38	57	627	445	111	60	52
24	70	53	54	40	36	36	36	36	57	622	436	107	60	54
25	69	52	51	39	37	37	35	37	59	614	445	107	68	52
26	69	51	51	43	38	37	35	36	68	459	427	105	74	55
27	68	50	50	43	40	36	35	37	92	372	401	103	64	57
28	67	51	48	39	42	35	35	41	113	308	384	102	62	54
29	66	52	48	36	39	36	------	42	105	283	359	100	62	52
30	65	53	48	39	39	35	------	36	87	290	324	96	60	51
31	64	------	48	------	38	36	------	33	------	339	-----	98	59	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1928				
August 13–31	80	64	71.7	2,700
September	73	50	58.2	3,460
The period	----------	----------	----------	6,160
1928–29				
October	72	48	58.2	3,580
November	50	33	42.4	2,520
December	42	27	37.0	2,280
January	39	31	36.2	2,230
February	38	30	35.1	1,950
March	46	33	37.8	2,320
April	113	29	50.3	2,990
May	627	77	278	17,100
June	739	301	490	29,200
July	294	96	156	9,590
August	100	59	72.5	4,460
September	57	47	52.8	3,140
The year	739	27	112	81,400

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 a quarter of a mile southwest of Yellow Pine.
RECORDS AVAILABLE.—August, 1928, to September, 1929.
EXTREMES.—Maximum discharge during period, 2,200 second-feet May 27 (gage height, 4.95 feet); minimum, 40 second-feet Dec. 4 (gage height, 0.83 foot).
REMARKS.—Records good except those for Aug. 20 to Sept. 6, Sept. 8–10, 19–26, Sept. 28 to Oct. 3, and Oct. 5–11, 1928, which are fair. No diversions above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	83	84	82	71	65	65	62	69	162	1,140	538	114	62
2	------	82	87	74	59	68	66	64	71	188	990	495	114	61
3	------	81	90	77	59	68	68	62	72	210	900	454	108	61
4	------	79	93	82	48	65	66	64	77	224	930	418	99	60
5	------	78	92	80	54	52	65	68	74	204	1,080	388	95	61
6	------	77	92	80	56	56	54	65	68	195	1,240	362	92	61
7	------	76	91	72	61	65	52	65	66	192	1,320	338	90	60
8	------	78	90	72	62	69	60	65	65	217	1,320	318	88	60
9	------	79	90	80	66	68	65	68	65	262	1,420	295	84	61
10	------	80	89	82	68	65	64	82	60	237	1,420	272	82	61
11	------	82	89	72	68	66	65	76	66	280	1,320	254	80	61
12	------	86	88	74	62	66	64	69	59	405	1,350	240	79	61
13	------	99	88	79	68	66	64	66	65	587	1,320	227	76	60
14	------	103	86	79	68	66	62	62	65	673	1,350	217	74	59
15	------	97	86	66	62	66	61	65	68	725	1,380	204	72	58
16	------	90	88	71	61	64	62	68	69	845	1,610	192	69	58
17	------	80	105	72	64	66	62	69	79	900	1,280	182	68	55
18	------	79	110	54	66	66	62	62	84	900	1,080	176	71	55
19	99	78	93	55	61	65	61	65	95	1,050	960	182	69	55
20	98	77	90	80	60	55	62	69	97	1,210	900	162	80	55
21	97	76	84	77	60	60	62	71	97	1,460	900	156	64	56
22	96	75	82	72	61	66	61	66	99	1,690	900	146	62	59
23	94	75	82	72	60	60	64	66	110	1,850	845	138	61	60
24	93	74	82	71	61	64	62	62	110	1,940	818	136	60	64
25	92	73	80	68	64	66	62	65	112	1,650	818	128	65	64
26	91	72	79	76	65	66	61	64	126	1,210	779	123	77	66
27	89	71	77	76	72	62	62	65	156	1,020	720	119	72	72
28	88	74	77	72	74	61	62	76	201	930	688	116	66	72
29	87	77	77	58	69	64	------	77	217	872	647	112	66	66
30	86	80	77	66	69	61	------	68	185	960	592	108	66	65
31	84	------	79	------	66	65	------	66	------	1,110	-------	105	65	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1928				
August 19–31	99	84	91.8	2,370
September	103	71	80.4	4,780
The period				7,150
1928–29				
October	110	77	87.0	5,350
November	82	54	73.0	4,340
December	74	48	63.4	3,900
January	69	52	63.9	3,930
February	68	52	62.4	3,470
March	82	62	67.2	4,130
April	217	59	94.9	5,650
May	1,940	162	786	48,300
June	1,610	592	1,070	63,700
July	538	105	236	14,500
August	114	60	78.3	4,810
September	72	55	61.0	3,630
The year	1,940	48	229	166,000

GRANDE RONDE RIVER AT LA GRANDE, OREG.

LOCATION.—Staff gage in SW. ¼ sec. 31, T. 2 S., R. 38 E., an eighth of a mile below State Highway bridge and half a mile northwest of La Grande.

RECORDS AVAILABLE.—February, 1918, to June, 1923; October, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, 2,970 second-feet Mar. 21 (gage height, 4.60 feet); minimum, 15 second-feet Sept. 15 (gage height, 0.50 foot). 1918–1923, 1925–1929: Maximum discharge, 4,750 second-feet Apr. 22, 1922; minimum, 4 second-feet Sept. 14 and 16–20, 1922.

REMARKS.—Records good except those for October and Jan. 7 to Feb. 25, which are fair. No diversions above station. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	44	24	33		51	620	1,280	690	137	27	20
2	28	38	25	34		67	760	1,190	550	137	27	19
3	33	38	18	34		280	880	1,380	462	112	38	19
4	37	36	16	33		87	1,100	1,280	462	112	28	19
5	36	38	24	36		103	920	1,190	462	110	25	17
6	40	39	23	28		105	655	1,100	520	105	25	18
7	35	36	21			186	550	1,010	550	97	24	18
8	33	30	21			144	462	1,010	655	95	22	19
9	31	30	24			256	435	1,010	840	91	21	19
10	30	38	27			760	380	1,010	880	85	21	18
11	30	39	28			655	435	1,060	760	83	20	18
12	31	38	33			462	355	1,190	690	72	20	18
13	31	36	34		33	330	435	1,580	620	67	19	17
14	30	36	34			330	435	1,580	550	65	19	17
15	35	38	34			435	840	1,380	550	61	19	15
16	40	38	33			690	1,010	1,380	760	54	18	16
17	54	38	33			880	1,190	1,380	690	51	18	16
18	42	35	18			690	1,190	1,380	620	47	17	16
19	40	21	16	23		760	1,580	1,380	550	47	16	16
20	37	27	21			880	1,680	1,380	462	39	16	17
21	35	22	22			2,970	1,680	1,480	435	41	16	17
22	32	25	24			1,580	1,580	1,580	408	41	16	18
23	34	27	22			1,140	1,790	1,480	330	38	16	19
24	31	37	19			725	1,480	1,380	305	34	16	21
25	34	28	21			550	1,580	1,190	280	33	16	24
26	34	30	23		38	490	1,580	920	280	33	21	27
27	34	36	24		41	490	1,790	1,140	240	31	25	28
28	34	36	24		44	1,280	1,680	620	200	30	21	27
29	34	33	28		-------	1,190	1,900	550	193	29	20	27
30	34	20	33		-------	920	1,580	550	176	27	28	25
31	46	-------	33		-------	725	-------	520	-------	28	24	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	54	28	34.9	2,150
November	44	20	33.6	2,000
December	34	16	25.2	1,550
January	----------	----------	24.9	1,530
February	----------	----------	33.9	1,880
March	2,970	51	652	40,100
April	1,900	355	1,090	64,900
May	1,580	520	1,180	72,600
June	880	176	506	30,100
July	137	27	65.5	4,030
August	38	16	21.3	1,310
September	28	15	19.5	1,160
The year	2,970	15	308	223,000

GRANDE RONDE RIVER AT RONDOWA, OREG.

LOCATION.—Water-stage recorder in NW. ¼ sec. 23, T. 3 N., R. 40 E., 600 feet below mouth of Wallowa River at Rondowa.

RECORDS AVAILABLE.—October, 1926, to September, 1929.

EXTREMES.—Maximum discharge during year, 9,550 second-feet June 16 (gage height, 6.01 feet); minimum, 295 second-feet Dec. 5 (gage height, 0.85 foot). 1926–1929: Maximum discharge, 15,600 second-feet, Mar. 11, 1927 (gage height, 7.70 feet); minimum, that of Dec. 5, 1928.

