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

Water-Supply Paper 673

# SURFACE WATER SUPPLY *of the* UNITED STATES

# 1928

## PART XII

## NORTH PACIFIC SLOPE DRAINAGE BASINS

## B. SNAKE RIVER BASIN

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



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# SURFACE WATER SUPPLY OF SNAKE RIVER BASIN, 1928

## 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, 1928.

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

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

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

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

*Annual appropriations for the fiscal year ending June 30, 1895–1929*

| | | | |
|---|---|---|---|
| 1895 | $12, 500. 00 | 1919 | $148, 244. 10 |
| 1896 | 24, 500. 00 | 1920 | 175, 000. 00 |
| 1897–1899 | 50, 000. 00 | 1921 | 180, 000. 00 |
| 1900 | 70, 000. 00 | 1922 | 180, 000. 00 |
| 1901–1902 | 100, 000. 00 | 1923 | 180, 000. 00 |
| 1903–1906 | 200, 000. 00 | 1924–1925 | 170, 000. 00 |
| 1907 | 150, 000. 00 | 1926 | 165, 000. 00 |
| 1908–1910 | 100, 000. 00 | 1927 | 151, 000. 00 |
| 1911–1917 | 150, 000. 00 | 1928 | 147, 000. 00 |
| 1918 | 175, 000. 00 | 1929 | 270, 500. 00 |

In the execution of the work many private and State organizations have cooperated either by furnishing data or by assisting in collecting data. Acknowledgments for cooperation of the first kind are made in connection with the description of each station affected; cooperation of the second kind is acknowledged on page 9.

Measurements of stream flow have been made at about 5,480 points in the United States and also at many points in Alaska and the Hawaiian Islands. In July, 1928, 1,830 gaging stations were being maintained by the Geological Survey and the cooperating organizations. Many miscellaneous discharge measurements are made at

other points. In connection with this work data were also collected in regard to precipitation, evaporation, storage reservoirs, river profiles, and water power in many sections of the country and will be made available in water-supply papers from time to time.

## DEFINITION OF TERMS

The volume of water flowing in a stream—the "run-off" or "discharge"—is expressed in various terms, each of which has become associated with a certain class of work. These terms may be divided into two groups—(1) those that represent a rate of flow, as second-feet, gallons per minute, miner's inches, and discharge in second-feet per square mile; and (2) those that represent the actual quantity of water, as run-off in inches, acre-feet, and millions of cubic feet. The principal terms used in this series of reports are second-feet, second-feet per square mile, run-off in inches, and acre-feet. They may be defined as follows:

"Second-feet" is an abbreviation for "cubic feet per second." A second-foot is the rate of discharge of water flowing in a channel of rectangular cross section 1 foot wide and 1 foot deep at an average velocity of 1 foot per second. It is generally used as a fundamental unit from which others are computed.

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

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

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

The following terms not in common use are here defined.

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

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

## EXPLANATION OF DATA

The data presented in this report cover the year beginning October 1, 1927, and ending September 30, 1928. At the beginning of January in most parts of the United States much of the precipitation in the preceding three months is stored in the form of snow or ice, or in ponds, lakes, and swamps, or as underground water, and this

stored water passes off in the streams during the spring break-up. At the end of September, on the other hand, the only stored water available for run-off is possibly a small quantity in the ground; therefore the run-off for the year beginning October 1 is practically all derived from precipitation within that year.

The base data collected at gaging stations consist of records of stage, measurements of discharge, and general information used to supplement the gage heights and discharge measurements in determining the daily flow. The records of stage are obtained either from direct 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.

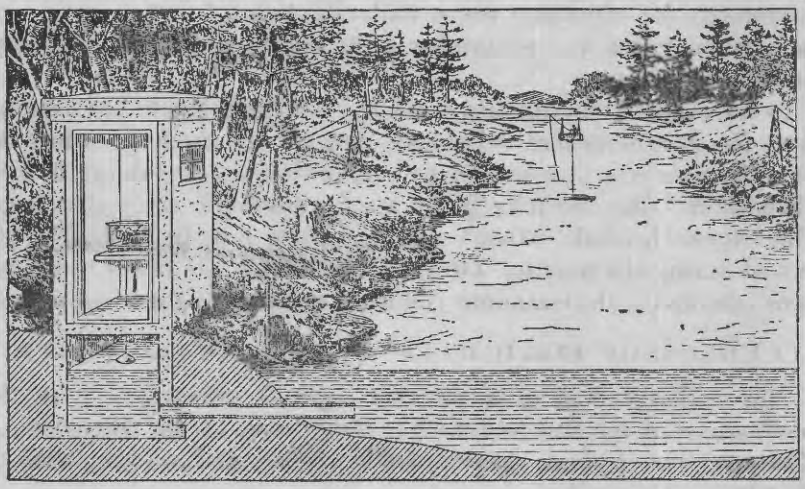

FIGURE 1.—Typical gaging station

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 permanence of the stage-discharge relation and (2) on the accuracy of observation of stage, measurements of flow, and interpretation of records.

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

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

The table of monthly discharge gives a general idea of the flow at the station. The table of daily discharge allows more detailed studies of the variation in flow. It should be borne in mind, however, that the observations in each succeeding year may be expected to throw new light on data previously published.

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

## PUBLICATIONS

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

The results of stream-flow measurements are now published annually in 12 parts, each part covering an area whose boundaries coincide with natural drainage features as indicated below:

Part 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 in the United States.

3. Sets are available for consultation in the local offices of the water-resources branch of the Geological Survey, as follows:

Augusta, Me., Statehouse.
Boston, Mass., 2500 Customhouse.
Hartford, Conn., 60 Washington Street.
Albany, N. Y., 506 Broadway-Arcade Building.
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.
Chattanooga, Tenn., 630 Power Building.
Tuscaloosa, Ala., Post Office Building.
Columbus, Ohio, Engineering Experiment Station, Ohio State University.
Indianapolis, Ind., 319 Federal Building.
Lansing, Mich., M 9 State Office 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.
Tucson, Ariz., 104 Agricultural Building, University of Arizona.
Denver, Colo., 403 Post Office Building.
Salt Lake City, Utah, 313 Federal Building.
Idaho Falls, Idaho, 228 Federal Building.
Boise, Idaho, Federal Building.
Helena, Mont., 416 Power Block.
Tacoma, Wash., 406 Federal Building.
Portland, Oreg., 606 Post Office Building.
San Francisco, Calif., 303 Customhouse.
Los Angeles, Calif., 751 South Figueroa Street, room 510.
Honolulu, Hawaii, Territorial Office Building.

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

Stream-flow records have been obtained at about 5,480 points in the United States, and the data obtained have been published in the reports tabulated on page 7.

*Stream-flow data in reports of the United States Geological Survey*

[A=Annual Report; B=Bulletin; W=Water-Supply Paper]

| Report | Character of data | Year |
|---|---|---|
| 10th A, pt. 2 | Descriptive information only | |
| 11th A, pt. 2 | Monthly discharge and descriptive information | 1884 to Sept., 1890. |
| 12th A, pt. 2 | do | 1884 to June 30, 1891. |
| 13th A, pt. 3 | Mean discharge in second-feet | 1884 to Dec. 31, 1892. |
| 14th A, pt. 2 | Monthly discharge (long-time records, 1871 to 1893) | 1888 to Dec. 31, 1893. |
| B 131 | Descriptions, measurements, gage heights, and ratings | 1893 and 1894. |
| 16th A, pt. 2 | Descriptive information only | |
| B 140 | Descriptions, measurements, gage heights, ratings, and monthly discharge (also many data covering earlier years). | 1895. |
| W 11 | Gage heights (also gage heights for earlier years) | 1896. |
| 18th A, pt. 4 | Descriptions, measurements, ratings, and monthly discharge (also similar data for some earlier years). | 1895 and 1896. |
| W 15 | Descriptions, measurements, and gage heights, eastern United States, eastern Mississippi River, and Missouri River above junction with Kansas. | 1897. |
| W 16 | Descriptions, measurements, and gage heights, western Mississippi River below junction of Missouri and Platte, and western United States. | 1897. |
| 19th A, pt. 4 | Descriptions, measurements, ratings, and monthly discharge (also some long-time records). | 1897. |
| W 27 | Measurements, ratings, and gage heights, eastern United States, eastern Mississippi River, and Missouri River. | 1898. |
| W 28 | Measurements, ratings, and gage heights, Arkansas River and western United States. | 1898. |
| 20th A, pt. 4 | Monthly discharge (also for many earlier years) | 1898. |
| W 35 to 39 | Descriptions, measurements, gage heights, and ratings | 1899. |
| 21st A, pt. 4 | Monthly discharge | 1899. |
| W 47 to 52 | Descriptions, measurements, gage heights, and ratings | 1900. |
| 22d A, pt. 4 | Monthly discharge | 1900. |
| W 65, 66 | Descriptions, measurements, gage heights, and ratings | 1901. |
| W 75 | Monthly discharge | 1901. |
| W 82 to 85 | Complete data | 1902. |
| W 97 to 100 | do | 1903. |
| W 124 to 135 | do | 1904. |
| W 165 to 178 | do | 1905. |
| W 201 to 214 | do | 1906. |
| W 241 to 252 | do | 1907 and 1908. |
| W 261 to 272 | do | 1909. |
| W 281 to 292 | do | 1910. |
| W 301 to 312 | do | 1911. |
| W 321 to 332 | do | 1912. |
| W 351 to 362 | do | 1913. |
| W 381 to 394 | do | 1914. |
| W 401 to 414 | do | 1915. |
| W 431 to 444 | do | 1916. |
| W 451 to 464 | do | 1917. |
| W 471 to 484 | do | 1918. |
| W 501 to 514 | do | 1919 and 1920. |
| W 521 to 534 | do | 1921. |
| W 541 to 554 | do | 1922. |
| W 561 to 574 | do | 1923. |
| W 581 to 594 | do | 1924. |
| W 601 to 614 | do | 1925. |
| W 621 to 634 | do | 1926. |
| W 641 to 654 | do | 1927. |
| W 661 to 674 | do | 1928. |

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

*Numbers of water-supply papers containing results of stream measurements, 1899–1928*

[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] | 48, [b] 48 | 48 | 48, [g] 49 | 49 | 49 | 49, [f] 50 | 50 | 50 | 50 | 51 | 51 | 51 | 51 | 51 |
| 1901 | 65, 75 | 65, 75 | 65, 75 | 65, 75 | [h] 65, 66, 75 | 66, 75 | [h] 65, 66, 75 | 66, 75 | 66, 75 | 66, 75 | 66, 75 | 66, 75 | 66, 75 | 66, 75 |
| 1902 | 82 | [b] 82, 83 | 83 | [i] 82, 83 | [h] 83, 85 | 84 | [h] 83, 84 | 84 | 85 | 85 | 85 | 85 | 85 | 85 |
| 1903 | 97 | [b] 97, 98 | 98 | 97 | [h] 98, 99, [m] 100 | 99 | [h] 98, 99 | 99 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1904 | [n] 124, [o] 125, [p] 126 | [p] 126, 127 | 128 | 129 | [h] 128, 130 | 130, [q] 128 | [h] 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 | [h] 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 | [h] 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 | 476 | 477 | 478 | 479 | 480 | 481 | 482 | 483 | 484 |
| 1919–20 | 501 | 502 | 503 | 504 | 505 | 506 | 507 | 508 | 509 | 510 | 511 | 512 | 513 | 514 |
| 1921 | 521 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 529 | 530 | 531 | 532 | 533 | 534 |
| 1922 | 541 | 542 | 543 | 544 | 545 | 546 | 547 | 548 | 549 | 550 | 551 | 552 | 553 | 554 |
| 1923 | 561 | 562 | 563 | 564 | 565 | 566 | 567 | 568 | 569 | 570 | 571 | 572 | 573 | 574 |
| 1924 | 581 | 582 | 583 | 584 | 585 | 586 | 587 | 588 | 589 | 590 | 591 | 592 | 593 | 594 |
| 1925 | 601 | 602 | 603 | 604 | 605 | 606 | 607 | 608 | 609 | 610 | 611 | 612 | 613 | 614 |
| 1926 | 621 | 622 | 623 | 624 | 625 | 626 | 627 | 628 | 629 | 630 | 631 | 632 | 633 | 634 |
| 1927 | 641 | 642 | 643 | 644 | 645 | 646 | 647 | 648 | 649 | 650 | 651 | 652 | 653 | 654 |
| 1928 | 661 | 662 | 663 | 664 | 665 | 666 | 667 | 668 | 669 | 670 | 671 | 672 | 673 | 674 |

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

The preceding table gives, by years and drainage basins, the numbers of the papers on surface-water supply published from 1899 to 1928. The data for any particular station will, as a rule, be found in the reports covering the years during which the station was maintained. For example, data from 1910 to 1920 for any station in the area covered by Part 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.

## COOPERATION

Work in the Snake River Basin was carried on in cooperation with the State of Idaho, effected under agreement made between the Director of the United States Geological Survey and the commissioner of reclamation of Idaho, and authorized by legislative acts appropriating money. Special acknowledgments are due to George N. Carter, commissioner of reclamation of Idaho, for the efficient manner in which he represented the State in the investigations.

The work in Oregon was carried on under cooperative agreements between the United States Geological Survey and the State through Rhea Luper, State engineer. Data for many stations in Oregon were collected under the direction of Mr. Luper and were reviewed and prepared for publication under the direction of G. H. Canfield, district engineer.

The station on Owyhee River at Mountain City, Nev., was maintained in cooperation with the State, through George W. Malone, State engineer of Nevada.

The work in Washington was carried on in cooperation with the Department of Conservation and Development, Erle J. Barnes, director. Cooperative relations were administered by R. K. Tiffany.

Acknowledgments are due also to the United States Bureau of Reclamation, the United States Indian Service, the United States Weather Bureau, the United States Forest Service, and the Corps of Engineers, United States Army, for assistance furnished in the work.

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

## DIVISION OF WORK

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

The data for stations in Idaho (except in the upper Snake River Basin and Snake River at Oxbow, Oreg.) and in the Salmon Falls Creek Basin in Nevada were collected and prepared for publication under the direction of C. G. Paulsen, district engineer, assisted by Berkeley Johnson, Fred M. Veatch, W. J. Parsons, jr., E. L. Harrington, M. C. Boyer, and Miss E. H. Haugse.

In Oregon the data for East Fork of Wallowa River near Joseph and Inland Power & Light Co.'s tailrace near Joseph, 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 Miss Belle Irwin.

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, D. M. Corbett, J. B. Ringwood, and Miss Lysle Christensen.

The data for Snake River at Riparia and Tucannon River near Pomeroy, Wash., were collected and prepared for publication under the direction of G. L. Parker, district engineer, assisted by D. J. F. Calkins, R. B. Kilgore, M. C. Boyer, L. T. Gabrielsen, L. I. Meyer, R. J. Swanson, and A. P. Martinson.

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

# GAGING-STATION RECORDS

## SNAKE RIVER

### JACKSON LAKE AT MORAN, WYO.

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

RECORDS AVAILABLE.—June, 1909, to September, 1928. 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 elevations 6,730 and 6,769 feet, sea-level datum.

*Daily contents, in acre-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 520, 960 | 544, 770 | 557, 900 | 549, 210 | 546, 640 | 572, 270 | 604, 050 | 595, 730 | 810, 160 | 843, 660 | 7[illegible] 260 | 666, 320 |
| 2 | 522, 580 | 545, 230 | 557, 900 | 548, 980 | 547, 570 | 573, 450 | 605, 480 | 593, 830 | 810, 410 | 847, 000 | 7[illegible] 490 | 663, 900 |
| 3 | 524, 210 | 545, 700 | 557, 900 | 548, 740 | 548, 510 | 574, 390 | 606, 680 | 591, 690 | 810, 160 | 847, 000 | 7[illegible] 480 | 661, 480 |
| 4 | 525, 610 | 546, 170 | 557, 670 | 548, 510 | 549, 450 | 575, 100 | 607, 870 | 590, 030 | 810, 160 | 847, 000 | 7[illegible] 220 | 659, 300 |
| 5 | 527, 000 | 546, 400 | 557, 430 | 548, 040 | 550, 380 | 576, 040 | 609, 310 | 588, 610 | 810, 660 | 847, 000 | 7[illegible] 700 | 656, 640 |
| 6 | 528, 160 | 546, 640 | 557, 200 | 547, 570 | 551, 320 | 576, 750 | 609, 070 | 587, 900 | 809, 650 | 847, 420 | 7[illegible] 940 | 653, 730 |
| 7 | 529, 320 | 547, 110 | 556, 960 | 547, 340 | 552, 250 | 577, 460 | 608, 830 | 586, 950 | 811, 420 | 847, 000 | 7[illegible] 190 | 650, 820 |
| 8 | 530, 260 | 547, 570 | 556, 720 | 546, 870 | 553, 190 | 578, 410 | 608, 350 | 585, 760 | 811, 420 | 847, 000 | 7[illegible] 210 | 647, 690 |
| 9 | 531, 430 | 548, 510 | 556, 490 | 546, 400 | 554, 130 | 579, 120 | 608, 350 | 585, 050 | 811, 420 | 847, 000 | 7[illegible] 470 | 644, 330 |
| 10 | 532, 600 | 549, 450 | 556, 250 | 545, 940 | 554, 840 | 580, 070 | 608, 350 | 583, 150 | 813, 440 | 847, 000 | 7[illegible] 990 | 640, 710 |
| 11 | 533, 770 | 550, 380 | 556, 020 | 545, 470 | 555, 550 | 581, 020 | 608, 590 | 581, 970 | 817, 480 | 845, 700 | 7[illegible] 760 | 637, 190 |
| 12 | 534, 940 | 551, 320 | 555, 550 | 545, 000 | 556, 250 | 581, 970 | 608, 830 | 591, 690 | 820, 510 | 843, 660 | 7[illegible] 770 | 633, 490 |
| 13 | 535, 870 | 552, 250 | 555, 070 | 544, 530 | 557, 200 | 582, 920 | 609, 070 | 595, 720 | 823, 050 | 842, 140 | 7[illegible] 800 | 629, 890 |
| 14 | 537, 040 | 553, 190 | 554, 600 | 544, 060 | 558, 140 | 583, 870 | 609, 550 | 617, 670 | 828, 900 | 840, 350 | 7[illegible] 360 | 626, 040 |
| 15 | 538, 210 | 553, 900 | 554, 130 | 543, 600 | 559, 080 | 584, 810 | 610, 020 | 627, 720 | 835, 520 | 838, 330 | 7[illegible] 910 | 622, 680 |
| 16 | 539, 380 | 554, 600 | 553, 900 | 542, 890 | 560, 020 | 585, 760 | 610, 500 | 638, 540 | 842, 900 | 837, 050 | 7[illegible] 210 | 619, 340 |
| 17 | 540, 550 | 555, 070 | 553, 660 | 542, 190 | 560, 960 | 586, 710 | 609, 780 | 650, 100 | 846, 210 | 835, 260 | 7[illegible] 760 | 616, 710 |
| 18 | 541, 720 | 555, 550 | 553, 190 | 541, 490 | 561, 910 | 587, 420 | 609, 310 | 662, 930 | 847, 740 | 833, 480 | 7[illegible] 580 | 614, 080 |
| 19 | 541, 960 | 556, 020 | 552, 960 | 540, 790 | 562, 610 | 588, 140 | 608, 830 | 677, 980 | 847, 480 | 831, 190 | 7[illegible] 910 | 611, 220 |
| 20 | 542, 190 | 556, 490 | 552, 720 | 540, 090 | 563, 560 | 589, 080 | 608, 590 | 688, 960 | 844, 420 | 829, 410 | 7[illegible] 740 | 608, 350 |
| 21 | 542, 190 | 556, 960 | 552, 490 | 539, 380 | 564, 260 | 589, 800 | 607, 870 | 699, 460 | 841, 370 | 827, 380 | 7[illegible] 320 | 666, 490 |
| 22 | 542, 190 | 557, 200 | 552, 250 | 538, 920 | 565, 200 | 590, 740 | 606, 440 | 711, 250 | 839, 340 | 825, 600 | 7[illegible] 390 | 602, 390 |
| 23 | 541, 960 | 557, 200 | 552, 020 | 538, 210 | 565, 910 | 591, 460 | 605, 010 | 724, 770 | 836, 790 | 823, 050 | 6[illegible] 720 | 599, 520 |
| 24 | 542, 190 | 557, 200 | 551, 790 | 538, 920 | 566, 620 | 592, 170 | 603, 810 | 734, 660 | 834, 250 | 820, 770 | 6[illegible] 830 | 596, 910 |
| 25 | 542, 660 | 557, 200 | 551, 320 | 539, 850 | 567, 330 | 593, 830 | 602, 620 | 744, 310 | 832, 470 | 817, 990 | 6[illegible] 200 | 594, 300 |
| 26 | 543, 130 | 557, 430 | 551, 080 | 540, 790 | 568, 270 | 595, 490 | 601, 900 | 755, 500 | 831, 700 | 815, 460 | 6[illegible] 570 | 591, 690 |
| 27 | 543, 360 | 557, 430 | 550, 850 | 541, 490 | 569, 210 | 596, 910 | 600, 000 | 771, 180 | 831, 960 | 812, 430 | 6[illegible] 150 | 589, 320 |
| 28 | 543, 600 | 557, 430 | 550, 380 | 542, 430 | 570, 390 | 598, 570 | 598, 810 | 790, 240 | 834, 500 | 809, 650 | 6[illegible] 740 | 588, 850 |
| 29 | 543, 830 | 557, 670 | 549, 910 | 543, 360 | 571, 330 | 600, 000 | 598, 810 | 803, 080 | 837, 050 | 806, 370 | 6[illegible] 080 | 588, 850 |
| 30 | 544, 060 | 557, 670 | 549, 680 | 544, 530 | ------- | 601, 420 | 598, 340 | 810, 160 | 839, 340 | 802, 580 | 6[illegible] 920 | 590, 080 |
| 31 | 544, 300 | ------- | 549, 450 | 545, 700 | ------- | 602, 360 | ------- | 810, 160 | ------- | 799, 040 | 6[illegible] 500 | ------- |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 11,400 second-feet May 30 (gage height, 8.61 feet); minimum, 14 second-feet on numerous dates when gates at Jackson Lake Dam were closed (gage height, 0.04 foot).

1903–1928: Maximum discharge, 15,100 second-feet June 12, 1918 (gage height, 10.41 feet); practically no flow for few days in 1907 and 1909.

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

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 45 | 554 | 950 | 934 | 19 | 14 | 15 | 3,760 | 7,290 | 2,720 | 3,700 | 1,960 |
| 2 | 47 | 554 | 950 | 934 | 17 | 14 | 17 | 3,760 | 7,580 | 3,880 | 3,340 | 1,880 |
| 3 | 49 | 554 | 950 | 934 | 15 | 14 | 19 | 3,710 | 7,090 | 4,120 | 3,340 | 1,840 |
| 4 | 49 | 559 | 950 | 934 | 14 | 14 | 19 | 3,710 | 5,300 | 3,720 | 3,330 | 1,840 |
| 5 | 50 | 559 | 950 | 934 | 14 | 14 | 19 | 3,710 | 6,270 | 3,710 | 3,250 | 1,950 |
| 6 | 52 | 565 | 950 | 934 | 14 | 14 | 764 | 4,910 | 6,590 | 3,960 | 3,160 | 2,060 |
| 7 | 52 | 565 | 950 | 934 | 14 | 14 | 764 | 4,910 | 3,800 | 3,800 | 3,070 | 2,050 |
| 8 | 50 | 571 | 950 | 934 | 14 | 14 | 764 | 5,510 | 6,210 | 2,610 | 3,000 | 2,140 |
| 9 | 36 | 576 | 950 | 934 | 14 | 14 | 493 | 6,060 | 3,960 | 2,490 | 2,960 | 2,320 |
| 10 | 29 | 582 | 950 | 934 | 14 | 14 | 493 | 8,530 | 3,150 | 3,610 | 3,060 | 2,340 |
| 11 | 23 | 738 | 942 | 934 | 14 | 14 | 493 | 5,480 | 3,000 | 4,320 | 3,260 | 2,350 |
| 12 | 20 | 738 | 934 | 934 | 14 | 14 | 493 | 1,850 | 3,640 | 3,940 | 3,400 | 2,340 |
| 13 | 20 | 738 | 934 | 934 | 14 | 14 | 493 | 172 | 1,810 | 3,950 | 3,540 | 2,340 |
| 14 | 19 | 950 | 934 | 934 | 14 | 14 | 655 | 128 | 927 | 3,650 | 3,540 | 2,340 |
| 15 | 18 | 950 | 934 | 934 | 14 | 14 | 655 | 111 | 764 | 3,330 | 3,530 | 2,340 |
| 16 | 18 | 950 | 934 | 934 | 14 | 14 | 655 | 128 | 2,140 | 3,700 | 3,260 | 2,150 |
| 17 | 18 | 950 | 934 | 934 | 14 | 14 | 934 | 169 | 2,920 | 3,830 | 3,130 | 2,000 |
| 18 | 18 | 950 | 934 | 934 | 14 | 14 | 833 | 197 | 3,360 | 3,680 | 3,060 | 2,010 |
| 19 | 415 | 950 | 934 | 934 | 14 | 14 | 833 | 2,470 | 4,590 | 3,030 | 2,910 | 2,000 |
| 20 | 554 | 950 | 934 | 934 | 14 | 14 | 833 | 4,270 | 5,420 | 2,900 | 2,940 | 2,000 |
| 21 | 559 | 950 | 934 | 934 | 14 | 14 | 833 | 4,370 | 5,390 | 2,660 | 2,910 | 2,000 |
| 22 | 565 | 950 | 934 | 934 | 14 | 14 | 1,260 | 4,420 | 5,570 | 2,860 | 2,910 | 2,000 |
| 23 | 559 | 950 | 934 | 934 | 14 | 14 | 1,260 | 5,550 | 5,780 | 3,180 | 3,020 | 1,930 |
| 24 | 559 | 950 | 934 | 339 | 14 | 14 | 1,260 | 6,670 | 5,730 | 3,220 | 3,180 | 1,890 |
| 25 | 559 | 950 | 934 | 50 | 14 | 14 | 1,260 | 6,830 | 5,710 | 3,020 | 3,180 | 1,890 |
| 26 | 559 | 950 | 934 | 30 | 14 | 15 | 1,260 | 6,420 | 5,480 | 2,950 | 3,060 | 1,899 |
| 27 | 559 | 950 | 934 | 25 | 14 | 15 | 1,940 | 4,590 | 4,120 | 3,200 | 2,910 | 1,219 |
| 28 | 559 | 950 | 934 | 21 | 14 | 15 | 1,940 | 5,060 | 3,540 | 3,480 | 2,850 | 531 |
| 29 | 554 | 950 | 934 | 21 | 14 | 15 | 1,940 | 7,070 | 3,370 | 3,780 | 2,550 | 153 |
| 30 | 554 | 950 | 934 | 19 | ------ | 15 | 2,640 | 10,200 | 2,470 | 3,900 | 2,150 | 30 |
| 31 | 554 | ------ | 934 | 19 | ------ | 15 | ------ | 9,720 | ------ | 3,700 | 1,940 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 565 | 18 | 249 | 15,300 |
| November | 950 | 554 | 800 | 47,600 |
| December | 950 | 934 | 939 | 57,700 |
| January | 934 | 19 | 710 | 43,700 |
| February | 19 | 14 | 14.3 | 822 |
| March | 15 | 14 | 14.2 | 873 |
| April | 2,640 | 15 | 861 | 51,200 |
| May | 10,200 | 111 | 4,340 | 267,000 |
| June | 7,580 | 764 | 4,430 | 264,000 |
| July | 4,320 | 2,490 | 3,450 | 212,000 |
| August | 3,700 | 1,940 | 3,080 | 189,000 |
| September | 2,350 | 30 | 1,860 | 111,000 |
| The year | 10,200 | 14 | 1,740 | 1,260,000 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 36,100 second-feet May 27 (gage height, 8.38 feet); minimum, 2,370 second-feet March 4 (gage height, 0.51 foot).

1910–1928: Maximum discharge, about 60,000 second-feet May 19, 1927 (gage height, about 14.0 feet); minimum, 2,000 second-feet February 10, 1927.

REMARKS.—Records good except those for periods of ice effect, October 16 to November 7 and December 7 to January 12, which are fair. Discharge interpolated November 9–11 and 13–15. Station is above all irrigation diversions except the Riley ditch (capacity about 30 second-feet) which diverts 1 mile above gage. Flow is regulated by storage at Jackson Lake Reservoir.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4,800 | | 4,590 | | 2,700 | 2,590 | 3,640 | 17,800 | 30,900 | 16,400 | 10,200 | 6,230 |
| 2 | 4,900 | | 4,640 | | 2,680 | 3,160 | 3,880 | 19,700 | 27,000 | 16,400 | 9,860 | 6,160 |
| 3 | 4,900 | | 4,820 | | 2,680 | 2,580 | 4,010 | 19,100 | 26,400 | 16,400 | 9,260 | 6,040 |
| 4 | 4,900 | | 4,690 | | 2,700 | 2,370 | 3,850 | 18,200 | 24,600 | 16,200 | 9,070 | 5,920 |
| 5 | 4,900 | 4,200 | 4,320 | | 2,710 | 2,510 | 3,700 | 18,300 | 21,900 | 15,900 | 9,110 | 5,860 |
| 6 | 4,900 | | 4,460 | | 2,700 | 2,590 | 3,640 | 20,100 | 21,900 | 16,200 | 9,030 | 5,800 |
| 7 | 4,950 | | | 4,760 | 2,660 | 2,540 | 3,850 | 23,100 | 22,600 | 16,600 | 8,740 | 5,860 |
| 8 | 4,980 | 4,460 | | | 2,820 | 2,580 | 3,970 | 25,000 | 19,400 | 15,300 | 8,410 | 5,860 |
| 9 | 4,930 | 4,670 | | | 2,590 | 2,710 | 3,940 | 27,200 | 20,500 | 13,300 | 8,240 | 5,860 |
| 10 | 4,870 | 4,880 | | | 2,640 | 2,640 | 3,920 | 29,900 | 17,800 | 12,800 | 8,060 | 6,100 |
| 11 | 4,850 | 5,100 | | | 2,680 | 2,890 | 3,920 | 31,400 | 17,200 | 13,700 | 7,960 | 6,130 |
| 12 | 4,850 | 5,310 | | | 2,710 | 2,840 | 3,850 | 31,400 | 17,100 | 14,800 | 8,100 | 6,040 |
| 13 | 4,850 | 5,250 | | 4,770 | 2,820 | 2,630 | 3,920 | 29,400 | 16,900 | 14,500 | 8,100 | 6,100 |
| 14 | 4,850 | 5,180 | | 4,440 | 2,970 | 2,710 | 3,850 | 26,400 | 14,700 | 14,600 | 8,300 | 6,070 |
| 15 | 4,850 | 5,120 | | 4,080 | 2,450 | 2,660 | 3,920 | 22,900 | 13,500 | 14,500 | 8,300 | 6,010 |
| 16 | | 5,060 | | 3,990 | 2,640 | 2,590 | 4,100 | 21,800 | 13,300 | 13,800 | 8,270 | 5,980 |
| 17 | | 5,340 | | 3,790 | 2,660 | 2,580 | 4,620 | 21,700 | 14,500 | 13,700 | 8,060 | 5,860 |
| 18 | | 5,230 | | 3,720 | 2,710 | 2,560 | 5,040 | 22,400 | 15,200 | 13,600 | 7,750 | 5,570 |
| 19 | | 5,120 | 4,230 | 3,740 | 2,800 | 2,610 | 5,010 | 23,700 | 15,100 | 13,100 | 7,620 | 5,570 |
| 20 | | 5,060 | | 3,790 | 2,780 | 2,710 | 4,900 | 27,000 | 15,500 | 12,100 | 7,310 | 5,600 |
| 21 | | 5,090 | | 3,850 | 2,750 | 2,870 | 4,770 | 28,800 | 16,300 | 11,300 | 7,240 | 5,540 |
| 22 | | 5,090 | | 3,420 | 3,200 | 3,140 | 4,770 | 29,700 | 17,300 | 10,800 | 7,140 | 5,420 |
| 23 | 4,000 | 4,850 | | 3,570 | 2,990 | 3,510 | 5,370 | 30,500 | 18,000 | 10,400 | 7,050 | 5,420 |
| 24 | | 4,590 | | 3,790 | 2,460 | 3,900 | 6,470 | 31,500 | 18,400 | 10,400 | 7,080 | 5,370 |
| 25 | | 4,670 | | 3,230 | 2,840 | 4,620 | 7,890 | 33,200 | 18,600 | 10,400 | 7,310 | 5,280 |
| 26 | | 4,740 | | 3,000 | 2,510 | 4,560 | 10,400 | 34,900 | 19,200 | 10,200 | 7,280 | 5,250 |
| 27 | | 4,850 | | 3,080 | 2,460 | 4,200 | 13,100 | 35,500 | 19,600 | 9,940 | 7,310 | 5,250 |
| 28 | | 4,950 | | 3,040 | 2,530 | 3,990 | 15,900 | 34,440 | 18,800 | 10,200 | 7,310 | 5,140 |
| 29 | | 4,930 | | 2,780 | 2,510 | 3,790 | 17,200 | 33,700 | 18,000 | 10,200 | 7,110 | 4,320 |
| 30 | | 4,740 | | 2,770 | ------ | 3,640 | 15,900 | 33,500 | 17,500 | 10,400 | 6,880 | 3,990 |
| 31 | | ------ | | 2,730 | ------ | 3,570 | ------ | 33,500 | ------ | 10,500 | 6,500 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 4,980 | ---------- | 4,430 | 272,000 |
| November | 5,340 | ---------- | 4,790 | 285,000 |
| December | 4,820 | ---------- | 4,300 | 264,000 |
| January | 4,770 | 2,730 | 4,020 | 247,000 |
| February | 3,200 | 2,450 | 2,700 | 155,000 |
| March | 4,620 | 2,370 | 3,060 | 188,000 |
| April | 17,200 | 3,640 | 6,110 | 364,000 |
| May | 35,550 | 17,800 | 27,000 | 1,660,000 |
| June | 30,900 | 13,300 | 18,900 | 1,120,000 |
| July | 16,600 | 9,940 | 13,200 | 812,000 |
| August | 10,200 | 6,500 | 8,000 | 492,000 |
| September | 6,230 | 3,990 | 5,660 | 336,000 |
| The year | 35,500 | ---------- | 8,540 | 6,200,000 |

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

Between Heise and Shelley gaging stations 50 separate canals divert water from Snake River for irrigation. Forty of these divert above the mouth of Henrys Fork and 10 below. Records are available during a portion of each irrigation season from June, 1919, to September, 1928, 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 10 to September 1 flow was supplemented by release of water from Jackson Lake. Records good.

*Daily and monthly discharge, in second-feet, 1928*

| Day | June | July | Aug. | Sept. | Day | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 7,730 | 8,290 | 8,310 | 5,350 | 16 | 4,740 | 8,170 | 7,000 | 5,150 |
| 2 | 7,690 | 7,870 | 8,280 | 5,210 | 17 | 4,790 | 8,380 | 6,830 | 5,090 |
| 3 | 7,630 | 7,580 | 7,900 | 5,100 | 18 | 5,080 | 8,430 | 6,780 | 4,930 |
| 4 | 7,910 | 6,460 | 7,950 | 5,250 | 19 | 4,750 | 8,350 | 6,710 | 4,900 |
| 5 | 8,040 | 7,800 | 7,930 | 5,290 | 20 | 4,760 | 8,220 | 6,550 | 4,870 |
| 6 | 8,280 | 8,390 | 7,870 | 5,320 | 21 | 4,820 | 8,000 | 6,490 | 4,860 |
| 7 | 8,960 | 8,240 | 7,620 | 5,360 | 22 | 4,860 | 8,040 | 6,460 | 4,890 |
| 8 | 8,280 | 7,870 | 7,440 | 5,370 | 23 | 4,880 | 7,800 | 6,440 | 4,840 |
| 9 | 8,960 | 7,540 | 7,360 | 5,330 | 24 | 5,200 | 8,070 | 6,360 | 4,840 |
| 10 | 8,530 | 7,680 | 7,270 | 5,410 | 25 | 6,150 | 8,100 | 6,390 | 4,770 |
| 11 | 8,250 | 7,840 | 7,220 | 5,510 | 26 | 7,680 | 8,180 | 6,420 | 4,670 |
| 12 | 7,490 | 8,170 | 7,240 | 5,480 | 27 | 7,860 | 8,100 | 6,480 | 4,510 |
| 13 | 6,420 | 8,250 | 7,210 | 5,540 | 28 | 8,840 | 8,320 | 6,180 | 4,360 |
| 14 | 5,320 | 8,270 | 7,240 | 5,480 | 29 | 9,080 | 8,350 | 6,060 | 4,100 |
| 15 | 4,930 | 8,310 | 7,090 | 5,280 | 30 | 9,000 | 8,230 | 5,910 | 3,630 |
| | | | | | 31 | | 8,270 | 5,580 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| June | 9,080 | 4,740 | 6,900 | 411,000 |
| July | 8,430 | 6,460 | 8,050 | 495,000 |
| August | 8,310 | 5,580 | 6,990 | 430,000 |
| September | 5,540 | 3,630 | 5,020 | 299,000 |
| 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, 1928.

EXTREMES.—Maximum discharge during year, 36,600 second-feet May 29 (gage height, 14.36 feet); minimum, 2,500 second-feet September 30 (gage height, 5.55 feet).

1915–1928: Maximum discharge, 47,200 second-feet June 17, 1918 (gage height, 16.97 feet); minimum, 628 second-feet September 15, 1926 (gage height, 3.53 feet).

REMARKS.—Records excellent. Flow regulated by numerous canal diversions above station and by storage in Jackson Lake Reservoir.

*Daily and monthly discharge, in second-feet, 1928*

| Day | Apr. | May | June | July | Aug. | Sept. | Day | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ------- | 19,000 | 35,000 | 11,700 | 3,630 | 4,000 | 16 | | 27,700 | 13,200 | 8,080 | 3,270 | 3,230 |
| 2 | ------- | 20,600 | 32,700 | 11,700 | 3,660 | 3,770 | 17 | | 25,900 | 14,000 | 7,220 | 3,270 | 3,290 |
| 3 | ------- | 21,900 | 28,100 | 12,100 | 3,550 | 3,660 | 18 | | 25,000 | 15,600 | 7,020 | 3,380 | 3,270 |
| 4 | 4,820 | 21,500 | 25,900 | 13,200 | 3,440 | 3,550 | 19 | 4,860 | 26,000 | 16,000 | 6,670 | 3,400 | 3,030 |
| 5 | 4,820 | 20,200 | 22,400 | 12,400 | 3,570 | 3,310 | 20 | | 25,900 | 16,400 | 6,330 | 3,290 | 2,980 |
| 6 | 4,680 | 19,800 | 19,000 | 10,900 | 3,570 | 3,010 | 21 | | 28,600 | 16,900 | 5,400 | 3,310 | 2,980 |
| 7 | 4,550 | 21,500 | 18,500 | 11,300 | 3,460 | 2,840 | 22 | | 29,900 | 17,300 | 4,820 | 3,250 | 2,980 |
| 8 | 4,550 | 24,100 | 17,300 | 11,700 | 3,380 | 2,790 | 23 | 5,090 | 30,800 | 18,100 | 4,420 | 3,210 | 2,900 |
| 9 | 4,550 | 25,900 | 15,600 | 10,600 | 3,230 | 2,700 | 24 | 5,520 | 31,300 | 19,400 | 3,910 | 3,190 | 2,860 |
| 10 | 4,680 | 27,700 | 15,200 | 8,920 | 3,050 | 2,720 | 25 | 6,420 | 32,200 | 18,500 | 3,880 | 3,290 | 2,840 |
| 11 | 4,550 | 29,500 | 13,600 | 8,220 | 2,920 | 2,770 | 26 | 7,880 | 33,600 | 16,900 | 3,750 | 3,440 | 2,810 |
| 12 | 4,420 | 31,300 | 14,000 | 8,530 | 2,900 | 2,790 | 27 | 10,600 | 35,000 | 16,000 | 3,400 | 3,770 | 2,770 |
| 13 | 4,420 | 33,100 | 15,200 | 8,840 | 2,940 | 2,880 | 28 | 13,600 | 36,300 | 15,200 | 3,290 | 3,880 | 2,720 |
| 14 | 4,420 | 32,700 | 15,600 | 8,460 | 2,990 | 2,980 | 29 | 16,900 | 36,300 | 13,200 | 3,400 | 4,240 | 2,720 |
| 15 | 4,170 | 30,800 | 14,000 | 8,420 | 3,130 | 3,130 | 20 | 19,000 | 36,300 | 12,100 | 3,630 | 4,370 | 2,620 |
| | | | | | | | 31 | ------- | 35,900 | ------- | 3,630 | 4,240 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| April 4–30 | 19,000 | 4,170 | 6,430 | 344,000 |
| May | 36,300 | 19,000 | 28,200 | 1,730,000 |
| June | 35,000 | 12,100 | 18,000 | 1,070,000 |
| July | 13,200 | 3,290 | 7,610 | 468,000 |
| August | 4,370 | 2,900 | 3,430 | 211,000 |
| September | 4,000 | 2,620 | 3,030 | 180,000 |
| The period | | | | 4,000,000 |

### SNAKE RIVER BELOW BLACKFOOT BRIDGE,[1] 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, 1928.

EXTREMES.—Maximum discharge during year not determined; minimum, 168 second-feet August 15.

1924–1928: Maximum discharge not determined; no flow on days during several years.

REMARKS.—Records good. Discharge is the total of the flow in three channels. Measuring conditions are such that discharge 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, 1928*

| Day | July | Aug. | Sept. | Day | July | Aug. | Sept. | Day | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ------- | 483 | 1,450 | 11 | ------- | 226 | 295 | 21 | ------- | 398 | 828 |
| 2 | ------- | 487 | 1,250 | 12 | ------- | 186 | 350 | 22 | ------- | 283 | 823 |
| 3 | ------- | 463 | 1,100 | 13 | ------- | 203 | 471 | 23 | ------- | 245 | 807 |
| 4 | ------- | 448 | 948 | 14 | ------- | 175 | 572 | 24 | ------- | 231 | 774 |
| 5 | ------- | 482 | 769 | 15 | ------- | 168 | 711 | 25 | ------- | 335 | 737 |
| 6 | ------- | 544 | 589 | 16 | ------- | 214 | 780 | 26 | 1,040 | 541 | 702 |
| 7 | ------- | 512 | 350 | 17 | ------- | 322 | 812 | 27 | 887 | 970 | 657 |
| 8 | ------- | 471 | 315 | 18 | ------- | 435 | 844 | 28 | 610 | 1,300 | 647 |
| 9 | ------- | 408 | 302 | 19 | ------- | 485 | 840 | 29 | 505 | 1,510 | 722 |
| 10 | ------- | 307 | 284 | 20 | ------- | 503 | 828 | 30 | 502 | 1,650 | 783 |
| | | | | | | | | 31 | 513 | 1,650 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| July 26–31 | ------- | ------- | 676 | 8,050 |
| August | 1,650 | 168 | 537 | 33,000 |
| September | 1,450 | 284 | 710 | 42,200 |
| The period | ------- | ------- | ------- | 83,200 |

[1] Previously published as two stations; Snake River (Nos. 1 and 2 channels) below Blackfoot Bridge and Snake River (No. 3 channel) below Blackfoot Bridge.

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

Between Shelley and Clough ranch 15 canals divert water from Snake River for irrigation. Records are available during a portion of each irrigation season from May, 1924, to September, 1928, showing the combined discharge of all canals. Between July 16 and September 30 flow was supplemented by release of water from Jackson Lake Reservoir. Records good, being based on daily readings of staff gages.

*Daily and monthly discharge, in second-feet, 1928*

| Day | June | July | Aug. | Sept. | Day | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2,640 | 2,450 | 3,020 | 2,520 | 16 | 2,410 | 3,400 | 2 930 | 2,440 |
| 2 | 2,680 | 2,360 | 3,080 | 2,520 | 17 | 2,400 | 3,360 | 2 870 | 2,420 |
| 3 | 2,760 | 2,150 | 3,020 | 2,520 | 18 | 2,360 | 3,480 | 2 780 | 2,400 |
| 4 | 3,010 | 2,700 | 3,040 | 2,530 | 19 | 2,200 | 3,420 | 2 760 | 2,340 |
| 5 | 3,180 | 3,150 | 3,080 | 2,530 | 20 | 2,150 | 3,390 | 2 790 | 2,260 |
| 6 | 3,260 | 3,140 | 3,070 | 2,510 | 21 | 1,900 | 3,130 | 2 870 | 2,240 |
| 7 | 3,230 | 3,400 | 3,080 | 2,490 | 22 | 1,810 | 2,750 | 2 870 | 2,230 |
| 8 | 2,740 | 3,600 | 2,990 | 2,480 | 23 | 1,880 | 2,610 | 2 860 | 2,210 |
| 9 | 2,760 | 3,630 | 2,920 | 2,460 | 24 | 1,900 | 2,470 | 2 840 | 2,190 |
| 10 | 2,860 | 3,400 | 2,780 | 2,460 | 25 | 2,290 | 2,460 | 2 840 | 2,160 |
| 11 | 2,680 | 3,360 | 2,730 | 2,440 | 26 | 2,760 | 2,520 | 2 840 | 2,150 |
| 12 | 2,540 | 3,400 | 2,630 | 2,410 | 27 | 3,100 | 2,510 | 2 660 | 2,120 |
| 13 | 2,470 | 3,480 | 2,650 | 2,340 | 28 | 3,420 | 2,650 | 2 530 | 2,080 |
| 14 | 2,340 | 3,290 | 2,750 | 2,370 | 29 | 3,510 | 2,730 | 2 580 | 2,050 |
| 15 | 2,350 | 3,350 | 2,860 | 2,360 | 30 | 2,790 | 2,910 | 2 600 | 2,030 |
| | | | | | 31 | | 3,000 | 2 540 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| June | 3,510 | 1,810 | 2,610 | 155,000 |
| July | 3,630 | 2,150 | 3,020 | 186,000 |
| August | 3,080 | 2,530 | 2,830 | 174,000 |
| September | 2,530 | 2,030 | 2,340 | 139,000 |
| The period | | | | 654,000 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 33,500 second-feet May 31 (gage height, 12.55 feet); minimum, 339 second-feet August 15 (gage height, 1.45 feet).

1910–1928: Maximum discharge, 46,200 second-feet June 18, 1918 (gage height, 14.8 feet); minimum, 118 second-feet August 25, 1919 (gage height, 1.93 feet).

REMARKS.—Records excellent. Discharge interpolated December 25–28, January 20, 22–26, and February 22–29. Flow regulated by storage in Jackson Lake and Blackfoot-Marsh Reservoir. Numerous diversions for irrigation above station.

*Daily and monthly discharge, in second-feet, of Snake River at Clough ranch, near Blackfoot, Idaho, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4,190 | 4,290 | 6,020 | 4,090 | 3,620 | 3,220 | 4,290 | 17,700 | 32,500 | 9,740 | 593 | 1,880 |
| 2 | 4,710 | 4,400 | 5,760 | 3,900 | 3,800 | 3,240 | 4,090 | 19,200 | 31,300 | 9,740 | 606 | 1,550 |
| 3 | 4,820 | 4,400 | 5,640 | 3,990 | 3,710 | 3,070 | 4,190 | 20,700 | 26,900 | 9,900 | 685 | 1,340 |
| 4 | 4,940 | 4,290 | 5,640 | 4,290 | 3,900 | 2,990 | 4,400 | 20,000 | 23,100 | 10,900 | 645 | 1,140 |
| 5 | 4,940 | 4,400 | 5,640 | 4,610 | 3,800 | 3,110 | 4,400 | 19,000 | 20,300 | 10,100 | 618 | 908 |
| 6 | 5,050 | 4,710 | 5,400 | 4,710 | 3,990 | 3,140 | 4,190 | 17,700 | 16,500 | 8,340 | 772 | 750 |
| 7 | 4,940 | 4,820 | 4,610 | 5,050 | 3,900 | 3,490 | 3,990 | 18,100 | 14,700 | 8,040 | 827 | 533 |
| 8 | 4,820 | 4,820 | 3,800 | 5,170 | 4,090 | 3,740 | 3,990 | 20,000 | 15,100 | 8,490 | 699 | 426 |
| 9 | 4,710 | 5,170 | 3,530 | 4,940 | 3,800 | 3,990 | 3,990 | 22,000 | 12,300 | 7,900 | 600 | 421 |
| 10 | 4,500 | 5,640 | 3,900 | 4,820 | 3,800 | 3,900 | 3,900 | 23,300 | 12,800 | 6,060 | 446 | 426 |
| 11 | 4,190 | 6,400 | 4,090 | 4,710 | 3,710 | 3,990 | 3,990 | 25,100 | 11,200 | 5,030 | 397 | 456 |
| 12 | 4,190 | 7,960 | 4,610 | 4,500 | 3,400 | 3,990 | 3,990 | 26,900 | 11,500 | 4,710 | 347 | 488 |
| 13 | 4,090 | 8,110 | 4,610 | 4,710 | 3,290 | 3,990 | 3,900 | 29,200 | 12,600 | 5,250 | 383 | 593 |
| 14 | 3,900 | 7,230 | 4,090 | 4,610 | 3,440 | 3,900 | 3,900 | 30,600 | 13,900 | 5,030 | 388 | 858 |
| 15 | 3,900 | 6,810 | 3,090 | 4,710 | 2,950 | 3,710 | 3,800 | 29,700 | 12,800 | 5,030 | 343 | 1,050 |
| 16 | 3,900 | 6,540 | 3,260 | 4,820 | 2,970 | 3,530 | 3,800 | 26,700 | 11,700 | 4,920 | 378 | 1,220 |
| 17 | 3,710 | 6,540 | 3,440 | 4,710 | 2,990 | 3,400 | 3,800 | 24,400 | 12,000 | 4,200 | 488 | 1,260 |
| 18 | 3,530 | 6,670 | 3,530 | 4,820 | 3,140 | 3,310 | 4,090 | 23,300 | 13,300 | 3,720 | 545 | 1,250 |
| 19 | 3,530 | 6,540 | 3,450 | 4,500 | 3,440 | 3,260 | 4,610 | 22,700 | 14,500 | 3,440 | 612 | 1,160 |
| 20 | 3,400 | 6,400 | 3,510 | 4,150 | 3,530 | 3,220 | 4,820 | 23,100 | 14,600 | 3,100 | 612 | 1,060 |
| 21 | 3,310 | 6,270 | 3,490 | 3,800 | 3,190 | 3,240 | 4,820 | 24,700 | 15,200 | 2,610 | 587 | 1,090 |
| 22 | 3,490 | 6,140 | 2,290 | 3,860 | 3,060 | 3,400 | 4,710 | 26,500 | 15,900 | 2,180 | 436 | 1,000 |
| 23 | 3,530 | 6,270 | 3,400 | 3,930 | 2,940 | 3,490 | 4,500 | 27,200 | 16,500 | 1,850 | 383 | 936 |
| 24 | 3,530 | 6,140 | 3,530 | 4,000 | 2,810 | 3,710 | 4,500 | 27,900 | 17,000 | 1,480 | 347 | 968 |
| 25 | 3,350 | 6,020 | 3,570 | 4,060 | 2,680 | 4,190 | 5,170 | 28,500 | 16,600 | 1,270 | 392 | 951 |
| 26 | 3,290 | 5,890 | 3,600 | 4,130 | 2,780 | 4,940 | 6,400 | 29,700 | 14,800 | 1,090 | 679 | 908 |
| 27 | 3,280 | 5,890 | 3,640 | 4,190 | 2,910 | 5,520 | 8,720 | 30,900 | 13,200 | 892 | 1,180 | 875 |
| 28 | 3,440 | 6,020 | 3,670 | 3,800 | 3,090 | 5,280 | 11,700 | 32,300 | 12,300 | 699 | 1,680 | 827 |
| 29 | 3,800 | 6,140 | 3,710 | 3,800 | 3,310 | 4,940 | 15,100 | 33,000 | 10,700 | 581 | 1,890 | 942 |
| 30 | 3,990 | 6,140 | 3,900 | 3,710 | ------ | 4,710 | 17,500 | 33,000 | 9,420 | 568 | 2,110 | 995 |
| 31 | 4,190 | ------ | 3,990 | 3,710 | ------ | 4,500 | ------ | 33,200 | ------ | 606 | 2,110 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 5,050 | 3,280 | 4,040 | 248,000 |
| November | 8,110 | 4,290 | 5,900 | 351,000 |
| December | 6,020 | 3,090 | 4,110 | 253,000 |
| January | 5,170 | 3,710 | 4,350 | 267,000 |
| February | 4,090 | 2,680 | 3,380 | 194,000 |
| March | 5,520 | 2,990 | 3,810 | 234,000 |
| April | 17,500 | 3,800 | 5,510 | 328,000 |
| May | 33,200 | 17,700 | 25,400 | 1,560,000 |
| June | 32,500 | 9,420 | 15,800 | 940,000 |
| July | 10,900 | 568 | 4,760 | 293,000 |
| August | 2,110 | 343 | 735 | 45,200 |
| September | 1,830 | 421 | 940 | 55,900 |
| The year | 33,200 | 343 | 6,570 | 4,770,000 |

### AMERICAN FALLS RESERVOIR AT AMERICAN FALLS, IDAHO

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

RECORDS AVAILABLE.—March, 1926, to September, 1928.

REMARKS.—American Falls Reservoir impounds water for supplemental irrigation of lands in the Minidoka and North and South Side Twin Falls tracts and also stores 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, 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, of American Falls Reservoir at American Falls, Idaho, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. |
|---|---|---|---|---|---|---|
| 1 | | 1,603,660 | 1,652,070 | 1,498,650 | 1,453,670 | 1,366,510 |
| 2 | 1,406,880 | 1,609,090 | 1,649,860 | 1,497,080 | 1,451,620 | 1,361,970 |
| 3 | 1,414,600 | 1,618,910 | 1,647,100 | 1,495,510 | 1,449,380 | 1,359,950 |
| 4 | 1,415,620 | 1,627,760 | 1,642,120 | 1,494,460 | 1,447,590 | 1,354,910 |
| 5 | 1,426,940 | 1,636,040 | 1,642,120 | 1,496,030 | 1,445,960 | 1,350,950 |
| 6 | 1,437,780 | 1,646,550 | 1,646,550 | 1,491,840 | 1,443,390 | 1,347,980 |
| 7 | 1,444,420 | 1,639,910 | 1,631,070 | 1,491,840 | 1,441,330 | 1,345,010 |
| 8 | 1,453,160 | 1,639,910 | 1,621,120 | 1,493,410 | 1,439,280 | 1,343,030 |
| 9 | 1,451,620 | 1,638,810 | 1,611,270 | 1,492,360 | 1,437,220 | 1,342,040 |
| 10 | 1,454,700 | 1,644,340 | 1,605,830 | 1,490,270 | 1,434,650 | 1,341,050 |
| 11 | 1,464,610 | 1,665,340 | 1,611,270 | 1,490,270 | 1,433,110 | 1,339,560 |
| 12 | 1,471,420 | 1,680,380 | 1,601,480 | 1,489,750 | 1,428,990 | 1,341,050 |
| 13 | 1,480,850 | 1,706,720 | 1,590,620 | 1,489,750 | 1,425,910 | 1,340,060 |
| 14 | 1,487,130 | 1,705,600 | 1,588,440 | 1,490,270 | 1,422,820 | 1,338,080 |
| 15 | 1,494,980 | 1,702,800 | 1,578,660 | 1,488,180 | 1,418,190 | 1,337,580 |
| 16 | 1,502,310 | 1,705,600 | 1,572,140 | 1,487,130 | 1,414,080 | 1,336,590 |
| 17 | 1,508,070 | 1,706,400 | 1,563,450 | 1,486,080 | 1,410,480 | 1,335,110 |
| 18 | 1,517,630 | 1,706,720 | 1,558,100 | 1,486,080 | 1,407,910 | 1,331,640 |
| 19 | 1,522,960 | 1,706,160 | 1,557,040 | 1,482,940 | 1,403,320 | 1,328,670 |
| 20 | 1,529,880 | 1,701,120 | 1,547,450 | 1,482,940 | 1,398,780 | 1,326,690 |
| 21 | 1,534,680 | 1,691,030 | 1,533,610 | 1,481,890 | 1,397,270 | 1,323,230 |
| 22 | 1,538,930 | 1,688,790 | | 1,479,800 | 1,392,730 | 1,318,280 |
| 23 | 1,542,130 | 1,688,790 | | 1,475,610 | 1,391,720 | 1,318,280 |
| 24 | 1,547,450 | 1,680,940 | 1,519,770 | 1,474,560 | 1,387,690 | 1,316,300 |
| 25 | 1,552,780 | 1,677,580 | 1,514,440 | 1,470,900 | 1,385,170 | 1,301,510 |
| 26 | 1,559,760 | 1,675,340 | 1,511,780 | 1,469,330 | 1,380,630 | 1,319,270 |
| 27 | 1,565,080 | 1,664,240 | | 1,467,230 | 1,377,100 | 1,309,370 |
| 28 | 1,574,310 | 1,659,810 | | 1,466,180 | 1,372,060 | 1,314,320 |
| 29 | 1,578,120 | 1,660,920 | 1,505,980 | 1,463,040 | 1,368,530 | 1,317,290 |
| 30 | 1,585,180 | 1,658,710 | 1,503,880 | 1,458,850 | | 1,318,280 |
| 31 | 1,594,960 | | 1,501,270 | 1,456,760 | | 1,322,730 |

| Day | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|
| 1 | 1,324,710 | 1,309,370 | 1,459,380 | 1,694,400 | 1,518,700 | 1,168,250 |
| 2 | 1,324,220 | 1,313,330 | 1,503,360 | 1,696,640 | 1,515,510 | 1,155,210 |
| 3 | 1,316,300 | 1,316,300 | 1,532,550 | 1,697,760 | 1,503,360 | 1,145,520 |
| 3 | 1,316,790 | 1,319,760 | 1,544,260 | 1,699,440 | 1,488,180 | 1,137,690 |
| 5 | 1,312,830 | 1,327,190 | 1,555,440 | 1,703,360 | 1,477,180 | 1,127,550 |
| 6 | 1,318,280 | 1,323,720 | 1,557,040 | 1,705,600 | 1,465,140 | 1,116,940 |
| 7 | 1,320,260 | 1,320,260 | 1,557,040 | 1,708,960 | 1,453,670 | 1,108,350 |
| 8 | 1,312,340 | 1,319,270 | 1,565,620 | 1,711,200 | 1,443,390 | 1,097,520 |
| 9 | 1,309,370 | 1,325,210 | 1,577,580 | 1,710,640 | 1,435,160 | 1,087,600 |
| 10 | 1,300,540 | 1,325,210 | 1,585,730 | 1,709,520 | 1,421,790 | 1,079,940 |
| 11 | 1,305,410 | 1,333,130 | 1,597,140 | 1,707,840 | 1,409,450 | 1,069,590 |
| 12 | 1,303,460 | 1,341,050 | 1,604,750 | 1,702,800 | 1,393,240 | 1,059,020 |
| 13 | 1,303,950 | 1,362,980 | 1,615,070 | 1,694,960 | 1,382,140 | 1,049,340 |
| 14 | 1,300,540 | 1,381,130 | 1,628,300 | 1,694,960 | 1,371,050 | 1,045,820 |
| 15 | 1,299,080 | 1,396,260 | 1,637,700 | 1,688,230 | 1,356,930 | 1,041,420 |
| 16 | 1,298,100 | 1,402,820 | 1,649,310 | 1,684,310 | 1,345,500 | 1,035,250 |
| 17 | 1,290,800 | 1,402,310 | 1,659,260 | 1,680,940 | 1,333,620 | 1,031,730 |
| 18 | 1,292,750 | 1,397,780 | 1,670,870 | 1,674,220 | 1,327,190 | 1,026,450 |
| 19 | 1,291,770 | 1,391,720 | 1,685,430 | 1,669,210 | 1,306,890 | 1,014,430 |
| 20 | 1,291,770 | 1,385,670 | 1,696,640 | 1,660,370 | 1,297,620 | 1,013,570 |
| 21 | 1,291,770 | 1,381,130 | 1,702,240 | 1,656,500 | 1,285,930 | 1,008,420 |
| 22 | 1,293,720 | 1,380,130 | 1,705,040 | 1,649,310 | 1,270,350 | 1,004,560 |
| 23 | 1,292,750 | 1,385,170 | 1,711,200 | 1,633,280 | 1,262,070 | 997,260 |
| 24 | 1,288,850 | 1,388,190 | 1,708,960 | 1,623,880 | 1,252,870 | 992,540 |
| 25 | 1,288,360 | 1,393,740 | 1,706,160 | 1,613,440 | 1,238,490 | 988,680 |
| 26 | 1,284,470 | 1,397,270 | 1,694,960 | 1,603,660 | 1,224,100 | 985,680 |
| 27 | 1,280,090 | 1,404,330 | 1,685,430 | 1,590,620 | 1,211,630 | 981,860 |
| 28 | 1,279,600 | 1,410,480 | 1,683,190 | 1,584,100 | 1,199,330 | 976,850 |
| 29 | 1,289,830 | 1,426,940 | 1,683,190 | 1,571,660 | 1,191,800 | 974,350 |
| 30 | 1,306,400 | 1,434,140 | 1,689,350 | 1,552,780 | 1,182,380 | 967,670 |
| 31 | | 1,453,670 | | 1,542,130 | 1,172,960 | |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 29,000 second-feet May 28 (gage height, 10.44 feet); minimum, 959 second-feet October 17 (gage height, 2.89 feet).

1906–1928: Maximum discharge, 48,400 second-feet June 20, 1918 (gage height, 13.5 feet); minimum, about 180 second-feet October 31, 1926, March 20, and April 5, 1927.

REMARKS.—Records excellent. Discharge estimated or interpolated November 5–7 and December 15 to March 4. Flow regulated by operation of gates at American Falls Dam.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4,390 | 2,850 | 10,700 | 8,100 | 8,010 | 8,050 | 7,830 | 18,200 | 20,740 | 10,590 | 9,450 | 9,200 |
| 2 | 4,420 | 2,870 | 10,700 | 8,100 | 8,010 | 8,060 | 7,830 | 19,760 | 20,940 | 10,590 | 9,240 | 8,820 |
| 3 | 4,390 | 2,890 | 10,600 | 8,100 | 8,010 | 8,070 | 7,860 | 19,760 | 20,940 | 10,630 | 9,200 | 8,580 |
| 4 | 4,080 | 2,910 | 10,600 | 8,100 | 8,000 | 8,000 | 7,860 | 19,760 | 19,810 | 10,630 | 9,240 | 8,640 |
| 5 | 3,560 | 2,950 | 10,600 | 8,100 | 8,000 | 7,930 | 7,860 | 20,890 | 18,710 | 9,990 | 9,200 | 8,440 |
| 6 | 3,560 | 7,700 | 10,700 | 8,100 | 8,000 | 8,030 | 7,760 | 22,100 | 16,900 | 9,850 | 9,170 | 8,100 |
| 7 | 3,600 | 8,900 | 10,600 | 8,100 | 8,000 | 8,030 | 7,800 | 22,100 | 15,300 | 10,030 | 9,140 | 8,000 |
| 8 | 3,440 | 8,370 | 10,600 | 8,110 | 8,000 | 8,030 | 7,800 | 22,040 | 12,500 | 10,030 | 9,060 | 8,000 |
| 9 | 3,160 | 5,540 | 10,600 | 8,110 | 8,000 | 8,130 | 7,860 | 22,040 | 10,670 | 9,850 | 8,540 | 7,900 |
| 10 | 3,250 | 2,740 | 10,600 | 8,120 | 8,000 | 8,030 | 7,900 | 21,990 | 10,670 | 9,560 | 8,920 | 7,730 |
| 11 | 3,200 | 2,650 | 10,500 | 8,120 | 8,000 | 7,960 | 7,800 | 22,150 | 10,030 | 9,530 | 9,000 | 7,700 |
| 12 | 3,250 | 2,690 | 10,600 | 8,130 | 8,010 | 7,930 | 7,860 | 22,250 | 9,490 | 9,490 | 8,890 | 7,470 |
| 13 | 3,270 | 3,600 | 10,600 | 8,170 | 8,020 | 7,860 | 7,730 | 22,300 | 9,450 | 9,490 | 9,060 | 6,990 |
| 14 | 3,290 | 7,280 | 10,600 | 8,100 | 8,030 | 7,930 | 7,800 | 23,900 | 9,450 | 9,490 | 9,100 | 6,430 |
| 15 | 3,340 | 7,700 | 10,500 | 8,100 | 8,040 | 7,960 | 7,760 | 26,700 | 9,420 | 9,490 | 9,030 | 6,070 |
| 16 | 3,340 | 9,140 | 10,500 | 8,100 | 8,050 | 7,960 | 7,800 | 28,430 | 9,380 | 9,450 | 9,140 | 6,040 |
| 17 | 2,100 | 10,100 | 10,400 | 8,100 | 8,060 | 7,960 | 7,830 | 28,430 | 9,380 | 9,380 | 9,100 | 6,010 |
| 18 | 3,340 | 10,900 | 10,400 | 8,100 | 8,070 | 7,900 | 7,760 | 28,260 | 9,380 | 9,350 | 9,140 | 6,010 |
| 19 | 3,090 | 11,100 | 10,400 | 8,100 | 8,060 | 7,960 | 7,760 | 28,090 | 10,140 | 9,310 | 9,140 | 6,620 |
| 20 | 3,110 | 10,900 | 10,400 | 8,100 | 8,050 | 7,960 | 7,760 | 27,920 | 13,070 | 9,310 | 8,890 | 6,560 |
| 21 | 3,110 | 10,900 | 9,250 | 8,100 | 8,040 | 7,930 | 7,830 | 27,810 | 14,740 | 9,280 | 8,960 | 6,530 |
| 22 | 3,130 | 10,900 | 8,100 | 8,090 | 8,030 | 7,900 | 7,830 | 27,870 | 16,050 | 9,240 | 9,140 | 6,530 |
| 23 | 3,180 | 10,900 | 8,100 | 8,080 | 8,020 | 7,860 | 7,860 | 27,920 | 18,050 | 9,200 | 9,140 | 6,620 |
| 24 | 3,200 | 10,900 | 8,100 | 8,070 | 8,010 | 7,860 | 7,860 | 28,090 | 19,480 | 9,200 | 9,240 | 6,620 |
| 25 | 3,110 | 10,900 | 8,100 | 8,060 | 8,000 | 7,930 | 9,810 | 28,260 | 21,240 | 9,200 | 9,350 | 6,370 |
| 26 | 3,130 | 10,700 | 8,100 | 8,050 | 8,010 | 7,760 | 11,050 | 28,540 | 22,200 | 9,170 | 9,240 | 6,370 |
| 27 | 3,130 | 10,700 | 8,100 | 8,040 | 8,020 | 7,860 | 11,050 | 28,760 | 18,520 | 9,170 | 9,060 | 6,220 |
| 28 | 3,160 | 10,700 | 8,100 | 8,030 | 8,030 | 7,860 | 11,050 | 28,760 | 13,440 | 9,100 | 9,310 | 5,950 |
| 29 | 3,090 | 10,700 | 8,100 | 8,020 | 8,040 | 7,830 | 11,010 | 28,430 | 11,120 | 9,140 | 9,420 | 5,800 |
| 30 | 2,820 | 10,700 | 8,100 | 8,020 | ------- | 7,830 | 12,860 | 28,370 | 10,590 | 9,100 | 9,280 | 5,620 |
| 31 | 2,820 | ------- | 8,100 | 8,020 | ------- | 7,860 | ------- | 23,080 | ------- | 9,200 | 9,240 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 4,420 | 2,100 | 3,320 | 204,000 |
| November | 11,100 | 2,650 | 7,730 | 460,000 |
| December | 10,700 | 8,100 | 9,720 | 598,000 |
| January | 8,170 | 8,020 | 8,090 | 497,000 |
| February | 8,070 | 8,000 | 8,020 | 461,000 |
| March | 8,130 | 7,760 | 7,940 | 488,000 |
| April | 12,860 | 7,730 | 8,480 | 505,000 |
| May | 28,760 | 18,200 | 24,900 | 1,530,000 |
| June | 22,200 | 9,380 | 14,400 | 857,000 |
| July | 10,630 | 9,100 | 9,580 | 589,000 |
| August | 9,450 | 8,540 | 9,130 | 561,000 |
| September | 9,200 | 5,620 | 7,060 | 420,000 |
| The year | 28,760 | 2,100 | 9,880 | 7,170,000 |

### 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, 4,200 feet above mean sea level.

RECORDS AVAILABLE.—April, 1909, to September, 1928.

REMARKS.—Lake Walcott impounds 107,240 acre-feet between elevations 4,236 and 4,246 feet sea-level datum, for the irrigation of lands on the Minidoka project of the United States Bureau of Reclamation. Gage-height record and capacity table furnished by the Bureau of Reclamation.

*Daily contents, in acre-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 101,450 | 91,460 | 95,430 | 91,690 | 91,690 | 93,440 | 93,320 | 93,440 | 97,350 | 96,390 | 92,390 | 92,160 |
| 2 | 101,210 | 89,940 | 96,030 | 91,690 | 91,690 | 93,320 | 93,550 | 95,430 | 97,110 | 96,870 | 93,550 | 93,200 |
| 3 | 102,290 | 90,880 | 95,550 | 91,690 | 91,810 | 93,200 | 93,200 | 95,430 | 96,990 | 96,750 | 93,670 | 93,550 |
| 4 | 103,260 | 92,970 | 96,030 | 91,920 | 91,810 | 93,320 | 93,320 | 95,670 | 97,470 | 96,510 | 93,090 | 93,670 |
| 5 | 104,100 | 94,840 | 95,670 | 91,920 | 92,970 | 93,550 | 92,040 | 95,310 | 97,590 | 96,510 | 94,140 | 94,020 |
| 6 | 103,980 | 96,630 | 94,370 | 91,690 | 93,320 | 93,550 | 92,970 | 95,550 | 97,350 | 96,870 | 94,490 | 93,550 |
| 7 | 104,460 | 98,920 | 95,310 | 91,810 | 93,550 | 93,550 | 93,440 | 96,150 | 96,390 | 98,320 | 94,720 | 93,320 |
| 8 | 104,580 | 98,200 | 95,070 | 91,810 | 93,440 | 93,550 | 92,860 | 95,910 | 96,390 | 98,800 | 95,070 | 92,970 |
| 9 | 104,340 | 100,970 | 95,180 | 91,920 | 93,550 | 93,670 | 93,320 | 95,790 | 98,390 | 99,160 | 94,950 | 92,740 |
| 10 | 102,950 | 95,790 | 95,670 | 91,810 | 93,550 | 93,440 | 92,390 | 95,790 | 96,750 | 93,680 | 94,140 | 92,390 |
| 11 | 102,660 | 98,440 | 96,670 | 91,570 | 93,440 | 93,790 | 93,900 | 95,790 | 96,870 | 99,520 | 93,090 | 92,510 |
| 12 | 102,660 | 98,200 | 95,430 | 91,810 | 93,320 | 93,550 | 92,740 | 95,550 | 97,590 | 100,010 | 92,740 | 90,530 |
| 13 | 103,140 | 98,440 | 95,550 | 91,810 | 93,550 | 93,790 | 93,790 | 96,030 | 97,720 | 100,010 | 92,390 | 91,460 |
| 14 | 103,620 | 99,160 | 94,950 | 92,510 | 93,440 | 93,320 | 92,860 | 96,030 | 97,720 | 99,760 | 91,920 | 91,690 |
| 15 | 104,340 | 98,560 | 96,030 | 91,690 | 93,440 | 93,200 | 93,550 | 96,270 | 96,390 | 99,520 | 91,460 | 91,690 |
| 16 | 106,030 | 97,960 | 95,550 | 91,810 | 93,440 | 93,550 | 93,440 | 96,750 | 98,080 | 99,520 | 90,880 | 92,160 |
| 17 | 106,030 | 96,390 | 95,670 | 91,810 | 93,440 | 93,670 | 92,620 | 96,990 | 97,230 | 99,280 | 90,530 | 93,200 |
| 18 | 103,980 | 96,750 | 95,550 | 91,690 | 93,440 | 93,670 | 92,860 | 96,990 | 98,560 | 98,800 | 90,290 | 93,550 |
| 19 | 103,020 | 97,230 | 95,430 | 91,690 | 93,320 | 93,790 | 92,860 | 96,990 | 98,680 | 98,920 | 89,710 | 92,270 |
| 20 | 102,170 | 96,630 | 95,310 | 91,690 | 93,440 | 93,670 | 92,270 | 96,750 | 98,560 | 98,680 | 89,130 | 91,810 |
| 21 | 101,210 | 96,390 | 95,070 | 91,690 | 93,440 | 94,720 | 92,390 | 96,630 | 97,960 | 98,320 | 88,310 | 91,570 |
| 22 | 100,370 | 96,030 | 92,860 | 91,690 | 93,440 | 93,440 | 92,860 | 96,390 | 97,840 | 98,080 | 84,940 | 91,570 |
| 23 | 100,010 | 96,150 | 92,160 | 91,690 | 93,790 | 93,550 | 92,740 | 96,750 | 97,470 | 97,840 | 87,730 | 92,040 |
| 24 | 99,640 | 95,790 | 91,920 | 91,690 | 93,550 | 93,440 | 91,690 | 96,990 | 96,750 | 97,470 | 87,730 | 92,620 |
| 25 | 98,440 | 95,790 | 91,810 | 91,810 | 93,440 | 93,320 | 90,880 | 97,110 | 96,750 | 96,870 | 87,960 | 92,860 |
| 26 | 97,470 | 95,910 | 91,690 | 91,810 | 93,090 | 94,020 | 94,020 | 97,230 | 96,510 | 96,630 | 88,080 | 92,860 |
| 27 | 96,030 | 95,180 | 91,570 | 91,810 | 93,440 | 91,110 | 94,370 | 97,590 | 96,150 | 96,150 | 88,780 | 93,550 |
| 28 | 96,030 | 95,910 | 91,690 | 91,810 | 93,440 | 93,090 | 93,320 | 97,350 | 95,180 | 95,180 | 88,780 | 93,790 |
| 29 | 95,310 | 96,150 | 91,690 | 91,690 | 93,440 | 93,320 | 93,200 | 97,590 | 95,180 | 94,600 | 89,480 | 93,200 |
| 30 | 94,490 | 96,030 | 91,690 | 91,810 | ------- | 93,440 | 93,900 | 97,110 | 96,270 | 94,020 | 90,530 | 91,690 |
| 31 | 92,860 | ------- | 91,690 | 91,810 | ------- | 93,320 | ------- | 97,720 | ------- | 93,670 | 91,570 | ------- |

### 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, 1928. Records prior to 1910 at Montgomerys Ferry, 6 miles downstream.

EXTREMES.—Maximum discharge during year, 26,400 second-feet May 28 (gage height, 12.3 feet); minimum, 1,340 second-feet October 16 (gage height, 4.06 feet).

1910–1928: Maximum discharge, 45,900 second-feet June 21, 1918 (gage height, 16.02 feet); minimum, 960 second-feet October 13, 1914 (gage height, 4.05 feet).

REMARKS.—Records excellent. Discharge estimated December 14–21, 22–24, and January 1–3; interpolated April 15. 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, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3,500 | 2,730 | 10,600 | | 7,980 | 7,950 | 7,220 | 14,330 | 18,120 | 8,100 | 6,680 | 6,190 |
| 2 | 2,940 | 2,480 | 10,600 | 8,100 | 7,950 | 7,860 | 7,480 | 17,530 | 17,960 | 8,190 | 6,600 | 5,920 |
| 3 | 2,650 | 1,590 | 10,700 | | 7,980 | 7,690 | 7,430 | 17,610 | 18,430 | 8,070 | 6,570 | 5,920 |
| 4 | 2,490 | 1,500 | 10,800 | 8,190 | 7,660 | 7,600 | 7,460 | 17,720 | 17,650 | 8,010 | 6,320 | 6,030 |
| 5 | 2,430 | 1,500 | 10,600 | 8,130 | 7,460 | 7,770 | 7,280 | 18,040 | 16,530 | 7,160 | 6,570 | 5,920 |
| 6 | 2,460 | 4,670 | 10,900 | 8,130 | 7,890 | 7,800 | 7,720 | 19,180 | 15,060 | 6,740 | 6,600 | 5,740 |
| 7 | 2,460 | 8,670 | 10,700 | 8,100 | 7,950 | 7,800 | 7,890 | 19,420 | 12,940 | 7,190 | 6,570 | 5,540 |
| 8 | 2,460 | 7,430 | 10,600 | 7,980 | 7,920 | 7,800 | 6,990 | 19,420 | 11,480 | 7,630 | 6,630 | 5,640 |
| 9 | 2,380 | 6,400 | 10,700 | 8,070 | 7,920 | 7,860 | 7,190 | 19,380 | 7,770 | 7,600 | 6,570 | 5,480 |
| 10 | 2,490 | 2,760 | 10,800 | 8,010 | 7,950 | 7,920 | 6,940 | 19,420 | 7,800 | 6,600 | 6,460 | 5,480 |
| 11 | 2,420 | 2,340 | 10,800 | 7,980 | 7,920 | 7,920 | 7,600 | 19,260 | 7,740 | 6,680 | 6,490 | 5,510 |
| 12 | 2,180 | 2,190 | 10,800 | 8,010 | 7,890 | 7,890 | 7,160 | 19,580 | 7,250 | 6,740 | 6,570 | 5,380 |
| 13 | 2,030 | 2,040 | 10,900 | 8,040 | 7,980 | 7,920 | 7,690 | 19,700 | 7,160 | 6,740 | 6,600 | 5,180 |
| 14 | 1,990 | 6,740 | | 8,220 | 7,980 | 7,740 | 7,370 | 20,670 | 7,190 | 6,740 | 6,540 | 4,540 |
| 15 | 1,780 | 7,740 | | 8,160 | 7,980 | 7,860 | 7,260 | 23,060 | 7,110 | 6,740 | 6,710 | 3,990 |
| 16 | 1,910 | 9,320 | | 8,190 | 8,040 | 7,860 | 7,160 | 25,270 | 7,340 | 6,770 | 6,680 | 3,760 |
| 17 | 2,070 | 10,500 | | 8,130 | 7,980 | 7,800 | 6,910 | 25,610 | 7,370 | 6,770 | 6,630 | 3,800 |
| 18 | 2,430 | 10,700 | 10,800 | 8,100 | 8,010 | 7,690 | 7,020 | 25,700 | 7,770 | 6,660 | 6,520 | 4,190 |
| 19 | 2,700 | 11,200 | | 8,040 | 7,890 | 7,770 | 7,020 | 25,610 | 8,310 | 6,740 | 6,600 | 5,440 |
| 20 | 2,650 | 10,900 | | 8,040 | 7,890 | 7,770 | 6,850 | 25,440 | 11,390 | 6,770 | 6,600 | 5,310 |
| 21 | 2,630 | 10,800 | | 8,040 | 7,920 | 7,660 | 6,850 | 25,270 | 13,040 | 6,660 | 6,460 | 5,060 |
| 22 | 2,550 | 10,900 | | 8,010 | 8,100 | 7,400 | 6,850 | 25,100 | 14,550 | 6,660 | 6,570 | 4,970 |
| 23 | 2,400 | 10,800 | 9,000 | 8,100 | 8,130 | 7,510 | 7,080 | 25,180 | 16,650 | 6,680 | 6,320 | 4,920 |
| 24 | 2,620 | 10,600 | | 8,130 | 7,980 | 7,540 | 6,710 | 25,400 | 17,920 | 6,660 | 6,430 | 4,990 |
| 25 | 2,730 | 10,700 | 8,190 | 8,070 | 7,920 | 7,570 | 7,020 | 25,520 | 18,820 | 6,570 | 6,570 | 5,020 |
| 26 | 2,760 | 10,600 | 8,100 | 8,040 | 7,770 | 8,280 | 9,130 | 25,610 | 20,340 | 6,600 | 6,570 | 4,900 |
| 27 | 2,730 | 10,500 | 8,130 | 8,040 | 7,890 | 7,460 | 9,320 | 25,780 | 18,080 | 6,680 | 6,600 | 4,870 |
| 28 | 2,710 | 10,800 | 8,310 | 8,010 | 7,890 | 7,430 | 9,070 | 26,170 | 11,870 | 6,600 | 6,540 | 4,800 |
| 29 | 2,700 | 10,800 | 8,250 | 7,920 | 7,980 | 7,570 | 9,380 | 25,870 | 8,310 | 6,540 | 6,460 | 4,800 |
| 30 | 2,730 | 10,900 | 8,200 | 8,010 | ------ | 7,630 | 10,800 | 25,830 | 7,950 | 6,600 | 6,320 | 4,750 |
| 31 | 2,650 | ------ | 8,000 | 7,980 | ------ | 7,510 | ------ | 22,360 | ------ | 6,570 | 6,270 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 3,500 | 1,780 | 2,500 | 154,000 |
| November | 11,200 | 1,500 | 7,360 | 438,000 |
| December | 10,900 | 8,000 | 10,000 | 615,000 |
| January | 8,220 | 7,920 | 8,070 | 496,000 |
| February | 8,130 | 7,460 | 7,920 | 456,000 |
| March | 8,280 | 7,400 | 7,740 | 476,000 |
| April | 10,800 | 6,710 | 7,590 | 452,000 |
| May | 26,170 | 14,330 | 22,300 | 1,370,000 |
| June | 20,340 | 7,110 | 12,300 | 732,000 |
| July | 8,190 | 6,540 | 6,950 | 427,000 |
| August | 6,710 | 6,270 | 6,540 | 402,000 |
| September | 6,190 | 3,760 | 5,130 | 305,000 |
| The year | 26,170 | 1,500 | 8,710 | 6,320,000 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 22,500 second-feet May 28 (gage height, 19.7 feet); minimum, 16 second-feet several days during August and September (gage height, 1.60 feet).