REMARKS.—Records good except those for Feb. 8 to Mar. 7, which are poor. Many irrigation diversions above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	474	645	585	556	585		2,230	3,620	4,230	2,820	556	375
2	461	622	528	556	675		2,160	3,460	3,790	2,600	535	370
3	507	622	442	549	675		2,230	3,540	3,460	2,370	549	364
4	528	630	411	528	668	1,100	2,300	3,380	3,380	2,160	517	381
5	542	622	393	474	630		2,370	3,220	3,460	1,900	509	387
6	528	608	468	461	507		2,160	3,060	3,880	1,770	487	387
7	528	600	500	528	521		1,960	2,980	4,140	1,660	474	387
8	542	592	528	578		1,170	1,830	2,900	4,920	1,490	448	393
9	535	638	615	556		1,490	1,710	2,900	5,260	1,380	435	393
10	528	638	638	542		3,380	1,600	2,820	5,380	1,290	435	393
11	542	630	638	500		2,900	1,540	2,980	5,260	1,210	423	393
12	535	608	563	556		2,370	1,540	3,460	5,140	1,120	411	387
13	535	600	563	570		1,960	1,490	4,140	5,140	1,050	393	387
14	542	615	570	578		1,770	1,830	4,420	5,380	1,010	391	364
15	542	615	563	592		1,770	2,230	4,510	6,060	952	375	364
16	645	622	549	556		2,090	2,440	4,510	8,500	925	378	364
17	705	630	528	570		2,370	2,520	4,710	6,210	898	374	358
18	682	592	487	585	525	2,370	2,740	4,820	5,030	856	378	358
19	660	563	480	542		2,300	2,900	5,030	4,510	832	373	364
20	638	608	468	381		2,740	3,060	5,640	4,140	776	378	364
21	615	592	442	468		4,820	3,220	6,510	4,050	744	378	358
22	608	578	494	622		4,140	3,300	7,490	4,140	736	378	364
23	600	585	494	514		3,620	3,460	8,330	4,050	705	374	370
24	608	563	514	528		3,140	3,460	8,850	4,050	682	371	387
25	608	556	570	507		2,740	3,460	7,490	4,050	660	379	399
26	592	570	585	578		2,300	3,540	5,780	3,960	630	429	405
27	600	592	736	549		2,300	3,700	4,710	3,620	622	435	417
28	585	585	768	514		2,600	3,960	4,140	3,540	600	377	442
29	578	549	630	528	-------	2,900	4,050	3,790	3,380	585	377	454
30	585	528	592	521	-------	2,820	3,880	3,700	3,060	570	371	448
31	615	-------	563	528	-------	2,520	-------	3,960	-------	563	371	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	705	461	574	35,300
November	645	528	600	35,700
December	768	393	545	33,500
January	622	381	536	33,000
February	675	----------	546	30,300
March	4,820	----------	2,270	140,000
April	4,050	1,490	2,630	156,000
May	8,850	2,820	4,540	279,000
June	8,500	3,060	4,510	268,000
July	2,820	563	1,170	71,900
August	585	353	419	25,800
September	454	358	386	23,000
The year	8,850	353	1,560	1,130,000

CATHERINE CREEK NEAR UNION, OREG.

LOCATION.—Staff gage in SW. ¼ sec. 34, T. 4 S., R. 40 E., 5 miles southeast of Union.

RECORDS AVAILABLE.—February, 1918, to August, 1919; October, 1925, to September, 1929. 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. ¼ sec. 1, T. 5 S., R. 40 E.

EXTREMES.—Maximum discharge during year, 1,000 second-feet May 24 (gage height, 5.30 feet); minimum, 15 second-feet Dec. 3, 4, and 9–12 (gage height, 1.10 feet).

1906–1907, 1911–1912, 1915, 1918–1919, 1925–1929: Maximum discharge, 1,240 second-feet May 21, 1912; minimum, 8 second-feet Nov. 7, 1925.

REMARKS.—Records fair, except those for Dec. 5–7, 18–23, Jan. 4–9, Jan. 17 to Feb. 3, and Feb. 8–18, which are poor. Station is above practically all diversions. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	36	30	45		30	102	362	390	213	73	24
2	29	36	24	45	51	37	102	335	390	213	63	24
3	30	36	15	37		39	87	335	420	213	60	23
4	30	36	15		66	39	81	309	420	202	60	23
5	30	36			66	37	79	309	420	192	58	23
6	31	37	15	37	45	39	73	282	440	182	55	23
7	31	37			45	40	73	283	450	172	53	23
8	33	39	19			39	70	258	450	172	50	23
9	33	40	15			94	70	258	450	162	48	23
10	33	39	15	37		127	68	335	480	153	44	23
11	33	37	15	37		145	66	420	480	126	42	23
12	31	37	15	30		110	65	450	480	110	40	23
13	33	37	19	30	25	110	65	575	480	102	38	23
14	34	37	24	30		94	63	610	480	99	36	23
15	45	36	37	30		94	63	545	480	96	36	23
16	55	36	37	30		110	70	545	610	93	34	23
17	45	36	37			127	118	545	480	90	34	23
18	37	36				127	135	545	450	84	34	23
19	36	36			24	127	182	575	420	81	33	23
20	36	36			37	165	192	645	390	79	33	23
21	34	36	31		36	187	192	780	362	76	31	23
22	33	36			34	313	192	890	335	73	31	23
23	31	36			34	460	224	890	335	70	29	23
24	30	36	30	30	31	118	235	1,000	335	68	29	23
25	29	36	30		30	110	258	850	309	65	27	23
26	28	36	30		30	102	322	610	309	63	27	23
27	28	37	30		29	102	362	450	283	60	27	23
28	26	36	34		29	102	390	420	283	58	26	23
29	26	34	45		------	102	390	390	258	58	26	23
30	30	33	45		------	102	362	390	258	55	25	23
31	37	------	37		------	102	------	390	------	53	25	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	55	26	33.1	2,040
November	40	33	36.4	2,170
December	45	----------	26.7	1,640
January	45	----------	33.0	2,030
February	66	----------	34.4	1,910
March	460	30	114	7,010
April	390	63	158	9,400
May	1,000	258	503	30,900
June	610	258	405	24,100
July	213	53	114	7,010
August	73	25	39.6	2,430
September	24	23	23.1	1,370
The year	1,000	----------	127	92,000

WALLOWA RIVER ABOVE WALLOWA LAKE, NEAR JOSEPH, OREG.

LOCATION.—Water-stage recorder in NE. ¼ 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, 1929.

EXTREMES.—Maximum discharge during year, 852 second-feet June 15 (gage height, 2.18 feet); minimum, 17 second-feet Mar. 6 (gage height, 0.10 foot).

1924–1929: Maximum discharge, 1,250 second-feet June 26, 1927 (gage height, 2.65 feet); minimum, that of Mar. 6, 1929.

REMARKS.—Records good except those for discharges above 650 second-feet and for estimated periods, which are fair. 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	44	44	34	30	29	25	29	e61	230	400	84	43
2	44	44	35	30	28	25	28	e62	197	390	90	42
3	47	44	31	29	27	25	28	62	184	380	85	37
4	50	43		29	26	25	28	61	184	338	81	36
5	53	43			25	24	29	60	215	315	78	34
6	51	43	e31	e28		23	29	57	259	294	72	34
7	53	42				23	29	56	290	272	70	34
8	54	42				23	29	56	315	238	66	33
9	52	41			e26	23	29	56	325	203	66	32
10	50	41				24	33	58	315	199	61	29
11	49	41	31	28		25	29	72	320	192	59	28
12	46	41	30	25	27	26	28	106	340	192	55	27
13	45	41	31	e24	26	26	25	143	378	192	55	26
14	44	40	29	e24	25	25	28	152	448	192	53	26
15	48	39		e24	25	26	29	152	502	185	53	26
16	55	38		23	25	25	31	149	510	182	51	25
17	59		e28	25	25	25	31	155	380	175	46	25
18	55			26	25	25	31	165	307	165	45	25
19	53				25	25	31	174	268	155	45	24
20	51				25	27	33	230	259	152	41	24
21	48		26	e27	e25	33	33	277	272	128	40	24
22	45		26		25	31	33	340	303	121	39	24
23	44		25		25	31	33	400	324	121	34	24
24	44	e36	26		25	29	34	442	351	e117	34	24
25	44		29	28	25	29	36	372	395	e113	34	24
26	44		29	29	25	29	41	282	420	109	39	24
27	44		30	29	25	29	51	227	420	98	37	24
28	44		29	31	25	33	58	194	435	93	37	25
29	44		32	29	------	31	e59	187	425	85	39	24
30	44		32	e29	------	29	e60	208	410	82	49	24
31	44	------	32	e29	------	31	------	227	------	82	47	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	59	44	48.1	2,960
November	44	------	39.0	2,320
December	35	25	29.7	1,830
January	31	23	27.5	1,690
February	29	25	25.7	1,430
March	33	23	26.8	1,650
April	------	25	34.2	2,040
May	442	56	169	10,400
June	510	184	333	19,800
July	400	82	192	11,800
August	90	34	54.4	3,340
September	43	24	28.4	1,690
The year	510	23	84.2	61,000

e Estimated.

EAST FORK OF WALLOWA RIVER NEAR JOSEPH, ORE.

LOCATION.—Staff gage in SE. ¼ sec. 29, T. 3 S., R. 45 E., a quarter of a mile above mouth, 1 mile above Wallowa Lake, and 6 miles south of Joseph.

RECORDS AVAILABLE.—July, 1924, to September, 1929.

EXTREMES.—Maximum discharge during year, 117 second-feet June 15 (gage height, 1.80 feet); minimum, 0.7 second-foot Apr. 18, 20, and 22 (gage height, 0.20 foot).

1924–1929: Maximum discharge, 203 second-feet June 26, 1927 (gage height, 2.20 feet); minimum, 0.5 second-foot Jan. 31 and Feb. 15, 1927 (gage height, 0.62 foot).