1909–1928: Maximum discharge, 44,400 second-feet June 12, 1909 (gage height, 20.1 feet on old gage); minimum, 8 second-feet August 22–26, 1924 (gage height, 1.50 feet).

REMARKS.—Records good. Discharge estimated August 2–8, 10, 18, 20, and 25. Flow regulated by American Falls and Lake Walcott Reservoirs and by diversions for irrigation at Milner Dam just above station.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,970 | 2,340 | 9,340 | 5,850 | 6,950 | 7,200 | 6,080 | 7,800 | 11,900 | 1,650 | 23 | 17 |
| 2 | 270 | 1,980 | 9,400 | 7,280 | 6,950 | 7,120 | 5,820 | 11,300 | 11,000 | 1,730 | 209 | 19 |
| 3 | 376 | 1,950 | 9,200 | 8,380 | 7,000 | 7,060 | 5,800 | 11,800 | 11,750 | 1,590 | 265 | 18 |
| 4 | 424 | 1,530 | 9,540 | 7,500 | 6,950 | 6,740 | 5,850 | 12,000 | 10,970 | 1,690 | 88 | 16 |
| 5 | 464 | 1,200 | 9,480 | 7,290 | 6,480 | 6,780 | 5,760 | 12,000 | 9,840 | 1,270 | 149 | 16 |
| 6 | 720 | 2,600 | 8,880 | 7,000 | 6,320 | 7,050 | 5,510 | 14,600 | 8,840 | 143 | 125 | 16 |
| 7 | 950 | 8,140 | 9,550 | 7,170 | 7,090 | 7,010 | 7,110 | 14,100 | 6,040 | 369 | 280 | 16 |
| 8 | 964 | 8,200 | 9,380 | 7,170 | 7,040 | 6,800 | 5,730 | 13,800 | 5,920 | 912 | 260 | 16 |
| 9 | 976 | 6,566 | 9,340 | 7,110 | 7,050 | 6,740 | 5,660 | 14,000 | 2,510 | 1,440 | 47 | 16 |
| 10 | 670 | 1,190 | 9,810 | 7,060 | 7,060 | 6,370 | 5,410 | 14,400 | 1,600 | 281 | 130 | 16 |
| 11 | 1,100 | 1,930 | 9,880 | 7,000 | 6,840 | 6,430 | 6,430 | 13,300 | 2,050 | 43 | 23 | 17 |
| 12 | 1,350 | 1,930 | 9,400 | 6,950 | 7,730 | 6,610 | 5,760 | 13,200 | 1,870 | 38 | 16 | 17 |
| 13 | 976 | 1,780 | 8,980 | 7,060 | 6,990 | 6,700 | 6,670 | 13,000 | 1,540 | 48 | 17 | 17 |
| 14 | 538 | 3,950 | 8,580 | 7,060 | 7,160 | 6,600 | 6,600 | 14,200 | 1,500 | 35 | 18 | 81 |
| 15 | 778 | 6,420 | 6,880 | 7,280 | 7,170 | 6,600 | 5,140 | 16,600 | 924 | 32 | 16 | 404 |
| 16 | 760 | 9,120 | 10,200 | 7,170 | 6,920 | 6,500 | 5,280 | 19,000 | 1,480 | 33 | 18 | 18 |
| 17 | 976 | 10,300 | 10,200 | 7,280 | 7,010 | 5,880 | 4,810 | 19,900 | 1,280 | 455 | 18 | 16 |
| 18 | 1,020 | 9,010 | 9,880 | 7,060 | 6,970 | 5,720 | 4,760 | 20,000 | 2,030 | 23 | 150 | 201 |
| 19 | 1,440 | 9,800 | 9,050 | 7,060 | 7,070 | 6,310 | 5,280 | 15,200 | 2,230 | 20 | 18 | 435 |
| 20 | 2,650 | 10,000 | 8,360 | 7,060 | 7,070 | 6,720 | 5,180 | 20,300 | 4,220 | 19 | 160 | 290 |
| 21 | 1,480 | 9,060 | 9,110 | 6,950 | 6,990 | 6,620 | 4,280 | 19,200 | 6,140 | 24 | 23 | 1,640 |
| 22 | 1,580 | 9,500 | 9,530 | 6,840 | 6,570 | 6,830 | 4,800 | 18,800 | 7,430 | 24 | 16 | 1,610 |
| 23 | 2,000 | 9,590 | 8,550 | 7,060 | 7,280 | 6,120 | 4,060 | 18,800 | 9,310 | 208 | 25 | 1,500 |
| 24 | 1,760 | 9,340 | 7,720 | 7,060 | 7,360 | 5,960 | 4,130 | 18,900 | 12,190 | 23 | 18 | 1,570 |
| 25 | 2,090 | 9,380 | 7,110 | 7,000 | 7,140 | 5,810 | 3,680 | 19,200 | 14,070 | 23 | 200 | 1,590 |
| 26 | 2,260 | 9,550 | 7,060 | 7,000 | 6,870 | 6,650 | 5,050 | 18,900 | 13,830 | 24 | 23 | 1,720 |
| 27 | 2,250 | 9,160 | 7,060 | 7,060 | 6,920 | 6,730 | 5,150 | 19,200 | 12,940 | 23 | 158 | 1,790 |
| 28 | 2,210 | 8,890 | 7,110 | 6,950 | 6,950 | 6,130 | 4,300 | 19,700 | 6,360 | 290 | 19 | 1,750 |
| 29 | 1,910 | 9,010 | 7,170 | 7,000 | 7,060 | 6,730 | 4,790 | 19,500 | 3,050 | 28 | 61 | 1,710 |
| 30 | 2,330 | 9,710 | 7,000 | 6,950 | ------- | 7,380 | 5,540 | 18,900 | 625 | 24 | 107 | 1,760 |
| 31 | 2,180 | ------- | 7,280 | 6,950 | ------- | 7,330 | ------- | 18,100 | ------- | 28 | 18 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 2,330 | 270 | 1,320 | 81,200 |
| November | 10,300 | 1,190 | 6,440 | 383,000 |
| December | 10,200 | 6,880 | 8,710 | 536,000 |
| January | 8,380 | 6,840 | 7,080 | 435,000 |
| February | 7,360 | 6,320 | 6,960 | 400,000 |
| March | 7,380 | 5,720 | 6,630 | 408,000 |
| April | 7,110 | 3,680 | 5,370 | 320,000 |
| May | 20,300 | 7,800 | 16,200 | 996,000 |
| June | 14,070 | 625 | 6,180 | 368,000 |
| July | 1,730 | 19 | 402 | 24,700 |
| August | 280 | 16 | 87 | 5,350 |
| September | 1,790 | 16 | 61 | 36,300 |
| The year | 20,300 | 16 | 5,500 | 3,990,000 |

### 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, 2½ miles above Shoshone Falls, and 4 miles north of Kimberly.

RECORDS AVAILABLE.—July, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 22,100 second-feet May 20 (gage height, 13.8 feet); minimum, 391 second-feet July 24 (gage height, 0.91 foot).

1923–1928: Maximum discharge, 27,200 second-feet July 4, 1927 (gage height, 14.76 feet); minimum, 378 second-feet May 16–20 (gage height, 0.80 foot.

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; no diversions between this station and Milner.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2,280 | 2,550 | 9,950 | 6,320 | 7,820 | 7,320 | 6,740 | 6,950 | 12,400 | 1,580 | 480 | |
| 2 | 1,620 | 2,660 | 9,950 | 8,500 | 7,820 | 7,320 | 6,320 | *10,200 | 11,000 | 2,020 | 490 | |
| 3 | 805 | 1,970 | 9,950 | 9,210 | 7,820 | 7,600 | 6,320 | *12,600 | 11,900 | 1,810 | 564 | |
| 4 | 951 | 2,140 | 10,200 | 8,500 | 7,820 | 7,380 | 6,320 | 12,200 | 11,600 | 1,860 | 760 | |
| 5 | 703 | 880 | 10,200 | 8,040 | 7,380 | 7,380 | 6,320 | 13,100 | 10,500 | 1,860 | 612 | |
| 6 | 985 | 1,400 | 9,700 | 8,040 | 7,160 | 7,600 | 6,120 | 14,400 | 9,700 | 1,180 | 320 | *650 |
| 7 | 1,180 | 8,270 | 10,200 | 8,040 | 7,820 | 7,600 | 7,160 | 14,700 | 6,950 | 650 | 932 | |
| 8 | 1,400 | 9,210 | 10,200 | 8,040 | 7,820 | 7,380 | 6,740 | 14,400 | 6,740 | 1,120 | 850 | |
| 9 | 1,400 | 5,920 | 10,200 | 8,040 | 7,820 | 7,160 | 5,920 | 14,400 | 3,290 | 1,580 | 865 | |
| 10 | 1,400 | 3,860 | 10,500 | 8,040 | 7,820 | 7,160 | 6,530 | 14,400 | 1,860 | 1,530 | 638 | |
| 11 | 1,220 | 1,710 | 10,700 | 8,040 | 7,820 | 6,950 | 5,720 | 13,400 | 1,620 | 805 | 663 | 760 |
| 12 | 1,660 | 2,210 | 10,200 | 8,040 | 7,380 | 6,950 | 5,340 | 13,100 | | 650 | 553 | 790 |
| 13 | 1,580 | 2,080 | 9,950 | 8,040 | 7,600 | 7,160 | 5,530 | 14,000 | | 625 | 531 | 676 |
| 14 | 1,400 | 2,550 | | 8,040 | 7,600 | 7,160 | 5,340 | 14,000 | | 638 | 520 | 650 |
| 15 | 1,020 | 6,950 | | 8,500 | 7,820 | 7,160 | 6,120 | 16,200 | | 588 | 510 | 950 |
| 16 | 1,360 | 8,500 | | 8,500 | 7,600 | 6,950 | | 19,400 | *2,600 | 576 | 520 | 717 |
| 17 | 1,200 | 10,500 | | 8,500 | 7,600 | 6,530 | *5,300 | 20,300 | | 542 | 520 | 588 |
| 18 | 1,400 | 9,450 | *9,600 | 8,270 | 7,600 | 6,120 | | 20,700 | | 663 | 576 | 576 |
| 19 | 1,480 | 10,200 | | 8,270 | 7,600 | 6,740 | | 20,300 | | 542 | 663 | 576 |
| 20 | 2,140 | 10,700 | | 8,270 | 7,600 | 7,380 | 5,720 | 21,200 | | 490 | 553 | 1,530 |
| 21 | 2,080 | 9,950 | | | 7,600 | 7,160 | 5,160 | 19,800 | | 462 | 650 | 1,760 |
| 22 | 1,530 | 9,950 | | *8,100 | 7,160 | 7,380 | 4,980 | 19,400 | | 471 | 600 | 1,660 |
| 23 | 2,140 | 10,200 | | | 7,600 | 6,950 | 4,980 | 19,400 | *9,000 | 471 | 553 | 1,760 |
| 24 | 2,210 | 9,950 | | | 8,040 | 6,120 | 4,980 | 19,400 | | 420 | 553 | 1,860 |
| 25 | 2,080 | 9,950 | *8,000 | 8,040 | 7,820 | 6,530 | 4,640 | 19,400 | 14,400 | 462 | 612 | 1,970 |
| 26 | 2,550 | 10,200 | | 8,040 | 7,380 | 6,740 | 4,640 | 19,800 | 13,700 | 471 | 690 | 1,976 |
| 27 | 2,450 | 9,950 | | 8,040 | 7,600 | 7,600 | 4,640 | 19,400 | 14,000 | 490 | 600 | 1,920 |
| 28 | 2,450 | 9,450 | 7,820 | 8,040 | 7,600 | 6,740 | 4,640 | 20,300 | 8,040 | | 805 | 2,140 |
| 29 | 2,280 | 9,700 | 8,040 | 8,040 | 7,600 | 7,160 | 4,810 | 20,300 | 2,900 | *500 | 717 | 1,920 |
| 30 | 2,280 | 10,200 | 7,600 | 7,820 | | 7,820 | 7,380 | 19,400 | 1,810 | | 650 | 2,080 |
| 31 | 2,450 | | 6,740 | 7,820 | | 8,040 | | 19,400 | | | 663 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 2,550 | 703 | 1,670 | 103,000 |
| November | 10,700 | 880 | 6,770 | 403,000 |
| December | 10,700 | 6,740 | 9,360 | 576,000 |
| January | 9,210 | 6,320 | 8,110 | 499,000 |
| February | 8,040 | 7,160 | 7,650 | 440,000 |
| March | 8,040 | 6,120 | 7,170 | 441,000 |
| April | 7,380 | 4,640 | 5,680 | 338,000 |
| May | 21,200 | 6,950 | 16,600 | 1,020,000 |
| June | 14,040 | | 6,730 | 400,000 |
| July | 2,020 | 420 | 857 | 52,700 |
| August | 932 | 480 | 636 | 39,100 |
| September | 2,140 | 576 | 1,110 | 66,000 |
| The year | 21,200 | 420 | 6,030 | 4,380,000 |

* Estimated.

### 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 Twin Falls and 4 miles below Shoshone Falls.

RECORDS AVAILABLE.—September, 1911, to June, 1917; May, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 23,000 second-feet May 20 (gage height, 11.57 feet); minimum, 520 second-feet July 23 (gage height, 2.10 feet).

1911–1917, 1919–1928: Maximum discharge, 32,200 second-feet June 10, 1914 (gage height, 13.3 feet); minimum, 468 second-feet many days in June, July, and August, 1915.

REMARKS.—Records good. Practically entire flow is diverted during irrigation seasons by North and South Side Canals at Milner; only minor diversions below Milner.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2,760 | 2,920 | 11,100 | 7,280 | 8,260 | 8,260 | 7,770 | 7,770 | *15,000 | 1,880 | 655 | 820 |
| 2 | 2,010 | 3,260 | 11,100 | 9,270 | 8,260 | 8,260 | 6,570 | 11,100 | *13,000 | 2,300 | 625 | 820 |
| 3 | 1,370 | 2,300 | 10,600 | 10,000 | 8,260 | 8,260 | 6,570 | 12,800 | 13,700 | 2,300 | 750 | 750 |
| 4 | 1,220 | 2,920 | *10,800 | 9,010 | 8,260 | *8,000 | 6,800 | 13,100 | 12,600 | *2,300 | 718 | 820 |
| 5 | 1,010 | 1,470 | 11,100 | 8,760 | 8,020 | 7,770 | 6,570 | 14,400 | 11,100 | 2,300 | *950 | 858 |
| 6 | 1,090 | 932 | 10,300 | 8,510 | 7,520 | 8,020 | 6,340 | 15,000 | 10,600 | 1,520 | 858 | 820 |
| 7 | 1,270 | 9,530 | 11,100 | 8,510 | 8,260 | 8,020 | 7,520 | 15,600 | 7,040 | 1,010 | 970 | 820 |
| 8 | 1,640 | 10,000 | 10,900 | 8,510 | 8,510 | 7,770 | 7,520 | 14,700 | 6,800 | *1,400 | 895 | 858 |
| 9 | 1,760 | 7,040 | 10,900 | 8,510 | 8,260 | 7,520 | 6,340 | 14,000 | 3,620 | 1,640 | 970 | *950 |
| 10 | 1,760 | 7,040 | 10,600 | 8,510 | 8,260 | 7,520 | 6,570 | 16,900 | 2,150 | 1,880 | 820 | 970 |
| 11 | 1,470 | 1,880 | 11,100 | 8,260 | 8,260 | 7,770 | 7,040 | 13,700 | 2,010 | 1,090 | 820 | 970 |
| 12 | 1,880 | 2,600 | 11,100 | 8,260 | *8,000 | 7,520 | 6,800 | 13,400 | 2,920 | 895 | 655 | 1,010 |
| 13 | 2,010 | *2,500 | 10,600 | 8,510 | 8,020 | 7,770 | 7,040 | 14,400 | 2,300 | 785 | 685 | 1,010 |
| 14 | 1,760 | 2,010 | 10,000 | 8,260 | 8,260 | 7,520 | 8,020 | 14,700 | 1,880 | 750 | 718 | 895 |
| 15 | 1,320 | 7,520 | 6,570 | 8,510 | 8,510 | 7,770 | *6,900 | 16,600 | 2,010 | *735 | 685 | 1,010 |
| 16 | 1,270 | 9,270 | 12,000 | 8,510 | 8,260 | 7,280 | 5,880 | 20,100 | 1,880 | 718 | 655 | 1,140 |
| 17 | 1,520 | 11,400 | 11,700 | 8,510 | 8,020 | 7,040 | 5,880 | 20,800 | *2,240 | 718 | 685 | 858 |
| 18 | 1,640 | 10,000 | 11,100 | 8,510 | 8,020 | *6,700 | 5,440 | 21,200 | 2,600 | 685 | 685 | 820 |
| 19 | 1,640 | 11,100 | 10,600 | 8,260 | 8,020 | 6,800 | 5,880 | 20,400 | 3,440 | 785 | 685 | 820 |
| 20 | 2,440 | 11,700 | 9,530 | 8,260 | 8,260 | 7,770 | 6,100 | 22,300 | 4,190 | 685 | 685 | 1,010 |
| 21 | 2,600 | *11,000 | 10,000 | 8,260 | 8,260 | 7,520 | 5,010 | 20,100 | 7,040 | 625 | 718 | 2,150 |
| 22 | 1,760 | 11,100 | 11,100 | 8,510 | 7,520 | 8,020 | 5,440 | 20,100 | 9,010 | *610 | 820 | 2,010 |
| 23 | 2,440 | 11,100 | 10,000 | 8,260 | 8,260 | 7,520 | 5,010 | 20,100 | 10,600 | 598 | 685 | *2,200 |
| 24 | 2,600 | 11,100 | 9,270 | 8,510 | 8,510 | 6,570 | 5,010 | 20,100 | 12,600 | 820 | 685 | 2,300 |
| 25 | 2,300 | 10,900 | 8,510 | 8,260 | 8,510 | 6,100 | 4,390 | 20,100 | 15,900 | 785 | 718 | 2,300 |
| 26 | 2,920 | 11,100 | 8,260 | 8,510 | 7,770 | 7,040 | 5,440 | 20,400 | 15,000 | 718 | 685 | 2,300 |
| 27 | 2,920 | 10,900 | 8,510 | 8,510 | 8,020 | 8,260 | 6,570 | *20,400 | 15,000 | 625 | 750 | 2,150 |
| 28 | 3,100 | 10,300 | 8,510 | 8,260 | 8,020 | 7,280 | 4,600 | 20,400 | 8,760 | 598 | 750 | 2,600 |
| 29 | 2,920 | 10,600 | 8,510 | 8,510 | 8,020 | 7,520 | 5,220 | 20,800 | 3,620 | *700 | 970 | 2,300 |
| 30 | 2,300 | 11,100 | 8,260 | 8,260 | ------- | 8,260 | 6,100 | 20,400 | 2,300 | 750 | 785 | 2,600 |
| 31 | 2,920 | ------- | 7,040 | 8,260 | ------- | 8,510 | ------- | 20,400 | ------- | 685 | 820 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 3,100 | 1,010 | 1,990 | 122,000 |
| November | 11,700 | 932 | 7,550 | 449,000 |
| December | 12,000 | 6,570 | 10,000 | 615,000 |
| January | 10,000 | 7,280 | 8,480 | 521,000 |
| February | 8,510 | 7,520 | 8,150 | 469,000 |
| March | 8,510 | 6,100 | 7,610 | 468,000 |
| April | 8,020 | 4,390 | 6,210 | 370,000 |
| May | 22,300 | 7,770 | 17,300 | 1,060,000 |
| June | 15,900 | 1,880 | 7,360 | 438,000 |
| July | 2,300 | 598 | 1,090 | 67,000 |
| August | 970 | 625 | 760 | 46,700 |
| September | 2,600 | 750 | 1,360 | 80,900 |
| The year | 22,300 | 598 | 6,490 | 4,710,000 |

* Estimated.

### SNAKE RIVER NEAR HAGERMAN, IDAHO

LOCATION.—Water-stage record in NW. ¼ sec. 1, T. 8 S., R. 13 E., an eighth of a mile above Owsley Bridge, just above Upper Salmon Falls and 4 miles south of Hagerman.

RECORDS AVAILABLE.—August, 1912, to June, 1917; July, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 26,500 second-feet May 20 (gage height, 6.58 feet); minimum, 5,330 second-feet July 18 (gage height, 3.41 feet).

1912–1917, 1919–1928: Maximum discharge, 35,100 second-feet June 10, 1914 (gage height, 7.75 feet); minimum, 4,030 second-feet July 15 to August 2, 1915 (gage height, 3.1 feet). Data insufficient in 1916 and 1917 for determination of extremes.

REMARKS.—Records excellent. 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, 1927–28*

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

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 8,180 | 6,420 | 7,160 | 440,000 |
| November | 16,000 | 6,420 | 12,000 | 714,000 |
| December | 16,000 | 11,600 | 14,500 | 892,000 |
| January | 14,200 | 11,600 | 12,700 | 781,000 |
| February | 12,900 | 11,900 | 12,400 | 713,000 |
| March | 12,900 | 10,300 | 11,900 | 732,000 |
| April | 12,600 | 8,750 | 10,500 | 625,000 |
| May | 24,900 | 10,900 | 20,800 | 1,280,000 |
| June | 19,600 | 6,650 | 11,900 | 708,000 |
| July | 6,890 | 5,540 | 5,930 | 365,000 |
| August | 6,190 | 5,540 | 5,810 | 357,000 |
| September | 7,640 | 5,970 | 6,620 | 394,000 |
| The year | 24,900 | 5,540 | 11,000 | 8,000,000 |

### SNAKE RIVER AT KING HILL, IDAHO

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

RECORDS AVAILABLE.—May, 1909, to September, 1928.

EXTREMES.—Maximum discharge during year, 26,200 second-feet June 1 (gage height, 11.50 feet); minimum, 6,780 second-feet July 22 (gage height, 5.65 feet).

1909–1928: Maximum discharge, 47,200 second-feet June 22, 1918 (gage height, 16.3 feet); minimum, 4,760 second-feet July 7–9, and August 15, 16, 1910 (gage height, 4.5 feet).

REMARKS.—Records good. Discharge estimated April 11. Practically entire flow is diverted at Milner during irrigation seasons.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 9,000 | 10,100 | 17,300 | 16,000 | 14,600 | 14,300 | 14,900 | 12,100 | 26,200 | 8,740 | 7,250 | 7,730 |
| 2 | 9,530 | 10,400 | 17,300 | 16,300 | 14,600 | 14,300 | 13,300 | 14,300 | 18,400 | 8,740 | 7,250 | 7,730 |
| 3 | 9,800 | 10,100 | 17,300 | 16,600 | 14,600 | 14,600 | 13,000 | 16,600 | 17,700 | 8,740 | 7,250 | 7,730 |
| 4 | 9,260 | 10,400 | 17,300 | 16,300 | 14,600 | 14,300 | 12,700 | 18,000 | 18,400 | 8,740 | 7,250 | 7,730 |
| 5 | 9,000 | 10,600 | 17,300 | 16,000 | 14,600 | 14,000 | 13,000 | 18,000 | 17,300 | 8,740 | 7,250 | 7,730 |
| 6 | 8,480 | 13,300 | 17,300 | 15,600 | 14,600 | 14,300 | 13,000 | 22,200 | 16,600 | 8,740 | 7,490 | 7,730 |
| 7 | 8,740 | 14,600 | 17,000 | 15,300 | 14,600 | 14,600 | 12,700 | 21,000 | 14,600 | 8,480 | 7,770 | 7,730 |
| 8 | 8,740 | 16,600 | 16,600 | 15,300 | 14,600 | 14,600 | 14,600 | 18,400 | 12,700 | 7,490 | 7,250 | 7,730 |
| 9 | 8,740 | 17,000 | 17,700 | 14,900 | 14,600 | 14,300 | 14,600 | 19,500 | 10,400 | 7,250 | 7,730 | 7,730 |
| 10 | 9,000 | 12,700 | 18,400 | 14,900 | 14,600 | 14,000 | 14,600 | 18,400 | 9,260 | 7,730 | 7,730 | 7,730 |
| 11 | 9,000 | 10,900 | 18,400 | 14,600 | 14,600 | 14,600 | 14,300 | 20,200 | 8,480 | 7,730 | 7,490 | 8,230 |
| 12 | 8,740 | 10,400 | 18,400 | 14,600 | 14,600 | 14,600 | 13,300 | 19,900 | 8,740 | 7,490 | 7,250 | 7,730 |
| 13 | 9,260 | 9,800 | 18,000 | 14,600 | 14,600 | 14,300 | 12,400 | 18,800 | 8,740 | 7,250 | 7,250 | 7,730 |
| 14 | 9,260 | 10,900 | 17,700 | 14,600 | 14,600 | 14,300 | 12,700 | 18,800 | 8,740 | 7,250 | 7,250 | 7,980 |
| 15 | 9,260 | 14,300 | 17,700 | 14,900 | 14,600 | 14,000 | 13,600 | 20,200 | 8,740 | 7,010 | 7,250 | 7,980 |
| 16 | 9,000 | 14,900 | 17,300 | 14,900 | 14,600 | 14,000 | 12,700 | 22,600 | 8,740 | 7,010 | 7,250 | 8,230 |
| 17 | 9,000 | 17,000 | 17,300 | 14,900 | 14,600 | 14,000 | 12,700 | 25,800 | 8,740 | 7,010 | 7,250 | 8,230 |
| 18 | 9,000 | 18,000 | 17,300 | 14,900 | 14,600 | 13,600 | 11,500 | 25,800 | 8,740 | 7,250 | 7,250 | 8,230 |
| 19 | 8,740 | 18,000 | 17,300 | 14,900 | 14,600 | 13,300 | 11,800 | 25,800 | 9,000 | 7,010 | 7,250 | 8,230 |
| 20 | 9,000 | 17,700 | 16,600 | 14,600 | 14,300 | 13,300 | 11,800 | 25,800 | 10,400 | 7,010 | 7,250 | 8,230 |
| 21 | 9,530 | 17,300 | 17,000 | 14,600 | 14,300 | 13,300 | 12,100 | 25,800 | 11,500 | 7,010 | 7,250 | 8,480 |
| 22 | 9,530 | 17,000 | 17,000 | 14,600 | 14,300 | 13,300 | 12,400 | 25,800 | 13,300 | 6,780 | 7,250 | 8,480 |
| 23 | 8,740 | 17,300 | 17,000 | 14,600 | 14,000 | 13,600 | 12,100 | 25,800 | 14,900 | 7,010 | 7,250 | 8,740 |
| 24 | 9,000 | 17,700 | 16,600 | 14,600 | 14,000 | 13,300 | 11,500 | 25,800 | 16,600 | 7,010 | 7,250 | 8,740 |
| 25 | 9,260 | 17,700 | 15,300 | 14,600 | 14,600 | 13,300 | 11,200 | 25,800 | 18,800 | 7,250 | 7,250 | 9,260 |
| 26 | 9,530 | 18,000 | 14,600 | 14,600 | 14,600 | 13,300 | 10,400 | 25,800 | 21,000 | 7,250 | 7,250 | 9,530 |
| 27 | 9,800 | 17,300 | 14,600 | 14,600 | 14,600 | 13,600 | 12,100 | 25,300 | 21,000 | 7,250 | 7,250 | 9,530 |
| 28 | 10,100 | 17,300 | 14,900 | 14,600 | 14,300 | 14,000 | 12,700 | 25,300 | 20,200 | 7,250 | 7,490 | 9,530 |
| 29 | 10,100 | 17,300 | 15,300 | 14,600 | 14,300 | 14,000 | 10,900 | 25,800 | 14,000 | 7,250 | 7,490 | 9,800 |
| 30 | 10,100 | 17,300 | 15,300 | 14,600 | ------- | 14,600 | 11,200 | 25,800 | 9,530 | 7,250 | 7,490 | 9,260 |
| 31 | 10,100 | ------- | 15,600 | 14,600 | ------- | 15,300 | ------- | 25,800 | ------- | 7,250 | 7,490 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 10,100 | 8,480 | 9,240 | 568,000 |
| November | 18,000 | 9,800 | 14,700 | 875,000 |
| December | 18,400 | 14,600 | 16,900 | 1,040,000 |
| January | 16,600 | 14,600 | 15,000 | 922,000 |
| February | 14,600 | 14,000 | 14,500 | 834,000 |
| March | 15,300 | 13,300 | 14,000 | 861,000 |
| April | 14,900 | 10,400 | 12,700 | 756,000 |
| May | 25,800 | 12,100 | 22,100 | 1,360,000 |
| June | 26,200 | 8,480 | 13,700 | 815,000 |
| July | 8,740 | 6,780 | 7,550 | 464,000 |
| August | 7,730 | 7,250 | 7,340 | 451,000 |
| September | 9,800 | 7,730 | 8,320 | 495,000 |
| The year | 26,200 | 6,780 | 13,000 | 9,440,000 |

[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, 1928.

EXTREMES.—Maximum discharge during year, estimated 26,500 second-feet May 18–30; minimum, 6,250 second-feet July 15 (gage height, −1.00 foot).

1912–1928: Maximum discharge, 47,300 second-feet June 22, 1918 (gage height, 13.95 feet); minimum, about 5,000 second-feet August 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. Gage-height record furnished by Idaho Power Co.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 9,190 | 10,300 | 18,100 | | 15,300 | 15,000 | 16,500 | 12,400 | | 9,770 | | |
| 2 | 10,300 | 10,400 | 18,700 | | 15,300 | 15,000 | 16,300 | 13,600 | [a]22,000 | 9,060 | | |
| 3 | 10,800 | 10,400 | 18,100 | | 15,500 | 15,300 | 14,500 | 16,500 | | 8,560 | [a]7,500 | |
| 4 | | 10,400 | 18,400 | | 15,300 | 15,300 | 14,300 | 19,000 | 18,700 | 8,100 | | |
| 5 | | 9,930 | 17,900 | [a]16,500 | 15,300 | 15,000 | 14,000 | 19,500 | 19,200 | 9,330 | | |
| 6 | [a]9,200 | 10,100 | 18,100 | | 15,500 | 14,800 | 13,800 | 19,200 | 17,900 | 8,800 | | [a]8,000 |
| 7 | | 9,470 | 18,100 | | 15,000 | 15,000 | 14,000 | 21,000 | 17,300 | 8,800 | | |
| 8 | | 9,770 | 17,300 | | 14,800 | 15,300 | 13,800 | 21,600 | 15,500 | 8,440 | [a]7,700 | |
| 9 | | 16,800 | 17,600 | 15,000 | 15,800 | 15,300 | 15,000 | 21,300 | 13,600 | 7,880 | | |
| 10 | 9,190 | 16,300 | 17,900 | 15,300 | 15,300 | 15,000 | 13,600 | 21,000 | 13,100 | 7,470 | | |
| 11 | 9,190 | 13,300 | 18,100 | 15,300 | 15,300 | 15,000 | 13,600 | 23,200 | 10,100 | 7,670 | | |
| 12 | 8,930 | 11,200 | 18,400 | 15,300 | 15,300 | 15,800 | 13,100 | 21,000 | 9,130 | 8,210 | | |
| 13 | 9,190 | 9,620 | 18,100 | 15,300 | 14,800 | 15,800 | 14,000 | 21,000 | 9,070 | 7,670 | [a]7,500 | 8,210 |
| 14 | 9,330 | 10,300 | 18,100 | 15,500 | 14,800 | 15,300 | 13,600 | 21,300 | 9,070 | 7,370 | | 8,210 |
| 15 | 9,470 | 10,300 | 17,100 | 15,500 | 15,300 | 15,300 | 14,300 | 21,600 | 9,070 | 7,090 | | 8,210 |
| 16 | 9,060 | 11,800 | 16,300 | 15,300 | 15,300 | 15,000 | 14,000 | 22,500 | 8,970 | 7,270 | 7,370 | 8,320 |
| 17 | 8,930 | 15,000 | 16,500 | 15,300 | 15,300 | 14,800 | 12,600 | 23,800 | 8,670 | 7,180 | 7,370 | 8,440 |
| 18 | 8,800 | 17,300 | 18,400 | 15,300 | 15,000 | 14,800 | 12,900 | | 8,810 | 7,090 | 7,370 | 8,680 |
| 19 | 8,930 | 17,600 | 18,100 | 15,300 | 15,000 | 13,600 | 12,400 | | 9,130 | 7,090 | 7,270 | 8,210 |
| 20 | 8,930 | 17,600 | 17,600 | 15,000 | 15,000 | 13,600 | 12,400 | | 9,130 | 7,090 | 7,270 | 8,210 |
| 21 | 9,060 | 18,400 | | 15,300 | 15,000 | 14,300 | 12,900 | | 10,300 | 7,270 | 7,370 | 8,100 |
| 22 | 9,620 | 18,400 | | 15,000 | 15,300 | 14,500 | 12,900 | | 11,800 | 7,090 | 7,370 | 8,320 |
| 23 | 9,770 | 17,600 | [a]17,400 | 15,000 | 14,800 | 14,500 | 11,800 | | 13,800 | 7,090 | 7,270 | 9,330 |
| 24 | 9,060 | 18,400 | | 15,300 | 14,800 | 15,000 | 12,400 | [a]26,500 | 15,500 | 7,090 | 7,370 | 9,190 |
| 25 | 9,470 | 17,900 | | 15,300 | 15,500 | 14,000 | 12,200 | | 17,600 | 7,000 | 7,570 | 9,330 |
| 26 | 10,100 | 17,900 | | 15,300 | 15,300 | 15,000 | 11,400 | | 20,700 | 7,180 | 7,370 | 9,190 |
| 27 | 10,400 | 18,400 | [a]15,400 | 15,500 | 15,000 | 14,800 | 10,800 | | 20,100 | 7,270 | 7,470 | 9,470 |
| 28 | 10,300 | 17,900 | | 15,300 | 14,800 | 17,600 | 12,600 | | 20,700 | 7,180 | 7,570 | 9,470 |
| 29 | 10,400 | 17,900 | | 15,300 | 15,000 | 16,800 | 12,600 | | 17,900 | 7,090 | 7,570 | 9,470 |
| 30 | 10,300 | 17,600 | | 15,300 | ------- | 15,800 | 12,000 | | 13,100 | [a]7,300 | 7,570 | 9,620 |
| 31 | 10,400 | ------- | | 15,300 | ------- | 16,000 | ------- | 26,200 | ------- | ------- | [a]7,700 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 10,800 | 8,800 | 9,490 | 584,000 |
| November | 18,400 | 9,470 | 14,300 | 851,000 |
| December | 18,700 | ---------- | 17,200 | 1,060,000 |
| January | ---------- | 15,000 | 15,600 | 959,000 |
| February | 15,800 | 14,800 | 15,200 | 874,000 |
| March | 17,600 | 13,600 | 15,100 | 928,000 |
| April | 16,500 | 10,800 | 13,300 | 791,000 |
| May | ---------- | 12,400 | 22,900 | 1,410,000 |
| June | ---------- | 8,680 | 14,500 | 863,000 |
| July | 9,770 | 7,000 | 7,700 | 473,000 |
| August | ---------- | 7,270 | 7,500 | 461,000 |
| September | 9,620 | ---------- | 8,470 | 504,000 |
| The year | ---------- | 7,000 | 13,400 | 9,760,000 |

[a] Estimated.

### SNAKE RIVER AT WEISER, IDAHO

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

RECORDS AVAILABLE.—October, 1910, to September, 1928. Fragmentary gage-height record obtained by United States Weather Bureau since 1895.

EXTREMES.—Maximum discharge during year, 62,300 second-feet May 12 (gage height, 11.35 feet); minimum, 7,640 second-feet August 20 and 24 (gage height, 2.15 feet).

1910–1928: Maximum discharge, 83,100 second-feet May 23, 1911 (gage height, 13.60 feet); minimum 5,100 second-feet August 5, 1924 (gage height, 1.35 feet).

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

REMARKS.—Records good. Flow regulated by operation of Swan Falls power plant. Some diversions below Murphy for irrigation. Gage-height record furnished by United States Weather Bureau.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14,500 | 15,500 | 30,700 | 19,600 | 20,600 | 19,600 | 42,300 | 34,400 | 49,700 | 18,600 | 7,810 | 8,340 |
| 2 | 14,500 | 15,000 | 30,700 | 19,600 | 21,100 | 20,100 | 40,200 | 35,600 | 46,000 | 14,400 | 7,810 | 8,340 |
| 3 | 14,500 | 15,500 | 30,700 | 19,600 | 21,100 | 20,100 | 38,200 | 34,400 | 39,500 | 12,700 | 7,810 | 8,510 |
| 4 | 15,000 | 16,000 | 30,700 | 20,600 | 21,700 | 20,600 | 37,600 | 35,000 | 37,600 | 12,300 | 7,980 | 8,510 |
| 5 | 15,000 | 16,000 | 29,500 | 22,200 | 22,200 | 21,100 | 35,000 | 36,900 | 32,500 | 11,100 | 8,160 | 8,510 |
| 6 | 14,500 | 16,000 | 29,500 | 22,700 | 22,200 | 23,800 | 31,900 | 37,600 | 33,100 | 11,500 | 8,340 | 8,690 |
| 7 | 14,000 | 15,500 | 29,500 | 23,800 | 22,700 | 24,900 | 29,500 | 40,200 | 31,300 | 11,500 | 8,510 | 8,690 |
| 8 | 13,600 | 16,000 | 25,500 | 23,800 | 22,700 | 26,000 | 27,700 | 44,500 | 30,700 | 11,500 | 8,510 | 8,690 |
| 9 | 13,600 | 16,900 | 23,800 | 23,300 | 22,200 | 29,500 | 27,200 | 50,500 | 28,300 | 11,100 | 8,510 | 8,870 |
| 10 | 13,600 | 21,600 | 23,300 | 22,700 | 21,700 | 34,400 | 27,200 | 54,300 | 24,400 | 9,970 | 8,510 | 9,050 |
| 11 | 14,000 | 29,400 | 23,300 | 23,300 | 21,700 | 35,000 | 25,500 | 57,500 | 23,800 | 9,600 | 8,340 | 9,050 |
| 12 | 13,600 | 24,400 | 23,800 | 24,400 | 21,100 | 44,500 | 24,400 | 62,300 | 20,100 | 9,230 | 8,340 | 9,230 |
| 13 | 13,600 | 23,000 | 23,800 | 27,700 | 20,600 | 37,600 | 23,800 | 59,900 | 18,600 | 9,600 | 8,160 | 9,420 |
| 14 | 13,600 | 21,100 | 23,800 | 30,700 | 20,100 | 36,300 | 24,400 | 58,300 | 18,100 | 9,780 | 8,160 | 9,780 |
| 15 | 14,000 | 17,900 | 23,800 | 30,100 | 20,100 | 31,900 | 24,900 | 55,100 | 18,100 | 9,230 | 7,810 | 10,200 |
| 16 | 14,500 | 17,600 | 23,800 | 29,500 | 19,600 | 30,100 | 25,500 | 52,000 | 17,200 | 8,870 | 7,810 | 10,200 |
| 17 | 14,000 | 17,200 | 23,800 | 28,900 | 20,100 | 29,500 | 25,500 | 51,200 | 16,200 | 8,870 | 7,810 | 10,400 |
| 18 | 13,100 | 24,400 | 23,800 | 26,000 | 19,600 | 29,500 | 26,000 | 52,000 | 15,800 | 8,510 | 7,810 | 10,500 |
| 19 | 13,100 | 24,400 | 23,800 | 23,800 | 20,100 | 27,200 | 26,000 | 53,600 | 15,300 | 8,510 | 7,810 | 10,400 |
| 20 | 13,100 | 24,900 | 23,800 | 22,200 | 20,100 | 27,700 | 26,000 | 55,100 | 14,800 | 8,510 | 7,810 | 10,200 |
| 21 | 13,100 | 25,500 | 23,300 | 21,700 | 20,600 | 30,700 | 26,000 | 55,900 | 14,400 | 8,510 | 7,810 | 10,400 |
| 22 | 13,600 | 28,300 | 23,300 | 21,100 | 20,600 | 34,400 | 25,500 | 55,900 | 14,800 | 8,510 | 7,810 | 10,700 |
| 23 | 14,000 | 27,700 | 22,700 | 21,700 | 20,600 | 36,900 | 24,900 | 57,500 | 15,800 | 8,340 | 7,810 | 11,100 |
| 24 | 14,500 | 26,000 | 22,700 | 21,700 | 20,100 | 40,200 | 24,400 | 58,300 | 17,600 | 8,160 | 7,640 | 11,500 |
| 25 | 14,000 | 25,500 | 22,700 | 21,100 | 19,600 | 40,900 | 26,000 | 58,300 | 19,600 | 8,340 | 8,160 | 11,900 |
| 26 | 13,600 | 27,700 | 22,200 | 20,600 | 19,600 | 41,600 | 27,700 | 59,900 | 21,100 | 8,510 | 7,980 | 11,500 |
| 27 | 15,500 | 30,700 | 21,100 | 20,100 | 20,100 | 46,000 | 30,700 | 61,500 | 24,400 | 8,340 | 7,810 | 11,100 |
| 28 | 18,500 | 30,700 | 20,600 | 20,600 | 19,600 | 51,200 | 34,400 | 61,500 | 24,400 | 8,340 | 8,340 | 11,100 |
| 29 | 16,000 | 31,300 | 20,600 | 20,100 | 19,600 | 52,000 | 36,900 | 60,700 | 24,400 | 8,160 | 8,160 | 11,500 |
| 30 | 16,000 | 30,700 | 20,100 | 20,600 | ------- | 48,200 | 37,600 | 58,300 | 23,800 | 8,160 | 8,160 | 11,500 |
| 31 | 15,500 | ------- | 19,600 | 20,600 | ------- | 43,800 | ------- | 54,300 | ------- | 7,810 | 8,160 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 18,500 | 13,100 | 14,300 | 879,000 |
| November | 31,300 | 15,000 | 22,400 | 1,330,000 |
| December | 30,700 | 19,600 | 24,500 | 1,510,000 |
| January | 30,700 | 19,600 | 23,000 | 1,410,000 |
| February | 22,700 | 19,600 | 20,700 | 1,190,000 |
| March | 52,000 | 19,600 | 33,400 | 2,050,000 |
| April | 42,300 | 23,800 | 29,400 | 1,750,000 |
| May | 62,300 | 34,400 | 51,700 | 3,180,000 |
| June | 49,700 | 14,400 | 24,400 | 1,450,000 |
| July | 18,600 | 7,810 | 9,890 | 608,000 |
| August | 8,510 | 7,640 | 8,050 | 495,000 |
| September | 11,900 | 8,340 | 9,930 | 591,000 |
| The year | 62,300 | 7,640 | 22,700 | 16,400,000 |

### SNAKE RIVER AT OXBOW, OREG.

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

RECORDS AVAILABLE.—May, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 67,600 second-feet May 13 (gage height, 19.33 feet); minimum, 7,710 second-feet August 16 (gage height, 7.38 feet).

1923–1928: Maximum discharge, 70,600 second-feet February 6, 1925; maximum gage height, that of May 13, 1928; minimum discharge, 4,890 second-feet August 6, 1924 (gage height, 6.30 feet).

REMARKS.—Records good. Discharge estimated December 16, 25–30, June 3–8 and August 17. 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, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14,400 | 14,800 | 30,100 | 20,700 | 21,600 | 21,100 | 46,400 | 39,400 | 53,700 | 21,100 | 7,960 | 8,470 |
| 2 | 14,000 | 14,800 | 31,100 | 19,800 | 21,600 | 21,100 | 45,200 | 38,800 | 48,800 | 17,200 | 7,960 | 8,470 |
| 3 | 14,000 | 14,800 | 30,600 | 19,800 | 21,600 | 21,100 | 45,200 | 38,200 | 42,000 | 14,000 | 7,960 | 8,470 |
| 4 | 14,800 | 14,800 | 29,600 | 19,800 | 21,600 | 21,100 | 42,800 | 38,200 | 40,000 | 13,300 | 7,960 | 8,470 |
| 5 | 14,800 | 14,800 | 28,600 | 21,100 | 22,000 | 21,600 | 39,400 | 40,500 | 36,000 | 12,600 | 8,210 | 8,470 |
| 6 | 14,400 | 14,800 | 28,100 | 23,400 | 22,500 | 23,400 | 37,100 | 41,700 | 36,000 | 11,800 | 8,210 | 8,470 |
| 7 | 14,000 | 14,800 | 28,600 | 23,400 | 22,900 | 26,200 | 34,300 | 44,000 | 34,000 | 12,900 | 8,470 | 8,470 |
| 8 | 13,300 | 15,200 | 29,100 | 23,400 | 22,900 | 27,200 | 32,200 | 47,600 | 33,000 | 12,200 | 8,470 | 8,470 |
| 9 | 13,300 | 15,600 | 29,100 | 22,900 | 22,900 | 30,100 | 30,600 | 53,700 | 30,600 | 11,800 | 8,470 | 8,470 |
| 10 | 12,900 | 18,100 | 29,100 | 22,500 | 22,500 | 34,900 | 30,100 | 58,000 | 28,100 | 11,200 | 8,470 | 8,740 |
| 11 | 12,900 | 27,200 | 26,700 | 22,000 | 22,500 | 36,000 | 29,600 | 61,800 | 26,200 | 10,500 | 8,210 | 8,740 |
| 12 | 13,300 | 25,700 | 25,300 | 22,000 | 21,600 | 42,800 | 27,600 | 65,700 | 23,800 | 9,880 | 8,210 | 9,010 |
| 13 | 13,300 | 21,600 | 24,800 | 22,500 | 21,100 | 44,000 | 27,600 | 66,300 | 21,600 | 9,880 | 8,210 | 9,010 |
| 14 | 13,300 | 18,900 | 24,300 | 25,300 | 21,100 | 39,400 | 27,200 | 63,100 | 20,200 | 10,200 | 8,210 | 9,290 |
| 15 | 13,300 | 17,700 | 24,300 | 29,600 | 20,200 | 36,500 | 28,100 | 60,500 | 19,800 | 9,880 | 7,960 | 9,580 |
| 16 | 13,300 | 18,500 | 23,800 | 25,700 | 20,200 | 36,200 | 28,100 | 56,800 | 19,400 | 9,290 | 7,710 | 9,880 |
| 17 | 13,700 | 17,700 | 23,400 | 24,300 | 20,700 | 32,200 | 29,600 | 54,300 | 18,500 | 9,010 | 7,840 | 10,200 |
| 18 | 12,900 | 21,600 | 22,500 | 22,900 | 20,700 | 32,200 | 30,100 | 54,300 | 18,100 | 9,010 | 7,960 | 10,200 |
| 19 | 12,900 | 23,800 | 23,400 | 22,000 | 20,700 | 32,200 | 30,100 | 56,800 | 17,200 | 8,740 | 7,960 | 10,200 |
| 20 | 12,200 | 25,300 | 23,800 | 21,600 | 20,700 | 32,700 | 30,600 | 58,600 | 16,400 | 8,470 | 7,710 | 10,200 |
| 21 | 12,600 | 25,300 | 24,300 | 22,000 | 21,100 | 33,200 | 29,600 | 59,900 | 16,400 | 8,470 | 7,710 | 10,200 |
| 22 | 12,900 | 22,500 | 23,400 | 22,000 | 21,600 | 36,000 | 28,600 | 60,500 | 16,400 | 8,470 | 7,710 | 10,200 |
| 23 | 12,900 | 27,200 | 22,500 | 22,500 | 21,600 | 40,500 | 29,100 | 61,800 | 17,200 | 8,470 | 7,960 | 9,880 |
| 24 | 14,000 | 26,200 | 22,900 | 22,000 | 21,600 | 44,000 | 28,600 | 62,500 | 18,500 | 8,470 | 8,210 | 10,200 |
| 25 | 14,000 | 24,800 | 22,500 | 22,000 | 20,700 | 47,000 | 28,600 | 62,500 | 20,700 | 8,210 | 8,210 | 11,200 |
| 26 | 13,300 | 26,700 | 22,000 | 22,000 | 21,100 | 48,200 | 31,700 | 63,700 | 22,000 | 8,210 | 8,210 | 10,800 |
| 27 | 13,700 | 29,600 | 21,600 | 22,000 | 21,100 | 48,200 | 34,900 | 65,000 | 23,800 | 8,210 | 8,210 | 10,800 |
| 28 | 14,800 | 30,600 | 21,100 | 21,100 | 21,100 | 54,900 | 37,600 | 65,700 | 26,200 | 8,210 | 7,960 | 11,200 |
| 29 | 15,200 | 33,200 | 20,700 | 21,600 | 20,700 | 54,300 | 39,900 | 65,000 | 25,300 | 8,210 | 8,210 | 10,800 |
| 30 | 15,200 | 32,200 | 20,200 | 21,100 | ------- | 54,900 | 42,200 | 61,800 | 25,700 | 8,210 | 8,210 | 11,200 |
| 31 | 15,200 | ------- | 19,800 | 21,600 | ------- | 49,400 | ------- | 57,400 | ------- | 7,960 | 8,210 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 15,200 | 12,200 | 13,700 | 842,000 |
| November | 33,200 | 14,800 | 21,600 | 1,290,000 |
| December | 31,100 | 19,800 | 25,100 | 1,540,000 |
| January | 29,600 | 19,800 | 22,400 | 1,380,000 |
| February | 22,900 | 20,200 | 21,500 | 1,240,000 |
| March | 54,900 | 21,100 | 36,100 | 2,220,000 |
| April | 46,400 | 27,200 | 33,400 | 1,990,000 |
| May | 66,300 | 38,200 | 55,600 | 3,420,000 |
| June | 53,700 | 16,400 | 26,500 | 1,580,000 |
| July | 21,100 | 7,960 | 10,500 | 646,000 |
| August | 8,470 | 7,710 | 8,090 | 497,000 |
| September | 11,200 | 8,470 | 9,590 | 571,000 |
| The year | 66,300 | 7,710 | 23,700 | 17,200,000 |

### 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 to September, 1928.

EXTREMES.—Maximum discharge during period, 20,700 second-feet August 7 (gage height, 2.09 feet); minimum, 16,100 second-feet August 23–25, September 3, 4, 6, and 7.

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

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

REMARKS.—Records good. Small diversions by pumping between this station and the one at Oxbow. Possible slight diurnal fluctuation as result of pondage on Clearwater River at Lewiston.

*Daily and monthly discharge, in second-feet, 1928*

| Day | Aug. | Sept. | Day | Aug. | Sept. | Day | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1 | | 17,500 | 11 | 19,000 | 17,000 | 21 | 17,000 | 18,000 |
| 2 | | 16,600 | 12 | 18,000 | 17,000 | 22 | 16,600 | 18,500 |
| 3 | | 16,100 | 13 | 18,500 | 17,500 | 23 | 16,100 | 18,000 |
| 4 | | 16,100 | 14 | 17,500 | 17,500 | 24 | 16,100 | 18,000 |
| 5 | | 16,600 | 15 | 18,000 | 18,500 | 25 | 16,100 | 18,000 |
| 6 | 19,500 | 16,100 | 16 | 17,500 | 18,500 | 26 | 17,000 | 18,000 |
| 7 | 20,700 | 16,100 | 17 | 17,500 | 19,000 | 27 | 17,000 | 19,000 |
| 8 | 20,100 | 16,600 | 18 | 18,000 | 18,500 | 28 | 17,000 | 18,000 |
| 9 | 20,100 | 16,600 | 19 | 17,500 | 18,000 | 29 | 17,000 | 18,500 |
| 10 | 19,000 | 16,600 | 20 | 17,500 | 18,500 | 30 | 17,000 | 18,000 |
| | | | | | | 31 | 17,500 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| August 6–31 | 20,700 | 16,100 | 17,800 | 918,000 |
| September | 19,000 | 16,100 | 17,600 | 1,050,000 |
| The period | | | | 1,970,000 |

## TRIBUTARY BASINS

### HENRYS FORK NEAR LAKE, IDAHO

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

RECORDS AVAILABLE.—May, 1920, to September, 1928. Prior to September, 1922, at a point below mouth of Dry Creek, 3 miles downstream.

EXTREMES.—Maximum discharge during year, 384 second-feet August 19 (gage height, 4.19 feet); minimum, 17 second-feet May 13, 14, and 17–21 (gage height, 0.70 foot); lower discharge probably occurred during period of no record.

1920–1928: Maximum discharge, 907 second-feet June 13, 1926 (gage height, 5.40 feet); minimum, 1 second-foot on days reservoir gates were closed.

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

*Daily and monthly discharge, in second-feet, 1928*

| Day | May | June | July | Aug. | Sept. | Day | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ------ | 23 | 37 | 182 | 232 | 16 | 19 | 30 | 45 | 276 | 65 |
| 2 | ------ | 22 | 38 | 148 | 124 | 17 | 17 | 31 | 49 | 282 | 66 |
| 3 | ------ | 23 | 37 | 124 | 72 | 18 | 17 | 30 | 48 | 281 | 68 |
| 4 | ------ | 25 | 37 | 68 | 73 | 19 | 17 | 31 | 49 | 288 | 68 |
| 5 | ------ | 25 | 38 | 41 | 73 | 20 | 17 | 31 | 47 | 312 | 68 |
| 6 | ------ | 26 | 39 | 43 | 72 | 21 | 17 | 33 | 45 | 274 | 68 |
| 7 | ------ | 26 | 40 | 43 | 71 | 22 | 19 | 33 | 47 | 245 | 64 |
| 8 | ------ | 25 | 40 | 43 | 70 | 23 | 19 | 33 | 48 | 228 | 62 |
| 9 | ------ | 26 | 38 | 45 | 71 | 24 | 20 | 34 | 70 | 228 | 62 |
| 10 | ------ | 27 | 37 | 47 | 71 | 25 | 20 | 35 | 119 | 232 | 62 |
| 11 | ------ | 28 | 37 | 49 | 72 | 26 | 20 | 31 | 136 | 240 | 62 |
| 12 | ------ | 28 | 36 | 51 | 73 | 27 | 22 | 37 | 148 | 242 | 59 |
| 13 | 17 | 28 | 37 | 53 | 71 | 28 | 23 | 34 | 151 | 237 | 60 |
| 14 | 17 | 29 | 36 | 181 | 69 | 29 | 23 | 37 | 159 | 236 | 61 |
| 15 | 18 | 30 | 36 | 271 | 67 | 30 | 23 | 37 | 192 | 236 | 61 |
| | | | | | | 31 | 23 | ------ | 172 | 232 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| May 13–31 | 23 | 17 | 19.4 | 731 |
| June | 37 | 22 | 29.8 | 1,770 |
| July | 192 | 36 | 67.4 | 4,140 |
| August | 312 | 41 | 176 | 10,800 |
| September | 232 | 59 | 74.6 | 4,440 |
| The period | ------ | ------ | ------ | 21,900 |

### 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, 1917 to September, 1928.

EXTREMES.—Maximum discharge during year, 2,110 second-feet May 7 (gage height, 6.0 feet); minimum, 735 second-feet February 23 (gage height, 4.12 feet).

1910–1915, 1918–1928: Maximum discharge, 3,540 second-feet May 18, 1927 (gage height, 7.55 feet); minimum, 482 second-feet December 17, 19, and 20, 1924 (gage height, 3.50 feet).

REMARKS.—Records good. Discharge estimated December 16–23 and December 25 to January 3. Flow is 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, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,080 | 1,080 | 1,050 | | 886 | 794 | 957 | 1,720 | 1,200 | 1,030 | 1,080 | 1,130 |
| 2 | 1,060 | 1,080 | 1,050 | 930 | 893 | 794 | 957 | 1,680 | 1,180 | 1,060 | 1,080 | 1,120 |
| 3 | 1,060 | 1,050 | 1,020 | | 893 | 764 | 996 | 1,680 | 1,180 | 1,030 | 1,070 | 1,110 |
| 4 | 1,050 | 1,060 | 983 | 1,040 | 918 | 824 | 938 | 1,720 | 1,160 | 1,040 | 1,040 | 1,000 |
| 5 | 1,050 | 1,080 | 1,020 | 1,060 | 918 | 855 | 931 | 1,790 | 1,140 | 1,020 | 1,050 | 990 |
| 6 | 1,060 | 1,080 | 1,050 | 1,020 | 918 | 855 | 855 | 1,910 | 1,120 | 1,000 | 1,000 | 976 |
| 7 | 1,080 | 1,060 | 1,020 | 983 | 886 | 855 | 855 | 2,110 | 1,110 | 1,020 | 983 | 970 |
| 8 | 1,080 | 1,050 | 950 | 996 | 886 | 855 | 868 | 1,960 | 1,110 | 1,000 | 964 | 976 |
| 9 | 1,060 | 1,300 | 1,080 | 918 | 855 | 886 | 950 | 2,020 | 1,090 | 1,000 | 964 | 944 |
| 10 | 1,050 | 1,450 | 1,020 | 924 | 855 | 855 | 957 | 2,040 | 1,090 | 990 | 957 | 970 |
| 11 | 1,040 | 1,490 | 983 | 931 | 918 | 886 | 918 | 2,050 | 1,100 | 996 | 950 | 976 |
| 12 | 1,040 | 1,230 | 950 | 924 | 886 | 874 | 957 | 2,030 | 1,110 | 990 | 950 | 957 |
| 13 | 1,030 | 1,150 | 931 | 950 | 764 | 868 | 957 | 1,990 | 1,110 | 990 | 950 | 970 |
| 14 | 1,040 | 1,150 | 886 | 938 | 843 | 868 | 918 | 1,860 | 1,100 | 1,010 | 938 | 983 |
| 15 | 1,040 | 1,120 | 824 | 918 | 806 | 831 | 918 | 1,750 | 1,110 | 996 | 950 | 983 |
| 16 | 1,050 | 1,080 | | | 782 | 824 | 855 | 957 | 1,690 | 1,090 | 990 | 1,110 | 976 |
| 17 | 1,060 | 1,100 | | | 764 | 905 | 855 | 957 | 1,640 | 1,150 | 990 | 1,130 | 970 |
| 18 | 1,070 | 1,080 | | | 837 | 886 | 855 | 983 | 1,620 | 1,180 | 1,020 | 1,130 | 964 |
| 19 | 1,070 | 1,080 | | | 886 | 868 | 886 | 1,020 | 1,600 | 1,180 | 1,020 | 1,130 | 964 |
| 20 | 1,050 | 1,100 | | 820 | 824 | 868 | 893 | 1,020 | 1,570 | 1,130 | 1,010 | 1,130 | 964 |
| 21 | 1,050 | 1,170 | | | 794 | 868 | 905 | 983 | 1,530 | 1,130 | 1,010 | 1,150 | 964 |
| 22 | 1,050 | 1,120 | | | 824 | 874 | 918 | 983 | 1,500 | 1,180 | 996 | 1,160 | 944 |
| 23 | 1,060 | 1,100 | | | 918 | 735 | 957 | 1,020 | 1,460 | 1,150 | 990 | 1,150 | 944 |
| 24 | 1,050 | 1,080 | | 824 | 905 | 824 | 996 | 1,170 | 1,430 | 1,110 | 983 | 1,140 | 944 |
| 25 | 1,060 | 1,100 | | | 855 | 812 | 1,010 | 1,340 | 1,400 | 1,080 | 1,000 | 1,130 | 944 |
| 26 | 1,060 | 1,120 | | | 899 | 794 | 1,010 | 1,560 | 1,400 | 1,080 | 1,040 | 1,150 | 950 |
| 27 | 1,120 | 1,120 | | | 918 | 868 | 1,020 | 1,720 | 1,430 | 1,070 | 1,060 | 1,180 | 950 |
| 28 | 1,150 | 1,150 | | 880 | 855 | 886 | 1,020 | 1,880 | 1,400 | 1,080 | 1,060 | 1,150 | 970 |
| 29 | 1,180 | 1,080 | | | 886 | 874 | 983 | 1,930 | 1,330 | 1,080 | 1,070 | 1,150 | 964 |
| 30 | 1,190 | 1,080 | | | 899 | ------- | 970 | 1,770 | 1,280 | 1,030 | 1,060 | 1,130 | 944 |
| 31 | 1,150 | ------- | | | 893 | ------- | 970 | ------- | 1,230 | ------- | 1,070 | 1,130 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 1,190 | 1,050 | 1,070 | 65,800 |
| November | 1,490 | 1,050 | 1,130 | 67,200 |
| December | 1,080 | ---------- | 915 | 56,300 |
| January | 1,060 | ---------- | 907 | 55,800 |
| February | 918 | 735 | 862 | 49,600 |
| March | 1,020 | 764 | 896 | 55,100 |
| April | 1,930 | 855 | 1,110 | 66,000 |
| May | 2,110 | 1,230 | 1,670 | 103,000 |
| June | 1,200 | 1,030 | 1,120 | 66,600 |
| July | 1,070 | 983 | 1,020 | 62,700 |
| August | 1,180 | 938 | 1,070 | 65,800 |
| September | 1,130 | 944 | 980 | 58,300 |
| The year | 2,110 | 735 | 1,060 | 772,000 |

### 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 and 4 miles southwest of Ashton.

RECORDS AVAILABLE.—August, 1902, to June, 1909; April, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,440 second-feet May 11 (gage height, 2.01 feet); minimum, 1,080 second-feet January 29, February 5, March 1, and April 1 (gage height, 0.75 foot).

1902–1909, 1920–1928: Maximum discharge, 6,220 second-feet May 7, 1925 (gage height, 3.11 feet); minimum, 575 second-feet August 15, 1924.

REMARKS.—Records good. Discharge estimated December 9–31, January 1–10, 18–28, and April 2–7. Flow regulated at times by operation of gates at power dam 3 miles above station. No diversions for irrigation above station.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,450 | 1,430 | 1,540 | | 1,200 | 1,080 | 1,080 | 2,660 | 1,890 | 1,620 | 1,450 | 1,480 |
| 2 | 1,480 | 1,400 | 1,480 | | 1,170 | 1,200 | | 2,540 | 1,890 | 1,500 | 1,450 | 1,500 |
| 3 | 1,430 | 1,400 | 1,500 | | 1,170 | 1,170 | | 2,540 | 1,820 | 1,570 | 1,430 | 1,540 |
| 4 | 1,360 | 1,350 | 1,500 | | 1,170 | 1,140 | | 2,560 | 1,750 | 1,470 | 1,420 | 1,450 |
| 5 | 1,390 | 1,380 | 1,540 | | 1,080 | 1,140 | 1,120 | 2,640 | 1,660 | 1,480 | 1,420 | 1,400 |
| 6 | 1,420 | 1,360 | 1,480 | 1,200 | 1,330 | 1,170 | | 3,210 | 1,670 | 1,420 | 1,380 | 1,380 |
| 7 | 1,400 | 1,520 | 1,500 | | 1,200 | 1,140 | | 3,250 | 1,540 | 1,430 | 1,360 | 1,360 |
| 8 | 1,430 | 1,500 | 1,480 | | 1,170 | 1,140 | 1,170 | 3,130 | 1,550 | 1,380 | 1,250 | 1,350 |
| 9 | 1,400 | 1,470 | | | 1,170 | 1,170 | 1,170 | 3,150 | 1,540 | 1,400 | 1,300 | 1,380 |
| 10 | 1,420 | 2,090 | | | 1,170 | 1,140 | 1,170 | 3,250 | 1,540 | 1,400 | 1,310 | 1,380 |
| 11 | 1,400 | 2,230 | | 1,200 | 1,230 | 1,140 | 1,140 | 3,360 | 1,520 | 1,380 | 1,260 | 1,400 |
| 12 | 1,430 | 1,590 | | 1,300 | 1,170 | 1,170 | 1,140 | 3,280 | 1,570 | 1,520 | 1,300 | 1,380 |
| 13 | 1,450 | 1,600 | | 1,260 | 1,170 | 1,200 | 1,120 | 3,210 | 1,580 | 1,470 | 1,330 | 1,360 |
| 14 | 1,430 | 1,620 | | 1,360 | 1,200 | 1,140 | 1,180 | 2,940 | 1,570 | 1,310 | 1,300 | 1,380 |
| 15 | 1,420 | 1,590 | | 1,230 | 1,200 | 1,140 | 1,180 | 2,740 | 1,590 | 1,360 | 1,250 | 1,390 |
| 16 | 1,400 | 1,540 | | 1,200 | 1,170 | 1,170 | 1,200 | 2,600 | 1,660 | 1,520 | 1,360 | 1,350 |
| 17 | 1,400 | 1,500 | | 1,200 | 1,170 | 1,140 | 1,220 | 2,420 | 1,620 | 1,470 | 1,550 | 1,330 |
| 18 | 1,380 | 1,500 | | | 1,200 | 1,140 | 1,250 | 2,560 | 1,680 | 1,450 | 1,480 | 1,380 |
| 19 | 1,400 | 1,420 | | | 1,200 | 1,140 | 1,420 | 2,420 | 1,750 | 1,520 | 1,480 | 1,420 |
| 20 | 1,400 | 1,420 | 1,200 | | 1,170 | 1,140 | 1,300 | 2,280 | 1,730 | 1,430 | 1,520 | 1,420 |
| 21 | 1,360 | 1,540 | | | 1,230 | 1,140 | 1,380 | 2,250 | 1,710 | 1,450 | 1,570 | 1,420 |
| 22 | 1,350 | 1,570 | | | 1,230 | 1,420 | 1,300 | 2,320 | 1,730 | 1,450 | 1,570 | 1,420 |
| 23 | 1,330 | 1,500 | | 1,150 | 1,330 | 1,730 | 1,150 | 2,170 | 1,730 | 1,430 | 1,500 | 1,430 |
| 24 | 1,350 | 1,420 | | | 1,170 | 1,750 | 1,280 | 2,080 | 1,710 | 1,380 | 1,480 | 1,420 |
| 25 | 1,330 | 1,470 | | | 1,170 | 1,850 | 1,640 | 2,090 | 1,640 | 1,400 | 1,540 | 1,380 |
| 26 | 1,360 | 1,450 | | | 1,200 | 1,620 | 2,040 | 2,080 | 1,570 | 1,430 | 1,540 | 1,360 |
| 27 | 1,480 | 1,420 | | | 1,170 | 1,550 | 2,500 | 2,080 | 1,570 | 1,430 | 1,540 | 1,330 |
| 28 | 1,640 | 1,400 | | | 1,170 | 1,570 | 2,080 | 2,080 | 1,570 | 1,420 | 1,570 | 1,350 |
| 29 | 1,640 | 1,400 | | 1,080 | 1,500 | 1,480 | 2,900 | 2,020 | 1,520 | 1,420 | 1,590 | 1,360 |
| 30 | 1,500 | 1,420 | | 1,170 | ------- | 1,400 | 2,780 | 1,930 | 1,470 | 1,420 | 1,550 | 1,350 |
| 31 | 1,450 | ------- | | 1,200 | ------- | 1,220 | ------- | 1,890 | ------- | 1,420 | 1,470 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 1,640 | 1,330 | 1,420 | 87,300 |
| November | 2,230 | 1,350 | 1,520 | 90,490 |
| December | 1,540 | ---------- | 1,280 | 78,700 |
| January | 1,360 | ---------- | 1,190 | 73,200 |
| February | 1,500 | 1,080 | 1,200 | 66,000 |
| March | 1,850 | 1,080 | 1,280 | 78,700 |
| April | 2,900 | ---------- | 1,440 | 85,700 |
| May | 3,360 | 1,890 | 2,570 | 158,000 |
| June | 1,890 | 1,470 | 1,640 | 97,600 |
| July | 1,620 | 1,310 | 1,440 | 88,500 |
| August | 1,590 | 1,250 | 1,440 | 88,500 |
| September | 1,540 | 1,330 | 1,390 | 82,700 |
| The year | 3,360 | 1,080 | 1,490 | 1,080,000 |

### 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 during a portion of each irrigation season from June, 1919, to September, 1928. Discharge is determined from daily staff-gage readings. Records good.

*Daily and monthly discharge, in second-feet, 1928*

| Day | June | July | Aug. | Sept. | Day | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,200 | 1,160 | 824 | 502 | 16 | 507 | 919 | 788 | 421 |
| 2 | 1,250 | 1,110 | 814 | 535 | 17 | 535 | 961 | 635 | 412 |
| 3 | 1,280 | 928 | 382 | 547 | 18 | 470 | 962 | 610 | 406 |
| 4 | 1,100 | 923 | 384 | 540 | 19 | 465 | 1,010 | 656 | 399 |
| 5 | 1,080 | 826 | 694 | 536 | 20 | 463 | 1,090 | 602 | 387 |
| 6 | 1,050 | 850 | 693 | 531 | 21 | 424 | 1,110 | 669 | 382 |
| 7 | 1,120 | 854 | 654 | 533 | 22 | 483 | 1,090 | 669 | 377 |
| 8 | 1,100 | 745 | 680 | 535 | 23 | 516 | 1,090 | 642 | 372 |
| 9 | 1,080 | 624 | 698 | 537 | 24 | 561 | 1,100 | 654 | 367 |
| 10 | 1,060 | 666 | 751 | 518 | 25 | 662 | 1,020 | 657 | 360 |
| 11 | 839 | 681 | 764 | 498 | 26 | 830 | 877 | 596 | 338 |
| 12 | 797 | 878 | 748 | 478 | 27 | 1,040 | 865 | 451 | 335 |
| 13 | 636 | 879 | 761 | 439 | 28 | 1,070 | 924 | 438 | 332 |
| 14 | 577 | 968 | 797 | 433 | 29 | 1,120 | 948 | 417 | 331 |
| 15 | 587 | 974 | 790 | 428 | 30 | 1,140 | 940 | 416 | 328 |
| | | | | | 31 | | 854 | 463 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| June | 1,280 | 424 | 833 | 49,600 |
| July | 1,160 | 624 | 930 | 57,200 |
| August | 824 | 416 | 639 | 39,300 |
| September | 547 | 328 | 438 | 26,100 |
| The period | | | | 172,000 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 6,570 second-feet May 12 (gage height, 5.92 feet); minimum not determined.

1919–1928: 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 good. 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, 1928*

| Day | Mar. | May | June | July | Aug. | Sept. | Day | Mar. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 3,860 | 3,430 | 1,410 | 910 | 1,410 | 16 | | 4,480 | 2,53[illegible] | 970 | 934 | 1,300 |
| 2 | | 3,760 | 2,900 | 1,580 | 922 | 1,380 | 17 | | 4,000 | 2,57[illegible] | 910 | 1,180 | 1,330 |
| 3 | | 3,830 | 2,770 | 1,600 | 1,140 | 1,400 | 18 | | 4,230 | 2,70[illegible] | 838 | 1,290 | 1,350 |
| 4 | | 4,060 | 2,620 | 1,460 | 1,240 | 1,330 | 19 | | 4,360 | 2,81[illegible] | 804 | 1,240 | 1,350 |
| 5 | | 4,230 | 2,400 | 1,510 | 1,090 | 1,230 | 20 | | 4,360 | 2,51[illegible] | 682 | 1,260 | 1,360 |
| 6 | | 5,270 | 2,340 | 1,490 | 1,040 | 1,320 | 21 | | 4,360 | 2,42[illegible] | 640 | 1,300 | 1,330 |
| 7 | | 5,680 | 2,300 | 1,430 | 1,060 | 1,200 | 22 | | 4,360 | 2,49[illegible] | 611 | 1,290 | 1,320 |
| 8 | | 5,270 | 2,240 | 1,350 | 946 | 1,180 | 23 | | 4,360 | 2,42[illegible] | 602 | 1,230 | 1,330 |
| 9 | | 5,680 | 2,130 | 1,430 | 958 | 1,210 | 24 | | 4,230 | 2,34[illegible] | 651 | 1,200 | 1,330 |
| 10 | | 5,960 | 2,050 | 1,410 | 922 | 1,210 | 25 | | 4,480 | 2,21[illegible] | 792 | 1,260 | 1,330 |
| 11 | | 6,240 | 1,970 | 1,350 | 850 | 1,260 | 26 | | 4,610 | 1,97[illegible] | 958 | 1,270 | 1,330 |
| 12 | | 6,380 | 2,190 | 1,330 | 874 | 1,290 | 27 | | 5,140 | 1,84[illegible] | 922 | 1,400 | 1,320 |
| 13 | | 6,380 | 2,210 | 1,160 | 910 | 1,290 | 28 | | 5,270 | 1,69[illegible] | 922 | 1,490 | 1,300 |
| 14 | | 5,410 | 2,260 | 970 | 946 | 1,290 | 29 | 2,010 | 4,870 | 1,46[illegible] | 816 | 1,610 | 1,300 |
| 15 | | 4,610 | 2,440 | 910 | 898 | 1,290 | 30 | | 4,360 | 1,35[illegible] | 816 | 1,540 | 1,270 |
| | | | | | | | 31 | | 3,910 | | 874 | 1,460 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| May | 6,380 | 3,760 | 4,770 | 293,000 |
| June | 3,430 | 1,350 | 2,320 | 138,000 |
| July | 1,600 | 602 | 1,070 | 65,800 |
| August | 1,610 | 850 | 1,150 | 70,700 |
| September | 1,410 | 1,180 | 1,300 | 77,400 |
| The period | | | | 645,000 |

### 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 during a portion of each irrigation season from June, 1919, to September, 1928. Discharge is computed from daily staff-gage readings. Records good.

*Daily and monthly discharge, in second-feet, 1928*

| Day | June | July | Aug. | Sept. | Day | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,040 | 827 | 828 | 456 | 16 | 502 | 846 | 691 | 415 |
| 2 | 1,030 | 841 | 775 | 471 | 17 | 496 | 833 | 704 | 415 |
| 3 | 1,050 | 816 | 761 | 487 | 18 | 477 | 781 | 721 | 417 |
| 4 | 997 | 784 | 748 | 470 | 19 | 473 | 774 | 724 | 415 |
| 5 | 966 | 733 | 703 | 459 | 20 | 569 | 678 | 687 | 415 |
| 6 | 938 | 728 | 694 | 449 | 21 | 568 | 668 | 679 | 415 |
| 7 | 935 | 726 | 685 | 442 | 22 | 572 | 621 | 682 | 416 |
| 8 | 936 | 726 | 689 | 435 | 23 | 569 | 653 | 634 | 412 |
| 9 | 926 | 734 | 748 | 430 | 24 | 609 | 682 | 605 | 410 |
| 10 | 922 | 674 | 764 | 423 | 25 | 616 | 819 | 568 | 406 |
| 11 | 768 | 708 | 747 | 418 | 26 | 650 | 926 | 540 | 404 |
| 12 | 681 | 772 | 740 | 415 | 27 | 739 | 638 | 504 | 398 |
| 13 | 675 | 841 | 741 | 409 | 28 | 799 | 757 | 464 | 389 |
| 14 | 659 | 736 | 713 | 412 | 29 | 820 | 839 | 441 | 384 |
| 15 | 659 | 776 | 697 | 412 | 30 | 826 | 836 | 429 | 382 |
| | | | | | 31 | | 852 | 440 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| June | 1,050 | 473 | 749 | 44,600 |
| July | 926 | 621 | 762 | 46,900 |
| August | 828 | 429 | 663 | 40,800 |
| September | 487 | 382 | 423 | 25,200 |
| The period | | | | 158,000 |

### HENRYS FORK NEAR REXBURG, IDAHO

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

RECORDS AVAILABLE.—April, 1909, to September, 1928.

EXTREMES.—Maximum discharge during year, 7,700 second-feet May 14 (gage height, 9.60 feet); minimum not determined.

1909–1928: 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. Discharge estimated April 1–5. 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, 1927–28*

| Day | Oct. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1 | 2,520 | | | 5,300 | 5,660 | 2,080 | 580 | 1,640 |
| 2 | 2,620 | | | 5,060 | 4,900 | 2,260 | 625 | 1,580 |
| 3 | 2,700 | | 1,820 | 4,940 | 4,270 | 2,440 | 730 | 1,560 |
| 4 | 2,580 | | | 4,940 | 3,800 | 2,440 | 1,040 | 1,500 |
| 5 | 2,480 | | | 5 060 | 3,360 | 2,350 | 1,030 | 1,420 |
| 6 | 2,390 | | 1,640 | 5,180 | 2,840 | 2,260 | 940 | 1,420 |
| 7 | 2,300 | | 1,540 | 5,900 | 2,640 | 2,260 | 907 | 1,370 |
| 8 | 2,300 | | 1,490 | 6,520 | 2,350 | 2,170 | 896 | 1,330 |
| 9 | 2,300 | | 1,460 | 6,520 | 2,170 | 2,080 | 836 | 1,310 |
| 10 | 2,210 | | 1,450 | 6,780 | 2,000 | 2,050 | 792 | 1,300 |
| 11 | 2,210 | | 1,440 | 6,920 | 1,920 | 1,850 | 750 | 1,320 |
| 12 | 2,210 | | 1,400 | 7,180 | 2,340 | 1,700 | 700 | 1,330 |
| 13 | 2,120 | | 1,410 | 7,440 | 2,800 | 1,530 | 675 | 1,360 |
| 14 | 2,120 | | 1,310 | 7,700 | 3,080 | 1,360 | 705 | 1,420 |
| 15 | 2,120 | | 1,310 | 7,250 | 3,270 | 1,220 | 750 | 1,460 |
| 16 | 2,120 | | 1,320 | 6,810 | 3,690 | 1,160 | 770 | 1,440 |
| 17 | 2,120 | | 1,350 | 6,120 | 3,800 | 1,100 | 841 | 1,450 |
| 18 | 2,120 | | 1,440 | 5,590 | 4,020 | 1,040 | 1,040 | 1,420 |
| 19 | 2,120 | | 1,510 | 5,300 | 4,130 | 952 | 1,050 | 1,430 |
| 20 | 2,030 | | 1,510 | 5,460 | 4,130 | 890 | 1,100 | 1,430 |
| 21 | 2,030 | | 1,430 | 5,610 | 3,680 | 824 | 1,160 | 1,440 |
| 22 | 2,120 | | 1,360 | 5,650 | 3,550 | 755 | 1,150 | 1,420 |
| 23 | 2,120 | | 1,350 | 5,790 | 3,610 | 695 | 1,140 | 1,410 |
| 24 | 2,030 | | 1,350 | 5,830 | 3,550 | 645 | 1,140 | 1,420 |
| 25 | 2,030 | | 1,710 | 5,860 | 3,510 | 605 | 1,190 | 1,400 |
| 26 | | | 2,080 | 6,140 | 3,240 | 575 | 1,280 | 1,350 |
| 27 | | | 2,730 | 6,400 | 3,080 | 585 | 1,440 | 1,340 |
| 28 | | 2,340 | 3,560 | 6,660 | 2,840 | 605 | 1,580 | 1,350 |
| 29 | | 2,340 | 4,460 | 6,780 | 2,490 | 566 | 1,770 | 1,400 |
| 30 | | 2,160 | 5,420 | 6,620 | 2,260 | 530 | 1,780 | 1,390 |
| 31 | | 1,990 | | 6,190 | | 512 | 1,740 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October 1–25 | 2,700 | 2,030 | 2,240 | 111,000 |
| April | 5,420 | 1,310 | 1,870 | 111,000 |
| May | 7,700 | 4,940 | 6,110 | 376,000 |
| June | 5,660 | 1,920 | 3,300 | 196,000 |
| July | 2,440 | 512 | 1,360 | 83,600 |
| August | 1,780 | 580 | 1,040 | 64,000 |
| September | 1,640 | 1,300 | 1,410 | 83,900 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 497 second-feet April 28 (gage height, 2.20 feet); minimum, 181 second-feet February 25 (gage height, 1.24 feet).

1912–1915, 1918–1928: Maximum discharge, 900 second-feet June 2, 1912 (gage height, 2.30 feet on original gage); minimum, 123 second-feet December 19, 1924 (gage height, 1.00 foot).

REMARKS.—Records good. Flow unaffected by regulation. No diversions.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 228 | 222 | 222 | 210 | 210 | 222 | 231 | 399 | 273 | 243 | 231 | 231 |
| 2 | 228 | 222 | 222 | 210 | 204 | 222 | 225 | 399 | 267 | 243 | 231 | 231 |
| 3 | 228 | 222 | 222 | 210 | 204 | 184 | 231 | 373 | 267 | 243 | 231 | 231 |
| 4 | 228 | 228 | 222 | 216 | 204 | 243 | 225 | 367 | 264 | 243 | 231 | 225 |
| 5 | 228 | 216 | 222 | 210 | 198 | 213 | 225 | 367 | 264 | 243 | 234 | 231 |
| 6 | 228 | 216 | 216 | 210 | 198 | 213 | 225 | 386 | 261 | 237 | 231 | 231 |
| 7 | 222 | 222 | 210 | 210 | 204 | 213 | 225 | 393 | 258 | 237 | 234 | 231 |
| 8 | 222 | 222 | 216 | 234 | 198 | 213 | 243 | 386 | 255 | 237 | 231 | 225 |
| 9 | 222 | 228 | 222 | 222 | 210 | 213 | 231 | 393 | 252 | 237 | 231 | 225 |
| 10 | 222 | 234 | 222 | 213 | 216 | 213 | 225 | 373 | 249 | 237 | 228 | 225 |
| 11 | 222 | 246 | 222 | 204 | 198 | 213 | 225 | 377 | 249 | 237 | 228 | 228 |
| 12 | 222 | 234 | 216 | 210 | 204 | 213 | 225 | 373 | 255 | 237 | 228 | 225 |
| 13 | 222 | 234 | 216 | 210 | 216 | 213 | 225 | 367 | 252 | 237 | 228 | 225 |
| 14 | 222 | 228 | 222 | 210 | 204 | 213 | 225 | 335 | 249 | 237 | 231 | 231 |
| 15 | 222 | 228 | 216 | 210 | 210 | 225 | 225 | 335 | 249 | 237 | 228 | 225 |
| 16 | 222 | 228 | 216 | 210 | 198 | 219 | 225 | 329 | 249 | 237 | 231 | 225 |
| 17 | 222 | 222 | 204 | 193 | 198 | 213 | 225 | 316 | 255 | 231 | 231 | 225 |
| 18 | 216 | 228 | 198 | 210 | 198 | 219 | 243 | 310 | 264 | 237 | 231 | 225 |
| 19 | 216 | 222 | 198 | 210 | 198 | 219 | 240 | 304 | 264 | 237 | 231 | 225 |
| 20 | 216 | 228 | 198 | 198 | 198 | 213 | 243 | 298 | 249 | 234 | 231 | 225 |
| 21 | 216 | 234 | 198 | 204 | 204 | 219 | 237 | 295 | 249 | 234 | 231 | 225 |
| 22 | 216 | 228 | 198 | 198 | 204 | 225 | 237 | 301 | 249 | 231 | 231 | 225 |
| 23 | 216 | 222 | 198 | 210 | 210 | 237 | 255 | 304 | 246 | 240 | 231 | 225 |
| 24 | 216 | 228 | 198 | 210 | 187 | 237 | 292 | 310 | 249 | 237 | 231 | 225 |
| 25 | 228 | 234 | 193 | 204 | 181 | 255 | 335 | 329 | 246 | 234 | 231 | 225 |
| 26 | 225 | 240 | 198 | 198 | 204 | 243 | 418 | 361 | 249 | 234 | 231 | 225 |
| 27 | 228 | 234 | 204 | 204 | 198 | 243 | 464 | 338 | 243 | 231 | 231 | 225 |
| 28 | 228 | 240 | 210 | 216 | 204 | 243 | 497 | 361 | 243 | 231 | 231 | 225 |
| 29 | 228 | 228 | 216 | 204 | 198 | 243 | 431 | 304 | 243 | 231 | 231 | 225 |
| 30 | 228 | 228 | 216 | 216 | ------- | 228 | 399 | 301 | 243 | 231 | 228 | 225 |
| 31 | 228 | ------- | 216 | 216 | ------- | 225 | ------- | 279 | ------- | 231 | 225 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 228 | 216 | 223 | 13,700 |
| November | 246 | 216 | 228 | 13,600 |
| December | 222 | 193 | 211 | 13,000 |
| January | 234 | 193 | 209 | 12,900 |
| February | 216 | 181 | 202 | 11,600 |
| March | 255 | 184 | 223 | 13,700 |
| April | 497 | 225 | 272 | 16,200 |
| May | 399 | 279 | 344 | 21,200 |
| June | 273 | 243 | 254 | 15,100 |
| July | 243 | 231 | 236 | 14,500 |
| August | 234 | 225 | 230 | 14,100 |
| September | 231 | 225 | 226 | 13,400 |
| The year | 497 | 181 | 238 | 173,000 |

### 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; April, 1918, to September, 1928.

EXTREMES.—Maximum discharge during year, 851 second-feet May 10 and 12 (gage height, 3.40 feet); minimum, 68 second-feet February 25 (gage height, 0.68 foot).

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

REMARKS.—Records good, except for periods of ice effect, December 7–31, January 18–25, February 8–10, 12–17, 26–29, and March 1–4, for which they are are fair. Discharge unaffected by regulation or diversions

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 126 | 174 | 122 | 80 | 90 | | 116 | 511 | 228 | 126 | 92 | 87 |
| 2 | 124 | 118 | 122 | 85 | 90 | 76 | 116 | 511 | 233 | 151 | 90 | 87 |
| 3 | 118 | 111 | 118 | 94 | 87 | | 116 | 511 | 214 | 126 | 90 | 87 |
| 4 | 113 | 118 | 118 | 97 | 87 | | 113 | 495 | 209 | 118 | 90 | 86 |
| 5 | 105 | 122 | 122 | 94 | 87 | 80 | 113 | 577 | 202 | 122 | 94 | 84 |
| 6 | 107 | 122 | 118 | 94 | 87 | 80 | 102 | 712 | 206 | 118 | 94 | 84 |
| 7 | 105 | 130 | | 97 | 84 | 80 | 84 | 698 | 212 | 126 | 92 | 84 |
| 8 | 100 | 126 | | 87 | | 80 | 104 | 712 | 186 | 122 | 92 | 81 |
| 9 | 100 | 209 | | 90 | 80 | 83 | 114 | 732 | 192 | 118 | 92 | 81 |
| 10 | 100 | 415 | | 90 | | 80 | 118 | 851 | 186 | 114 | 87 | 81 |
| 11 | 100 | 236 | | 89 | 78 | 86 | 118 | 837 | 182 | 109 | 89 | 83 |
| 12 | 100 | 179 | | 94 | | 86 | 118 | 851 | 174 | 107 | 87 | 81 |
| 13 | 100 | 179 | | 97 | | 83 | 118 | 812 | 170 | 107 | 87 | 84 |
| 14 | 100 | 160 | 95 | 94 | | 80 | 111 | 590 | 172 | 104 | 87 | 84 |
| 15 | 100 | 151 | | 94 | 80 | 80 | 111 | 607 | 194 | 104 | 87 | 84 |
| 16 | 100 | 138 | | 90 | | 83 | 118 | 584 | 177 | 104 | 87 | 84 |
| 17 | 97 | 134 | | 90 | | 80 | 118 | 505 | 178 | 100 | 87 | 84 |
| 18 | 97 | 134 | | | 84 | 80 | 138 | 495 | 196 | 107 | 87 | 81 |
| 19 | 97 | 134 | | | 84 | 86 | 130 | 534 | 196 | 100 | 87 | 83 |
| 20 | 94 | 138 | | | 84 | 89 | 130 | 463 | 177 | 98 | 86 | 81 |
| 21 | 94 | 156 | | | | | | | | | | |
| 22 | 94 | 134 | | | 80 | 84 | 113 | 130 | 453 | 172 | 97 | 87 | 78 |
| 23 | 94 | 130 | | | | 84 | 122 | 126 | 431 | 174 | 95 | 87 | 81 |
| 24 | 94 | 126 | | | | 84 | 145 | 199 | 400 | 172 | 97 | 87 | 81 |
| 25 | 100 | 134 | | | | 75 | 167 | 276 | 365 | 142 | 94 | 87 | 81 |
| | | | | | | 68 | 177 | 317 | 359 | 142 | 94 | 87 | 83 |
| 26 | 102 | 138 | 85 | 87 | | | | | | | | |
| 27 | 111 | 134 | | 87 | | 132 | 434 | 356 | 136 | 92 | 87 | 83 |
| 28 | 170 | 138 | | 81 | 76 | 132 | 479 | 332 | 136 | 92 | 90 | 83 |
| 29 | 184 | 130 | | 87 | | 132 | 544 | 326 | 126 | 92 | 89 | 83 |
| 30 | 199 | 118 | | 90 | | 140 | 479 | 293 | 136 | 92 | 89 | 83 |
| 31 | 194 | | | 90 | | 116 | 479 | 267 | 126 | 90 | 87 | 81 |
| | | | | | | 113 | | 239 | | 92 | 87 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 199 | 94 | 114 | 7,010 |
| November | 415 | 111 | 152 | 9,040 |
| December | 122 | | 96.3 | 5,920 |
| January | 97 | | 87.7 | 5,390 |
| February | 90 | 68 | 81.4 | 4,680 |
| March | 177 | | 100 | 6,150 |
| April | 544 | 84 | 192 | 11,400 |
| May | 851 | 239 | 529 | 32,500 |
| June | 233 | 126 | 178 | 10,600 |
| July | 151 | 90 | 107 | 6,580 |
| August | 94 | 86 | 88.6 | 5,450 |
| September | 87 | 78 | 82.9 | 4,930 |
| The year | 851 | 68 | 152 | 110,000 |

### 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 during a portion of each irrigation season from June, 1919, to September, 1928. Discharge is computed from daily staff-gage readings and combined to show the total flow of the canals. Records good.

*Daily and monthly discharge, in second-feet, 1928*

| Day | June | July | Aug. | Sept. | Day | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 59 | 177 | 176 | 41 | 16 | 172 | 176 | 0 | 46 |
| 2 | 73 | 187 | 172 | 45 | 17 | 170 | 184 | 0 | 46 |
| 3 | 73 | 158 | 177 | 45 | 18 | 170 | 192 | 0 | 45 |
| 4 | 90 | 156 | 166 | 46 | 19 | 135 | 187 | 0 | 47 |
| 5 | 102 | 158 | 130 | 47 | 20 | 140 | 187 | 0 | 48 |
| 6 | 127 | 177 | 113 | 47 | 21 | 141 | 188 | 0 | 50 |
| 7 | 127 | 173 | 110 | 48 | 22 | 135 | 188 | 0 | 51 |
| 8 | 128 | 176 | 100 | 48 | 23 | 133 | 189 | 0 | 52 |
| 9 | 132 | 177 | 102 | 49 | 24 | 128 | 188 | 0 | 53 |
| 10 | 132 | 177 | 102 | 50 | 25 | 130 | 186 | 27 | 54 |
| 11 | 136 | 188 | 103 | 49 | 26 | 148 | 180 | 27 | 55 |
| 12 | 0 | 192 | 101 | 49 | 27 | 140 | 185 | 32 | 57 |
| 13 | 143 | 190 | 0 | 48 | 28 | 149 | 69 | 32 | 58 |
| 14 | 159 | 201 | 0 | 47 | 29 | 181 | 183 | 32 | 60 |
| 15 | 160 | 176 | 0 | 47 | 30 | 179 | 172 | 33 | 60 |
| | | | | | 31 | | 172 | 36 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| June | 181 | 0 | 130 | 7,740 |
| July | 201 | 69 | 177 | 10,900 |
| August | 176 | 0 | 57.1 | 3,510 |
| September | 60 | 41 | 49.6 | 2,950 |
| The period | | | | 25,100 |

### FALL RIVER NEAR SQUIRREL, IDAHO

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

RECORDS AVAILABLE.—January, 1904, to June, 1909; May, 1918, to September, 1928. August 24, 1902, to December 31, 1903, at Wilson's sawmill 3 miles upstream.

EXTREMES.—Maximum discharge during year, 4,330 second-feet May 27 (gage height, 5.20 feet); minimum not determined.

1904–1909, 1918–1928: Maximum discharge, 6,440 second-feet June 27, 1927; minimum, 124 second-feet January 19, 1924.

REMARKS.—Records good except those for periods of ice effect, December 5 to January 28, for which they are poor. Diversions for irrigation above and below station.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 823 | 720 | 754 | | 586 | 565 | 610 | 1,720 | 2,830 | 1,480 | 810 | 710 |
| 2 | 805 | 720 | 754 | | 580 | 565 | 580 | 1,790 | 2,690 | 1,600 | 770 | 690 |
| 3 | 788 | 704 | 754 | | 595 | 551 | 565 | 1,780 | 2,560 | 1,430 | 780 | 690 |
| 4 | 788 | 720 | 720 | | 610 | 551 | 551 | 2,070 | 2,360 | 1,400 | 770 | 710 |
| 5 | 796 | 780 | | 540 | 625 | 565 | 565 | 2,330 | 2,040 | 1,420 | 840 | 710 |
| 6 | 720 | 754 | | | 610 | 551 | 565 | 2,360 | 2,160 | 1,540 | 870 | 690 |
| 7 | 720 | 841 | | | 523 | 551 | 551 | 2,760 | 2,230 | 1,260 | 830 | 690 |
| 8 | 788 | 962 | | | 537 | 551 | 537 | 3,040 | 2,160 | 1,160 | 810 | 690 |
| 9 | 788 | 1,290 | | | 551 | 565 | 551 | 3,320 | 2,040 | 1,180 | 790 | 690 |
| 10 | 712 | 2,080 | | 549 | 565 | 565 | 565 | 3,600 | 1,900 | 1,140 | 790 | 680 |
| 11 | 712 | 1,450 | 620 | | 595 | 595 | 565 | 3,680 | 1,720 | 1,200 | 770 | 670 |
| 12 | 688 | 1,130 | | | 580 | 580 | 580 | 3,800 | 1,840 | 1,250 | 750 | 690 |
| 13 | 672 | 1,010 | | | 580 | 565 | 565 | 3,110 | 1,720 | 1,200 | 870 | 730 |
| 14 | 656 | 971 | | | 565 | 565 | 551 | 2,620 | 1,670 | 1,180 | 870 | 690 |
| 15 | 672 | 933 | | | 565 | 565 | 537 | 2,490 | 1,780 | 1,070 | 870 | 670 |
| 16 | 672 | 895 | | | 580 | 558 | 595 | 2,620 | 1,820 | 975 | 860 | 650 |
| 17 | 771 | 859 | 537 | | 595 | 551 | 595 | 2,560 | 1,740 | 880 | 850 | 650 |
| 18 | 796 | 841 | | | 595 | 565 | 580 | 2,830 | 1,720 | 964 | 850 | 640 |
| 19 | 720 | 805 | | | 537 | 580 | 580 | 3,040 | 1,660 | 860 | 860 | 630 |
| 20 | 680 | 841 | | 530 | 565 | 610 | 565 | 3,180 | 1,500 | 830 | 840 | 630 |
| 21 | 640 | 914 | | | 580 | 625 | 551 | 3,180 | 1,520 | 820 | 850 | 630 |
| 22 | 640 | 841 | | | 551 | 625 | 551 | 3,250 | 1,660 | 800 | 830 | 611 |
| 23 | 640 | 805 | | | 495 | 640 | 618 | 3,320 | 1,600 | 820 | 830 | 611 |
| 24 | 640 | 771 | 500 | | 509 | 640 | 656 | 3,320 | 1,650 | 810 | 830 | 602 |
| 25 | 640 | 788 | | | 523 | 672 | 780 | 3,530 | 1,670 | 770 | 730 | 611 |
| 26 | 771 | 805 | | | 551 | 640 | 1,000 | 3,810 | 1,720 | 770 | 740 | 593 |
| 27 | 933 | 805 | | | 551 | 625 | 1,160 | 4,330 | 1,780 | 770 | 810 | 593 |
| 28 | 823 | 805 | | | 551 | 625 | 1,490 | 4,180 | 1,720 | 942 | 770 | 670 |
| 29 | 805 | 754 | | 565 | 551 | 632 | 1,550 | 3,810 | 1,660 | 810 | 760 | 650 |
| 30 | 796 | 754 | | 565 | ------ | 632 | 1,480 | 3,530 | 1,540 | 840 | 740 | 611 |
| 31 | 754 | ------ | | 565 | ------ | 632 | ------ | 3,210 | ------ | 790 | 730 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 823 | 640 | 737 | 45,300 |
| November | 2,080 | 704 | 912 | 54,300 |
| December | 754 | ------ | 579 | 35,600 |
| January | 565 | ------ | 537 | 33,000 |
| February | 625 | 495 | 565 | 32,500 |
| March | 672 | 551 | 590 | 36,300 |
| April | 1,550 | 537 | 706 | 42,000 |
| May | 4,330 | 1,720 | 3,040 | 187,000 |
| June | 2,830 | 1,500 | 1,890 | 112,000 |
| July | 1,600 | 770 | 1,060 | 65,200 |
| August | 870 | 730 | 809 | 49,700 |
| September | 730 | 593 | 659 | 39,200 |
| The year | 4,330 | ------ | 1,010 | 732,000 |

### 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 portion of each irrigation season from June, 1919, to September, 1928. 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, 1928*

| Day | June | July | Aug. | Sept. | Day | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 736 | 668 | 577 | 339 | 16 | 607 | 606 | 530 | 366 |
| 2 | 727 | 662 | 579 | 341 | 17 | 619 | 606 | 529 | 366 |
| 3 | 754 | 628 | 576 | 342 | 18 | 539 | 630 | 526 | 367 |
| 4 | 737 | 627 | 597 | 344 | 19 | 514 | 621 | 528 | 368 |
| 5 | 733 | 629 | 598 | 345 | 20 | 513 | 603 | 499 | 370 |
| 6 | 690 | 673 | 607 | 346 | 21 | 517 | 599 | 496 | 373 |
| 7 | 684 | 620 | 586 | 348 | 22 | 540 | 589 | 491 | 374 |
| 8 | 689 | 596 | 579 | 352 | 23 | 555 | 624 | 495 | 376 |
| 9 | 704 | 606 | 575 | 355 | 24 | 546 | 551 | 498 | 378 |
| 10 | 692 | 585 | 578 | 359 | 25 | 551 | 511 | 517 | 380 |
| 11 | 675 | 600 | 573 | 358 | 26 | 552 | 507 | 512 | 382 |
| 12 | 683 | 603 | 569 | 359 | 27 | 589 | 597 | 481 | 384 |
| 13 | 698 | 613 | 528 | 362 | 28 | 584 | 619 | 463 | 386 |
| 14 | 691 | 638 | 525 | 363 | 29 | 668 | 595 | 362 | 386 |
| 15 | 628 | 628 | 535 | 365 | 30 | 675 | 581 | 346 | 384 |
| | | | | | 31 | | 570 | 338 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| June | 754 | 513 | 636 | 37,800 |
| July | 668 | 507 | 606 | 37,300 |
| August | 607 | 338 | 522 | 32,100 |
| September | 386 | 339 | 364 | 21,700 |
| The period | | | | 129,000 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 4,510 second-feet May 27 (gage height, 5.60 feet); minimum, 216 second-feet August 4 (gage height, 1.96 feet).

1920–1928: Maximum discharge, 6,380 second-feet June 27, 1927 (gage height, 6.60 feet); minimum, 9 second-feet August 7, 1923 (gage height, 1.01 feet).

REMARKS.—Records excellent except for May 12–21, for which discharge is estimated. Numerous diversions for irrigation above station.

*Daily and monthly discharge, in second-feet, 1928*

| Day | May | June | July | Aug. | Sept. | Day | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,860 | 2,530 | 979 | 238 | 443 | 16 | | 1,360 | 461 | 375 | 380 |
| 2 | 1,910 | 2,260 | 1,120 | 229 | 437 | 17 | | 1,360 | 364 | 375 | 369 |
| 3 | 1,960 | 2,130 | 951 | 220 | 431 | 18 | | 1,400 | 278 | 375 | 369 |
| 4 | 2,060 | 1,910 | 896 | 229 | 420 | 19 | 2,850 | 1,400 | 260 | 380 | 369 |
| 5 | 2,340 | 1,760 | 896 | 274 | 414 | 20 | | 1,200 | 283 | 375 | 359 |
| 6 | 2,820 | 1,730 | 924 | 293 | 403 | 21 | | 1,140 | 307 | 380 | 359 |
| 7 | 3,100 | 1,770 | 792 | 302 | 397 | 22 | 3,180 | 1,290 | 283 | 375 | 343 |
| 8 | 3,090 | 1,680 | 688 | 293 | 397 | 23 | 3,170 | 1,250 | 283 | 375 | 332 |
| 9 | 3,440 | 1,570 | 658 | 278 | 386 | 24 | 3,170 | 1,250 | 338 | 375 | 332 |
| 10 | 3,620 | 1,440 | 628 | 274 | 403 | 25 | 3,420 | 1,270 | 380 | 343 | 327 |
| 11 | 3,910 | 1,270 | 628 | 269 | 397 | 26 | 3,690 | 1,270 | 375 | 302 | 312 |
| 12 | | 1,310 | 628 | 264 | 380 | 27 | 4,150 | 1,270 | 302 | 375 | 307 |
| 13 | | 1,210 | 607 | 317 | 391 | 28 | 4,050 | 1,190 | 338 | 420 | 338 |
| 14 | 2,850 | 1,210 | 578 | 380 | 397 | 29 | 3,640 | 1,080 | 283 | 486 | 312 |
| 15 | | 1,340 | 524 | 375 | 391 | 30 | 3,290 | 1,010 | 283 | 474 | 298 |
| | | | | | | 31 | 2,940 | | 260 | 468 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| May | 4,150 | 1,860 | 3,010 | 185,000 |
| June | 2,530 | 1,010 | 1,460 | 86,900 |
| July | 1,120 | 260 | 535 | 32,900 |
| August | 486 | 220 | 338 | 20,800 |
| September | 443 | 298 | 373 | 22,200 |
| The period | | | | 348,000 |

### 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, 4 miles southeast of St. Anthony.

RECORDS AVAILABLE.—April, 1920, to September, 1928. From April, 1903, to June, 1909, at station three-quarters of a mile upstream.

EXTREMES.—Maximum discharge during year, 4,350 second-feet May 13 (gage height, 5.94 feet); minimum, 550 second-feet April 6 (gage height, 0.43 foot). 1903–1909, 1920–1928: Maximum discharge, 7,820 second-feet June 5, 1909 (gage height, 6.90 feet); minimum, 88 second-feet March 12, 1906 (gage height, 1.00 foot).

REMARKS.—Records excellent. Some diversions for irrigation in Teton Basin 20 miles above station. No regulation.

*Daily and monthly discharge, in second-feet, 1928*

| Day | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | | 628 | 1,550 | 2,930 | 1,910 | 867 | 688 |
| 2 | | 684 | 1,660 | 2,580 | 2,000 | 851 | 679 |
| 3 | | 662 | 1,620 | 2,400 | 1,820 | 841 | 671 |
| 4 | | 608 | 1,510 | 2,170 | 1,760 | 836 | 671 |
| 5 | | 593 | 1,550 | 1,910 | 1,810 | 846 | 671 |
| 6 | | 582 | 1,880 | 1,780 | 1,830 | 851 | 641 |
| 7 | | 578 | 2,340 | 1,760 | 1,740 | 836 | 624 |
| 8 | | 570 | 2,640 | 1,720 | 1,500 | 821 | 628 |
| 9 | | 582 | 2,950 | 1,620 | 1,440 | 801 | 645 |
| 10 | | 616 | 3,100 | 1,450 | 1,420 | 791 | 653 |
| 11 | | 608 | 3,520 | 1,460 | 1,390 | 772 | 653 |
| 12 | | 645 | 3,860 | 1,630 | 1,380 | 762 | 653 |
| 13 | | 604 | 4,220 | 1,600 | 1,370 | 753 | 657 |
| 14 | | 593 | 4,140 | 1,550 | 1,380 | 743 | 662 |
| 15 | | 597 | 3,530 | 1,490 | 1,330 | 743 | 653 |
| 16 | | 632 | 3,060 | 1,420 | 1,270 | 738 | 649 |
| 17 | | 872 | 2,900 | 1,420 | 1,230 | 734 | 645 |
| 18 | | 914 | 2,920 | 1,480 | 1,250 | 725 | 645 |
| 19 | | 772 | 3,180 | 1,570 | 1,210 | 706 | 649 |
| 20 | | 738 | 3,350 | 1,490 | 1,120 | 702 | 637 |
| 21 | | 693 | 3,410 | 1,460 | 1,040 | 702 | 641 |
| 22 | | 725 | 3,560 | 1,680 | 1,010 | 697 | 641 |
| 23 | | 786 | 3,660 | 1,680 | 995 | 693 | 645 |
| 24 | | 941 | 3,730 | 1,630 | 989 | 702 | 641 |
| 25 | | 1,050 | 3,850 | 1,780 | 973 | 706 | 641 |
| 26 | | 1,180 | 4,020 | 1,980 | 957 | 706 | 637 |
| 27 | | 1,400 | 4,180 | 2,100 | 946 | 743 | 632 |
| 28 | | 1,660 | 4,210 | 2,090 | 957 | 753 | 645 |
| 29 | | 1,730 | 4,000 | 2,000 | 935 | 743 | 649 |
| 30 | | 1,570 | 3,720 | 1,950 | 914 | 715 | 645 |
| 31 | 597 | | 3,380 | | 883 | 697 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| April | 1,730 | 570 | 827 | 49,200 |
| May | 4,220 | 1,510 | 3,140 | 193,000 |
| June | 2,930 | 1,420 | 1,790 | 107,000 |
| July | 2,000 | 883 | 1,310 | 80,600 |
| August | 867 | 693 | 761 | 46,800 |
| September | 688 | 624 | 650 | 38,700 |
| The period | | | | 515,000 |

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

Between St. Anthony and mouth of river 15 separate canals divert from Teton River for irrigation. Records are available during a portion of each irrigation season from June, 1919, to September, 1928. 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, 1928*

| Day | June | July | Aug. | Sept. | Day | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,150 | 1,080 | 857 | 459 | 16 | 767 | 936 | 599 | 561 |
| 2 | 1,080 | 1,130 | 812 | 473 | 17 | 768 | 913 | 617 | 569 |
| 3 | 1,010 | 1,010 | 781 | 474 | 18 | 749 | 970 | 544 | 574 |
| 4 | 1,090 | 976 | 781 | 477 | 19 | 774 | 893 | 564 | 579 |
| 5 | 1,070 | 1,040 | 798 | 479 | 20 | 743 | 916 | 571 | 586 |
| 6 | 1,100 | 1,060 | 800 | 491 | 21 | 746 | 928 | 576 | 591 |
| 7 | 1,150 | 1,060 | 781 | 498 | 22 | 795 | 922 | 588 | 596 |
| 8 | 1,100 | 921 | 766 | 505 | 23 | 768 | 955 | 592 | 599 |
| 9 | 1,130 | 738 | 738 | 510 | 24 | 752 | 959 | 554 | 598 |
| 10 | 1,080 | 916 | 740 | 524 | 25 | 853 | 927 | 536 | 594 |
| 11 | 1,100 | 870 | 740 | 541 | 26 | 887 | 956 | 573 | 588 |
| 12 | 1,110 | 966 | 708 | 548 | 27 | 1,020 | 997 | 670 | 585 |
| 13 | 1,030 | 974 | 616 | 558 | 28 | 1,040 | 964 | 371 | 584 |
| 14 | 979 | 954 | 605 | 552 | 29 | 1,060 | 981 | 459 | 584 |
| 15 | 872 | 933 | 605 | 557 | 30 | 1,040 | 944 | 452 | 582 |
| | | | | | 31 | | 864 | 443 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| June | 1,150 | 743 | 960 | 57,100 |
| July | 1,130 | 738 | 957 | 58,800 |
| August | 857 | 371 | 640 | 39,400 |
| September | 599 | 459 | 547 | 32,500 |
| The period | | | | 188,000 |

## WILLOW CREEK NEAR RIRIE, IDAHO

LOCATION.—Water-stage recorder in about sec. 16, T. 3 N., R. 40 E., 3 miles ab
mouth of canyon and 6 miles southeast of Ririe.
RECORDS AVAILABLE.—December, 1916, to July, 1925; May to September, 19
EXTREMES.—Maximum discharge during year, 1,740 second-feet May 1 (g
height, 10.25 feet); minimum, 23 second-feet August 22 (gage height, 2.
feet).
1916–1924, 1928: Maximum discharge, 4,200 second-feet May 15, 19
(gage height, 16.3 feet); minimum, 10 second-feet August 31 to September
1924 (gage height, 1.91 feet).
REMARKS.—Records good. Discharge estimated May 6–14. Since the spring
1924, flow has been regulated by Grays Lake Dam, 40 miles upstream.

*Daily discharge, in second-feet, 1928*

| Day | May | June | July | Aug. | Sept. | Day | May | June | July | Aug. | Sept |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,680 | 394 | 171 | 50 | 33 | 16 | 1,030 | 282 | 97 | 30 | |
| 2 | 1,620 | 372 | 180 | 51 | | 17 | 928 | 274 | 96 | 31 | |
| 3 | 1,280 | 361 | 178 | 50 | | 18 | 828 | 305 | 97 | 30 | |
| 4 | 1,100 | 350 | 162 | 49 | | 19 | 780 | 301 | 91 | 27 | |
| 5 | 1,000 | 328 | 148 | 49 | | 20 | 756 | 282 | 86 | 26 | |
| 6 | | 312 | 140 | 49 | | 21 | 708 | 274 | 83 | 25 | |
| 7 | | 293 | 140 | 46 | | 22 | 660 | 270 | 79 | 24 | |
| 8 | | 280 | 138 | 44 | | 23 | 636 | 244 | 78 | 25 | |
| 9 | | 272 | 128 | 42 | | 24 | 624 | 230 | 75 | 26 | |
| 10 | | 266 | 120 | 40 | | 25 | 600 | 215 | 70 | 29 | |
| 11 | 1,130 | 282 | 114 | 37 | | 26 | 554 | 204 | 66 | 31 | |
| 12 | | 339 | 108 | 33 | | 27 | 427 | 193 | 64 | 34 | |
| 13 | | 328 | 104 | 32 | | 28 | 508 | 182 | 62 | 36 | |
| 14 | | 328 | 103 | 30 | | 29 | 462 | 175 | 62 | 39 | |
| 15 | | 308 | 100 | 30 | | 30 | 438 | 177 | 59 | 37 | |
| | 1,260 | | | | | 31 | 416 | | 55 | 34 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| May | 1,680 | 416 | 918 | 56,400 |
| June | 394 | 167 | 280 | 16,700 |
| July | 180 | 55 | 105 | 6,460 |
| August | 51 | 24 | 36.0 | 2,210 |
| The period | | | | 81,800 |

### BLACKFOOT RIVER NEAR BLACKFOOT, IDAHO

LOCATION.—Water-stage recorder in sec. 27, T. 3 S., R. 34 E., 2 mil
mouth and 8 miles southwest of Blackfoot.
RECORDS AVAILABLE.—July, 1913, to September, 1928.
EXTREMES.—Maximum discharge during year, 664 second-feet May
height, 8.47 feet); no flow for several hours on various days.
1913–1928: Maximum discharge, 868 second-feet May 21, 1921;
on numerous occasions.
REMARKS.—Records good. Discharge estimated June 1–3 and Septemb
Flow regulated by storage at Blackfoot Dam and by numerous canal
sions above station. No diversions from Blackfoot River below sta

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | May | June | July | Aug. | Sept. | Day | Oct. | May | June | July | Aug. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 516 | ------ | 12 | 160 | 44 | 228 | 16 | ------ | 469 | 421 | 39 | 160 |
| 2 | 691 | 661 | 9 | 268 | 51 | 152 | 17 | ------ | 502 | 316 | 26 | 180 |
| 3 | 658 | 645 | 7 | 328 | 97 | 124 | 18 | ------ | 535 | 473 | 9 | 121 |
| 4 | 606 | 604 | 56 | 347 | 111 | 34 | 19 | ------ | 501 | 556 | 9 | 110 |
| 5 | 634 | 408 | 142 | 297 | 108 | 4 | 20 | ------ | 429 | 605 | 10 | 75 |
| 6 | 619 | 188 | 130 | 188 | 200 | 2 | 21 | ------ | 404 | 623 | 4 | 92 |
| 7 | 514 | 150 | 48 | 164 | 236 | 7 | 22 | ------ | 394 | 468 | 7 | 59 |
| 8 | 448 | 251 | 24 | 217 | 168 | 12 | 23 | ------ | 362 | 328 | 21 | 32 |
| 9 | 382 | 312 | 6 | 286 | 101 | 17 | 24 | ------ | 370 | 270 | 6 | 37 |
| 10 | ------ | 221 | 101 | 130 | 19 | 50 | 25 | ------ | 341 | 156 | 5 | 74 |
| 11 | ------ | 291 | 158 | 9 | 10 | 89 | 26 | ------ | 234 | 39 | 7 | 144 |
| 12 | ------ | 280 | 249 | 8 | 37 | 75 | 27 | ------ | 154 | 10 | 4 | 280 |
| 13 | ------ | 383 | 387 | 10 | 128 | 84 | 28 | ------ | 174 | 33 | 5 | 375 |
| 14 | ------ | 529 | 389 | 22 | 106 | 196 | 29 | ------ | 119 | 95 | 22 | 333 |
| 15 | ------ | 449 | 383 | 11 | 95 | 270 | 30 | ------ | 93 | 95 | 24 | 305 |
| | | | | | | | 31 | ------ | 20 | ------ | 32 | 303 |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October 1–9 | 691 | 382 | 563 | 10,0 |
| May 2–31 | 661 | 20 | 349 | 20,80 |
| June | 623 | 6 | 220 | 13,10 |
| July | 347 | 4 | 86.3 | 5,31 |
| August | 375 | 10 | 135 | 8,30 |
| September | 270 | 2 | ·109 | 6,49 |

### MUD LAKE NEAR TERRETON, IDAHO

LOCATION.—Staff gage in NW. ¼ sec. 3, T. 6 N., R. 35 E., at C. O. Magill ranch in backwater of Camas Creek, 6 miles northeast of Terreton; and a 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 Magill ranch gage. Zero of gages is 4,775.33 feet above mean sea level.

RECORDS AVAILABLE.—April, 1921, to September, 1928.

EXTREMES.—Maximum contents during year, 34,800 acre-feet April 6 (gage height, 6.83 feet); minimum, 3,320 acre-feet September 13 (gage height, —0.05 foot).

1921–1928: Maximum contents, 61,660 acre-feet May 5, 1923 (gage height, 9.20 feet); minimum, that of September 13, 1928.

REMARKS.—Considerable water diverted from tributaries and from the lake during irrigation season. No regulation except as the supply in the lake is affected by pumping operations. Gage heights from gage at Owsley Canal Co.'s pump house furnished by Owsley Canal Co.

*Daily contents, in acre-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7,770 | 9,940 | 15,800 | 20,500 | 25,500 | 30,200 | 34,400 | 33,900 | 22,700 | 11,400 | 4,560 | 3,760 |
| 2 | 7,980 | 10,100 | 16,000 | 20,700 | 25,600 | 30,300 | 34,500 | 33,800 | 21,800 | 11,100 | 4,560 | 3,700 |
| 3 | 8,050 | 10,200 | 16,500 | 20,900 | 25,700 | 30,400 | 34,500 | 33,700 | 21,200 | 10,900 | 4,560 | 3,680 |
| 4 | 8,140 | 10,400 | 16,600 | 21,000 | 25,800 | 30,500 | 34,600 | 33,500 | 20,700 | 10,800 | 4,580 | 3,650 |
| 5 | 8,230 | 10,500 | 16,700 | 21,200 | 26,000 | 30,600 | 34,700 | 33,300 | 20,000 | 10,600 | 4,580 | 3,610 |
| 6 | 8,300 | 10,700 | 16,800 | 21,300 | 26,200 | 30,600 | 34,800 | 32,900 | 19,600 | 10,600 | 4,580 | 3,550 |
| 7 | 8,330 | 10,900 | 17,000 | 21,600 | 26,300 | 30,700 | 34,700 | 32,700 | 18,900 | 10,600 | 4,580 | 3,520 |
| 8 | 8,360 | 11,100 | 17,200 | 21,800 | 26,500 | 30,800 | 34,700 | 32,400 | 18,200 | 10,600 | 4,580 | 3,480 |
| 9 | 8,520 | 11,200 | 17,500 | 22,000 | 26,700 | 30,800 | 34,600 | 32,000 | 17,700 | 10,600 | 4,580 | 3,450 |
| 10 | 8,660 | 11,500 | 17,700 | 22,300 | 26,800 | 31,000 | 34,600 | 31,800 | 17,000 | 10,300 | 4,580 | 3,410 |
| 11 | 8,720 | 11,700 | 17,800 | 22,400 | 27,000 | 31,200 | 34,500 | 31,600 | 16,700 | 9,730 | 4,580 | 3,370 |
| 12 | 8,820 | 11,800 | 17,800 | 22,600 | 27,300 | 31,200 | 34,500 | 31,400 | 16,000 | 9,060 | 4,580 | 3,340 |
| 13 | 8,890 | 12,000 | 17,900 | 22,800 | 27,500 | 31,400 | 34,500 | 31,200 | 15,300 | 8,490 | 4,580 | 3,320 |
| 14 | 8,960 | 12,200 | 17,900 | 22,900 | 27,700 | 31,500 | 34,500 | 30,800 | 14,900 | 8,270 | 4,580 | 3,340 |
| 15 | 8,990 | 12,400 | 18,000 | 23,100 | 27,900 | 31,600 | 34,500 | 30,600 | 14,900 | 8,170 | 4,540 | 3,370 |
| 16 | 9,060 | 12,500 | 18,000 | 23,300 | 28,000 | 31,700 | 34,400 | 30,300 | 14,900 | 8,170 | 4,500 | 3,410 |
| 17 | 9,160 | 12,700 | 18,000 | 23,400 | 28,100 | 31,900 | 34,300 | 30,100 | 15,000 | 8,170 | 4,450 | 3,460 |
| 18 | 9,230 | 12,900 | 18,000 | 23,600 | 28,200 | 32,000 | 34,300 | 29,800 | 15,100 | 8,110 | 4,390 | 3,520 |
| 19 | 9,230 | 13,100 | 18,200 | 23,700 | 28,400 | 32,300 | 34,300 | 29,400 | 15,000 | 7,770 | 4,330 | 3,590 |
| 20 | 9,230 | 13,300 | 18,300 | 23,900 | 28,600 | 32,400 | 34,300 | 29,000 | 14,700 | 7,440 | 4,270 | 3,630 |
| 21 | 9,230 | 13,600 | 18,400 | 23,900 | 28,700 | 32,600 | 34,300 | 28,700 | 14,500 | 7,020 | 4,210 | 3,670 |
| 22 | 9,230 | 13,800 | 18,600 | 24,000 | 29,000 | 32,700 | 34,300 | 28,400 | 14,300 | 6,720 | 4,150 | 3,680 |
| 23 | 9,230 | 13,900 | 18,700 | 24,100 | 29,200 | 32,800 | 34,300 | 27,700 | 13,900 | 6,200 | 4,110 | 3,720 |
| 24 | 9,230 | 14,100 | 18,900 | 24,200 | 29,400 | 33,000 | 34,300 | 27,300 | 13,500 | 5,950 | 4,070 | 3,780 |
| 25 | 9,230 | 14,300 | 19,000 | 24,300 | 29,500 | 33,300 | 34,300 | 26,400 | 13,200 | 5,580 | 4,030 | 3,780 |
| 26 | 9,300 | 14,600 | 19,200 | 24,400 | 29,700 | 33,500 | 34,300 | 26,000 | 12,800 | 5,230 | 3,990 | 3,820 |
| 27 | 9,370 | 14,800 | 19,400 | 24,600 | 29,800 | 33,800 | 34,200 | 25,300 | 12,400 | 4,990 | 3,950 | 3,860 |
| 28 | 9,440 | 15,000 | 19,600 | 24,700 | 30,000 | 34,100 | 34,100 | 24,700 | 12,100 | 4,770 | 3,910 | 3,880 |
| 29 | 9,550 | 15,200 | 19,800 | 25,000 | 30,100 | 34,300 | 34,000 | 24,400 | 11,800 | 4,600 | 3,880 | 3,930 |
| 30 | 9,690 | 15,700 | 20,100 | 25,200 | -------- | 34,300 | 33,900 | 23,800 | 11,600 | 4,580 | 3,860 | 3,970 |
| 31 | 9,800 | -------- | 20,400 | 25,400 | -------- | 34,400 | -------- | 23,200 | -------- | 4,580 | 3,820 | ------ |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 69 second-feet November 23; maximum stage, 2.01 feet March 20; minimum discharge, 0.1 second-foot June 9 (gage height, −0.13 foot).

1925–1928: Maximum discharge recorded, 204 second-feet May 4, 1927; maximum gage height, that of March 20, 1928; no flow June 1–7, 1926.

REMARKS.—Records good except those for estimated periods, which are poor. Diversions for irrigation and stock water above station. Flow past station affected to some extent by losses through lava crevices in Lone Tree Reservoir, 29 miles upstream.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | a 20 | 43 | | | | | 30 | 8.5 | a 3.2 | 9.3 | 7.2 | 7.2 |
| 2 | 22 | 35 | | | | | 30 | 7.6 | a 2.8 | 8.5 | 5.9 | 6.5 |
| 3 | 23 | 34 | | | | | 30 | 8.1 | 2.5 | 6.8 | 5.3 | 5.9 |
| 4 | 24 | 36 | | | | | 39 | 14 | 1.8 | a 6.8 | 5.6 | 5.3 |
| 5 | 23 | 36 | | | | | 28 | 35 | 1.7 | a 6.8 | 6.8 | 5.3 |
| 6 | 22 | 39 | | | | | 22 | 35 | 1.0 | a 6.8 | 7.6 | a 5.6 |
| 7 | 21 | 40 | | | | | 22 | 30 | .7 | a 6.8 | 8.9 | a 5.9 |
| 8 | 24 | 40 | | | | | 25 | 28 | .4 | 6.8 | 10 | a 6.2 |
| 9 | 25 | 39 | | | | | 26 | 27 | .2 | 8.1 | 9.7 | a 6.5 |
| 10 | 24 | 39 | | | | a 25 | 24 | 22 | .5 | 10 | 8.5 | 6.8 |
| 11 | 24 | 41 | | | | | 21 | 23 | .4 | 14 | 6.5 | 11 |
| 12 | 24 | 48 | | | | | 19 | 25 | .4 | 17 | 5.3 | 14 |
| 13 | 24 | 53 | | | | | 19 | 26 | .6 | 16 | 5.3 | 16 |
| 14 | 24 | 54 | | | | | 17 | 30 | .6 | 14 | 5.3 | 16 |
| 15 | 24 | 54 | | | 20 | | 16 | 32 | .4 | 15 | 5.0 | 17 |
| 16 | 23 | 54 | a 25 | a 20 | | | 16 | 39 | .6 | 14 | 5.3 | 17 |
| 17 | 24 | 54 | | | | | 16 | 37 | 1.5 | 12 | 5.3 | 16 |
| 18 | 24 | 53 | | | | | 16 | 36 | 1.2 | 11 | 5.3 | 16 |
| 19 | 24 | 49 | | | | | 17 | 35 | 1.5 | 9.3 | 5.3 | a 14 |
| 20 | 23 | 44 | | | | | 18 | 35 | 4.1 | 8.9 | 5.3 | a 12 |
| 21 | 22 | 42 | | | | a 30 | 20 | 34 | 6.2 | 8.9 | 5.3 | a 10 |
| 22 | 23 | 37 | | | | | 21 | 29 | 4.1 | 8.1 | 5.3 | a 8.1 |
| 23 | 23 | 42 | | | | | 21 | 21 | 3.4 | 6.8 | 5.3 | 6.2 |
| 24 | 24 | 41 | | | | 23 | 19 | 16 | 3.2 | 5.3 | 5.0 | 6.2 |
| 25 | 24 | 41 | | | | 23 | 17 | 12 | 11 | 5.3 | 5.0 | 6.2 |
| 26 | 25 | 41 | | | | 23 | 16 | 6.5 | 11 | 5.0 | a 6.2 | 5.6 |
| 27 | 29 | 42 | | | | 36 | 14 | 6.2 | 12 | 7.6 | a 7.4 | 5.6 |
| 28 | 29 | 43 | | | | 46 | 14 | 5.6 | 12 | 7.2 | 8.5 | 5.3 |
| 29 | 36 | 29 | | | | 51 | 13 | 4.7 | 12 | 6.8 | 8.5 | 5.3 |
| 30 | 40 | 28 | | | | 48 | 13 | 4.1 | 13 | 7.2 | 8.5 | 5.3 |
| 31 | 41 | | | | | a 39 | | 3.6 | | 7.6 | 8.5 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 41 | 20 | 25.2 | 1,550 |
| November | 54 | 28 | 42.4 | 2,520 |
| December | | | 25.0 | 1,540 |
| January | | | 20.0 | 1,230 |
| February | | | 20.0 | 1,150 |
| March | 51 | | 28.7 | 1,760 |
| April | 30 | 13 | 20.3 | 1,210 |
| May | 39 | 3.6 | 21.8 | 1,340 |
| June | 13 | .2 | 3.80 | 226 |
| July | 17 | 5.0 | 9.15 | 563 |
| August | 10 | 5.0 | 6.55 | 403 |
| September | 17 | 5.3 | 9.13 | 543 |
| The year | 54 | .2 | 19.3 | 14,000 |

a Estimated or interpolated.

### BEAVER CREEK AT DUBOIS, IDAHO

LOCATION.—Water-stage recorder in NW. ¼ sec. 21, T. 10 N., R. 36 E., at Ed F. Palmer ranch, half a mile north of Dubois. This stream is locally known as Dry Creek.

DRAINAGE AREA.—220 square miles.

RECORDS AVAILABLE.—April, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 205 second-feet March 23; maximum stage, 2.25 feet March 22; no flow subsequent to July 31.

1921–1928: Maximum discharge, 637 second-feet May 20, 1922; maximum stage, 6.50 feet ± 0.20 foot March 16, 1926, during ice jam; no flow August 3 to November 30, 1924, and July 31 to September 30, 1928.

REMARKS.—Records good below 30 second-feet; others fair, except those for estimated periods, November 22 to December 4, March 20–22, June 19–21, and July 26–31, which are fair. A few small diversions several miles upstream. During the summer practically entire flow is diverted below gage for irrigation.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Mar. | Apr. | May | June | July |
|---|---|---|---|---|---|---|---|---|
| 1 | 18 | 12 | 12 | | 25 | 17 | 3 | 3 |
| 2 | 18 | 15 | | | 23 | 16 | 3 | 5 |
| 3 | 18 | 15 | | | 19 | 14 | 3 | 7 |
| 4 | 17 | 16 | | | 11 | 11 | 3 | 5 |
| 5 | 16 | 17 | | | 19 | 11 | 2 | 3 |
| 6 | 15 | 17 | | | 17 | 10 | 2 | 3 |
| 7 | 15 | 17 | | | 10 | 10 | 2 | 3 |
| 8 | 14 | 16 | | | 10 | 11 | 3 | 5 |
| 9 | 14 | 16 | | | 15 | 11 | 3 | 5 |
| 10 | 14 | 25 | | | 21 | 11 | 3 | 4 |
| 11 | 14 | 29 | | | 13 | 10 | 3 | 3 |
| 12 | 14 | 22 | | | 13 | 10 | 4 | 3 |
| 13 | 14 | 20 | | | 15 | 13 | 4 | 2 |
| 14 | 14 | 21 | | | 13 | 18 | 4 | 3 |
| 15 | 14 | 22 | | | 14 | 14 | 5 | 4 |
| 16 | 14 | 22 | | | 14 | 13 | 4 | 3 |
| 17 | 14 | 22 | | | 21 | 12 | 5 | 4 |
| 18 | 14 | 19 | | | 20 | 9 | 8 | 4 |
| 19 | 13 | 19 | | | 16 | 6 | 8 | 5 |
| 20 | 13 | 20 | | | 17 | 6 | 8 | 4 |
| 21 | 13 | 20 | | 100 | 13 | 5 | 8 | 3 |
| 22 | 14 | | | | 21 | 4 | 8 | 3 |
| 23 | 14 | | | 178 | 24 | 4 | 7 | 2 |
| 24 | 15 | | | 108 | 28 | 4 | 6 | 2 |
| 25 | 15 | | | 60 | 29 | 4 | 5 | 2 |
| 26 | 16 | 17 | | 29 | 29 | 4 | 4 | |
| 27 | 24 | | | 28 | 29 | 4 | 4 | 2 |
| 28 | 26 | | | 20 | 25 | 5 | 5 | |
| 29 | 22 | | | 19 | 22 | 4 | 4 | 1 |
| 30 | 19 | | | 17 | 19 | 4 | 3 | 1 |
| 31 | 18 | | | 23 | | 3 | | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 26 | 13 | 15.9 | 978 |
| November | | 12 | 18.5 | 1,100 |
| March 20–31 | | 17 | 65.2 | 1,550 |
| April | 29 | 10 | 18.8 | 1,120 |
| May | 18 | 3 | 9.0 | 553 |
| June | 8 | 2 | 4.5 | 268 |
| July | 7 | | 3.2 | 197 |

### BEAVER CREEK AT CAMAS, IDAHO

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

RECORDS AVAILABLE.—April, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 62 second-feet March 23 (gage height, 1.85 feet); no flow prior to March 20 and after April 4.

1921–1928: Maximum discharge, 153 second-feet June 1, 1921, and March 18 and 19, 1926; no flow past station except during spring of each year.

REMARKS.—Records good. During summer entire flow is diverted for irrigation above Dubois, 14 miles above gage.

*Daily and monthly discharge, in second-feet, 1927–28*

| Date | Discharge | Date | Discharge | Date | Discharge |
|---|---|---|---|---|---|
| Mar. 20 | 20 | Mar. 26 | 18 | Apr. 1 | 2 |
| Mar. 21 | 42 | Mar. 27 | 18 | Apr. 2 | 2 |
| Mar. 22 | 42 | Mar. 28 | 2 | Apr. 3 | 2 |
| Mar. 23 | 62 | Mar. 29 | 2 | Apr. 4 | 2 |
| Mar. 24 | 50 | Mar. 30 | 2 | | |
| Mar. 25 | 50 | Mar. 31 | 2 | | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| March | 62 | 0 | 10.0 | 615 |
| April | 2 | 0 | .3 | 18 |
| The period | | | | 633 |

NOTE.—No flow on days for which no discharge is given.

### 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, 1928.

EXTREMES.—Maximum discharge during year, 168 second-feet May 22–24, 26–29; minimum, 39 second-feet April 1 (gage height, 0.62 foot).

1921–1928: Maximum discharge, 176 second-feet June 14, 1923; minimum, 13 second-feet April 15 and 20, 1923 (gage height, 0.23 foot).

REMARKS.—Records for October to April and May 28 through July good; others fair. Numerous irrigation diversions above and below station. Water stored in a small reservoir on Dry Creek, 40 miles above station, is released during irrigation season and carried through Canal and Wet Creeks to Little Lost River and diverted into the Blaine County Investment Co.'s main canal one-fourth mile below station. Gage-height record furnished by water master for Little Lost River.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1 | 85 | | 39 | 104 | 152 | 117 | 79 | 63 |
| 2 | 85 | | 63 | 104 | 138 | 124 | 78 | 62 |
| 3 | 79 | | 53 | 104 | 138 | 124 | 78 | 60 |
| 4 | 85 | | 51 | 98 | 138 | 117 | 78 | 59 |
| 5 | 85 | | 42 | 98 | 131 | 110 | 91 | 58 |
| 6 | 85 | | 52 | 104 | 131 | 110 | 79 | 59 |
| 7 | 85 | | 53 | 110 | 138 | 110 | 75 | 59 |
| 8 | 91 | | 44 | 110 | 131 | 104 | 69 | 60 |
| 9 | 85 | | 58 | 124 | 131 | 91 | 69 | 60 |
| 10 | 85 | | 57 | 124 | 131 | 91 | 67 | 68 |
| 11 | 85 | | 58 | 131 | 131 | 91 | 69 | 64 |
| 12 | 79 | | 57 | 145 | 138 | 91 | 69 | 64 |
| 13 | 85 | | 59 | 152 | 138 | 98 | 71 | 69 |
| 14 | 85 | | 56 | 160 | 138 | 98 | 62 | 77 |
| 15 | 79 | | 60 | 160 | 138 | 91 | 62 | 69 |
| 16 | 79 | | 60 | 152 | 131 | 85 | 60 | 66 |
| 17 | 79 | | 65 | 152 | 131 | 85 | 62 | 65 |
| 18 | 77 | | 67 | 152 | 131 | 91 | 63 | 64 |
| 19 | 77 | 57 | 68 | 152 | 131 | 85 | 59 | 66 |
| 20 | 77 | | 66 | 160 | 131 | 85 | 60 | 66 |
| 21 | 78 | | 71 | 160 | 131 | 79 | 63 | 65 |
| 22 | 78 | | 67 | 168 | 124 | 75 | 58 | 64 |
| 23 | 78 | | 67 | 168 | 124 | 77 | 68 | 59 |
| 24 | 79 | | 72 | 168 | 117 | 72 | 65 | 57 |
| 25 | 79 | | 85 | 160 | 117 | 72 | 65 | 58 |
| 26 | 79 | | 85 | 168 | 117 | 74 | 65 | 55 |
| 27 | 85 | | 117 | 168 | 117 | 77 | 68 | 56 |
| 28 | 85 | | 124 | 168 | 117 | 78 | 69 | 62 |
| 29 | 77 | | 117 | 168 | 117 | 78 | 65 | 63 |
| 30 | 79 | | 110 | 160 | 117 | 77 | 65 | 65 |
| 31 | 79 | | | 160 | | 73 | 62 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 91 | 77 | 81.5 | 5,010 |
| April | 124 | 39 | 68.1 | 4,050 |
| May | 168 | 98 | 142 | 8,730 |
| June | 152 | 117 | 130 | 7,740 |
| July | 124 | 72 | 91.3 | 5,610 |
| August | 91 | 58 | 68.2 | 4,190 |
| September | 77 | 55 | 62.7 | 3,730 |

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

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

RECORDS AVAILABLE.—April, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 87 second-feet May 24 and 25 (gage height, 1.82 feet); minimum, estimated 0.8 second-foot March 19 (gage height, 0.52 foot).

1924–1928: Maximum discharge, that of May 24 and 25, 1928; no flow at times during nonirrigation periods.

REMARKS.—Records good. Discharge estimated April 6 and interpolated July 26. 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 furnished by water master for Little Lost River, and one discharge measurement furnished by Lynn Crandall, engineer, of Mackay, Idaho.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1 | 14 | | 3.8 | 32 | 76 | 43 | 17 | 11 |
| 2 | 14 | | 3.8 | 32 | 58 | 43 | 16 | 11 |
| 3 | 14 | | 3.8 | 34 | 57 | 43 | 17 | 11 |
| 4 | 14 | | 3.8 | 34 | 57 | 43 | 17 | 11 |
| 5 | 14 | | 3.8 | 34 | 51 | 43 | 17 | 11 |
| 6 | 14 | | 9 | 35 | 51 | 43 | 17 | 11 |
| 7 | 14 | | 13 | 39 | 53 | 41 | 17 | 11 |
| 8 | 14 | | 11 | 40 | 53 | 35 | 17 | 11 |
| 9 | 19 | | 11 | 48 | 53 | 25 | 14 | 11 |
| 10 | 19 | | 11 | 54 | 53 | 24 | 12 | 11 |
| 11 | 19 | | 14 | 58 | 53 | 23 | 12 | 10 |
| 12 | 19 | | 9.7 | 66 | 54 | 22 | 12 | 10 |
| 13 | 21 | | 9.7 | 76 | 55 | 22 | 12 | 10 |
| 14 | 21 | | 8.2 | 82 | 55 | 21 | 12 | 12 |
| 15 | 26 | | 7.3 | 82 | 55 | 21 | 12 | 12 |
| 16 | 27 | | 7.3 | 82 | 53 | 20 | 12 | 12 |
| 17 | 28 | | 7.3 | 82 | 53 | 20 | 12 | 12 |
| 18 | 27 | | 7.3 | 75 | 53 | 25 | 12 | 12 |
| 19 | 27 | 0.8 | 7.3 | 78 | 53 | 21 | 11 | 12 |
| 20 | 27 | | 7.3 | 84 | 53 | 19 | 11 | 15 |
| 21 | 30 | | 7.6 | 84 | 53 | 18 | 11 | 17 |
| 22 | 32 | | 10 | 82 | 47 | 18 | 11 | 17 |
| 23 | 25 | | 10 | 86 | 44 | 17 | 11 | 17 |
| 24 | 26 | | 10 | 87 | 44 | 16 | 11 | 17 |
| 25 | 26 | | 17 | 87 | 44 | 16 | 11 | 11 |
| 26 | 27 | | 18 | 86 | 43 | 16 | 11 | 11 |
| 27 | 28 | | 25 | 84 | 43 | 16 | 11 | 10 |
| 28 | 29 | | 30 | 84 | 43 | 17 | 11 | 10 |
| 29 | 30 | | 42 | 84 | 43 | 17 | 11 | 10 |
| 30 | 34 | | 37 | 81 | 43 | 17 | 11 | 10 |
| 31 | 35 | | | 81 | | 17 | 11 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 35 | 14 | 23.0 | 1,410 |
| April | 42 | 3.8 | 12.2 | 726 |
| May | 87 | 32 | 66.9 | 4,110 |
| June | 76 | 43 | 51.5 | 3,060 |
| July | 43 | 16 | 25.2 | 1,550 |
| August | 17 | 11 | 12.9 | 793 |
| September | 17 | 10 | 11.9 | 708 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 2,020 second-feet May 27 (gage height, 4.18 feet); minimum, 73 second-feet April 6–8 (gage height, 1.08 feet).

1904–1914, 1920–1928: Maximum discharge, 3,500 second-feet June 12, 1921 (gage height, 5.94 feet); minimum, 35 second-feet April 2, 1909.

REMARKS.—Records good except those for estimated periods, which are fair. Several small diversions above gage and Hammerly ditch, capacity about 20 second-feet, a quarter of a mile below gage. Water commissioner for Big Lost River furnished result of three discharge measurements.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 160 | 182 | | 93 | 654 | a 1,070 | 435 | 196 | 106 |
| 2 | 162 | 168 | | 86 | 545 | 910 | 430 | 190 | 106 |
| 3 | 160 | 144 | | 83 | 466 | 786 | 401 | 184 | 104 |
| 4 | 168 | 139 | | 79 | 388 | 779 | 430 | 202 | 102 |
| 5 | 155 | 139 | | 76 | 440 | 807 | 460 | 215 | 101 |
| 6 | 152 | 137 | | 73 | a 587 | 828 | 440 | 193 | 97 |
| 7 | 149 | 137 | | 73 | a 734 | 800 | 401 | 187 | 95 |
| 8 | 152 | 137 | | 73 | a 881 | 700 | 388 | 179 | 93 |
| 9 | 155 | 168 | | 76 | a 1,030 | 642 | 406 | 173 | 93 |
| 10 | 152 | 182 | | 76 | a 1,180 | 599 | 430 | 167 | 97 |
| 11 | 147 | 174 | | 79 | a 1,320 | 599 | 415 | 165 | 95 |
| 12 | 144 | 210 | | 83 | 1,470 | 563 | 420 | 167 | 93 |
| 13 | 142 | | | 90 | 1,320 | 533 | 420 | 154 | 97 |
| 14 | 147 | | | 91 | a 1,020 | 521 | 410 | 152 | 95 |
| 15 | 147 | | | 95 | 872 | 493 | 401 | 144 | 93 |
| 16 | 144 | | | 102 | 800 | 455 | 370 | 136 | 93 |
| 17 | 144 | | | 125 | 821 | 445 | 357 | 132 | 93 |
| 18 | 142 | | | 110 | 962 | 420 | 332 | 127 | 93 |
| 19 | 139 | | | 95 | 1,170 | 406 | 301 | 123 | 93 |
| 20 | 134 | | | 101 | 1,240 | 406 | 282 | 121 | 93 |
| 21 | 132 | | | 97 | 1,420 | 410 | 268 | 119 | 93 |
| 22 | 132 | | | 106 | 1,610 | 445 | 265 | 116 | 93 |
| 23 | 127 | | | 134 | 1,660 | 504 | 262 | a 118 | 91 |
| 24 | 125 | | | 193 | 1,610 | 545 | 258 | a 120 | 91 |
| 25 | 125 | | | 238 | 1,760 | 635 | 265 | 123 | 90 |
| 26 | 180 | | | 361 | 1,910 | 694 | 262 | 116 | 91 |
| 27 | 194 | | | 545 | 1,810 | 661 | 251 | 123 | 95 |
| 28 | 185 | | | 611 | 1,660 | 569 | 248 | 119 | 93 |
| 29 | 180 | | | 466 | 1,560 | 521 | 231 | 112 | 95 |
| 30 | 168 | | | 482 | a 1,400 | 460 | 225 | 108 | 97 |
| 31 | 177 | | 93 | | a 1,240 | | 212 | 108 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 194 | 125 | 152 | 9,350 |
| November 1–12 | 210 | 137 | 160 | 3,810 |
| April | 611 | 73 | 166 | 9,880 |
| May | 1,910 | 388 | 1,150 | 70,700 |
| June | 1,070 | 406 | 607 | 36,100 |
| July | 460 | 212 | 344 | 21,200 |
| August | 215 | 108 | 148 | 9,100 |
| September | 106 | 90 | 95.4 | 5,680 |

a Interpolated.

### 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, 1928.

EXTREMES.—Maximum mean daily discharge during year, 750 second-feet May 27 (gage height, 3.10 feet); no flow March 24 to May 1.

1919–1928: Maximum discharge, 999 second-feet June 16, 1922 (gage height, 3.37 feet); no flow for long periods.

REMARKS.—Records good except those for estimated periods, November 1–4, December 4 to March 23, June 10 and 11, which are poor. Several canals divert in vicinity of Chilly, above "dry beds" which extend from a few miles above gage to a point about 15 miles above. This record represents a portion 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 channel of Warm Spring Creek, will show the entire flow of Big Lost River at this point, and practically the entire surface flow into Mackay Reservoir. Gage-height record and two discharge measurements furnished by water commissioner for Big Lost River.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.4 | 2.6 | 3.4 | | | 1.2 | 0 | 366 | 150 | 12 | 10 |
| 2 | 6.0 | 2.7 | 3.2 | | 2.1 | | 24 | 334 | 146 | 12 | 9.6 |
| 3 | 5.7 | 2.7 | 3.9 | | | 1.0 | 32 | 306 | 140 | 12 | 9.6 |
| 4 | 5.7 | 2.8 | | 2.4 | 2.0 | | 28 | 283 | 132 | 18 | 9.2 |
| 5 | 5.5 | 2.8 | | | | | 28 | 278 | 142 | 23 | 9.2 |
| 6 | 5.0 | 2.6 | 3.4 | | | | 49 | 280 | 136 | 20 | 9.2 |
| 7 | 4.7 | 2.4 | | 2.4 | 2.0 | .7 | 109 | 280 | 119 | 18 | 9.2 |
| 8 | 4.7 | 2.2 | | | | | 150 | 256 | 92 | 17 | 8.8 |
| 9 | 4.4 | 2.4 | | | | | 234 | 234 | 72 | 16 | 8.4 |
| 10 | 4.4 | 2.8 | 3.0 | | | | 315 | 237 | 68 | 15 | 8.8 |
| 11 | 3.9 | 2.8 | | 2.4 | 2.0 | .4 | 343 | 240 | 68 | 14 | 8.8 |
| 12 | 3.2 | 2.8 | | | | | 458 | 243 | 67 | 13 | 9.2 |
| 13 | 3.0 | 2.6 | | | | | 489 | 221 | 70 | 12 | 9.2 |
| 14 | 2.8 | 2.8 | 3.1 | 2.4 | | | 414 | 216 | 73 | 12 | 9.2 |
| 15 | 2.6 | 3.0 | | | 1.9 | | 338 | 202 | 70 | 12 | 9.2 |
| 16 | 2.4 | 3.4 | | | | | 287 | 187 | 64 | 11 | 9.2 |
| 17 | 2.2 | 3.9 | 3.2 | 2.4 | | | 269 | 172 | 61 | 10 | 9.2 |
| 18 | 2.0 | 4.2 | | | 1.8 | .2 | 292 | 160 | 59 | 12 | 9.6 |
| 19 | 2.0 | 4.4 | | | | | 363 | 144 | 55 | 10 | 9.6 |
| 20 | 1.8 | 4.4 | | | | | 400 | 142 | 51 | 10 | 10 |
| 21 | 1.8 | 4.4 | 3.1 | 2.4 | 1.7 | | 443 | 123 | 47 | 10 | 11 |
| 22 | 1.6 | 4.4 | | | | | 539 | 117 | 45 | 12 | 11 |
| 23 | 1.4 | 4.4 | | 2.4 | | | 591 | 126 | 39 | 11 | 11 |
| 24 | 1.3 | 4.4 | 3.0 | | | 0 | 591 | 148 | 22 | 12 | 11 |
| 25 | 1.3 | 4.4 | | | 1.6 | 0 | 665 | 183 | 12 | 12 | 11 |
| 26 | 1.6 | 4.4 | | 2.3 | | 0 | 706 | 212 | 12 | 12 | 10 |
| 27 | 1.6 | 4.7 | 2.7 | 2.2 | 1.4 | 0 | 750 | 225 | 10 | 12 | 9.6 |
| 28 | 2.2 | 5.0 | | 2.2 | | 0 | 665 | 208 | 10 | 12 | 9.6 |
| 29 | 2.6 | 4.4 | | | | 0 | 591 | 189 | 10 | 10 | 9.6 |
| 30 | 2.6 | 3.9 | | 2.1 | ------- | 0 | 506 | 178 | 10 | 10 | 10 |
| 31 | 2.6 | ------- | 2.4 | | ------- | 0 | 428 | ------- | 10 | 10 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 6.4 | 1.3 | 3.19 | 196 |
| November | 5.0 | 2.2 | 3.49 | 208 |
| December | ---------- | ---------- | 3.09 | 190 |
| January | ---------- | ---------- | 2.35 | 144 |
| February | ---------- | ---------- | 1.82 | 105 |
| March | ---------- | 0 | .36 | 22 |
| May | 750 | 0 | 358 | 22,000 |
| June | 366 | 117 | 216 | 12,900 |
| July | 150 | 10 | 66.5 | 4,090 |
| August | 23 | 10 | 13.0 | 799 |
| September | 11 | 8.4 | 9.6 | 571 |
| The year | 750 | 0 | 56.8 | 41,200 |

NOTE.—No flow during April.

### 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, 1928.

EXTREMES.—Maximum mean daily discharge during year, 387 second-feet (gage height, 2.68 feet); minimum, 28 second-feet March 27 to April 24 (gage height, 1.10 feet).

1919–1928: Maximum discharge, estimated 1,200 second-feet during period 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. Discharge interpolated October 5 6, 8–11, 13, 14, 16–18, 20, and 21. Several canals divert water above the "dry beds" which extend from a point a few miles above to a point near Chilly about 15 miles above station. Gage-height record and three discharge measurements furnished by water commissioner for Big Lost River. This record represents part of the natural flow of Big Lost River and, taken in conjunction with record for east channel of Big Lost River and east and west channels of Warm Spring Creek, will show the entire surface flow of Big Lost River at this point and represents practically the entire flow into Mackay Reservoir.

*Daily discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 51 | 48 | 44 | 37 | 32 | 30 | 28 | 34 | 206 | 93 | 41 | 40 |
| 2 | 51 | 48 | 44 | 37 | 34 | 30 | 28 | 46 | 183 | 93 | 41 | 40 |
| 3 | 51 | 48 | 44 | 37 | 34 | 30 | 28 | 50 | 164 | 91 | 42 | 40 |
| 4 | 51 | 48 | 42 | 37 | 34 | 30 | 28 | 48 | 150 | 82 | 44 | 40 |
| 5 | 50 | 46 | 42 | 37 | 34 | 29 | 28 | 48 | 141 | 82 | 45 | 40 |
| 6 | 49 | 46 | 42 | 37 | 34 | 29 | 28 | 60 | 141 | 80 | 44 | 40 |
| 7 | 48 | 46 | 42 | 37 | 32 | 29 | 28 | 89 | 141 | 76 | 42 | 40 |
| 8 | 48 | 48 | 41 | 37 | 32 | 29 | 28 | 121 | 134 | 69 | 41 | 40 |
| 9 | 48 | 50 | 41 | 37 | 32 | 29 | 28 | 150 | 127 | 57 | 41 | 40 |
| 10 | 48 | 51 | 41 | 37 | 32 | 29 | 28 | 181 | 121 | 60 | 40 | 40 |
| 11 | 48 | 48 | 40 | 37 | 32 | 29 | 28 | 200 | 127 | 66 | 40 | 41 |
| 12 | 48 | 46 | 40 | 37 | 32 | 29 | 28 | 246 | 125 | 67 | 40 | 41 |
| 13 | 47 | 46 | 40 | 37 | 32 | 29 | 28 | 296 | 118 | 69 | 40 | 42 |
| 14 | 47 | 46 | 40 | 37 | 32 | 29 | 28 | 275 | 116 | 74 | 38 | 42 |
| 15 | 46 | 46 | 40 | 37 | 32 | 29 | 28 | 238 | 112 | 71 | 38 | 42 |
| 16 | 46 | 48 | 40 | 37 | 32 | 29 | 28 | 206 | 106 | 71 | 38 | 42 |
| 17 | 46 | 48 | 38 | 36 | 32 | 29 | 28 | 196 | 101 | 69 | 38 | 42 |
| 18 | 45 | 48 | 38 | 36 | 32 | 29 | 28 | 198 | 97 | 66 | 37 | 42 |
| 19 | 45 | 48 | 38 | 36 | 32 | 29 | 28 | 223 | 87 | 62 | 37 | 42 |
| 20 | 45 | 48 | 38 | 36 | 32 | 29 | 28 | 241 | 87 | 57 | 37 | 41 |
| 21 | 45 | 48 | 38 | 36 | 32 | 29 | 28 | 264 | 87 | 57 | 37 | 41 |
| 22 | 45 | 48 | 38 | 35 | 31 | 29 | 28 | 304 | 82 | 52 | 40 | 41 |
| 23 | 45 | 46 | 38 | 34 | 31 | 29 | 28 | 340 | 80 | 48 | 40 | 41 |
| 24 | 45 | 45 | 37 | 32 | 31 | 29 | 28 | 334 | 84 | 45 | 40 | 41 |
| 25 | 45 | 45 | 37 | 32 | 30 | 29 | 29 | 343 | 89 | 46 | 40 | 41 |
| 26 | 50 | 45 | 37 | 32 | 30 | 29 | 29 | 363 | 97 | 45 | 41 | 41 |
| 27 | 48 | 45 | 37 | 32 | 30 | 28 | 29 | 387 | 101 | 45 | 41 | 41 |
| 28 | 48 | 45 | 37 | 32 | 30 | 28 | 30 | 354 | 99 | 46 | 41 | 41 |
| 29 | 48 | 45 | 37 | 32 | 30 | 28 | 30 | 323 | 95 | 45 | 40 | 41 |
| 30 | 48 | 45 | 37 | 32 | ------ | 28 | 30 | 282 | 93 | 44 | 40 | 41 |
| 31 | 48 | ------ | 37 | 32 | ------ | 28 | ------ | 238 | ------ | 42 | 40 | ------ |

*Monthly discharge, in second-feet, of Big Lost River (west channel) above Mackay Reservoir, near Mackay, Idaho, 1927–28*

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 51 | 45 | 47.5 | 2,920 |
| November | 51 | 45 | 46.9 | 2,790 |
| December | 44 | 37 | 39.5 | 2,430 |
| January | 37 | 32 | 35.4 | 2,180 |
| February | 34 | 30 | 31.9 | 1,830 |
| March | 30 | 28 | 29.0 | 1,780 |
| April | 30 | 28 | 28.3 | 1,680 |
| May | 387 | 34 | 215 | 13,200 |
| June | 206 | 80 | 116 | 6,900 |
| July | 93 | 42 | 63.5 | 3,900 |
| August | 45 | 37 | 40.1 | 2,470 |
| September | 42 | 40 | 40.9 | 2,430 |
| The year | 387 | 28 | 61.4 | 44,500 |

*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, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 190 | 180 | 174 | 163 | 157 | 146 | 135 | 119 | 796 | 385 | 141 | 145 |
| 2 | 185 | 180 | 174 | 162 | 159 | 146 | 134 | 156 | 727 | 380 | 143 | 143 |
| 3 | 186 | 181 | 173 | 163 | 159 | 146 | 134 | 170 | 670 | 368 | 144 | 143 |
| 4 | 186 | 181 | 168 | 163 | 159 | 146 | 133 | 165 | 625 | 349 | 157 | 144 |
| 5 | 184 | 179 | 170 | 164 | 159 | 145 | 131 | 167 | 603 | 360 | 165 | 143 |
| 6 | 183 | 179 | 168 | 164 | 159 | 145 | 131 | 214 | 605 | 351 | 161 | 143 |
| 7 | 183 | 178 | 166 | 164 | 158 | 146 | 131 | 323 | 604 | 327 | 158 | 143 |
| 8 | 184 | 180 | 166 | 164 | 158 | 146 | 133 | 416 | 573 | 285 | 155 | 143 |
| 9 | 183 | 184 | 166 | 164 | 155 | 146 | 133 | 546 | 541 | 251 | 154 | 142 |
| 10 | 182 | 186 | 166 | 165 | 155 | 146 | 133 | 674 | 534 | 256 | 151 | 144 |
| 11 | 180 | 179 | 164 | 165 | 155 | 142 | 131 | 737 | 548 | 268 | 150 | 147 |
| 12 | 179 | 176 | 164 | 165 | 155 | 142 | 132 | 923 | 547 | 270 | 144 | 148 |
| 13 | 175 | 176 | 163 | 165 | 155 | 142 | 130 | 1,040 | 518 | 278 | 138 | 152 |
| 14 | 174 | 176 | 163 | 165 | 154 | 144 | 123 | 932 | 510 | 288 | 139 | 150 |
| 15 | 173 | 176 | 162 | 165 | 153 | 144 | 123 | 806 | 489 | 280 | 139 | 150 |
| 16 | 170 | 180 | 162 | 165 | 153 | 144 | 121 | 707 | 466 | 271 | 138 | 150 |
| 17 | 162 | 183 | 160 | 164 | 153 | 144 | 118 | 673 | 435 | 261 | 137 | 150 |
| 18 | 160 | 181 | 161 | 164 | 153 | 144 | 116 | 698 | 412 | 252 | 138 | 154 |
| 19 | 160 | 181 | 161 | 164 | 153 | 145 | 117 | 794 | 377 | 238 | 136 | 153 |
| 20 | 159 | 183 | 162 | 164 | 153 | 145 | 115 | 863 | 374 | 224 | 137 | 152 |
| 21 | 159 | 183 | 164 | 164 | 153 | 145 | 113 | 947 | 354 | 212 | 138 | 153 |
| 22 | 158 | 180 | 166 | 158 | 151 | 145 | 115 | 1,110 | 337 | 201 | 145 | 153 |
| 23 | 157 | 178 | 166 | 157 | 151 | 144 | 110 | 1,210 | 337 | 189 | 142 | 151 |
| 24 | 157 | 177 | 165 | 156 | 150 | 143 | 104 | 1,210 | 368 | 164 | 144 | 151 |
| 25 | 158 | 177 | 165 | 156 | 149 | 141 | 106 | 1,300 | 414 | 154 | 144 | 153 |
| 26 | 170 | 177 | 166 | 156 | 148 | 140 | 108 | 1,380 | 454 | 154 | 147 | 152 |
| 27 | 168 | 178 | 166 | 156 | 148 | 138 | 109 | 1,450 | 473 | 153 | 145 | 152 |
| 28 | 175 | 178 | 165 | 155 | 147 | 138 | 113 | 1,320 | 450 | 154 | 145 | 152 |
| 29 | 176 | 176 | 165 | 155 | 147 | 136 | 115 | 1,200 | 425 | 150 | 142 | 150 |
| 30 | 179 | 175 | 164 | 155 | ------ | 136 | 116 | 1,050 | 412 | 144 | 142 | 152 |
| 31 | 179 | ------ | 160 | 156 | ------ | 135 | ------ | 907 | ------ | 141 | 145 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 190 | 157 | 173 | 10,600 |
| November | 186 | 175 | 179 | 10,700 |
| December | 174 | 160 | 165 | 10,100 |
| January | 165 | 155 | 161 | 9,900 |
| February | 159 | 147 | 154 | 8,860 |
| March | 146 | 135 | 143 | 8,790 |
| April | 135 | 104 | 122 | 7,260 |
| May | 1,450 | 119 | 781 | 48,000 |
| June | 796 | 337 | 499 | 29,700 |
| July | 385 | 141 | 250 | 15,400 |
| August | 165 | 136 | 145 | 8,920 |
| September | 154 | 142 | 149 | 8,870 |
| The year | 1,450 | 104 | 244 | 177,000 |

### MACKAY RESERVOIR NEAR MACKAY, IDAHO

LOCATION.—Staff gage on head-gate tower of dam in sec. 12, T. 7 N., R. 23 E., 4 miles northwest of Mackay. Zero of gage is 6,000 feet above sea level.

RECORDS AVAILABLE.—January, 1919, to September, 1928.

EXTREMES.—Maximum contents during year, 27,340 acre-feet May 14 (gage height, 52.55 feet); minimum, 48 acre-feet September 26 and 27 (gage height, 7.29 feet).

1919–1928: Maximum contents, 40,500 acre-feet June 26, 1922 (gage height, 63.62 feet); minimum, water surface below bottom of outlet tunnel August 1 to October 19, 1919, August 5, 17–27, 31, September 1–5 12–14, and 18, 1920, August 5, 1924, August 12 to November 3, 1926 (minimum stage during these periods, 6.6 feet August 24 to September 2, 1919).

REMARKS.—Gage-height record furnished by Utah Construction Co. through water commissioner for Big Lost River. Capacity of reservoir is 38,400 acre-feet between gage heights 7 feet and 62 feet. Water is used for irrigation of about 7,100 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, Idaho.

*Daily contents, in acre-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100 | 1,956 | 9,535 | 15,830 | 20,030 | 22,970 | 25,160 | 26,050 | 25,870 | 11,590 | 1,206 | 350 |
| 2 | 100 | 2,297 | 9,727 | 15,990 | 20,160 | 23,070 | 25,260 | 26,120 | 25,350 | 11,160 | 1,184 | 304 |
| 3 | 100 | 2,354 | 10,000 | 16,110 | 20,300 | 23,170 | 25,370 | 26,180 | 24,810 | 10,700 | 1,157 | 270 |
| 4 | 100 | 2,231 | 10,330 | 16,250 | 20,430 | 23,260 | 25,470 | 26,220 | 24,180 | 10,240 | 1,165 | 234 |
| 5 | 88 | 2,364 | 10,660 | 16,410 | 20,590 | 23,360 | 25,530 | 26,260 | 23,510 | 9,804 | 1,179 | 193 |
| 6 | 83 | 2,664 | 10,870 | 16,570 | 20,720 | 23,460 | 25,580 | 26,270 | 22,780 | 9,383 | 1,173 | 158 |
| 7 | 88 | 2,992 | 11,000 | 16,710 | 20,810 | 23,560 | 25,680 | 26,520 | 22,270 | 9,084 | 1,117 | 150 |
| 8 | 97 | 3,365 | 11,180 | 16,830 | 20,900 | 23,660 | 25,780 | 26,670 | 21,730 | 8,880 | 1,047 | 144 |
| 9 | 112 | 3,742 | 11,390 | 16,980 | 20,990 | 23,760 | 25,840 | 26,830 | 21,180 | 8,739 | 974 | 139 |
| 10 | 129 | 4,035 | 11,650 | 17,140 | 21,090 | 23,860 | 25,860 | 26,800 | 20,680 | 8,690 | 896 | 131 |
| 11 | 145 | 4,293 | 11,880 | 17,280 | 21,180 | 23,950 | 25,860 | 26,610 | 20,270 | 8,654 | 845 | 120 |
| 12 | 162 | 4,524 | 12,090 | 17,430 | 21,270 | 24,010 | 25,890 | 26,860 | 19,830 | 8,570 | 812 | 110 |
| 13 | 217 | 4,778 | 12,310 | 17,570 | 21,360 | 24,060 | 25,910 | 27,250 | 19,340 | 8,084 | 782 | 100 |
| 14 | 268 | 5,049 | 12,470 | 17,720 | 21,420 | 24,110 | 25,910 | 27,340 | 18,800 | 7,420 | 709 | 90 |
| 15 | 296 | 5,325 | 12,670 | 17,890 | 21,470 | 24,160 | 25,910 | 27,000 | 18,360 | 6,917 | 661 | 85 |
| 16 | 328 | 5,607 | 12,860 | 18,030 | 21,550 | 24,210 | 25,910 | 26,520 | 17,930 | 6,583 | 619 | 77 |
| 17 | 342 | 5,881 | 13,040 | 18,160 | 21,670 | 24,260 | 25,910 | 26,060 | 17,530 | 6,190 | 580 | 69 |
| 18 | 357 | 6,305 | 13,180 | 18,290 | 21,810 | 24,310 | 25,910 | 25,750 | 17,010 | 5,746 | 554 | 67 |
| 19 | 378 | 6,713 | 13,290 | 18,410 | 21,920 | 24,360 | 25,910 | 25,600 | 16,520 | 5,203 | 547 | 60 |
| 20 | 399 | 6,996 | 13,420 | 18,540 | 22,020 | 24,410 | 25,910 | 25,560 | 16,180 | 4,967 | 532 | 57 |
| 21 | 420 | 7,174 | 13,600 | 18,670 | 22,110 | 24,460 | 25,910 | 25,210 | 15,850 | 4,634 | 496 | 52 |
| 22 | 426 | 7,376 | 13,830 | 18,830 | 22,210 | 24,550 | 25,910 | 24,940 | 15,470 | 4,267 | 459 | 50 |
| 23 | 411 | 7,520 | 14,070 | 18,950 | 22,300 | 24,650 | 25,910 | 24,990 | 15,140 | 3,808 | 416 | 50 |
| 24 | 420 | 7,745 | 14,290 | 19,030 | 22,400 | 24,710 | 25,940 | 25,090 | 14,840 | 3,358 | 369 | 50 |
| 25 | 441 | 7,997 | 14,470 | 19,120 | 22,490 | 24,760 | 26,000 | 25,270 | 14,490 | 3,000 | 426 | 50 |
| 26 | 551 | 8,266 | 14,670 | 19,210 | 22,590 | 24,820 | 26,030 | 25,700 | 14,060 | 2,693 | 468 | 48 |
| 27 | 731 | 8,564 | 14,880 | 19,320 | 22,680 | 24,870 | 26,040 | 26,160 | 13,570 | 2,327 | 455 | 48 |
| 28 | 948 | 8,831 | 15,070 | 19,430 | 22,780 | 24,920 | 26,040 | 26,500 | 13,040 | 1,996 | 433 | 50 |
| 29 | 1,112 | 9,115 | 15,290 | 19,540 | 22,880 | 24,970 | 26,040 | 26,600 | 12,490 | 1,662 | 411 | 50 |
| 30 | 1,340 | 9,345 | 15,470 | 19,260 | ------- | 25,020 | 26,030 | 26,520 | 11,990 | 1,334 | 390 | 50 |
| 31 | 1,642 | ------- | 15,620 | 19,870 | ------- | 25,070 | ------- | 26,270 | ------- | 1,224 | 369 | ------ |

### 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 March, 1915; and January, 1919, to September, 1928. From April, 1913, to March 15, 1915, at station 1 mile below present site and below diversion of Streeter ditch.