REMARKS.—Records fair except those for discharges exceeding 60 second-feet, which are poor. Practically entire low-water flow is diverted 1 mile upstream for power.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.7	7.1		4.4		1.9	3.8	3.8	2[illegible]	56	9.5	4.5
2	7.7	4.9		4.0		[e]1.8	3.8	4.5	2[illegible]	53	10	3.8
3	11	5.9		3.6		1.7	3.8	4.9	19	50	9.5	4.7
4	7.7	7.7		3.4		1.5	3.8	4.5	16	53	9.5	4.9
5	8.9	6.5	[e]2.0			1.8	2.9	4.9	17	52	7.6	4.9
6	8.3	5.9				1.7	2.5	4.3	15	43	7.6	4.5
7	8.9	5.4		[e]3.1		1.8	4.9	3.8	19	43	7.3	4.7
8	8.3	5.4				1.5	2.7	4.2	3[illegible]	39	7.3	4.3
9	7.4	5.9	1.4			1.7	2.7	2.9	3[illegible]	38	7.6	4.9
10	7.7	7.7	1.6			3.5	3.5	2.7	3[illegible]	33	7.3	4.5
11	8.3	7.1	5.1	2.8		2.0	2.8	4.2	3[illegible]	31	8.0	4.9
12	8.3	6.8	4.2	4.4		1.9	3.3	8.0	3[illegible]	29	7.3	4.7
13	7.7	6.8	4.2	4.9		1.4	3.2	9.5	4[illegible]	26	6.6	4.5
14	7.7	5.4	3.8	3.2		1.5	2.9	12	4[illegible]	25	6.3	4.2
15	8.0	4.9	3.8	1.9	[e]2.0	3.5	2.9	11	8[illegible]	24	6.6	4.5
16	7.7	4.9	[e]3.6	2.5		3.2	2.7	12	9[illegible]	21	6.3	4.0
17	8.3	5.9	[e]3.4	2.5		2.9	2.9	13	6[illegible]	17	6.3	4.2
18	7.7		4.9	2.8		2.7	1.7	12	6[illegible]	15	6.6	4.2
19	7.7		4.9			3.2	2.1	15	4[illegible]	15	6.0	4.0
20	7.1		4.4			3.5	1.7	26	4[illegible]	15	5.7	4.2
21	7.7					2.7	3.5	24	4[illegible]	14	5.7	4.2
22	7.1					2.5	1.7	28	4[illegible]	14	5.7	4.3
23	6.8		[e]4.0			2.5	2.0	35	4[illegible]	13	5.4	4.5
24	6.8	[e]4.0				2.9	3.2	36	43	13	5.2	4.5
25	6.5			[e]2.0		2.9	1.8	31	5[illegible]	12	5.7	4.2
26	6.5		6.2			3.2	3.6	22	5[illegible]	11	5.7	4.7
27	6.8		7.7			3.2	4.2	19	6[illegible]	11	5.2	4.5
28	6.8		6.2			3.5	4.7	16	6[illegible]	10	5.7	4.9
29	6.5		5.4		-------	2.9	5.4	16	6[illegible]	10	6.0	4.7
30	6.5		5.9		-------	2.9	4.3	17	5[illegible]	9.5	6.6	4.2
31	7.1	-------	5.4		-------	4.9	-------	19	-------	8.7	4.2	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	11	6.5	7.65	470
November	7.7	----------	5.21	310
December	7.7	----------	3.81	234
January	4.9	----------	2.74	168
February	----------	----------	2.0	111
March	4.9	1.4	2.54	156
April	5.4	1.7	3.17	189
May	36	2.7	13.7	842
June	97	15	44.5	2,650
July	56	8.7	25.9	1,560
August	10	4.2	6.77	416
September	4.9	3.8	4.46	265
The year	97	----------	10.2	7,400

[e] Estimated.

WALLOWA FALLS POWER PLANT TAILRACE NEAR JOSEPH, OREG.

LOCATION.—Staff gage in SE. ¼ sec. 29, T. 3 S., R. 45 E., a quarter of a mile above point where channel discharges into West Fork of Wallowa River and 6 miles south of Joseph.

RECORDS AVAILABLE.—August, 1924, to September, 1929.

EXTREMES.—Maximum discharge during year, 13 second-feet June 6 (gage height, 0.76 foot); no flow May 20.

1924–1929: Maximum discharge, 16 second-feet Jan. 9 and 17, 1928 (gage height, 0.80 foot); minimum, that of May 20, 1929.

REMARKS.—Records fair. Flow regulated by discharge through nozzle for impulse wheel in power house. Water is diverted at dam on East Fork of Wallowa River into a conduit 1 mile above power house and is discharged into West Fork of Wallowa River.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.0	8.2	7.6	7.1	7.1	6.9	6.7	6.7	8.2	6.9	6.7	6.7
2	8.0	7.6	7.4	6.7	7.1	6.9	6.7	6.7	6.7	7.1	6.9	6.9
3	8.0	8.0	7.6	7.1	6.7	6.7	6.9	6.7	6.7	6.9	6.7	6.9
4	8.0	6.9	7.6	7.6	7.1	6.9	6.9	6.7	6.7	6.7	6.7	8.0
5	8.0	8.0	8.0	7.1	7.1	6.9	8.7	6.7	8.2	6.9	7.1	7.6
6	7.1	8.2	7.8	6.5	7.1	6.9	6.7	6.7	8.5	7.1	7.6	7.6
7	6.5	8.0	8.2	7.1	7.1	6.9	6.7	6.7	6.7	6.3	7.6	7.1
8	7.4	8.5	7.8	6.3	7.1	6.9	6.7	6.7	6.7	6.9	7.1	7.1
9	8.0	8.0	6.5	6.3	7.1	6.9	6.7	8.5	6.7	7.1	7.1	6.9
10	7.6	8.0	8.2	6.5	6.7	6.7	6.7	7.8	6.7	7.1	6.7	6.9
11	7.4	6.9	8.0	6.9	7.1	6.9	6.7	6.9	6.7	6.7	6.7	6.9
12	7.6	8.0	7.8	6.7	7.4	6.9	6.7	6.7	6.7	6.7	7.1	6.9
13	7.8	8.5	7.6	6.3	7.1	7.1	6.7	8.5	6.7	6.7	7.6	7.6
14	6.7	8.2	7.4	6.9	7.1	6.9	6.7	6.9	6.9	6.3	6.9	8.0
15	8.0	8.5	7.6	7.6	7.1	6.9	6.7	6.7	7.1	6.7	6.9	6.7
16	8.0	8.5	6.9	7.6	7.1	6.9	6.7	6.5	6.7	7.1	7.1	6.9
17	8.2	8.0	7.6	7.6	6.7	6.7	6.7	6.7	6.9	7.6	7.6	6.9
18	8.5	6.9	7.6	7.1	7.6	6.9	8.0	8.2	6.9	7.1	6.7	6.7
19	8.5	8.0	7.6	7.1	7.1	6.9	8.5	6.7	6.7	7.1	8.0	6.9
20	8.5	8.5	7.6	7.1	7.1	6.9	8.5	6.4	6.9	7.1	7.6	7.1
21	6.9	8.5	7.6	7.1	7.1	6.9	6.7	6.7	6.7	6.7	7.6	8.0
22	8.2	8.0	7.6	7.6	7.1	6.9	6.7	8.7	7.1	6.9	7.1	6.7
23	8.5	8.5	6.9	8.0	7.1	6.9	8.5	6.7	6.9	6.9	7.1	7.1
24	8.5	8.0	7.6	7.1	6.9	6.7	6.7	6.7	6.9	6.9	8.2	7.1
25	8.5	6.7	6.7	6.7	7.1	6.9	8.5	6.5	6.9	7.1	7.1	7.1
26	8.5	8.2	6.7	7.4	7.1	6.9	6.7	6.7	7.1	6.9	7.4	7.1
27	8.0	8.0	7.1	6.5	7.1	6.9	6.7	8.5	7.6	7.1	7.4	6.7
28	6.9	7.4	7.1	7.1	7.1	6.9	6.7	8.5	7.1	7.1	8.0	6.9
29	8.5	6.9	7.1	7.4	------	6.9	6.7	6.7	7.1	7.1	7.1	6.7
30	8.5	7.6	6.7	7.6	------	6.7	6.7	6.7	6.7	7.1	7.1	7.1
31	8.5	------	7.4	7.1	------	6.3	------	7.6	------	6.9	7.4	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	8.5	6.5	7.91	486
November	8.5	6.7	7.91	471
December	8.2	6.5	7.45	458
January	8.0	6.3	7.06	434
February	7.6	6.7	7.08	393
March	7.1	6.3	6.85	421
April	8.7	6.7	7.06	420
May	8.7	6.4	7.10	437
June	8.5	6.7	7.07	421
July	7.6	6.3	6.93	426
August	8.2	6.7	7.22	444
September	8.0	6.7	7.09	422
The year	8.7	6.3	7.23	5,230

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, 1929.

EXTREMES.—Maximum discharge during year, 658 second-feet June 15 (gage height, 2.55 feet); minimum, 12 second-feet Feb. 19 and Mar. 15–18.

1915, 1924–1929: Maximum discharge, 716 second-feet May 26, 1928 (gage height, 2.65 feet); minimum, that of Feb. 19 and Mar. 15–18, 1929.