EXTREMES.—Maximum mean daily discharge during year, 1,220 second-feet May 27 (gage height, 3.99 feet); minimum, 35 second-feet November 1 (gage height, 1.46 feet).

1903–1906, 1912–1915, 1919–1928: Maximum discharge, 2,990 second-feet June 10, 1921 (gage height, 5.79 feet); minimum, 25 second-feet November 5–8, 1926 (gage height, 1.25 feet).

REMARKS.—Records good. Many diversions above Mackay Reservoir; Sharp ditch only diversion between gage and reservoir. Flow past gage regulated by operation of gates in Mackay Dam. Gage-height record and five discharge measurements furnished by water commissioner for Big Lost River.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 200 | 35 | 75 | 89 | 113 | 126 | 123 | 101 | 995 | 650 | 204 | 165 |
| 2 | 200 | 37 | 78 | 89 | 113 | 126 | 123 | 113 | 995 | 660 | 204 | 176 |
| 3 | 212 | 200 | 78 | 95 | 116 | 126 | 123 | 123 | 968 | 645 | 204 | 176 |
| 4 | 212 | 248 | 78 | 101 | 116 | 126 | 123 | 135 | 940 | 635 | 196 | 172 |
| 5 | 208 | 182 | 78 | 101 | 116 | 126 | 123 | 152 | 940 | 640 | 200 | 172 |
| 6 | 208 | 42 | 81 | 101 | 116 | 126 | 126 | 158 | 940 | 635 | 204 | 168 |
| 7 | 212 | 42 | 81 | 101 | 120 | 126 | 126 | 182 | 912 | 550 | 212 | 162 |
| 8 | 212 | 42 | 84 | 101 | 120 | 126 | 126 | 312 | 858 | 470 | 220 | 158 |
| 9 | 216 | 42 | 84 | 101 | 120 | 126 | 126 | 435 | 830 | 380 | 216 | 165 |
| 10 | 208 | 45 | 86 | 101 | 120 | 126 | 126 | 670 | 802 | 294 | 212 | 165 |
| 11 | 208 | 48 | 86 | 101 | 120 | 126 | 126 | 830 | 775 | 280 | 200 | 168 |
| 12 | 212 | 50 | 86 | 101 | 120 | 126 | 120 | 830 | 775 | 298 | 193 | 168 |
| 13 | 176 | 50 | 86 | 104 | 120 | 126 | 113 | 830 | 802 | 525 | 193 | 172 |
| 14 | 193 | 53 | 86 | 104 | 120 | 126 | 113 | 885 | 802 | 590 | 193 | 172 |
| 15 | 208 | 53 | 86 | 104 | 120 | 129 | 113 | 940 | 748 | 530 | 186 | 172 |
| 16 | 182 | 56 | 86 | 104 | 120 | 129 | 113 | 940 | 720 | 470 | 182 | 168 |
| 17 | 193 | 58 | 86 | 107 | 120 | 129 | 113 | 885 | 670 | 480 | 182 | 168 |
| 18 | 182 | 61 | 86 | 107 | 120 | 129 | 113 | 858 | 695 | 490 | 186 | 168 |
| 19 | 179 | 61 | 86 | 107 | 120 | 129 | 113 | 858 | 660 | 480 | 176 | 168 |
| 20 | 186 | 61 | 86 | 107 | 120 | 129 | 115 | 885 | 605 | 415 | 162 | 168 |
| 21 | 193 | 64 | 86 | 107 | 120 | 129 | 113 | 1,160 | 580 | 395 | 168 | 168 |
| 22 | 190 | 64 | 86 | 107 | 123 | 129 | 110 | 1,190 | 585 | 415 | 190 | 168 |
| 23 | 190 | 67 | 86 | 107 | 123 | 129 | 110 | 1,190 | 570 | 445 | 190 | 168 |
| 24 | 182 | 67 | 86 | 107 | 123 | 129 | 110 | 1,190 | 585 | 415 | 182 | 168 |
| 25 | 176 | 69 | 86 | 107 | 123 | 129 | 110 | 1,190 | 645 | 375 | 182 | 168 |
| 26 | 132 | 72 | 86 | 107 | 123 | 129 | 110 | 1,190 | 720 | 375 | 165 | 172 |
| 27 | 126 | 72 | 86 | 107 | 123 | 129 | 110 | 1,220 | 775 | 390 | 165 | 172 |
| 28 | 132 | 72 | 86 | 110 | 123 | 129 | 110 | 1,160 | 775 | 385 | 182 | 172 |
| 29 | 120 | 75 | 86 | 110 | 126 | 129 | 107 | 1,160 | 748 | 380 | 182 | 172 |
| 30 | 81 | 75 | 86 | 110 | ------ | 129 | 101 | 1,100 | 720 | 370 | 176 | 172 |
| 31 | 48 | ------ | 86 | 113 | ------ | 129 | ------ | 1,020 | ------ | 276 | 168 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 216 | 48 | 180.0 | 11,100 |
| November | 248 | 35 | 72.1 | 4,290 |
| December | 86 | 75 | 84.2 | 5,180 |
| January | 113 | 89 | 104 | 6,400 |
| February | 126 | 113 | 120 | 6,900 |
| March | 129 | 126 | 128 | 7,870 |
| April | 126 | 101 | 116 | 6,900 |
| May | 1,220 | 101 | 771 | 47,400 |
| June | 995 | 570 | 771 | 45,900 |
| July | 660 | 276 | 463 | 28,500 |
| August | 220 | 162 | 190 | 11,700 |
| September | 176 | 158 | 169 | 10,100 |
| The year | 1,220 | 35 | 264 | 192,000 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 108 second-feet May 26 (gage height, 2.18 feet); minimum, 15 second-feet April 24 and 25 (gage height, 1.30 feet April 24).

1919–1928: Maximum discharge, 225 second-feet June 15, 1922; minimum, 9 second-feet May 8, 9, 13, and 14, 1919, and May 18–21, 1920.

REMARKS.—Records fair. Natural flow practically all diverted during irrigation season. Gage-height record and three discharge measurements furnished by water commissioner for Big Lost River. This record represents part 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 a short distance downstream.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | *28 | 30 | 31 | 29 | 31 | 25 | 24 | 22 | 73 | 37 | 21 | *23 |
| 2 | 28 | 30 | 31 | 29 | 31 | 25 | 24 | 23 | *65 | 36 | 22 | 23 |
| 3 | 29 | 31 | *31 | 30 | 31 | *25 | 24 | 25 | 62 | *36 | 22 | 23 |
| 4 | *29 | 31 | 31 | 30 | *31 | 25 | 23 | 26 | 59 | 36 | *22 | 23 |
| 5 | 29 | *31 | 31 | 31 | 31 | 25 | 23 | *28 | *56 | 36 | 23 | 22 |
| 6 | 30 | 31 | 31 | 31 | 31 | 25 | 23 | 35 | 56 | 35 | 23 | 22 |
| 7 | 30 | 31 | 30 | *31 | 30 | 26 | *23 | 42 | 56 | *35 | *24 | 22 |
| 8 | *30 | 31 | 30 | 31 | 30 | 26 | 23 | *48 | 56 | 32 | 24 | *22 |
| 9 | 30 | 31 | 30 | 31 | 29 | 26 | 22 | 54 | *56 | | 24 | 22 |
| 10 | 30 | 31 | *30 | 31 | 29 | *26 | 22 | 59 | 55 | *32 | 23 | 22 |
| 11 | 29 | 31 | 30 | 31 | *29 | *25 | 21 | 64 | | 34 | *23 | 23 |
| 12 | 29 | *31 | 30 | 31 | 29 | 25 | 21 | *70 | *51 | 36 | 23 | 23 |
| 13 | 28 | 31 | 29 | 31 | 29 | 25 | 20 | 80 | 51 | 38 | 22 | 24 |
| 14 | 28 | 31 | 29 | *31 | 29 | 25 | *20 | | 50 | *40 | *22 | 24 |
| 15 | *28 | 31 | 28 | 31 | 28 | 25 | 20 | *76 | 49 | 38 | 22 | *24 |
| 16 | 27 | 32 | 28 | 31 | 28 | 25 | 20 | 70 | *49 | 36 | 22 | 24 |
| 17 | 27 | 32 | *28 | 31 | 28 | *25 | 20 | | 45 | *34 | 21 | 24 |
| 18 | 26 | 32 | 28 | 31 | *28 | 25 | 19 | | 42 | 32 | *21 | 24 |
| 19 | 26 | *32 | 28 | 31 | 28 | 25 | 19 | *67 | *38 | 30 | 21 | 24 |
| 20 | 25 | 32 | 29 | 31 | 28 | 25 | 19 | 73 | 37 | 28 | 22 | 24 |
| 21 | 25 | 32 | 29 | *31 | 28 | 24 | *19 | 80 | 36 | *25 | *22 | 24 |
| 22 | *24 | 32 | 30 | 31 | 27 | 24 | 18 | *86 | 35 | 24 | *24 | *24 |
| 23 | 24 | 32 | 30 | 31 | 27 | 24 | 16 | 92 | *34 | 23 | 23 | 24 |
| 24 | 25 | 32 | *30 | 32 | 27 | *24 | *15 | 98 | 36 | *22 | 23 | 24 |
| 25 | 26 | 32 | 30 | 32 | *27 | 24 | 15 | 104 | 38 | 22 | *22 | 24 |
| 26 | 27 | *32 | 30 | *32 | 27 | 24 | 16 | *108 | *39 | 23 | 22 | 24 |
| 27 | 28 | 32 | 30 | 32 | 27 | 24 | 17 | 105 | 39 | 24 | 22 | 24 |
| 28 | 29 | 32 | 29 | *31 | 26 | 24 | *17 | | 38 | *24 | *22 | *24 |
| 29 | *29 | 32 | 29 | 31 | 26 | 24 | 19 | *97 | 37 | 23 | 22 | 24 |
| 30 | 29 | 31 | 29 | 31 | ------ | 24 | 20 | 89 | *37 | 22 | 22 | 24 |
| 31 | 29 | ------ | *29 | 31 | ------ | *24 | ------ | 81 | ------ | *21 | 23 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 30 | 24 | 27.8 | 1,710 |
| November | 32 | 30 | 31.4 | 1,870 |
| December | 31 | 28 | 29.6 | 1,820 |
| January | 32 | 29 | 30.9 | 1,900 |
| February | 31 | 26 | 28.6 | 1,650 |
| March | 26 | 24 | 24.8 | 1,520 |
| April | 24 | 15 | 20.1 | 1,200 |
| May | ---------- | 22 | 68.6 | 4,220 |
| June | 73 | 34 | 47.7 | 2,840 |
| July | 40 | 21 | 30.5 | 1,880 |
| August | 24 | 21 | 22.4 | 1,380 |
| September | 24 | 22 | 23.4 | 1,390 |
| The year | ---------- | 15 | 32.2 | 23,400 |

* Gage readings observed on these dates; discharge estimated or interpolated for all others.

### WARM SPRING CREEK (WEST CHANNEL) NEAR MACKAY, IDAHO

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

RECORDS AVAILABLE.—May, 1919, to September, 1928.

EXTREMES.—Maximum mean daily discharge during year, 212 second-feet May 27 (gage height, 1.84 feet); minimum, 61 second-feet April 24 (gage height, 0.66 foot).

1919–1928: Maximum discharge, 411 second-feet June 12, 1921 (gage height, 3.38 feet); minimum, 61 second-feet May 7, 1925, and April 24, 1928.

REMARKS.—Records good. Practically entire flow diverted during irrigation season. This record represents part of the natural flow of Big Lost River and taken in conjunction with the record for east channel of Warm Spring Creek and 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 three discharge measurements furnished by water commissioner for Big Lost River.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 105 | 99 | 96 | 95 | 92 | 90 | 83 | 63 | 15[illegible] | 105 | 67 | 72 |
| 2 | 100 | 99 | 96 | 94 | 92 | 90 | 82 | 63 | 145 | 105 | 68 | 70 |
| 3 | 100 | 99 | 94 | 94 | 92 | 90 | 82 | 63 | 138 | 101 | 68 | 70 |
| 4 | 100 | 99 | 92 | 94 | 92 | 90 | 82 | 63 | 133 | 99 | 73 | 72 |
| 5 | 100 | 99 | 94 | 94 | 92 | 90 | 80 | 63 | 12[illegible] | 100 | 74 | 72 |
| 6 | 99 | 99 | 92 | 94 | 92 | 90 | 80 | 70 | 12[illegible] | 100 | 74 | 72 |
| 7 | 100 | 99 | 91 | 94 | 94 | 90 | 80 | 83 | 127 | 97 | 74 | 72 |
| 8 | 101 | 99 | 92 | 94 | 94 | 90 | 82 | 97 | 127 | 92 | 73 | 72 |
| 9 | 101 | 101 | 92 | 94 | 92 | 90 | 83 | 108 | 12[illegible] | 90 | 73 | 72 |
| 10 | 100 | 101 | 92 | 95 | 92 | 90 | 83 | 119 | 12[illegible] | 96 | 73 | 73 |
| 11 | 99 | 97 | 91 | 95 | 92 | 88 | 82 | 130 | 12[illegible] | 100 | 73 | 74 |
| 12 | 99 | 96 | 91 | 95 | 92 | 88 | 83 | 149 | 12[illegible] | 100 | 68 | 75 |
| 13 | 97 | 96 | 91 | 95 | 92 | 88 | 82 | 173 | 12[illegible] | 101 | 64 | 77 |
| 14 | 96 | 96 | 91 | 95 | 91 | 90 | 75 | 163 | 12[illegible] | 101 | 67 | 75 |
| 15 | 96 | 96 | 91 | 95 | 91 | 90 | 75 | 154 | 12[illegible] | 101 | 67 | 75 |
| 16 | 95 | 97 | 91 | 95 | 91 | 90 | 73 | 144 | 12[illegible] | 100 | 67 | 75 |
| 17 | 87 | 99 | 91 | 95 | 91 | 90 | 70 | 138 | 117 | 97 | 68 | 75 |
| 18 | 87 | 97 | 92 | 95 | 91 | 90 | 69 | 138 | 113 | 95 | 68 | 78 |
| 19 | 87 | 97 | 92 | 95 | 91 | 91 | 70 | 141 | 108 | 91 | 68 | 77 |
| 20 | 87 | 99 | 92 | 95 | 91 | 91 | 68 | 149 | 108 | 88 | 68 | 77 |
| 21 | 87 | 99 | 94 | 95 | 91 | 92 | 66 | 160 | 108 | 83 | 69 | 77 |
| 22 | 87 | 96 | 95 | 90 | 91 | 92 | 69 | 179 | 103 | 80 | 69 | 77 |
| 23 | 87 | 96 | 95 | 90 | 91 | 91 | 66 | 185 | 97 | 79 | 68 | 75 |
| 24 | 86 | 96 | 95 | 90 | 90 | 90 | 61 | 185 | 10[illegible] | 75 | 69 | 75 |
| 25 | 86 | 96 | 95 | 90 | 90 | 88 | 62 | 191 | 104 | 74 | 70 | 77 |
| 26 | 91 | 96 | 96 | 90 | 90 | 87 | 63 | 202 | 10[illegible] | 74 | 72 | 77 |
| 27 | 90 | 96 | 96 | 90 | 90 | 86 | 63 | 212 | 108 | 74 | 70 | 77 |
| 28 | 96 | 96 | 96 | 90 | 90 | 86 | 66 | 196 | 105 | 74 | 70 | 77 |
| 29 | 96 | 95 | 96 | 90 | 90 | 84 | 66 | 191 | 104 | 72 | 70 | 75 |
| 30 | 99 | 95 | 95 | 90 | ------ | 84 | 66 | 173 | 10[illegible] | 68 | 70 | 77 |
| 31 | 99 | ------ | 92 | 91 | ------ | 83 | ------ | 160 | ------ | 68 | 72 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 105 | 86 | 94.8 | 5,830 |
| November | 101 | 95 | 97.5 | 5,800 |
| December | 96 | 91 | 93.2 | 5,730 |
| January | 95 | 90 | 93.2 | 5,730 |
| February | 94 | 90 | 91.4 | 5,260 |
| March | 92 | 83 | 89.0 | 5,470 |
| April | 83 | 61 | 73.7 | 4,390 |
| May | 212 | 63 | 139 | 8,550 |
| June | 151 | 97 | 119 | 7,080 |
| July | 105 | 68 | 89.7 | 5,520 |
| August | 74 | 64 | 69.8 | 4,290 |
| September | 78 | 70 | 74.6 | 4,440 |
| The year | 212 | 61 | 93.8 | 68,100 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 32 second-feet May 28 (gage height, 0.83 foot); no flow except for leakage through head gates December 6 to March 17.

1912–1914, 1919–1928: Maximum discharge, 42 second-feet June 23, 1921 (gage height, 2.50 feet); no flow during winter and when water is shut off.

REMARKS.—Records fair. Gage-height record and two discharge measurements furnished by water commissioner for Big Lost River. Sharp ditch diverts from east side of Big Lost River in sec. 12, T. 7 N., R. 23 E., 1 mile above Streeter ditch and half a mile below Mackay Reservoir. Water is used for irrigation on land northwest of Mackay and above Streeter ditch.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | 0 | | 24 | 29 | 25 | 18 | 18 |
| 2 | a 18 | | | 0 | | 23 | 29 | 26 | 18 | 18 |
| 3 | | | a 3 | 0 | | 23 | 29 | 25 | 20 | 18 |
| 4 | 16 | | | 0 | a 4 | 23 | 29 | 25 | 21 | 18 |
| 5 | | | | 0 | | 23 | 29 | 25 | 21 | 18 |
| 6 | a 16 | | 0 | 0 | | 23 | 29 | 25 | 20 | 18 |
| 7 | 13 | | 0 | 0 | | 24 | 29 | 25 | 20 | 18 |
| 8 | | | 0 | 0 | | 24 | 28 | 25 | 20 | 18 |
| 9 | | | 0 | 0 | | 24 | 28 | 25 | 19 | 18 |
| 10 | | | 0 | 0 | a 8 | 24 | 28 | 23 | 19 | 18 |
| 11 | | | 0 | 0 | | 24 | 28 | 25 | 18 | 18 |
| 12 | a 12 | | 0 | 0 | | 24 | 29 | 24 | 18 | 18 |
| 13 | | | 0 | 0 | | 24 | 29 | 24 | 18 | 18 |
| 14 | | | 0 | 0 | | 24 | 29 | 24 | 18 | 18 |
| 15 | | | 0 | 0 | | 24 | 29 | 24 | 18 | 18 |
| 16 | | a 4 | 0 | 0 | a 18 | 27 | 29 | 25 | 18 | 18 |
| 17 | | | 0 | 0 | | 27 | 29 | 21 | 18 | 18 |
| 18 | | | 0 | | | 27 | 29 | 21 | 18 | 18 |
| 19 | | | 0 | | | 27 | 28 | 21 | 18 | 18 |
| 20 | | | 0 | | | 27 | 26 | 21 | 18 | 19 |
| 21 | a 11 | | 0 | | a 19 | 27 | 26 | 21 | 18 | 19 |
| 22 | | | 0 | | | 27 | 26 | 21 | 18 | a 19 |
| 23 | | | 0 | | | 27 | 26 | 21 | 18 | 19 |
| 24 | | | 0 | | 20 | 27 | 26 | 21 | 18 | a 19 |
| 25 | | | 0 | a 5 | a 20 | 29 | 26 | 20 | 18 | 19 |
| 26 | | | 0 | | a 20 | 29 | 26 | 20 | 18 | 18 |
| 27 | | | 0 | | 20 | 29 | 26 | 21 | 18 | 18 |
| 28 | a 9 | | 0 | | 20 | 32 | 26 | 21 | 18 | a 18 |
| 29 | | | 0 | | 20 | 29 | 25 | 21 | 18 | 18 |
| 30 | | | 0 | | 23 | 29 | 25 | 21 | 18 | 18 |
| 31 | | | 0 | | | 29 | | 18 | 18 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | | | 12.1 | 744 |
| November | | | 4.0 | 238 |
| December | | 0 | .5 | 30 |
| March | | 0 | 2.3 | 140 |
| April | 23 | | 13.9 | 827 |
| May | 32 | 23 | 25.9 | 1,590 |
| June | 29 | 25 | 27.7 | 1,650 |
| July | 26 | 18 | 22.7 | 1,400 |
| August | 21 | 18 | 18.5 | 1,140 |
| September | 19 | 18 | 18.2 | 1,080 |
| The year | 32 | 0 | 12.2 | 8,840 |

a Estimated or interpolated.

### 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, 1928.

EXTREMES.—Maximum discharge during year, 492 second-feet May 13 (gage height, 3.15 feet); minimum, 130 second-feet September 24 (gage height, 1.01 feet).

1913–1915, 1919–1928: Maximum discharge, 902 second-feet April 3, 1913 (gage height, 6.1 feet); minimum, 116 second-feet August 17 and 30, 1919 (gage height, 0.92 foot).

REMARKS.—Records good. Discharge interpolated January 1–5. Numerous ranch diversions upstream; Portneuf-Marsh Valley Canal Co. diverts 1¼ miles downstream. Flow regulated by storage reservoir near Chesterfield.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 162 | 196 | 194 | 170 | 170 | 162 | 230 | 380 | 267 | 226 | 276 | 192 |
| 2 | 162 | 190 | 194 | 172 | 170 | 162 | 228 | 365 | 258 | 230 | 267 | 196 |
| 3 | 162 | 190 | 198 | 174 | 170 | 162 | 226 | 350 | 240 | 240 | 258 | 188 |
| 4 | 164 | 182 | 200 | 176 | 170 | 164 | 222 | 334 | 240 | 240 | 258 | 180 |
| 5 | 164 | 174 | 200 | 178 | 170 | 166 | 216 | 342 | 240 | 258 | 249 | 174 |
| 6 | 166 | 178 | 198 | 180 | 170 | 174 | 212 | 350 | 249 | 276 | 240 | 174 |
| 7 | 170 | 182 | 196 | 180 | 170 | 182 | 208 | 365 | 249 | 294 | 230 | 172 |
| 8 | 170 | 182 | 200 | 180 | 166 | 190 | 204 | 380 | 267 | 285 | 214 | 170 |
| 9 | 170 | 186 | 204 | 180 | 164 | 230 | 200 | 412 | 285 | 267 | 218 | 170 |
| 10 | 170 | 190 | 204 | 178 | 162 | 285 | 198 | 412 | 318 | 258 | 210 | 164 |
| 11 | 170 | 198 | 204 | 178 | 159 | 412 | 198 | 412 | 334 | 249 | 206 | 159 |
| 12 | 170 | 202 | 200 | 178 | 159 | 388 | 202 | 444 | 350 | 258 | 188 | 157 |
| 13 | 172 | 206 | 196 | 178 | 159 | 334 | 208 | 492 | 365 | 267 | 200 | 157 |
| 14 | 172 | 210 | 188 | 178 | 162 | 294 | 208 | 444 | 342 | 276 | 188 | 158 |
| 15 | 176 | 214 | 188 | 174 | 162 | 285 | 208 | 428 | 334 | 267 | 188 | 155 |
| 16 | 176 | 216 | 184 | 172 | 162 | 228 | 210 | 412 | 318 | 267 | 186 | 155 |
| 17 | 176 | 220 | 188 | 172 | 162 | 230 | 210 | 412 | 302 | 258 | 186 | 153 |
| 18 | 176 | 226 | 188 | 176 | 162 | 230 | 218 | 396 | 285 | 258 | 186 | 149 |
| 19 | 178 | 230 | 184 | 172 | 162 | 230 | 214 | 396 | 276 | 258 | 186 | 138 |
| 20 | 178 | 222 | 180 | 164 | 162 | 230 | 204 | 388 | 267 | 258 | 188 | 138 |
| 21 | 182 | 210 | 176 | 164 | 162 | 230 | 202 | 388 | 258 | 258 | 184 | 136 |
| 22 | 186 | 204 | 172 | 168 | 162 | 230 | 202 | 358 | 249 | 249 | 180 | 132 |
| 23 | 188 | 190 | 168 | 172 | 162 | 249 | 206 | 350 | 249 | 258 | 180 | 132 |
| 24 | 188 | 182 | 168 | 172 | 162 | 258 | 222 | 342 | 240 | 258 | 182 | 130 |
| 25 | 190 | 186 | 168 | 172 | 162 | 334 | 249 | 334 | 228 | 258 | 184 | 132 |
| 26 | 186 | 188 | 168 | 172 | 162 | 318 | 276 | 342 | 222 | 258 | 190 | 132 |
| 27 | 186 | 186 | 168 | 172 | 162 | 294 | 326 | 342 | 240 | 258 | 196 | 132 |
| 28 | 190 | 190 | 168 | 172 | 162 | 276 | 350 | 318 | 230 | 258 | 200 | 134 |
| 29 | 194 | 194 | 168 | 172 | 162 | 249 | 380 | 310 | 220 | 262 | 198 | 138 |
| 30 | 194 | 194 | 172 | 172 | ------ | 240 | 372 | 302 | 220 | 267 | 194 | 138 |
| 31 | 196 | ------ | 168 | 172 | ------ | 230 | ------ | 285 | ------ | 272 | 194 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 196 | 162 | 177 | 10,900 |
| November | 230 | 174 | 197 | 11,700 |
| December | 204 | 168 | 186 | 11,400 |
| January | 180 | 164 | 174 | 10,700 |
| February | 170 | 159 | 164 | 9,430 |
| March | 412 | 162 | 247 | 15,200 |
| April | 380 | 198 | 234 | 13,900 |
| May | 492 | 285 | 374 | 23,000 |
| June | 365 | 220 | 272 | 16,200 |
| July | 294 | 226 | 260 | 16,000 |
| August | 276 | 180 | 207 | 12,700 |
| September | 196 | 130 | 155 | 9,220 |
| The year | 492 | 130 | 221 | 160,000 |

### PORTNEUF RIVER AT POCATELLO, IDAHO

LOCATION.—Water-stage recorder prior to October 13 and staff gage subsequent thereto 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, 1928; May, 1897, to October, 1899, at a site 1 mile upstream.

EXTREMES.—Maximum discharge during year, 647 second-feet April 29 to May 4 (gage height, 5.2 feet); minimum, 78 second-feet August 22.

1897–1899, 1911–1928: 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 fair. Numerous ranch diversions above gage. Flow regulated by storage reservoir near Chesterfield. Twelve discharge measurements and inspection of recorder June 14 to September 30 furnished by T. R. Newell.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 234 | 273 | 336 | | 294 | 294 | 488 | 647 | | 108 | 90 | 97 |
| 2 | 240 | a 273 | a 336 | | a 294 | a 294 | 466 | 647 | a 165 | 113 | 92 | 100 |
| 3 | 243 | 273 | 336 | | 294 | 294 | 466 | 647 | | 124 | 92 | 101 |
| 4 | 249 | a 273 | a 326 | | a 294 | a 294 | a 466 | 647 | 133 | 124 | 93 | 101 |
| 5 | 252 | 273 | 315 | a 310 | a 294 | 294 | 466 | a 632 | | 115 | 97 | 101 |
| 6 | 240 | 263 | 315 | | 294 | a 315 | 466 | a 616 | a 110 | 110 | 100 | 100 |
| 7 | 234 | 263 | a 304 | | a 274 | a 336 | 444 | 601 | 87 | 103 | 100 | 98 |
| 8 | 234 | a 278 | 294 | | 253 | 357 | 444 | 578 | | 101 | 98 | 95 |
| 9 | 228 | 294 | | 336 | a 246 | a 390 | 400 | a 563 | | a 97 | 98 | 97 |
| 10 | 240 | 315 | | 336 | a 240 | 422 | 400 | a 547 | a 160 | 93 | 97 | 100 |
| 11 | 268 | a 315 | | a 329 | 233 | 466 | 400 | 532 | | 93 | 95 | 101 |
| 12 | 278 | 315 | | a 322 | a 223 | 555 | 378 | a 540 | | 95 | 98 | 103 |
| 13 | 271 | a 315 | | 315 | 213 | 624 | 422 | a 548 | 213 | 92 | 98 | 101 |
| 14 | 263 | 315 | | a 322 | a 195 | 601 | 422 | 555 | 215 | 95 | 97 | 106 |
| 15 | 263 | 315 | | a 329 | | 578 | 400 | a 510 | 202 | 89 | 97 | 108 |
| 16 | 263 | a 315 | | 336 | 175 | a 533 | 378 | 466 | 179 | 92 | 95 | a 110 |
| 17 | 263 | 315 | | 294 | a 224 | 488 | 400 | a 422 | 188 | 87 | 95 | 113 |
| 18 | 263 | a 315 | | a 294 | 273 | 466 | 400 | 378 | 186 | 87 | 93 | 115 |
| 19 | 253 | 315 | | a 294 | a 273 | 466 | 400 | a 364 | 179 | 90 | 95 | 113 |
| 20 | 263 | 315 | a 290 | 294 | a 273 | a 477 | 400 | a 350 | 167 | 89 | 95 | 113 |
| 21 | 253 | a 315 | | a 294 | 273 | 488 | 378 | 336 | 167 | 86 | 93 | 115 |
| 22 | 253 | 315 | | a 294 | a 273 | 466 | 378 | a 315 | 160 | 86 | 81 | 115 |
| 23 | a 248 | a 315 | | a 294 | a 273 | a 488 | 400 | 294 | 149 | 90 | 82 | 117 |
| 24 | 243 | 315 | | 294 | 273 | 510 | 400 | a 294 | 143 | 92 | 84 | 118 |
| 25 | 253 | a 315 | | a 294 | a 280 | a 556 | 422 | 294 | 142 | 93 | 84 | 113 |
| 26 | 263 | 315 | | 294 | a 287 | 601 | 466 | 294 | 138 | 89 | 97 | 113 |
| 27 | a 263 | a 315 | | a 294 | 294 | a 612 | 444 | a 294 | 133 | 87 | 92 | 113 |
| 28 | 263 | 315 | | a 294 | a 294 | 624 | 624 | 294 | 125 | 89 | 93 | 117 |
| 29 | 253 | a 322 | | a 294 | a 294 | 555 | 647 | 253 | 115 | 87 | 97 | 118 |
| 30 | 263 | a 329 | | 294 | ------- | 510 | 647 | 233 | 108 | 87 | 100 | 120 |
| 31 | 263 | ------- | | a 294 | ------- | 510 | ------- | 204 | ------- | 90 | 98 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 278 | 228 | 254 | 15,600 |
| November | 329 | 263 | 303 | 18,000 |
| December | 336 | ---------- | 298 | 18,300 |
| January | ---------- | ---------- | 307 | 18,900 |
| February | 294 | ---------- | 262 | 15,100 |
| March | 624 | 294 | 467 | 28,700 |
| April | 647 | 378 | 444 | 26,400 |
| May | 647 | 204 | 448 | 27,500 |
| June | ---------- | ---------- | 155 | 9,220 |
| July | 124 | 86 | 95.9 | 5,900 |
| August | 100 | 81 | 94.1 | 5,790 |
| September | 120 | 95 | 108 | 6,430 |
| The year | 647 | 81 | 270 | 196,000 |

aEstimated or interpolated.

### BIRCH CREEK POWER PLANT TAILRACE NEAR MALAD, IDAHO

LOCATION.—Staff gage in sec. 28, T. 12 S., R. 36 E., just below power plant 10 miles north of Malad and 10 miles southwest of Downey.

RECORDS AVAILABLE.—February to September, 1928.

EXTREMES.—Maximum discharge during year, 11.3 second-feet June 21 (gage height, 0.76 foot); minimum, 5.2 second-feet February 2[illegible] March 3, 4, 9 (gage height, 0.48 foot).

REMARKS.—Records fair. Tailrace diverts from Birch Creek at dam 8,200 feet above power plant, and water is returned to creek 175 feet below gage. Capacity of reservoir, 6 acre-feet storage. Gage-height record furnished by Western State Utilities Co.

*Daily and monthly discharge, in second-feet, 1928*

| Day | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1 | 6.4 | 5.6 | 6.4 | 8.5 | 8.5 | 8.3 | 7.6 | 7.8 |
| 2 | 8.5 | 6.0 | 7.0 | 8.5 | 8.5 | 8.7 | 8.1 | 7.4 |
| 3 | 6.4 | 5.2 | 6.8 | 8.5 | 8.1 | 8.9 | 7.6 | 7.6 |
| 4 | 6.4 | 5.2 | 6.8 | 8.5 | 8.5 | 8.5 | 8.3 | 7.2 |
| 5 | 8.5 | 6.2 | 6.4 | 8.1 | 8.3 | 8.1 | 7.4 | 7.4 |
| 6 | 8.5 | 6.0 | 6.4 | 7.6 | 8.5 | 8.7 | 7.8 | 7.8 |
| 7 | 8.5 | 6.4 | 6.0 | 8.1 | 8.7 | 8.9 | 7.2 | 7.4 |
| 8 | 6.4 | 6.4 | 5.8 | 7.8 | 8.9 | 8.9 | 7.0 | 7.6 |
| 9 | 6.4 | 5.2 | 6.4 | 8.5 | 8.9 | 8.9 | 7.0 | 7.0 |
| 10 | 6.4 | 5.6 | 6.2 | 8.1 | 8.1 | 8.5 | 7.2 | 7.4 |
| 11 | 6.4 | 6.2 | 6.4 | 8.5 | 8.5 | 8.9 | 7.8 | 7.8 |
| 12 | 6.6 | 6.0 | 6.8 | 8.5 | 8.5 | 8.9 | 7.4 | 8.1 |
| 13 | 6.6 | 6.0 | 6.2 | 8.9 | 9.2 | 8.9 | 7.8 | 7.6 |
| 14 | 6.6 | 6.0 | 6.2 | 8.9 | 8.5 | 8.9 | 7.8 | 8.7 |
| 15 | 6.4 | 5.8 | 6.0 | 8.9 | 8.5 | 7.6 | 7.8 | 7.2 |
| 16 | 6.0 | 6.0 | 6.4 | 8.7 | 8.5 | 8.9 | 7.8 | 8.1 |
| 17 | 6.0 | 6.4 | 6.4 | 8.5 | 8.1 | 9.4 | 7.8 | 8.1 |
| 18 | 6.0 | 6.0 | 6.2 | 8.5 | 9.4 | 8.9 | 7.8 | 7.8 |
| 19 | 5.8 | 6.0 | 8.1 | 8.9 | 9.4 | 8.9 | 7.2 | 7.8 |
| 20 | 5.6 | 6.2 | 6.8 | 8.1 | 9.8 | 8.5 | 7.8 | 7.6 |
| 21 | 5.4 | 6.0 | 7.4 | 8.1 | 9.8 | 7.8 | 7.8 | 7.6 |
| 22 | 5.6 | 6.2 | 6.8 | 8.1 | 11.0 | 7.6 | 8.3 | 7.2 |
| 23 | 5.6 | 6.4 | 7.2 | 8.1 | 9.4 | 8.7 | 7.8 | 7.0 |
| 24 | 5.8 | 6.6 | 7.2 | 7.6 | 7.6 | 7.6 | 8.1 | 8.1 |
| 25 | 6.0 | 6.2 | 7.0 | 7.6 | 8.5 | 8.7 | 8.1 | 6.8 |
| 26 | 5.2 | 6.4 | 8.5 | 8.1 | 9.8 | 7.4 | 7.2 | 7.0 |
| 27 | 6.0 | 6.4 | 8.9 | 8.1 | 9.2 | 7.6 | 7.8 | 7.4 |
| 28 | 6.4 | 6.0 | 8.3 | 8.7 | 8.5 | 7.4 | 7.8 | 7.2 |
| 29 | 6.0 | 6.4 | 8.5 | 9.4 | 8.7 | 7.2 | 8.1 | 6.8 |
| 30 | ------- | 6.4 | 7.8 | 8.3 | 8.9 | 8.1 | 7.8 | 7.6 |
| 31 | ------- | 6.0 | ------- | 8.5 | ------- | 7.8 | 7.8 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| February | 8.5 | 5.2 | 6.43 | 370 |
| March | 6.6 | 5.2 | 6.05 | 372 |
| April | 8.9 | 5.8 | 6.91 | 411 |
| May | 9.4 | 7.6 | 8.36 | 514 |
| June | 11.0 | 7.6 | 8.83 | 525 |
| July | 9.4 | 7.2 | 8.39 | 516 |
| August | 8.3 | 7.0 | 7.70 | 473 |
| September | 8.7 | 6.8 | 7.54 | 449 |
| The period | | | | 3,630 |

### NORTH SIDE MINIDOKA CANAL NEAR MINIDOKA, IDAHO

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

RECORDS AVAILABLE.—May, 1909, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,630 second-feet June 2 (gage height, 9.88 feet); no flow during winter.

1909–1928: Maximum discharge, that of 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, 1927–28*

| Day | Oct. | Nov. | Dec. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 576 | 542 | 485 | | 292 | 1,510 | 1,610 | 1,610 | 1,540 | 1,400 |
| 2 | 574 | 540 | 487 | | 292 | 1,580 | 1,620 | 1,600 | 1,510 | 1,410 |
| 3 | 580 | 542 | 484 | | 291 | 1,610 | 1,620 | 1,600 | 1,480 | 1,410 |
| 4 | 582 | 546 | 484 | | 327 | 1,620 | 1,620 | 1,600 | 1,380 | 1,410 |
| 5 | 569 | 550 | 484 | | 348 | 1,620 | 1,620 | 1,600 | 1,330 | 1,410 |
| 6 | 563 | 554 | 484 | | 350 | 1,620 | 1,610 | 1,600 | 1,300 | 1,400 |
| 7 | 565 | 557 | 484 | | 350 | 1,620 | 1,610 | 1,600 | 1,270 | 1,400 |
| 8 | 565 | 557 | 480 | | 350 | 1,620 | 1,610 | 1,160 | 1,280 | 1,400 |
| 9 | 563 | 554 | 200 | | 350 | 1,620 | 1,620 | 1,420 | 1,320 | 1,390 |
| 10 | 557 | 529 | | | 378 | 1,620 | 1,610 | 1,490 | 1,400 | 1,370 |
| 11 | 559 | 503 | | | 401 | 1,620 | 1,490 | 1,590 | 1,470 | 1,300 |
| 12 | 559 | 507 | | | 399 | 1,620 | 1,390 | 1,600 | 1,510 | 1,190 |
| 13 | 559 | 507 | | | 401 | 1,620 | 1,310 | 1,600 | 1,500 | 1,130 |
| 14 | 559 | 507 | | | 432 | 1,620 | 1,180 | 1,600 | 1,500 | 1,080 |
| 15 | 563 | 505 | | | 457 | 1,620 | 1,130 | 1,600 | 1,530 | 1,040 |
| 16 | 563 | 505 | | | 500 | 1,620 | 1,130 | 1,600 | 1,590 | 1,020 |
| 17 | 559 | 503 | | | 531 | 1,620 | 1,130 | 1,600 | 1,600 | 1,000 |
| 18 | 557 | 502 | | | 588 | 1,620 | 1,140 | 1,600 | 1,600 | 960 |
| 19 | 557 | 503 | | | 619 | 1,620 | 1,130 | 1,600 | 1,600 | 956 |
| 20 | 554 | 502 | | 105 | 619 | 1,620 | 1,130 | 1,600 | 1,600 | 919 |
| 21 | 563 | 500 | | 164 | 621 | 1,620 | 1,130 | 1,600 | 1,600 | 861 |
| 22 | 563 | 498 | | 205 | 621 | 1,620 | 1,130 | 1,600 | 1,600 | 748 |
| 23 | 563 | 500 | | 207 | 659 | 1,620 | 1,140 | 1,600 | 1,590 | 710 |
| 24 | 563 | 498 | | 231 | 786 | 1,620 | 1,180 | 1,600 | 1,540 | 710 |
| 25 | 559 | 494 | | 251 | 960 | 1,620 | 1,250 | 1,600 | 1,500 | 712 |
| 26 | 557 | 489 | | 251 | 1,170 | 1,620 | 1,400 | 1,600 | 1,400 | 712 |
| 27 | 555 | 487 | | 250 | 1,320 | 1,620 | 1,530 | 1,600 | 1,400 | 712 |
| 28 | 552 | 485 | | 250 | 1,440 | 1,620 | 1,590 | 1,600 | 1,390 | 712 |
| 29 | 550 | 487 | | 274 | 1,460 | 1,610 | 1,600 | 1,600 | 1,400 | 712 |
| 30 | 550 | 487 | | 290 | 1,460 | 1,610 | 1,610 | 1,600 | 1,410 | 708 |
| 31 | 548 | | | 291 | | 1,620 | | 1,600 | 1,410 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 582 | 548 | 561 | 34,500 |
| November | 557 | 485 | 515 | 30,600 |
| December 1–9 | 487 | 200 | 452 | 8,070 |
| March 20–31 | 291 | 105 | 231 | 5,500 |
| April | 1,460 | 291 | 626 | 37,200 |
| May | 1,620 | 1,510 | 1,610 | 99,000 |
| June | 1,620 | 1,130 | 1,400 | 83,300 |
| July | 1,610 | 1,160 | 1,580 | 97,200 |
| August | 1,600 | 1,270 | 1,470 | 90,400 |
| September | 1,410 | 708 | 1,060 | 63,100 |

### SOUTH SIDE MINIDOKA CANAL NEAR MINIDOKA, IDAHO

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

RECORDS AVAILABLE.—April, 1909, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,110 second-feet July 27 (gage height, 5.98 feet); no flow during winter.

1909–1927: Maximum discharge, that of July 27, 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 South Side Minidoka project.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1 | 396 | 405 | ------- | 463 | 1,020 | 1,060 | 1,100 | 1,050 |
| 2 | 352 | 168 | ------- | 545 | 1,020 | 1,060 | 1,100 | 1,040 |
| 3 | 352 | ------- | ------- | 621 | 1,040 | 1,060 | 1,090 | 1,030 |
| 4 | 354 | ------- | ------- | 726 | 1,040 | 1,060 | 1,070 | 999 |
| 5 | 354 | ------- | ------- | 830 | 1,040 | 1,050 | 1,060 | 1,020 |
| 6 | 354 | ------- | ------- | 887 | 1,040 | 1,040 | 1,040 | 1,030 |
| 7 | 354 | ------- | ------- | 940 | 1,040 | 1,040 | 1,010 | 1,030 |
| 8 | 354 | ------- | ------- | 964 | 1,040 | 1,040 | 1,010 | 1,020 |
| 9 | 354 | ------- | ------- | 980 | 1,040 | 1,030 | 1,010 | 1,020 |
| 10 | 349 | ------- | ------- | 988 | 1,030 | 1,040 | 1,010 | 1,000 |
| 11 | 347 | ------- | ------- | 991 | 1,000 | 1,050 | 1,020 | 978 |
| 12 | 344 | ------- | ------- | 999 | 986 | 1,060 | 1,060 | 948 |
| 13 | 344 | ------- | ------- | 1,010 | 969 | 1,060 | 1,060 | 884 |
| 14 | 342 | ------- | ------- | 999 | 937 | 1,060 | 1,060 | 832 |
| 15 | 342 | ------- | ------- | 991 | 907 | 1,060 | 1,070 | 774 |
| 16 | 342 | ------- | ------- | 986 | 897 | 1,060 | 1,080 | 772 |
| 17 | 357 | ------- | 156 | 983 | 855 | 1,060 | 1,080 | 777 |
| 18 | 399 | ------- | 157 | 980 | 832 | 1,060 | 1,080 | 760 |
| 19 | 381 | ------- | 157 | 980 | 835 | 1,070 | 1,080 | 719 |
| 20 | 345 | ------- | 160 | 980 | 835 | 1,080 | 1,080 | 716 |
| 21 | 350 | ------- | 157 | 978 | 835 | 1,090 | 1,080 | 662 |
| 22 | 380 | ------- | 156 | 983 | 879 | 1,070 | 1,080 | 630 |
| 23 | 378 | ------- | 196 | 1,000 | 934 | 1,070 | 1,080 | 632 |
| 24 | 396 | ------- | 231 | 1,010 | 950 | 1,090 | 1,080 | 630 |
| 25 | 416 | ------- | 231 | 1,010 | 967 | 1,090 | 1,080 | 576 |
| 26 | 414 | ------- | 231 | 1,000 | 999 | 1,090 | 1,080 | 543 |
| 27 | 412 | ------- | 262 | 988 | 1,010 | 1,090 | 1,070 | 493 |
| 28 | 412 | ------- | 287 | 997 | 1,020 | 1,100 | 1,070 | 465 |
| 29 | 412 | ------- | 342 | 999 | 1,030 | 1,100 | 1,070 | 465 |
| 30 | 408 | ------- | 418 | 1,010 | 1,050 | 1,100 | 1,070 | 465 |
| 31 | 408 | ------- | ------- | 1,020 | ------- | 1,100 | 1,070 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 416 | 342 | 371 | 22,800 |
| April 17–30 | 418 | 156 | 224 | 6,220 |
| May | 1,020 | 463 | 930 | 57,200 |
| June | 1,050 | 832 | 969 | 57,700 |
| July | 1,100 | 1,030 | 1,070 | 65,800 |
| August | 1,100 | 1,010 | 1,060 | 65,200 |
| September | 1,050 | 465 | 799 | 47,500 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 208 second-feet May 12 (gage height, 3.41 feet); minimum, 4.2 second-feet August 21 (gage height, 1.48 feet).

1911–1916, 1919–1928: Maximum discharge, 670 second-feet May 18, 1921; maximum gage height, 5.7 feet February 21, 1927, affected by ice; minimum discharge, 1.1 second-feet August 13, 1915 (gage height, 1.19 feet).

REMARKS.—Records good, except those for estimated periods, November 22, November 25 to March 17, and July 2, which are poor. Several small canals and ditches divert above station for irrigation. Gage-height record furnished by Oakley Canal Co.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17 | 31 | | | | | 88 | 161 | 57 | 18 | 8.6 | 6.8 |
| 2 | 18 | 28 | | | | | 81 | 172 | 49 | 18 | 8.6 | 6.5 |
| 3 | 19 | 28 | | | | | 78 | 189 | 43 | 17 | 7.8 | 6.0 |
| 4 | 21 | 28 | 30 | | | | 76 | 181 | 42 | 14 | 8.6 | 6.0 |
| 5 | 21 | 28 | | | | | 74 | 164 | 41 | 13 | 9.4 | 5.8 |
| 6 | 20 | 28 | | | | 85 | 68 | 155 | 40 | 13 | 11 | 5.8 |
| 7 | 20 | 30 | | | | | 63 | 152 | 36 | 12 | 9.0 | 5.2 |
| 8 | 19 | 31 | | | | | 58 | 168 | 30 | 11 | 10 | 5.2 |
| 9 | 19 | 32 | | | | | 57 | 177 | 28 | 10 | 9.0 | 5.2 |
| 10 | 19 | 32 | | | | | 57 | 189 | 30 | 9.4 | 7.4 | 5.8 |
| 11 | 19 | 30 | | | | | 56 | 203 | 31 | 8.6 | 7.4 | 6.5 |
| 12 | 19 | 31 | | | | | 59 | 208 | 46 | 7.4 | 6.2 | 7.0 |
| 13 | 19 | 31 | | | | | 60 | 205 | 59 | 6.5 | 5.8 | 7.4 |
| 14 | 19 | 30 | | | | | 61 | 191 | 53 | 6.5 | 5.8 | 8.6 |
| 15 | 20 | 30 | | | 35 | 50 | 59 | 179 | 45 | 7.0 | 5.5 | 8.2 |
| 16 | 19 | 30 | | 30 | | | 60 | 168 | 41 | 11 | 5.5 | 8.2 |
| 17 | 18 | 31 | | | | | 62 | 154 | 40 | 11 | 5.2 | 8.6 |
| 18 | 17 | 32 | | | | 56 | 62 | 142 | 39 | 13 | 5.2 | 9.0 |
| 19 | 17 | 33 | 12 | | | 61 | 67 | 137 | 37 | 12 | 4.5 | 9.8 |
| 20 | 19 | 34 | | | | 62 | 73 | 127 | 35 | 12 | 4.5 | 9.4 |
| 21 | 19 | 33 | | | | 65 | 74 | 114 | 35 | 11 | 4.2 | 9.8 |
| 22 | 19 | 29 | | | | 72 | 72 | 102 | 32 | 11 | 4.4 | 10 |
| 23 | 20 | 25 | | | | 82 | 68 | 100 | 29 | 10 | 4.4 | 10 |
| 24 | 20 | 17 | | | | 96 | 67 | 104 | 28 | 9.4 | 4.5 | 10 |
| 25 | 20 | | | | | 109 | 68 | 97 | 27 | 9.0 | 5.2 | 10 |
| 26 | 21 | | | | | 122 | 78 | 88 | 24 | 8.6 | 5.5 | 10 |
| 27 | 22 | 25 | | | | 130 | 92 | 76 | 21 | 7.4 | 6.5 | 10 |
| 28 | 34 | | | | | 127 | 110 | 73 | 21 | 6.8 | 7.0 | 10 |
| 29 | 44 | | | | | 114 | 132 | 69 | 19 | 7.0 | 7.0 | 10 |
| 30 | 35 | | | | ------ | 102 | 152 | 66 | 19 | 7.4 | 6.8 | 10 |
| 31 | 32 | ------ | | | ------ | 94 | ------ | 64 | ------ | 7.0 | 6.5 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 44 | 17 | 21.5 | 1,320 |
| November | 34 | ---------- | 28.7 | 1,710 |
| December | ---------- | ---------- | 15.5 | 953 |
| January | ---------- | ---------- | 30.0 | 1,840 |
| February | ---------- | ---------- | 35.0 | 2,010 |
| March | 130 | ---------- | 81.5 | 5,010 |
| April | 152 | 56 | 74.4 | 4,430 |
| May | 208 | 64 | 141 | 8,670 |
| June | 59 | 19 | 35.9 | 2,140 |
| July | 18 | 6.5 | 10.5 | 646 |
| August | 11 | 4.2 | 6.68 | 411 |
| September | 10 | 5.2 | 8.03 | 478 |
| The year | 208 | 4.2 | 40.8 | 29,600 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 50 second-feet May 10 (gage height, 2.87 feet); minimum estimated, 5 second-feet December 8–31.

1911–1916, 1919–1928: Maximum discharge, 98 second-feet May 28 and June 8, 1921 (gage height, 3.44 feet); minimum probably occurred during winter.

REMARKS.—Records good except those for estimated periods, November 2, December 8 to March 17, April 2–7, June 16–20, August 1, 2, and 18–23, which are fair. Gage-height record furnished by Oakley Canal Co.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11 | 11 | 12 | | | | 21 | 39 | 25 | 14 | 9.5 | 9.2 |
| 2 | 11 | 11 | 12 | | | | 21 | 39 | 24 | 13 | 9.5 | 9.1 |
| 3 | 11 | 11 | 12 | | | | 20 | 38 | 23 | 12 | 9.4 | 9.1 |
| 4 | 11 | 11 | 12 | | | | 19 | 38 | 22 | 12 | 9.4 | 9.1 |
| 5 | 11 | 11 | 12 | | | | 19 | 38 | 21 | 12 | 9.6 | 9.1 |
| 6 | 11 | 12 | 12 | | | | 18 | 39 | 20 | 12 | 9.4 | 9.1 |
| 7 | 11 | 13 | 11 | | | | 17 | 41 | 20 | 12 | 9.4 | 9.0 |
| 8 | 11 | 12 | | | | | 17 | 43 | 19 | 11 | 9.2 | 9.1 |
| 9 | 11 | 12 | | | | | 17 | 47 | 19 | 11 | 9.2 | 9.1 |
| 10 | 11 | 13 | | | | 17 | 17 | 47 | 19 | 11 | 9.4 | 9.2 |
| 11 | 11 | 12 | | | | | 16 | 47 | 25 | 11 | 9.2 | 9.2 |
| 12 | 11 | 12 | | | | | 18 | 46 | 24 | 11 | 9.2 | 9.2 |
| 13 | 11 | 12 | | | | | 16 | 45 | 21 | 11 | 9.2 | 9.2 |
| 14 | 11 | 12 | | | | | 16 | 44 | 19 | 11 | 9.1 | 9.2 |
| 15 | 11 | 12 | | | | | 16 | 43 | 19 | 10 | 9.1 | 9.1 |
| 16 | 11 | 11 | | 10 | 10 | | 17 | 41 | 19 | 10 | 9.1 | 9.1 |
| 17 | 11 | 12 | | | | | 18 | 39 | 18 | 10 | 9.1 | 9.1 |
| 18 | 11 | 12 | | | | 14 | 19 | 38 | 17 | 10 | 9.1 | 9.1 |
| 19 | 11 | 11 | | | | 14 | 19 | 36 | 16 | 10 | 9.1 | 9.1 |
| 20 | 11 | 11 | 8 | | | 15 | 19 | 35 | 15 | 10 | 9.1 | 9.1 |
| 21 | 11 | 11 | | | | 17 | 18 | 34 | 15 | 10 | 9.2 | 9.1 |
| 22 | 11 | 11 | | | | 19 | 18 | 34 | 15 | 9.8 | 9.2 | 9.0 |
| 23 | 11 | 11 | | | | 20 | 19 | 34 | 15 | 9.8 | 9.2 | 9.0 |
| 24 | 11 | 11 | | | | 23 | 20 | 34 | 14 | 9.4 | 9.2 | 9.0 |
| 25 | 11 | 12 | | | | 32 | 22 | 32 | 14 | 9.4 | 9.2 | 9.0 |
| 26 | 11 | 12 | | | | 28 | 24 | 31 | 14 | 9.2 | 9.6 | 8.9 |
| 27 | 12 | 12 | | | | 27 | 30 | 30 | 14 | 9.2 | 9.6 | 8.9 |
| 28 | 12 | 14 | | | | 24 | 34 | 29 | 14 | 9.6 | 9.4 | 9.0 |
| 29 | 11 | 13 | | | | 23 | 36 | 28 | 13 | 9.8 | 9.4 | 9.0 |
| 30 | 11 | 12 | | | ------- | 22 | 36 | 28 | 13 | 9.6 | 9.4 | 9.0 |
| 31 | 11 | ------- | | | ------- | 22 | ------- | 26 | ------- | 9.6 | 9.1 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 12 | 11 | 11.1 | 682 |
| November | 14 | 11 | 11.8 | 702 |
| December | 12 | ---------- | 8.9 | 547 |
| January | ---------- | ---------- | 10.0 | 615 |
| February | ---------- | ---------- | 10.0 | 555 |
| March | 32 | ---------- | 19.0 | 1,170 |
| April | 36 | 16 | 20.6 | 1,230 |
| May | 47 | 26 | 37.5 | 2,310 |
| June | 25 | 13 | 18.2 | 1,080 |
| July | 14 | 9.2 | 10.6 | 652 |
| August | 9.6 | 9.1 | 9.28 | 571 |
| September | 9.2 | 8.9 | 9.08 | 540 |
| The year | 47 | ---------- | 14.7 | 10,700 |

### 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, 1928.

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

1919–1928: 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, 1927–28*

| Day | Nov. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | 14 | 57 | 56 | 56 | 55 |
| 2 | | | | 14 | 57 | 56 | 55 | 55 |
| 3 | | | | 28 | 57 | 57 | 55 | 55 |
| 4 | | | | 43 | 57 | 57 | 55 | 55 |
| 5 | | | | 43 | 57 | 56 | 55 | 55 |
| 6 | | | | 51 | 57 | 56 | 55 | 55 |
| 7 | | | | 55 | 57 | 57 | 55 | 55 |
| 8 | | | | 55 | 57 | 56 | 55 | 55 |
| 9 | | | | 55 | 57 | 57 | 55 | 55 |
| 10 | | | | 55 | 57 | 56 | 55 | 55 |
| 11 | | | | 55 | 57 | 56 | 55 | 55 |
| 12 | | | | 55 | 57 | 56 | 55 | 55 |
| 13 | | | | 55 | 57 | 56 | 55 | 55 |
| 14 | | | | 55 | 57 | 56 | 55 | 55 |
| 15 | | 9 | | 55 | 57 | 56 | 55 | 55 |
| 16 | | 14 | | 55 | 56 | 55 | 55 | 55 |
| 17 | 9 | 14 | | 55 | 56 | 56 | 55 | 55 |
| 18 | 14 | 14 | | 55 | 56 | 56 | 55 | 55 |
| 19 | 14 | 14 | | 55 | 56 | 56 | 55 | 55 |
| 20 | 14 | 14 | | 55 | 56 | 56 | 55 | 55 |
| 21 | 14 | 15 | | 55 | 56 | 56 | 55 | 55 |
| 22 | 4 | 8 | | 49 | 56 | 56 | 55 | 55 |
| 23 | | | | 57 | 56 | 56 | 55 | 55 |
| 24 | | | | 57 | 56 | 56 | 55 | 55 |
| 25 | | | | 57 | 51 | 56 | 55 | 47 |
| 26 | | | | 57 | 0 | 56 | 55 | 42 |
| 27 | | | | 57 | 9 | 56 | 55 | 42 |
| 28 | | | | 57 | 56 | 56 | 55 | 42 |
| 29 | | | | 57 | 57 | 56 | 55 | 42 |
| 30 | | | 9 | 57 | 57 | 56 | 55 | 42 |
| 31 | | | | 57 | | 56 | 55 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| November | 14 | 0 | 2.3 | 137 |
| March | 15 | 0 | 3.3 | 203 |
| April | 9 | 0 | .3 | 18 |
| May | 57 | 14 | 51.0 | 3,140 |
| June | 57 | 0 | 53.0 | 3,150 |
| July | 57 | 55 | 56.1 | 3,450 |
| August | 56 | 55 | 55.0 | 3,380 |
| September | 55 | 42 | 52.6 | 3,130 |
| The period | | | | 16,610 |

NOTE.—Canal presumably dry on days 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, 1928.

EXTREMES.—Maximum discharge during year, 143 second-feet June 10 and 11 (gage height, 2.82 feet); no flow during winter.

1921–1928: Maximum discharge, that of June 10 and 11, 1928; no flow for long periods.

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

*Daily and monthly discharge, in second-feet, 1928*

| Day | May | June | July | Aug. | Sept. | Day | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14 | 17 | 70 | 134 | 85 | 16 | 111 | 110 | 138 | 137 | 94 |
| 2 | 13 | 29 | 139 | 134 | 95 | 17 | 66 | 110 | 137 | 134 | 77 |
| 3 | 10 | 63 | 134 | 89 | 123 | 18 | 100 | 112 | 138 | 135 | 73 |
| 4 | 0 | 108 | 134 | 0 | 118 | 19 | 117 | 114 | 138 | 135 | 81 |
| 5 | 0 | 108 | 134 | 65 | 117 | 20 | 116 | 110 | 137 | 135 | 85 |
| 6 | 9 | 133 | 134 | 91 | 117 | 21 | 117 | 117 | 137 | 135 | 85 |
| 7 | 25 | 142 | 134 | 31 | 117 | 22 | 103 | 117 | 140 | 130 | 84 |
| 8 | 71 | 136 | 133 | 46 | 118 | 23 | 114 | 117 | 139 | 133 | 83 |
| 9 | 101 | 139 | 134 | 132 | 117 | 24 | 123 | 116 | 134 | 131 | 81 |
| 10 | 114 | 143 | 134 | 134 | 116 | 25 | 124 | 115 | 136 | 132 | 81 |
| 11 | 113 | 143 | 134 | 139 | 93 | 26 | 122 | 120 | 134 | 132 | 82 |
| 12 | 113 | 137 | 131 | 136 | 91 | 27 | 123 | 139 | 134 | 131 | 92 |
| 13 | 110 | 141 | 136 | 110 | 92 | 28 | 31 | 140 | 135 | 130 | 97 |
| 14 | 110 | 130 | 137 | 138 | 93 | 29 | 29 | 139 | 134 | 131 | 97 |
| 15 | 110 | 129 | 137 | 138 | 94 | 30 | 17 | 140 | 135 | 130 | 97 |
| | | | | | | 31 | 16 | ------ | 136 | 132 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| May | 124 | 0 | 75.6 | 4,650 |
| June | 143 | 17 | 117 | 6,960 |
| July | 140 | 70 | 133 | 8,180 |
| August | 139 | 0 | 117 | 7,190 |
| September | 118 | 73 | 95.8 | 5,700 |
| The period | ------ | ------ | ------ | 32,700 |

### 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-quarters of a mile below head gates at Milner Dam.

RECORDS AVAILABLE.—May, 1909, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,200 second-feet May 15 (gage height, 8.92 feet); no flow for a few hours on several days.

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

REMARKS.—Records excellent. Discharge affected by ice December 7–10, 14–16, 17–27, 29–31, and January 1–3. Intake is on Snake River at Milner Dam. Water is used for stock and irrigation of land in Jerome and Gooding Counties.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,730 | 207 | 626 | | 498 | 533 | 468 | 2,600 | 3,130 | 3,090 | 2,970 | 3,010 |
| 2 | 1,580 | 295 | 626 | 500 | 498 | 530 | 1,060 | 2,910 | 3,120 | 3,080 | 3,030 | 2,990 |
| 3 | 1,300 | 421 | 617 | | 501 | 527 | 1,060 | 3,000 | 3,110 | 3,080 | 3,030 | 2,920 |
| 4 | 1,230 | 440 | 630 | 501 | 501 | 527 | 1,090 | 3,020 | 3,100 | 3,090 | 3,030 | 2,870 |
| 5 | 1,200 | 440 | 648 | 492 | 498 | 536 | 1,080 | 3,010 | 3,120 | 3,070 | 3,030 | 2,870 |
| 6 | 1,110 | 445 | 658 | 486 | 509 | 562 | 1,100 | 3,050 | 3,100 | 3,070 | 3,050 | 2,810 |
| 7 | 1,060 | 445 | | 484 | 518 | 722 | 1,130 | 3,060 | 3,130 | 3,180 | 3,050 | 2,800 |
| 8 | 924 | 442 | 670 | 486 | 509 | 759 | 1,070 | 3,050 | 3,120 | 3,170 | 3,050 | 2,730 |
| 9 | 886 | 445 | | 484 | 509 | 799 | 1,100 | 3,060 | 3,120 | 3,180 | 3,060 | 2,740 |
| 10 | 878 | 440 | | 484 | 506 | 946 | 1,060 | 3,050 | 3,110 | 3,180 | 3,030 | 2,740 |
| 11 | 878 | 450 | 680 | 486 | 509 | 1,040 | 1,100 | 3,080 | 3,140 | 3,180 | 2,990 | 2,780 |
| 12 | 789 | 484 | 674 | 484 | 518 | 1,050 | 989 | 3,050 | 3,110 | 3,180 | 3,010 | 2,710 |
| 13 | 752 | 504 | 661 | 484 | 527 | 1,060 | 622 | 3,070 | 3,120 | 3,160 | 3,030 | 2,770 |
| 14 | 752 | 509 | | 486 | 527 | 1,040 | 892 | 3,080 | 3,120 | 3,150 | 3,050 | 2,790 |
| 15 | 759 | 515 | 630 | 489 | 515 | 1,070 | 1,470 | 3,090 | 3,110 | 3,120 | 3,030 | 2,600 |
| 16 | 752 | 501 | | 486 | 515 | 1,090 | 1,620 | 3,080 | 3,090 | 3,130 | 3,010 | 2,480 |
| 17 | 749 | 401 | | 489 | 524 | 1,370 | 1,570 | 3,080 | 3,090 | 3,120 | 3,020 | 2,410 |
| 18 | 749 | 375 | | 486 | 527 | 1,660 | 1,430 | 3,060 | 3,090 | 3,080 | 2,980 | 2,380 |
| 19 | 756 | 406 | | 486 | 536 | 1,570 | 1,360 | 3,060 | 3,080 | 3,090 | 2,990 | 2,390 |
| 20 | 752 | 453 | | 489 | 530 | 1,470 | 1,340 | 3,050 | 3,090 | 3,100 | 3,030 | 2,390 |
| 21 | 742 | 495 | 500 | 481 | 530 | 1,160 | 1,510 | 3,070 | 3,100 | 3,140 | 3,030 | 2,350 |
| 22 | 362 | 556 | | 492 | 524 | 1,060 | 1,620 | 3,060 | 3,080 | 3,120 | 2,930 | 2,350 |
| 23 | 189 | 626 | | 492 | 541 | 1,040 | 1,660 | 3,070 | 3,090 | 3,090 | 3,030 | 2,350 |
| 24 | 209 | 630 | | 492 | 533 | 1,040 | 1,730 | 3,100 | 2,330 | 3,090 | 3,010 | 2,310 |
| 25 | 211 | 636 | | 492 | 524 | 996 | 1,940 | 3,130 | 767 | 3,100 | 3,010 | 2,300 |
| 26 | 209 | 639 | | 489 | 524 | 928 | 2,150 | 3,140 | 3,090 | 3,100 | 3,040 | 2,270 |
| 27 | 209 | 636 | 498 | 492 | 524 | 886 | 2,280 | 3,130 | 3,080 | 3,110 | 3,060 | 2,210 |
| 28 | 211 | 633 | 501 | 492 | 530 | 715 | 2,470 | 3,120 | 3,080 | 3,110 | 3,000 | 2,120 |
| 29 | 211 | 636 | | 495 | 533 | 0 | 2,460 | 3,110 | 3,080 | 3,090 | 3,050 | 1,990 |
| 30 | 211 | 642 | 500 | 495 | ------- | 0 | 2,450 | 3,120 | 3,080 | 3,070 | 3,050 | 1,820 |
| 31 | 207 | ------- | | 495 | ------- | 0 | ------- | 3,130 | ------- | 3,110 | 3,020 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 1,730 | 189 | 728 | 44,800 |
| November | 642 | 207 | 492 | 29,300 |
| December | ------- | ------- | 577 | 35,500 |
| January | 501 | 481 | 490 | 30,100 |
| February | 541 | 498 | 519 | 29,900 |
| March | 1,660 | 0 | 861 | 52,900 |
| April | 2,470 | 468 | 1,430 | 85,100 |
| May | 3,140 | 2,600 | 3,050 | 188,000 |
| June | 3,140 | 767 | 3,000 | 179,000 |
| July | 3,180 | 3,070 | 3,120 | 192,000 |
| August | 3,060 | 2,930 | 3,020 | 186,000 |
| September | 3,010 | 1,820 | 2,540 | 151,000 |
| The year | 3,180 | 0 | 1,660 | 1,200,000 |

### SOUTH SIDE TWIN FALLS CANAL AT MILNER, IDAHO

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

RECORDS AVAILABLE.—May, 1909, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,750 second-feet August 16 (gage height, 10.51 feet); minimum, 103 second-feet March 16 (gage height, 1.83 feet).

1909–1928: Maximum discharge, 4,600 second-feet August 12, 1918; no flow September 20, 1920.

REMARKS.—Records excellent except during periods of ice effect, December 14–31, January 1–13 and 20–26, which are fair. Canal diverts from Snake River at Milner Dam, and water is used for stock and irrigation of land near Twin Falls.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,760 | 998 | 852 | | 876 | 701 | 756 | 2,560 | 3,550 | 3,550 | 3,510 | 3,540 |
| 2 | 1,710 | 711 | 609 | | 876 | 698 | 759 | 2,830 | 3,560 | 3,540 | 3,590 | 3,540 |
| 3 | 1,720 | 452 | 571 | | 872 | 692 | 772 | 3,000 | 3,560 | 3,540 | 3,580 | 3,490 |
| 4 | 1,610 | 934 | 876 | | 876 | 698 | 775 | 3,140 | 3,540 | 3,550 | 3,580 | 3,480 |
| 5 | 1,500 | 652 | 872 | | 872 | 704 | 772 | 2,280 | 3,550 | 3,540 | 3,580 | 3,460 |
| 6 | 1,450 | 178 | 876 | | 886 | 708 | 775 | 2,480 | 3,540 | 3,480 | 3,590 | 3,320 |
| 7 | 1,330 | 141 | 865 | 900 | 886 | 679 | 727 | 3,210 | 3,560 | 3,560 | 3,570 | 3,200 |
| 8 | 1,280 | 139 | 842 | | 859 | 664 | 648 | 3,290 | 3,540 | 3,550 | 3,570 | 3,080 |
| 9 | 1,290 | 838 | 855 | | 835 | 676 | 528 | 2,890 | 3,530 | 3,570 | 3,570 | 3,090 |
| 10 | 1,290 | 1,190 | 859 | | 831 | 676 | 489 | 1,860 | 3,510 | 3,580 | 3,540 | 3,020 |
| 11 | 1,310 | 831 | 828 | | 825 | 686 | 468 | 3,300 | 3,400 | 3,620 | 3,510 | 2,990 |
| 12 | 1,250 | 701 | 815 | | 808 | 686 | 489 | 3,340 | 3,260 | 3,610 | 3,510 | 2,800 |
| 13 | 1,180 | 679 | 821 | | 795 | 679 | 512 | 3,310 | 3,350 | 3,610 | 3,530 | 2,660 |
| 14 | 1,180 | 695 | | 882 | 788 | 403 | 594 | 3,310 | 3,380 | 3,610 | 3,550 | 2,510 |
| 15 | 1,190 | 701 | | 879 | 740 | 190 | 714 | 3,390 | 3,420 | 3,590 | 3,580 | 2,290 |
| 16 | 1,180 | 255 | | 876 | 736 | 103 | 815 | 3,430 | 3,480 | 3,600 | 3,620 | 2,210 |
| 17 | 1,180 | 603 | | 886 | 743 | 272 | 928 | 3,480 | 3,510 | 3,610 | 3,630 | 2,170 |
| 18 | 1,180 | 1,130 | | 882 | 749 | 115 | 973 | 3,460 | 3,530 | 3,580 | 3,540 | 2,150 |
| 19 | 1,190 | 769 | | 876 | 759 | 116 | 984 | 3,440 | 3,460 | 3,580 | 3,520 | 2,170 |
| 20 | 1,180 | 769 | | | 765 | 113 | 1,030 | 2,570 | 3,470 | 3,590 | 3,560 | 2,160 |
| 21 | 1,190 | 772 | | | 756 | 113 | 1,180 | 3,510 | 3,560 | 3,620 | 3,560 | 2,080 |
| 22 | 1,200 | 775 | 850 | | 740 | 111 | 1,350 | 3,530 | 3,520 | 3,630 | 3,480 | 1,900 |
| 23 | 1,190 | 762 | | 880 | 743 | 476 | 1,170 | 3,530 | 3,430 | 3,610 | 3,560 | 1,820 |
| 24 | 1,170 | 762 | | | 730 | 686 | 1,120 | 3,510 | 3,420 | 3,610 | 3,540 | 1,810 |
| 25 | 1,200 | 583 | | | 727 | 730 | 1,270 | 3,490 | 3,410 | 3,610 | 3,530 | 1,810 |
| 26 | 1,220 | 589 | | | 736 | 924 | 1,810 | 3,580 | 3,430 | 3,610 | 3,540 | 1,810 |
| 27 | 1,220 | 848 | | 882 | 724 | 689 | 1,990 | 3,580 | 3,420 | 3,610 | 3,560 | 1,780 |
| 28 | 1,250 | 855 | | 876 | 704 | 714 | 2,010 | 3,550 | 3,490 | 3,600 | 3,520 | 1,750 |
| 29 | 1,270 | 865 | | 879 | 708 | 743 | 2,210 | 3,560 | 3,540 | 3,590 | 3,560 | 1,760 |
| 30 | 1,260 | 859 | | 879 | ------ | 743 | 2,300 | 3,570 | 3,540 | 3,560 | 3,560 | 1,760 |
| 31 | 1,180 | ------ | | 876 | ------ | 746 | ------ | 3,560 | ------ | 3,580 | 3,540 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 1,760 | 1,170 | 1,300 | 79,900 |
| November | 1,190 | 139 | 701 | 41,700 |
| December | ------ | ------ | 834 | 51,300 |
| January | ------ | ------ | 888 | 54,600 |
| February | 886 | 704 | 791 | 45,500 |
| March | 924 | 103 | 546 | 33,600 |
| April | 2,300 | 468 | 1,030 | 61,300 |
| May | 3,580 | 1,860 | 3,210 | 197,000 |
| June | 3,560 | 3,260 | 3,480 | 207,000 |
| July | 3,630 | 3,480 | 3,580 | 220,000 |
| August | 3,630 | 3,480 | 3,550 | 218,000 |
| September | 3,540 | 1,750 | 2,520 | 150,000 |
| The year | 3,630 | 103 | 1,880 | 1,360,000 |

### 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 mouth and 3½ miles northwest of Twin Falls.

RECORDS AVAILABLE.—March, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 568 second-feet May 20 (gage height, 2.84 feet); minimum, 112 second-feet March 24 (gage height, 0.83 foot).

1922–1928: Maximum discharge, 984 second-feet September 21, 1927 (gage height, 4.5 feet); minimum, 90 second-feet April 1 and 2, 1926 (gage height, 0.81 foot).

REMARKS.—Records good except those for stages above 300 second-feet and for estimated periods, which are fair. Natural 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, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 209 | 177 | 204 | a 225 | 184 | 162 | 276 | 247 | 173 | 229 | 204 | 242 |
| 2 | | 173 | 209 | | a 195 | 162 | 266 | 271 | 177 | 222 | 209 | 259 |
| 3 | | 169 | 200 | 245 | 204 | 134 | 257 | 285 | 182 | 217 | 220 | 266 |
| 4 | a 200 | 175 | 209 | 252 | 206 | 130 | 249 | 278 | 184 | 222 | 222 | 261 |
| 5 | | 177 | 233 | 257 | 211 | | 242 | 249 | 178 | 229 | 224 | 283 |
| 6 | | 177 | | 242 | 204 | | 233 | 206 | 180 | 213 | 226 | 310 |
| 7 | 194 | 171 | a 270 | 211 | 204 | a 145 | 229 | 202 | 177 | 215 | 220 | 264 |
| 8 | | 158 | | 202 | 224 | | a 235 | 238 | 182 | 222 | 211 | 261 |
| 9 | | 159 | 305 | 196 | 224 | | 238 | 259 | 190 | 215 | 204 | 259 |
| 10 | a 190 | 153 | 322 | | 222 | 162 | 150 | 242 | 204 | 206 | 202 | 266 |
| 11 | | 154 | 266 | | 209 | 171 | 136 | 252 | 238 | 200 | 196 | 266 |
| 12 | | 166 | 257 | | 196 | 171 | 133 | 257 | 330 | 198 | 198 | 261 |
| 13 | 182 | 166 | 245 | a 200 | 186 | 196 | 132 | 257 | 285 | 194 | 204 | 257 |
| 14 | 180 | 161 | 247 | | 188 | 196 | 130 | 252 | 370 | 192 | 209 | 249 |
| 15 | 182 | 158 | 288 | | 180 | 177 | 128 | 242 | 370 | 188 | 206 | 247 |
| 16 | 182 | 158 | 254 | | 162 | 173 | 125 | 238 | 396 | 190 | 209 | a 240 |
| 17 | 182 | 161 | 236 | | 164 | 173 | 121 | 213 | 422 | 194 | 211 | 236 |
| 18 | 180 | 269 | 238 | 209 | 162 | 158 | 118 | 190 | 435 | 190 | 215 | 238 |
| 19 | 184 | 173 | 238 | 215 | 161 | 140 | 123 | 177 | 461 | 200 | 217 | 236 |
| 20 | 184 | 168 | 242 | 213 | 161 | 128 | 132 | 288 | | 200 | 220 | 236 |
| 21 | 184 | 168 | 245 | 198 | 164 | 121 | 144 | 173 | a 360 | 196 | 224 | 242 |
| 22 | 184 | 162 | 240 | 213 | 166 | 116 | 345 | 158 | | 200 | 217 | 240 |
| 23 | 182 | 188 | 233 | 222 | 164 | 113 | 370 | 158 | | 204 | 220 | 233 |
| 24 | 186 | 204 | 217 | 188 | 162 | 112 | 142 | 151 | 252 | 186 | 231 | 233 |
| 25 | 182 | 209 | 215 | 161 | 162 | 123 | 126 | 153 | 245 | 192 | 238 | 231 |
| 26 | 184 | a 210 | 213 | 180 | 161 | 162 | 126 | 156 | 222 | 190 | | 226 |
| 27 | 184 | | 213 | 173 | 162 | 231 | 192 | 161 | 204 | 192 | a 240 | 222 |
| 28 | 186 | 213 | 213 | 171 | 166 | 249 | 266 | 164 | 184 | 190 | | 215 |
| 29 | 182 | 206 | 209 | 175 | 164 | 200 | 236 | 159 | 198 | 196 | 238 | 211 |
| 30 | 184 | 204 | 206 | 202 | ------ | 240 | 242 | 164 | 209 | 196 | 247 | 215 |
| 31 | 186 | ------ | 206 | 192 | ------ | 295 | ------ | 164 | ------ | 200 | 245 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | ------ | 180 | 188 | 11,600 |
| November | 269 | 153 | 180 | 10,700 |
| December | 322 | 200 | 239 | 14,700 |
| January | 257 | 161 | 205 | 12,600 |
| February | 224 | 161 | 183 | 10,500 |
| March | 295 | 112 | 165 | 10,100 |
| April | 370 | 118 | 195 | 11,600 |
| May | 288 | 151 | 213 | 13,100 |
| June | ------ | 173 | 270 | 16,100 |
| July | 229 | 186 | 203 | 12,500 |
| August | 247 | 196 | 220 | 13,500 |
| September | 310 | 211 | 247 | 14,700 |
| The year | ------ | 112 | 209 | 152,000 |

a Estimated.

### SALMON FALLS CREEK NEAR SAN JACINTO, NEV.

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

RECORDS AVAILABLE.—September, 1909, to September, 1916; October, 1918, to September, 1928.

EXTREMES.—Maximum discharge during year, 594 second-feet May 14 (gage height, 5.13 feet); minimum, 18 second-feet August 18, 19, and 22–24 (gage height, 2.36 feet).

1909–1916, 1919–1928: 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 for estimated periods, which are fair. Many diversions from basin above station. Gage-height record and seven discharge measurements furnished by Salmon River Canal Co. (Ltd.)