REMARKS.—Records good except those for Dec. 12, 13, Jan. 5–10, 19–24, Jan. 27 to Feb. 6, Feb. 9–15, Mar. 10–14, July 14–18, and 20, which are fair. No diversions above station. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	27	20	18		12	16	29	155	304	54	32
2	34	27	20	17		12	15	29	127	290	56	32
3	34	27	20	16		12	15	29	117	255	54	31
4	34	26	19	16		12	15	30	120	228	54	30
5	34	26	19		14	12	15	29	163	204	52	30
6	35	26	19			12	15	29	183	190	47	30
7	34	26	19	16		12	15	28	20[illegible]	173	47	28
8	35	25	19		14	12	15	28	230	154	43	28
9	35	25	23			12	15	28	235	148	42	25
10	35	25	23				15	28	226	141	40	24
11	36	25	23	15			15	33	239	135	42	24
12	36	25	22	16	13	12	15	50	265	132	43	25
13	36	26	21	16			15	74	293	122	43	25
14	34	26	20	17			15	82	28[illegible]	105	43	24
15	35	26	20	16			15	82	42[illegible]	105	43	24
16	38	26	20	16	12	12	15	87	358	105	45	24
17	41	26	20	15	12	12	14	103	23[illegible]	105	45	23
18	36	26	20	14	12	12	15	115	18[illegible]	105	45	23
19	33	27	20		12	12	16	137	160	87	45	23
20	33	27	19		12	14	17	177	164	82	43	24
21	32	27	19	14	12	17	18	205	211	76	43	24
22	30	27	19		12	15	18	255	23[illegible]	71	40	23
23	29	27	19		12	16	18	306	25[illegible]	69	38	23
24	27	27	19		12	16	20	306	28[illegible]	65	38	23
25	26	27	19	15	12	16	21	204	33[illegible]	63	37	23
26	26	27	19	15	12	16	22	161	318	60	43	22
27	26	27	19		12	16	24	129	29[illegible]	56	38	23
28	26	27	19		12	18	28	115	33[illegible]	54	38	23
29	26	27	19	14	-------	18	29	115	32[illegible]	52	37	24
30	26	27	19		-------	17	29	139	30[illegible]	52	35	23
31	26	-------	19		-------	16	-------	155	-------	52	34	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	41	26	32.3	1,990
November	27	25	26.3	1,560
December	23	19	19.8	1,220
January	18	----------	15.2	935
February	----------	12	12.8	711
March	18	12	13.6	836
April	29	14	17.7	1,050
May	306	28	107	6,580
June	420	117	243	14,500
July	304	52	124	7,620
August	56	34	43.5	2,670
September	32	22	25.3	1,510
The year	420	12	56.8	41,200

LOSTINE RIVER NEAR LOSTINE, OREG.

LOCATION.—Water-stage recorder in NW. ¼ sec. 34, T. 1 S., R. 43 E., 10 miles above mouth and 3½ miles south of Lostine.

RECORDS AVAILABLE.—August, 1912, to March, 1914; April to September, 1915; July, 1925, to September, 1929.

EXTREMES.—Maximum discharge during year, about 1,570 second-feet June 15 or 16 (gage height, 5.70 feet); minimum, 15 second-feet Nov. 18 (gage height, 0.23 foot).

1912-1914, 1915, 1925-1929: Maximum discharge, 2,540 second-feet May 27, 1913; minimum, that of Nov. 18, 1928.

REMARKS.—Records fair. No large diversions above station. Flow regulated to a small extent by storage in Minam Lake Reservoir. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	37	*25		*23		36	124	572	675	101	33
2	21	29	26		23		38	129	488	645	111	32
3	24	32	*26				35	142	488	558	98	31
4	25	32	*25			*20	39	138	488	476	88	30
5	29	30	*24		*24		38	128	515	438	79	30
6	27	29	24	*27			37	122	630	414	73	32
7	32	25	*26			21	36	121	675	378	69	31
8	39	32	*27		24		36	126	822	344	66	30
9	33	33	*28				36	126	875	321	62	28
10	32	36	30			*22	35	129	805	310	60	27
11	29	29					36	170	822	289	55	26
12	27	28		26			35	258	875	278	51	26
13	32	26					34	355	945	262	47	26
14	28	26	*29		*22	23	37	378	1,020	255	44	24
15	36	25		*24		23	40	356	1,180	243	43	24
16	111	24				25	37	378	1,260	223	42	24
17	95	23	28			29	*41	438	805	205	40	24
18	73	18				36	*45	464	587	203	39	24
19	63	23		23		44	49	558	501	178	38	24
20	53	27				54	52	675	488	172	38	24
21	45	26			20	58	51	770	558	158	36	24
22	45	22				54	52	910	645	133	34	24
23	40	22				52	56	1,100	690	121	34	24
24	38	22	*28			49	60	*950	735	119	34	24
25	36			*23	*20	45	66	*800	892	114	34	26
26	34					37	81	*650	910	114	40	26
27	37	*24				32	108	*500	840	103	38	27
28	37				20	44	145	356	857	92	34	27
29	34				-------	42	155	356	840	88	38	27
30	33				-------	38	136	426	735	101	34	26
31	37	-------	28		-------	37	-------	543	-------	104	34	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	111	21	40.2	2,470
November	37	18	26.7	1,590
December	-------	-------	27.6	1,700
January	-------	-------	24.7	1,520
February	-------	-------	21.9	1,220
March	58	-------	32.1	1,970
April	155	34	56.1	3,340
May	1,100	121	409	25,100
June	1,260	488	751	44,700
July	675	88	262	16,100
August	111	34	52.7	3,240
September	33	24	26.8	1,590
The year	1,260	-------	144	105,000

* Estimated.

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, 1929. April to September, 1915, at site half a mile downstream.

EXTREMES.—Maximum discharge during year, 950 second-feet May 22, 23, and June 15 (gage height, 3.70 feet); minimum, 6 second-feet Sept. 18 and 19 (gage height, 0.86 foot).

1915, 1924–1929: Maximum discharge, 1,480 second-feet June 8, 1927 (gage height, 4.55 feet); minimum, 6 second-feet Sept. 30, 1924, Aug. 14, 1926, Sept. 5 and 6, 1928, and Sept. 18 and 19, 1929.

REMARKS.—Records good except those for estimated periods, which are fair. Records furnished by State engineer of Oregon.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	17					65	e 159	374	245	22	9
2	10	16	14				63	158	287	225	22	9
3	10	16					65	167	253	190	20	8
4	10	16					67	155	273	158	18	8
5	10	16		7			65	140	333	135	17	8
6	11	16					61	123	40[illegible]	117	15	8
7	11	16				e 20	56	111	470	105	14	8
8	11	16					52	111	58[illegible]	93	15	8
9	12	17					47	111	550	83	15	8
10	14	15					45	113	50[illegible]	74	14	8
11	16	11					43	158	500	60	14	8
12	15	8					42	268	49[illegible]	55	13	8
13	15	8					42	364	57[illegible]		12	8
14	15	8				31	51	369	540		e 12	7
15	16	7			e 12	33	57	333	715	e 48	e 11	7
16	29	8			e 12	38	68	346	644		e 10	7
17	35		12		e 12	41	88	378	490		10	7
18	35				12	43	93	396	40[illegible]	41	10	6
19	31			12	12	44	93	445	37[illegible]		10	6
20	28				12	58	93	520	360		10	
21	25				12	96	96	616	39[illegible]		10	
22	24				12	86	103	742	42[illegible]		10	
23	24	10			12	78	111	800	42[illegible]		10	e 8
24	21				12	67	121	704	430			
25	21				11	57	133	485	e 410	e 30		
26	20				10	53	164	333	e 390		e 10	
27	21				e 10	53	164	249	360			9
28	20				10	65	e 163	212	360			10
29	18					80	e 162	215	315			e 8
30	17					77	e 160	268	26[illegible]		10	e 8
31	19		12			71		356		20	9	

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	35	10	18.5	1,140
November	17	7	11.7	696
February 15–28			11.5	319
March	96		42.9	2,640
April	164	42	87.8	5,220
May	800	111	320	19,700
June	715	256	431	25,600
July	245	20	71.0	4,370
August	22	9	12.7	781
September	10	6	7.9	470

e 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 for irrigation and domestic use and 8 miles west of Asotin.

DRAINAGE AREA.—171 square miles.

RECORDS AVAILABLE.—August, 1928, to September, 1929. Records at practically same site March, 1904, to November, 1906, and August, 1910, to October, 1911.

EXTREMES.—Maximum discharge during period Aug. 13, 1928, to Sept. 30, 1929, 187 second-feet May 24 (gage height, 1.67 feet); minimum, 27 second feet Aug. 14, 1929.

1904–1906, 1910–11, 1928–29: Maximum discharge, 1,180 second-feet Apr. 15, 1904 (gage height, 4.3 feet, former datum); minimum, 24.6 second-feet Aug. 20 and 21, 1910.

REMARKS.—Records good except those for period Jan. 20 to Feb. 21, which are poor. No large diversion above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	29	31	33	35	36		34	56	81	100	56	31	29
2	------	29	31	33	34	35		34	56	81	97	55	33	29
3	------	29	35	33	32	35		35	55	84	86	52	34	29
4	------	29	35	33	23	35		37	55	84	84	52	31	29
5	------	29	34	33	30	35		42	56	83	83	50	30	29
6	------	29	34	34	31	33	30	50	56	86	83	49	30	30
7	------	29	34	34	32	35		46	52	86	83	49	30	30
8	------	31	36	33	33	34		46	50	83	88	46	28	29
9	------	33	34	36	33	34		46	49	83	105	46	29	29
10	------	31	33	36	35	34		52	48	86	118	46	28	29
11	------	31	33	36	35	31		62	48	88	118	48	28	29
12	------	33	33	36	35	31		56	46	105	112	45	28	28
13	31	33	33	37	35	31		55	46	127	102	45	28	28
14	31	33	33	36	34	31		52	46	127	100	44	27	28
15	31	31	34	36	34	32		52	65	110	88	41	28	28
16	31	30	36	36	34	32	35	52	68	124	112	41	29	28
17	31	30	36	34	33	32		50	68	127	121	42	28	28
18	30	30	35	33	31	32		49	67	124	110	42	28	28
19	30	30	34	35	31	32		49	67	127	110	41	29	28
20	30	30	33	35	31			50	67	133	100	41	29	28
21	31	30	33	35	31			56	71	142	90	39	29	29
22	31	30	33	35	31		33	67	71	164	86	37	28	29
23	31	30	33	35	31		33	65	78	175	83	37	29	30
24	31	30	33	35	33		33	65	78	187	79	37	29	31
25	31	30	33	36	35	30	35	56	78	175	74	36	29	33
26	31	30	33	36	33		35	55	78	139	70	35	30	33
27	36	30	33	37	34		35	52	83	127	67	35	30	33
28	32	30	33	37	34		34	56	97	110	64	35	29	33
29	31	30	32	37	35		------	70	105	100	78	34	29	31
30	31	30	32	36	35		------	70	95	88	58	34	30	31
31	31	------	33	------	36		------	70	------	95	------	33	30	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1928				
August 13–31	36	30	31.2	1,180
September	33	29	30.3	1,800
The period				2,980
1928–29				
October	36	31	33.5	2,060
November	37	33	35.0	2,080
December	36	29	33.1	2,040
January			31.9	1,960
February			33.0	1,830
March	70	34	52.6	3,230
April	105	46	65.2	3,880
May	187	81	114	7,010
June	121	58	91.6	5,450
July	56	33	42.7	2,630
August	34	27	29.3	1,800
September	33	28	29.5	1,760
The year	187	27	49.3	35,700

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, 1929.

EXTREMES.—Maximum discharge during year, 52,700 second-feet May 24 (gage height, 13.28 feet); minimum, 650 second-feet Jan. 6, 7, and 20 (gage height, 1.8 feet).

1910–1929: Maximum discharge, 76,600 second-feet May 26, 1913 (gage height, 16.1 feet); minimum, probably less than 500 second-feet in December, 1919.

REMARKS.—Records good except those for Dec. 5–8, Jan. 21–25, Feb. 6–16, and Apr. 5, 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, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,280	1,820	1,410	1,410	1,410	1,280	4,300	14,000	28,500	11,100	2,110	1,160
2	1,280	1,680	1,680	1,410	1,280	1,680	3,730	13,100	25,500	10,300	2,110	1,100
3	1,280	1,540	1,540	1,410	1,410	1,820	3,730	13,100	21,600	9,550	2,260	1,100
4	1,820	1,820	1,540	1,280	1,410	1,820	3,910	12,700	19,600	8,490	2,260	1,100
5	1,960	1,680	1,300	940	1,280	2,110	4,400	12,700	21,600	8,150	2,110	1,100
6	1,820	1,820	1,100	650	1,200	2,560	4,300	11,500	26,700	7,160	2,110	1,160
7	1,960	1,540	1,000	650	900	2,880	3,910	11,100	32,400	6,850	1,960	1,050
8	1,960	1,680	1,000	940	700	2,560	3,550	12,700	35,100	6,260	1,680	1,050
9	1,960	1,540	1,410	1,050	700	2,410	3,550	12,700	35,800	5,710	1,610	1,050
10	2,410	1,540	1,680	1,280	700	3,730	3,380	13,100	31,700	5,450	1,480	995
11	2,560	1,680	1,680	1,410	700	5,710	3,210	13,100	29,200	4,960	1,480	995
12	2,720	1,680	1,820	1,050	800	4,300	3,210	17,100	28,500	4,730	1,410	995
13	2,560	1,680	1,680	1,280	900	3,550	3,380	23,300	29,200	4,510	1,410	995
14	2,110	1,820	1,280	1,280	1,100	3,040	3,210	26,100	29,200	4,300	1,340	995
15	2,110	1,680	1,280	1,540	1,100	3,040	4,100	24,400	27,900	4,300	1,340	995
16	1,960	1,410	1,280	1,280	1,200	3,040	4,300	26,100	27,900	4,100	1,280	995
17	2,880	1,410	1,280	1,050	1,410	3,380	4,960	28,500	24,900	3,550	1,280	995
18	3,210	1,540	940	940	1,280	3,210	5,980	29,200	23,300	3,380	1,280	995
19	3,380	1,410	940	940	1,280	3,210	6,850	29,200	23,800	3,380	1,280	940
20	3,040	1,410	940	650	1,410	3,380	7,480	33,700	20,100	3,210	1,160	940
21	2,560	1,540	940	700	1,280	4,100	8,840	38,600	19,000	3,380	1,160	940
22	2,260	1,410	840	700	1,280	5,200	9,190	41,600	17,100	3,730	1,160	890
23	2,260	1,680	1,050	1,000	1,280	4,100	10,700	48,600	16,600	3,380	1,160	890
24	2,110	1,680	1,050	1,100	1,280	3,550	10,700	50,200	16,200	2,880	1,160	890
25	2,260	1,410	1,280	1,200	1,410	3,380	11,100	46,200	16,200	2,720	1,160	940
26	1,960	1,280	1,280	1,280	1,280	3,040	11,500	32,400	15,700	2,720	1,160	995
27	1,820	1,680	1,540	1,280	1,280	3,210	13,500	27,900	15,300	2,560	1,160	1,050
28	1,820	1,680	1,680	1,160	1,280	3,380	16,200	22,700	14,000	2,410	1,100	1,050
29	1,960	1,680	1,680	1,160	-------	5,450	18,500	21,100	13,100	2,410	1,050	1,100
30	1,680	1,680	1,680	1,160	-------	4,960	17,600	21,600	12,300	2,260	1,050	1,160
31	1,680	-------	1,680	1,160	-------	4,510	-------	22,700	-------	2,260	1,050	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	3,380	1,280	2,150	0.443	0.51	132,000
November	1,820	1,280	1,600	.330	.37	95,200
December	1,820	840	1,340	.276	.32	82,400
January	1,540	650	1,110	.229	.26	68,200
February	1,410	700	1,160	.239	.25	64,400
March	5,710	1,280	3,340	.689	.79	205,000
April	18,500	3,210	7,110	1.47	1.64	423,000
May	50,200	11,100	24,200	4.99	5.75	1,490,000
June	35,800	12,300	23,300	4.80	5.36	1,390,000
July	11,100	2,260	4,840	.998	1.15	298,000
August	2,260	1,050	1,460	.301	.35	89,800
September	1,160	890	1,020	.210	.23	60,700
The year	50,200	650	6,070	1.25	16.98	4,400,000

CLEARWATER RIVER AT SPALDING, IDAHO

LOCATION.—Water-stage recorder in lot 22, sec. 22, T. 36 N., R. 4 W., one-eighth of a mile below mouth of Lapwai Creek and a quarter of a mile north of Spalding.

DRAINAGE AREA.—9,570 square miles. Prior to Oct. 1, 1928, record at Spalding highway bridge, 2,300 feet upstream in NE. ¼ sec. 22, T. 36 N., R. 4 W.

RECORDS AVAILABLE.—March, 1926, to September, 1929.

EXTREMES.—Maximum discharge during year, 77,100 second-feet May 24 (gage height, 15.4 feet); minimum, 920 second-feet Dec. 8 (gage height, 1.42 feet).

1926–1929: Maximum discharge, 109,000 second-feet June 9, 1927 (gage height, 17.7 feet at old gage); minimum, that of Dec. 8, 1929.

Maximum stage known, 25.6 feet (referred to gage at present site) Jan. 5, 1928, during severe ice jam.

REMARKS.—Records excellent except those for period Jan. 23 to Mar. 5, which are fair. Station is maintained in cooperation with Inland Power & Light Co.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2,450	3,100	2,900	3,100	2,800	3,000	8,680	28,700	39,300	17,000	3,910	2,200
2	2,630	3,000	3,000	2,900	3,000	3,000	8,020	25,600	39,300	15,700	3,910	2,120
3	3,000	2,900	2,900	2,900	3,000	3,300	8,350	26,800	35,000	14,800	3,910	2,040
4	3,910	2,720	2,810	2,900	3,000	3,300	9,020	26,800	30,800	13,500	3,910	2,040
5	4,020	3,000	2,040	2,720	2,500	3,500	9,710	25,000	30,100	12,700	3,700	2,040
6	4,360	3,290	1,450	1,970	2,500	5,060	9,360	23,800	35,000	11,500	3,490	2,120
7	4,020	3,100	1,290	1,570	2,000	5,560	8,680	22,600	42,400	11,200	3,390	2,120
8	5,180	3,000	1,290	1,570	1,500	5,560	7,860	22,600	45,400	10,800	3,290	2,040
9	5,820	2,810	3,290	2,200	1,000	5,690	7,540	25,000	44,700	10,100	3,190	2,120
10	4,820	3,490	3,390	3,290	1,000	7,390	7,240	26,200	43,900	9,360	3,100	2,120
11	5,180	4,360	3,490	3,100	1,200	9,360	7,390	25,600	43,900	9,020	3,100	2,200
12	4,940	4,240	3,590	2,720	1,400	9,360	7,540	30,100	41,600	8,350	3,000	2,200
13	4,020	3,590	3,290	2,450	1,800	7,540	7,540	39,300	38,600	8,020	2,900	2,120
14	3,910	3,390	3,000	2,540	2,100	6,500	8,350	46,200	37,900	7,700	2,810	2,120
15	3,590	3,390	2,810	2,900	2,000	6,080	12,300	43,900	37,100	7,540	2,720	2,040
16	3,590	3,590	2,810	3,000	2,600	6,500	13,100	43,100	39,300	7,240	2,630	1,970
17	4,470	3,700	2,720	2,810	2,600	6,790	13,100	46,200	37,100	6,790	2,630	1,970
18	5,950	3,590	2,630	2,630	2,600	6,940	13,900	47,000	33,500	6,500	2,630	1,970
19	6,220	3,290	2,630	2,360	2,600	7,090	14,800	47,800	32,800	6,220	2,540	1,900
20	5,180	3,000	2,280	1,700	2,600	7,540	15,700	51,800	30,100	6,220	2,540	1,900
21	4,700	2,810	2,040	1,700	2,600	10,800	18,500	57,600	26,800	5,950	2,450	1,900
22	4,240	3,290	2,120	1,700	2,600	11,900	20,500	64,400	25,600	5,560	2,450	1,970
23	3,910	3,290	2,120	2,000	2,600	9,710	22,600	70,600	25,000	5,300	2,360	1,970
24	3,800	3,100	2,280	2,200	2,500	8,350	22,600	73,300	24,400	5,180	2,360	2,040
25	3,700	3,000	2,360	2,200	2,500	7,390	21,500	67,900	23,800	4,940	2,280	2,120
26	3,490	2,900	2,630	2,100	2,500	6,790	22,600	52,600	23,200	4,820	2,280	2,200
27	3,390	3,000	3,100	2,200	2,600	6,640	25,600	42,400	22,100	4,580	2,360	2,280
28	3,290	3,290	3,100	2,400	3,000	8,680	30,100	37,100	20,500	4,470	2,450	3,200
29	3,190	3,290	3,490	2,400	-------	12,700	36,400	33,500	19,400	4,360	2,360	2,200
30	3,190	3,100	3,390	2,400	-------	12,700	37,900	32,800	18,500	4,240	2,280	2,280
31	3,100	-------	3,190	2,400	-------	10,400	--------	34,200	--------	4,130	2,280	-------