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 41 | 69 | 81 | | 79 | 76 | | 493 | | 47 | | 21 |
| 2 | 42 | 68 | 79 | | 79 | 79 | | 493 | | 48 | | 21 |
| 3 | 44 | 69 | 86 | | 79 | 88 | | 507 | | 48 | | 22 |
| 4 | 53 | 71 | 84 | | 92 | 212 | | 493 | | 48 | a 21 | 22 |
| 5 | 48 | 71 | 82 | | 132 | 212 | | 437 | | 51 | | 22 |
| 6 | 39 | 71 | 72 | | 111 | 205 | | 388 | | 52 | | 21 |
| 7 | 38 | 71 | 44 | a 80 | 88 | | | 373 | | 51 | 22 | 21 |
| 8 | 39 | 72 | 55 | | 78 | | | 391 | | 51 | 22 | 21 |
| 9 | 39 | 71 | 67 | | 75 | | | 424 | | 50 | 22 | 22 |
| 10 | 41 | 71 | 67 | | 71 | | | 451 | a 214 | 50 | 21 | 23 |
| 11 | 41 | 72 | 68 | | 69 | | | 507 | | 48 | 21 | 24 |
| 12 | 42 | 71 | 59 | | 68 | | a 196 | 536 | | 47 | 21 | 24 |
| 13 | 42 | 71 | 68 | 92 | 58 | | | 536 | | 44 | 21 | 24 |
| 14 | 42 | 71 | 60 | 99 | 74 | | | 579 | | 41 | 21 | 24 |
| 15 | 43 | 71 | 60 | 72 | 56 | | | 579 | | 39 | 20 | 24 |
| 16 | 43 | 71 | 67 | 63 | 48 | | | 564 | | 37 | 20 | 26 |
| 17 | 48 | 72 | 59 | 65 | 67 | | | 493 | | 34 | 19 | 27 |
| 18 | 59 | 72 | 52 | 50 | 71 | | | 437 | | 32 | 18 | 27 |
| 19 | 59 | 72 | 47 | 46 | 71 | a 238 | | 405 | 123 | 30 | 18 | 28 |
| 20 | 60 | 72 | 47 | 53 | 74 | | | 402 | 116 | 28 | 19 | 28 |
| 21 | 60 | 74 | 50 | 54 | 85 | | | 386 | 111 | | 19 | 29 |
| 22 | 62 | 75 | 52 | 55 | 78 | | | 375 | 102 | | 18 | 29 |
| 23 | 62 | 71 | 55 | 62 | 72 | | | 373 | 97 | a 24 | 18 | 28 |
| 24 | 62 | 68 | 54 | 63 | 71 | | 203 | 380 | 96 | | 18 | 28 |
| 25 | 62 | 69 | 54 | 65 | 71 | | 210 | 394 | 90 | | 19 | 27 |
| 26 | 63 | 69 | | 69 | 72 | | 252 | 399 | 84 | | 20 | 28 |
| 27 | 65 | 72 | | 65 | 71 | | 298 | 378 | 68 | | 20 | 28 |
| 28 | 69 | 75 | a 56 | 81 | 72 | | 367 | 362 | 56 | a 20 | 21 | 25 |
| 29 | 69 | 82 | | 74 | 75 | | 437 | 349 | 51 | | 21 | 24 |
| 30 | 69 | 84 | | 74 | ------ | | 479 | 318 | 47 | | 20 | 24 |
| 31 | 69 | ------ | | 76 | ------ | | ------ | 306 | ------ | | 21 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 69 | 38 | 52.1 | 3,200 |
| November | 84 | 68 | 71.9 | 4,280 |
| December | 86 | 44 | 61.5 | 3,780 |
| January | 99 | 46 | 72.2 | 4,440 |
| February | 132 | 48 | 76.1 | 4,380 |
| March | ------ | 76 | 220 | 13,500 |
| April | 479 | ------ | 225 | 13,400 |
| May | 579 | 306 | 436 | 26,800 |
| June | ------ | 47 | 163 | 9,700 |
| July | 52 | ------ | 36.0 | 2,210 |
| August | ------ | 18 | 20.2 | 1,240 |
| September | 29 | 21 | 24.7 | 1,470 |
| The year | 579 | 18 | 122 | 88,400 |

a Estimated.

### 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, 1928.

EXTREMES.—Maximum discharge during year, 2,390 second-feet May 26 (gage height, 4.60 feet); minimum, 13 second-feet September 20–24 (gage height, −0.15 foot).

1915–1928: Maximum discharge, 3,560 second-feet June 12, 1921 (gage height, 5.70 feet), minimum, 0.1 second-foot September 10–20 and October 2–9, 1924.

REMARKS.—Records for October, November, and May to September, good; December 1–6, March 18–31, and April, fair; estimated periods, December 17 to March 7 and September 24–26, poor. Diversions for irrigation above station. Hailey power plant diverts around gage through Big Wood Slough. Seven discharge measurements and daily gage-height reading April 2 to September 29 furnished by water master for Big Wood and Little Wood Rivers.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 172 | 123 | 102 | | | | 180 | 925 | 1,260 | 482 | 204 | 20 |
| 2 | 172 | 126 | 96 | | | | 192 | 925 | 1,190 | 460 | 158 | 19 |
| 3 | 172 | 130 | 88 | | | | 192 | 865 | 1,120 | 460 | 132 | 19 |
| 4 | 172 | 130 | 90 | | | | 180 | 865 | 1,050 | 460 | 110 | 18 |
| 5 | 161 | 140 | 88 | | | | 180 | 925 | 987 | 482 | 119 | 18 |
| 6 | 161 | 140 | 88 | | | | 180 | 1,120 | 987 | 460 | 114 | 18 |
| 7 | 150 | 150 | | | | | 169 | 1,340 | 987 | 398 | 103 | 16 |
| 8 | 150 | 161 | | | | 30 | 158 | 1,580 | 925 | 439 | 86 | 16 |
| 9 | 150 | 172 | | | | | 169 | 1,860 | 807 | 418 | 72 | 18 |
| 10 | 140 | 220 | | | | | 204 | 1,760 | 751 | 418 | 68 | 27 |
| 11 | 140 | 195 | 40 | | | | 204 | 1,960 | 751 | 418 | 67 | 19 |
| 12 | 140 | 195 | | | | | 180 | 1,960 | 697 | 398 | 63 | 19 |
| 13 | 140 | 172 | | | | | 180 | 1,960 | 671 | 378 | 59 | 19 |
| 14 | 130 | 161 | | | | | 192 | 1,580 | 620 | 378 | 50 | 19 |
| 15 | 130 | 150 | | | 20 | | 204 | 1,420 | 620 | 360 | 41 | 19 |
| 16 | 130 | 150 | | 25 | | | 204 | 1,340 | 595 | 360 | 42 | 17 |
| 17 | 130 | 150 | | | | 40 | 217 | 1,260 | 503 | 360 | 40 | 16 |
| 18 | 130 | 150 | | | | 45 | 217 | 1,420 | 548 | 324 | 38 | 16 |
| 19 | 126 | 150 | | | | 105 | 204 | 1,580 | 526 | 306 | 33 | 16 |
| 20 | 126 | 140 | | | | 123 | 204 | 1,670 | 526 | 290 | 32 | 13 |
| 21 | 126 | 140 | | | | 158 | 192 | 1,760 | 526 | 290 | 32 | 13 |
| 22 | 126 | 140 | | | | 217 | 204 | 1,960 | 526 | 290 | 32 | 13 |
| 23 | 126 | 130 | | | | 259 | 244 | 1,960 | 572 | 274 | 25 | 13 |
| 24 | 140 | 140 | 30 | | | 259 | 398 | 1,960 | 595 | 274 | 25 | 13 |
| 25 | 140 | 140 | | | | 259 | 460 | 2,060 | 645 | 259 | 22 | 14 |
| 26 | 130 | 140 | | | | 230 | 645 | 2,170 | 645 | 244 | 24 | 14 |
| 27 | 126 | 130 | | | | 230 | 865 | 2,170 | 645 | 244 | 24 | 14 |
| 28 | 126 | 123 | | | | 204 | 925 | 1,960 | 572 | 244 | 23 | 14 |
| 29 | 126 | 116 | | | | 192 | 865 | 1,860 | 526 | 244 | 22 | 14 |
| 30 | 126 | 106 | | | ------ | 204 | 807 | 1,580 | 503 | 230 | 21 | 14 |
| 31 | 123 | ------ | | | ------ | 192 | ------ | 1,340 | ------ | 217 | 21 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 172 | 123 | 140 | 8,610 |
| November | 220 | 106 | 147 | 8,750 |
| December | 102 | ---------- | 44.9 | 2,760 |
| January | ---------- | ---------- | 25.0 | 1,540 |
| February | ---------- | ---------- | 20.0 | 1,150 |
| March | 259 | ---------- | 103 | 6,330 |
| April | 925 | 158 | 314 | 18,700 |
| May | 2,170 | 865 | 1,580 | 97,200 |
| June | 1,260 | 503 | 729 | 43,400 |
| July | 482 | 217 | 350 | 21,500 |
| August | 204 | 21 | 61.4 | 3,780 |
| September | 27 | 13 | 16.6 | 988 |
| The year | 2,170 | ---------- | 296 | 215,000 |

*Daily and monthly discharge, in second-feet, of Big Wood River and Big Wood Slough at Hailey, Idaho, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 269 | 229 | 231 | 165 | 149 | 163 | 248 | 1,010 | 1,300 | 509 | 221 | 136 |
| 2 | 269 | 232 | 218 | 165 | 157 | 163 | 260 | 1,030 | 1,240 | 484 | 199 | 141 |
| 3 | 269 | 233 | 198 | 165 | 157 | 163 | 257 | 965 | 1,180 | 485 | 245 | 141 |
| 4 | 269 | 233 | 200 | 165 | 157 | 163 | 235 | 962 | 1,100 | 486 | 220 | 137 |
| 5 | 264 | 243 | 198 | 165 | 157 | 163 | 233 | 1,020 | 1,060 | 508 | 238 | 137 |
| 6 | 264 | 243 | 232 | 165 | 164 | 163 | 229 | 1,220 | 1,060 | 485 | 227 | 134 |
| 7 | 253 | 253 | 180 | 165 | 164 | 163 | 222 | 1,450 | 1,060 | 420 | 209 | 138 |
| 8 | 253 | 264 | 180 | 162 | 157 | 163 | 209 | 1,670 | 990 | 463 | 186 | 138 |
| 9 | 250 | 275 | 180 | 162 | 153 | 163 | 226 | 1,950 | 866 | 440 | 182 | 166 |
| 10 | 240 | 330 | 180 | 162 | 153 | 163 | 235 | 1,840 | 802 | 439 | 171 | 156 |
| 11 | 240 | 305 | 188 | 162 | 153 | 163 | 231 | 2,060 | 798 | 438 | 167 | 148 |
| 12 | 240 | 305 | 188 | 162 | 153 | 152 | 235 | 2,070 | 742 | 418 | 163 | 152 |
| 13 | 246 | 282 | 180 | 162 | 153 | 152 | 239 | 2,060 | 726 | 398 | 162 | 159 |
| 14 | 236 | 271 | 180 | 162 | 153 | 159 | 253 | 1,660 | 677 | 398 | 147 | 148 |
| 15 | 243 | 260 | 195 | 154 | 153 | 159 | 267 | 1,470 | 673 | 379 | 151 | 148 |
| 16 | 243 | 253 | 193 | 169 | 153 | 184 | 269 | 1,400 | 634 | 379 | 152 | 139 |
| 17 | 230 | 272 | 185 | 162 | 153 | 184 | 290 | 1,300 | 613 | 377 | 143 | 142 |
| 18 | 233 | 266 | 178 | 162 | 153 | 197 | 292 | 1,470 | 586 | 341 | 148 | 142 |
| 19 | 229 | 260 | 170 | 184 | 146 | 264 | 287 | 1,660 | 555 | 322 | 139 | 135 |
| 20 | 229 | 250 | 170 | 169 | 136 | 226 | 304 | 1,740 | 556 | 307 | 138 | 142 |
| 21 | 229 | 250 | 178 | 162 | 120 | 302 | 289 | 1,850 | 557 | 307 | 142 | 139 |
| 22 | 229 | 256 | 178 | 154 | 153 | 339 | 301 | 2,060 | 548 | 307 | 142 | 139 |
| 23 | 236 | 252 | 178 | 154 | 153 | 356 | 319 | 2,070 | 604 | 291 | 144 | 142 |
| 24 | 259 | 250 | 170 | 122 | 153 | 381 | 463 | 2,050 | 628 | 291 | 144 | 135 |
| 25 | 250 | 250 | 170 | 162 | 153 | 381 | 495 | 2,150 | 684 | 276 | 151 | 124 |
| 26 | 236 | 250 | 170 | 154 | 120 | 333 | 696 | 2,270 | 684 | 261 | 150 | 136 |
| 27 | 232 | 233 | 170 | 144 | 136 | 316 | 926 | 2,270 | 685 | 261 | 153 | 130 |
| 28 | 232 | 226 | 193 | 144 | 146 | 274 | 988 | 2,040 | 605 | 261 | 149 | 133 |
| 29 | 232 | 202 | 193 | 162 | 153 | 257 | 918 | 1,930 | 557 | 263 | 151 | 136 |
| 30 | 232 | 228 | 193 | 162 | ------ | 274 | 866 | 1,650 | 531 | 247 | 140 | 143 |
| 31 | 229 | ------ | 185 | 154 | ------ | 262 | ------ | 1,390 | ------ | 233 | 140 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 269 | 229 | 244 | 15,000 |
| November | 330 | 202 | 255 | 15,200 |
| December | 232 | 170 | 187 | 11,500 |
| January | 184 | 122 | 160 | 9,840 |
| February | 164 | 120 | 150 | 8,630 |
| March | 381 | 152 | 224 | 13,800 |
| April | 988 | 209 | 376 | 22,400 |
| May | 2,270 | 962 | 1,670 | 103,000 |
| June | 1,300 | 531 | 777 | 46,200 |
| July | 509 | 233 | 370 | 22,800 |
| August | 245 | 138 | 168 | 10,300 |
| September | 166 | 124 | 141 | 8,390 |
| The year | 2,270 | 120 | 395 | 287,000 |

### BIG WOOD RIVER NEAR BELLEVUE, IDAHO

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

DRAINAGE AREA.—823 square miles.

RECORDS AVAILABLE.—July, 1911, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,890 second-feet May 27 (gage height, 3.55 feet); minimum, 52 second-feet September 24–30.

1911–1928: Maximum discharge, 3,660 second-feet June 16, 1921 (gage height, 6.07 feet); minimum, 25 second-feet April 22–24, 1920.

REMARKS.—Records good. Discharge estimated September 28–30, interpolated May 10. Numerous diversions for irrigation above station. Gage-height record and five discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

*Daily and monthly discharge, in second-feet, 1928*

| Day | Mar. | Apr. | May | June | July | Aug | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | | 129 | 607 | 907 | 178 | 75 | 67 |
| 2 | | 129 | 589 | 805 | 171 | 75 | 65 |
| 3 | | 132 | 564 | 746 | 154 | 70 | 62 |
| 4 | | 126 | 540 | 607 | 148 | 75 | 62 |
| 5 | | 120 | 515 | 556 | 141 | 89 | 62 |
| 6 | | 114 | 598 | 548 | 135 | 94 | 60 |
| 7 | | 114 | 765 | 507 | 132 | 94 | 57 |
| 8 | | 114 | 907 | 463 | 135 | 91 | 57 |
| 9 | | 114 | 1,150 | 434 | 135 | 86 | 60 |
| 10 | | 117 | 1,240 | 427 | 132 | 83 | 62 |
| 11 | | 120 | 1,320 | 421 | 135 | 80 | 65 |
| 12 | | 120 | 1,380 | 395 | 129 | 80 | 65 |
| 13 | | 117 | 1,390 | 369 | 129 | 83 | 73 |
| 14 | | 120 | 1,210 | 346 | 120 | 78 | 73 |
| 15 | 108 | 123 | 981 | 306 | 120 | 75 | 70 |
| 16 | 105 | 129 | 865 | 281 | 120 | 75 | 65 |
| 17 | 103 | 135 | 775 | 266 | 108 | 75 | 62 |
| 18 | 97 | 144 | 865 | 247 | 108 | 73 | 60 |
| 19 | 94 | 151 | 1,040 | 225 | 111 | 70 | 57 |
| 20 | 97 | 161 | 1,110 | 208 | 103 | 73 | 57 |
| 21 | 100 | 161 | 1,190 | 193 | 103 | 73 | 57 |
| 22 | 111 | 154 | 1,330 | 161 | 94 | 73 | 55 |
| 23 | 126 | 158 | 1,410 | 158 | 86 | 73 | 55 |
| 24 | 138 | 174 | 1,460 | 182 | 83 | 73 | 52 |
| 25 | 144 | 230 | 1,560 | 212 | 89 | 73 | 52 |
| 26 | 138 | 323 | 1,720 | 238 | 89 | 75 | 52 |
| 27 | 154 | 499 | 1,820 | 243 | 89 | 78 | 52 |
| 28 | 154 | 531 | 1,640 | 212 | 86 | 78 | |
| 29 | 144 | 540 | 1,480 | 189 | 86 | 75 | 52 |
| 30 | 135 | 580 | 1,260 | 178 | 91 | 75 | |
| 31 | 132 | | 1,070 | | 83 | 70 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| March 15–31 | 154 | 94 | 122 | 4,110 |
| April | 580 | 114 | 196 | 11,700 |
| May | 1,820 | 515 | 1,110 | 68,200 |
| June | 907 | 158 | 368 | 21,900 |
| July | 178 | 83 | 117 | 7,190 |
| August | 94 | 70 | 77.7 | 4,780 |
| September | 73 | 52 | 59.7 | 3,550 |
| The period | | | | 121,000 |

### 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 sea-level datum.

DRAINAGE AREA.—1,500 square miles.

RECORDS AVAILABLE.—February, 1909, to September, 1928 (gage-height record only prior to April 4, 1909). Practically no storage prior to July 14, 1909.

EXTREMES.—Maximum contents during year, 175,930 acre-feet May 30 (gage height, 4,930.91 feet); no storage September 9 and 16–18.

1909–1928: 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.—Storage is used for irrigation on about 69,000 acres of land, under Carey Act project of the Big Wood Canal Co. (Ltd.). Available storage is 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, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 59,180 | 64,390 | 74,440 | 82,780 | 90,590 | 96,790 | 139,740 | 166,180 | 174,460 | 121,990 | 54,140 | 3,195 |
| 2 | 59,320 | 64,920 | 74,950 | 82,990 | 90,820 | 96,950 | 141,040 | 166,790 | 173,040 | 119,960 | 52,080 | 2,384 |
| 3 | 59,490 | 65,160 | 75,430 | 83,230 | 91,070 | 97,140 | 142,160 | 167,210 | 171,920 | 117,960 | 49,850 | 1,621 |
| 4 | 59,630 | 65,520 | 75,880 | 83,420 | 91,280 | 97,310 | 143,390 | 167,390 | 170,800 | 115,890 | 47,730 | 833 |
| 5 | 59,820 | 65,850 | 76,340 | 83,640 | 91,530 | 97,500 | 144,380 | 167,170 | 168,940 | 113,640 | 45,640 | 154 |
| 6 | 59,980 | 66,190 | 76,750 | 83,820 | 91,760 | 97,670 | 145,400 | 166,710 | 167,530 | 111,380 | 43,590 | 57 |
| 7 | 60,150 | 66,590 | 77,110 | 83,970 | 92,060 | 97,810 | 146,470 | 166,540 | 165,800 | 109,220 | 41,580 | 71 |
| 8 | 60,330 | 66,950 | 77,380 | 84,130 | 92,310 | 97,930 | 147,220 | 166,610 | 163,740 | 106,890 | 39,670 | 42 |
| 9 | 60,480 | 67,200 | 77,730 | 84,260 | 92,540 | 97,890 | 148,040 | 167,030 | 161,940 | 104,670 | 37,600 | 0 |
| 10 | 60,660 | 67,920 | 78,170 | 84,500 | 92,800 | 98,120 | 148,740 | 167,950 | 160,100 | 102,760 | 35,650 | 35 |
| 11 | 60,800 | 68,600 | 78,440 | 84,940 | 93,030 | 98,460 | 149,380 | 168,660 | 158,410 | 100,080 | 33,780 | 33 |
| 12 | 60,970 | 69,330 | 78,780 | 85,350 | 93,240 | 99,490 | 149,990 | 169,660 | 156,570 | 97,910 | 32,030 | 32 |
| 13 | 61,130 | 69,830 | 79,120 | 85,730 | 93,470 | 100,440 | 150,800 | 170,730 | 154,970 | 95,700 | 29,960 | 33 |
| 14 | 61,260 | 70,350 | 79,390 | 86,170 | 93,710 | 102,300 | 151,500 | 171,700 | 153,330 | 93,400 | 28,220 | 54 |
| 15 | 61,420 | 70,930 | 79,610 | 86,510 | 93,940 | 104,050 | 152,250 | 172,420 | 151,470 | 91,230 | 26,430 | 57 |
| 16 | 61,600 | 71,260 | 79,820 | 86,800 | 94,170 | 105,740 | 152,770 | 172,530 | 149,990 | 89,070 | 24,620 | 0 |
| 17 | 61,770 | 71,680 | 80,030 | 87,060 | 94,340 | 107,020 | 153,270 | 172,350 | 148,140 | 86,820 | 23,010 | 0 |
| 18 | 61,950 | 72,170 | 80,220 | 87,310 | 94,520 | 108,610 | 153,950 | 171,950 | 146,560 | 84,450 | 21,360 | 0 |
| 19 | 62,130 | 72,680 | 80,390 | 87,510 | 94,730 | 109,860 | 154,770 | 171,740 | 144,840 | 82,320 | 19,940 | 27 |
| 20 | 62,300 | 73,050 | 80,580 | 87,730 | 94,970 | 111,890 | 155,530 | 171,850 | 142,650 | 80,070 | 18,170 | 44 |
| 21 | 62,460 | 73,370 | 80,750 | 88,000 | 95,180 | 113,970 | 156,540 | 171,850 | 141,040 | 77,960 | 16,680 | 48 |
| 22 | 62,640 | 73,880 | 80,920 | 88,280 | 95,370 | 116,600 | 157,400 | 172,060 | 139,320 | 75,970 | 15,220 | 51 |
| 23 | 62,870 | 74,230 | 81,140 | 88,480 | 95,540 | 120,100 | 158,210 | 172,570 | 137,750 | 73,660 | 14,010 | 53 |
| 24 | 63,070 | 74,580 | 81,350 | 88,770 | 95,700 | 123,400 | 158,950 | 172,970 | 135,570 | 71,560 | 12,660 | 51 |
| 25 | 63,210 | 75,030 | 81,500 | 88,980 | 95,890 | 126,350 | 159,630 | 173,290 | 133,170 | 69,330 | 11,510 | 48 |
| 26 | 63,360 | 75,320 | 81,650 | 89,220 | 96,100 | 128,880 | 160,580 | 173,660 | 131,610 | 67,200 | 10,030 | 40 |
| 27 | 63,500 | 75,780 | 81,780 | 89,450 | 96,270 | 130,930 | 161,670 | 174,760 | 129,950 | 64,900 | 8,703 | 39 |
| 28 | 63,640 | 75,660 | 81,910 | 89,630 | 96,460 | 133,120 | 163,050 | 175,380 | 127,730 | 62,640 | 7,402 | 36 |
| 29 | 63,780 | 75,160 | 82,080 | 89,860 | 96,620 | 135,020 | 164,780 | 175,710 | 125,880 | 60,800 | 6,254 | 35 |
| 30 | 63,910 | 74,640 | 82,320 | 90,130 | ------- | 136,890 | 165,580 | 175,930 | 123,900 | 58,700 | 5,171 | 35 |
| 31 | 64,090 | ------- | 82,560 | 90,360 | ------- | 138,430 | ------- | 175,450 | ------- | 56,200 | 4,132 | ------ |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 1,530 second-feet May 28 (gage height, 5.13 feet); minimum, 12 second-feet September 25.

1911–1928: Maximum discharge, 5,070 second-feet May 18, 1911 (gage height, 9.2 feet); no flow February 3, 1915.

REMARKS.—Records good except during winter and last half of September, which are fair. Discharge estimated December 13 to March 11. Numerous diversions several miles upstream. Flow completely regulated by gates in outlet tunnel at Magic Dam. Gage-height record and 17 discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 84 | 44 | 68 | | | | 22 | 595 | 1,470 | 1,280 | 1,150 | 567 |
| 2 | 84 | 20 | 16 | | 19 | | 22 | 601 | 1,470 | 1,280 | 1,120 | 485 |
| 3 | 84 | 20 | 16 | | | 28 | 23 | 700 | 1,470 | 1,280 | 1,120 | 410 |
| 4 | 84 | 20 | 16 | 16 | | | 23 | 862 | 1,440 | 1,280 | 1,120 | 303 |
| 5 | 84 | 20 | 16 | | 20 | 35 | 23 | 924 | 1,440 | 1,310 | 1,090 | 167 |
| 6 | 83 | 20 | 16 | | | 40 | 23 | 956 | 1,440 | 1,340 | 1,090 | 115 |
| 7 | 83 | 20 | 16 | 16 | | 205 | 23 | 956 | 1,440 | 1,340 | 1,090 | 115 |
| 8 | 81 | 20 | 16 | | 21 | 368 | 23 | 956 | 1,410 | 1,310 | 1,050 | 109 |
| 9 | 79 | 20 | 16 | | | 320 | 23 | 988 | 1,410 | 1,310 | 1,050 | 107 |
| 10 | 79 | 19 | 16 | | | 180 | 23 | 1,020 | 1,380 | 1,280 | 1,050 | 107 |
| 11 | 79 | 19 | 16 | 16 | 22 | 44 | 23 | 1,020 | 1,340 | 1,280 | 1,020 | 104 |
| 12 | 77 | 20 | 16 | | | 35 | 23 | 1,050 | 1,310 | 1,280 | 1,020 | 104 |
| 13 | 73 | 20 | | | | 35 | 23 | 1,090 | 1,310 | 1,280 | 988 | 107 |
| 14 | 70 | 20 | | 16 | | 29 | 23 | 1,090 | 1,280 | 1,250 | 988 | 109 |
| 15 | 66 | 20 | 16 | | 23 | 23 | 23 | 1,090 | 1,250 | 1,250 | 956 | 109 |
| 16 | 66 | 20 | | | | 20 | 23 | 1,090 | 1,220 | 1,250 | 956 | 100 |
| 17 | 66 | 20 | | 16 | | 20 | 23 | 1,120 | 1,190 | 1,280 | 924 | 96 |
| 18 | 66 | 20 | 16 | | 24 | 19 | 24 | 1,150 | 1,190 | 1,280 | 924 | 84 |
| 19 | 66 | 20 | | | | 19 | 24 | 1,190 | 1,150 | 1,280 | 893 | 86 |
| 20 | 66 | 20 | | | | 19 | 24 | 1,220 | 1,190 | 1,280 | 893 | 86 |
| 21 | 66 | 20 | 16 | 16 | 25 | 20 | 24 | 1,250 | 1,190 | 1,250 | 862 | 84 |
| 22 | 66 | 20 | | | | 20 | 24 | 1,250 | 1,190 | 1,250 | 862 | 84 |
| 23 | 63 | 20 | | 16 | | 20 | 24 | 1,310 | 1,190 | 1,250 | 832 | 83 |
| 24 | 60 | 20 | 16 | | | 20 | 24 | 1,440 | 1,150 | 1,250 | 826 | 81 |
| 25 | 60 | 20 | | | 26 | 20 | 24 | 1,470 | 1,250 | 1,220 | 808 | 70 |
| 26 | 60 | 20 | | 17 | | 20 | 24 | 1,470 | 1,250 | 1,220 | 784 | 79 |
| 27 | 60 | 248 | 16 | | | 20 | 24 | 1,470 | 1,280 | 1,220 | 760 | 79 |
| 28 | 60 | 470 | | | 27 | 20 | 24 | 1,530 | 1,280 | 1,190 | 736 | 77 |
| 29 | 60 | 567 | | 18 | | 21 | 306 | 1,470 | 1,280 | 1,190 | 706 | 77 |
| 30 | 60 | 355 | | | | 21 | 550 | 1,470 | 1,280 | 1,190 | 665 | 77 |
| 31 | 60 | | 16 | 19 | | 22 | | 1,470 | | 1,150 | 624 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 84 | 60 | 70.8 | 4,350 |
| November | 567 | 19 | 72.7 | 4,330 |
| December | 68 | | 17.7 | 1,090 |
| January | | | 16.4 | 1,010 |
| February | | | 23.0 | 1,320 |
| March | 368 | 19 | 56.4 | 3,470 |
| April | 550 | 22 | 50.3 | 2,990 |
| May | 1,530 | 595 | 1,140 | 70,100 |
| June | 1,470 | 1,150 | 1,300 | 77,400 |
| July | 1,340 | 1,150 | 1,260 | 77,500 |
| August | 1,150 | 624 | 934 | 57,400 |
| September | 567 | 70 | 142 | 8,450 |
| The year | 1,530 | | 426 | 309,000 |

### 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, 1928.

EXTREMES.—1921–1928: Maximum discharge, 3,330 second-feet June 13, 1921 (gage height, 12.79 feet); practically no flow for long periods.

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

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

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

RECORDS AVAILABLE.—January, 1911, to September, 1928.

EXTREMES.—Maximum discharge during year, 133 second-feet November 30 (gage height, 2.66 feet); no flow except November 27–30.

1911–1928: Maximum discharge, 3,180 second-feet May 18, 1921 (gage height, 15.0 feet); no flow for long periods since establishment of station.

REMARKS.—Records good. Station is below all diversions of Big Wood Canal Co. North Gooding and Richfield Canals divert water between station and Magic Dam. Lincoln Canal, designed to carry about 700 second-feet and completed in spring of 1925, diverts 7 miles upstream for the purpose of conserving loss in the natural channel throughout this stretch of the river and empties directly into North Gooding Canal at its head gates a quarter of a mile above station. Flow is regulated by storage in Magic Reservoir. Gage-height record furnished by water master for Big Wood and Little Wood Rivers.

*Daily and monthly discharge, in second-feet, 1927–28*

| Date | Discharge | Date | Discharge |
|---|---|---|---|
| Nov. 27 | 10 | Nov. 29 | 42 |
| Nov. 28 | 64 | Nov. 30 | 75 |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| November 27–30 | 75 | 10 | 47.8 | 379 |

NOTE.—No flow during year ending Sept. 30, 1928, except Nov. 27–30.

### 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, 1928. 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, 74 second-feet May 4 (gage height, 1.87 feet); no flow for long period prior to May 1.

1921–1928: 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 11 discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

*Daily and monthly discharge, in second-feet, 1928*

| Day | May | June | July | Aug. | Sept. | Day | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11 | 15 | 19 | 35 | 6 | 16 | 37 | 14 | 20 | 20 | 15 |
| 2 | 55 | 13 | 20 | 35 | 5 | 17 | 37 | 16 | 19 | 20 | 15 |
| 3 | 63 | 13 | 19 | 33 | 6 | 18 | 36 | 16 | 19 | 20 | 12 |
| 4 | 63 | 12 | 21 | 30 | 7 | 19 | 36 | 16 | 19 | 19 | 8 |
| 5 | 63 | 11 | 23 | 27 | 8 | 20 | 30 | 16 | 19 | 19 | 4 |
| 6 | 63 | 11 | 21 | 26 | 4 | 21 | 32 | 14 | 19 | 19 | 4 |
| 7 | 63 | 11 | 21 | 21 | 7 | 22 | 33 | 12 | 19 | 20 | 3 |
| 8 | 56 | 12 | 15 | 20 | 19 | 23 | 30 | 14 | 25 | 21 | 3 |
| 9 | 56 | 12 | 15 | 20 | 17 | 24 | 28 | 15 | 27 | 23 | 7 |
| 10 | 56 | 13 | 13 | 20 | 9 | 25 | 20 | 13 | 27 | 19 | 7 |
| 11 | 50 | 15 | 13 | 20 | 10 | 26 | 15 | 15 | 29 | 10 | 5 |
| 12 | 35 | 16 | 12 | 19 | 10 | 27 | 14 | 17 | 35 | 6 | 3 |
| 13 | 37 | 14 | 12 | 18 | 10 | 28 | 16 | 18 | 35 | 6 | 4 |
| 14 | 37 | 14 | 11 | 20 | 13 | 29 | 16 | 14 | 36 | 7 | 7 |
| 15 | 38 | 13 | 12 | 20 | 16 | 30 | 16 | 19 | 36 | 7 | 6 |
| | | | | | | 31 | 19 | ------- | 35 | 8 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| May | 63 | 11 | 37.5 | 2,310 |
| June | 19 | 11 | 14.1 | 839 |
| July | 36 | 11 | 21.5 | 1,320 |
| August | 35 | 6 | 19.6 | 1,210 |
| September | 19 | 3 | 8.3 | 490 |
| The period | ---------- | ---------- | ---------- | 6,170 |

### BIG WOOD RIVER NEAR GOODING, IDAHO

LOCATION.—Water-stage recorder in sec. 21, T. 6 S., R. 14 E., 3½ miles above bridge on upper road between Bliss and Hagerman, 5 miles above diversion dam for King Hill project, and 6 miles southwest of Gooding.

RECORDS AVAILABLE.—March, 1916, to September, 1928.

EXTREMES.—Maximum discharge during year, 182 second-feet March 28 (gage height, 2.38 feet); no flow April 18, practically no flow April 19 and August 31, and probably no flow prior to early spring run-off period.

1916–1928: Maximum discharge, 3,680 second-feet March 17, 1922 (gage height, 9.00 feet); no flow for long periods each year.

REMARKS.—Records good. Many diversions for irrigation above station. Flow regulated by storage reservoirs upstream. Gage-height record and five discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

*Daily and monthly discharge, in second-feet, 1928*

| Day | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | | 44 | 1 | 35 | 19 | 10 | |
| 2 | | 42 | a 18 | 29 | 20 | 13 | |
| 3 | | 22 | 26 | 29 | 11 | 15 | |
| 4 | | 22 | 26 | 31 | 15 | 23 | |
| 5 | | 86 | 27 | 28 | 14 | 18 | a 1 |
| 6 | | 95 | 27 | 23 | 13 | 15 | |
| 7 | | 95 | 31 | 22 | 13 | 12 | |
| 8 | | 61 | 24 | 21 | 24 | 7 | |
| 9 | | 33 | 18 | 27 | 23 | a 3 | 6 |
| 10 | | 14 | 18 | 27 | 18 | a 2 | 5 |
| 11 | | 30 | 20 | 41 | 20 | 5 | 4 |
| 12 | | 27 | 9 | 45 | 18 | 6 | 4 |
| 13 | | 30 | 12 | 39 | 17 | 7 | 3 |
| 14 | | a 22 | 29 | 26 | 17 | 5 | 4 |
| 15 | | a 19 | 33 | 24 | 14 | 5 | 7 |
| 16 | | a 11 | 30 | 22 | 17 | 7 | 7 |
| 17 | | 2 | 22 | 28 | 13 | 9 | 5 |
| 18 | | 0 | 19 | 34 | 13 | 8 | 5 |
| 19 | | 0 | 15 | 26 | 12 | 6 | 4 |
| 20 | | 3 | 19 | 13 | 10 | 6 | 3 |
| 21 | | 2 | 19 | 13 | 14 | 6 | 1 |
| 22 | | 1 | 17 | 15 | 15 | 7 | 1 |
| 23 | | 1 | 19 | 16 | 14 | 9 | 1 |
| 24 | | a 7 | 21 | 10 | 11 | 12 | 1 |
| 25 | | 11 | 25 | 10 | 9 | 11 | 1 |
| 26 | | 4 | 26 | 28 | 8 | 7 | 1 |
| 27 | | a 2 | 22 | 31 | 9 | a 2 | 1 |
| 28 | 143 | a 2 | 25 | 32 | 11 | 1 | 1 |
| 29 | 95 | a 3 | 27 | 30 | 12 | 1 | 1 |
| 30 | 77 | 1 | 34 | 10 | 11 | 1 | 3 |
| 31 | 53 | | 32 | | 10 | a 0 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| April | 95 | 0 | 23.1 | 1,370 |
| May | 34 | 1 | 22.3 | 1,370 |
| June | 45 | 10 | 25.5 | 1,520 |
| July | 24 | 8 | 14.4 | 885 |
| August | 23 | 0 | 7.7 | 470 |
| September | 7 | | 2.6 | 150 |
| The period | | | | 5,760 |

a Estimated.

### 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, 1928.

EXTREMES.—Maximum discharge during year, 176 second-feet September 9 (gage height, 1.74 feet); minimum, 15 second-feet April 11 (gage height, 0.92 foot). 1915–1928: Maximum discharge, 419 second-feet June 6, 1921 (gage height, 3.00 feet); minimum, 0.9 second-foot March 21–24, 1919.

REMARKS.—Records fair. Big Wood Slough is a natural channel of Big Wood River that is utilized also as a tailrace for the Hailey power plant. Flow regulated by load on power plant. Eight discharge measurements and daily gage-height reading April 2 to September 29 furnished by water master for Big Wood and Little Wood Rivers.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 97 | 106 | 129 | 140 | 129 | 133 | 68 | 86 | 43 | 27 | 17 | 116 |
| 2 | 97 | 106 | 122 | 140 | 137 | 133 | 68 | 103 | 47 | 24 | 41 | 122 |
| 3 | 97 | 103 | 110 | 140 | 137 | 133 | 65 | 100 | 61 | 25 | 113 | 122 |
| 4 | 97 | 103 | 110 | 140 | 137 | 133 | 55 | 97 | 63 | 26 | 110 | 119 |
| 5 | 103 | 103 | 110 | 140 | 137 | 133 | 53 | 100 | 75 | 26 | 119 | 119 |
| 6 | 103 | 103 | 144 | 140 | 144 | 133 | 49 | 100 | 73 | 25 | 113 | 116 |
| 7 | 103 | 103 | 140 | 140 | 144 | 133 | 53 | 106 | 73 | 22 | 106 | 122 |
| 8 | 103 | 103 | 140 | 137 | 137 | 133 | 51 | 91 | 65 | 24 | 100 | 122 |
| 9 | 100 | 103 | 140 | 137 | 133 | 133 | 57 | 94 | 59 | 22 | 110 | 148 |
| 10 | 100 | 110 | 140 | 137 | 133 | 133 | 31 | 81 | 51 | 21 | 103 | 129 |
| 11 | 100 | 110 | 148 | 137 | 133 | 133 | 27 | 103 | 47 | 20 | 100 | 129 |
| 12 | 100 | 110 | 148 | 137 | 133 | 122 | 55 | 106 | 45 | 20 | 100 | 133 |
| 13 | 106 | 110 | 140 | 137 | 133 | 122 | 59 | 100 | 55 | 20 | 103 | 140 |
| 14 | 106 | 110 | 140 | 137 | 133 | 129 | 61 | 78 | 57 | 20 | 97 | 129 |
| 15 | 113 | 110 | 155 | 129 | 133 | 129 | 63 | 53 | 53 | 19 | 110 | 129 |
| 16 | 113 | 103 | 163 | 144 | 133 | 144 | 65 | 63 | 39 | 19 | 110 | 122 |
| 17 | 100 | 122 | 155 | 137 | 133 | 144 | 73 | 41 | 110 | 17 | 103 | 126 |
| 18 | 103 | 116 | 148 | 137 | 133 | 152 | 75 | 49 | 38 | 17 | 110 | 126 |
| 19 | 103 | 110 | 140 | 159 | 126 | 159 | 83 | 75 | 29 | 16 | 106 | 119 |
| 20 | 103 | 110 | 140 | 144 | 116 | 103 | 100 | 73 | 30 | 17 | 106 | 129 |
| 21 | 103 | 110 | 148 | 137 | 100 | 144 | 97 | 86 | 31 | 17 | 110 | 126 |
| 22 | 103 | 116 | 148 | 129 | 133 | 122 | 97 | 97 | 22 | 17 | 110 | 126 |
| 23 | 110 | 122 | 148 | 129 | 133 | 97 | 75 | 106 | 32 | 17 | 119 | 129 |
| 24 | 119 | 110 | 140 | 97 | 133 | 122 | 65 | 94 | 33 | 17 | 119 | 122 |
| 25 | 110 | 110 | 140 | 137 | 133 | 122 | 35 | 88 | 39 | 17 | 129 | 110 |
| 26 | 106 | 110 | 140 | 129 | 100 | 103 | 51 | 97 | 39 | 17 | 126 | 122 |
| 27 | 106 | 103 | 140 | 119 | 116 | 86 | 61 | 97 | 40 | 17 | 129 | 116 |
| 28 | 106 | 103 | 163 | 119 | 126 | 70 | 63 | 83 | 33 | 17 | 126 | 119 |
| 29 | 106 | 86 | 163 | 137 | 133 | 65 | 53 | 70 | 31 | 19 | 129 | 122 |
| 30 | 106 | 122 | 163 | 137 | ------ | 70 | 59 | 70 | 28 | 17 | 119 | 129 |
| 31 | 106 | ------ | 155 | 129 | ------ | 70 | ------ | 53 | ------ | 16 | 119 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 119 | 97 | 104 | 6,400 |
| November | 122 | 86 | 108 | 6,430 |
| December | 163 | 110 | 142 | 8,730 |
| January | 159 | 97 | 135 | 8,300 |
| February | 144 | 100 | 130 | 7,480 |
| March | 159 | 65 | 121 | 7,440 |
| April | 100 | 27 | 62.2 | 3,700 |
| May | 106 | 41 | 85.2 | 5,240 |
| June | 110 | 22 | 48.0 | 2,860 |
| July | 27 | 16 | 19.8 | 1,220 |
| August | 129 | 17 | 107 | 6,580 |
| September | 148 | 110 | 125 | 7,440 |
| The year | 163 | 16 | 98.9 | 71,800 |

### 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, 1928. Discharge measurements only are available for 1911 and 1922.

EXTREMES.—Maximum discharge during year, 1,850 second-feet March 23 (gage height, 7.16 feet); minimum, 2.6 second-feet September 7 (gage height, 0.98 foot).

1911–1928: Maximum discharge, 5,240 second-feet April 12, 1916; maximum gage height, 12.35 feet April 5, 1925; minimum discharge, 1.8 second-feet July 29, 1926 (gage height, 0.95 foot).

REMARKS.—Records excellent except July to September, which are good. Discharge estimated September 28–30. Many small diversions above station. Gage-height record and five discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

*Daily and monthly discharge, in second-feet, 1928*

| Day | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | ------- | 555 | 261 | 90 | 13 | 5.1 | 2.8 |
| 2 | ------- | 495 | 240 | 81 | 15 | 4.8 | 2.7 |
| 3 | ------- | 495 | 232 | 75 | 16 | 4.8 | 2.7 |
| 4 | ------- | 410 | 222 | 68 | 16 | 5.3 | 2.7 |
| 5 | ------- | 438 | 208 | 60 | 16 | 5.3 | 2.8 |
| 6 | ------- | 390 | 202 | 51 | 15 | 6.7 | 2.7 |
| 7 | ------- | 336 | 202 | 43 | 15 | 6.2 | 2.7 |
| 8 | ------- | 274 | 210 | 36 | 13 | 5.6 | 2.7 |
| 9 | ------- | 258 | 228 | 32 | 12 | 5.3 | 2.8 |
| 10 | ------- | 258 | 235 | 30 | 11 | 4.8 | 3.0 |
| 11 | ------- | 251 | 232 | 28 | 10 | 4.4 | 3.2 |
| 12 | ------- | 251 | 238 | 29 | 9.2 | 4.0 | 3.4 |
| 13 | ------- | 235 | 228 | 31 | 10 | 3.6 | 3.4 |
| 14 | ------- | 258 | 218 | 32 | 8.6 | 3.8 | 3.6 |
| 15 | 466 | 240 | 205 | 31 | 7.8 | 4.2 | 3.6 |
| 16 | 555 | 256 | 192 | 30 | 7.5 | 4.2 | 3.8 |
| 17 | 832 | 271 | 190 | 29 | 6.7 | 3.8 | 3.6 |
| 18 | 615 | 287 | 175 | 30 | 6.4 | 3.4 | 3.6 |
| 19 | 750 | 303 | 159 | 29 | 5.6 | 3.0 | 3.6 |
| 20 | 868 | 309 | 147 | 27 | 4.8 | 2.8 | 3.6 |
| 21 | 1,170 | 284 | 134 | 25 | 4.8 | 2.8 | 3.6 |
| 22 | 1,600 | 271 | 134 | 24 | 5.3 | 2.8 | 3.6 |
| 23 | 1,550 | 251 | 132 | 18 | 5.3 | 2.7 | 3.6 |
| 24 | 1,450 | 235 | 138 | 18 | 5.1 | 2.7 | 3.6 |
| 25 | 1,260 | 225 | 132 | 16 | 5.9 | 2.7 | 3.6 |
| 26 | 1,040 | 243 | 125 | 14 | 6.4 | 2.7 | 3.4 |
| 27 | 980 | 261 | 125 | 12 | 5.9 | 2.8 | 3.4 |
| 28 | 750 | 277 | 125 | 11 | 5.6 | 2.8 | } |
| 29 | 850 | 279 | 117 | 10 | 5.6 | 3.0 | 3.4 |
| 30 | 630 | 274 | 110 | 10 | 5.1 | 3.0 | } |
| 31 | 615 | ------- | 98 | ------- | 5.6 | 3.0 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| March 15–31 | 1,600 | 466 | 940 | 31,700 |
| April | 555 | 225 | 306 | 18,200 |
| May | 261 | 98 | 180 | 11,100 |
| June | 90 | 10 | 34.0 | 2,020 |
| July | 16 | 4.8 | 9.01 | 554 |
| August | 6.7 | 2.7 | 3.94 | 242 |
| September | 3.8 | 2.7 | 3.27 | 195 |
| The period | ------- | ------- | ------- | 64,000 |

### LINCOLN CANAL NEAR RICHFIELD, IDAHO

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

RECORDS AVAILABLE.—April, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 522 second-feet June 5 (gage height, 3.32 feet); no flow October 1 to November 26 and December 1 to April 28.

1925–1928: Maximum discharge, 706 second-feet May 28, 1927 (gage height, 4.00 feet); no flow for long periods each year.

REMARKS.—Records excellent except for November, for which they are good. Canal diverts from Big Wood River in sec. 9, T. 3 S., R. 18 E., approximately 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 five discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Nov. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 363 | 449 | 428 | 407 | 181 |
| 2 | 0 | 0 | 372 | 451 | 430 | 398 | 177 |
| 3 | 0 | 0 | 378 | 456 | 435 | 398 | 177 |
| 4 | 0 | 0 | 372 | 458 | 435 | 396 | 151 |
| 5 | 0 | 0 | 389 | 466 | 432 | 391 | 106 |
| 6 | 0 | 0 | 387 | 473 | 437 | 385 | 88 |
| 7 | 0 | 0 | 398 | 468 | 435 | 383 | 78 |
| 8 | 0 | 0 | 410 | 461 | 432 | 380 | 70 |
| 9 | 0 | 0 | 414 | 454 | 432 | 380 | 67 |
| 10 | 0 | 0 | 407 | 449 | 430 | 378 | 67 |
| 11 | 0 | 0 | 398 | 444 | 432 | 366 | 62 |
| 12 | 0 | 0 | 396 | 444 | 437 | 363 | 60 |
| 13 | 0 | 0 | 396 | 451 | 439 | 363 | 61 |
| 14 | 0 | 0 | 398 | 449 | 437 | 361 | 63 |
| 15 | 0 | 0 | 398 | 446 | 437 | 363 | 63 |
| 16 | 0 | 0 | 396 | 435 | 430 | 361 | 63 |
| 17 | 0 | 0 | 391 | 430 | 430 | 355 | 58 |
| 18 | 0 | 0 | 400 | 421 | 437 | 342 | 53 |
| 19 | 0 | 0 | 412 | 414 | 432 | 330 | 49 |
| 20 | 0 | 0 | 414 | 407 | 430 | 320 | 50 |
| 21 | 0 | 0 | 421 | 410 | 432 | 320 | 49 |
| 22 | 0 | 0 | 419 | 410 | 435 | 318 | 52 |
| 23 | 0 | 0 | 430 | 403 | 432 | 318 | 53 |
| 24 | 0 | 0 | 446 | 380 | 432 | 314 | 49 |
| 25 | 0 | 0 | 449 | 405 | 430 | 298 | 42 |
| 26 | 0 | 0 | 449 | 437 | 423 | 290 | 55 |
| 27 | 98 | 0 | 449 | 416 | 421 | 281 | 48 |
| 28 | 296 | 0 | 449 | 432 | 416 | 283 | 45 |
| 29 | 273 | 102 | 451 | 430 | 416 | 273 | 45 |
| 30 | 147 | 306 | 451 | 423 | 419 | 248 | 46 |
| 31 | ------ | ------ | 451 | ------ | 414 | 212 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| November | 296 | 0 | 27.1 | 1,610 |
| April | 306 | 0 | 13.6 | 803 |
| May | 451 | 363 | 411 | 25,300 |
| June | 473 | 380 | 436 | 25,900 |
| July | 439 | 414 | 430 | 26,400 |
| August | 407 | 212 | 341 | 21,000 |
| September | 181 | 42 | 74.3 | 4,420 |
| The year | ------ | ------ | ------ | 105,000 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 465 second-feet June 26 (gage height, 2.02 feet); no flow October 1 to November 26 and December 2 to April 28.

1925–1928: Maximum discharge, 667 second-feet May 29, 1927 (gage height, 2.48 feet); no flow for long periods each year.

REMARKS.—Records excellent except for November, which are good. 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 natural stream bed of the river. Gage-height record and eight discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Nov. | Dec. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 5 | 0 | 329 | 402 | 398 | 374 | 162 |
| 2 | 0 | 0 | 0 | 344 | 406 | 398 | 363 | 154 |
| 3 | 0 | 0 | 0 | 351 | 410 | 402 | 363 | 154 |
| 4 | 0 | 0 | 0 | 340 | 410 | 406 | 363 | 152 |
| 5 | 0 | 0 | 0 | 359 | 418 | 402 | 359 | 77 |
| 6 | 0 | 0 | 0 | 351 | 427 | 406 | 355 | 79 |
| 7 | 0 | 0 | 0 | 363 | 427 | 406 | 351 | 67 |
| 8 | 0 | 0 | 0 | 378 | 422 | 402 | 347 | 61 |
| 9 | 0 | 0 | 0 | 378 | 418 | 402 | 347 | 54 |
| 10 | 0 | 0 | 0 | 374 | 418 | 398 | 347 | 54 |
| 11 | 0 | 0 | 0 | 366 | 418 | 398 | 336 | 53 |
| 12 | 0 | 0 | 0 | 363 | 414 | 402 | 336 | 47 |
| 13 | 0 | 0 | 0 | 359 | 418 | 410 | 336 | 48 |
| 14 | 0 | 0 | 0 | 359 | 418 | 410 | 336 | 52 |
| 15 | 0 | 0 | 0 | 359 | 418 | 410 | 336 | 53 |
| 16 | 0 | 0 | 0 | 355 | 410 | 402 | 332 | 52 |
| 17 | 0 | 0 | 0 | 355 | 402 | 398 | 329 | 47 |
| 18 | 0 | 0 | 0 | 359 | 394 | 406 | 314 | 44 |
| 19 | 0 | 0 | 0 | 370 | 386 | 402 | 304 | 37 |
| 20 | 0 | 0 | 0 | 370 | 378 | 402 | 293 | 40 |
| 21 | 0 | 0 | 0 | 374 | 378 | 402 | 293 | 38 |
| 22 | 0 | 0 | 0 | 374 | 378 | 402 | 290 | 37 |
| 23 | 0 | 0 | 0 | 378 | 370 | 398 | 290 | 41 |
| 24 | 0 | 0 | 0 | 398 | 340 | 398 | 286 | 37 |
| 25 | 0 | 0 | 0 | 398 | 374 | 398 | 273 | 34 |
| 26 | 0 | 0 | 0 | 402 | 402 | 390 | 266 | 35 |
| 27 | 1 | 0 | 0 | 402 | 386 | 386 | 253 | |
| 28 | 253 | 0 | 0 | 402 | 406 | 382 | 256 | 32 |
| 29 | 240 | 0 | 8 | 406 | 406 | 382 | 250 | 33 |
| 30 | 216 | 0 | 260 | 406 | 394 | 382 | 225 | 33 |
| 31 | ------ | 0 | ------- | 406 | ------- | 382 | 193 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| November | 253 | 0 | 23.7 | 1,410 |
| December | 5 | 0 | .2 | 10 |
| April | 260 | 0 | 8.9 | 530 |
| May | 406 | 329 | 372 | 22,900 |
| June | 427 | 340 | 402 | 23,900 |
| July | 410 | 382 | 399 | 24,500 |
| August | 374 | 193 | 313 | 19,200 |
| September | 162 | 32 | 61.4 | 3,650 |
| The year | 427 | 0 | 132 | 96,100 |

### 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 to September, 1928.

EXTREMES.—Maximum discharge, 110 second-feet May 1 (gage height, 1.58 feet); no flow prior to April 30.

REMARKS.—Records good. Gage-height record and results of 13 discharge measurements furnished by water master for Big Wood and Little Wood Rivers. 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.

*Daily and monthly discharge, in second-feet, 1928*

| Day | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|
| 1 | 0 | 107 | 52 | 46 | 54 | 22 |
| 2 | 0 | 106 | 52 | 47 | 52 | 20 |
| 3 | 0 | 106 | 54 | 54 | 52 | 21 |
| 4 | 0 | 101 | 54 | 55 | 50 | 21 |
| 5 | 0 | 104 | 54 | 55 | 48 | 16 |
| 6 | 0 | 102 | 54 | 54 | 46 | 20 |
| 7 | 0 | 102 | 54 | 48 | 42 | 28 |
| 8 | 0 | 98 | 52 | 44 | 42 | 38 |
| 9 | 0 | 100 | 51 | 44 | 43 | 34 |
| 10 | 0 | 100 | 50 | 44 | 43 | 32 |
| 11 | 0 | 85 | 50 | 42 | 44 | 33 |
| 12 | 0 | 76 | 50 | 42 | 44 | 28 |
| 13 | 0 | 78 | 50 | 40 | 45 | 28 |
| 14 | 0 | 78 | 50 | 38 | 46 | 30 |
| 15 | 0 | 78 | 50 | 42 | 46 | 32 |
| 16 | 0 | 78 | 50 | 46 | 46 | 31 |
| 17 | 0 | 76 | 50 | 46 | 46 | 29 |
| 18 | 0 | 76 | 50 | 45 | 44 | 25 |
| 19 | 0 | 79 | 50 | 46 | 44 | 20 |
| 20 | 0 | 78 | 48 | 45 | 43 | 20 |
| 21 | 0 | 79 | 47 | 45 | 42 | 20 |
| 22 | 0 | 78 | 47 | 47 | 43 | 19 |
| 23 | 0 | 74 | 41 | 51 | 44 | 21 |
| 24 | 0 | 71 | 37 | 51 | 42 | 23 |
| 25 | 0 | 59 | 38 | 50 | 34 | 20 |
| 26 | 0 | 59 | 49 | 55 | 23 | 17 |
| 27 | 0 | 59 | 55 | 57 | 23 | 19 |
| 28 | 0 | 59 | 52 | 57 | 24 | 21 |
| 29 | 0 | 59 | 48 | 58 | 24 | 19 |
| 30 | 35 | 59 | 47 | 56 | 24 | 20 |
| 31 | ------- | 56 | ------- | 54 | 24 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| April 30 | ---------- | ---------- | 35.0 | 69.4 |
| May | 107 | 56 | 81.3 | 5,000 |
| June | 55 | 37 | 49.5 | 2,950 |
| July | 58 | 38 | 48.5 | 2,980 |
| August | 54 | 23 | 40.9 | 2,510 |
| September | 38 | 16 | 24.2 | 1,440 |
| The period | ---------- | ---------- | ---------- | 14,900 |

### 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, 1928. At station 6 miles upstream, February, 1920, to September, 1926; records comparable except perhaps during spring run-off.

EXTREMES.—Maximum discharge during year, 575 second-feet March 23 (gage height, 3.12 feet); minimum, 20 second-feet September 4 (gage height, 0.90 foot).

1904–5, 1926–1928: Maximum discharge, 1,180 second-feet April 27, 1927; maximum stage, 5.1 feet May 22, 1904; minimum discharge, 19 second-feet September 20 and 21, 1926 (gage height, 0.88 foot).

REMARKS.—Records good except those for estimated periods, October 2–6, November 13–17, December 1–6, March 14–17, April 9 and 10, which are fair. Few 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, 1927–28*

| Day | Oct. | Nov. | Dec. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 78 | 90 | | | 187 | 353 | 247 | 116 | 37 | 24 |
| 2 | 78 | 94 | | | 177 | 340 | 232 | 118 | 36 | 22 |
| 3 | 77 | 92 | | | 167 | 301 | 224 | 103 | 36 | 22 |
| 4 | 76 | 90 | 75 | | 149 | 282 | 213 | 107 | 38 | 21 |
| 5 | 75 | 85 | | | 147 | 286 | 213 | 107 | 43 | 23 |
| 6 | 74 | 81 | | | 136 | 320 | 205 | 97 | 40 | 23 |
| 7 | 73 | 83 | | 79 | 132 | 380 | 200 | 94 | 37 | 23 |
| 8 | 73 | 88 | | 94 | 138 | 428 | 187 | 85 | 35 | 23 |
| 9 | 73 | 136 | | 128 | 150 | 499 | 172 | 83 | 33 | 24 |
| 10 | 75 | 221 | | 116 | | 499 | 160 | 85 | 31 | 27 |
| 11 | 71 | 153 | | 187 | 130 | 525 | 158 | 83 | 31 | 29 |
| 12 | 71 | 136 | | 136 | 136 | 539 | 153 | 83 | 29 | 28 |
| 13 | 71 | | | 114 | 138 | 517 | 151 | 83 | 28 | 29 |
| 14 | 73 | | | | 142 | 432 | 149 | 75 | 27 | 29 |
| 15 | 71 | 125 | | 125 | 151 | 370 | 138 | 71 | 27 | 27 |
| 16 | 71 | | | | 158 | 363 | 134 | 68 | 26 | 26 |
| 17 | 71 | | | | 177 | 343 | 134 | 65 | 24 | 25 |
| 18 | 68 | 107 | | 177 | 167 | 356 | 132 | 62 | 24 | 25 |
| 19 | 68 | 107 | | 202 | 160 | 380 | 128 | 57 | 23 | 24 |
| 20 | 68 | 114 | | 295 | 162 | 383 | 124 | 55 | 23 | 26 |
| 21 | 68 | 114 | | 380 | 149 | 397 | 124 | 52 | 23 | 27 |
| 22 | 68 | 103 | | 387 | 151 | 422 | 124 | 47 | 23 | 27 |
| 23 | 68 | 88 | | 446 | 160 | 428 | 126 | 46 | 25 | 27 |
| 24 | 68 | 103 | | 481 | 194 | 411 | 130 | 46 | 25 | 26 |
| 25 | 70 | 101 | | 333 | 205 | 418 | 140 | 46 | 26 | 26 |
| 26 | 105 | 103 | | 244 | 258 | 422 | 145 | 44 | 25 | 26 |
| 27 | 110 | 103 | | 267 | 330 | 425 | 140 | 46 | 29 | 26 |
| 28 | 108 | 105 | | 230 | 387 | 390 | 126 | 44 | 27 | 25 |
| 29 | 105 | 97 | | 205 | 353 | 353 | 120 | 47 | 25 | 24 |
| 30 | 103 | 88 | | 197 | 333 | 308 | 114 | 40 | 25 | 24 |
| 31 | 101 | | | 197 | | 270 | | 38 | 24 | |

| Month | Maximum | Minimum | Mean | Run-off in acre feet |
|---|---|---|---|---|
| October | 110 | 68 | 78.4 | 4,820 |
| November | 221 | 81 | 110 | 6,550 |
| December 1–6 | | | 75.0 | 893 |
| March 7–31 | 481 | 79 | 216 | 10,700 |
| April | 387 | 130 | 186 | 11,100 |
| May | 539 | 270 | 392 | 24,100 |
| June | 247 | 114 | 158 | 9,400 |
| July | 118 | 38 | 70.7 | 4,350 |
| August | 43 | 23 | 29.2 | 1,800 |
| September | 29 | 21 | 25.3 | 1,510 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 254 second-feet March 29 (gage height, 2.25 feet); minimum, 60 second-feet May 25 (gage height, 1.33 feet).

1911–1928: 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 fair. Small ranch diversions above gage. Gage-height record and 16 discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

*Daily and monthly discharge, in second-feet, 1928*

| Day | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | | 222 | 126 | 84 | 110 | 97 | 97 |
| 2 | | 212 | 110 | 84 | 115 | 88 | 97 |
| 3 | | 210 | 105 | 84 | 110 | 88 | 100 |
| 4 | | 204 | 95 | 85 | 113 | 88 | 100 |
| 5 | | 194 | 84 | 86 | 112 | 89 | 100 |
| 6 | | 194 | 69 | 86 | 105 | 91 | 102 |
| 7 | | 182 | 81 | 89 | 103 | 88 | 102 |
| 8 | | 180 | 82 | 89 | 108 | 88 | 103 |
| 9 | | 180 | 78 | 91 | 103 | 88 | 103 |
| 10 | | 180 | 79 | 92 | 108 | 82 | 105 |
| 11 | | 180 | 103 | 94 | 106 | 81 | 105 |
| 12 | | 173 | 100 | 97 | 105 | 79 | 105 |
| 13 | | 173 | 103 | 106 | 106 | 79 | 105 |
| 14 | | 170 | 110 | 112 | 100 | 79 | 106 |
| 15 | | 170 | 103 | 106 | 100 | 81 | 108 |
| 16 | | 173 | 100 | 106 | 100 | 84 | 110 |
| 17 | | 170 | 98 | 108 | 103 | 84 | 110 |
| 18 | | 168 | 88 | 119 | 103 | 82 | 110 |
| 19 | | 159 | 84 | 121 | 103 | 81 | 110 |
| 20 | | 153 | 95 | 112 | 106 | 82 | 112 |
| 21 | | 153 | 97 | 112 | 106 | 82 | 113 |
| 22 | | 148 | 91 | 115 | 105 | 85 | 112 |
| 23 | | 142 | 79 | 115 | 102 | 86 | 112 |
| 24 | | 138 | 66 | 103 | 102 | 85 | 106 |
| 25 | | 140 | 63 | 100 | 102 | 85 | 106 |
| 26 | | 138 | 72 | 100 | 100 | 91 | 106 |
| 27 | | 134 | 74 | 106 | 100 | 94 | 103 |
| 28 | | 136 | 84 | 102 | 102 | 95 | 103 |
| 29 | 248 | 146 | 81 | 102 | 98 | 95 | 106 |
| 30 | 235 | 142 | 79 | 106 | 97 | 95 | 103 |
| 31 | 233 | | 81 | | 97 | 95 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| April | 222 | 134 | 169 | 10,100 |
| May | 126 | 63 | 89.0 | 5,470 |
| June | 121 | 84 | 100 | 5,950 |
| July | 115 | 97 | 104 | 6,400 |
| August | 97 | 79 | 86.7 | 5,330 |
| September | 113 | 97 | 105 | 6,250 |
| The period | | | | 39,500 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 431 second-feet June 3 (gage height, 1.83 feet); minimum, 39 second-feet September 9 (gage height, 0.67 foot).

1922–1928: Maximum discharge, 664 second-feet June 18, 1922 (gage height, 2.26 feet); minimum, 0.4 second-foot September 3, 1924 (gage height, 0.34 foot).

REMARKS.—Records good. Discharge estimated September 26–30. Diversions for irrigation above and below gage. Small ditch for Shoshone water supply diverts immediately below gage. Gage-height record and 15 discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

*Daily and monthly discharge, in second-feet, 1928*

| Day | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | | 138 | 162 | 416 | 347 | 269 | 173 |
| 2 | | 135 | 169 | 416 | 337 | 269 | 169 |
| 3 | | 135 | 156 | 431 | 332 | 269 | 179 |
| 4 | | 135 | 173 | 416 | 328 | 269 | 126 |
| 5 | | 107 | 166 | 416 | 342 | 273 | 92 |
| 6 | | 121 | 223 | 376 | 356 | 269 | 68 |
| 7 | | 116 | 223 | 376 | 366 | 260 | 56 |
| 8 | | 107 | 223 | 396 | 371 | 244 | 55 |
| 9 | | 102 | 220 | 391 | 366 | 248 | 45 |
| 10 | | 97 | 223 | 391 | 356 | 239 | 55 |
| 11 | | 97 | 248 | 396 | 356 | 239 | 53 |
| 12 | | 100 | 265 | 411 | 352 | 244 | 56 |
| 13 | | 88 | 278 | 386 | 352 | 244 | 56 |
| 14 | | 83 | 286 | 381 | 332 | 235 | 68 |
| 15 | | 80 | 286 | 376 | 332 | 227 | 72 |
| 16 | | 80 | 278 | 361 | 328 | 223 | 72 |
| 17 | | 74 | 278 | 361 | 328 | 216 | 68 |
| 18 | | 78 | 273 | 361 | 337 | 227 | 66 |
| 19 | | 92 | 273 | 342 | 328 | 223 | 70 |
| 20 | | 92 | 282 | 332 | 328 | 220 | 70 |
| 21 | | 88 | 309 | 356 | 332 | 212 | 70 |
| 22 | | 88 | 318 | 361 | 328 | 208 | 66 |
| 23 | | 83 | 318 | 337 | 323 | 204 | 64 |
| 24 | | 76 | 342 | 347 | 314 | 173 | 62 |
| 25 | | 66 | 347 | 342 | 304 | 179 | 64 |
| 26 | 220 | 70 | 356 | 337 | 286 | 190 | |
| 27 | 201 | 68 | 381 | 337 | 286 | 190 | |
| 28 | 176 | 66 | 396 | 347 | 286 | 186 | 62 |
| 29 | 176 | 66 | 411 | 342 | 286 | 169 | |
| 30 | 156 | 92 | 421 | 342 | 278 | 169 | |
| 31 | 153 | | 411 | | 269 | 173 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| March 26–31 | 220 | 153 | 180 | 2,140 |
| April | 138 | 66 | 94.0 | 5,590 |
| May | 421 | 156 | 280 | 17,200 |
| June | 431 | 332 | 373 | 22,200 |
| July | 371 | 269 | 328 | 20,200 |
| August | 273 | 169 | 225 | 13,800 |
| September | 179 | 45 | 76.8 | 4,570 |
| The period | | | | 85,700 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 43 second-feet May 12 (gage height, 0.79 foot); minimum, 1.9 second-feet July 30 and 31 (gage height, 0.10 foot).

1920–1928: Maximum discharge, 158 second-feet May 6, 1922 (gage height, 1.78 feet); no flow September 9–12 and October 17–27, 1923.

REMARKS.—Records good except those for April, which are fair. Discharge estimated or interpolated April 23–30, July 25, September 5, 11, 13, 15, and 17–29. Several small diversions above gage. Gage-height record furnished by water master for Fish Creek and special deputy of the Idaho commissioner of reclamation.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | 12 | | 28 | 21 | 13 | 2.2 | 5.4 |
| 2 | 12 | | 27 | 21 | 13 | 2.6 | 5.4 |
| 3 | 11 | | 28 | 21 | 12 | 2.2 | 5.0 |
| 4 | 11 | | 27 | 19 | 12 | 2.9 | 4.7 |
| 5 | 11 | | 26 | 17 | 12 | 3.5 | 4.7 |
| 6 | 11 | | 23 | 17 | 10 | 3.5 | 4.7 |
| 7 | 11 | | 25 | 14 | 13 | 5.4 | 5.0 |
| 8 | 11 | | 34 | 12 | 10 | 5.4 | 3.9 |
| 9 | 11 | | 35 | 7.6 | 10 | 5.4 | 4.7 |
| 10 | 10 | | 35 | 6.3 | 8.1 | 5.0 | 3.9 |
| 11 | 10 | | 38 | 7.6 | 10 | 4.3 | 4.4 |
| 12 | 10 | | 41 | 6.7 | 9.5 | 5.0 | 5.0 |
| 13 | 9.5 | | 36 | 6.7 | 8.6 | 5.4 | 4.6 |
| 14 | 9.5 | | 30 | 9.5 | 8.6 | 5.4 | 4.3 |
| 15 | 10 | | 27 | 12 | 7.6 | 5.4 | 4.8 |
| 16 | 11 | | 28 | 13 | 9.0 | 4.3 | 5.4 |
| 17 | 11 | | 26 | 12 | 5.4 | 4.7 | |
| 18 | 11 | | 25 | 13 | 3.2 | 5.0 | |
| 19 | 11 | | 26 | 12 | 3.2 | 5.4 | |
| 20 | 11 | | 26 | 15 | 2.2 | 5.4 | |
| 21 | 10 | | 28 | 15 | 2.6 | 5.4 | |
| 22 | 10 | 27 | 27 | 14 | 2.6 | 5.4 | |
| 23 | 9.5 | | 27 | 14 | 2.6 | 5.4 | 4.0 |
| 24 | 9.5 | | 25 | 14 | 2.2 | 6.3 | |
| 25 | 9.5 | | 25 | 14 | 2.4 | 5.4 | |
| 26 | 12 | 28 | 25 | 13 | 2.6 | 5.4 | |
| 27 | 12 | | 25 | 13 | 2.6 | 5.4 | |
| 28 | 11 | | 22 | 11 | 2.6 | 6.3 | |
| 29 | 12 | | 22 | 12 | 2.6 | 5.9 | |
| 30 | 11 | | 22 | 12 | 1.9 | 5.9 | 3.2 |
| 31 | | | 22 | | 1.9 | 5.4 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October 1–30 | 12 | 9.5 | 10.7 | 637 |
| April 22–30 | | | 27.9 | 498 |
| May | 41 | 22 | 27.8 | 1,710 |
| June | 21 | 6.3 | 13.2 | 786 |
| July | 13 | 1.9 | 6.68 | 411 |
| August | 6.3 | 2.2 | 4.86 | 299 |
| September | | | 4.37 | 260 |

### 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, 1928. Discharge measurements only 1921 and 1922.

EXTREMES.—Maximum discharge during year, 137 second-feet July 12, 13, 14, and 15 (gage height, 1.66 feet); minimum, 1.5 second-feet October 13–15 (gage height, 0.08 foot).

1919–20, 1923–1928: Maximum discharge, 170 second-feet May 19, 1927 (gage height, 1.91 feet); no flow for long periods.

REMARKS.—Records good. Discharge estimated April 23–29 and September 22–29; interpolated October 16, August 17, 19, 20, 25, 27. Flow completely regulated by storage reservoir. Gage-height record furnished by water master for Fish Creek.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | 8.3 | | 12 | 56 | 68 | 54 | 11 |
| 2 | 7.8 | | 15 | 52 | 48 | 55 | 16 |
| 3 | 7.8 | | 7.4 | 56 | 12 | 55 | 24 |
| 4 | 6.5 | | 35 | 61 | 12 | 58 | 19 |
| 5 | 2.7 | | 36 | 62 | 19 | 56 | 16 |
| 6 | 3.7 | | 36 | 58 | 59 | 50 | 14 |
| 7 | 5.6 | | 36 | 58 | 67 | 48 | 12 |
| 8 | 5.6 | | 38 | 61 | 75 | 48 | 14 |
| 9 | 5.6 | | 40 | 61 | 90 | 46 | 14 |
| 10 | 4.1 | | 44 | 61 | 105 | 32 | 14 |
| 11 | 2.0 | | 46 | 61 | 112 | 27 | 23 |
| 12 | 1.8 | | 48 | 63 | 133 | 23 | 29 |
| 13 | 1.5 | | 48 | 67 | 137 | 22 | 30 |
| 14 | 1.5 | | 48 | 67 | 136 | 20 | 29 |
| 15 | 1.5 | | 45 | 68 | 134 | 19 | 29 |
| 16 | 2.4 | | 50 | 61 | 125 | 19 | 35 |
| 17 | 3.4 | | 52 | 61 | 124 | 18 | 35 |
| 18 | 3.4 | | 47 | 65 | 103 | 17 | 40 |
| 19 | 3.4 | | 42 | 54 | 95 | 14 | 39 |
| 20 | 3.4 | | 41 | 48 | 99 | 10 | 12 |
| 21 | 3.4 | | 53 | 40 | 86 | 6.5 | 11 |
| 22 | 3.4 | 4.1 | 56 | 34 | 76 | 7.0 | |
| 23 | 3.7 | | 57 | 43 | 56 | 14 | |
| 24 | 4.1 | | 59 | 55 | 47 | 14 | |
| 25 | 4.1 | | 57 | 54 | 47 | 14 | |
| | | 4 | | | | | 10 |
| 26 | 4.1 | | 57 | 47 | 53 | 14 | |
| 27 | 3.7 | | 60 | 50 | 62 | 11 | |
| 28 | 3.7 | | 56 | 75 | 78 | 8.3 | |
| 29 | 3.7 | 7 | 56 | 81 | 74 | 9.3 | |
| 30 | | 11 | 58 | 77 | 74 | 9.3 | 8.3 |
| 31 | | | 58 | | 62 | 11 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October 1–29 | 8.3 | 1.5 | 4.00 | 230 |
| April 22–30 | 11 | | 5.12 | 91.4 |
| May | 60 | 7.4 | 44.9 | 2,760 |
| June | 81 | 34 | 58.6 | 3,490 |
| July | 137 | 12 | 79.6 | 4,890 |
| August | 58 | 6.5 | 26.1 | 1,600 |
| September | 40 | | 18.5 | 1,100 |

### 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, 1928 (discharge measurements only in 1923).

EXTREMES.—Maximum discharge during year, 3.2 second-feet May 1 (gage height, 0.34 foot); minimum, 0.1 second-foot July 15–19, August 11–13, 17–23, September 16–30 (minimum gage height, 0.03 foot August 12).

1920–1922, 1924–1928: Maximum discharge, 42.8 second-feet April 22, 1922 (gage height, 0.93 foot); minimum, 0.1 second-foot August 8, 1920, for several days in 1924, December 4–7, 1925, January 16–31, and July 27–31, 1926, July 15–19, August 11–13, 17–23, and September 16–30, 1928.

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

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | 0.2 | | e3.2 | e0.9 | 0.4 | 0.2 | 0.2 |
| 2 | .3 | | 3.0 | .9 | e.4 | e.2 | .2 |
| 3 | e.3 | | 2.8 | .8 | .4 | .2 | .2 |
| 4 | .3 | | e2.7 | .7 | .3 | .2 | e.2 |
| 5 | .2 | | 2.6 | e.7 | .2 | .2 | |
| 6 | .2 | | 2.4 | .7 | e.2 | .2 | |
| 7 | e.2 | | e2.3 | .6 | .2 | .2 | |
| 8 | | | 2.2 | .6 | .2 | e.2 | |
| 9 | | | 2.1 | e.6 | e.2 | .2 | |
| 10 | | | e2.0 | .6 | .2 | .2 | .2 |
| 11 | | | 2.0 | .7 | .2 | .1 | |
| 12 | | | 2.0 | .8 | e.2 | e.1 | |
| 13 | | | 2.0 | e.9 | e.2 | .1 | |
| 14 | | | e2.0 | .8 | .2 | .2 | |
| 15 | | | 1.9 | .7 | e.1 | e.2 | |
| 16 | | | 1.8 | e.6 | .1 | .2 | |
| 17 | | | 1.7 | e.6 | .1 | e.1 | |
| 18 | | | e1.6 | e.6 | .1 | .1 | |
| 19 | | | 1.5 | .6 | e.1 | .1 | |
| 20 | | | 1.4 | .6 | e.2 | .1 | |
| 21 | | | 1.3 | e.6 | .2 | .1 | |
| 22 | | e2.7 | e1.2 | .6 | .2 | e.1 | |
| 23 | | | 1.2 | e.6 | .2 | .1 | .1 |
| 24 | | | 1.1 | .5 | .2 | .2 | |
| 25 | | | 1.0 | e.4 | .2 | .2 | |
| 26 | | 3.0 | e1.0 | .4 | .2 | e.2 | |
| 27 | | | 1.0 | .4 | .2 | .2 | |
| 28 | | | 1.0 | .4 | e.2 | .2 | |
| 29 | | | e1.0 | .4 | .2 | .2 | |
| 30 | | | 1.0 | .4 | .2 | e.2 | |
| 31 | | | .9 | | .2 | .2 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October 1–7 | 0.3 | 0.2 | 0.24 | 3.3 |
| April 22–30 | | | 2.97 | 53.0 |
| May | 3.2 | .9 | 1.77 | 109 |
| June | .9 | .4 | .62 | 36.9 |
| July | .4 | .1 | .21 | 12.9 |
| August | .2 | .1 | .17 | 10.5 |
| September | | | .15 | 8.9 |

e Discharge from gage-height observations; all others estimated.

### SILVER CREEK NEAR PICABO, IDAHO

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

RECORDS AVAILABLE.—May, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 243 second-feet March 13 (gage height, 2.74 feet); minimum, 78 second-feet May 13 (gage height, 1.14 feet).

1920–1928: Maximum discharge, 312 second-feet April 3, 1923; minimum, 26 second-feet June 2, 1920 (gage height, 0.48 foot).

REMARKS.—Records excellent. Numerous diversions for irrigation above gage. Some water is diverted around station by slough heading 300 feet above gage. Gage-height record and 14 discharge measurements furnished by water master for Big Wood and Little Wood Rivers.

*Daily and monthly discharge, in second-feet, 1928*

| Day | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | | | 88 | 108 | 146 | 122 | 136 |
| 2 | | 169 | 83 | 110 | 149 | 123 | 135 |
| 3 | | 169 | 84 | 108 | 148 | 122 | 137 |
| 4 | | 165 | 83 | 110 | 144 | 123 | 137 |
| 5 | | 161 | 81 | 106 | 140 | 125 | 135 |
| 6 | | 161 | 91 | 110 | 131 | 124 | 134 |
| 7 | | 149 | 96 | 108 | 140 | 123 | 132 |
| 8 | | 145 | 105 | 109 | 138 | 126 | 131 |
| 9 | | 145 | 92 | 110 | 139 | 126 | 131 |
| 10 | | 146 | 96 | 114 | 138 | 121 | 131 |
| 11 | | 145 | 97 | 121 | 135 | 122 | 132 |
| 12 | | 146 | 82 | 130 | 134 | 120 | 132 |
| 13 | 229 | 141 | 79 | 148 | 134 | 118 | 138 |
| 14 | 243 | 141 | 79 | 145 | 136 | 116 | 139 |
| 15 | | 140 | 81 | 145 | 137 | 117 | 145 |
| 16 | | 140 | 89 | 141 | 141 | 118 | 146 |
| 17 | | 139 | 88 | 154 | 139 | 118 | 146 |
| 18 | | 136 | 85 | 152 | 139 | 116 | 144 |
| 19 | | 137 | 91 | 144 | 138 | 116 | 143 |
| 20 | | 139 | 92 | 144 | 138 | 118 | 143 |
| 21 | | 138 | 90 | 145 | 140 | 123 | 141 |
| 22 | | 135 | 88 | 144 | 140 | 128 | 141 |
| 23 | | 132 | 88 | 138 | 142 | 126 | 141 |
| 24 | | 136 | 85 | 129 | 140 | 126 | 143 |
| 25 | | 137 | 98 | 132 | 139 | 129 | 145 |
| 26 | | 117 | 100 | 136 | 137 | 130 | 145 |
| 27 | | 111 | 112 | 133 | 136 | 132 | 145 |
| 28 | | 103 | 110 | 134 | 133 | 135 | 144 |
| 29 | | 96 | 106 | 136 | 132 | 138 | 138 |
| 30 | | 92 | 106 | 142 | 131 | 137 | 138 |
| 31 | | | 107 | | 127 | 137 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| April 2–30 | 169 | 92 | 138 | 7,940 |
| May | 112 | 79 | 92 | 5,660 |
| June | 154 | 106 | 130 | 7,740 |
| July | 149 | 127 | 138 | 8,480 |
| August | 138 | 116 | 124 | 7,620 |
| September | 146 | 131 | 139 | 8,270 |

NOTE.—Water diverted around gage through slough estimated by water master for Big Wood and Little Wood Rivers as follows: Mar. 12–13, 60 acre-feet; Apr. 2–22, 154 acre-feet; after Apr. 22, negligible.

### 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 and 5 miles north of Mountain Home.

RECORDS AVAILABLE.—April, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 122 second-feet March 27 (gage height, 1.16 feet); no flow prior to irrigation season and after September 29. 1924–1928: Maximum discharge, 226 second-feet February 21, 1927 (gage height, 2.18 feet); no flow for long periods each year.

REMARKS.—Records good. Discharge interpolated March 21–26, April 1, June 9, 10, August 6–8, 24, September 2, 11, and 24. Canal diverts from Canyon Creek in sec. 36, T. 2 S., R. 6 E., and water is used for irrigation on about 5,000 acres included in the project of the Mountain Home Irrigation District.

*Daily and monthly discharge, in second-feet, 1928*

| Day | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | | 68 | 47 | 83 | 84 | 47 | 35 |
| 2 | | 68 | 45 | 87 | 84 | 46 | 34 |
| 3 | | 68 | 44 | 88 | 84 | 42 | 33 |
| 4 | | 65 | 52 | 75 | 82 | 43 | 33 |
| 5 | | 63 | 53 | 74 | 82 | 49 | 33 |
| 6 | | 60 | 51 | 71 | 81 | 51 | 29 |
| 7 | | 57 | 51 | 71 | 80 | 53 | 28 |
| 8 | | 56 | 52 | 71 | 76 | 55 | 28 |
| 9 | | 55 | 53 | 70 | 75 | 57 | 27 |
| 10 | | 50 | 53 | 70 | 76 | 57 | 26 |
| 11 | | 49 | 64 | 69 | 76 | 64 | 26 |
| 12 | 110 | 49 | 63 | 61 | 76 | 65 | 26 |
| 13 | 94 | 47 | 63 | 58 | 76 | 64 | 26 |
| 14 | 81 | 46 | 71 | 58 | 72 | 71 | 26 |
| 15 | 69 | 45 | 74 | 58 | 77 | 71 | 26 |
| 16 | 63 | 45 | 78 | 58 | 76 | 72 | 34 |
| 17 | 62 | 44 | 77 | 52 | 76 | 72 | 33 |
| 18 | 62 | 42 | 78 | 51 | 75 | 71 | 33 |
| 19 | 57 | 42 | 78 | 50 | 66 | 70 | 32 |
| 20 | 58 | 41 | 78 | 50 | 65 | 66 | 31 |
| 21 | 58 | 39 | 77 | 56 | 57 | 65 | 30 |
| 22 | 59 | 37 | 82 | 56 | 45 | 64 | 30 |
| 23 | 60 | 36 | 82 | 56 | 43 | 68 | 29 |
| 24 | 60 | 35 | 82 | 61 | 43 | 61 | 26 |
| 25 | 61 | 33 | 82 | 61 | 51 | 54 | 22 |
| 26 | 57 | 33 | 82 | 66 | 53 | 53 | 20 |
| 27 | 77 | 44 | 81 | 68 | 45 | 53 | 18 |
| 28 | 70 | 44 | 80 | 72 | 45 | 44 | 14 |
| 29 | 69 | 48 | 84 | 82 | 45 | 34 | 5 |
| 30 | 69 | 49 | 84 | 84 | 44 | 33 | 0 |
| 31 | 68 | ------- | 84 | ------- | 47 | 33 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| March 12–31 | 110 | 57 | 68.2 | 2,710 |
| April | 68 | 33 | 48.6 | 2,890 |
| May | 84 | 44 | 68.5 | 4,210 |
| June | 88 | 50 | 66.2 | 3,940 |
| July | 84 | 43 | 66.4 | 4,080 |
| August | 72 | 33 | 56.4 | 3,470 |
| September | 35 | 0 | 26.4 | 1,570 |
| The period | ---------- | ---------- | ---------- | 22,900 |

### 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 from Mountain Home feeder canal and 4½ miles north of Mountain Home.

RECORDS AVAILABLE.—April, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 75 second-feet May 24 and July 2; no flow subsequent to September 25.

1924–1928: Maximum discharge, 109 second-feet July 16, 1925 (gage height, 1.69 feet); usually no flow during nonirrigation periods.

REMARKS.—Records good. Discharge interpolated June 30, August 24, September 2, 11, and 16–18. 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, 1928*

| Day | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | | | | | 74 | 45 | 36 |
| 2 | | | | | 74 | 45 | 35 |
| 3 | | | | | 74 | 41 | 34 |
| 4 | | | | | 73 | 41 | 34 |
| 5 | | | | | 74 | 47 | 34 |
| 6 | | | | | 74 | 47 | 29 |
| 7 | | | | | 73 | 46 | 28 |
| 8 | | | | | 72 | 45 | 28 |
| 9 | | | | | 71 | 54 | 26 |
| 10 | | | | | 71 | 54 | 26 |
| 11 | | | | | 70 | 59 | 26 |
| 12 | | | | | 69 | 59 | 25 |
| 13 | | | | | 69 | 59 | 25 |
| 14 | | | | | 66 | 64 | 25 |
| 15 | | | | 57 | 70 | 65 | 25 |
| 16 | | | | 57 | 70 | 65 | 24 |
| 17 | | | | 52 | 70 | 64 | 22 |
| 18 | | | | 50 | 69 | 64 | 20 |
| 19 | | 3.1 | | 49 | 62 | 62 | 19 |
| 20 | | | | 49 | 61 | 60 | 17 |
| 21 | | | | 55 | 54 | 59 | 14 |
| 22 | | | | 54 | 44 | 59 | 13 |
| 23 | | | | 55 | 42 | 61 | 13 |
| 24 | 5.3 | | 75 | 58 | 41 | 57 | 13 |
| 25 | | | | 59 | 48 | 53 | 6 |
| 26 | | | | 63 | 50 | 53 | |
| 27 | | | | 64 | 43 | 52 | |
| 28 | | | | 66 | 42 | 46 | 0 |
| 29 | | | | 73 | 42 | 36 | |
| 30 | | | | 74 | 42 | 35 | |
| 31 | | | | | 45 | 35 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| June 15–30 | 74 | 49 | 58.4 | 1,850 |
| July | 74 | 41 | 61.3 | 3,770 |
| August | 65 | 35 | 52.6 | 3,230 |
| September | 36 | 0 | 19.9 | 1,180 |
| The period | | | | 10,000 |

### OWYHEE RIVER AT MOUNTAIN CITY, NEV.

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

DRAINAGE AREA.—350 square miles.

RECORDS AVAILABLE.—May to December, 1913; November, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,510 second-feet March 26 (gage height, 7.0 feet); minimum, 2 second-feet September 12 (gage height, 1.32 feet).

1913, 1927–28: Maximum and minimum occurred in 1928.

REMARKS.—Diversions for irrigation above station. Records fair except those for December 5 to March 4, which were estimated, and March 25–27, which were based on an extension of the rating curve.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16 | 24 | 64 | | | | 481 | 622 | 121 | 26 | 7 | 4 |
| 2 | 16 | 24 | 74 | | | | 471 | 573 | 117 | 24 | 7 | 4 |
| 3 | 16 | 24 | 69 | | | 40 | 382 | 521 | 108 | 20 | 8 | 4 |
| 4 | 16 | 23 | 64 | | | | 423 | 447 | 95 | 16 | 8 | 4 |
| 5 | 16 | 23 | | | | 69 | 386 | 364 | 74 | 15 | 8 | 3 |
| 6 | 16 | 23 | | | | 74 | 351 | 391 | 55 | 13 | 8 | 3 |
| 7 | 16 | 22 | | | | 85 | 320 | 433 | 55 | 12 | 8 | 3 |
| 8 | 16 | 22 | | | | 108 | 311 | 457 | 50 | 12 | 8 | 3 |
| 9 | 16 | 22 | | | | 142 | 307 | 447 | 46 | 11 | 7 | 4 |
| 10 | 15 | 23 | | | | 179 | 329 | 423 | 43 | 10 | 7 | 3 |
| 11 | 15 | 24 | | | | 384 | 333 | 457 | 46 | 9 | 8 | 3 |
| 12 | 15 | 24 | | | | 418 | 324 | 423 | 46 | 8 | 7 | 2 |
| 13 | 15 | 24 | | | | 311 | 329 | 377 | 46 | 8 | 6 | 3 |
| 14 | 15 | 25 | | | | 269 | 333 | 346 | 43 | 8 | 6 | 3 |
| 15 | 15 | 26 | | 25 | 25 | 190 | 315 | 311 | 46 | 7 | 5 | 4 |
| 16 | 15 | 26 | | | | 183 | 329 | 282 | 41 | 7 | 4 | 5 |
| 17 | 15 | 27 | 30 | | | 209 | 364 | 261 | 40 | 6 | 4 | 5 |
| 18 | 15 | 28 | | | | 269 | 355 | 237 | 38 | 6 | 3 | 5 |
| 19 | 16 | 26 | | | | 359 | 351 | 229 | 35 | 6 | 4 | 6 |
| 20 | 16 | 27 | | | | 405 | 320 | 225 | 32 | 6 | 4 | 6 |
| 21 | 16 | 28 | | | | 476 | 311 | 221 | 29 | 7 | 4 | 6 |
| 22 | 16 | 32 | | | | 573 | 303 | 213 | 26 | 6 | 4 | 6 |
| 23 | 16 | 30 | | | | 573 | 290 | 205 | 24 | 6 | 4 | 6 |
| 24 | 16 | 32 | | | | 611 | 324 | 198 | 21 | 6 | 4 | 6 |
| 25 | 16 | 30 | | | | 1,310 | 351 | 198 | 18 | 6 | 4 | 6 |
| 26 | 24 | 29 | | | | 1,510 | 447 | 190 | 16 | 6 | 4 | 6 |
| 27 | 24 | 32 | | | | 1,070 | 495 | 176 | 15 | 6 | 4 | 6 |
| 28 | 25 | 35 | | | | 830 | 521 | 153 | 15 | 6 | 4 | 7 |
| 29 | 26 | 99 | | | | 661 | 568 | 142 | 15 | 6 | 4 | 7 |
| 30 | 25 | 80 | | | ------- | 600 | 573 | 138 | 16 | 6 | 4 | 8 |
| 31 | 24 | ------- | | | ------- | 605 | ------- | 130 | ------- | 6 | 4 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 26 | 15 | 17.4 | 1,070 |
| November | 99 | 22 | 30.5 | 1,810 |
| December | 74 | ---------- | 34.9 | 2,150 |
| January | ---------- | ---------- | 25 | 1,540 |
| February | ---------- | ---------- | 25 | 1,440 |
| March | 1,510 | ---------- | 408 | 25,100 |
| April | 573 | 290 | 377 | 22,400 |
| May | 622 | 130 | 316 | 19,400 |
| June | 121 | 15 | 45.7 | 2,720 |
| July | 26 | 6 | 9.6 | 590 |
| August | 8 | 3 | 5.1 | 314 |
| September | 8 | 2 | 4.7 | 280 |
| The year | 1,510 | .2 | 109 | 78,800 |

### 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 September, 1928.

EXTREMES.—Maximum discharge during year, 11,400 second-feet March 29 (gage height, 8.95 feet); minimum, 6 second-feet July 27 and 30 (gage height, 1.60 feet).

1890–1893, 1895–1896, 1903–1916, 1920–1928: Maximum discharge, 23,200 second-feet March 2, 1910 (gage height, 12.9 feet); no flow July 7, 19, August 14–16, 1924, and July 5 and 6, 1926.

REMARKS.—Records poor. Discharge interpolated April 5, June 19, July 29, and August 12. 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*

| Day | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | | 5,200 | 1,660 | 250 | 12 | 8 | 10 |
| 2 | | 2,820 | 1,770 | 250 | 12 | 8 | 15 |
| 3 | | 4,300 | 1,770 | 210 | 12 | 18 | 15 |
| 4 | | 3,700 | 2,010 | 175 | 12 | 10 | 15 |
| 5 | | 3,260 | 2,010 | 143 | 10 | 15 | 15 |
| 6 | | 2,820 | 1,770 | 143 | 12 | 15 | 15 |
| 7 | | 2,820 | 1,770 | 143 | 12 | 12 | 15 |
| 8 | | 2,820 | 1,550 | 115 | 18 | 12 | 15 |
| 9 | | 2,660 | 1,550 | 68 | 12 | 15 | 15 |
| 10 | | 2,130 | 1,550 | 79 | 12 | 12 | 18 |
| 11 | | 2,130 | 1,550 | 79 | 12 | 15 | 18 |
| 12 | | 1,890 | 1,550 | 68 | 12 | 16 | 18 |
| 13 | | 1,550 | 1,550 | 68 | 12 | 18 | 18 |
| 14 | | 1,770 | 1,550 | 49 | 12 | 11 | 22 |
| 15 | | 1,550 | 1,550 | 34 | 18 | 12 | 28 |
| 16 | | 1,550 | 1,350 | 49 | 12 | 12 | 22 |
| 17 | | 1,550 | 1,350 | 49 | 15 | 12 | 22 |
| 18 | | 1,450 | 1,160 | 34 | 15 | 15 | 22 |
| 19 | | 1,770 | 1,070 | 31 | 8 | 18 | 22 |
| 20 | | 1,770 | 940 | 28 | 8 | 18 | 22 |
| 21 | | 1,550 | 900 | 24 | 8 | 15 | 28 |
| 22 | | 1,550 | 732 | 28 | 10 | 15 | 28 |
| 23 | | 1,550 | 668 | 22 | 10 | 18 | 34 |
| 24 | | 1,770 | 605 | 22 | 8 | 18 | 34 |
| 25 | | 1,550 | 605 | 22 | 8 | 18 | 34 |
| 26 | | 1,550 | 700 | 22 | 8 | 12 | 34 |
| 27 | | 1,890 | 700 | 22 | 6 | 10 | 34 |
| 28 | 9,600 | 1,770 | 460 | 22 | 8 | 10 | 34 |
| 29 | 11,400 | 1,550 | 460 | 22 | 7 | 12 | 34 |
| 30 | 8,120 | 1,550 | 350 | 18 | 6 | 12 | 34 |
| 31 | 6,220 | | 300 | | 15 | 10 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| April | 5,200 | 1,450 | 2,190 | 130,000 |
| May | 2,010 | 300 | 1,210 | 74,400 |
| June | 250 | 18 | 76.3 | 4,540 |
| July | 18 | 6 | 11.0 | 676 |
| August | 18 | 8 | 13.3 | 818 |
| September | 34 | 10 | 23.0 | 1,370 |
| The period | | | | 212,000 |

### 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 1928.

EXTREMES.—Maximum discharge during year, 284 second-feet May 31 (gage height, 3.84 feet); no flow November 13 to April 23.

1904–5, 1911–1916, 1920–1928; 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 estimated periods, which are fair. Canal diverts from Owyhee River in sec. 18, T. 21 S., R. 46 E. Water is used for irrigation of 11,284 acres of land near Owyhee, Nyssa, and Ontario. Waste water is returned to river between this and the station on Owyhee River near Owyhee. Record furnished by State engineer of Oregon.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1 | a 161 | a 130 | 0 | 188 | a 270 | 158 | 102 | a 99 |
| 2 | a 160 | 122 | 0 | 209 | a 269 | 153 | 106 | a 99 |
| 3 | 158 | a 122 | 0 | 243 | a 268 | 153 | 110 | 98 |
| 4 | 148 | 122 | 0 | 254 | 266 | 153 | 118 | 102 |
| 5 | a 144 | a 122 | 0 | 260 | a 260 | a 146 | 114 | 102 |
| 6 | 139 | 122 | 0 | 260 | 254 | 139 | 110 | 102 |
| 7 | a 139 | a 122 | 0 | 260 | 238 | 130 | 106 | 102 |
| 8 | 139 | 122 | 0 | 254 | 226 | 134 | 110 | 102 |
| 9 | a 139 | a 122 | 0 | | 220 | 134 | 110 | 102 |
| 10 | 139 | 122 | 0 | | 214 | 126 | 110 | 114 |
| 11 | a 139 | a 122 | 0 | a 266 | a 214 | 122 | a 109 | 118 |
| 12 | 139 | 122 | 0 | | a 214 | 122 | a 107 | 114 |
| 13 | a 139 | 0 | 0 | | a 214 | 118 | 106 | 118 |
| 14 | a 139 | 0 | 0 | | 214 | 114 | 106 | 122 |
| 15 | 139 | 0 | 0 | 272 | | 114 | 106 | 126 |
| 16 | a 139 | 0 | 0 | 272 | | 114 | 106 | 139 |
| 17 | 139 | 0 | 0 | 272 | a 214 | 114 | 106 | 134 |
| 18 | a 136 | 0 | 0 | 266 | | 122 | 106 | 134 |
| 19 | 134 | 0 | 0 | 260 | | 114 | 102 | 134 |
| 20 | a 134 | 0 | 0 | 248 | 214 | 110 | 98 | 134 |
| 21 | 134 | 0 | 0 | 238 | 204 | 106 | | 130 |
| 22 | a 136 | 0 | 0 | 232 | 198 | 110 | | 126 |
| 23 | 139 | 0 | 0 | 238 | 193 | 106 | | 130 |
| 24 | a 139 | 0 | 0 | 243 | 183 | 106 | a 100 | 130 |
| 25 | 139 | 0 | | 238 | 173 | 102 | | 130 |
| 26 | a 139 | 0 | | 248 | 168 | 102 | | 134 |
| 27 | 139 | 0 | a 100 | 140 | 163 | 98 | 102 | 139 |
| 28 | a 139 | 0 | | 72 | 153 | 98 | a 101 | 139 |
| 29 | 139 | 0 | | 83 | 158 | 98 | a 101 | a 139 |
| 30 | a 139 | 0 | | 233 | 158 | 98 | a 100 | 139 |
| 31 | 139 | | | 272 | | 98 | a 100 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | | 134 | 141 | 8,670 |
| November | | 0 | 49.1 | 2,920 |
| April | | 0 | 23.3 | 1,390 |
| May | 272 | 72 | 237 | 14,600 |
| June | | 153 | 213 | 12,700 |
| July | 158 | 98 | 120 | 7,380 |
| August | 118 | 98 | 105 | 6,460 |
| September | 139 | 98 | 121 | 7,200 |
| The year | 272 | 0 | 84.3 | 61,360 |

a Estimated or interpolated.

### 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, 1928.

EXTREMES.—Maximum discharge during year, 9,400 second-feet May 10 (gage height, 7.93 feet); minimum, 320 second-feet September 23–29 (gage height, 1.96 feet).

1911–1928: Maximum discharge, 10,300 second-feet May 17, 1927 (gage height, 8.30 feet); minimum, about 142 second-feet November 18, 1916 (gage height, 1.73 feet).

REMARKS.—Records good except those for estimated periods, December 16–31, January 1–8, and 21–31, which are fair. One discharge measurement furnished by water master for Boise River.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 562 | 424 | 1,150 | | 560 | 515 | 1,700 | 4,430 | 4,160 | 1,510 | 528 | 351 |
| 2 | 562 | 472 | 1,100 | | 560 | 509 | 1,580 | 4,430 | 3,900 | 1,500 | 522 | 340 |
| 3 | 548 | 484 | 1,070 | | 567 | 528 | 1,500 | 4,070 | 3,640 | 1,470 | 522 | 330 |
| 4 | 597 | 478 | 960 | | 567 | 554 | 1,370 | 3,980 | 3,560 | 1,400 | 528 | 335 |
| 5 | 569 | 472 | 952 | 600 | 574 | 580 | 1,290 | 4,430 | 3,730 | 1,390 | 560 | 325 |
| 6 | 536 | 472 | 943 | | 574 | 574 | 1,230 | 5,540 | 3,730 | 1,330 | 534 | 325 |
| 7 | 503 | 645 | 742 | | 541 | 574 | 1,170 | 6,910 | 3,640 | 1,230 | 503 | 325 |
| 8 | 490 | 708 | 851 | | 567 | 615 | 1,150 | 7,930 | 3,230 | 1,180 | 479 | 330 |
| 9 | 484 | 1,350 | 918 | 554 | 515 | 758 | 1,190 | 8,770 | 2,990 | 1,130 | 461 | 340 |
| 10 | 484 | 2,610 | 827 | 567 | 509 | 827 | 1,220 | 8,980 | 2,840 | 1,100 | 443 | 356 |
| 11 | 472 | 1,450 | 742 | 567 | 560 | 1,190 | 1,190 | 8,980 | 2,840 | 1,050 | 431 | 351 |
| 12 | 454 | 1,100 | 728 | 574 | 567 | 1,480 | 1,190 | 8,140 | 2,610 | 1,010 | 425 | 368 |
| 13 | 448 | 969 | 750 | 795 | 541 | 1,150 | 1,160 | 7,110 | 2,470 | 987 | 419 | 407 |
| 14 | 454 | 918 | 657 | 892 | 608 | 1,030 | 1,130 | 6,110 | 2,400 | 952 | 413 | 401 |
| 15 | 454 | 875 | 643 | 742 | 541 | 900 | 1,140 | 5,540 | 2,330 | 909 | 407 | 378 |
| 16 | 454 | 996 | | 629 | 522 | 884 | 1,170 | 5,350 | 2,200 | 875 | 401 | 362 |
| 17 | 454 | 1,360 | | 643 | 567 | 918 | 1,390 | 5,540 | 2,070 | 835 | 395 | 351 |
| 18 | 454 | 1,120 | | 650 | 574 | 1,010 | 1,490 | 6,110 | 1,880 | 795 | 390 | 335 |
| 19 | 442 | 996 | | 650 | 580 | 1,170 | 1,450 | 6,510 | 1,820 | 758 | 378 | 330 |
| 20 | 436 | 1,260 | | 671 | 567 | 1,460 | 1,420 | 6,510 | 1,820 | 728 | 378 | 330 |
| 21 | 436 | 1,820 | | | 587 | 1,820 | 1,300 | 7,110 | 1,880 | 713 | 384 | 325 |
| 22 | 430 | 1,390 | | | 615 | 2,400 | 1,300 | 7,510 | 2,000 | 678 | 378 | 325 |
| 23 | 424 | 1,110 | | | 580 | 2,330 | 1,510 | 7,310 | 2,140 | 664 | 378 | 320 |
| 24 | 419 | 1,080 | 600 | | 567 | 2,840 | 2,070 | 7,510 | 2,200 | 643 | 378 | 320 |
| 25 | 419 | 1,130 | | | 587 | 2,680 | 2,470 | 7,930 | 2,260 | 622 | 384 | 320 |
| 26 | 454 | 1,540 | | 600 | 574 | 2,260 | 3,560 | 8,140 | 2,330 | 608 | 378 | 320 |
| 27 | 536 | 1,510 | | | 541 | 2,540 | 4,790 | 7,720 | 2,200 | 601 | 378 | 320 |
| 28 | 548 | 1,490 | | | 564 | 2,400 | 4,970 | 7,110 | 1,940 | 580 | 373 | 320 |
| 29 | 510 | 1,460 | | | 548 | 2,140 | 4,250 | 6,310 | 1,760 | 587 | 368 | 320 |
| 30 | 496 | 1,270 | | | ------- | 1,940 | 3,980 | 5,540 | 1,580 | 554 | 362 | 325 |
| 31 | 478 | ------- | | | ------- | 1,760 | ------- | 4,790 | ------- | 534 | 356 | ------ |

| Month | Maximum | Minimum | Mean | Per square mile | Inches | Run-off in acre-feet |
|---|---|---|---|---|---|---|
| October | 597 | 419 | 484 | 0.583 | 0.67 | 29,800 |
| November | 2,610 | 424 | 1,100 | 1.33 | 1.48 | 65,500 |
| December | 1,150 | ---------- | 720 | .880 | 1.01 | 44,900 |
| January | 892 | ---------- | 624 | .752 | .87 | 38,400 |
| February | 615 | 509 | 563 | .678 | .73 | 32,400 |
| March | 2,840 | 509 | 1,370 | 1.65 | 1.90 | 84,200 |
| April | 4,970 | 1,130 | 1,880 | 2.27 | 2.53 | 112,000 |
| May | 8,980 | 3,980 | 6,530 | 7.87 | 9.07 | 402,000 |
| June | 4,160 | 1,580 | 2,600 | 3.13 | 3.49 | 155,000 |
| July | 1,510 | 534 | 933 | 1.12 | 1.29 | 57,400 |
| August | 560 | 356 | 427 | .514 | .59 | 26,300 |
| September | 407 | 320 | 340 | .410 | .46 | 20,200 |
| The year | 8,980 | 320 | 1,470 | 1.77 | 24.09 | 1,070,000 |

### ARROWROCK RESERVOIR AT ARROWROCK, IDAHO

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

RECORDS AVAILABLE.—October, 1917, to September, 1928.

EXTREMES.—Maximum contents during year, 284,900 acre-feet May 11 (gage height, 3,213.8 feet); minimum, 3,405 acre-feet September 29, 30 (gage height, 3,004.0 feet).

1917–1928: Maximum contents, 286,100 acre-feet May 19 and 20, 1925 (gage height, 3,214.2 feet); natural flow passing through reservoir September 13–17, September 20 to October 1, 1919; September 13 to October 10, 1920; September 19 to October 22, 1922; August 19 to October 15, 1924; September 16 to October 15, 1926; October 1–15, 1927.

REMARKS.—Reservoir has a capacity of 276,500 acre-feet storage between elevations 2,967 feet and 3,211 feet. Water is used for irrigation in Boise Valley. Gage-height record and table of storage capacity furnished by United States Bureau of Reclamation.

*Daily contents, in acre-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 34,970 | 20,890 | 142,000 | 179,700 | 236,400 | 216,500 | 256,200 | 274,400 | 277,100 | 267,100 | 17[illegible],000 | 68,060 |
| 2 | 34,180 | 22,380 | 146,000 | 181,200 | 237,200 | 215,200 | 252,000 | 275,300 | 279,500 | 263,400 | 17[illegible],000 | 64,940 |
| 3 | 33,560 | 24,070 | 150,000 | 183,200 | 237,700 | 213,800 | 247,800 | 275,200 | 281,000 | 261,300 | 16[illegible],800 | 61,950 |
| 4 | 33,030 | 25,500 | 154,200 | 185,800 | 236,200 | 212,500 | 242,900 | 274,400 | 281,500 | 258,700 | 16[illegible],400 | 58,920 |
| 5 | 32,350 | 27,360 | 157,300 | 188,100 | 238,000 | 214,000 | 240,100 | 274,100 | 281,800 | 256,200 | 16[illegible],300 | 55,920 |
| 6 | 31,330 | 28,910 | 160,900 | 190,600 | 238,200 | 215,500 | 239,000 | 275,300 | 281,900 | 254,000 | 15[illegible],900 | 53,120 |
| 7 | 29,890 | 30,750 | 163,600 | 192,700 | 238,200 | 216,500 | 238,000 | 278,300 | 281,500 | 251,200 | 15[illegible],000 | 50,700 |
| 8 | 28,290 | 32,880 | 165,300 | 194,500 | 238,000 | 218,500 | 237,700 | 281,000 | 281,200 | 248,400 | 15[illegible],800 | 48,300 |
| 9 | 26,770 | 35,370 | 165,500 | 195,900 | 237,200 | 220,800 | 237,200 | 282,800 | 281,500 | 245,600 | 148,400 | 46,100 |
| 10 | 25,130 | 41,880 | 166,100 | 198,100 | 236,400 | 224,200 | 239,000 | 284,600 | 282,100 | 242,400 | 14[illegible],000 | 44,000 |
| 11 | 23,210 | 49,600 | 166,500 | 200,000 | 235,600 | 227,600 | 240,600 | 284,900 | 282,600 | 239,300 | 141,400 | 41,970 |
| 12 | 21,310 | 54,600 | 166,300 | 201,700 | 234,600 | 234,600 | 242,900 | 284,600 | 282,800 | 236,200 | 13[illegible],600 | 39,990 |
| 13 | 19,040 | 58,800 | 166,300 | 204,100 | 233,300 | 240,600 | 244,200 | 283,400 | 282,700 | 232,300 | 13[illegible],000 | 38,270 |
| 14 | 16,840 | 62,600 | 166,300 | 206,500 | 232,500 | 245,600 | 246,100 | 282,100 | 282,500 | 228,900 | 130,200 | 36,410 |
| 15 | 14,750 | 66,240 | 166,500 | 209,500 | 231,200 | 249,800 | 247,800 | 280,700 | 282,200 | 225,500 | 123,600 | 34,340 |
| 16 | 12,610 | 69,100 | 165,700 | 212,000 | 229,400 | 253,400 | 249,800 | 278,600 | 281,900 | 222,100 | 121,800 | 32,060 |
| 17 | 10,620 | 73,840 | 165,700 | 213,200 | 228,100 | 256,800 | 251,700 | 276,200 | 281,300 | 218,500 | 119,200 | 29,820 |
| 18 | 9,050 | 78,880 | 165,300 | 214,500 | 226,800 | 260,400 | 254,200 | 278,400 | 280,400 | 214,800 | 115,200 | 27,690 |
| 19 | 7,890 | 82,850 | 166,400 | 215,800 | 226,000 | 264,800 | 257,300 | 279,400 | 279,200 | 211,500 | 111,800 | 25,560 |
| 20 | 6,950 | 86,600 | 161,500 | 218,000 | 225,200 | 268,000 | 259,600 | 279,800 | 278,000 | 208,200 | 108,400 | 23,610 |
| 21 | 5,400 | 91,820 | 163,000 | 221,100 | 224,700 | 270,300 | 262,200 | 280,100 | 276,800 | 204,800 | 104,800 | 21,410 |
| 22 | 4,150 | 97,370 | 164,000 | 223,700 | 223,900 | 271,200 | 264,500 | 280,500 | 275,900 | 202,400 | 101,300 | 19,130 |
| 23 | 5,180 | 102,500 | 166,100 | 225,500 | 223,200 | 271,800 | 266,200 | 280,900 | 275,000 | 199,300 | 97,710 | 16,970 |
| 24 | 6,200 | 106,600 | 167,800 | 227,600 | 222,400 | 270,600 | 269,200 | 280,900 | 274,400 | 196,200 | 94,220 | 14,640 |
| 25 | 7,340 | 110,500 | 169,300 | 229,400 | 221,600 | 270,900 | 272,600 | 281,200 | 273,800 | 193,400 | 90,700 | 12,260 |
| 26 | 8,605 | 114,800 | 170,500 | 231,500 | 220,800 | 270,600 | 273,800 | 281,800 | 272,900 | 190,600 | 87,200 | 9,577 |
| 27 | 10,400 | 120,100 | 171,800 | 232,500 | 220,000 | 268,900 | 276,500 | 281,900 | 272,000 | 187,800 | 83,900 | 6,745 |
| 28 | 12,780 | 125,500 | 173,100 | 233,000 | 218,800 | 268,300 | 276,800 | 281,000 | 270,600 | 185,300 | 80,450 | 4,086 |
| 29 | 14,940 | 131,200 | 175,300 | 233,800 | 217,500 | 266,200 | 276,200 | 279,800 | 269,200 | 182,800 | 77,200 | 3,405 |
| 30 | 16,880 | 138,000 | 177,300 | 234,600 | ------- | 263,400 | 275,300 | 278,900 | 267,700 | 180,100 | 73,980 | 3,405 |
| 31 | 19,180 | ------- | 178,800 | 235,400 | ------- | 259,600 | ------- | 277,400 | ------- | 177,300 | 70,920 | ------- |

### BOISE RIVER AT DOWLING RANCH, NEAR ARROWROCK, IDAHO

LOCATION.—Water-stage recorder in sec. 15, T. 3 N., R. 4 E., three-quarters of a mile above Moore Creek and 4 miles below Arrowrock.

DRAINAGE AREA.—2,230 square miles.

RECORDS AVAILABLE.—March, 1911, to September, 1928.

EXTREMES.—Maximum discharge during year, 17,600 second-feet May 11 (gage height, 9.55 feet); minimum, estimated 10 second-feet November 16–30.

1911–1928: Maximum discharge, that of May 11, 1928; minimum, estimated 5 second-feet November 2–10, December 21 to January 6, and March 26–29, 1925.

REMARKS.—Records good except those for estimated period. November 16 to December 5, which are poor. No diversions above station. Flow regulated by storage in Arrowrock Reservoir. Ten discharge measurements furnished by United States Bureau of Reclamation and water master for Boise River. Gage-height record furnished by United States Bureau of Reclamation.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,580 | 193 | | 249 | 680 | 1,760 | 6,090 | 8,550 | 6,6[illegible] | 3,680 | 2,660 | 2,160 |
| 2 | 1,460 | 202 | 15 | 253 | 826 | 1,760 | 6,090 | 8,870 | 6,2[illegible] | 3,680 | 2,590 | 2,160 |
| 3 | 1,410 | 210 | | 234 | 998 | 1,760 | 5,960 | 8,870 | 6,2[illegible] | 3,680 | 2,590 | 2,160 |
| 4 | 1,460 | 213 | | 151 | 1,140 | 852 | 5,210 | 8,550 | 6,4[illegible] | 3,680 | 2,590 | 2,090 |
| 5 | 1,580 | 220 | 70 | 140 | 1,260 | 436 | 4,300 | 8,550 | 6,4[illegible] | 3,590 | 2,660 | 2,090 |
| 6 | 1,700 | 220 | 177 | 140 | 1,260 | 431 | 3,500 | 9,190 | 6,770 | 3,590 | 2,590 | 1,960 |
| 7 | 1,760 | 230 | 349 | 140 | 1,410 | 436 | 3,060 | 11,500 | 6,6[illegible] | 3,590 | 2,590 | 1,820 |
| 8 | 1,760 | 199 | 826 | 148 | 1,520 | 441 | 2,900 | 13,900 | 6,2[illegible] | 3,500 | 2,590 | 1,820 |
| 9 | 1,760 | 125 | 1,100 | 140 | 1,640 | 445 | 2,370 | 15,700 | 4,6[illegible] | 3,500 | 2,590 | 1,820 |
| 10 | 1,890 | 81 | 1,320 | 216 | 1,640 | 436 | 2,020 | 16,800 | 4,8[illegible] | 3,500 | 2,590 | 1,760 |
| 11 | 1,960 | 68 | 1,410 | 293 | 1,640 | 455 | 2,020 | 17,600 | 4,740 | 3,500 | 2,590 | 1,700 |
| 12 | 1,960 | 69 | 1,460 | 297 | 1,640 | 460 | 2,020 | 16,800 | 4,740 | 3,500 | 2,590 | 1,700 |
| 13 | 2,020 | 71 | 1,460 | 306 | 1,640 | 460 | 2,020 | 15,400 | 4,52[illegible] | 3,500 | 2,590 | 1,760 |
| 14 | 2,020 | 73 | 1,460 | 306 | 1,640 | 460 | 2,020 | 13,200 | 4,41[illegible] | 3,500 | 2,590 | 1,820 |
| 15 | 1,960 | 73 | 1,460 | 306 | 1,640 | 460 | 2,020 | 12,200 | 4,30[illegible] | 3,500 | 2,590 | 1,820 |
| 16 | 1,890 | 26 | 1,460 | 310 | 1,640 | 460 | 2,020 | 10,800 | 4,200 | 3,400 | 2,520 | 1,820 |
| 17 | 1,760 | | 1,460 | 310 | 1,640 | 465 | 2,020 | 10,500 | 4,090 | 3,320 | 2,590 | 1,700 |
| 18 | 1,460 | | 1,460 | 310 | 1,640 | 470 | 2,020 | 10,800 | 3,990 | 3,140 | 2,520 | 1,640 |
| 19 | 1,290 | | 1,460 | 310 | 1,640 | 887 | 2,020 | 11,800 | 3,990 | 3,060 | 2,440 | 1,640 |
| 20 | 1,460 | | 1,220 | 310 | 1,640 | 2,020 | 2,090 | 12,200 | 3,880 | 2,980 | 2,440 | 1,700 |
| 21 | 1,410 | | 727 | 310 | 1,640 | 3,400 | 2,090 | 12,900 | 3,880 | 2,820 | 2,440 | 1,760 |
| 22 | 834 | | 390 | 310 | 1,640 | 4,740 | 2,090 | 13,600 | 3,880 | 2,740 | 2,440 | 1,760 |
| 23 | 485 | 10 | 390 | 310 | 1,640 | 5,830 | 2,090 | 13,900 | 3,880 | 2,740 | 2,370 | 1,760 |
| 24 | 431 | | 390 | 310 | 1,640 | 6,220 | 2,660 | 13,900 | 3,990 | 2,660 | 2,370 | 1,820 |
| 25 | 372 | | 390 | 314 | 1,640 | 6,220 | 4,090 | 14,300 | 4,090 | 2,590 | 2,370 | 1,760 |
| 26 | 380 | | 390 | 475 | 1,640 | 6,220 | 5,830 | 15,000 | 4,200 | 2,520 | 2,370 | 1,760 |
| 27 | 358 | | 394 | 620 | 1,700 | 6,220 | 8,550 | 14,700 | 4,200 | 2,440 | 2,370 | 1,700 |
| 28 | 230 | | 323 | 620 | 1,760 | 6,220 | 9,840 | 13,900 | 3,880 | 2,370 | 2,300 | 1,210 |
| 29 | 177 | | 249 | 620 | 1,760 | 6,090 | 9,190 | 12,200 | 3,780 | 2,440 | 2,300 | 650 |
| 30 | 138 | | 249 | 620 | ------- | 6,090 | 8,550 | 10,800 | 3,780 | 2,520 | 2,230 | 650 |
| 31 | 165 | ------- | 249 | 620 | ------- | 6,090 | ------- | 8,870 | ------- | 2,590 | 2,230 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 2,020 | 138 | 1,260 | 77,500 |
| November | 230 | ---------- | 80.4 | 4,780 |
| December | 1,460 | ---------- | 721 | 44,300 |
| January | 620 | 140 | 323 | 19,900 |
| February | 1,760 | 680 | 1,510 | 86,900 |
| March | 6,220 | 431 | 2,540 | 156,000 |
| April | 9,840 | 2,020 | 3,890 | 231,000 |
| May | 17,600 | 8,550 | 12,400 | 762,000 |
| June | 6,770 | 3,780 | 4,790 | 285,000 |
| July | 3,680 | 2,370 | 3,160 | 194,000 |
| August | 2,660 | 2,230 | 2,490 | 153,000 |
| September | 2,160 | 650 | 1,730 | 103,000 |
| The year | 17,600 | ---------- | 2,920 | 2,120,000 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 14,000 second-feet May 12 (gage height, 7.40 feet); minimum, 19 second-feet August 25, 28, and 31 (gage height, 0.22 foot).

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

REMARKS.—Records good. Station is below all diversions for irrigation in Boise Valley. Flow regulated by storage in Arrowrock Reservoir.

*Daily and monthly discharge, in second-feet, 1927-28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 775 | 732 | 1,290 | 912 | 960 | 865 | 8,190 | 6,360 | 5,210 | 45 | 26 | 20 |
| 2 | 820 | 775 | 1,170 | 912 | 960 | 865 | 7,870 | 6,070 | 2,810 | 42 | 29 | 20 |
| 3 | 865 | 775 | 960 | 865 | 1,010 | 960 | 7,250 | 6,070 | 2,810 | 55 | 30 | 20 |
| 4 | 820 | 820 | 960 | 865 | 960 | 912 | 7,250 | 5,790 | 2,710 | 55 | 29 | 22 |
| 5 | 775 | 820 | 1,170 | 865 | 1,570 | 912 | 5,510 | 5,240 | 2,810 | 87 | 27 | 23 |
| 6 | 775 | 865 | 960 | 865 | 1,290 | 960 | 4,710 | 5,510 | 2,810 | 77 | 26 | 24 |
| 7 | 732 | 865 | 960 | 865 | 1,170 | 1,010 | 3,710 | 6,650 | 3,020 | 55 | 26 | 27 |
| 8 | 732 | 865 | 960 | 865 | 1,010 | 1,060 | 3,040 | 9,490 | 2,810 | 45 | 24 | 32 |
| 9 | 775 | 960 | 960 | 865 | 1,060 | 1,230 | 2,940 | 11,500 | 2,220 | 34 | 24 | 34 |
| 10 | 775 | 1,010 | 960 | 820 | 1,120 | 1,570 | 1,890 | 12,900 | 1,390 | 34 | 30 | 36 |
| 11 | 775 | 1,170 | 775 | 865 | 1,010 | 1,890 | 1,810 | 13,700 | 1,240 | 40 | 27 | 38 |
| 12 | 865 | 960 | 865 | 2,240 | 1,060 | 3,040 | 1,810 | 14,000 | 1,100 | 40 | 24 | 60 |
| 13 | 775 | 1,010 | 820 | 2,240 | 1,060 | 2,830 | 1,810 | 13,300 | 970 | 55 | 24 | 64 |
| 14 | 775 | 960 | 865 | 3,040 | 960 | 2,430 | 2,240 | 11,800 | 744 | 45 | 24 | 78 |
| 15 | 775 | 960 | 865 | 1,570 | 1,060 | 2,060 | 2,240 | 10,700 | 582 | 40 | 25 | 87 |
| 16 | 820 | 912 | 820 | 1,170 | 960 | 1,810 | 2,240 | 8,900 | 472 | 40 | 25 | 106 |
| 17 | 820 | 865 | 775 | 912 | 865 | 1,890 | 2,340 | 7,570 | 472 | 36 | 24 | 128 |
| 18 | 865 | 865 | 820 | 960 | 865 | 1,890 | 2,430 | 7,570 | 356 | 34 | 26 | 104 |
| 19 | 820 | 865 | 820 | 960 | 865 | 2,060 | 2,430 | 8,220 | 239 | 34 | 24 | 87 |
| 20 | 820 | 820 | 865 | 960 | 960 | 3,260 | 2,430 | 8,900 | 152 | 45 | 24 | 80 |
| 21 | 775 | 775 | 865 | 1,120 | 1,060 | 3,950 | 2,240 | 9,250 | 106 | 36 | 23 | 77 |
| 22 | 820 | 865 | 865 | 1,060 | 912 | 6,070 | 2,060 | 9,600 | 70 | 34 | 23 | 73 |
| 23 | 1,230 | 865 | 865 | 1,060 | 865 | 7,250 | 1,980 | 10,700 | 40 | 32 | 22 | 64 |
| 24 | 912 | 820 | 865 | 1,010 | 865 | 8,510 | 2,940 | 10,300 | 32 | 30 | 20 | 58 |
| 25 | 820 | 775 | 960 | 960 | 865 | 9,160 | 4,710 | 10,300 | 24 | 30 | 19 | 55 |
| 26 | 732 | 775 | 960 | 960 | 865 | 8,510 | 5,240 | 10,700 | 27 | 29 | 20 | 55 |
| 27 | 960 | 960 | 960 | 1,010 | 960 | 8,830 | 8,510 | 11,400 | 34 | 29 | 20 | 52 |
| 28 | 865 | 1,170 | 960 | 960 | 865 | 9,160 | 8,510 | 9,950 | 36 | 32 | 19 | 50 |
| 29 | 865 | 1,290 | 960 | 1,060 | 912 | 8,830 | 7,870 | 9,250 | 40 | 29 | 20 | 47 |
| 30 | 820 | 1,500 | 912 | 1,060 | ------- | 8,510 | 7,560 | 8,220 | 42 | 27 | 20 | 50 |
| 31 | 775 | ------- | 912 | 1,010 | ------- | 8,510 | ------- | 6,640 | ------- | 26 | 19 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 1,230 | 732 | 823 | 50,600 |
| November | 1,500 | 732 | 922 | 54,900 |
| December | 1,290 | 775 | 927 | 57,000 |
| January | 3,040 | 820 | 1,130 | 69,500 |
| February | 1,570 | 865 | 998 | 57,400 |
| March | 9,160 | 865 | 3,900 | 240,000 |
| April | 8,510 | 1,810 | 4,190 | 249,000 |
| May | 14,000 | 5,240 | 9,240 | 568,000 |
| June | 5,210 | 24 | 1,180 | 70,200 |
| July | 87 | 26 | 41.0 | 2,520 |
| August | 30 | 19 | 24.0 | 1,480 |
| September | 128 | 20 | 55.7 | 3,310 |
| The year | 14,000 | 19 | 1,960 | 1,420,000 |

### 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 irrigation. Records are available from 1919 to 1928. Record of daily diversions subsequent to 1915 is on file in the office of Idaho commissioner of reclamation.

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

*Total amount of water, in acre-feet, diverted by each canal during irrigation season of 1928*

| | | | |
|---|---|---|---|
| Main canal of United States Bureau of Reclamation | 623,000 | Phyllis | 113,000 |
| Penitentiary | 2,130 | Eureka No. 1 | 6,420 |
| Ridenbaugh | 131,000 | Pioneer | 8,910 |
| Bubb | 3,680 | Canyon County | 18,800 |
| Cruzen | 8,280 | Caldwell High Line | 14,200 |
| Boise City No. 1 | 7,240 | Riverside No. 2 | 50,600 |
| Settlers | 43,000 | Farmers cooperative | 78,600 |
| Thurmans Mill | 9,440 | Canyon | 5,280 |
| Farmers Union (includes Boise Valley diversion) | 58,100 | Seibenberg | 2,830 |
| Little Union | 3,730 | Pioneer Dixie | 11,300 |
| Dry Creek | 17,700 | Eureka No. 2 | 12,200 |
| Ballantine | 3,540 | Upper Center Point | 2,730 |
| 7 Eagle Island canals | 12,100 | Lower Center Point | 2,100 |
| Middleton Water Co | 27,100 | Miscellaneous | 8,020 |
| Middleton Mill ditch | 19,600 | Total | 1,300,000 |

*Combined monthly discharge of canals diverting from Boise River, Idaho, 1928*

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| April | 3,840 | 238 | 1,650 | 98,200 |
| May | 5,620 | 4,490 | 5,310 | 326,000 |
| June | 5,460 | 4,600 | 5,090 | 303,000 |
| July | 4,710 | 2,980 | 3,990 | 245,000 |
| August | 3,260 | 2,760 | 3,080 | 189,000 |
| September | 2,720 | 1,340 | 2,400 | 143,000 |
| The period | | | | 1,300,000 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 7,570 second-feet May 11 (gage height, 8.7 feet); minimum, 240 second-feet September 9 and 10 (gage height, 2.15 feet).

1911–1928: Maximum discharge, 9,200 second-feet May 15, 1917 (gage height, 9.53 feet); minimum, 142 second-feet December 31, 1925 (gage height, 1.92 feet).

REMARKS.—Records good. Discharge estimated December 17–31, January 18 to February 6, and June 22–30. One discharge measurement furnished by water master for Boise River.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 436 | 432 | 743 | 590 | | 436 | 1,400 | 3,510 | 3,440 | 1,000 | 399 | 268 |
| 2 | 432 | 428 | 738 | 604 | | 399 | 1,400 | 3,660 | 3,170 | 976 | 391 | 261 |
| 3 | 436 | 458 | 738 | 648 | | 411 | 1,330 | 3,440 | 2,970 | 947 | 391 | 261 |
| 4 | 432 | 458 | 682 | 614 | 450 | 428 | 1,220 | 3,300 | 2,780 | 892 | 387 | 258 |
| 5 | 428 | 445 | 638 | 557 | | 449 | 1,190 | 3,440 | 2,720 | 865 | 411 | 252 |
| 6 | 415 | 441 | 638 | 516 | | 462 | 1,160 | 3,950 | 2,660 | 838 | 428 | 249 |
| 7 | 407 | 484 | 511 | 480 | 415 | 471 | 1,120 | 4,740 | 2,600 | 812 | 399 | 246 |
| 8 | 403 | 524 | 480 | 445 | 441 | 516 | 1,120 | 5,800 | 2,420 | 785 | 379 | 243 |
| 9 | 403 | 708 | 619 | 449 | 415 | 619 | 1,160 | 6,960 | 2,260 | 749 | 359 | 243 |
| 10 | 403 | 1,640 | 619 | 458 | 375 | 682 | 1,220 | 7,360 | 2,120 | 718 | 344 | 243 |
| 11 | 399 | 1,120 | 552 | 475 | 399 | 920 | 1,190 | 7,360 | 2,070 | 697 | 333 | 255 |
| 12 | 395 | 838 | 502 | 489 | 441 | 1,060 | 1,220 | 7,360 | 1,980 | 667 | 322 | 261 |
| 13 | 395 | 780 | 571 | 580 | 415 | 892 | 1,220 | 6,760 | 1,890 | 653 | 308 | 274 |
| 14 | 395 | 728 | 552 | 623 | 432 | 838 | 1,220 | 5,800 | 1,760 | 628 | 298 | 284 |
| 15 | 395 | 677 | 484 | 543 | 395 | 785 | 1,260 | 4,910 | 1,680 | 604 | 291 | 284 |
| 16 | 391 | 672 | 547 | 529 | 387 | 775 | 1,330 | 4,420 | 1,640 | 604 | 287 | 274 |
| 17 | 387 | 892 | | 538 | 407 | 822 | 1,440 | 4,420 | 1,560 | 590 | 284 | 268 |
| 18 | 379 | 812 | | | 424 | 892 | 1,520 | 4,740 | 1,480 | 562 | 287 | 268 |
| 19 | 379 | 738 | | | 424 | 1,000 | 1,520 | 5,080 | 1,330 | 538 | 278 | 258 |
| 20 | 375 | 780 | | | 424 | 1,160 | 1,480 | 5,080 | 1,300 | 524 | 271 | 258 |
| 21 | 375 | 947 | | | 428 | 1,440 | 1,400 | 5,260 | 1,300 | 511 | 278 | 261 |
| 22 | 375 | 865 | | | 436 | 1,800 | 1,370 | 5,620 | | 498 | 274 | 261 |
| 23 | 375 | 723 | | | 445 | 1,890 | 1,480 | 5,800 | | 480 | 271 | 264 |
| 24 | 375 | 702 | 500 | 500 | 424 | 2,070 | 1,800 | 5,800 | | 458 | 278 | 268 |
| 25 | 371 | 738 | | | 420 | 2,120 | 2,120 | 5,800 | | 449 | 284 | 268 |
| 26 | 395 | 822 | | | 415 | 1,940 | 2,720 | 6,180 | 1,350 | 441 | 281 | 268 |
| 27 | 585 | 801 | | | 428 | 1,940 | 3,580 | 5,990 | | 428 | 274 | 268 |
| 28 | 643 | 865 | | | 424 | 1,800 | 3,950 | 5,440 | | 432 | 284 | 271 |
| 29 | 552 | 892 | | | 441 | 1,560 | 3,580 | 4,910 | | 453 | 284 | 271 |
| 30 | 502 | 790 | | | | 1,520 | 3,370 | 4,260 | | 441 | 274 | 271 |
| 31 | 480 | | | | | 1,440 | | 3,800 | | 411 | 268 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 643 | 371 | 423 | 0.388 | 0.45 | 26,000 |
| November | 1,640 | 428 | 740 | .679 | .76 | 44,000 |
| December | 743 | | 552 | .506 | .58 | 33,900 |
| January | 648 | | 521 | .478 | .55 | 32,000 |
| February | | 375 | 426 | .391 | .42 | 24,500 |
| March | 2,120 | 399 | 1,080 | .991 | 1.14 | 66,400 |
| April | 3,950 | 1,120 | 1,700 | 1.56 | 1.74 | 101,000 |
| May | 7,360 | 3,300 | 5,190 | 4.76 | 5.49 | 319,000 |
| June | 3,440 | | 1,910 | 1.75 | 1.95 | 114,000 |
| July | 1,000 | 411 | 634 | .582 | .67 | 39,000 |
| August | 428 | 268 | 319 | .293 | .34 | 19,600 |
| September | 284 | 243 | 263 | .241 | .27 | 15,600 |
| The year | 7,360 | 243 | 1,150 | 1.06 | 14.38 | 835,000 |

### 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, 1928.

EXTREMES.—Maximum stage during year, 4,965.5 feet May 26; minimum, 4,953.0 feet August 31.

1924–1928: Maximum stage, that of May 26, 1928; no storage May 29, 1924, and July 9, 1926.

REMARKS.—Reservoir gates were closed prior to May 2 and subsequent to August 31. Capacity of reservoir, 22,300 acre-feet between elevations 4,926.5 feet and 4,965.0 feet. Water is used for irrigation of about 5,000 acres of land near Mountain Home. Gage-height record furnished by Mountain Home Irrigation District.

*Daily elevation of water surface, in feet, 1928*

| Day | May | June | July | Aug. | Day | May | June | July | Aug. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 16 | | 4,963.75 | | |
| 2 | | 4,964.35 | | | 17 | | | | |
| 3 | | | | | 18 | | | | 4,955.10 |
| 4 | | | | 4,957.15 | 19 | | | | |
| 5 | | | | | 20 | | | | |
| 6 | | | | | 21 | | | 4,959.25 | |
| 7 | | | 4,961.15 | | 22 | | | | |
| 8 | | | | | 23 | | 4,962.95 | | |
| 9 | | 4,963.95 | | | 24 | | | | |
| 10 | | | | | 25 | | | | 4,954.10 |
| 11 | | | | 4,956.15 | 26 | 4,965.50 | | | |
| 12 | | | | | 27 | | | | |
| 13 | | | | | 28 | | | 4,958.25 | |
| 14 | | | 4,960.25 | | 29 | | | | |
| 15 | | | | | 30 | | 4,961.95 | | |
| | | | | | 31 | | | | 4,953.00 |

### LITTLE CAMAS CANAL AT HEADING, NEAR BENNETT, IDAHO

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

RECORDS AVAILABLE.—June to November, 1917; April, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 66 second-feet June 21–23 and 26 (gage height, 2.34 feet); no flow October 1 to May 2 and after August 31. 1917, 1924–1928: Maximum discharge, 77 second-feet April 27–30, May 1, 3, and 9, 1924; no flow except during irrigation season of each year.

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, 1928*

| Day | May | June | July | Aug. | Day | May | June | July | Aug. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 65 | 64 | 62 | 16 | 40 | 65 | 63 | 60 |
| 2 | 3.9 | 65 | 64 | 62 | 17 | 44 | 65 | 63 | 23 |
| 3 | 12 | 65 | 64 | 63 | 18 | 46 | 65 | 62 | 22 |
| 4 | 27 | 65 | 63 | 63 | 19 | 50 | 65 | 62 | 51 |
| 5 | 27 | 65 | 63 | 62 | 20 | 52 | 65 | 62 | 56 |
| 6 | 26 | 65 | 63 | 62 | 21 | 52 | 66 | 62 | 56 |
| 7 | 12 | 65 | 63 | 49 | 22 | 55 | 66 | 62 | 57 |
| 8 | 8.8 | 65 | 63 | 42 | 23 | 57 | 66 | 62 | 57 |
| 9 | 27 | 65 | 63 | 59 | 24 | 62 | 65 | 62 | 56 |
| 10 | 28 | 65 | 63 | 61 | 25 | 64 | 65 | 62 | 57 |
| 11 | 20 | 65 | 63 | 61 | 26 | 64 | 66 | 62 | 58 |
| 12 | 30 | 36 | 63 | 61 | 27 | 64 | 65 | 62 | 57 |
| 13 | 32 | 9.6 | 63 | 60 | 28 | 64 | 65 | 62 | 58 |
| 14 | 35 | 58 | 63 | 60 | 29 | 65 | 65 | 62 | 58 |
| 15 | 38 | 64 | 63 | 59 | 30 | 65 | 65 | 62 | 57 |
| | | | | | 31 | 65 | | 62 | 20 |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| May | 65 | 0 | 39.9 | 2,450 |
| June | 66 | 9.6 | 62.1 | 3,700 |
| July | 64 | 62 | 62.6 | 3,850 |
| August | 63 | 20 | 54.5 | 3,350 |
| The period | | | | 13,400 |

NOTE.—No flow on days for which no discharge is given.

### 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, 1928 (discharge measurements only prior to December, 1915).

EXTREMES.—Maximum discharge during year, 2,810 second-feet March 25 (gage height, 4.40 feet); minimum, 27 second-feet September 9 (gage height, 0.30 foot).

1915–1928: Maximum discharge, 3,140 second-feet April 11, 1916 (gage height, 6.3 feet); minimum, 7.9 second-feet August 13–15, 17, and 18, 1924.

REMARKS.—Daily discharges fair; monthly summary good. No diversions above station. Nine discharge measurements furnished by United States Bureau of Reclamation and water master for Boise River; gage-height record furnished by former.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 128 | 87 | 518 | 108 | 236 | 188 | 1,300 | 1,400 | 730 | 180 | 43 | 28 |
| 2 | 147 | 85 | 518 | 132 | 236 | 182 | 1,300 | 1,400 | 765 | 180 | 43 | 28 |
| 3 | 123 | 87 | 518 | 219 | 219 | 194 | 1,300 | 1,300 | 698 | 167 | 46 | 29 |
| 4 | 126 | 91 | 447 | 252 | 236 | 213 | 1,160 | 1,300 | 605 | 167 | 53 | 29 |
| 5 | 120 | 91 | 404 | 219 | 236 | 207 | 1,160 | 1,300 | 550 | 156 | 59 | 28 |
| 6 | 123 | 87 | 404 | 219 | 236 | 207 | 1,120 | 1,400 | 525 | 144 | 59 | 28 |
| 7 | 112 | 188 | 236 | 219 | 207 | 236 | 1,040 | 1,500 | 455 | 144 | 53 | 28 |
| 8 | 111 | 287 | 252 | 200 | 236 | 252 | 1,040 | 1,600 | 455 | 123 | 51 | 29 |
| 9 | 105 | 287 | 324 | 188 | 182 | 404 | 955 | 1,600 | 455 | 136 | 47 | 27 |
| 10 | 90 | 845 | 287 | 207 | 182 | 543 | 1,040 | 1,710 | 388 | 127 | 43 | 30 |
| 11 | 89 | 447 | 287 | 207 | 204 | 1,400 | 955 | 1,600 | 410 | 123 | 41 | 36 |
| 12 | 83 | 363 | 236 | 188 | 207 | 1,750 | 1,040 | 1,600 | 410 | 107 | 38 | 38 |
| 13 | 83 | 306 | 252 | 287 | 252 | 1,180 | 995 | 1,500 | 367 | 111 | 38 | 60 |
| 14 | 82 | 324 | 213 | 543 | 176 | 845 | 1,040 | 1,400 | 367 | 99 | 36 | 53 |
| 15 | 82 | 363 | 132 | 363 | 236 | 803 | 955 | 1,210 | 327 | 94 | 34 | 52 |
| 16 | 76 | 363 | 219 | 404 | 176 | 845 | 1,040 | 1,210 | 308 | 99 | 32 | 51 |
| 17 | 76 | 543 | 171 | 363 | 188 | 887 | 1,160 | 1,300 | 308 | 96 | 32 | 48 |
| 18 | 73 | 447 | 132 | 344 | 204 | 980 | 1,080 | 1,300 | 289 | 87 | 31 | 46 |
| 19 | 69 | 404 | 132 | 324 | 207 | 980 | 1,040 | 1,210 | 272 | 82 | 29 | 46 |
| 20 | 69 | 404 | 156 | 344 | 213 | 1,080 | 1,040 | 1,210 | 289 | 76 | 29 | 43 |
| 21 | 69 | 447 | 143 | 344 | 219 | 1,180 | 995 | 1,210 | 272 | 68 | 29 | 46 |
| 22 | 69 | 447 | 132 | 324 | 252 | 1,400 | 995 | 1,160 | 254 | 64 | 29 | 43 |
| 23 | 69 | 324 | 159 | 324 | 252 | 1,510 | 1,040 | 1,120 | 238 | 65 | 29 | 42 |
| 24 | 69 | 306 | 159 | 306 | 219 | 2,390 | 1,080 | 1,120 | 222 | 62 | 31 | 42 |
| 25 | 73 | 324 | 148 | 306 | 236 | 2,810 | 1,210 | 1,120 | 208 | 56 | 31 | 42 |
| 26 | 76 | 727 | 143 | 287 | 207 | 1,710 | 1,210 | 1,080 | 193 | 56 | 32 | 45 |
| 27 | 83 | 887 | 132 | 236 | 188 | 2,420 | 1,400 | 1,080 | 180 | 53 | 33 | 46 |
| 28 | 87 | 727 | 159 | 236 | 213 | 2,050 | 1,500 | 995 | 180 | 53 | 32 | 45 |
| 29 | 98 | 693 | 154 | 252 | 207 | 1,710 | 1,400 | 955 | 193 | 49 | 32 | 42 |
| 30 | 104 | 570 | 154 | 252 | ------ | 1,600 | 1,300 | 875 | 180 | 48 | 30 | 46 |
| 31 | 100 | ------ | 118 | 252 | ------ | 1,500 | ------ | 800 | ------ | 46 | 29 | ------ |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 147 | 69 | 92.4 | 0.217 | 0.25 | 5,680 |
| November | 887 | 85 | 385 | .904 | 1.01 | 22,900 |
| December | 518 | 118 | 240 | .563 | .65 | 14,800 |
| January | 543 | 108 | 273 | .641 | .74 | 16,800 |
| February | 252 | 176 | 216 | .507 | .55 | 12,400 |
| March | 2,810 | 182 | 1,090 | 2.56 | 2.95 | 67,000 |
| April | 1,500 | 955 | 1,130 | 2.65 | 2.96 | 67,200 |
| May | 1,710 | 800 | 1,280 | 3.00 | 3.46 | 78,700 |
| June | 765 | 180 | 370 | .869 | .97 | 22,000 |
| July | 180 | 46 | 101 | .237 | .27 | 6,210 |
| August | 59 | 29 | 37.9 | .089 | .10 | 2,330 |
| September | 60 | 27 | 39.9 | .094 | .10 | 2,370 |
| The year | 2,810 | 27 | 438 | 1.03 | 14.01 | 318,000 |

### 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, 1928. Comparable records at a site 7 miles upstream, June to December 1920 and April to September, 1921.

EXTREMES.—Maximum discharge during year, 3,050 second-feet March 27 (gage height, 7.30 feet); minimum, 2 second-feet August 28 (gage height, 0.87 foot).

1920–21, 1923, 1926–1928: Maximum discharge, that of March 27, 1928; minimum, 1 second-foot August 8, 1926.

REMARKS.—Records good, except those for discharge above 800 second-feet and for estimated period, December 7 to March 5, which are fair. Several small diversions above station. Records furnished by State engineer of Oregon.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 43 | 50 | 148 | | | | 665 | 710 | 131 | 21 | 5 | 2 |
| 2 | 47 | 49 | 144 | | | | 644 | 710 | 97 | 22 | 4 | 2 |
| 3 | 50 | 50 | 167 | 120 | 120 | 230 | 580 | 644 | 109 | 22 | 4 | 2 |
| 4 | 53 | 49 | 139 | | | | 580 | 601 | 129 | 21 | 5 | 2 |
| 5 | 50 | 55 | 106 | | | | 521 | 540 | 95 | 22 | 5 | 2 |
| 6 | 48 | 54 | 97 | | | 802 | 691 | 521 | 54 | 26 | 5 | 2 |
| 7 | 46 | 56 | | | | 665 | 540 | 540 | 39 | 26 | 4 | 2 |
| 8 | 50 | 58 | 90 | 150 | 90 | 732 | 466 | 560 | 36 | 24 | 3 | 2 |
| 9 | 50 | 78 | | | | 1,000 | 456 | 691 | 35 | 24 | 3 | 2 |
| 10 | 50 | 102 | | | | 970 | 466 | 622 | 36 | 22 | 3 | 2 |
| 11 | 50 | 131 | | | | 1,300 | 466 | 622 | 42 | 18 | 2 | 2 |
| 12 | 49 | 93 | | | | 2,040 | 459 | 580 | 52 | 16 | 2 | 3 |
| 13 | 48 | 87 | 90 | 170 | 70 | 968 | 484 | 560 | 47 | 15 | 2 | 3 |
| 14 | 49 | 90 | | | | 560 | 521 | 502 | 62 | 14 | 2 | 3 |
| 15 | 48 | 92 | | | | 438 | 540 | 462 | 48 | 13 | 2 | 4 |
| 16 | 48 | 92 | | | | 421 | 580 | 418 | 36 | 11 | 2 | 5 |
| 17 | 47 | 100 | | | | 560 | 665 | 385 | 39 | 10 | 2 | 7 |
| 18 | 46 | 129 | 80 | 120 | 140 | 710 | 732 | 360 | 40 | 10 | 2 | 7 |
| 19 | 46 | 104 | | | | 755 | 665 | 357 | 41 | 10 | 2 | 4 |
| 20 | 47 | 99 | | | | 755 | 601 | 347 | 37 | 10 | 2 | 5 |
| 21 | 47 | 92 | | | | 732 | 540 | 329 | 32 | 10 | 2 | 4 |
| 22 | 47 | 95 | | | | 710 | 502 | 305 | 32 | 10 | 2 | 3 |
| 23 | 46 | 82 | 70 | 100 | 140 | 732 | 540 | 326 | 31 | 10 | 2 | 3 |
| 24 | 45 | 65 | | | | 780 | 644 | 305 | 26 | 10 | 2 | 3 |
| 25 | 45 | 85 | | | | 755 | 732 | 265 | 24 | 10 | 2 | 3 |
| 26 | 46 | 90 | | | | 710 | 755 | 244 | 22 | 10 | 2 | 3 |
| 27 | 49 | 121 | | | 130 | 2,000 | 805 | 239 | 20 | 10 | 2 | 3 |
| 28 | 50 | 117 | | | | 1,810 | 805 | 268 | 18 | 9 | 2 | 4 |
| 29 | 50 | 192 | 100 | 100 | | 915 | 805 | 246 | 19 | 6 | 2 | 5 |
| 30 | 50 | 176 | | | | 755 | 755 | 221 | 20 | 6 | 2 | 5 |
| 31 | 51 | ------ | | | ------ | 710 | ------ | 178 | ------ | 5 | 2 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 53 | 43 | 48.1 | 2,960 |
| November | 192 | 49 | 91.1 | 5,420 |
| December | 167 | ------ | 95.5 | 5,870 |
| January | ------ | ------ | 126 | 7,750 |
| February | ------ | ------ | 114 | 6,560 |
| March | 2,040 | ------ | 788 | 48,500 |
| April | 805 | 456 | 604 | 35,900 |
| May | 710 | 178 | 438 | 26,900 |
| June | 131 | 18 | 48.3 | 2,870 |
| July | 26 | 5 | 14.6 | 898 |
| August | 5 | 2 | 2.7 | 166 |
| September | 7 | 2 | 3.3 | 196 |
| The year | 2,040 | 2 | 198 | 144,000 |

### 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 and 4 miles above Riverside. Elevation of zero of gage, 3,327.00 feet above mean sea level.

EXTREMES.—Maximum stage during year, 75.22 feet March 29 (contents, 175,500 acre-feet); minimum, 38.85 feet September 30 (contents, 49,100 acre-feet).

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 of Warmsprings Reservoir near Riverside, Oreg., 1927–28*

| Date | Gage height in feet | Contents in acre-feet | Change in contents during month (acre-feet) | Date | Gage height in feet | Contents in acre-feet | Change in contents during month (acre-feet) |
|---|---|---|---|---|---|---|---|
| Sept. 30 | 54.93 | 95,800 | | May 31 | 72.64 | 163,900 | −2,000 |
| Oct. 31 | 55.29 | 96,900 | +1,100 | June 30 | 65.42 | 134,700 | −29,200 |
| Nov. 30 | 56.98 | 101,900 | +5,000 | July 31 | 57.35 | 103,000 | −31,700 |
| Dec. 31 | 58.39 | 106,600 | +4,700 | Aug. 31 | 48.12 | 75,400 | −27,600 |
| Jan. 31 | 60.33 | 114,300 | +7,700 | Sept. 30 | 38.85 | 49,100 | −26,300 |
| Feb. 29 | 61.94 | 120,800 | +6,500 | | | | |
| Mar. 31 | 75.05 | 174,700 | +53,900 | The year | | | −46,700 |
| Apr. 30 | 73.09 | 165,900 | −8,800 | | | | |

### MALHEUR RIVER BELOW WARMSPRINGS RESERVOIR, NEAR RIVERSIDE, ORE.

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

DRAINAGE AREA.—About 1,100 square miles.

RECORDS AVAILABLE.—December, 1914, to July, 1917; March, 1919, to September, 1928. At Riverside, 4 miles downstream from January, 1906, to March 1907; December, 1908, to May, 1910.

EXTREMES.—Maximum discharge during year, 1,270 second-feet March 29 (gage height, 6.23 feet); minimum, 1 second-foot for long periods during which gates in dam were closed.

1906–1910, 1914–1917, 1919–1928: Maximum discharge, 5,490 second-feet March 2, 1910; practically no flow during August, 1910.

REMARKS.—Records good. Discharge estimated October 4–14 and October 27 to March 26. 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, 1927–28*

| Day | Oct. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|
| 1 | 168 | | 868 | 1,210 | 487 | 482 | 394 | 428 |
| 2 | 168 | | 785 | 1,210 | 487 | 482 | 428 | 428 |
| 3 | 140 | | 730 | 506 | 487 | 482 | 428 | 428 |
| 4 | | | 658 | 1 | 487 | 482 | 428 | 428 |
| 5 | | | 620 | 1 | 487 | 482 | 428 | 428 |
| 6 | | | 605 | 95 | 487 | 482 | 428 | 428 |
| 7 | | | 605 | 242 | 487 | 482 | 428 | 428 |
| 8 | | | 565 | 271 | 487 | 482 | 428 | 428 |
| 9 | | | 530 | 398 | 487 | 455 | 428 | 428 |
| 10 | | | 525 | 415 | 487 | 385 | 428 | 428 |
| 11 | | | 506 | 492 | 487 | 385 | 428 | 428 |
| 12 | | | 501 | 515 | 487 | 385 | 428 | 419 |
| 13 | | | 492 | 525 | 487 | 411 | 428 | 385 |
| 14 | 1 | 1 | 501 | 530 | 487 | 428 | 428 | 385 |
| 15 | | | 535 | 515 | 473 | 428 | 428 | 385 |
| 16 | | | 560 | 501 | 442 | 428 | 428 | 385 |
| 17 | | | 615 | 492 | 442 | 428 | 428 | 385 |
| 18 | | | 697 | 487 | 442 | 428 | 428 | 385 |
| 19 | | | 730 | 487 | 442 | 428 | 428 | 385 |
| 20 | | | 906 | 487 | 442 | 428 | 428 | 385 |
| 21 | | | 1,210 | 487 | 442 | 428 | 428 | 385 |
| 22 | | | 1,120 | 487 | 442 | 428 | 428 | 385 |
| 23 | | | 1,240 | 487 | 450 | 428 | 428 | 385 |
| 24 | | | 1,240 | 487 | 487 | 419 | 428 | 377 |
| 25 | 76 | | 1,210 | 487 | 487 | 385 | 428 | 345 |
| 26 | 28 | | 1,210 | 487 | 482 | 385 | 428 | 345 |
| 27 | | 46 | 1,210 | 487 | 482 | 385 | 428 | 345 |
| 28 | | 1,090 | 1,210 | 487 | 482 | 385 | 428 | 345 |
| 29 | 1 | 1,240 | 1,210 | 487 | 482 | 385 | 428 | 345 |
| 30 | | 1,060 | 1,210 | 487 | 482 | 385 | 428 | 345 |
| 31 | | 950 | ------- | 487 | ------- | 385 | 428 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 168 | ---------- | 19.5 | 1,200 |
| November | ---------- | ---------- | 1.0 | 60 |
| December | ---------- | ---------- | 1.0 | 61 |
| January | ---------- | ---------- | 1.0 | 61 |
| February | ---------- | ---------- | 1.0 | 58 |
| March | 1,240 | ---------- | 142 | 8,730 |
| April | 1,240 | 492 | 820 | 48,800 |
| May | 1,210 | 1 | 475 | 29,200 |
| June | 487 | 442 | 474 | 28,200 |
| July | 482 | 385 | 428 | 26,300 |
| August | 428 | 394 | 427 | 26,300 |
| September | 428 | 345 | 394 | 23,400 |
| The year | 1,240 | ---------- | 265 | 192,000 |

### 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, 1928. Comparable records at station 2 miles upstream May, 1913, to December, 1923.

EXTREMES.—Maximum discharge during year, 2,220 second-feet March 27 (gage height, 5.47 feet); minimum, 53 second-feet October 26 (gage height, 0.58 foot).

1913–1923, 1926–1928: Maximum discharge, 8,450 second-feet February 7, 1916; minimum, 4 second-feet July 25, 1919.

Discharge of flood of March 1, 1910, estimated 12,600 second-feet. The floods of March 7 and 9, 1894, are said to have been about 0.3 foot higher.

REMARKS.—Records good except for periods when channel was obstructed by ice, December 10 to February 25, for which they are fair. Numerous diversions for irrigation above station. Flow regulated by storage in Warmsprings Reservoir.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 320 | 79 | | | | 390 | 1,370 | 1,550 | 605 | 510 | 321 | 426 |
| 2 | 260 | 79 | | | | 381 | 1,260 | 1,490 | 605 | 510 | 357 | 430 |
| 3 | 245 | 79 | a 115 | | | 315 | 1,210 | 1,460 | 585 | 510 | 388 | 436 |
| 4 | 238 | a 79 | | | | 351 | 1,140 | 614 | 585 | 510 | 388 | 440 |
| 5 | 170 | a 79 | 112 | | | 600 | 1,060 | 337 | 565 | 510 | 391 | a 440 |
| 6 | 103 | 79 | 103 | | | 1,140 | 1,040 | 305 | 545 | 510 | 391 | 440 |
| 7 | 86 | 90 | 94 | | | 1,310 | 1,020 | 331 | 545 | 510 | 384 | 440 |
| 8 | 79 | 90 | 92 | | | 1,360 | 948 | 528 | 528 | 528 | 384 | 440 |
| 9 | 79 | 86 | 97 | | | 1,550 | 902 | 645 | 528 | 510 | 405 | 440 |
| 10 | 75 | 81 | | | | 1,160 | 848 | 790 | 528 | 492 | 405 | 440 |
| 11 | 70 | 75 | | | | 1,260 | 812 | 880 | 528 | 398 | 412 | 440 |
| 12 | 77 | 83 | | | | 1,760 | a 806 | 948 | 528 | 388 | 412 | 458 |
| 12 | 72 | 92 | | | a 152 | 835 | a 800 | 970 | 528 | 384 | 412 | 440 |
| 14 | 70 | 108 | | | | 528 | a 795 | 948 | 528 | 436 | 405 | 402 |
| 15 | 68 | 101 | | | | 412 | 790 | 925 | 528 | 436 | 405 | 394 |
| 16 | 66 | a 100 | | a 111 | | 331 | 835 | 880 | 528 | 430 | 405 | 388 |
| 17 | 66 | 99 | | | | 363 | 925 | 835 | 510 | 426 | | 384 |
| 18 | 64 | 94 | | | | 492 | a 992 | 790 | 492 | 419 | | 377 |
| 19 | 66 | 86 | | | | 565 | a 1,050 | 790 | 492 | 412 | a 404 | 370 |
| 20 | 66 | 94 | a 74 | | | 605 | a 1,200 | 768 | 475 | 408 | | 377 |
| 21 | 66 | 79 | | | | 665 | a 1,300 | 768 | 475 | 405 | | 377 |
| 22 | 66 | 72 | | | | 625 | 1,260 | 768 | 475 | 405 | 402 | 377 |
| 23 | 61 | 90 | | | | 545 | 1,310 | 768 | 458 | 405 | 402 | 380 |
| 24 | 57 | a 90 | | | | 585 | 1,460 | 745 | 475 | 405 | 405 | 386 |
| 25 | 55 | 90 | | | | 565 | a 1,480 | 725 | 510 | 394 | 412 | 374 |
| 26 | 53 | 88 | | | 182 | 545 | a 1,500 | 705 | 510 | 350 | 416 | 363 |
| 27 | 123 | 99 | | | 160 | 1,410 | a 1,510 | 705 | 492 | 347 | 416 | 357 |
| 28 | 94 | 105 | | | 144 | 1,620 | a 1,530 | 685 | 492 | 344 | 419 | 354 |
| 29 | 81 | a 106 | | | 188 | 1,490 | 1,550 | 665 | a 501 | a 339 | 419 | 354 |
| 30 | 79 | a 115 | | | ------ | 1,550 | 1,550 | 625 | 510 | a 333 | 419 | 354 |
| 31 | 79 | ------ | | | ------ | 1,550 | -------- | 605 | ------- | a 327 | 422 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 320 | 53 | 102 | 6,270 |
| November | 115 | 72 | 89.6 | 5,330 |
| December | ---------- | ---------- | 83.4 | 5,130 |
| January | ---------- | ---------- | 111 | 6,820 |
| February | ---------- | ---------- | 154 | 8,860 |
| March | 1,760 | 315 | 866 | 53,200 |
| April | 1,550 | 790 | 1,140 | 67,800 |
| May | 1,550 | 305 | 792 | 48,700 |
| June | 605 | 458 | 522 | 31,100 |
| July | 528 | 327 | 429 | 26,400 |
| August | 422 | 321 | 401 | 24,700 |
| September | 458 | 354 | 402 | 23,900 |
| The year | 1,760 | ---------- | 425 | 308,000 |

a Estimated or interpolated.

### 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, 1928. At station half a mile below Vines Canal, March to September, 1914.

EXTREMES.—Maximum discharge during year, 2,860 second-feet March 6 (gage height, 4.75 feet); minimum, 73 second-feet October 25 and 26 (gage height 1.00 foot).

1919–1928: Maximum discharge, 8,100 second-feet February 5, 1925; minimum, 3.5 second-feet September 2, 1919 (gage height, 0.02 foot).

REMARKS.—Records good, except for estimated periods, for which they 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, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 237 | 97 | 137 | | | 486 | 1,510 | e 1,240 | 514 | 519 | 347 | 410 |
| 2 | 233 | 97 | 132 | | | 492 | 1,420 | e 1,200 | 514 | 514 | 347 | 415 |
| 3 | 233 | 98 | 129 | | | 380 | 1,330 | e 1,150 | 541 | 514 | 405 | 415 |
| 4 | 202 | 98 | 127 | | | 395 | 1,200 | 868 | 541 | 514 | 415 | 410 |
| 5 | 179 | 98 | 129 | | | 1,010 | 1,120 | 435 | 568 | 514 | 415 | 410 |
| 6 | 129 | 103 | 124 | | | 2,210 | 1,080 | 390 | 558 | 514 | 415 | 410 |
| 7 | 124 | 101 | | | | 1,820 | 1,050 | 385 | 541 | 508 | 410 | 405 |
| 8 | 120 | 100 | | | | 1,760 | 995 | 502 | 530 | e 504 | 410 | 405 |
| 9 | 111 | 103 | e 120 | | | 1,930 | 935 | 563 | 514 | e 500 | 410 | 405 |
| 10 | 111 | 118 | | | e 150 | 1,510 | 890 | 663 | 530 | 497 | 410 | 405 |
| 11 | 111 | 137 | | | | 1,420 | 838 | 718 | 541 | 425 | 415 | 410 |
| 12 | 109 | 140 | 131 | | | 1,930 | 830 | 800 | 530 | 410 | 410 | 415 |
| 13 | 105 | 122 | | | | 1,160 | 815 | 845 | 524 | 395 | 410 | 425 |
| 14 | 103 | 124 | | | | 693 | 815 | 860 | 524 | 415 | 405 | 400 |
| 15 | 101 | 124 | | | | 530 | 822 | 815 | 524 | 445 | 395 | 395 |
| 16 | 100 | 122 | | e 147 | | 435 | 845 | 744 | 524 | 440 | 395 | 395 |
| 17 | 100 | 120 | | | | 425 | 898 | 757 | 497 | 435 | 400 | 395 |
| 18 | 98 | 122 | | | | 486 | 980 | 731 | 497 | 435 | 400 | 400 |
| 19 | 95 | 124 | | | 185 | 585 | 1,040 | 693 | 497 | 430 | 405 | 410 |
| 20 | 90 | 120 | | | 192 | 615 | 1,060 | 681 | 480 | 430 | 400 | 405 |
| 21 | 86 | 120 | | | 306 | 621 | 1,120 | 645 | 470 | 430 | 405 | 405 |
| 22 | 81 | 120 | e 83 | | 420 | 603 | 1,330 | 574 | 460 | 425 | 405 | 405 |
| 23 | 80 | 118 | | | 470 | 574 | 1,290 | 546 | 450 | 420 | 405 | 400 |
| 24 | 77 | 109 | | | 342 | 574 | 1,420 | 530 | 450 | 420 | 405 | 400 |
| 25 | e 79 | 97 | | | 244 | 591 | e 1,380 | 508 | 475 | 420 | 405 | 415 |
| 26 | 81 | 103 | | | 227 | 552 | e 1,330 | 502 | 475 | 385 | 400 | 375 |
| 27 | 95 | 98 | | | 213 | 1,260 | e 1,280 | 492 | 470 | 375 | 400 | 366 |
| 28 | 140 | 105 | | | 192 | 2,040 | 1,240 | 480 | 470 | 370 | 400 | 361 |
| 29 | 107 | 109 | | | 262 | 1,930 | e 1,240 | 465 | 486 | 366 | 400 | 366 |
| 30 | 98 | 120 | | | ------ | 1,820 | e 1,240 | 455 | 508 | 366 | 405 | 375 |
| 31 | 97 | ------ | | | ------ | 1,660 | ------ | 497 | ------ | 356 | 405 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 237 | 77 | 120 | 7,380 |
| November | 140 | 97 | 112 | 6,660 |
| December | 137 | ---------- | 99.5 | 6,120 |
| January | ---------- | ---------- | 147 | 9,040 |
| February | 470 | ---------- | 198 | 11,400 |
| March | 2,210 | 380 | 1,050 | 64,600 |
| April | 1,510 | 815 | 1,110 | 66,000 |
| May | 1,240 | 385 | 669 | 41,100 |
| June | 568 | 450 | 507 | 30,200 |
| July | 519 | 356 | 442 | 27,200 |
| August | 415 | 347 | 402 | 24,700 |
| September | 425 | 361 | 400 | 23,800 |
| The year | 2,210 | ---------- | 438 | 318,000 |

e Estimated or interpolated.

### MALHEUR RIVER BELOW NEVADA DAM, NEAR VALE, ORE.

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

RECORDS AVAILABLE.—May, 1926, to September, 1928. At station at Vale, 1½ 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, 2,670 second-feet March 9 (gage height, 3.82 feet); minimum, 19 second-feet October 27 (gage height, 0.43 foot).

1890–91, 1895–1897, 1903–1907, 1908–1914, 1919, 1926–1928: Maximum discharge, 22,800 second-feet March 2, 1910 (gage height, 19.5 feet); minimum, 4 second-feet July 19–21, 1895, and August 23, 1906.