Month	Maximum	Minimum	Mean	Per square Mile	Run-off	
					Inches	Acre-feet
October	6,220	2,450	4,110	0.429	0.49	253,000
November	4,360	2,720	3,250	.340	.38	193,000
December	3,590	1,290	2,690	.281	.32	165,000
January	3,290	1,570	2,420	.253	.29	149,000
February	3,000	1,000	2,310	.241	.25	128,000
March	12,700	3,000	7,260	.759	.88	446,000
April	37,900	7,240	15,200	1.59	1.77	904,000
May	73,300	22,600	40,000	4.18	4.82	2,460,000
June	45,400	18,500	32,900	3.44	3.84	1,960,000
July	17,000	4,130	8,190	.856	.99	504,000
August	3,910	2,280	2,880	.301	.35	177,000
September	2,280	1,900	2,080	.217	.24	124,000
The year	73,300	1,000	10,300	1.08	14.62	7,460,000

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 Inland Power & Light Co. and 6 miles southeast of Grangeville.

DRAINAGE AREA.—865 square miles.

RECORDS AVAILABLE.—November, 1910, to September, 1916; and April, 1923, to September, 1929.

EXTREMES.—Maximum discharge during year, 6,450 second-feet May 24 (gage height, 8.75 feet); minimum, 58 second-feet Dec. 5 (gage height, 2.40 feet). 1910–1916, 1923–1929: 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 for Jan. 7–10 and Jan. 18 to Feb. 28 and discharge below 400 second-feet, which are fair. Diurnal fluctuations caused by operation of power plant above. No diversions for irrigation above station. Gage-height record furnished by Inland Power & Light Co.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	173	220	220	204	160	167	575	2,500	3,130	1,480	272	113
2	188	220	188	204	160	176	575	2,500	3,270	1,400	272	136
3	254	204	188	220	160	176	602	2,740	3,000	1,310	272	104
4	272	204	136	204	170	204	775	2,500	2,740	1,150	254	131
5	254	220	61	144	140	237	775	2,380	3,000	1,150	237	126
6	272	220	64	126	140	272	685	2,270	3,270	1,000	220	131
7	237	220	117	140	120	254	575	2,160	3,690	935	220	147
8	254	204	176	145	80	272	548	2,270	3,550	902	220	126
9	237	185	220	170	100	311	521	2,500	3,550	838	188	131
10	374	220	254	190	110	420	444	2,500	3,550	775	204	142
11	420	237	237	185	130	548	495	2,620	3,840	745	182	150
12	291	220	220	188	140	444	420	3,550	3,690	685	204	147
13	254	204	204	179	135	397	469	4,290	3,550	658	188	136
14	237	220	204	204	130	352	495	4,600	3,410	630	185	117
15	237	237	204	204	130	352	630	4,140	3,270	602	179	90
16	521	237	188	188	150	397	775	4,290	3,840	575	167	150
17	575	220	182	182	150	420	1,150	4,440	3,270	521	164	122
18	521	220	170	170	150	420	1,150	4,440	3,270	495	153	147
19	374	173	182	120	150	444	1,480	4,440	3,690	521	155	122
20	311	170	153	130	155	469	1,480	4,760	3,130	469	153	142
21	291	254	153	140	150	548	1,850	5,240	3,000	444	150	142
22	272	237	164	160	150	548	1,950	5,580	2,740	420	136	122
23	254	220	161	140	150	469	2,270	5,750	2,620	374	136	142
24	254	220	153	135	155	420	2,270	6,090	2,500	374	129	153
25	237	173	220	145	165	397	2,270	5,410	2,270	352	122	147
26	237	237	185	160	160	374	2,500	4,440	2,270	331	164	164
27	220	220	204	140	160	352	2,870	3,840	2,050	331	188	158
28	220	237	272	135	160	575	3,410	3,550	1,850	311	150	188
29	220	204	237	140	-------	838	3,840	3,000	1,850	311	153	204
30	220	161	237	140	-------	745	3,270	3,000	1,660	291	167	173
31	220	-------	220	140	-------	658	-------	3,000	-------	272	164	-------

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	575	173	287	0.332	0.38	17,600
November	254	161	214	.247	.28	12,700
December	272	61	186	.215	.25	11,400
January	220	120	164	.190	.22	10,100
February	170	80	143	.165	.17	7,940
March	838	167	408	.472	.54	25,100
April	3,840	420	1,370	1.58	1.76	81,500
May	6,090	2,160	3,700	4.28	4.93	228,000
June	3,840	1,660	3,020	3.49	3.89	180,000
July	1,480	272	666	.770	.89	41,000
August	272	122	185	.214	.25	11,400
September	204	90	140	.162	.18	8,330
The year	6,090	61	876	1.01	13.74	635,000

NORTH FORK OF CLEARWATER RIVER NEAR AHSAHKA, IDAHO

LOCATION.—Staff gages on both banks in SE. ¼ sec. 26, T. 37 N., R. 1 E., at Bruces Eddy, 2 miles above mouth of river and 1½ miles northeast of Ahsahka.

DRAINAGE AREA.—2,440 square miles.

RECORDS AVAILABLE.—August, 1926, to September, 1929.

EXTREMES.—Maximum discharge during year, 22,800 second-feet May 24; minimum, 490 second-feet Jan. 7.

1926–1929: Maximum discharge, 40,300 second-feet May 10, 1928; minimum, that of Jan. 7, 1929.

REMARKS.—Records good April to September; others fair except those for estimated periods, which are poor.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1,040	1,100	1,170	1,240			3,000	12,000	12,700	4,280	1,580	1,000
2	e 1,290	1,040	1,170	1,100			2,800	10,600	12,300	4,280	1,580	1,000
3	1,540	980	1,170	1,100			3,000	11,100	10,100	4,050	1,580	1,000
4	e 1,650	1,100	920	1,100	e1,100		3,300	10,800	9,260	4,050	1,580	1,000
5	e 1,770	1,310	615	980		e2,000	3,300	9,920	9,420	3,510	1,500	1,000
6	1,880	1,240	570	710			3,100	9,590	9,760	3,400	1,420	1,000
7	e 2,730	1,170	570	490			2,800	9,100	12,700	3,200	1,350	1,000
8	3,580	1,310	760	710			2,620	9,920	12,700	3,200	1,350	1,000
9	e 2,680	1,620	1,170	e 1,000			2,520	11,300	13,100	3,000	1,350	1,000
10	1,730	1,960	1,540	1,200	e 700		2,430	11,300	13,200	3,000	1,280	1,000
11	e 1,650	2,430	1,620	e 1,000		e4,500	2,430	10,900	13,400	2,800	1,280	1,060
12	e 1,520	1,790	1,460	980			2,520	12,300	11,300	2,800	1,280	1,060
13	1,380	1,540	1,310	980			2,520	16,100	10,600	2,710	1,280	1,000
14	e 1,340	1,460	1,170	1,100			2,900	17,500	10,900	2,620	1,280	1,060
15	1,310	1,540	1,100	1,240	e1,000		4,510	16,300	10,400	2,620	1,280	1,060
16	e 1,460	1,620	1,100	e 1,100			4,750	16,900	10,300	2,430	1,350	1,000
17	1,620	1,620	1,100	e 900			4,750	16,700	9,920	2,340	1,350	1,000
18	e 1,570	1,540	1,040	e 800		e2,800	4,880	16,900	8,330	2,250	1,350	1,000
19	e 1,510	1,310	980	e 700			5,400	16,500	9,920	2,250	1,350	1,060
20	1,460	1,310	920				5,810	18,200	8,600	2,250	1,280	1,060
21	e 1,380	1,310	920	e 700			7,170	19,400	7,960	2,160	1,280	1,060
22	1,310	1,240	e 800				8,280	20,500	7,320	2,080	1,280	1,000
23	e 1,280	1,170	e 900		e1,150		9,100	21,200	7,020	1,990	1,280	1,000
24	1,240	1,170	1,040			2,430	8,440	22,100	6,700	1,900	1,140	1,060
25	e 1,220	1,170	e 1,100			2,340	8,280	19,400	6,550	1,900	1,060	1,060
26	e 1,190	1,100	1,240	e1,000		2,340	9,420	15,500	6,100	1,820	1,060	1,060
27	1,170	1,240	1,380			2,340	10,800	14,200	5,530	1,740	1,060	1,060
28	e 1,170	1,310	1,380			3,810	12,900	11,600	5,260	1,740	1,060	1,000
29	1,170	e 1,280	1,380			5,400	15,700	10,300	5,000	1,660	1,060	935
30	e 1,170	1,240	1,310			4,390	12,700	11,300	4,510	1,580	1,000	935
31	1,170		1,240			3,400		11,300		1,580	1,000	