REMARKS.—Records good. Discharge estimated October 12–14, 30, November 8–11, 20, February 2–5, and 9–12. Several diversions for irrigation above gage. Flow regulated by storage in Warmsprings Reservoir. Records furnished by State engineer of Oregon.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 173 | 43 | 134 | 108 | 157 | 488 | 1,730 | 1,470 | 223 | 108 | 55 | 116 |
| 1 | 183 | 45 | 132 | 94 | 160 | 572 | 1,600 | 1,470 | 237 | 118 | 52 | 123 |
| 3 | 142 | 45 | 132 | 94 | 180 | 452 | 1,470 | 1,420 | 252 | 145 | 59 | 121 |
| 4 | 113 | 45 | 129 | 106 | 200 | 446 | 1,340 | 1,070 | 260 | 176 | 88 | 123 |
| 5 | 111 | 49 | 134 | 118 | 180 | 760 | 1,270 | 422 | 269 | 170 | 92 | 151 |
| 6 | 96 | 55 | 126 | 145 | 164 | 1,940 | 1,200 | 252 | 269 | 176 | 92 | 170 |
| 7 | 61 | 55 | 77 | 151 | 226 | 1,940 | 1,150 | 199 | 269 | 164 | 88 | 186 |
| 8 | 52 | 55 | 96 | 148 | 269 | 2,010 | 1,080 | 223 | 252 | 234 | 81 | 157 |
| 9 | 45 | 55 | 116 | 145 | 236 | 2,330 | 1,010 | 244 | 223 | 264 | 58 | 183 |
| 10 | 45 | 75 | 126 | 157 | 203 | 1,940 | 974 | 330 | 223 | 220 | 43 | 183 |
| 11 | 45 | 40 | 70 | 140 | 170 | 1,730 | 926 | 398 | 216 | 151 | | 212 |
| 12 | 42 | 134 | 113 | 142 | 137 | 1,600 | 902 | 530 | 237 | 99 | 60 | 240 |
| 13 | 40 | 113 | 140 | 220 | 104 | 1,360 | 886 | 530 | 226 | 90 | | 240 |
| 14 | 37 | 104 | 113 | 620 | 118 | 934 | 886 | 512 | 234 | 90 | | 230 |
| 15 | 34 | 104 | 90 | 662 | 129 | 704 | 862 | 476 | 226 | 104 | 38 | 220 |
| 16 | 30 | 106 | 104 | 370 | 132 | 608 | 894 | 452 | 176 | 106 | 41 | 216 |
| 17 | 29 | 106 | 132 | 189 | 140 | 536 | 950 | 392 | 164 | 92 | 55 | 196 |
| 18 | 29 | 104 | 101 | 148 | 176 | 590 | 1,030 | 350 | 154 | 102 | 52 | 183 |
| 19 | 28 | 106 | 99 | 137 | 192 | 704 | 1,080 | 308 | 151 | 113 | 56 | 170 |
| 20 | 28 | 108 | 99 | 113 | 234 | 753 | 1,110 | 294 | 157 | 123 | 59 | 176 |
| 21 | 26 | 111 | 81 | 140 | 294 | 767 | 1,120 | 277 | 140 | 96 | 66 | 183 |
| 22 | 23 | 108 | 84 | 157 | 518 | 746 | 1,320 | 277 | 118 | 94 | 75 | 176 |
| 23 | 22 | 106 | 84 | 167 | 572 | 718 | 1,320 | 269 | 104 | 118 | 70 | 183 |
| 24 | 22 | 106 | 92 | 154 | 422 | 718 | 1,420 | 260 | 99 | 167 | 75 | 186 |
| 25 | 20 | 99 | 101 | 157 | 294 | 711 | 1,540 | 223 | 106 | 340 | 86 | 199 |
| 26 | 20 | 101 | 106 | 157 | 252 | 690 | 1,540 | 209 | 104 | 392 | 90 | 192 |
| 27 | 19 | 106 | 108 | 148 | 237 | 1,360 | 1,540 | 222 | 99 | 350 | 92 | 189 |
| 28 | 40 | 121 | 111 | 151 | 216 | 2,170 | 1,540 | 234 | 96 | 273 | 88 | 179 |
| 29 | 52 | 118 | 111 | 151 | 277 | 2,090 | 1,540 | 252 | 94 | 216 | 92 | 164 |
| 30 | 46 | 123 | 113 | 151 | ------ | 2,010 | 1,540 | 226 | 99 | 121 | 92 | 157 |
| 31 | 41 | ------ | 94 | 151 | ------ | 1,870 | ------ | 226 | ------ | 70 | 96 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 183 | 19 | 54.6 | 3,360 |
| November | 134 | 40 | 88.2 | 5,250 |
| December | 140 | 70 | 108 | 6,640 |
| January | 662 | 94 | 184 | 11,300 |
| February | 572 | 104 | 227 | 13,100 |
| March | 2,330 | 446 | 1,170 | 71,900 |
| April | 1,730 | 862 | 1,230 | 73,200 |
| May | 1,470 | 199 | 452 | 27,800 |
| June | 269 | 94 | 183 | 10,900 |
| July | 392 | 70 | 164 | 10,100 |
| August | 96 | 38 | 70.0 | 4,300 |
| September | 240 | 116 | 180 | 10,700 |
| The year | 2,330 | 19 | 342 | 249,000 |

### 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, 1928. At station near Beulah 6 miles downstream, March, 1909, to June, 1912; November, 1913, to July, 1914.

EXTREMES.—Maximum discharge during year, 1,410 second-feet March 11 (gage height, 7.30 feet); minimum, 23 second-feet July 25 and August 24 (gage height, 0.76 foot).

1909–1912, 1913–14, 1926–1928: Maximum discharge, 5,910 second-feet March 20, 1910; minimum, 5 second-feet December 28, 1910, and January 26 and 27, 1911.

REMARKS.—Records fair. Discharge estimated or interpolated November 3–5, December 7–10, 13–31, January 1–6, 15–25, and February 15–17. Small diversions for irrigation above station; below, practically entire summer flow is diverted above Juntūra. Record furnished by State engineer of Oregon.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 60 | 56 | 90 | | 72 | 63 | 314 | 366 | 154 | 60 | 25 | 30 |
| 2 | 67 | 69 | 96 | | 70 | 58 | 290 | 357 | 143 | 63 | 26 | 31 |
| 3 | 67 | 68 | 94 | | 67 | 67 | 290 | 340 | 138 | 58 | 27 | 35 |
| 4 | 64 | 66 | 82 | 57 | 66 | 79 | 282 | 314 | 128 | 60 | 27 | 34 |
| 5 | 64 | 65 | 76 | | 66 | 106 | 306 | 306 | 114 | 62 | 26 | 32 |
| 6 | 61 | 64 | 82 | | 61 | 130 | 282 | 314 | 108 | 59 | 26 | 31 |
| 7 | 60 | 66 | 80 | 72 | 58 | 163 | 244 | 366 | 99 | 56 | 26 | 30 |
| 8 | 60 | 68 | 80 | 71 | 56 | 174 | 236 | 422 | 92 | 55 | 26 | 30 |
| 9 | 60 | 79 | 80 | 67 | 52 | 325 | 236 | 470 | 92 | 53 | 28 | 34 |
| 10 | 59 | 122 | 80 | 64 | 56 | 310 | 236 | 503 | 96 | 47 | 28 | 37 |
| 11 | 59 | 84 | 86 | 66 | 74 | 842 | 236 | 492 | 99 | 46 | 28 | 36 |
| 12 | 60 | 76 | 56 | 68 | 85 | 484 | 252 | 481 | 96 | 44 | 27 | 37 |
| 13 | 60 | 79 | | 76 | 73 | 259 | 252 | 440 | 92 | 47 | 27 | 41 |
| 14 | 60 | 79 | | 73 | 68 | 215 | 252 | 412 | 87 | 43 | 27 | 41 |
| 15 | 61 | 76 | | | 68 | 173 | 259 | 375 | 85 | 42 | 26 | 40 |
| 16 | 59 | 80 | | | 68 | 215 | 282 | 366 | 85 | 40 | 25 | 38 |
| 17 | 55 | 96 | | | 69 | 274 | 332 | 340 | 92 | 40 | 25 | 36 |
| 18 | 54 | 84 | | | 69 | 357 | 314 | 323 | 89 | 38 | 25 | 36 |
| 19 | 51 | 79 | | | 73 | 393 | 290 | 314 | 84 | 38 | 26 | 36 |
| 20 | 51 | 77 | | 67 | 56 | 422 | 274 | 306 | 81 | 34 | 27 | 36 |
| 21 | 50 | 79 | 56 | | 53 | 412 | 259 | 298 | 83 | 32 | 27 | 34 |
| 22 | 51 | 67 | | | 59 | 384 | 252 | 298 | 76 | 34 | 26 | 34 |
| 23 | 53 | 60 | | | 62 | 402 | 282 | 282 | 71 | 34 | 24 | 34 |
| 24 | 56 | 80 | | | 62 | 412 | 314 | 259 | 68 | 28 | 23 | 37 |
| 25 | 60 | 83 | | | 63 | 357 | 340 | 244 | 65 | 24 | 28 | 38 |
| 26 | 64 | 91 | | 87 | 53 | 323 | 348 | 236 | 62 | 25 | 30 | 38 |
| 27 | 64 | 86 | | 88 | 56 | 739 | 375 | 229 | 57 | 26 | 31 | 40 |
| 28 | 63 | 97 | | 76 | 72 | 422 | 393 | 215 | 57 | 26 | 34 | 41 |
| 29 | 63 | 106 | | 78 | 72 | 348 | 384 | 194 | 60 | 26 | 34 | 40 |
| 30 | 63 | 91 | | 78 | ------ | 340 | 366 | 173 | 58 | 26 | 34 | 41 |
| 31 | 60 | ------ | | 75 | ------ | 357 | ------ | 166 | ------ | 26 | 33 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 67 | 50 | 59.3 | 3,650 |
| November | 122 | 56 | 79.1 | 4,710 |
| December | 96 | ---------- | 66.0 | 4,060 |
| January | 88 | ---------- | 68.3 | 4,200 |
| February | 85 | 52 | 64.8 | 3,730 |
| March | 842 | 58 | 310 | 19,100 |
| April | 393 | 236 | 292 | 17,400 |
| May | 503 | 166 | 329 | 20,200 |
| June | 154 | 58 | 90.4 | 5,380 |
| July | 63 | 24 | 41.7 | 2,560 |
| August | 34 | 23 | 27.5 | 1,690 |
| September | 41 | 30 | 35.9 | 2,140 |
| The year | 842 | 23 | 122 | 88,800 |

### WILLOW CREEK NEAR MALHEUR, OREG.

LOCATION.—Water-stage recorder in sec. 6, T. 14 S., R. 41 E., half a mile above flow line of reservoir No. 3 of Willow River Land & Irrigation Co. and 2½ miles south of Malheur.

RECORDS AVAILABLE.—November, 1904, to August, 1906; March, 1910, to September, 1915; March, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 28 second-feet April 17 (gage height, 1.32 feet); no flow May 22 to September 30.

1904–1906, 1910–1915, 1921–1928: Maximum discharge, estimated 1,400 second-feet March 20, 1910; no flow at times.

REMARKS.—Records good. Several small diversions for irrigation above station. Eldorado ditch diverted a small quantity of water into Willow Creek from May 4 to June 12, 25 miles above gaging station, part of which was lost by evaporation and seepage. Records furnished by State engineer of Oregon.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Apr. | May | Day | Apr. | May | Day | Apr. | May |
|---|---|---|---|---|---|---|---|---|
| 1 | | 11.0 | 11 | 19.0 | 20.0 | 21 | 18.0 | 0.1 |
| 2 | | 12.0 | 12 | 21.0 | 18.0 | 22 | 17.0 | 0 |
| 3 | | 13.0 | 13 | 21.0 | 13.0 | 23 | 14.0 | 0 |
| 4 | | 13.0 | 14 | 19.0 | 12.0 | 24 | 10.0 | 0 |
| 5 | | 14.0 | 15 | 18.0 | 12.0 | 25 | 9.2 | 0 |
| 6 | | 14.0 | 16 | 20.0 | 9.8 | 26 | 8.9 | 0 |
| 7 | | 15.0 | 17 | 26.0 | 5.9 | 27 | 9.2 | 0 |
| 8 | | 17.0 | 18 | 25.0 | 4.4 | 28 | 9.8 | 0 |
| 9 | | 21.0 | 19 | 22.0 | 4.2 | 29 | 10.0 | 0 |
| 10 | 21.0 | 21.0 | 20 | 19.0 | 2.5 | 30 | 12.0 | 0 |
| | | | | | | 31 | | 0 |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| April 10–30 | 26 | 8.9 | 16.6 | 691 |
| May | 21 | 0 | 8.16 | 502 |
| The period | | | | 1,190 |

NOTE.—No flow May 22 to Sept. 30.

### WILLOW CREEK RESERVOIR NEAR MALHEUR, OREG.

LOCATION.—Staff gage in NE. ¼ sec. 15, T. 14 S., R. 41 E., 5 miles southeast of Malheur.

RECORDS AVAILABLE.—October, 1922, to September, 1928.

EXTREMES.—Maximum stage during year, 48.75 feet May 4 (contents, 4,480 acre-feet); no storage at beginning of year and September 7–30.

1922–1928: Maximum stage, 71.35 feet April 14–16, 1923 (contents, 15,670 acre-feet); no storage at times.

REMARKS.—Reservoir has a capacity of 50,000 acre-feet which is in excess of the flow of Willow Creek for any except a year of abnormally high run-off. Water is used for irrigation of land near Brogan, 20 miles downstream. Records furnished by State engineer of Oregon.

*Monthly stage and contents, 1927–28*

| Date | Gage height in feet | Contents in acre-feet | Change in contents during month (acre-feet) | Date | Gage height in feet | Contents in acre-feet | Change in contents during month (acre-feet) |
|---|---|---|---|---|---|---|---|
| Sept. 30 | | 0 | | July 31 | | 1,030 | −1,310 |
| Apr. 10 | 46.70 | 3,850 | | Aug. 31 | 10.0 | 125 | −905 |
| Apr. 30 | | [a] 4,390 | | Sept. 30 | | 0 | −125 |
| May 31 | | [a] 3,480 | −910 | | | | |
| June 30 | | [a] 2,340 | −1,140 | The year | | | 0 |

[a] Interpolated.

### WILLOW CREEK BELOW RESERVOIR NEAR MALHEUR, OREG.

LOCATION.—Staff gage in NE. ¼ sec. 15, T. 14 S., R. 41 E., 300 feet below outlet tunnel from reservoir and 5 miles southeast of Malheur.

RECORDS AVAILABLE.—October, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 33 second-feet May 18 (gage height, 0.91 foot); no flow September 7–30.

1920–1928: Maximum discharge, 83 second-feet July 13–26, 1922 (gage height, 1.73 feet); no flow at times.

REMARKS.—Records fair. Flow completely regulated by storage reservoir above station. Records furnished by State engineer of Oregon.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|
| 1 | | a 8.5 | | | | |
| 2 | | 16.0 | | a 12 | a 22 | a 8.0 |
| 3 | | a 27.0 | | | | |
| 4 | | 30.0 | | 15 | | |
| 5 | | a 27.0 | a 17 | | 16 | 4.0 |
| 6 | | a 25.0 | | | | a 1.0 |
| 7 | | 22.0 | | | | 0 |
| 8 | | 18.0 | 18 | a 15 | | 0 |
| 9 | | | | | | 0 |
| 10 | | | | | a 11 | 0 |
| 11 | | a 22.0 | | | | 0 |
| 12 | | | | 14 | | 0 |
| 13 | | | | | | 0 |
| 14 | | | a 15 | | 10 | 0 |
| 15 | | 26.0 | | | a 11 | 0 |
| 16 | | a 28.0 | | | a 12 | 0 |
| 17 | | a 31.0 | | | 11 | 0 |
| 18 | | 33.0 | | | | 0 |
| 19 | | | 12 | a 25 | | 0 |
| 20 | 8.5 | | | | | 0 |
| 21 | a 8.5 | | | | | 0 |
| 22 | a 8.5 | | | | | 0 |
| 23 | a 8.5 | a 24.0 | | | | 0 |
| 24 | a 8.5 | | | | a 10 | 0 |
| 25 | | | a 12 | | | 0 |
| 26 | | | | 24 | | 0 |
| 27 | a 8.5 | 15.0 | | | | 0 |
| 28 | | | | | | 0 |
| 29 | | | | a 23 | | 0 |
| 30 | | a 16.0 | | | 12 | 0 |
| 31 | | | | | 8 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| April 20–30 | | | 8.50 | 185 |
| May | 33 | | 22.4 | 1,380 |
| June | 18 | | 14.4 | 857 |
| July | | | 20.5 | 1,260 |
| August | | | 12.1 | 744 |
| September | | 0 | 1.23 | 73 |
| The period | | | | 4,500 |

a Estimated or interpolated.

### 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 Station Creek and 5 miles southeast of Garden Valley.

DRAINAGE AREA.—779 square miles.

RECORDS AVAILABLE.—May, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 10,600 second-feet May 26 (gage height, 8.0 feet); minimum, 514 second-feet September 28–29 (gage height, 1.74 to 1.76 feet).

1921–1928: Maximum discharge, that of May 26, 1928; minimum, probably less than 300 second-feet December 18, 1924.

REMARKS.—Records fair. Gage-height record furnished by United States Forest Service.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | e1,270 | | 680 | 645 | 1,400 | e3,350 | | | e980 | |
| 2 | | e700 | e1,170 | e600 | e668 | e662 | e1,350 | 3,560 | | | e980 | |
| 3 | | | e1,080 | | e657 | 680 | e1,300 | e3,400 | | | e980 | |
| 4 | e800 | 680 | 980 | | 645 | e680 | 1,250 | 3,400 | | | e980 | |
| 5 | | e680 | e980 | e750 | e595 | 680 | e1,180 | 4,060 | e5,000 | | 980 | |
| 6 | | 680 | 980 | | 545 | | 1,110 | 4,940 | | | e953 | |
| 7 | | 980 | 680 | | e545 | e700 | | 6,450 | | e1,800 | e927 | e575 |
| 8 | e700 | e1,200 | e715 | 680 | e545 | | e1,050 | 7,250 | | | 900 | |
| 9 | | | 750 | e680 | 545 | 715 | | 8,090 | | | e869 | |
| 10 | 680 | | 825 | e680 | | e800 | | 8,750 | 4,060 | | e837 | |
| 11 | 680 | e1,400 | e825 | 680 | | 1,060 | 1,020 | 9,200 | | | e806 | |
| 12 | e680 | | 825 | e775 | e600 | | e1,020 | 8,310 | | | e774 | |
| 13 | e680 | | | | | e1,100 | e1,020 | 7,460 | e3,600 | | e743 | |
| 14 | 680 | | | 900 | | | 1,020 | 6,850 | | | e711 | 610 |
| 15 | 645 | 1,020 | | e827 | | 825 | e1,000 | 6,250 | | 1,460 | 680 | e599 |
| 16 | 645 | 1,200 | | e753 | 610 | | 1,060 | 6,250 | 3,090 | e1,410 | e676 | e589 |
| 17 | 645 | 1,020 | | 680 | e600 | e900 | | 6,250 | 2,940 | e1,360 | e671 | e578 |
| 18 | e645 | 980 | | e680 | | | e1,200 | 7,050 | 2,800 | e1,300 | e667 | e567 |
| 19 | 645 | 1,020 | | e680 | 545 | 980 | | e7,470 | 2,530 | 1,250 | e662 | e557 |
| 20 | 645 | 1,560 | e650 | e680 | e545 | e1,170 | 1,060 | e7,890 | 2,530 | e1,160 | e658 | e546 |
| 21 | 645 | 1,680 | | 680 | e545 | e1,370 | 1,110 | 8,310 | 2,660 | 1,060 | e654 | e535 |
| 22 | e633 | 1,350 | | e680 | 545 | 1,560 | e1,200 | 8,750 | 2,660 | 1,110 | e649 | e525 |
| 23 | e622 | 1,020 | | 680 | e578 | 1,600 | 1,350 | 8,750 | 2,800 | e1,080 | 645 | 514 |
| 24 | 610 | 1,200 | | e662 | e612 | 1,790 | e1,900 | 9,200 | 2,800 | 1,060 | e645 | 514 |
| 25 | 610 | 1,460 | | e645 | 645 | 1,750 | | 9,890 | e2,870 | e1,060 | 645 | e514 |
| 26 | 715 | 1,510 | | e628 | e645 | 1,680 | 2,660 | 10,600 | 2,940 | 1,060 | | 514 |
| 27 | | 1,510 | | 610 | 645 | e1,750 | 3,720 | | 2,800 | e1,020 | | 514 |
| 28 | | 1,560 | 680 | e633 | e645 | | 3,720 | | 2,530 | 980 | e620 | e514 |
| 29 | e725 | 1,460 | | e657 | e645 | 1,460 | e3,400 | e8,000 | 2,280 | e980 | | 514 |
| 30 | | e1,360 | e600 | 680 | | e1,460 | 3,090 | | 2,280 | e980 | | 545 |
| 31 | | | | e680 | | 1,460 | | | | e980 | | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | | 610 | 698 | 0.896 | 1.03 | 42,900 |
| November | | | 1,180 | 1.51 | 1.68 | 70,200 |
| December | 1,270 | | 752 | .965 | 1.11 | 46,200 |
| January | 900 | | 699 | .897 | 1.03 | 43,000 |
| February | 680 | | 601 | .772 | .83 | 34,600 |
| March | | 645 | 1,120 | 1.44 | 1.66 | 68,900 |
| April | 3,720 | | 1,550 | 1.99 | 2.22 | 92,200 |
| May | 10,600 | | 7,150 | 9.18 | 10.58 | 440,000 |
| June | | 2,280 | 3,590 | 4.61 | 5.14 | 214,000 |
| July | | 980 | 1,440 | 1.85 | 2.13 | 88,500 |
| August | 980 | | 755 | .969 | 1.12 | 46,400 |
| September | | 514 | 557 | .715 | .80 | 33,100 |
| The year | 10,600 | 514 | 1,680 | 2.16 | 29.33 | 1,220,000 |

e Estimated or interpolated.

### 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.
DRAINAGE AREA.—1,200 square miles.
RECORDS AVAILABLE.—August, 1921, to September, 1928.
EXTREMES.—Maximum discharge during year, 12,600 second-feet May 11 (gage height, 9.86 feet); minimum, 557 second-feet September 10 (gage height, 0.67 foot).
1921–1928: Maximum discharge, 13,800 second-feet May 17, 1927 (gage height, 10.6 feet); minimum, 322 second-feet December 30, 1925 (gage height, 0.13 foot).
REMARKS.—Records excellent. Discharge interpolated February 7–11, 27, and July 24–28. Few small ranch diversions above station.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,010 | 770 | 1,960 | 828 | 940 | 816 | 2,740 | 5,460 | 6,950 | 2,520 | 1,050 | 674 |
| 2 | 975 | 822 | 1,580 | 1,050 | 940 | 809 | 2,680 | 5,600 | 6,200 | 2,410 | 1,050 | 662 |
| 3 | 975 | 842 | 1,830 | 1,160 | 940 | 822 | 2,580 | 5,180 | 6,050 | 2,360 | 1,010 | 656 |
| 4 | 1,090 | 842 | 1,650 | 1,160 | 940 | 870 | 2,360 | 5,180 | 5,600 | 2,310 | 1,010 | 650 |
| 5 | 1,050 | 835 | 1,570 | 1,090 | 940 | 898 | 2,310 | 5,600 | 5,460 | 2,260 | 1,090 | 644 |
| 6 | 975 | 849 | 1,520 | 1,050 | 940 | 891 | 2,200 | 6,950 | 5,460 | 2,200 | 1,010 | 632 |
| 7 | 905 | 1,200 | 1,160 | 1,010 | 928 | 891 | 2,110 | 8,330 | 5,320 | 2,110 | 975 | 626 |
| 8 | 898 | 1,240 | 1,240 | 940 | 917 | 905 | 2,010 | 9,930 | 5,180 | 2,010 | 940 | 632 |
| 9 | 884 | 1,880 | 1,480 | 940 | 905 | 1,120 | 1,960 | 11,000 | 4,6.0 | 1,920 | 898 | 638 |
| 10 | 884 | 3,620 | 1,400 | 940 | 893 | 1,280 | 2,010 | 11,900 | 4,370 | 1,880 | 891 | 662 |
| 11 | 870 | 2,160 | 1,280 | 940 | 882 | 2,010 | 1,960 | 12,100 | 4,370 | 1,830 | 870 | 674 |
| 12 | 849 | 1,650 | 1,240 | 940 | 870 | 2,520 | 1,960 | 11,400 | 4,240 | 1,780 | 870 | 686 |
| 13 | 835 | 1,520 | 1,320 | 1,360 | 809 | 1,960 | 1,960 | 10,400 | 3,980 | 1,740 | 856 | 758 |
| 14 | 835 | 1,480 | 1,120 | 1,520 | 905 | 1,830 | 1,920 | 9,610 | 3,860 | 1,740 | 842 | 746 |
| 15 | 828 | 1,440 | 1,050 | 1,240 | 822 | 1,700 | 1,880 | 8,650 | 3,740 | 1,700 | 822 | 716 |
| 16 | 822 | 1,570 | 1,200 | 975 | 770 | 1,650 | 1,960 | 8,170 | 3,620 | 1,610 | 816 | 686 |
| 17 | 816 | 1,960 | 1,010 | 905 | 877 | 1,650 | 2,310 | 8,170 | 3,620 | 1,570 | 802 | 674 |
| 18 | 802 | 1,650 | 863 | 975 | 884 | 1,700 | 2,410 | 8,810 | 3,380 | 1,520 | 790 | 662 |
| 19 | 802 | 1,520 | 975 | 940 | 884 | 1,830 | 2,360 | 9,120 | 3,140 | 1,480 | 770 | 644 |
| 20 | 796 | 2,010 | 1,010 | 1,090 | 870 | 2,110 | 2,360 | 9,450 | 3,140 | 1,440 | 752 | 632 |
| 21 | 783 | 2,680 | 1,030 | 1,160 | 891 | 2,520 | 2,110 | 9,930 | 3,030 | 1,360 | 752 | 632 |
| 22 | 770 | 2,060 | 1,010 | 1,090 | 905 | 3,260 | 2,110 | 10,400 | 3,030 | 1,320 | 746 | 626 |
| 23 | 764 | 1,700 | 1,050 | 1,090 | 856 | 3,260 | 2,310 | 10,600 | 3,030 | 1,320 | 752 | 620 |
| 24 | 758 | 1,700 | 1,050 | 1,050 | 822 | 3,360 | 2,920 | 10,700 | 3,030 | 1,280 | 746 | 614 |
| 25 | 758 | 2,010 | 975 | 1,050 | 884 | 3,740 | 3,140 | 11,200 | 3,140 | 1,240 | 746 | 608 |
| 26 | 863 | 2,740 | 940 | 1,010 | 877 | 3,380 | 4,110 | 11,700 | 3,140 | 1,200 | 734 | 602 |
| 27 | 905 | 2,630 | 1,050 | 940 | 880 | 3,360 | 5,600 | 11,700 | 3,140 | 1,170 | 728 | 602 |
| 28 | 975 | 2,680 | 1,160 | 940 | 884 | 3,620 | 5,750 | 11,000 | 3,030 | 1,130 | 716 | 602 |
| 29 | 905 | 2,580 | 1,050 | 975 | 870 | 3,260 | 5,180 | 10,200 | 2,860 | 1,090 | 704 | 608 |
| 30 | 884 | 2,160 | 1,010 | 1,010 | ------ | 2,970 | 4,900 | 9,130 | 2,680 | 1,090 | 692 | 602 |
| 31 | 863 | ------ | 776 | 975 | ------ | 2,860 | ------ | 8,010 | ------ | 1,090 | 680 | ------ |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 1,090 | 758 | 875 | 0.729 | 0.84 | 53,800 |
| November | 3,620 | 770 | 1,760 | 1.47 | 1.64 | 105,000 |
| December | 1,960 | 776 | 1,220 | 1.02 | 1.18 | 75,000 |
| January | 1,520 | 828 | 1,040 | .867 | 1.00 | 64,000 |
| February | 940 | 770 | 887 | .739 | .80 | 51,000 |
| March | 3,860 | 809 | 2,090 | 1.74 | 2.01 | 129,000 |
| April | 5,750 | 1,880 | 2,740 | 2.28 | 2.54 | 163,000 |
| May | 12,100 | 5,180 | 9,210 | 7.68 | 8.85 | 566,000 |
| June | 6,950 | 2,680 | 4,080 | 3.40 | 3.79 | 243,000 |
| July | 2,520 | 1,090 | 1,670 | 1.39 | 1.60 | 103,000 |
| August | 1,090 | 680 | 842 | .702 | .81 | 51,800 |
| September | 758 | 602 | 649 | .541 | .60 | 38,600 |
| The year | 12,100 | 602 | 2,260 | 1.88 | 25.66 | 1,640,000 |

### 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 from Banks.

DRAINAGE AREA.—2,120 square miles.

RECORDS AVAILABLE.—May, 1922, to September, 1928.

EXTREMES.—Maximum discharge during year, 22,900 second-feet May 26 (gage height, 13.7 feet); minimum, 870 second-feet September 28 (gage height, 1.87 feet).

1922–1928: Maximum discharge, that of May 26, 1928; minimum, 455 second-feet December 18, 1924.

REMARKS.—Records good. Discharge estimated December 16, 25–27, and January 1. Several diversions for irrigation above station. Flow slightly regulated at outlet of Payette Lake. Between the stations at Banks and Horseshoe Bend, the river leaves the granite and enters a lava formation, and a loss occurs which varies from 2 to nearly 4 per cent of the mean annual flow.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,580 | 1,240 | 4,240 | 1,700 | 1,720 | 1,410 | 5,680 | 10,100 | 15,000 | 3,420 | 1,330 | 940 |
| 2 | 1,540 | 1,320 | 3,960 | 1,880 | 1,760 | 1,380 | 5,340 | 10,100 | 13,800 | 3,550 | 1,390 | 940 |
| 3 | 1,510 | 1,350 | 4,100 | 2,050 | 1,720 | 1,440 | 4,850 | 9,200 | 12,600 | 3,420 | 1,390 | 965 |
| 4 | 1,720 | 1,350 | 3,560 | 2,140 | 1,800 | 1,510 | 4,390 | 9,200 | 11,400 | 3,420 | 1,390 | 940 |
| 5 | 1,580 | 1,540 | 3,430 | 2,050 | 1,720 | 1,480 | 4,100 | 10,100 | 10,900 | 3,180 | 1,390 | 940 |
| 6 | 1,510 | 1,680 | 2,960 | 2,050 | 1,720 | 1,510 | 3,820 | 12,000 | 10,700 | 3,180 | 1,390 | 915 |
| 7 | 1,480 | 2,050 | 2,430 | 2,050 | 1,680 | 1,510 | 3,820 | 14,100 | 10,500 | 2,950 | 1,360 | 915 |
| 8 | 1,440 | 2,530 | 2,530 | 1,880 | 1,680 | 1,580 | 3,960 | 16,500 | 9,780 | 2,630 | 1,300 | 940 |
| 9 | 1,410 | 3,070 | 2,740 | 1,880 | 1,620 | 1,960 | 3,820 | 18,600 | 8,900 | 2,730 | 1,210 | 990 |
| 10 | 1,380 | 5,850 | 2,740 | 1,880 | 1,580 | 2,050 | 3,820 | 19,600 | 8,470 | 2,630 | 1,210 | 990 |
| 11 | 1,350 | 4,390 | 2,630 | 1,800 | 1,620 | 3,820 | 3,820 | 20,700 | 8,260 | 2,530 | 1,180 | 990 |
| 12 | 1,320 | 3,560 | 2,230 | 1,880 | 1,650 | 3,820 | 3,820 | 20,200 | 7,840 | 2,430 | 1,150 | 1,060 |
| 13 | 1,320 | 2,960 | 2,140 | 2,740 | 1,650 | 3,430 | 3,690 | 19,600 | 7,430 | 2,430 | 1,150 | 1,120 |
| 14 | 1,290 | 2,850 | 1,960 | 2,630 | 1,680 | 3,190 | 3,820 | 18,300 | 7,230 | 2,340 | 1,150 | 1,120 |
| 15 | 1,290 | 2,850 | 1,960 | 2,330 | 1,440 | 2,850 | 3,960 | 17,000 | 7,030 | 2,340 | 1,120 | 1,090 |
| 16 | 1,290 | 3,310 | 2,600 | 2,050 | 1,480 | 2,850 | 4,100 | 16,800 | 6,640 | 2,160 | 1,090 | 1,060 |
| 17 | 1,290 | 3,310 | 2,430 | 2,050 | 1,540 | 2,960 | 5,680 | 17,000 | 6,450 | 2,070 | 1,060 | 1,040 |
| 18 | 1,260 | 3,070 | 2,430 | 2,050 | 1,540 | 3,190 | 5,680 | 17,000 | 5,890 | 1,990 | 1,090 | 1,020 |
| 19 | 1,240 | 2,850 | 2,140 | 1,960 | 1,580 | 3,310 | 5,340 | 18,300 | 5,530 | 1,910 | 1,060 | 965 |
| 20 | 1,240 | 5,680 | 2,050 | 2,230 | 1,510 | 3,820 | 4,690 | 18,100 | 5,360 | 1,870 | 1,060 | 940 |
| 21 | 1,210 | 5,010 | 2,230 | 2,050 | 1,540 | 4,390 | 4,390 | 18,800 | 5,360 | 1,790 | 1,090 | 940 |
| 22 | 1,210 | 3,960 | 2,140 | 1,960 | 1,540 | 5,850 | 3,960 | 20,500 | 5,530 | 1,710 | 1,150 | 940 |
| 23 | 1,210 | 3,070 | 2,230 | 1,880 | 1,510 | 6,210 | 5,010 | 21,000 | 5,360 | 1,640 | 1,150 | 940 |
| 24 | 1,210 | 3,070 | 2,050 | 1,880 | 1,480 | 7,750 | 6,210 | 21,500 | 5,360 | 1,640 | 1,090 | 915 |
| 25 | 1,210 | 4,540 | | 1,880 | 1,510 | 7,550 | 6,770 | 22,100 | 5,360 | 1,600 | 1,090 | 890 |
| 26 | 1,380 | 6,770 | 1,950 | 1,880 | 1,540 | 6,390 | 8,360 | 22,900 | 5,360 | 1,560 | 1,060 | 890 |
| 27 | 1,480 | 6,210 | | 1,800 | 1,440 | 7,950 | 10,300 | 22,600 | 5,190 | 1,530 | 1,060 | 890 |
| 28 | 1,580 | 6,390 | 2,050 | 1,720 | 1,510 | 7,150 | 10,500 | 21,800 | 4,860 | 1,500 | 1,060 | 870 |
| 29 | 1,440 | 6,030 | 1,960 | 1,800 | 1,440 | 6,210 | 9,640 | 20,700 | 4,390 | 1,460 | 1,040 | 890 |
| 30 | 1,350 | 4,850 | 1,880 | 1,800 | ------- | 5,680 | 9,200 | 18,300 | 3,420 | 1,420 | 1,020 | 890 |
| 31 | 1,290 | ------- | 1,620 | 1,760 | ------- | 5,510 | ------- | 16,500 | ------- | 1,360 | 990 | ------- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 1,720 | 1,210 | 1,370 | 0.646 | 0.74 | 84,200 |
| November | 6,770 | 1,240 | 3,560 | 1.68 | 1.87 | 212,000 |
| December | 4,240 | 1,620 | 2,490 | 1.17 | 1.35 | 153,000 |
| January | 2,740 | ---------- | 1,990 | .939 | 1.08 | 122,000 |
| February | 1,800 | 1,440 | 1,590 | .750 | .81 | 91,500 |
| March | 7,950 | 1,380 | 3,860 | 1.82 | 2.10 | 237,000 |
| April | 10,500 | 3,690 | 5,420 | 2.56 | 2.86 | 323,000 |
| May | 22,900 | 9,200 | 17,400 | 8.21 | 9.46 | 1,070,000 |
| June | 15,000 | 3,420 | 7,660 | 3.61 | 4.03 | 456,000 |
| July | 3,550 | 1,360 | 2,270 | 1.07 | 1.23 | 140,000 |
| August | 1,390 | 990 | 1,170 | .552 | .64 | 71,900 |
| September | 1,120 | 870 | 964 | .455 | .51 | 57,400 |
| The year | 22,900 | 870 | 4,160 | 1.96 | 26.68 | 3,020,000 |

### 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, 1928. Prior to November, 1912, at station in sec. 2, 2 miles upstream.

EXTREMES.—Maximum discharge during year, 21,500 second-feet May 27 (gage height, 9.43 feet); minimum, 804 second-feet September 30 (gage height, 1.08 feet).

1906–1916, 1919–1928: Maximum discharge, 22,100 second-feet June 9, 1921 (gage height, 9.57 feet); minimum, 365 second-feet December 18, 1924 (gage height, 0.30 foot).

REMARKS.—Records excellent. Several diversions for irrigation above station; none between this station and the one at Banks. Flow slightly regulated at outlet of Payette Lake. 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.

*Daily discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,530 | 1,200 | 4,270 | 1,560 | 1,710 | 1,380 | 5,580 | 9,370 | 14,400 | 3,540 | 1,320 | 914 |
| 2 | 1,440 | 1,190 | 4,080 | 1,740 | 1,710 | 1,360 | 5,470 | 9,640 | 12,800 | 3,370 | 1,330 | 888 |
| 3 | 1,420 | 1,240 | 4,080 | 1,940 | 1,700 | 1,360 | 5,050 | 9,100 | 11,600 | 3,280 | 1,330 | 880 |
| 4 | 1,510 | 1,260 | 3,720 | 2,000 | 1,700 | 1,410 | 4,560 | 8,830 | 11,100 | 3,200 | 1,330 | 862 |
| 5 | 1,530 | 1,250 | 3,370 | 2,000 | 1,700 | 1,440 | 4,270 | 9,370 | 10,500 | 3,040 | 1,390 | 854 |
| 6 | 1,460 | 1,250 | 3,120 | 2,000 | 1,700 | 1,470 | 4,080 | 10,800 | 10,200 | 2,960 | 1,350 | 854 |
| 7 | 1,390 | 1,660 | 2,500 | 1,940 | 1,650 | 1,480 | 3,900 | 12,500 | 9,920 | 2,800 | 1,300 | 854 |
| 8 | 1,350 | 1,940 | 2,350 | 1,870 | 1,650 | 1,540 | 3,900 | 14,800 | 9,370 | 2,640 | 1,250 | 862 |
| 9 | 1,300 | 2,500 | 2,640 | 1,810 | 1,560 | 1,870 | 3,900 | 16,800 | 8,830 | 2,500 | 1,210 | 896 |
| 10 | 1,300 | 5,580 | 2,570 | 1,810 | 1,520 | 2,070 | 3,990 | 18,300 | 8,310 | 2,500 | 1,180 | 923 |
| 11 | 1,300 | 4,560 | 2,350 | 1,810 | 1,540 | 3,120 | 3,900 | 19,000 | 8,050 | 2,420 | 1,150 | 950 |
| 12 | 1,250 | 3,370 | 2,200 | 1,810 | 1,570 | 4,080 | 3,810 | 18,600 | 7,550 | 2,350 | 1,100 | 950 |
| 13 | 1,220 | 2,880 | 2,200 | 2,350 | 1,470 | 3,540 | 3,810 | 17,900 | 7,300 | 2,280 | 1,070 | 1,030 |
| 14 | 1,210 | 2,800 | 2,000 | 2,640 | 1,540 | 3,200 | 3,810 | 16,800 | 7,060 | 2,200 | 1,070 | 1,040 |
| 15 | 1,200 | 2,720 | 1,940 | 2,350 | 1,460 | 2,960 | 3,990 | 16,100 | 6,820 | 2,200 | 1,050 | 1,010 |
| 16 | 1,190 | 2,880 | 2,570 | 2,070 | 1,380 | 2,800 | 4,360 | 15,400 | 6,350 | 2,070 | 1,040 | 995 |
| 17 | 1,180 | 3,630 | 2,500 | 1,810 | 1,460 | 2,800 | 5,260 | 15,400 | 6,350 | 1,940 | 1,020 | 977 |
| 18 | 1,170 | 3,120 | 2,280 | 1,870 | 1,470 | 2,960 | 5,580 | 15,800 | 5,900 | 1,870 | 1,010 | 950 |
| 19 | 1,150 | 2,800 | 2,140 | 1,810 | 1,480 | 3,200 | 5,260 | 16,100 | 5,580 | 1,810 | 1,020 | 923 |
| 20 | 1,140 | 3,370 | 2,140 | 1,870 | 1,480 | 3,630 | 4,750 | 16,400 | 5,260 | 1,740 | 1,010 | 896 |
| 21 | 1,120 | 4,850 | 2,200 | 2,000 | 1,480 | 4,360 | 4,360 | 17,200 | 5,260 | 1,660 | 1,020 | 896 |
| 22 | 1,100 | 4,080 | 2,140 | 1,870 | 1,510 | 5,470 | 4,270 | 18,300 | 5,260 | 1,590 | 1,060 | 888 |
| 23 | 1,090 | 3,200 | 2,140 | 1,870 | 1,460 | 6,010 | 4,650 | 19,000 | 5,260 | 1,570 | 1,060 | 871 |
| 24 | 1,080 | 3,040 | 2,000 | 1,870 | 1,390 | 7,300 | 5,680 | 19,400 | 5,160 | 1,540 | 1,050 | 862 |
| 25 | 1,080 | 3,720 | 1,870 | 1,810 | 1,440 | 7,800 | 6,350 | 20,600 | 5,260 | 1,520 | 1,040 | 854 |
| 26 | 1,210 | 6,350 | 1,870 | 1,810 | 1,420 | 6,820 | 7,800 | 21,000 | 5,260 | 1,480 | 1,000 | 846 |
| 27 | 1,340 | 6,120 | 1,940 | 1,720 | 1,400 | 7,300 | 9,920 | 21,500 | 5,050 | 1,430 | 995 | 837 |
| 28 | 1,480 | 5,900 | 2,000 | 1,700 | 1,440 | 7,300 | 10,200 | 20,600 | 4,850 | 1,400 | 995 | 828 |
| 29 | 1,420 | 6,120 | 1,870 | 1,730 | 1,430 | 6,350 | 9,370 | 19,400 | 4,460 | 1,400 | 986 | 820 |
| 30 | 1,350 | 5,050 | 1,810 | 1,740 | ------- | 5,900 | 8,830 | 17,900 | 3,990 | 1,350 | 968 | 812 |
| 31 | 1,310 | ------- | 1,570 | 1,740 | ------- | 5,580 | -------- | 16,100 | -------- | 1,320 | 950 | ------ |

*Monthly discharge, in second-feet, of Payette River near Horseshoe Bend, Idaho, 1927–28*

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 1,530 | 1,080 | 1,280 | 0.574 | 0.66 | 78,700 |
| November | 6,350 | 1,190 | 3,320 | 1.49 | 1.66 | 198,000 |
| December | 4,270 | 1,570 | 2.470 | 1.11 | 1.28 | 152,000 |
| January | 2,640 | 1,560 | 1,900 | .852 | .98 | 117,000 |
| February | 1,710 | 1,380 | 1,530 | .686 | .74 | 88,000 |
| March | 7,800 | 1,360 | 3,800 | 1.70 | 1.96 | 234,000 |
| April | 10,200 | 3,810 | 5,360 | 2.40 | 2.68 | 319,000 |
| May | 21,500 | 8,830 | 16,100 | 7.22 | 8.32 | 990,000 |
| June | 14,400 | 3,990 | 7,440 | 3.34 | 3.73 | 443,000 |
| July | 3,540 | 1,320 | 2,160 | .969 | 1.12 | 133,000 |
| August | 1,390 | 950 | 1,120 | .502 | .58 | 68,900 |
| September | 1,040 | 812 | 901 | .404 | .45 | 53,600 |
| The year | 21,500 | 812 | 3,950 | 1.77 | 24.16 | 2,880,000 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 22,000 second-feet May 27 (gage height, 12.75 feet); minimum, 107 second-feet November 6 (gage height, 1.46 feet).

1925–1928: Maximum discharge, that of May 27, 1928; minimum, 56 second-feet March 3, 1926 (gage height, 1.17 feet).

REMARKS.—Records excellent. Discharge estimated January 10–16, 22, and April 28 to May 5. Numerous diversions for irrigation above and below station. Flow slightly regulated by operation of gates in Black Canyon Dam and Payette Lake. Gage-height record furnished by United States Bureau of Reclamation.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,420 | 1,300 | 4,800 | 1,470 | 2,010 | 1,700 | 6,980 | | 14,300 | 3,160 | 873 | 552 |
| 2 | 1,330 | 1,270 | 4,530 | 1,640 | 2,010 | 1,670 | 6,980 | | 12,800 | 2,880 | 837 | 515 |
| 3 | 1,260 | 1,220 | 4,530 | 2,070 | 1,950 | 1,640 | 6,350 | 9,600 | 11,600 | 2,810 | 936 | 515 |
| 4 | 1,300 | 1,330 | 4,100 | 2,320 | 2,010 | 1,640 | 5,750 | | 10,700 | 2,740 | 963 | 500 |
| 5 | 1,520 | 1,330 | 3,630 | 2,380 | 1,950 | 1,750 | 5,360 | | 10,500 | 2,620 | 954 | 500 |
| 6 | 1,400 | 1,350 | 3,330 | 2,440 | 2,070 | 1,950 | 5,170 | 12,100 | 10,000 | 2,550 | 1,190 | 486 |
| 7 | 1,300 | 1,390 | 2,700 | 2,320 | 1,950 | 2,190 | 4,620 | 14,200 | 9,800 | 2,420 | 1,010 | 552 |
| 8 | 1,230 | 1,890 | 2,320 | 2,190 | 2,250 | 2,320 | 4,620 | 16,200 | 9,360 | 2,360 | 837 | 628 |
| 9 | 1,200 | 2,190 | 2,840 | 2,070 | 2,010 | 3,630 | 4,620 | 17,700 | 8,480 | 2,110 | 864 | 538 |
| 10 | 1,200 | 2,250 | 2,910 | | 1,890 | 2,510 | 4,710 | 19,300 | 8,060 | 2,110 | 810 | 552 |
| 11 | 1,200 | 4,620 | 2,640 | 2,100 | 1,790 | 6,150 | 4,440 | 19,800 | 7,850 | 2,110 | 730 | 552 |
| 12 | 1,190 | 3,700 | 2,250 | | 1,710 | 6,770 | 4,440 | 19,600 | 7,430 | 1,810 | 754 | 612 |
| 13 | 1,180 | 3,120 | 2,580 | | 1,810 | 4,980 | 4,440 | 18,800 | 7,030 | 1,930 | 714 | 682 |
| 14 | 1,130 | 2,980 | 2,010 | | 1,790 | 4,440 | 4,440 | 18,000 | 6,630 | 1,930 | 674 | 754 |
| 15 | 1,100 | 2,910 | 1,950 | 2,500 | 1,810 | 3,860 | 4,530 | 17,000 | 6,430 | 1,810 | 690 | 722 |
| 16 | 1,100 | 2,910 | 2,440 | | 1,700 | 3,700 | 4,980 | 16,700 | 6,240 | 1,760 | 690 | 658 |
| 17 | 1,110 | 3,940 | 2,700 | 2,190 | 1,690 | 3,860 | 6,150 | 16,500 | 6,240 | 1,700 | 658 | 674 |
| 18 | 1,080 | 3,400 | 2,380 | 2,010 | 1,710 | 3,940 | 6,560 | 16,700 | 5,670 | 1,700 | 628 | 682 |
| 19 | 1,040 | 3,120 | 2,130 | 2,010 | 1,680 | 4,100 | 6,150 | 17,200 | 5,130 | 1,480 | 612 | 605 |
| 20 | 1,110 | 3,260 | 2,700 | 1,950 | 1,780 | 4,620 | 5,550 | 17,500 | 4,960 | 1,430 | 650 | 568 |
| 21 | 1,160 | 5,360 | 2,320 | 1,950 | 1,790 | 5,360 | 4,980 | 18,000 | 4,960 | 1,330 | 690 | 598 |
| 22 | 1,160 | 4,530 | 2,250 | 2,100 | 1,820 | 6,770 | 4,800 | 19,000 | 4,960 | 1,280 | 1,040 | 598 |
| 23 | 1,090 | 3,480 | 2,130 | 2,250 | 1,810 | 7,610 | 4,980 | 19,800 | 4,790 | 1,210 | 945 | 568 |
| 24 | 1,090 | 3,190 | 2,190 | 2,250 | 1,740 | 9,350 | 5,360 | 20,400 | 4,620 | 1,170 | 706 | 560 |
| 25 | 1,050 | 3,780 | 1,950 | 2,250 | 1,720 | 10,000 | 7,190 | 20,600 | 4,790 | 1,180 | 650 | 545 |
| 26 | 1,140 | 7,190 | 1,950 | 2,190 | 1,660 | 8,690 | 8,690 | 21,400 | 4,790 | 1,160 | 642 | 538 |
| 27 | 1,510 | 7,190 | 1,850 | 2,070 | 1,760 | 10,200 | 10,500 | 21,200 | 4,450 | 1,040 | 628 | 552 |
| 28 | 1,600 | 7,190 | 2,320 | 1,870 | 1,710 | 9,790 | | 19,800 | 4,290 | 981 | 612 | 530 |
| 29 | 1,490 | 7,190 | 2,130 | 1,810 | 1,720 | 8,470 | 9,800 | 18,800 | 4,050 | 981 | 612 | 538 |
| 30 | 1,510 | 5,950 | 1,950 | 2,130 | ------- | 7,610 | | 17,300 | 3,670 | 990 | 605 | 508 |
| 31 | 1,370 | ------- | 1,620 | 2,070 | ------- | 7,190 | ------- | 15,800 | ------- | 963 | 582 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 1,600 | 1,040 | 1,240 | 76,200 |
| November | 7,190 | 1,220 | 3,480 | 207,000 |
| December | 4,800 | 1,620 | 2,650 | 163,000 |
| January | ------- | 1,470 | 2,140 | 132,000 |
| February | 2,250 | 1,660 | 1,840 | 106,000 |
| March | 10,200 | 1,640 | 5,110 | 314,000 |
| April | ------- | 4,440 | 6,090 | 362,000 |
| May | 21,400 | ------- | 16,700 | 1,030,000 |
| June | 14,300 | 3,670 | 7,150 | 425,000 |
| July | 3,160 | 963 | 1,800 | 111,000 |
| August | 1,190 | 582 | 767 | 47,200 |
| September | 754 | 486 | 579 | 34,500 |
| The year | 21,400 | 486 | 4,140 | 3,010,000 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 2,150 second-feet May 26 (gage height, 5.67 feet); minimum, 65 second-feet October 31 and November 1 (gage height, 1.63 feet).

1926–1928: Maximum discharge, that of May 26, 1928; minimum, 53 second-feet October 1 and 6, 1926 (gage height, 1.54 feet).

REMARKS.—Records excellent except from November 23 to April 5, which are fair. Gage-height record and four discharge measurements furnished by United States Bureau of Reclamation.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 128 | 81 | | | | | | 517 | 1,060 | 297 | 119 | 75 |
| 2 | 124 | 100 | | | | | | 504 | 905 | 294 | 119 | 74 |
| 3 | 128 | 101 | | | | | 160 | 500 | 935 | 288 | 117 | 74 |
| 4 | 157 | 101 | | | | | | 552 | 905 | 272 | 122 | 72 |
| 5 | 130 | 100 | | | | | | 665 | 905 | 255 | 130 | 74 |
| 6 | 119 | 110 | | | | 80 | 124 | 845 | 875 | 245 | 119 | 74 |
| 7 | 111 | 153 | | | | | 113 | 1,060 | 821 | 235 | 113 | 74 |
| 8 | 110 | 137 | 125 | | | | 104 | 1,320 | 746 | 225 | 108 | 75 |
| 9 | 110 | 280 | | | | | 117 | 1,520 | 675 | 218 | 104 | 76 |
| 10 | 110 | 311 | | | | | 120 | 1,690 | 665 | 208 | 103 | 80 |
| 11 | 106 | 192 | | | | | 115 | 1,690 | 635 | 199 | 101 | 78 |
| 12 | 103 | 170 | | | | | 119 | 1,560 | 600 | 194 | 98 | 84 |
| 13 | 103 | 161 | | | | | 115 | 1,520 | 580 | 194 | 98 | 92 |
| 14 | 103 | 155 | | | | | 117 | 1,400 | 557 | 185 | 96 | 90 |
| 15 | 101 | 147 | | | | | 119 | 1,320 | 557 | 176 | 95 | 86 |
| 16 | 101 | 181 | | 85 | 75 | 135 | 128 | 1,320 | 504 | 174 | 93 | 81 |
| 17 | 100 | 181 | | | | | 147 | 1,400 | 483 | 167 | 93 | 80 |
| 18 | 96 | 159 | | | | | 147 | 1,520 | 452 | 163 | 90 | 76 |
| 19 | 95 | 163 | | | | | 139 | 1,600 | 437 | 159 | 86 | 75 |
| 20 | 93 | 272 | | | | | 134 | 1,690 | 437 | 155 | 84 | 75 |
| 21 | 87 | 232 | | | | | 130 | 1,780 | 430 | 153 | 86 | 75 |
| 22 | 88 | 165 | | | | | 143 | 1,870 | 423 | 149 | 84 | 74 |
| 23 | 88 | 145 | | | | | 183 | 1,870 | 412 | 145 | 84 | 74 |
| 24 | 87 | 161 | 90 | | | | 227 | 1,920 | 405 | 141 | 84 | 72 |
| 25 | 93 | 178 | | | | | 263 | 2,060 | 395 | 137 | 86 | 71 |
| 26 | 120 | 235 | | | | 185 | 375 | 2,100 | 381 | 135 | 86 | 69 |
| 27 | 117 | 215 | | | | | 460 | 2,010 | 362 | 134 | 84 | 69 |
| 28 | 113 | 210 | | | | | 441 | 1,820 | 339 | 130 | 82 | 74 |
| 29 | 106 | 203 | | | | | 412 | 1,600 | 323 | 126 | 81 | 69 |
| 30 | 103 | 181 | | | ------- | | 426 | 1,360 | 305 | 124 | 80 | 72 |
| 31 | 88 | ------- | | | ------- | | ------- | 1,160 | ------- | 120 | 76 | ------- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 157 | 87 | 107 | 0.991 | 1.14 | 6,580 |
| November | 311 | 81 | 173 | 1.60 | 1.78 | 10,300 |
| December | ---------- | ---------- | 107 | .991 | 1.14 | 6,580 |
| January | ---------- | ---------- | 85.0 | .787 | .91 | 5,230 |
| February | ---------- | ---------- | 75.0 | .694 | .78 | 4,310 |
| March | ---------- | ---------- | 135 | 1.25 | 1.44 | 8,300 |
| April | 460 | 104 | 191 | 1.77 | 1.93 | 11,400 |
| May | 2,100 | 500 | 1,410 | 13.1 | 15.10 | 86,700 |
| June | 1,060 | 305 | 584 | 5.41 | 6.04 | 34,800 |
| July | 297 | 120 | 187 | 1.73 | 1.99 | 11,500 |
| August | 130 | 76 | 96.8 | .896 | 1.03 | 5,950 |
| September | 92 | 69 | 76.1 | .705 | .79 | 4,530 |
| The year | 2,100 | ---------- | 270 | 2.50 | 34.01 | 196,000 |

### DEADWOOD RIVER NEAR LOWMAN, IDAHO

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

DRAINAGE AREA.—201 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 4,230 second-feet May 9 (gage height, 5.17 feet); minimum, 115 second-feet September 6 (gage height, 1.42 feet).

1921–1928: Maximum discharge, that of May 9, 1928; minimum, 66 second-feet October 30, 1926 (gage height, 1.21 feet).

REMARKS.—Records good except those for estimated periods, October 8, October 13 to March 3, May 10 and 11, which are fair. No diversions.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 226 | 170 | | | | 150 | 351 | 1,240 | 1,800 | 477 | 189 | 131 |
| 2 | 219 | | | | | | 342 | 1,220 | 1,660 | 465 | 191 | 131 |
| 3 | 230 | | | | | | 320 | 1,180 | 1,580 | 454 | 189 | 129 |
| 4 | 279 | | | | | 162 | 299 | 1,240 | 1,510 | 443 | 194 | 126 |
| 5 | 241 | | | | | 152 | 291 | 1,430 | 1,480 | 416 | 220 | 122 |
| 6 | 219 | | | 150 | | 162 | 283 | 1,960 | 1,440 | 400 | 197 | 115 |
| 7 | 205 | | | | | 162 | 268 | 2,440 | 1,380 | 385 | 186 | 120 |
| 8 | 197 | | 225 | | | 173 | 275 | 2,930 | 1,250 | 370 | 180 | 124 |
| 9 | 189 | | | | | 197 | 283 | 3,530 | 1,170 | 351 | 175 | 129 |
| 10 | 192 | | | | | 203 | 295 | 3,600 | 1,120 | 338 | 167 | 133 |
| 11 | 189 | | | | 145 | 255 | 283 | 3,600 | 1,080 | 328 | 165 | 131 |
| 12 | 186 | | | | | 275 | 287 | 3,440 | 1,010 | 315 | 162 | 138 |
| 13 | | | | | | 235 | 268 | 2,930 | 970 | 311 | 160 | 145 |
| 14 | | | | | | 226 | 268 | 2,680 | 930 | 295 | 155 | 147 |
| 15 | | | | | | 205 | 268 | 2,440 | 901 | 287 | 152 | 138 |
| 16 | | | | 160 | | 211 | 291 | 2,440 | 856 | 275 | 152 | 133 |
| 17 | | | | | | 217 | 346 | 2,520 | 829 | 261 | 152 | 129 |
| 18 | | 350 | | | | 232 | 360 | 2,680 | 769 | 255 | 150 | 122 |
| 19 | 180 | | | | | 255 | 338 | 2,850 | 752 | 248 | 147 | 122 |
| 20 | | | | | | 291 | 324 | 2,930 | 735 | 244 | 145 | 120 |
| 21 | | | | | | 356 | 299 | 3,100 | 720 | 238 | 145 | 120 |
| 22 | | | | | | 426 | 320 | 3,180 | 712 | 235 | 147 | 122 |
| 23 | | | 165 | | | 438 | 400 | 3,100 | 682 | 232 | 145 | 118 |
| 24 | | | | | | 501 | 513 | 3,180 | 653 | 232 | 145 | 118 |
| 25 | | | | | 150 | 465 | 584 | 3,360 | 639 | 229 | 145 | 118 |
| 26 | | | | 155 | | 426 | 865 | 3,440 | 618 | 232 | 143 | 118 |
| 27 | | | | | 147 | 438 | 1,160 | 3,360 | 590 | 229 | 143 | 118 |
| 28 | 190 | | | | 150 | 410 | 1,130 | 3,180 | 551 | 217 | 143 | 120 |
| 29 | | | | | 150 | 385 | 1,020 | 2,680 | 519 | 203 | 140 | 120 |
| 30 | | | | | ------ | 365 | 1,030 | 2,280 | 501 | 197 | 138 | 120 |
| 31 | | ------ | | ------ | ------ | 351 | ------ | 1,960 | ------ | 191 | 135 | ------ |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 279 | ------ | 195 | 0.970 | 1.12 | 12,000 |
| November | ------ | ------ | 314 | 1.56 | 1.74 | 18,700 |
| December | ------ | ------ | 194 | .965 | 1.11 | 11,900 |
| January | ------ | ------ | 154 | .766 | .88 | 9,470 |
| February | ------ | ------ | 146 | .726 | .78 | 8,400 |
| March | 501 | ------ | 278 | 1.38 | 1.59 | 17,100 |
| April | 1,160 | 268 | 445 | 2.21 | 2.47 | 26,500 |
| May | ------ | 1,180 | 2,650 | 13.2 | 15.22 | 163,000 |
| June | 1,800 | 501 | 980 | 4.88 | 5.44 | 58,300 |
| July | 477 | 191 | 302 | 1.50 | 1.73 | 18,600 |
| August | 220 | 135 | 161 | .801 | .92 | 9,900 |
| September | 147 | 115 | 126 | .627 | .70 | 7,500 |
| The year | ------ | ------ | 498 | 2.48 | 33.70 | 361,000 |

### 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 is 4,984.17 feet above mean sea level.

DRAINAGE AREA.—131 square miles.

RECORDS AVAILABLE.—August, 1921, to September, 1928 (fragmentary).

EXTREMES.—Maximum stage during year, 5.90 feet May 26; minimum, 1.55 feet September 29.

1921–1928: Maximum stage, that of May 26, 1928; minimum, −0.27 foot September 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, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.26 | | | | | | | | | 3.39 | | 2.62 |
| 2 | | | | | | | | | | | | |
| 3 | | | | | | 1.76 | | | | | | |
| 4 | | | 3.89 | | 1.92 | | | | | | 4.20 | |
| 5 | | | | | | | | 2.88 | | | | |
| 6 | | | | | | | | | | | | |
| 7 | | | | 2.08 | | | 2.08 | 3.38 | | 3.98 | | |
| 8 | 2.52 | 3.53 | | | | | | | | 4.09 | | |
| 9 | | 3.61 | | | | | | | | | | |
| 10 | | | | | | | | | | | | 2.12 |
| 11 | | | | | | 1.95 | | | | | | |
| 12 | | | 3.80 | | 1.90 | | | 5.00 | | | | |
| 13 | | 4.10 | | | | | | | | | | |
| 14 | | | | 2.07 | | | 1.92 | 4.78 | | 4.28 | | |
| 15 | 2.70 | | | | | | | 4.67 | 3.46 | | | 2.00 |
| 16 | | | | | | | | | | | | |
| 17 | | | 2.77 | | | 1.92 | | | 3.20 | | | |
| 18 | | | | | 1.84 | | | | | | 3.51 | |
| 19 | | 4.05 | | | | | | 5.15 | | | | 1.83 |
| 20 | | | | | | | | | | | | |
| 21 | | | | 1.95 | | | 1.96 | | | 4.36 | | |
| 22 | 2.85 | | | | | | | | | | | 1.73 |
| 23 | | | | | | | | | 2.92 | | | |
| 24 | | | 2.24 | | | 2.06 | | | | | | |
| 25 | | | | | 1.79 | | | | | | | 1.63 |
| 26 | | 4.34 | | | | | | 5.90 | | | 2.86 | |
| 27 | | | | | | | | | | | | |
| 28 | | | | 1.96 | | | 2.50 | | | 4.35 | | |
| 29 | 3.07 | | | | | | | | | | | 1.55 |
| 30 | | | | | | | | | 3.25 | 4.30 | | |
| 31 | | | 2.36 | | | 2.21 | | | | | | |

### 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 and outlet of Payette Lake.

DRAINAGE AREA.—131 square miles.

RECORDS AVAILABLE.—September, 1908, to June, 1917; May, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year, 3,570 second-feet May 27 (gage height, 6.95 feet); minimum, 19 second-feet October 1–4.

1908–1917, 1919–1928: Maximum discharge, 4,250 second-feet June 5, 1909 (gage height, 7.5 feet); minimum, 1.4 second-feet October 22, 24, and 25, 1926 (gage height, 0.87 foot).

REMARKS.—Records excellent except those for estimated periods, which are fair. Flow partly regulated during irrigation season at outlet of Payette Lake. Services of observer furnished by United States Forest Service.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 19 | 48 | 500 | 189 | 135 | 91 | 229 | 690 | 2,190 | 70 | 138 | 91 |
| 2 | 19 | | 475 | 192 | 133 | 91 | 236 | 708 | 1,960 | 70 | 131 | 107 |
| 3 | 19 | | 450 | 189 | 131 | 91 | 236 | 714 | 1,820 | 72 | 120 | 118 |
| 4 | 19 | | 418 | 192 | 129 | | 229 | 720 | 1,740 | 74 | 112 | 109 |
| 5 | 20 | e 60 | 390 | 189 | 129 | | 264 | 789 | 1,700 | 74 | 107 | 124 |
| 6 | 20 | | 368 | 192 | 129 | e 100 | 299 | 950 | 1,700 | 72 | 98 | 150 |
| 7 | 20 | | 342 | 187 | 124 | | 270 | 1,210 | 1,660 | 69 | 94 | 138 |
| 8 | 21 | 109 | 322 | 181 | 122 | | 250 | 1,530 | 1,570 | 72 | 91 | 127 |
| 9 | 22 | 155 | 314 | 175 | 120 | | 233 | 1,820 | 1,480 | 75 | 89 | 118 |
| 10 | 22 | 299 | 302 | 167 | 118 | | 214 | 2,140 | 1,400 | 81 | 84 | 112 |
| 11 | e 22 | 326 | 291 | 160 | 116 | 109 | 204 | 2,380 | 1,320 | 87 | 80 | 105 |
| 12 | e 22 | 330 | 276 | 154 | 114 | 110 | 201 | 2,380 | 1,320 | 91 | 78 | 101 |
| 13 | e 22 | 318 | 731 | 170 | 112 | e 107 | 195 | 2,480 | 1,280 | 74 | 75 | 116 |
| 14 | e 22 | 326 | 957 | 178 | 109 | e 104 | 187 | 2,430 | 1,240 | 53 | 70 | 124 |
| 15 | 22 | 326 | e 815 | 173 | 109 | e 102 | 184 | 2,280 | 1,210 | 52 | 114 | 116 |
| 16 | 22 | 326 | e 673 | 164 | 107 | e 99 | 181 | 2,240 | 1,100 | 51 | 147 | 109 |
| 17 | 22 | 318 | 531 | 162 | 105 | 96 | 192 | 2,330 | 1,020 | 50 | 135 | 99 |
| 18 | 22 | 310 | | e 156 | 105 | 98 | 198 | 2,430 | 950 | 48 | 142 | 91 |
| 19 | 22 | 302 | | e 150 | 103 | 98 | 207 | 2,580 | 880 | 47 | 233 | 84 |
| 20 | e 22 | 330 | | e 144 | 101 | 99 | 210 | 2,730 | 848 | 46 | 210 | 74 |
| 21 | e 23 | 377 | e 300 | 138 | 99 | 107 | 204 | 2,840 | 848 | 45 | 189 | 68 |
| 22 | 23 | 377 | | 135 | 99 | 118 | 195 | 2,940 | 848 | 45 | 162 | 64 |
| 23 | 23 | 364 | | e 135 | 98 | 140 | 195 | 3,110 | 848 | 44 | 150 | 60 |
| 24 | 23 | 364 | 257 | e 136 | 94 | 167 | 210 | 3,110 | 848 | 44 | 150 | 56 |
| 25 | 22 | 390 | 246 | e 136 | 92 | 181 | 253 | 3,220 | 815 | 44 | 160 | 52 |
| 26 | 22 | 440 | 229 | e 137 | 92 | 187 | 319 | 3,330 | 815 | 44 | 144 | 48 |
| 27 | e 22 | 465 | 217 | e 138 | 92 | 207 | 425 | 3,570 | 776 | 44 | 129 | 44 |
| 28 | e 22 | 480 | 217 | 138 | 92 | 217 | 531 | 3,330 | 369 | 44 | 116 | 42 |
| 29 | 22 | 465 | 204 | 138 | 91 | 217 | 597 | 3,110 | 72 | 43 | 109 | 40 |
| 30 | 24 | 470 | 195 | 142 | ------ | 217 | 636 | 2,840 | 72 | 87 | 101 | 38 |
| 31 | 32 | ------ | 184 | 140 | ------ | 220 | ------ | 2,480 | ------ | 147 | 94 | ------ |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 32 | 19 | 21.9 | 0.167 | 0.19 | 1,350 |
| November | 480 | 48 | 279 | 2.13 | 2.38 | 16,600 |
| December | 957 | 184 | 378 | 2.89 | 3.33 | 23,200 |
| January | 192 | 135 | 161 | 1.23 | 1.42 | 9,900 |
| February | 135 | 91 | 110 | .840 | .91 | 6,330 |
| March | 220 | 91 | 128 | .977 | 1.13 | 7,870 |
| April | 636 | 181 | 266 | 2.03 | 2.26 | 15,800 |
| May | 3,570 | 690 | 2,240 | 17.1 | 19.71 | 138,000 |
| June | 2,190 | 72 | 1,160 | 8.85 | 9.87 | 69,000 |
| July | 147 | 43 | 63.2 | .482 | .56 | 3,890 |
| August | 233 | 70 | 124 | .947 | 1.09 | 7,620 |
| September | 150 | 38 | 90.8 | .693 | .77 | 5,400 |
| The year | 3,570 | 19 | 420 | 3.21 | 43.62 | 305,000 |

e Estimated or interpolated.

### 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-quarters of a mile below power plant, and 5 miles east of McCall.

RECORDS AVAILABLE.—May, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,620 second-feet May 26 (gage height, 5.65 feet); minimum, 15 second-feet September 4 and 5 (gage height, 0.39 foot).

1926–1928: Maximum discharge, 1,620 second-feet June 8, 1927, and May 26, 1928; minimum, 9 second-feet August 15, 1926 (gage height, 0.31 foot).

REMARKS.—Records good below 1,200 second-feet; others fair. Discharge estimated September 21–25. Water diverted 1½ miles upstream for power use is returned to river above gage. Gage-height record furnished by Lake Irrigation District.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | May | June | July | Aug. | Sept. | Day | Oct. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 49 | 328 | 556 | 192 | 37 | 16 | 16 | 64 | 781 | 302 | 78 | 25 | 22 |
| 2 | 57 | 278 | 556 | 173 | 36 | 16 | 17 | ------ | 900 | 278 | 72 | 24 | 18 |
| 3 | 59 | 315 | 556 | 173 | 35 | 16 | 18 | ------ | 940 | 255 | 73 | 24 | 18 |
| 4 | 85 | 342 | 556 | 173 | 48 | 15 | 19 | ------ | 981 | 266 | 66 | 23 | 18 |
| 5 | 78 | 386 | 629 | 164 | 38 | 15 | 20 | ------ | 1,100 | 290 | 62 | 21 | 18 |
| 6 | 55 | 556 | 556 | 153 | 35 | 16 | 21 | ------ | 1,230 | 315 | 59 | 20 | |
| 7 | 50 | 940 | 418 | 150 | 33 | 16 | 22 | ------ | 1,270 | 328 | 57 | 20 | |
| 8 | 52 | 1,100 | 418 | 143 | 31 | 16 | 23 | ------ | 1,270 | 328 | 54 | 23 | 17 |
| 9 | 55 | 1,190 | 418 | 132 | 29 | 20 | 24 | ------ | 1,360 | 328 | 52 | 25 | |
| 10 | 57 | 1,140 | 418 | 113 | 28 | 20 | 25 | ------ | 1,540 | 371 | 49 | 24 | |
| 11 | 59 | 940 | 418 | 104 | 28 | 21 | 26 | ------ | 1,620 | 356 | 46 | 20 | 16 |
| 12 | 59 | 1,020 | 418 | 101 | 27 | 21 | 27 | ------ | 1,270 | 278 | 45 | 20 | ------ |
| 13 | 57 | 860 | 386 | 93 | 26 | 27 | 28 | ------ | 1,060 | 244 | 44 | 20 | ------ |
| 14 | 64 | 742 | 386 | 85 | 25 | 27 | 29 | ------ | 940 | 255 | 42 | 18 | ------ |
| 15 | 64 | 704 | 356 | 80 | 25 | 27 | 30 | ------ | 704 | 212 | 40 | 16 | ------ |
| | | | | | | | 31 | ------ | 629 | ------ | 38 | 16 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October 1–16 | 85 | 49 | 60.2 | 1,910 |
| May | 1,620 | 278 | 917 | 56,400 |
| June | 629 | 212 | 382 | 22,700 |
| July | 192 | 38 | 93.7 | 5,760 |
| August | 48 | 16 | 26.5 | 1,630 |
| September 1–26 | 27 | 15 | 18.6 | 959 |

### 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.

RECORDS AVAILABLE.—April, 1926, to September, 1928.

EXTREMES.—Maximum contents during year, 14,920 acre-feet May 27 (elevation, 5,115.7 feet); no storage September 22–30.

1926–1928: Maximum contents, 14,920 acre-feet June 9, 27, and 28, 1927, and May 27, 1928 (elevation, 5,115.7 feet); no storage September 26–30, 1927, and September 22–30, 1928.

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

*Daily contents, in acre-feet, 1928*

| Day | May | June | July | Aug. | Sept. | Day | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2,105 | 13,080 | 13,850 | 7,399 | 1,739 | 16 | 12,470 | 13,390 | 12,020 | 3,987 | 677 |
| 2 | 2,807 | 12,620 | 13,850 | 7,147 | 1,617 | 17 | 12,470 | 13,390 | 11,570 | 3,801 | 579 |
| 3 | 3,615 | 12,320 | 13,690 | 7,021 | 1,557 | 18 | 12,620 | 13,390 | 11,270 | 3,615 | 384 |
| 4 | 4,080 | 12,320 | 13,540 | 6,895 | 1,497 | 19 | 12,780 | 13,230 | 10,970 | 3,453 | 288 |
| 5 | 4,547 | 12,320 | 13,540 | 6,769 | 1,497 | 20 | 12,780 | 13,080 | 10,670 | 3,291 | 192 |
| 6 | 5,606 | 12,320 | 13,390 | 6,652 | 1,391 | 21 | 13,080 | 13,230 | 10,390 | 3,210 | 48 |
| 7 | 6,895 | 12,780 | 13,230 | 6,302 | 1,232 | 22 | 13,690 | 13,390 | 10,100 | 3,048 | 0 |
| 8 | 8,028 | 13,080 | 13,080 | 5,954 | 1,179 | 23 | 13,850 | 13,540 | 9,666 | 2,887 | |
| 9 | 9,379 | 13,390 | 12,960 | 5,510 | 1,073 | 24 | 14,150 | 13,540 | 9,379 | 2,665 | |
| 10 | 10,240 | 13,390 | 12,930 | 5,182 | 969 | 25 | 14,460 | 13,690 | 9,243 | 2,595 | |
| 11 | 11,870 | 13,390 | 12,780 | 4,970 | 921 | 26 | 14,620 | 13,850 | 8,838 | 2,455 | 0 |
| 12 | 12,320 | 13,390 | 12,620 | 4,758 | 872 | 27 | 14,920 | 13,850 | 8,703 | 2,315 | |
| 13 | 12,780 | 13,390 | 12,470 | 4,547 | 824 | 28 | 14,620 | 13,850 | 8,433 | 2,175 | |
| 14 | 12,780 | 13,390 | 12,320 | 4,453 | 775 | 29 | 13,850 | 13,850 | 8,028 | 2,044 | |
| 15 | 12,620 | 13,390 | 12,170 | 4,173 | 726 | 30 | 13,540 | 13,850 | 7,651 | 1,922 | |
| | | | | | | 31 | 13,390 | | 7,525 | 1,861 | |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 114 second-feet June 15 (gage height, 4.72 feet); no flow during fall and winter.

1926–1928: Maximum discharge, that of June 15, 1928; no flow for long periods each year during nonirrigation seasons.

REMARKS.—Records good. 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 6,800 acres of land near McCall and Norwood. Gage-height record furnished by Lake Irrigation District.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | May | June | July | Aug. | Sept. | Day | Oct. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17 | 0 | 105 | 112 | 91 | 48 | 16 | 0 | 15 | 112 | 105 | 48 | 37 |
| 2 | 0 | 0 | 105 | 112 | 91 | 48 | 17 | 0 | 15 | 112 | 105 | 48 | 37 |
| 3 | 0 | 0 | 105 | 112 | 91 | 48 | 18 | 0 | e 24 | 112 | 105 | 48 | 37 |
| 4 | 0 | 0 | 0 | 112 | 91 | e 40 | 19 | 0 | 30 | 112 | 105 | e 51 | 37 |
| 5 | 0 | 0 | 0 | 112 | 91 | 37 | 20 | 0 | 30 | 112 | 105 | 52 | 37 |
| 6 | 0 | 0 | 0 | e 110 | 91 | 37 | 21 | 0 | 30 | 112 | 105 | 52 | 37 |
| 7 | 0 | 0 | e 20 | 108 | 91 | 37 | 22 | 0 | e 46 | 112 | 105 | e 47 | e 12 |
| 8 | 0 | 0 | 41 | 108 | 91 | 37 | 23 | 0 | 52 | 112 | 105 | 44 | 0 |
| 9 | 0 | 0 | e 77 | 104 | e 72 | 37 | 24 | 0 | e 58 | 112 | 105 | 44 | 0 |
| 10 | 0 | 0 | 91 | 105 | 64 | 37 | 25 | 0 | e 70 | 112 | 105 | 44 | 0 |
| 11 | 0 | 0 | 91 | 105 | 64 | 37 | 26 | 0 | e 82 | 112 | e 100 | e 50 | 0 |
| 12 | 0 | 0 | 91 | 105 | 64 | 37 | 27 | 0 | e 94 | 112 | 98 | 52 | 0 |
| 13 | 0 | e 9 | 91 | 105 | e 63 | 37 | 28 | 0 | e 103 | 112 | 98 | e 51 | 0 |
| 14 | 0 | 15 | 91 | 105 | 60 | 37 | 29 | 0 | 105 | 112 | 98 | 48 | 0 |
| 15 | 0 | 15 | e 105 | 105 | e 52 | 37 | 30 | 0 | 105 | 112 | e 98 | 48 | 0 |
| | | | | | | | 31 | 0 | 105 | | 91 | 48 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| May 13–31 | 105 | 9 | 52.8 | 1,990 |
| June | 112 | 0 | 89.8 | 5,340 |
| July | 112 | 91 | 105. | 6,460 |
| August | 91 | 44 | 62.6 | 3,850 |
| September 1–22 | 48 | 12 | 37.5 | 1,640 |

e Estimated.

NOTE.—No flow on days for which no discharge is given.

### 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, 1928.

EXTREMES.—Maximum discharge during year, 9,570 second-feet March 11 (gage height, 8.31 feet); minimum, 32 second-feet August 15 (gage height, 0.93 foot).

1920–1928: Maximum discharge, about 13,500 second-feet about February 4, 1925 (gage height, 10.65 feet); minimum, 10 second-feet July 31, August 1 and 6–18, 1924 (gage height, 0.80 foot).

REMARKS.—Records fair during winter, good June to September, others excellent. Numerous diversions for irrigation above station.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 197 | 186 | 1,800 | | | | 3,400 | 3,160 | 1,300 | 235 | 41 | 53 |
| 2 | 190 | 179 | 1,740 | | | | 3,800 | 3,090 | 1,170 | 216 | 43 | 50 |
| 3 | 193 | 175 | 1,560 | | | a 500 | 3,960 | 2,780 | 1,110 | 200 | 44 | 50 |
| 4 | 204 | 179 | 1,340 | | | | 3,400 | 2,560 | 1,030 | 186 | 46 | 52 |
| 5 | 208 | 182 | 1,190 | | | | 2,860 | 2,560 | 982 | 179 | 46 | 48 |
| 6 | a 204 | 190 | 1,080 | | | | 2,420 | 3,010 | 914 | a 167 | 46 | 43 |
| 7 | a 199 | 220 | 810 | | | a 1,000 | 2,100 | 3,560 | 857 | a 154 | 50 | 39 |
| 8 | a 194 | 342 | 765 | a 500 | | | 1,920 | 3,960 | a 781 | 142 | 50 | 35 |
| 9 | 190 | 402 | 833 | | | 3,400 | 1,800 | 4,380 | a 704 | 129 | a 48 | 33 |
| 10 | 186 | 2,100 | 788 | | | 4,970 | 1,630 | 4,630 | 628 | 105 | a 46 | 35 |
| 11 | 186 | 1,100 | 634 | | | 6,570 | 1,500 | 4,630 | a 634 | 82 | a 45 | 38 |
| 12 | 182 | 722 | 570 | | a 460 | 8,050 | 1,520 | 4,380 | 641 | a 71 | 43 | 44 |
| 13 | 179 | 628 | 680 | | | 4,800 | 1,410 | 4,040 | 628 | a 60 | 41 | 50 |
| 14 | 175 | 857 | 622 | | | 3,560 | 1,320 | 3,640 | 602 | a 50 | 36 | 79 |
| 15 | 175 | 973 | | | | 3,010 | 1,280 | 3,320 | 563 | 39 | 33 | 92 |
| 16 | 172 | 873 | | | | 3,160 | 1,380 | 3,010 | 532 | 48 | 35 | 84 |
| 17 | 165 | 1,150 | | | | 3,800 | 1,800 | 2,940 | 538 | 57 | 35 | 84 |
| 18 | 161 | 905 | | | | 3,960 | 1,920 | 3,010 | a 516 | a 55 | 36 | 79 |
| 19 | 161 | 788 | | | | 3,880 | 1,980 | 2,940 | a 493 | a 53 | 36 | 70 |
| 20 | 158 | 743 | | | | 3,800 | 2,100 | 2,940 | a 471 | a 50 | 38 | 59 |
| 21 | 161 | a 812 | | | | 3,720 | 1,920 | 3,010 | a 448 | a 48 | 38 | 59 |
| 22 | 161 | 881 | a 500 | | | 3,960 | 1,740 | 3,010 | a 426 | 46 | 41 | 57 |
| 23 | 161 | 788 | | a 475 | 451 | 5,140 | 1,800 | 2,940 | a 403 | a 44 | 43 | 55 |
| 24 | 161 | 722 | | | | 6,390 | 2,040 | 2,710 | 381 | a 42 | 44 | 55 |
| 25 | 161 | 1,050 | | | | 6,210 | 2,360 | 2,640 | a 350 | a 40 | 46 | 61 |
| 26 | 165 | 1,580 | | | a 450 | 4,970 | 2,780 | 2,710 | a 318 | a 38 | 48 | 64 |
| 27 | 182 | 1,490 | | | | 7,480 | 3,320 | 2,640 | a 287 | 36 | 48 | 61 |
| 28 | 200 | 3,090 | | | | 5,670 | 3,720 | 2,290 | a 255 | 39 | 46 | 59 |
| 29 | 200 | 3,160 | | | | 4,200 | 3,640 | 2,040 | 224 | 38 | 48 | 59 |
| 30 | 193 | 1,920 | | | ------- | 3,800 | 3,240 | 1,740 | 235 | 38 | 48 | 59 |
| 31 | 190 | ------- | | | ------- | 4,040 | ------- | 1,480 | ------- | 38 | 53 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 208 | 158 | 181 | 11,100 |
| November | 3,160 | 175 | 946 | 56,300 |
| December | 1,800 | ---------- | 739 | 45,400 |
| January | ---------- | ---------- | 487 | 29,900 |
| February | ---------- | ---------- | 458 | 26,300 |
| March | 8,050 | ---------- | 3,680 | 226,000 |
| April | 3,960 | 1,280 | 2,340 | 139,000 |
| May | 4,630 | 1,480 | 3,090 | 190,000 |
| June | 1,300 | 224 | 614 | 36,500 |
| July | 235 | 36 | 87.9 | 5,400 |
| August | 53 | 33 | 43.3 | 2,660 |
| September | 92 | 33 | 56.9 | 3,390 |
| The year | 8,050 | 33 | 1,060 | 772,000 |

a Estimated or interpolated.