Month	Maximum	Minimum	Mean	Per square mile	Run-off	
					Inches	Acre-feet
October	3,580	1,040	1,560	0.639	0.74	95,900
November	2,430	980	1,370	.561	.63	81,500
December	1,620	570	1,100	.451	.52	67,600
January		490	953	.391	.45	58,600
February			1,010	.414	.43	56,100
March			2,860	1.17	1.35	176,000
April	15,700	2,430	5,740	2.35	2.62	342,000
May	22,100	9,100	14,200	5.82	6.71	873,000
June	13,400	4,510	9,380	3.84	4.28	558,000
July	4,280	1,580	2,620	1.07	1.23	161,000
August	1,580	1,000	1,220	.529	.61	79,300
September	1,060	935	1,020	.418	.47	60,700
The year	22,100	490	3,610	1.48	20.04	2,610,000

e Estimated.

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, 1929.

EXTREMES.—Maximum discharge during year, 300 second-feet May 23 (gage height, 4.82 feet); minimum, 50 second-feet Aug. 11–18 and Sept. 2 (gage height, 4.10 feet).

1913–1915, 1924–1929: Maximum discharge, 1,630 second-feet Jan. 13, 1928 (gage height, 6.4 feet); minimum, 25 second-feet Dec. 24, 1914.

REMARKS.—Records good except those for Jan. 23 to Feb. 17, which are fair. Small diversions for irrigation above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	65	73	73	77		73	150	195	195	77	54	51
2	67	73	73	83		110	146	191	182	75	54	50
3	67	75	73	83		102	146	195	162	73	54	51
4	69	77	73	79		134	150	191	158	73	54	51
5	73	77	75	75		150	150	182	195	71	53	51
6	73	77	75	75	70	170	150	191	174	69	53	53
7	73	77	75	75		170	142	162	150	67	53	53
8	73	77	75	75		174	118	182	170	67	51	53
9	73	79	75	73		174	110	191	191	65	51	53
10	73	83	77	73		224	102	191	195	65	51	53
11	73	79	77	73		232	106	199	187	63	50	53
12	73	77	75	73		216	102	224	174	63	50	53
13	73	77	75	73		203	102	254	162	63	50	53
14	73	77	75	73		191	106	232	154	62	50	53
15	73	79	75	73	65	182	150	224	150	60	50	51
16	75	79	73	73		162	162	241	170	59	50	51
17	75	79	73	75		162	170	245	174	59	50	51
18	73	79	73	77	63	154	170	237	166	59	50	51
19	73	77	73	77	63	154	203	211	182	59	51	53
20	73	77	71	77	63	150	191	250	162	59	51	53
21	71	77	71	77	63	182	195	268	154	58	51	53
22	71	77	73	77	63	203	195	290	152	58	51	54
23	71	77	73		62	191	203	300	126	56	51	54
24	69	77	73		62	162	203	290	114	56	51	55
25	69	75	73		63	150	195	268	106	55	51	58
26	69	75	75	75	63	150	203	237	91	55	53	58
27	71	75	77		63	142	216	211	83	54	51	59
28	71	75	77		69	191	224	191	79	55	51	59
29	71	75	77		-------	191	245	182	79	55	51	58
30	71	73	77		-------	182	224	178	79	55	51	58
31	73	-------	79		-------	191	-------	182	-------	54	51	-------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
October	75	65	71.5	4,400
November	83	73	76.8	4,570
December	79	71	74.5	4,580
January	83	----------	75.5	4,640
February	----------	----------	66.1	3,670
March	232	73	168	10,300
April	245	102	164	9,760
May	300	162	219	13,500
June	195	79	150	8,930
July	77	54	61.9	3,810
August	54	50	51.4	3,160
September	59	50	53.6	3,190
The year	300	50	103	74,500

TUCANNON RIVER NEAR STARBUCK, WASH.

LOCATION.—Staff gage in sec. 23, T. 12 N., R. 38 E., three-fourths of a mile below Petaha Creek and 5½ miles east of Starbuck.

RECORDS AVAILABLE.—August, 1928, to September, 1929; November, 1914, to September, 1917, at station a fourth of a mile upstream.

EXTREMES.—Maximum discharge during period August, 1928, to Sept. 30, 1929, 581 second-feet Mar. 2 (gage height, 2.60 feet); minimum, 32 second-feet July 31, Aug. 1, 11, 13, 14, 17, and 18, 1929 (gage height, 0.96 foot).

1914–1917, 1928–29: Maximum discharge, 5,740 second-feet Feb. 10, 1916 (gage height, 8.5 feet); minimum, that of July 31, Aug. 1, 11, 13, 14, 17, and 18, 1929.

REMARKS.—Records fair except those for Jan. 20 to Feb. 22 and Mar. 5, which are poor. Small diversions above station.

Daily and monthly discharge, in second-feet, 1928–29

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	------	51	56	75	77	98		217	170	176	169	60	32	38
2	------	51	56	75	77	102		581	167	170	193	53	36	36
3	------	50	56	75	75	109		376	161	170	193	60	40	36
4	------	50	57	75	74	98		372	152	167	190	60	36	36
5	------	51	57	74	74	98		332	146	170	163	60	36	36
6	------	51	57	74	72	90	85	292	146	176	157	53	38	38
7	------	51	57	75	72	94		252	146	170	157	53	36	38
8	------	51	58	75	72	90		246	149	173	157	53	36	44
9	49	51	59	77	75	90		246	134	170	199	53	34	44
10	49	53	61	80	77	90		246	129	176	193	60	34	42
11	50	53	67	81	80	90		239	117	176	193	53	32	44
12	50	53	66	83	83	90		233	117	201	181	53	34	47
13	50	53	67	83	77	90		223	117	256	175	53	32	42
14	49	54	68	83	77	90		223	123	193	181	53	32	42
15	49	52	69	81	77	90		195	129	199	181	53	34	42
16	50	55	71	81	71	90	80	188	137	199	224	53	34	42
17	51	54	74	81	68	94		182	140	212	212	53	32	40
18	51	54	74	83	68	94		182	167	212	199	53	32	44
19	51	53	75	83	67	92		182	170	199	199	53	34	44
20	51	53	75	83	67			176	176	206	193	53	34	44
21	51	54	74	83	67			176	170	262	181	53	36	47
22	51	55	74	85	67			176	176	268	181	53	34	47
23	51	55	72	85	68		182	176	176	291	140	40	35	47
24	50	55	74	85	75		341	167	192	291	129	40	36	50
25	50	55	74	85	83	90	272	167	192	294	107	42	36	50
26	51	55	74	85	87		246	161	176	230	97	42	34	53
27	51	55	74	85	92		207	152	170	206	97	38	34	53
28	51	56	74	85	92		213	167	192	199	64	33	34	56
29	51	56	74	83	94		------	167	201	193	60	34	38	56
30	51	56	75	77	98		------	161	198	169	60	34	41	53
31	51	------	75	------	102		------	161	------	169	------	32	36	------

Month	Maximum	Minimum	Mean	Run-off in acre-feet
1928				
August 9–31	51	49	50.4	2,300
September	56	50	53.2	3,170
The period	----------	----------	----------	5,470
1928–29				
October	75	56	67.5	4,150
November	85	74	80.5	4,790
December	102	67	77.6	4,770
January	109	----------	92.2	5,670
February	341	----------	117	6,500
March	581	152	226	13,900
April	201	117	158	9,400
May	294	167	205	12,600
June	224	60	161	9,580
July	60	32	51.0	3,140
August	41	32	34.9	2,150
September	56	36	44.4	2,640
The year	581	32	109	79,300

MISCELLANEOUS DISCHARGE MEASUREMENTS

In addition to the records of stream flow obtained at gaging stations and reported in the preceding pages measurements of flow were made at a number of other points, as shown in the following table:

Miscellaneous discharge measurements in Snake River drainage basin, 1928–29

Date	Stream	Tributary to—	Locality	Gage height	Discharge
				Feet	*Sec.-ft.*
July 6	Targhee Creek	Henrys Lake	Near Lake, Idaho		50.8
Aug. 30	do	do	do		14.3
July 6	Duck Creek	do	do		3.1
6	Combined flow of Howard, Timber, and Rock Creeks.	do	Above diversions near Lake, Idaho.		15.2
July 16	Henrys Fork	Snake River	Below diversions near St. Anthony, Idaho.		4.2
May 19	Camas Creek	Mud Lake	NW. ¼ sec. 36, T. 7 N., R. 35 E., at highway bridge 5 miles southwest of Hamer, Idaho.		40.8
19	First Owsley Segregation Pump Canal.	Diverts from Mud Lake.	On line between secs. 23 and 24, T. 6 N., R. 34 E., 1 mile east of Terreton, Idaho.	3.80	63.8
June 3	Diversion Canal	Diverts from Dry Creek.	Approximately sec. 30, T. 10 N., R. 25 E., ⅛ mile below end of pipe line, 1 mile below Dry Creek Dam, 36 miles northwest of Howe, Idaho.	1.31	49.4
July 10	do	do	do	1.03	35.4
10	Corral Creek	Wet Creek	At mouth, sec. 8, T. 9 N., R. 26 E., 30 miles northwest of Howe, Idaho.	.82	27.9
Oct. 23	Birch Creek	Marsh Creek	Opposite power plant, sec. 28 T. 12 S., R. 36 E., 10 miles north of Malad, Idaho.		.8
Mar. 14	do	do	do		1.8
May 20	do	do	do	.85	11.1
June 5	do	do	do	.59	5.5
July 17	do	do	do	.29	1.9
Aug. 9	do	do	do	.19	.8
9	do	do	do	.19	.8
Oct. 23	Tailrace of Birch Creek power plant.	Birch Creek	Sec. 28, T. 12 S., R. 36 E., 10 miles north of Malad, Idaho.	.58	7.6
Mar. 14	do	do	do	.47	5.9
May 20	do	do	do	.48	7.0
June 5	do	do	do	.46	7.0
July 17	do	do	do	.46	7.1
17	do	do	do	.46	7.7
Aug. 9	do	do	do	.58	7.2
Mar. 15	Rock Creek	Snake River	W. ½ sec. 12, T. 9 S., R. 29 E., 100 feet above highway bridge 11 miles southwest of American Falls, Idaho.	1.50	54.9
Apr. 16	do	do	do	1.40	39.7
May 21	do	do	do	1.35	.4
Mar. 11	Fall Creek	do	Sec. 20, T. 9 S., R. 29 E., 10 feet above highway bridge, 15 miles southwest of American Falls, Idaho.	4.94	21.9
Mar. 15	do	do	do	3.94	26.4
Apr. 15	do	do	do	3.95	24.6
May 21	do	do	do	3.83	18.8
Mar. 11	Raft River	do	Approx. sec. 36, T. 9 S., R. 27 E., 1 mile from mouth, 23 miles southwest of American Falls, Idaho.	1.48	47.7
Mar. 15	do	do	do	1.42	47.4
Apr. 16	do	do	do	1.14	33.2
May 21	do	do	do	.90	23.7
Mar. 16	Blue Lakes outlet	do	SW. ¼ SW. ¼ sec. 28, T. 9 S., R. 17 E., 200 feet below highway bridge at Blue Lakes Ranch, 4 miles north of Twin Falls Idaho.	.92	201
Aug. 7	do	do	do	.99	199
July 31	Mountain Home feeder canal.	Diverts from Canyon Creek.	Sec. 36, T. 2 S., R. 6. E, below head of Mountain Home Cooperative Canal, 5 miles north of Mountain Home, Idaho.		17.4

Miscellaneous discharge measurements in Snake River drainage basin, 1928–29—Continued

Date	Stream	Tributary to—	Locality	Gage height	Discharge
				Feet	*Sec.-ft.*
Apr. 30	Ake No. 1 lateral	Diverts from Mountain Home feeder canal.	Sec. 36, T. 2 S., R. 6 E., 5 miles north of Mountain Home, Idaho.		2.3
June 25	do	do	do		Dry.
July 31	do	do	do		Dry.
Apr. 30	Ake No. 2 lateral	do	do		6.6
June 25	do	do	do	0.57	5.1
July 31	do	do	do	.57	4.2
Aug. 23	Walter's Butte Spring Creek.	Snake River	Sec. 9, T. 1 S., R. 2 W., 50 feet below Springs, 4 miles southwest of Melba, Idaho.	1.93	20.0
23	do	do	Sec. 9, T. 1 S., R. 2 W., 850 feet below Springs, 4 miles southwest of Melba, Idaho.	1.13	20.2
23	do	do	Sec. 8, T. 1 S., R. 2 W., 1½ miles below Springs, 4 miles southwest of Melba, Idaho.		14.2
23	Melba drain ditch	do	Sec. 9, T. 1 S., R. 2 W., 4 miles southwest of Melba, Idaho.		1.3
Sept. 4	Cottonwood Creek	Boise River	Sec. 35, T. 4 N., R. 5 E., 1½ miles above mouth, 6 miles northeast of Arrowrock, Idaho.		*.2
Sept. 3	Smith Creek	South Fork of Boise River.	Sec. 12, T. 2 N., R. 6 E., one-half mile above mouth, 3½ miles northwest of Lenox, Idaho.		*.06
3	Rattlesnake Creek	do	Sec. 14, T. 3 N., R. 6 E., 50 feet above mouth of Elk Creek, 7½ miles northwest of Lenox, Idaho.		5.5
3	Willow Creek	do	Sec. 1. T. 2 N., R. 5 E., 450 feet below mouth of Wood Creek, 10 miles northwest of Lenox, Idaho.		.6
July 15	Lake Fork of Payette River.	North Fork of Payette River .	NW. ¼ NW. ¼ sec. 13, T. 18 N., R. 3 E., 600 feet below reservoir, 3 miles east of McCall, Idaho.	1.36	188
Sept. 2	Deadwood River	South Fork of Payette River.	SW. ¼ sec. 35, T. 14 N., R. 7E., 320 feet below diversion dam, 12½ miles southeast of Knox, Idaho.		8.1
May 20	South 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.	8.49	83.9
July 25	do	do	do	8.78	89.3
July 12	Mesa Orchards Canal.	Diverts from Middle Fork of Weiser River.	Sec. 14, T. 15 N, R. 1 W., 1,700 feet above end of flume, 1½ miles northeast of Mesa, Idaho.	2.19	30.0
Aug. 1	do	do	do	1.63	19.0
1	Rush Creek	Weiser River	Sec. 28, T. 16 N., R. 3 W., just below diversion dam, 9 miles north of Cambridge, Idaho.		*5.0
1	do	do	Sec. 28, T. 16 N., R. 3 W., opposite power plant, 8½ miles north of Cambridge, Idaho.		1.8
July 12	do	do	Sec. 28, T. 16 N., R. 3 W., 200 feet below tailrace, 8½ miles north of Cambridge, Idaho.		11.9
June 17	Pahsimeroi River	Salmon River	Sec. 25, T. 16 N., R. 20 E., at mouth, 10 miles northwest of May, Idaho.	1.80	122
July 8	do	do	do	1.78	117
June 17	North Fork of Salmon River.	do	E. ½ sec. 17, T. 24 N., R. 21 E., at North Fork, Idaho.	2.78	434
July 9	do	do	do	2.07	128
Sept. 1	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, 14 miles west of Cape Horn, Idaho.	1.84	29.7
1	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, 15 miles west of Cape Horn, Idaho.	1.89	10.6

* Estimated.

Miscellaneous discharge measurements in Snake River drainage basin, 1928–29—Continued

Date	Stream	Tributary to—	Locality	Gage height	Dischar
				Feet	*Sec.-ft.*
Aug. 7	Sheep Creek	Imnaha River	At mouth, at Imnaha, Oreg.		
Aug. 28	South Fork of Salmon River.	Salmon River	Sec. 15, T. 18 N., R. 6 E., above mouth of Phoebe Creek, 12½ miles southwest of Yellow Pine, Idaho.		
July 27	do	do	Sec. 10, T. 19 N., R. 6 E., 1 mile above mouth of east fork of south fork of Salmon River, 11½ miles northwest of Yellow Pine, Idaho.		2
July 13	do	do	Sec. 17, T. 22 N., R. 8 E., 2 miles above mouth of Porphyry Creek, 8 miles east of Warren, Idaho.		1,3
Aug. 27	Cougar Creek	South Fork of Salmon River.	Sec. 21, T. 18 N., R. 6 E., 1 mile above mouth, 13½ miles southwest of Yellow Pine, Idaho.		
Oct. 31	East Fork of South Fork of Salmon River.	do	Sec. 20, T. 19 N., R. 8 E., 900 feet below mouth of Johnson Creek, at Yellow Pine, Idaho.		1
July 27	do	do	Sec. 3, T. 19 N., R. 6 E., one-half mile above mouth, 11½ miles northwest of Yellow Pine, Idaho.		2
Sept. 18	Johnson Creek	East Fork of South Fork of Salmon River.	Sec. 7, T. 15 N., R. 8 E., at Landmark ranger station, 21 miles south of Yellow Pine, Idaho.		
Aug. 6	Secesh River	South Fork of Salmon River.	Sec. 26, T. 22 N., R. 5 E., one-half mile below Long Gulch Creek, 6½ miles southeast of Burgdorf, Idaho.		6
July 27	do	do	Sec. 34, T. 20 N., R. 6 E., 1 mile above mouth, 12 miles northwest of Yellow Pine, Idaho.		16
July 6	Warren Creek	Salmon River	Sec. 12, T. 22 N., R. 6 E., at Warren, Idaho.		2
May 24	Lochsa River	Middle Fork of Clearwater River.	Sec. 33, T. 33 N., R. 7 E., just above Pete King ranger station, at Lowell, Idaho.	7.40	16,3
May 12	Lolo Creek	Clearwater River	Sec. 14, T. 35 N., R. 2 E., 1 mile southeast of Greer, Idaho.	2.95	[a] 5
May 14	Potlach Creek	do	Sec. 7, T. 36 N., R. 3 W., at mouth		2

[a] Estimated.

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