### 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; May, 1926, to September, 1928.

EXTREMES.—Maximum stage during year, 20.00 feet May 14; minimum, 7.56 feet November 17.

1924, 1926–1928: Maximum stage, that of May 14, 1928; minimum, 5.96 feet October 6, 1926.

REMARKS.—Capacity of reservoir is about 6,000 acre-feet between gage heights 0.0 foot and 21.4 feet. Water from reservoir is used for irrigation in Weiser Valley.

*Daily gage height, in feet, 1926–1928*

| Date | Gage height | Date | Gage height | Date | Gage height |
|---|---|---|---|---|---|
| 1926 | | 1926 | | 1927–28 | |
| May 8 | 19.72 | Aug. 1 | 14.25 | Nov. 17 | 7.56 |
| May 16 | 19.20 | Aug. 6 | 13.65 | May 14 | 20.00 |
| May 23 | 19.60 | | | May 16 | 19.60 |
| May 25 | 19.60 | 1926–27 | | May 20 | 18.30 |
| May 30 | 19.70 | Oct. 6 | 5.96 | May 22 | 17.80 |
| June 8 | 19.80 | July 29 | 18.65 | May 29 | 19.40 |
| June 17 | 19.70 | July 31 | 18.45 | June 4 | 19.90 |
| June 19 | 19.53 | Aug. 7 | 18.14 | June 10 | 20.50 |
| June 23 | 19.09 | Aug. 11 | 17.90 | June 26 | 21.16 |
| July 25 | 15.10 | Aug. 31 | 13.62 | Aug. 6 | 17.20 |
| | | Sept. 14 | 11.81 | | |

NOTE.—No record on days for which no gage heights are given.

### 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, 1928.

EXTREMES.—Maximum discharge during year, 308 second-feet April 29 (gage height, 3.05 feet); minimum, 9 second-feet July 13 (gage height, 1.24 feet). 1910–1914, 1920–21, 1924–1928: Maximum discharge, 688 second-feet May 17 and 18, 1921 (gage height, 4.29 feet); practically no flow when gates in dam were closed.

REMARKS.—Records fair. Discharge estimated July 14–24, 26–31, August 1–5, 7–15, 17–31, September 1 and 3–30. Practically entire flow is diverted below during irrigation season. Flow regulated at Lost Valley Reservoir.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Apr. | May | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | 32 | | | 262 | | | 68 |
| 2 | 31 | | | 254 | | | 55 |
| 3 | 30 | | | 240 | | 52 | |
| 4 | 30 | | | 229 | | | |
| 5 | 30 | | | 221 | | | |
| 6 | 30 | | | 227 | | 51 | |
| 7 | 30 | | | 232 | | | |
| 8 | 30 | | | 251 | | | |
| 9 | 30 | | | 288 | | | |
| 10 | 30 | | | 303 | | | |
| 11 | 30 | | | 303 | | 46 | |
| 12 | 30 | | | 282 | | | |
| 13 | 30 | | | 265 | 25 | | |
| 14 | 29 | | | 248 | | | |
| 15 | 28 | | | 234 | | | |
| 16 | | | | 219 | | 56 | 29 |
| 17 | | 27 | | 209 | | | |
| 18 | | | | 201 | | | |
| 19 | | | | 194 | 38 | | |
| 20 | | | | 189 | | | |
| 21 | | | | 187 | | | |
| 22 | | | | 185 | | | |
| 33 | | | | | | | |
| 24 | | | | | | 69 | |
| 25 | | | | | 48 | | |
| 26 | | | | | | | |
| 27 | | | | | | | |
| 28 | | | | | | | |
| 29 | | | 300 | | 54 | | |
| 30 | | | 282 | | | | |
| 31 | | | | | | | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October 1–15 | 32 | 28 | 30.0 | 893 |
| May | 303 | 185 | 237 | 10,300 |
| July 13–31 | | | 42.9 | 1,620 |
| August | | | 58.6 | 3,600 |
| September | | | 31.2 | 1,860 |

### 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 headgates.

RECORDS AVAILABLE.—May to September, 1924; May to September, 1928.

EXTREMES.—Maximum discharge during period, 31 second-feet July 26–28; no flow during nonirrigation season.

1924, 1928: Maximum discharge, 35 second-feet May 24, 25, 27, and 28, 1924; no flow September 5 and 6, 1924, and during nonirrigation seasons.

REMARKS.—Records good. Discharge estimated September 1–4; interpolated July 29, August 19 and 26. Canal diverts from Middle Fork of Weiser River in SE.¼ NW.¼ sec. 9, T. 15 N., R. 1 E. Water is used for irrigation on the Mesa orchards and for domestic purposes in the village of Mesa.

*Daily and monthly discharge, in second-feet, 1928*

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

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| July 26–31 | 31 | 30 | 30.5 | 363 |
| August | 30 | 16 | 22.7 | 1,400 |
| September 1–5 | | | 14.6 | 145 |
| The period | | | | 1,910 |

### 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, 1928.

EXTREMES.—Maximum stage during year, 55.0 feet March 27; practically no available storage by September 23.

1923–1928: Maximum stage, 56.3 feet February 22, 1927; no available storage September 23, 1928.

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, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 49.3 | 50.6 | 44.2 | | | 54.8 | 52.85 | | 36.03 | 32.0 | 25.0 |
| 2 | | 49.15 | 50.65 | 44.0 | | | 54.7 | 52.25 | | 36.01 | 31.7 | 24.8 |
| 3 | 50.7 | 49.05 | 50.75 | | | 38.2 | 54.7 | 51.6 | | | 31.5 | |
| 4 | 50.7 | 48.9 | 50.7 | 43.5 | 36.0 | | 54.65 | 51.15 | | 36.00 | 31.25 | 24.2 |
| 5 | 50.7 | 48.8 | 50.65 | 43.1 | | | 54.4 | 50.5 | | | 31.05 | 24.0 |
| 6 | 50.7 | 48.65 | 50.6 | 43.0 | | 38.45 | 54.1 | 49.85 | | 35.95 | 30.8 | 23.8 |
| 7 | 50.7 | 48.65 | 50.6 | 42.8 | | | 54.0 | 49.1 | | 35.90 | 30.6 | 23.55 |
| 8 | 50.7 | 48.65 | 50.6 | | | | 54.1 | 48.5 | | 35.86 | 30.5 | 23.3 |
| 9 | 50.7 | 48.7 | 50.6 | 42.4 | | 41.4 | | 47.8 | | | 30.35 | 23.05 |
| 10 | 50.7 | 48.95 | 50.55 | | | 43.5 | 54.2 | 47.1 | | 35.80 | 30.1 | 22.8 |
| 11 | 50.7 | 49.0 | 50.55 | 41.3 | 37.0 | 45.7 | | 46.4 | | 35.70 | 30.0 | 22.6 |
| 12 | 50.7 | 49.1 | 50.55 | 40.8 | | 49.4 | 54.45 | 45.3 | | 35.56 | 29.8 | 22.3 |
| 13 | 50.7 | 49.15 | 50.5 | | | 50.7 | 54.5 | 44.6 | 36.42 | 35.41 | 29.5 | 22.0 |
| 14 | 50.7 | 49.2 | 50.45 | 41.1 | | 51.5 | 54.55 | 44.39 | | 35.27 | 29.3 | 21.9 |
| 15 | 50.7 | 49.2 | 50.45 | 41.0 | | 52.1 | | 43.6 | 36.36 | 35.12 | 29.1 | 21.7 |
| 16 | | | 50.4 | 40.8 | | 52.7 | 54.7 | 43.05 | 36.30 | 34.87 | 28.9 | 21.2 |
| 17 | 50.65 | | | 40.3 | | 53.6 | 54.8 | 42.4 | | 34.63 | 28.4 | 20.6 |
| 18 | | | 49.5 | 39.8 | 37.4 | 54.2 | 54.7 | 41.65 | 36.28 | 34.38 | | |
| 19 | 50.65 | 49.5 | 49.0 | | | 54.5 | 54.6 | 40.9 | | 34.15 | 28.1 | 20.2 |
| 20 | 50.65 | | 48.5 | 38.8 | | | 54.5 | 40.05 | 36.24 | | 27.7 | 17.2 |
| 21 | 50.65 | 49.6 | 48.0 | 38.1 | | 54.6 | | 39.1 | 36.26 | 33.72 | 27.55 | |
| 22 | 50.5 | | 47.5 | 37.6 | | | 54.45 | 39.05 | 36.24 | 33.53 | 27.15 | |
| 23 | 50.4 | 49.65 | 47.0 | 37.1 | | 54.65 | 54.4 | 39.05 | 36.24 | 33.38 | 26.8 | |
| 24 | 50.25 | | | 36.4 | 37.8 | 54.6 | | 38.95 | 36.23 | 33.2 | 26.55 | |
| 25 | | 49.75 | 46.5 | 35.7 | | | 54.25 | 38.8 | 36.20 | 33.1 | | |
| 26 | 50.0 | 49.75 | 46.1 | 35.1 | | 54.2 | 54.15 | 38.48 | | 33.0 | 26.4 | |
| 27 | 49.9 | 49.9 | 45.7 | | | 55.0 | 54.11 | 38.12 | 36.15 | 32.95 | 26.25 | |
| 28 | 49.8 | | 45.4 | 35.2 | | 54.9 | | 37.74 | 36.11 | | 26.1 | |
| 29 | | 50.2 | 45.0 | | | | 53.75 | 37.34 | 36.09 | 32.6 | 25.8 | |
| 30 | 49.5 | 50.45 | 44.7 | 35.3 | | 54.9 | 53.35 | 37.05 | 36.07 | 32.5 | 25.45 | |
| 31 | 49.45 | | 44.45 | | | 54.9 | | 36.62 | | 32.3 | | |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 949 second-feet May 1 (gage height, 3.47 feet); no flow reported October 9–15, November 7–24. January 27 to February 29, April 8–12, May 22, June 1–10, September 25–30.

1910–1916, 1924–1928: Maximum discharge, 4,240 second-feet December 3, 1910 (gage height, 8.9 feet); no flow reported at various times each year when gates in dam are closed.

REMARKS.—Records fair. No large diversions above gage. Flow regulated by storage in Crane Creek Reservoir. Gage-height record furnished by Crane Creek Reservoir Administration Board.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | *7 | 165 | 79 | 345 | | | 728 | 824 | | *2 | 156 | 77 |
| 2 | *8 | 166 | 82 | 345 | | | 728 | 921 | | 6 | 138 | 76 |
| 3 | 8 | 166 | 80 | *344 | | | 728 | 921 | | 12 | 138 | 76 |
| 4 | 6 | 165 | 77 | 342 | | | 728 | 914 | | 11 | 134 | 77 |
| 5 | 6 | 165 | 77 | 342 | | | 722 | 900 | | 10 | 135 | 77 |
| 6 | 6 | 99 | 77 | 342 | | | 600 | 893 | 0 | 11 | 134 | 77 |
| 7 | 5 | | 77 | 342 | | | 100 | 879 | | 9 | 116 | 76 |
| 8 | 4 | | 77 | *342 | | | | 872 | | 13 | 98 | 72 |
| 9 | | | 77 | *475 | | | | 865 | | 12 | 101 | 72 |
| 10 | | | 77 | *650 | | *5 | 0 | 865 | | 63 | 101 | 72 |
| 11 | 0 | | 77 | 645 | | | | 851 | | 76 | 98 | 72 |
| 12 | | | 76 | 640 | | | | 844 | *4 | 101 | 87 | 72 |
| 13 | | | 76 | *638 | | 13 | 830 | 12 | | 97 | 80 | 71 |
| 14 | | | 76 | 635 | | 13 | 824 | 18 | | 96 | 81 | 70 |
| 15 | | | 76 | 635 | 0 | 13 | 824 | 18 | | 137 | 81 | 79 |
| 16 | 3 | 0 | 234 | 635 | | 14 | 818 | 17 | | 184 | 85 | 71 |
| 17 | 4 | | 551 | 630 | | 88 | 806 | 17 | | 169 | 126 | 70 |
| 18 | 4 | | 558 | 625 | | 734 | 232 | 800 | 8 | 169 | 138 | 69 |
| 19 | 4 | | 578 | *622 | | 734 | 232 | 794 | 4 | 148 | 135 | 160 |
| 20 | 4 | | 600 | 620 | | *731 | 216 | 782 | 4 | 134 | 135 | 464 |
| 21 | 37 | | 607 | 605 | | 728 | 180 | 126 | 4 | 123 | 128 | 366 |
| 22 | 150 | | 610 | 605 | | 728 | 180 | 0 | 4 | 94 | 123 | 36 |
| 23 | 148 | | 617 | 595 | | 728 | 180 | 69 | 4 | 86 | 123 | 14 |
| 24 | 150 | | 614 | 600 | | 728 | 180 | 135 | 4 | 72 | 103 | 12 |
| 25 | 162 | 16 | 487 | 590 | | *728 | 180 | 244 | 7 | 51 | 85 | |
| 26 | 157 | 80 | 345 | *298 | | 679 | 148 | 285 | 11 | 49 | 83 | |
| 27 | 157 | 85 | 345 | | | 659 | 91 | 327 | 11 | 72 | 83 | 0 |
| 28 | 157 | 84 | 345 | | | 728 | 91 | 345 | 12 | 87 | 80 | |
| 29 | 154 | 80 | 345 | 0 | | *728 | 692 | 352 | 13 | 88 | 78 | |
| 30 | 152 | 80 | 345 | | | 728 | 704 | 348 | 6 | 102 | 81 | |
| 31 | 150 | | 345 | | | 728 | | 82 | | 124 | 78 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 162 | 0 | 53.0 | 3,260 |
| November | 166 | 0 | 45.0 | 2,680 |
| December | 617 | 76 | 280 | 17,200 |
| January | | 0 | 435 | 26,700 |
| March | 734 | | 328 | 20,200 |
| April | 728 | 0 | 259 | 15,400 |
| May | 921 | 0 | 624 | 38,400 |
| June | 18 | 0 | 6.1 | 360 |
| July | 184 | | 77.7 | 4,780 |
| August | 156 | 78 | 108 | 6,640 |
| September | 464 | 0 | 77.3 | 4,600 |
| The year | 921 | 0 | 193 | 140,000 |

* Estimated or interpolated.

### CRANE CREEK AT MOUTH, NEAR WEISER, IDAHO

LOCATION.—Water-stage recorder in sec. 14, T. 11 N., R. 4 W., a quarter of a mile above mouth and 10 miles northeast of Weiser.

DRAINAGE AREA.—312 square miles.

RECORDS AVAILABLE.—July, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,840 second-feet March 27 (gage height, 6.25 feet); minimum, 0.6 second-foot June 10 (gage height, 1.42 feet).

1920–1928: Maximum discharge, about 2,350 second-feet about February 7, 1925 (gage height, 6.80 feet); minimum, 0.4 second-foot January 21, 1922 (gage height, 1.30 feet).

REMARKS.—Records good except those for estimated periods, which are fair. Small ranch diversions above gage. Flow is regulated by headgates at Crane Creek Reservoir.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.7 | 177 | 86 | 363 | 9.0 | 9.4 | 763 | 810 | 29 | 1.9 | 140 | 72 |
| 2 | 9.4 | 181 | 120 | 363 | 9.0 | 9.4 | 796 | 925 | 11 | 1.5 | 123 | 71 |
| 3 | 8.7 | 181 | 93 | 360 | 8.7 | 9.7 | 796 | 918 | 7.7 | 1.6 | 125 | 71 |
| 4 | 8.4 | 181 | 85 | 356 | 8.7 | 13 | 776 | 910 | 3.0 | 2.3 | 125 | 72 |
| 5 | 8.0 | 183 | 84 | 353 | 12 | 20 | 743 | 910 | 2.3 | 2.5 | 130 | 71 |
| 6 | 7.4 | 170 | 85 | 353 | 16 | 42 | 730 | 903 | 2.1 | 2.3 | [a] 125 | 70 |
| 7 | 7.1 | 29 | 85 | 353 | 21 | 67 | 511 | 896 | 1.8 | 3.2 | [a] 105 | 69 |
| 8 | 7.1 | 16 | 87 | 349 | 18 | 93 | 65 | 888 | 1.5 | 3.3 | 82 | 68 |
| 9 | 5.9 | 17 | 90 | 403 | 17 | 418 | 23 | 873 | 1.6 | 3.8 | | 67 |
| 10 | 5.4 | 34 | 91 | 743 | 16 | 272 | 20 | 866 | 1.1 | 21 | [a] 95 | 66 |
| 11 | 5.2 | 21 | 86 | 737 | 16 | [a] 500 | 18 | 866 | 1.1 | 52 | | 66 |
| 12 | 5.2 | 12 | 80 | 730 | 13 | 239 | 33 | 873 | 1.1 | 80 | 82 | 67 |
| 13 | 5.2 | 15 | 81 | 737 | 9.0 | 125 | 23 | 866 | [a] 6 | 86 | [a] 75 | 68 |
| 14 | 5.2 | 30 | 78 | 783 | 9.7 | 120 | 19 | 866 | | 88 | | 68 |
| 15 | 5.2 | 23 | 74 | 743 | | | 18 | 859 | 5.9 | 108 | 72 | 75 |
| 16 | 5.4 | 16 | 71 | 711 | [a] 10 | [a] 200 | 17 | 852 | 7.1 | 179 | 71 | 70 |
| 17 | 5.4 | 17 | 511 | 687 | | | 29 | 852 | 7.1 | 157 | 93 | 70 |
| 18 | 6.4 | 11 | 699 | 687 | | 903 | 208 | [a] 810 | 8.0 | 155 | 117 | 67 |
| 19 | 6.4 | 8.7 | 687 | 680 | 10 | 838 | 215 | | 4.5 | 138 | 123 | 100 |
| 20 | 6.7 | 7.7 | 693 | 674 | 12 | 838 | 226 | 783 | 3.7 | 122 | 123 | 447 |
| 21 | 6.4 | 8.4 | 699 | 668 | 14 | 824 | 208 | 456 | 1.8 | 120 | 120 | 366 |
| 22 | 87 | 7.7 | 699 | 668 | 11 | 824 | 177 | 31 | 1.6 | 88 | 111 | 76 |
| 23 | 153 | 6.7 | 693 | 662 | 9.4 | 881 | 172 | 11 | 1.1 | 85 | 111 | 19 |
| 24 | 155 | 6.2 | 693 | 656 | 8.7 | 831 | 170 | 123 | .9 | 73 | 103 | 14 |
| 25 | 170 | 6.2 | 588 | 645 | 9.0 | 803 | 166 | 126 | 1.1 | 48 | 80 | 11 |
| 26 | 172 | 46 | 366 | 501 | 8.4 | 776 | 159 | 247 | 1.3 | 43 | 75 | 9 |
| 27 | 172 | 84 | 363 | 30 | 8.4 | 1,180 | 92 | 280 | 1.5 | 52 | 75 | 8.0 |
| 28 | 170 | 218 | 363 | 15 | 9.0 | 881 | 88 | 315 | 1.9 | 77 | 74 | 7.1 |
| 29 | 170 | 96 | 360 | 13 | 9.7 | 859 | 292 | 330 | 2.6 | 77 | 73 | 6.2 |
| 30 | 163 | 85 | 360 | 11 | ------ | 817 | 737 | 337 | 2.3 | 86 | 74 | 5.4 |
| 31 | 161 | ------ | 399 | 9.7 | ------ | 783 | ------ | 306 | ------ | 99 | 72 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 172 | 5.2 | 55.2 | 3,390 |
| November | 218 | 6.2 | 63.2 | 3,760 |
| December | 699 | 71 | 308 | 18,900 |
| January | 783 | 9.7 | 485 | 29,800 |
| February | 21 | 8.4 | 11.5 | 662 |
| March | 1,180 | 9.4 | 470 | 28,900 |
| April | 796 | 17 | 276 | 16,400 |
| May | 925 | 11 | 642 | 39,500 |
| June | 29 | .9 | 4.26 | 253 |
| July | 179 | 1.5 | 66.3 | 4,080 |
| August | 140 | ---------- | 98.0 | 6,030 |
| September | 447 | 5.4 | 77.2 | 4,590 |
| The year | 1,180 | .9 | 215 | 156,000 |

[a] Estimated or interpolated.

### WEISER IRRIGATION DISTRICT CANAL NEAR WEISER, IDAHO

LOCATION.—Water-stage recorder in sec. 32, T. 11 N., R. 4 W., 1½ miles below headworks of canal and 7 miles east of Weiser.

RECORDS AVAILABLE.—April, 1920, to September, 1928.

EXTREMES.—Maximum discharge during year, 208 second-feet June 29 (gage height, 3.34 feet); practically no flow for long periods during winter.

1920–1928: Maximum discharge, 219 second-feet May 5, 1926 (gage height, 3.43 feet); usually no flow except during irrigation season.

REMARKS.—Records excellent. Discharge estimated April 13 and 28. 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 Irrigation District and Weiser Bench Irrigation District near Weiser.

*Daily and monthly discharge, in second-feet, 1928*

| Day | Apr. | May | June | July | Aug. | Sept. | Day | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ------ | 68 | 195 | 203 | 175 | 107 | 16 | ------ | 199 | 168 | 203 | 101 | 134 |
| 2 | ------ | 124 | 196 | 197 | 153 | 104 | 17 | ------ | 199 | 164 | 195 | 121 | 132 |
| 3 | ------ | 138 | 199 | 181 | 151 | 105 | 18 | ------ | 203 | 170 | 202 | 140 | 126 |
| 4 | ------ | 154 | 199 | 166 | 157 | 105 | 19 | ------ | 199 | 194 | 203 | 142 | 102 |
| 5 | ------ | 157 | 199 | 157 | 163 | 102 | 20 | ------ | 202 | 197 | 179 | 152 | 90 |
| 6 | ------ | 161 | 200 | 160 | 168 | 95 | 21 | ------ | 200 | 199 | 166 | 149 | 114 |
| 7 | ------ | 164 | 199 | 143 | 175 | 90 | 22 | ------ | 198 | 199 | 138 | 142 | 110 |
| 8 | ------ | 174 | 197 | 135 | 134 | 85 | 23 | ------ | 196 | 201 | 129 | 141 | 79 |
| 9 | ------ | 184 | 194 | 118 | 135 | 84 | 24 | ------ | 196 | 202 | 115 | 141 | 63 |
| 10 | ------ | 188 | 189 | 100 | 125 | 86 | 25 | ------ | 199 | 203 | 93 | 112 | 63 |
| 11 | ------ | 192 | 190 | 123 | 121 | 87 | 26 | ------ | 202 | 203 | 89 | 108 | 64 |
| 12 | ------ | 194 | 193 | 149 | 115 | 91 | 27 | ------ | 199 | 200 | 83 | 108 | 63 |
| 13 | 0.05 | 193 | 191 | 152 | 103 | 108 | 28 | 2.0 | 198 | 194 | 110 | 108 | 61 |
| 14 | ------ | 187 | 181 | 138 | 102 | 123 | 29 | ------ | 197 | 208 | 112 | 107 | 61 |
| 15 | ------ | 197 | 173 | 124 | 100 | 136 | 30 | ------ | 193 | 200 | 117 | 108 | ------ |
| | | | | | | | 31 | ------ | 189 | ------ | 133 | 107 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| May | 203 | 68 | 182 | 11,200 |
| June | 208 | 164 | 193 | 11,500 |
| July | 203 | 83 | 146 | 8,980 |
| August | 175 | 100 | 131 | 8,060 |
| September 1–29 | 136 | 61 | 95.5 | 5,490 |
| The period | ------ | ------ | ------ | 45,200 |

### IMNAHA RIVER AT IMNAHA, OREG.

LOCATION.—Staff gage in SW. ¼ sec. 16, T. 1 N., R. 48 E., at Imnaha, an eighth of a mile below mouth of Sheep Creek.

RECORDS AVAILABLE.—June to September, 1928.

EXTREMES.—Maximum discharge during period, 870 second-feet June 25 (gage height, 2.50 feet); minimum, 119 second-feet September 26–28.

REMARKS.—Records fair. Discharge interpolated July 23–31 and August 1–6. Diversions for irrigation above station.

*Daily and monthly discharge, in second-feet, 1928*

| Day | June | July | Aug. | Sept. | Day | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | 565 | | 126 | 16 | | 430 | 159 | 142 |
| 2 | | 542 | | 121 | 17 | | 410 | 159 | 142 |
| 3 | | 542 | | 121 | 18 | | 390 | 154 | 133 |
| 4 | | 520 | 232 | 126 | 19 | | 350 | 154 | 133 |
| 5 | | 520 | | 126 | 20 | | 332 | 147 | 133 |
| 6 | | 520 | | 126 | 21 | | 313 | 142 | 133 |
| 7 | | 498 | 214 | 126 | 22 | 700 | 296 | 142 | 133 |
| 8 | | 498 | 200 | 121 | 23 | | | 145 | 124 |
| 9 | | 498 | 200 | 154 | 24 | | | 145 | 124 |
| 10 | | 475 | 200 | 149 | 25 | 870 | | 145 | 124 |
| 11 | | 410 | 185 | 147 | 26 | | 273 | 135 | 119 |
| 12 | | 410 | 179 | 157 | 27 | | | 140 | 119 |
| 13 | | 642 | 179 | 157 | 28 | | | 149 | 119 |
| 14 | | 520 | 175 | 162 | 29 | | | 140 | 119 |
| 15 | | 475 | 169 | 147 | 30 | 642 | | 135 | 124 |
| | | | | | 31 | | | 140 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| July | 642 | | 407 | 25,000 |
| August | | 135 | 175 | 10,800 |
| September | 162 | 119 | 133 | 7,910 |
| The period | | | | 43,700 |

### 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 Stanley. Elevation of zero of gage is 6,189.24 feet above mean sea level.

DRAINAGE AREA.—535 square miles.

RECORDS AVAILABLE.—July, 1925, to September, 1928.

EXTREMES.—Maximum discharge during year, 4,380 second-feet May 27 (gage height, 4.03 feet); minimum, estimated 250 second-feet December 31 and January 1.

1925–1928: Maximum discharge, 5,020 second-feet June 27, 1927 (gage height, 4.41 feet); minimum, 210 second-feet March 16, 1927 (gage height, 0.70 foot).

REMARKS.—Records excellent except those for estimated periods, December 7 to March 13, March 15 to April 19, April 21 and 22, which are poor. Few small diversions above gage.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 479 | 420 | 487 | 250 | | | | 1,280 | 2,940 | 1,450 | 589 | 371 |
| 2 | 479 | 466 | 479 | | | | | 1,230 | 2,700 | 1,410 | 572 | 360 |
| 3 | 479 | 452 | 459 | 320 | | | | 1,220 | 2,540 | 1,350 | 556 | 342 |
| 4 | 523 | 446 | 390 | | | | | 1,360 | 2,460 | 1,310 | 548 | 337 |
| 5 | 494 | 433 | 414 | | | | | 1,540 | 2,460 | 1,290 | 556 | 337 |
| 6 | 466 | 440 | 426 | | | | | 1,880 | 2,460 | 1,260 | 531 | 331 |
| 7 | 440 | 508 | | | | 280 | | 2,240 | 2,460 | 1,220 | 516 | 331 |
| 8 | 440 | 501 | | | 320 | | 325 | 2,460 | 2,320 | 1,150 | 501 | 325 |
| 9 | 433 | 742 | | | | | | 2,780 | 2,100 | 1,110 | 486 | 325 |
| 10 | 446 | 982 | | | | | | 3,020 | 2,020 | 1,090 | 471 | 325 |
| 11 | 433 | 644 | | | | | | 3,180 | 2,100 | 1,100 | 464 | 325 |
| 12 | 426 | 610 | | | | | | 3,100 | 1,960 | 1,090 | 449 | 325 |
| 13 | 426 | 577 | | | | | | 3,020 | 1,820 | 1,080 | 436 | 337 |
| 14 | 426 | 561 | | | | 295 | | 2,780 | 1,710 | 1,040 | 429 | 337 |
| 15 | 426 | 545 | | | | | | 2,460 | 1,680 | 1,030 | 416 | 337 |
| 16 | 426 | 569 | 380 | | | | | 2,320 | 1,620 | 999 | 416 | 331 |
| 17 | 426 | 586 | | | | 280 | | 2,320 | 1,590 | 933 | 409 | 331 |
| 18 | 414 | 545 | | | | | 350 | 2,460 | 1,470 | 890 | 409 | 325 |
| 19 | 414 | 538 | | 340 | | | | 2,700 | 1,380 | 848 | 403 | 331 |
| 20 | 414 | 652 | | | | | 315 | 2,860 | 1,340 | 806 | 390 | 325 |
| 21 | 407 | 602 | | | | | 310 | 3,100 | 1,340 | 765 | 383 | 320 |
| 22 | 407 | 508 | | | | | | 3,340 | 1,370 | 735 | 390 | 320 |
| 23 | 407 | 446 | | | 280 | | 423 | 3,510 | 1,460 | 715 | 383 | 315 |
| 24 | 401 | 494 | | | | | 493 | 3,680 | 1,540 | 705 | 377 | 315 |
| 25 | 401 | 569 | | | | | 508 | 4,030 | 1,680 | 695 | 383 | 320 |
| 26 | 426 | 594 | | | | 420 | 632 | 4,290 | 1,800 | 686 | 383 | 320 |
| 27 | 545 | 569 | | | | | 868 | 4,380 | 1,830 | 668 | 383 | 320 |
| 28 | 516 | 538 | 325 | | | | 826 | 4,290 | 1,750 | 650 | 377 | 315 |
| 29 | 487 | 508 | | | | | 806 | 4,120 | 1,660 | 650 | 377 | 315 |
| 30 | 466 | 472 | | | | | 933 | 3,680 | 1,520 | 632 | 371 | 320 |
| 31 | 440 | ------ | 250 | | ------ | | ------ | 3,260 | ------ | 614 | 371 | ------ |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 545 | 401 | 436 | 0.834 | 0.96 | 27,400 |
| November | 982 | 420 | 551 | 1.03 | 1.15 | 32,800 |
| December | 487 | ------ | 379 | .708 | .82 | 23,300 |
| January | ------ | ------ | 335 | .626 | .72 | 20,600 |
| February | ------ | ------ | 301 | .563 | .61 | 17,300 |
| March | ------ | ------ | 330 | .617 | .71 | 20,300 |
| April | 933 | ------ | 423 | .791 | .88 | 25,200 |
| May | 4,380 | 1,220 | 2,840 | 5.31 | 6.12 | 175,000 |
| June | 2,940 | 1,340 | 1,900 | 3.55 | 3.96 | 113,000 |
| July | 1,450 | 614 | 967 | 1.81 | 2.09 | 59,500 |
| August | 589 | 371 | 443 | .828 | .95 | 27,200 |
| September | 371 | 315 | 329 | .615 | .69 | 19,600 |
| The year | 4,380 | ------ | 772 | 1.44 | 19.66 | 561,000 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 7,530 second-feet May 26 (gage height, 8.96 feet); minimum, estimated 325 second-feet December 31 and January 1.

1921–1928: Maximum discharge, estimated 8,000 second-feet, June 27, 1927; minimum, 249 second-feet October 30 and 31, 1926, and February 11 and 12, 1927 (gage height, 1.42 feet).

REMARKS.—Records excellent for April, May, June, and September; others good except those for December to February, which are fair. No large diversions above gage. Gage-height record furnished by Love & von Brecht.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 645 | 520 | 691 | a 325 | 447 | 354 | 533 | 2,120 | 4,430 | 1,990 | 815 | 487 |
| 2 | 645 | 623 | 691 | | 463 | 354 | 533 | 2,160 | 4,040 | 1,940 | a 800 | 479 |
| 3 | 645 | 601 | 645 | a 450 | 447 | 351 | 537 | 2,080 | 3,800 | 1,860 | a 784 | 479 |
| 4 | 715 | 601 | 512 | | 451 | 354 | 516 | 2,210 | 3,680 | 1,820 | a 769 | 471 |
| 5 | 645 | 580 | 558 | | 455 | 354 | 524 | 2,590 | 3,560 | 1,740 | a 753 | 459 |
| 6 | 623 | 601 | 601 | 487 | 463 | 369 | 500 | 3,220 | 3,560 | 1,700 | a 738 | 455 |
| 7 | 601 | 691 | 443 | 451 | 416 | 381 | 475 | 3,920 | 3,560 | 1,620 | a 722 | 455 |
| 8 | 601 | 691 | 524 | 455 | 443 | 388 | 471 | 4,560 | 3,330 | 1,540 | a 707 | 455 |
| 9 | 601 | 922 | 580 | 455 | 408 | 385 | 508 | 5,230 | 3,110 | a 1,520 | a 691 | 455 |
| 10 | 601 | 1,260 | 580 | 443 | 423 | 392 | 524 | 5,790 | 3,000 | 1,510 | a 676 | 459 |
| 11 | 580 | 841 | 524 | 435 | 435 | 419 | 483 | 5,930 | 3,000 | a 1,480 | a 660 | 459 |
| 12 | 580 | 815 | 554 | 455 | 423 | 423 | 529 | 5,790 | 2,790 | a 1,460 | 645 | 463 |
| 13 | 580 | 764 | 558 | 550 | 388 | 388 | 524 | 5,370 | 2,690 | a 1,440 | a 634 | 475 |
| 14 | 580 | 739 | 520 | 508 | 423 | 443 | 524 | 4,690 | 2,590 | a 1,410 | a 623 | 475 |
| 15 | 580 | 715 | 520 | 451 | 412 | 416 | 516 | 4,170 | 2,490 | a 1,380 | a 612 | 471 |
| 16 | 580 | 739 | 558 | 419 | 408 | 443 | 537 | 4,040 | 2,400 | 1,360 | a 602 | 463 |
| 17 | 580 | 764 | 483 | 435 | 404 | 443 | 580 | 4,300 | 2,350 | a 1,290 | a 591 | 463 |
| 18 | 558 | 715 | | 459 | 404 | 443 | 558 | 4,690 | 2,210 | a 1,220 | a 580 | 459 |
| 19 | 558 | 691 | | 467 | 408 | 451 | 541 | 5,230 | 2,080 | a 1,160 | a 569 | 459 |
| 20 | 550 | 841 | | 483 | 404 | a 550 | 545 | 5,510 | 2,030 | a 1,090 | 558 | a 456 |
| 21 | 550 | 815 | | 487 | 392 | | 520 | 5,930 | 1,990 | a 1,020 | 541 | a 452 |
| 22 | 545 | 645 | | 471 | 381 | 623 | 554 | 6,500 | 2,030 | 950 | 537 | a 449 |
| 23 | 541 | 580 | | 475 | 373 | 645 | 645 | 6,650 | 2,120 | a 936 | 537 | a 446 |
| 24 | 537 | 691 | a 450 | 471 | 366 | 645 | 815 | 6,800 | 2,210 | a 923 | 537 | a 442 |
| 25 | 537 | 764 | | 467 | 354 | 601 | 922 | 6,940 | 2,350 | a 910 | 545 | 439 |
| 26 | 580 | 815 | | 463 | 354 | 550 | 1,260 | 7,230 | 2,440 | a 896 | 537 | 443 |
| 27 | 691 | 764 | | 439 | 354 | 601 | 1,620 | 7,230 | 2,440 | a 882 | 545 | 439 |
| 28 | 691 | 739 | | 447 | 354 | 580 | 1,740 | 6,940 | 2,350 | a 869 | 537 | 439 |
| 29 | 645 | 691 | | 463 | 354 | 554 | 1,540 | 6,360 | 2,260 | a 856 | 520 | 431 |
| 30 | 623 | 623 | | 471 | ------ | 554 | 1,580 | 5,650 | 2,120 | a 842 | 504 | 439 |
| 31 | 554 | ------ | a 325 | 455 | ------ | 545 | ------ | 4,960 | ------ | a 828 | 496 | ------ |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 715 | 537 | 598 | 0.711 | 0.82 | 36,800 |
| November | 1,260 | 520 | 728 | .866 | .97 | 43,300 |
| December | 691 | ---------- | 507 | .603 | .70 | 31,200 |
| January | 550 | ---------- | 458 | .545 | .63 | 28,200 |
| February | 463 | 354 | 407 | .484 | .52 | 23,400 |
| March | 645 | 351 | 469 | .558 | .64 | 28,800 |
| April | 1,740 | 471 | 722 | .859 | .96 | 43,000 |
| May | 7,230 | 2,080 | 4,990 | 5.93 | 6.84 | 307,000 |
| June | 4,430 | 1,990 | 2,770 | 3.29 | 3.67 | 165,000 |
| July | 1,990 | 828 | 1,300 | 1.55 | 1.79 | 79,900 |
| August | 815 | 496 | 625 | .743 | .86 | 38,400 |
| September | 487 | 431 | 457 | .543 | .61 | 27,200 |
| The year | 7,230 | ---------- | 1,170 | 1.39 | 19.01 | 852,000 |

a Estimated or interpolated.

### 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, 1928.

EXTREMES.—Maximum discharge during year, 11,800 second-feet May 27 (gage height, 8.40 feet); minimum, estimated, 900 second-feet December 31 and January 1.

1912–1916, 1919–1928: Maximum discharge, 16,400 second-feet June 12, 1921 (gage height, 9.35 feet); minimum, 595 second-feet August 17–19, 25–31, September 1–5, December 18, 1924, and August 4–7, 1926; minimum gage height, 1.78 feet September 4, 1924.

REMARKS.—Records fair except those for estimated periods, which are poor. Numerous diversions above station.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,420 | 1,280 | 1,370 | e 900 | | e 925 | 1,230 | 2,590 | 7,250 | 3,160 | 1,470 | 945 |
| 2 | e 1,440 | 1,230 | 1,420 | | | 908 | 1,140 | 4,070 | 6,810 | 3,160 | 1,470 | 945 |
| 3 | e 1,450 | 1,230 | 1,420 | e 1,150 | | 908 | 1,100 | 3,300 | 6,170 | 3,010 | 1,470 | 945 |
| 4 | 1,470 | 1,370 | 1,570 | | | | 1,140 | 3,300 | 5,150 | 3,010 | 1,470 | 945 |
| 5 | 1,470 | 1,320 | 1,230 | | | | 1,140 | 3,160 | 5,350 | 2,870 | 1,470 | 908 |
| 6 | 1,420 | e 1,340 | 1,280 | | | | 1,100 | 3,300 | 5,150 | 2,870 | 1,420 | 908 |
| 7 | 1,420 | 1,370 | 1,230 | | | | 1,100 | e 4,940 | 5,150 | 2,730 | 1,370 | 908 |
| 8 | 1,420 | 1,420 | 1,180 | | | e 1,000 | 1,100 | 6,590 | 5,150 | 2,590 | 1,280 | 908 |
| 9 | 1,420 | 1,470 | 1,180 | | | | 1,140 | 7,470 | 4,770 | 2,450 | 1,230 | e 926 |
| 10 | 1,370 | 1,680 | 1,230 | | | | 1,100 | 8,380 | 4,770 | 2,320 | 1,230 | 945 |
| 11 | 1,420 | 1,920 | 1,140 | | | | 1,100 | 8,840 | 4,590 | 2,320 | 1,180 | e 926 |
| 12 | 1,370 | 1,680 | 1,180 | | | | 1,060 | 9,070 | 4,590 | 2,320 | 1,140 | 908 |
| 13 | 1,370 | e 1,680 | | | 1,000 | | 1,100 | 8,610 | e 4,500 | 2,320 | e 1,120 | 982 |
| 14 | 1,370 | 1,470 | | | | 1,060 | 1,100 | 7,920 | 4,410 | 2,320 | 1,100 | 1,020 |
| 15 | e 1,340 | 1,420 | | | | 1,100 | 1,100 | 6,590 | 3,750 | 2,040 | 1,060 | 982 |
| 16 | 1,320 | 1,420 | | | | 1,140 | 1,060 | 6,170 | 3,750 | 2,040 | 1,060 | 945 |
| 17 | 1,320 | 1,370 | | | | 1,180 | 1,100 | 6,170 | 3,750 | 2,040 | 1,020 | 945 |
| 18 | 1,280 | 1,420 | | e 1,200 | | 1,230 | 1,140 | 6,810 | 3,600 | 2,040 | 1,020 | 945 |
| 19 | 1,320 | 1,470 | | | | 1,230 | 1,140 | 7,470 | 3,450 | 1,920 | 1,020 | 945 |
| 20 | 1,280 | 1,470 | | | | 1,320 | 1,100 | 8,150 | 3,300 | 1,790 | e 1,000 | 945 |
| 21 | 1,180 | 1,570 | e 1,100 | | | 1,420 | 1,140 | 8,840 | 3,160 | 1,680 | 982 | 945 |
| 22 | 1,280 | 1,570 | | | | 1,570 | 1,140 | 9,790 | e 3,210 | 1,680 | 982 | 945 |
| 23 | 1,280 | 1,420 | | | | 1,570 | 1,230 | 10,300 | e 3,250 | 1,680 | 1,020 | e 926 |
| 24 | 1,280 | e 1,440 | | | | 1,570 | 1,320 | 10,500 | 3,300 | 1,570 | 982 | 908 |
| 25 | 1,230 | 1,470 | | | 908 | 1,420 | 1,420 | 10,800 | 3,450 | 1,570 | 1,020 | 908 |
| 26 | 1,280 | 1,570 | | | | 1,320 | 1,570 | 11,300 | 3,600 | 1,570 | 982 | 908 |
| 27 | 1,320 | 1,570 | | | | 1,230 | 2,040 | 11,800 | 3,750 | 1,570 | 1,060 | 908 |
| 28 | 1,370 | 1,570 | | | | 1,230 | 2,180 | 11,600 | 3,750 | 1,570 | 1,020 | 945 |
| 29 | 1,370 | 1,570 | | | | 1,230 | e 2,320 | 10,300 | 3,600 | 1,570 | 1,020 | 908 |
| 30 | e 1,370 | 1,470 | | | | 1,230 | 2,450 | 9,790 | 3,450 | 1,570 | 982 | 945 |
| 31 | 1,370 | | e 900 | | | 1,230 | | 9,070 | | 1,570 | 945 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 1,470 | 1,180 | 1,360 | 83,600 |
| November | 1,920 | 1,230 | 1,470 | 87,500 |
| December | 1,570 | | 1,170 | 71,900 |
| January | | | 1,180 | 72,600 |
| February | | | 986 | 56,700 |
| March | 1,570 | | 1,160 | 71,300 |
| April | 2,450 | 1,060 | 1,300 | 77,400 |
| May | 11,800 | 2,590 | 7,640 | 470,000 |
| June | 7,250 | 3,160 | 4,330 | 258,000 |
| July | 3,160 | 1,570 | 2,160 | 133,000 |
| August | 1,470 | 945 | 1,150 | 70,700 |
| September | 1,020 | 908 | 936 | 55,700 |
| The year | 11,800 | | 2,080 | 1,510,000 |

e Estimated or interpolated.

### SALMON RIVER AT WHITEBIRD, IDAHO

LOCATION.—Chain gage in sec. 22, T. 28 N., R. 1 E., at highway bridge just above Whitebird Creek and 1 mile southwest of Whitebird.

DRAINAGE AREA.—13,600 square miles.

RECORDS AVAILABLE.—August, 1910, to September, 1917; October, 1919, to September, 1928.

EXTREMES.—Maximum discharge during year probably occurred May 26 during period of no record; minimum, 3,900 second-feet September 5 and 7–9.

1910–1917, 1919–1928: Maximum discharge, 88,800 second-feet June 9, 1921 (gage height, 21.2 feet); minimum, 2,150 second-feet January 1, 1926 (gage height, 0.94 foot).

Maximum known stage, 27.5 feet June, 1894 (discharge, about 120,000 second-feet).

REMARKS.—Records good except those for estimated periods, which are fair. Very little water diverted for irrigation above station.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6,730 | 5,510 | 9,440 | 4,760 | 5,510 | 4,400 | 8,460 | 24,900 | 51,300 | 18,500 | 5,910 | 4,230 |
| 2 | 6,730 | 5,510 | 8,940 | 4,760 | 5,320 | 4,400 | 8,460 | 25,300 | 47,100 | 18,100 | [e]5,810 | 4,060 |
| 3 | 6,730 | 5,710 | 8,940 | 4,760 | 4,940 | 4,400 | 8,460 | 25,300 | 47,100 | 17,400 | [e]5,710 | 4,060 |
| 4 | 6,730 | 5,910 | 8,940 | 4,760 | 4,940 | 4,230 | 8,700 | 25,700 | 45,100 | | [e]5,610 | 4,060 |
| 5 | 6,520 | 5,910 | 8,700 | 6,520 | 4,940 | 4,230 | 8,460 | [e]25,700 | 43,100 | | 5,510 | 3,900 |
| 6 | 6,310 | 7,360 | 8,700 | 6,940 | 4,760 | 4,230 | 8,460 | 26,200 | 42,100 | [e]14,500 | 5,510 | 4,060 |
| 7 | 6,310 | 7,360 | 8,460 | 6,520 | 4,760 | 4,230 | 8,460 | 27,500 | 40,100 | | 5,510 | 3,900 |
| 8 | 6,110 | 7,360 | 8,460 | 6,730 | 4,580 | 4,400 | 8,460 | 32,900 | 35,300 | | 5,510 | 3,900 |
| 9 | 6,110 | 7,580 | 8,240 | 6,730 | 4,580 | 4,400 | 8,460 | 39,600 | 31,100 | | 5,510 | 3,900 |
| 10 | 6,110 | 7,580 | 8,020 | 6,730 | 4,580 | 4,400 | 8,240 | 50,800 | 31,600 | 11,300 | 5,510 | 4,060 |
| 11 | 5,910 | 9,700 | 6,940 | 6,730 | 4,400 | 4,400 | 8,240 | 57,300 | [e]31,600 | 11,300 | 5,510 | 4,230 |
| 12 | 5,910 | 9,960 | 6,730 | 6,940 | 4,400 | 4,400 | 8,240 | 63,000 | 31,600 | 11,100 | 5,130 | 4,400 |
| 13 | 6,110 | 9,960 | 6,730 | 6,310 | 4,400 | 4,580 | 8,240 | 59,500 | 30,600 | 11,100 | 4,940 | 4,400 |
| 14 | 5,910 | 7,150 | 6,730 | 7,150 | 4,230 | 4,580 | 8,240 | 51,300 | 30,600 | 11,100 | [e]4,830 | 4,580 |
| 15 | 6,110 | 8,020 | 6,520 | 7,360 | 4,230 | 4,760 | 6,940 | 50,300 | 30,200 | 10,500 | [e]4,720 | 4,580 |
| 16 | 6,110 | 8,020 | 6,110 | 6,940 | 4,230 | 4,760 | 6,940 | 49,200 | 30,200 | 10,200 | [e]4,620 | 4,400 |
| 17 | 5,910 | 8,020 | 5,910 | 6,940 | 4,060 | 4,760 | 6,940 | 50,300 | 29,700 | 10,200 | [e]4,510 | 4,230 |
| 18 | 5,910 | 8,020 | 4,940 | 6,940 | 4,230 | [e]5,560 | 6,940 | 51,800 | 28,800 | 9,960 | 4,400 | 4,060 |
| 19 | 5,910 | 8,020 | 4,940 | 6,940 | 4,230 | [e]6,350 | 7,150 | 59,000 | 28,400 | 9,960 | 4,400 | 4,230 |
| 20 | 5,910 | 8,020 | 4,760 | 6,730 | 4,230 | 7,150 | 7,360 | 59,500 | 27,000 | 8,940 | 4,400 | 4,230 |
| 21 | 5,910 | 8,240 | 4,760 | 6,730 | 4,060 | 8,940 | 7,360 | 70,100 | | 8,700 | 4,230 | 4,400 |
| 22 | 5,910 | 8,240 | 4,760 | 6,730 | 4,060 | 9,440 | 7,800 | 74,400 | | [e]8,580 | 4,230 | 4,230 |
| 23 | 5,910 | 8,020 | 4,760 | 6,520 | 4,230 | 10,200 | 9,440 | 81,600 | | 8,460 | 4,060 | 4,060 |
| 24 | 5,910 | 8,240 | 4,760 | 6,520 | 4,230 | 11,100 | 12,500 | | [e]22,500 | 8,460 | 4,060 | 4,060 |
| 25 | 5,910 | 8,240 | 4,760 | 6,520 | 4,230 | 12,200 | 15,000 | [e]81,000 | | 8,240 | 4,230 | 3,900 |
| 26 | 5,910 | 8,240 | 4,760 | 6,310 | 4,230 | 11,600 | 17,000 | | | 8,020 | 4,230 | 3,900 |
| 27 | 5,910 | 9,440 | 4,580 | 6,310 | 4,230 | 11,600 | 20,400 | 80,900 | 20,400 | 8,020 | 4,060 | 3,900 |
| 28 | 5,910 | 9,960 | 4,760 | 6,110 | 4,230 | 11,600 | 26,200 | 80,900 | 20,400 | 7,800 | 4,060 | 3,900 |
| 29 | 5,910 | 9,180 | 4,760 | 6,110 | 4,230 | 11,600 | 27,000 | 72,600 | 19,600 | 7,360 | 4,230 | 3,900 |
| 30 | 5,910 | 9,440 | 4,760 | 6,110 | | 8,700 | 27,900 | 59,000 | 18,900 | 6,310 | 4,230 | 3,900 |
| 31 | 5,910 | | 4,760 | 5,910 | | 8,940 | | 53,500 | | 5,910 | 4,060 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 6,730 | 5,910 | 6,100 | 375,000 |
| November | 9,960 | 5,510 | 7,930 | 472,000 |
| December | 9,440 | 4,580 | 6,430 | 395,000 |
| January | 7,360 | 4,760 | 6,390 | 393,000 |
| February | 5,510 | 4,060 | 4,460 | 257,000 |
| March | 12,200 | 4,230 | 6,790 | 418,000 |
| April | 27,900 | 6,940 | 11,000 | 655,000 |
| May | | 24,900 | 53,900 | 3,310,000 |
| June | 51,300 | 18,900 | 30,900 | 1,840,000 |
| July | 18,500 | 5,910 | 11,000 | 676,000 |
| August | 5,910 | 4,060 | 4,810 | 296,000 |
| September | 4,580 | 3,900 | 4,120 | 245,000 |
| The year | | 3,900 | 12,900 | 9,330,000 |

[e] Estimated or interpolated.

### 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-eighths of a mile above old Stanley post office.

DRAINAGE AREA.—176 square miles.

RECORDS AVAILABLE.—December, 1910, to October, 1913; May, 1921, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,300 second-feet May 10 and 27 (gage height, 3.5 feet); minimum, 61 second-feet March 18 (gage height, 1.02 feet).

1910–1913, 1921–1928: Maximum discharge, 1,850 second-feet May 29, 1921 (gage height, 4.4 feet); minimum, 41 second-feet September 7, 1924 (gage height, 0.84 foot).

REMARKS.—Records good except those for estimated periods, which are fair. Few diversions for irrigation above station.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | e 135 | 122 | e 170 | | e 97 | e 80 | | 553 | e 902 | 396 | 156 | e 92 |
| 2 | 131 | e 125 | e 155 | | 97 | e 80 | e 80 | 553 | e 864 | e 396 | e 156 | 89 |
| 3 | e 130 | e 125 | 140 | e 80 | e 97 | e 79 | 65 | 580 | e 826 | 396 | e 156 | e 88 |
| 4 | e 150 | 122 | | | e 97 | e 79 | | 720 | e 788 | e 384 | 156 | 86 |
| 5 | e 140 | | | | e 97 | 79 | | 908 | 750 | e 372 | e 148 | e 86 |
| 6 | 126 | e 140 | | | 97 | e 80 | e 65 | 1,010 | e 735 | 360 | e 141 | e 86 |
| 7 | 113 | | e 130 | e 105 | | e 82 | | 1,220 | 720 | 350 | 133 | e 87 |
| 8 | e 113 | 151 | | | | e 83 | | 1,220 | e 696 | 350 | e 131 | e 87 |
| 9 | e 114 | e 240 | | | | e 85 | 68 | 1,220 | e 672 | e 353 | e 128 | 87 |
| 10 | e 115 | 329 | | 107 | e 95 | 86 | | 1,300 | e 647 | e 357 | 126 | e 90 |
| 11 | 115 | | 124 | | | e 88 | e 70 | 1,150 | e 623 | 360 | e 124 | e 92 |
| 12 | e 114 | | | e 125 | | e 90 | | 1,010 | e 599 | e 356 | e 121 | 95 |
| 13 | 113 | e 200 | | | | e 91 | 72 | 1,080 | e 574 | e 353 | 119 | e 92 |
| 14 | e 112 | | | | 93 | 93 | | 842 | e 550 | e 350 | e 116 | 89 |
| 15 | e 112 | | | 109 | | | | 780 | 526 | 346 | e 114 | e 88 |
| 16 | 111 | 181 | | | e 90 | e 80 | e 100 | 780 | e 500 | e 323 | e 112 | e 88 |
| 17 | e 110 | e 190 | | | | | | 810 | 473 | e 300 | 109 | e 87 |
| 18 | e 110 | 151 | | | | 61 | | e 842 | e 460 | e 278 | 107 | 86 |
| 19 | 109 | e 145 | | | 86 | | | 875 | 447 | e 256 | e 105 | e 86 |
| 20 | e 108 | e 240 | | | | e 85 | 107 | 940 | e 434 | e 233 | e 103 | e 86 |
| 21 | e 107 | e 200 | e 100 | | e 83 | | e 117 | 1,010 | 421 | 210 | 101 | e 86 |
| 22 | e 106 | e 175 | | | | 107 | e 126 | 1,080 | e 434 | e 206 | e 103 | e 86 |
| 23 | 105 | 128 | | | | e 106 | 136 | 1,150 | e 447 | e 202 | e 105 | e 86 |
| 24 | | e 157 | | e 95 | 80 | e 106 | 153 | e 1,180 | e 460 | e 199 | 107 | 86 |
| 25 | e 105 | e 185 | | | e 81 | 105 | 195 | 1,220 | 473 | 195 | e 107 | e 87 |
| 26 | | 214 | | | e 81 | e 105 | 254 | e 1,260 | | e 190 | 107 | e 88 |
| 27 | | e 200 | | | 82 | e 105 | 336 | 1,300 | e 190 | 185 | e 104 | 89 |
| 28 | | e 190 | | | e 81 | 105 | 321 | e 1,210 | | e 180 | e 102 | |
| 29 | 145 | e 180 | | | 80 | | 321 | e 1,120 | 421 | e 174 | e 99 | e 85 |
| 30 | | e 160 | | | | e 95 | e 437 | e 1,030 | e 408 | 169 | e 97 | |
| 31 | | | | | | | | 940 | | e 162 | e 94 | |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | | | 121 | 0.688 | 0.79 | 7,440 |
| November | | | 178 | 1.01 | 1.13 | 10,600 |
| December | | | 113 | .642 | .74 | 6,950 |
| January | | | 99.4 | .565 | .65 | 6,110 |
| February | | | 89.8 | .510 | .55 | 5,170 |
| March | 107 | | 88.9 | .505 | .58 | 5,470 |
| April | 437 | | 133 | .756 | .84 | 7,910 |
| May | 1,300 | 553 | 997 | 5.66 | 6.52 | 61,300 |
| June | 902 | 408 | 577 | 3.28 | 3.66 | 34,300 |
| July | 396 | 162 | 288 | 1.64 | 1.89 | 17,700 |
| August | 156 | 94 | 119 | .676 | .78 | 7,320 |
| September | 95 | | 87.7 | .498 | .56 | 5,220 |
| The year | 1,300 | | 242 | 1.38 | 18.69 | 175,000 |

e Estimated or interpolated.

### 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 by river west of Clayton.
DRAINAGE AREA.—195 square miles.
RECORDS AVAILABLE.—May, 1921, to September, 1928.
EXTREMES.—Maximum discharge during year, 2,520 second-feet May 27 (gage height, 6.15 feet); minimum, estimated, 10 second-feet December 5 and 6. 1921–1928: Maximum discharge, 3,360 second-feet June 12, 1921 (gage height, 6.79 feet); minimum, that of December 5 and 6, 1927.
REMARKS.—Records good except those for estimated periods, which are poor. No diversions. Gage-height record furnished by Love & von Brecht.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 81 | 37 | 93 | | | | 93 | 375 | 1,050 | 280 | 111 | 74 |
| 2 | 81 | 81 | 75 | | | | 93 | 445 | 986 | 280 | 111 | 71 |
| 3 | 87 | a 76 | 75 | a 50 | | a 40 | 93 | 504 | 921 | 258 | 117 | 71 |
| 4 | 99 | 70 | 14 | | | | 105 | 526 | 859 | a 248 | 111 | 69 |
| 5 | 81 | 70 | a 10 | | | | 93 | 547 | 800 | 238 | 111 | 67 |
| 6 | 75 | 70 | | | | | 99 | 859 | 800 | 220 | 111 | a 67 |
| 7 | 75 | 87 | | | | | 105 | 1,200 | 744 | 220 | 99 | a 67 |
| 8 | 75 | 75 | | | a 50 | | 105 | 1,600 | 744 | 212 | 93 | 67 |
| 9 | 75 | 99 | | | | | 105 | 2,040 | 641 | 203 | 93 | 69 |
| 10 | 75 | 99 | | | | | 88 | a 2,000 | 617 | 203 | 93 | a 68 |
| 11 | 75 | 70 | | | | | 48 | 1,960 | 593 | 187 | 93 | 67 |
| 12 | 75 | 87 | a 65 | | | | 82 | 1,860 | 570 | 180 | 88 | 71 |
| 13 | 70 | 87 | | | | a 50 | 80 | 1,600 | a 537 | 180 | 88 | 75 |
| 14 | 75 | 81 | | | | | 81 | 1,440 | 504 | 172 | 88 | 72 |
| 15 | 70 | 81 | | | | | a 84 | 1,050 | 504 | 172 | 82 | 70 |
| 16 | 70 | 81 | | | | | a 86 | 1,120 | 464 | 164 | 82 | 67 |
| 17 | 70 | 81 | | | | | 88 | 1,280 | 359 | 157 | a 82 | 69 |
| 18 | 70 | 75 | | | | | 88 | a 1,510 | 344 | 150 | a 82 | 69 |
| 19 | 70 | 75 | | a 55 | | | 65 | a 1,730 | 330 | 143 | 82 | 65 |
| 20 | a 66 | 99 | | | | 93 | 78 | 1,960 | 330 | 136 | 82 | a 64 |
| 21 | 62 | 81 | | | | 136 | 75 | 2,040 | 304 | 136 | 81 | 63 |
| 22 | 62 | 26 | | | | 220 | 82 | 2,230 | 304 | 130 | 80 | 63 |
| 23 | 75 | 42 | | | a 40 | 143 | 93 | 2,140 | 304 | a 130 | 81 | 63 |
| 24 | 75 | 99 | | | | 150 | 143 | 2,230 | 280 | 130 | 75 | 64 |
| 25 | 75 | 99 | a 50 | | | 164 | 220 | 2,420 | 292 | 130 | 82 | 62 |
| 26 | 70 | 87 | | | | 143 | 391 | 2,320 | 304 | 130 | 82 | 61 |
| 27 | 99 | 81 | | | | a 124 | 547 | 2,520 | 292 | 130 | 81 | 63 |
| 28 | 81 | 81 | | | | 105 | 526 | 2,140 | 280 | 124 | 82 | 61 |
| 29 | 75 | 70 | | | | 99 | 408 | 1,860 | 280 | 117 | a 82 | 61 |
| 30 | 75 | 75 | | | | 93 | 375 | 1,520 | 280 | 117 | 81 | 71 |
| 31 | 59 | ------ | | | | 93 | ------ | 1,280 | ------ | 117 | 75 | ------ |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 99 | 59 | 74.9 | 0.384 | 0.44 | 4,610 |
| November | 99 | 26 | 77.4 | .397 | .44 | 4,610 |
| December | 93 | ------ | 54.6 | .280 | .32 | 3,360 |
| January | ------ | ------ | 54.2 | .278 | .32 | 3,330 |
| February | ------ | ------ | 45.2 | .232 | .25 | 2,600 |
| March | 220 | ------ | 79.5 | .408 | .47 | 4,890 |
| April | 547 | 48 | 154 | .790 | .88 | 9,160 |
| May | 2,520 | 375 | 1,560 | 8.00 | 9.22 | 95,900 |
| June | 1,050 | 280 | 521 | 2.67 | 2.98 | 31,000 |
| July | 280 | 117 | 174 | .892 | 1.03 | 10,700 |
| August | 177 | 75 | 89.7 | .460 | .53 | 5,520 |
| September | 75 | 61 | 67.0 | .344 | .38 | 3,990 |
| The year | 2,520 | ------ | 247 | 1.27 | 17.26 | 180,000 |

a Estimated or interpolated.

### 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, 1928.

EXTREMES.—Maximum discharge during year, 184 second-feet May 26 (gage height, 1.86 feet); minimum, 4.9 second-feet April 7 and 8 (gage height, 0.46 foot).

1926–1928: Maximum discharge, 206 second-feet June 26, 1927 (gage height, 2.04 feet); minimum, that of April 7 and 8, 1928.

REMARKS.—Records are fair except those for estimated period, December 9 to March 2, which are poor. Livingston Mines Corporation diverts water for power three-quarters of a mile upstream but returns it to creek above station. Gage-height record furnished by Livingston Mines Corporation.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15 | 7 | 13 | | | 8 | 8 | 17 | 72 | 50 | 39 | 19 |
| 2 | 15 | 9 | 17 | | | | 8 | 18 | 70 | 60 | 37 | 19 |
| 3 | 15 | 9 | 9 | | | 8 | 8 | 17 | 67 | 60 | 35 | 19 |
| 4 | 9 | 9 | 7 | | | 7 | 8 | 18 | 67 | 64 | 36 | 19 |
| 5 | 9 | 9 | 5 | | | 7 | 8 | 24 | 76 | 70 | 36 | 19 |
| 6 | 8 | 9 | 5 | | | 7 | 9 | 28 | 74 | 67 | 33 | 18 |
| 7 | 5 | 9 | 5 | | | 7 | 8 | 42 | 70 | 63 | 29 | 18 |
| 8 | 5 | 11 | 7 | | | 7 | 8 | 51 | 66 | 64 | 29 | 18 |
| 9 | 7 | 11 | | | | 7 | 7 | 55 | 69 | 66 | 29 | 18 |
| 10 | 7 | 11 | | | | 7 | 6 | 53 | 69 | 67 | 29 | 17 |
| 11 | 7 | 11 | | | | 8 | 7 | 72 | 67 | 70 | 29 | 18 |
| 12 | 11 | 11 | | | | 7 | 8 | 73 | 56 | 72 | 29 | 18 |
| 13 | 11 | 11 | | | | 7 | 8 | 53 | 55 | 70 | 29 | 18 |
| 14 | 11 | 11 | | | | 7 | 8 | 41 | 52 | 73 | 29 | 18 |
| 15 | 11 | 11 | 8 | | 7 | 7 | 8 | 41 | 47 | 70 | 27 | 18 |
| 16 | 11 | 10 | | 8 | | 7 | 9 | 46 | 43 | 63 | 27 | 16 |
| 17 | 10 | 9 | | | | 6 | 10 | 44 | 42 | 63 | 25 | 15 |
| 18 | 10 | 10 | | | | 7 | 8 | 62 | 39 | 59 | 25 | 15 |
| 19 | 11 | 11 | | | | 9 | 8 | 76 | 38 | 53 | 25 | 15 |
| 20 | 9 | 9 | | | | 12 | 8 | 82 | 37 | 48 | 24 | 15 |
| 21 | 11 | 9 | | | | 12 | 8 | 103 | 41 | 44 | 23 | 15 |
| 22 | 9 | 7 | | | | 12 | 8 | 98 | 43 | 43 | 23 | 15 |
| 23 | 9 | 7 | | | | 12 | 10 | 93 | 63 | 44 | 23 | 15 |
| 24 | 10 | 9 | | | | 10 | 10 | 110 | 80 | 44 | 23 | 14 |
| 25 | 11 | 9 | | | | 12 | 12 | 136 | 93 | 46 | 23 | 14 |
| 26 | 12 | 10 | 9 | | | 12 | 12 | 165 | 95 | 43 | 22 | 14 |
| 27 | 16 | 10 | | | | 10 | 14 | 147 | 90 | 48 | 20 | 14 |
| 28 | 15 | 9 | | | | 10 | 12 | 125 | 90 | 46 | 22 | 14 |
| 29 | 11 | 9 | | | | 8 | 19 | 129 | 73 | 43 | 20 | 14 |
| 30 | 8 | 9 | | | ------- | 8 | 18 | 95 | 60 | 42 | 20 | 14 |
| 31 | 5 | ------- | | | ------- | 8 | ------- | 78 | ------- | 41 | 20 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 16 | 5 | 10.1 | 621 |
| November | 11 | 7 | 9.5 | 570 |
| December | 17 | ---------- | 8.5 | 520 |
| January | ---------- | ---------- | 8.0 | 490 |
| February | ---------- | ---------- | 7.0 | 400 |
| March | 12 | 6 | 8.5 | 520 |
| April | 19 | 6 | 9.4 | 560 |
| May | 165 | 17 | 70.7 | 4,350 |
| June | 95 | 37 | 63.5 | 3,780 |
| July | 73 | 41 | 56.6 | 3,480 |
| August | 39 | 20 | 27.1 | 1,670 |
| September | 19 | 14 | 16.4 | 976 |
| The year | 165 | 5 | 24.7 | 17,900 |

### BEAR VALLEY CREEK NEAR CAPE HORN, IDAHO

LOCATION.—Water-stage recorder 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, 1928.

EXTREMES.—Maximum discharge during year, 3,120 second-feet May 26 (gage height, 5.3 feet); minimum, 94 second-feet September 6–8 (gage height, 1.31 feet).

1921–1928: Maximum discharge, that of May 26, 1928; minimum, 44 second-feet August 1, 2, 5, and 6, 1926 (gage height, 1.03 feet).

REMARKS.—Records excellent below 1,800 second-feet; good above. No diversions.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|
| 1 | 214 | 131 | ------- | 1,710 | 438 | 150 | 101 |
| 2 | 203 | 153 | ------- | 1,570 | 427 | 150 | 99 |
| 3 | 211 | 158 | ------- | 1,520 | 417 | 147 | 99 |
| 4 | 275 | 164 | ------- | 1,400 | 391 | 153 | 97 |
| 5 | 218 | ------- | ------- | 1,350 | 407 | 173 | 97 |
| 6 | 186 | ------- | ------- | 1,310 | 338 | 161 | 94 |
| 7 | 170 | ------- | ------- | 1,270 | 319 | 150 | 94 |
| 8 | 164 | ------- | ------- | 1,140 | 301 | 141 | 94 |
| 9 | 161 | ------- | 1,800 | 1,060 | 296 | 136 | 97 |
| 10 | 161 | ------- | 2,000 | 990 | 279 | 131 | 101 |
| 11 | 161 | ------- | 2,140 | 990 | 266 | 128 | 101 |
| 12 | 156 | ------- | 2,140 | 945 | 254 | 125 | 108 |
| 13 | 153 | ------- | 2,100 | 901 | 249 | 123 | 120 |
| 14 | 153 | ------- | 2,040 | 845 | 237 | 120 | 123 |
| 15 | 153 | ------- | 1,900 | 832 | 233 | 118 | 118 |
| 16 | 150 | ------- | 1,940 | 767 | 230 | 118 | 108 |
| 17 | 147 | ------- | 2,040 | 754 | 222 | 115 | 106 |
| 18 | 144 | ------- | 2,240 | 691 | 214 | 110 | 104 |
| 19 | 141 | ------- | 2,350 | 655 | 207 | 110 | 101 |
| 20 | 138 | ------- | 2,400 | 667 | 203 | 109 | 101 |
| 21 | 136 | ------- | 2,510 | 649 | 196 | 108 | 101 |
| 22 | 133 | ------- | 2,670 | 631 | 190 | 108 | 99 |
| 23 | 133 | ------- | 2,510 | 589 | 186 | 110 | 99 |
| 24 | 131 | ------- | 2,670 | 572 | 180 | 113 | 99 |
| 25 | 133 | ------- | 2,780 | 560 | 173 | 115 | 97 |
| 26 | 186 | ------- | 2,890 | 537 | 170 | 110 | 97 |
| 27 | 193 | ------- | 2,840 | 509 | 167 | 108 | 99 |
| 28 | 186 | ------- | 2,670 | 476 | 161 | 108 | 101 |
| 29 | 173 | ------- | 2,460 | 454 | 161 | 108 | 101 |
| 30 | 164 | ------- | 2,200 | 438 | 156 | 106 | 101 |
| 31 | 144 | ------- | 1,850 | ------- | 153 | 104 | ------- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 275 | 131 | 167 | 0.928 | 1.07 | 10,300 |
| May 9–31 | 2,890 | 1,800 | 2,310 | 12.8 | 10.95 | 105,000 |
| June | 1,710 | 438 | 893 | 4.96 | 5.53 | 53,100 |
| July | 438 | 153 | 252 | 1.40 | 1.61 | 15,500 |
| August | 173 | 104 | 125 | .694 | .80 | 7,690 |
| September | 123 | 94 | 102 | .567 | .63 | 6,070 |

### EAST FORK OF SOUTH FORK OF SALMON RIVER AT STIBNITE, IDAHO

LOCATION.—Staff gage 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 to September, 1928.

EXTREMES.—Maximum discharge during period, 85 second-feet June 15 (gage height, 1.72 feet); minimum, 9.3 second-feet September 20–29 (gage height 0.68 foot).

REMARKS.—Records good. Discharge estimated June 17–23. No diversions. Gage-height record furnished by Yellow Pine Co.

*Daily and monthly discharge, in second-feet, 1928*

| Day | June | July | Aug. | Sept. | Day | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | 57 | 16 | 11 | 16 | 82 | 26 | 13 | 11 |
| 2 | | 54 | 16 | 11 | 17 | 81 | 25 | 13 | 10 |
| 3 | | 49 | 16 | 11 | 18 | 80 | 25 | 12 | 10 |
| 4 | | 47 | 17 | 10 | 19 | 78 | 24 | 12 | 10 |
| 5 | | 44 | 16 | 10 | 20 | 77 | 22 | 12 | 9.5 |
| 6 | | 44 | 16 | 10 | 21 | 76 | 22 | 12 | 9.5 |
| 7 | | 42 | 15 | 10 | 22 | 74 | 21 | 12 | 9.5 |
| 8 | | 40 | 15 | 10 | 23 | 73 | 20 | 12 | 9.5 |
| 9 | | 37 | 15 | 10 | 24 | 72 | 20 | 12 | 9.5 |
| 10 | | 33 | 14 | 10 | 25 | 72 | 19 | 12 | 9.5 |
| 11 | | 32 | 14 | 10 | 26 | 68 | 19 | 12 | 9.5 |
| 12 | | 32 | 14 | 10 | 27 | 67 | 18 | 12 | 9.5 |
| 13 | | 31 | 13 | 11 | 28 | 63 | 18 | 12 | 9.5 |
| 14 | | 28 | 13 | 11 | 29 | 62 | 18 | 12 | 9.5 |
| 15 | 85 | 26 | 13 | 10 | 30 | 57 | 17 | 12 | 10 |
| | | | | | 31 | | 16 | 11 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| June 15–30 | 85 | 57 | 72.9 | 2,310 |
| July | 57 | 16 | 29.9 | 1,840 |
| August | 17 | 11 | 13.4 | 824 |
| September | 11 | 9.5 | 10.0 | 595 |
| The period | | | | 5,570 |

### EAST FORK OF SOUTH FORK OF SALMON RIVER NEAR STIBNITE, IDAHO

LOCATION.—Staff gage 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 to September, 1928.

EXTREMES.—Maximum discharge during period, 151 second-feet June 16 (gage height, 1.62 feet); minimum, 21 second-feet September 20–21 (gage height, 0.52 foot).

REMARKS.—Records good. No diversions. Gage-height record furnished by Yellow Pine Co.

*Daily and monthly discharge, in second-feet, 1928*

| Day | June | July | Aug. | Sept. | Day | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | 110 | 39 | 25 | 16 | 148 | 60 | 28 | 25 |
| 2 | | 101 | 40 | 25 | 17 | 150 | 59 | 27 | 24 |
| 3 | | 98 | 38 | 24 | 18 | 138 | 55 | 27 | 24 |
| 4 | | 95 | 40 | 24 | 19 | 134 | 53 | 28 | 23 |
| 5 | | 89 | 41 | 24 | 20 | 134 | 52 | 28 | 22 |
| 6 | | 87 | 38 | 24 | 21 | 132 | 51 | 28 | 22 |
| 7 | | 83 | 34 | 24 | 22 | 132 | 49 | 28 | 22 |
| 8 | | 80 | 35 | 24 | 23 | 135 | 48 | 28 | 22 |
| 9 | | 76 | 34 | 24 | 24 | 134 | 48 | 28 | 22 |
| 10 | | 74 | 32 | 24 | 25 | 135 | 46 | 28 | 22 |
| 11 | | 71 | 32 | 24 | 26 | 132 | 46 | 28 | 22 |
| 12 | | 69 | 32 | 25 | 27 | 129 | 45 | 27 | 22 |
| 13 | | 64 | 30 | 27 | 28 | 120 | 43 | 27 | 22 |
| 14 | | 63 | 30 | 27 | 29 | 120 | 44 | 27 | 22 |
| 15 | | 61 | 29 | 27 | 30 | 110 | 40 | 26 | 26 |
| | | | | | 31 | | 38 | 26 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| June 16–30 | 150 | 110 | 132 | 3,930 |
| July | 110 | 38 | 64.5 | 3,970 |
| August | 41 | 26 | 31.1 | 1,910 |
| September | 27 | 22 | 23.8 | 1,420 |
| The period | | | | 11,200 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 4,330 second-feet January 13 (gage height, 5.60 feet); minimum, 18 second-feet September 5 (gage height, 0.48 foot).

1918–1923, 1925–1928: Maximum discharge, 4,750 second-feet April 22, 1922; minimum, 4 second-feet September 14 and 16–20, 1922.

REMARKS.—Records good except those for ice-affected periods, December 13, 16, 19–21, 23–31, January 1–9 and 20, which are fair. Discharge estimated October 1, May 6, and September 2. No diversions. Records furnished by State engineer of Oregon.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 156 | 93 | 2,010 | | 330 | 95 | 2,120 | 1,790 | 280 | 111 | 26 | 20 |
| 2 | 157 | 107 | 2,010 | | 305 | 93 | 1,790 | 1,580 | 260 | 98 | 26 | 20 |
| 3 | 260 | 166 | 1,580 | | 280 | 93 | 1,680 | 1,480 | 248 | 109 | 27 | 19 |
| 4 | 310 | 166 | 1,280 | | 305 | 129 | 1,380 | 1,280 | 248 | 151 | 27 | 19 |
| 5 | 268 | 160 | 1,010 | 400 | 305 | 205 | 1,280 | 1,480 | 248 | 132 | 26 | 18 |
| 6 | 248 | 175 | 840 | | 280 | 355 | 1,140 | 1,690 | 198 | 119 | 26 | 19 |
| 7 | 205 | 380 | 490 | | 248 | 585 | 1,010 | 1,900 | 179 | 111 | 25 | 19 |
| 8 | 175 | 355 | 840 | | 216 | 760 | 840 | 2,010 | 172 | 93 | 24 | 19 |
| 9 | 157 | 408 | 620 | | 188 | 1,190 | 880 | 2,010 | 166 | 84 | 22 | 30 |
| 10 | 154 | 380 | 550 | 690 | 226 | 1,680 | 840 | 1,900 | 166 | 75 | 22 | 31 |
| 11 | 179 | 520 | 166 | 620 | 226 | 2,230 | 800 | 1,680 | 355 | 68 | 22 | 35 |
| 12 | 163 | 462 | 500 | 690 | 212 | 2,010 | 1,380 | 1,680 | 240 | 64 | 21 | 45 |
| 13 | 154 | 408 | 490 | 4,330 | 142 | 1,480 | 2,120 | 1,380 | 240 | 63 | 20 | 57 |
| 14 | 142 | 355 | 408 | 2,580 | 205 | 1,190 | 2,120 | 1,280 | 179 | 60 | 21 | 56 |
| 15 | 160 | 355 | 380 | 1,680 | 142 | 920 | 1,900 | 1,190 | 179 | 54 | 20 | 36 |
| 16 | 124 | 690 | 280 | 1,010 | 205 | 1,190 | 1,680 | 1,010 | 166 | 54 | 20 | 37 |
| 17 | 116 | 690 | 179 | 690 | 172 | 1,580 | 1,900 | 1,010 | 179 | 54 | 20 | 32 |
| 18 | 111 | 690 | 172 | 620 | 142 | 1,680 | 1,680 | 920 | 166 | 52 | 20 | 30 |
| 19 | 107 | 620 | 215 | 550 | 172 | 1,790 | 1,580 | 920 | 142 | 48 | 20 | 30 |
| 20 | 95 | 690 | 205 | 550 | 172 | 2,010 | 1,580 | 840 | 142 | 47 | 19 | 28 |
| 21 | 91 | 655 | 195 | 550 | 205 | 2,230 | 1,480 | 760 | 185 | 45 | 19 | 28 |
| 22 | 80 | 620 | 185 | 550 | 219 | 2,340 | 1,280 | 840 | 142 | 45 | 19 | 28 |
| 23 | 79 | 520 | | 435 | 157 | 2,580 | 1,480 | 760 | 129 | 35 | 20 | 27 |
| 24 | 84 | 550 | | 330 | 212 | 2,340 | 1,900 | 620 | 111 | 35 | 20 | 26 |
| 25 | 93 | 1,680 | | 380 | 192 | 2,010 | 1,900 | 620 | 102 | 33 | 20 | 26 |
| 26 | 89 | 2,230 | 170 | 330 | 172 | 1,790 | 1,790 | 585 | 93 | 33 | 19 | 26 |
| 27 | 104 | 1,790 | | 330 | 172 | 1,790 | 2,120 | 490 | 89 | 33 | 20 | 26 |
| 28 | 116 | 2,230 | | 260 | 179 | 1,580 | 2,230 | 462 | 93 | 33 | 22 | 26 |
| 29 | 109 | 1,580 | | 330 | 142 | 1,480 | 1,900 | 408 | 129 | 30 | 22 | 27 |
| 30 | 107 | 1,280 | | 355 | ------- | 1,680 | 1,680 | 330 | 116 | 29 | 21 | 27 |
| 31 | 102 | ------- | | 330 | ------- | 1,900 | ------- | 330 | ------- | 27 | 20 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 310 | 79 | 145 | 8,920 |
| November | 2,230 | 93 | 700 | 41,700 |
| December | 2,010 | 166 | 520 | 32,000 |
| January | 4,330 | 260 | 703 | 43,200 |
| February | 330 | 142 | 211 | 12,100 |
| March | 2,580 | 93 | 1,390 | 85,500 |
| April | 2,230 | 800 | 1,580 | 94,000 |
| May | 2,010 | 330 | 1,140 | 70,100 |
| June | 355 | 89 | 178 | 10,600 |
| July | 151 | 27 | 65.3 | 4,020 |
| August | 27 | 19 | 21.8 | 1,340 |
| September | 57 | 18 | 28.9 | 1,720 |
| The year | 4,330 | 18 | 558 | 405,000 |

### GRANDE RONDE RIVER AT RONDOWA, OREG.

LOCATION.—Water-stage recorder in NW. ¼ sec. 23, T. 3 N., R. 40 E., 500 feet below mouth of Wallowa River at Rondowa.

RECORDS AVAILABLE.—October, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, 15,600 second-feet March 11 (gage height, 7.70 feet); minimum, 465 second-feet September 7 (gage height, 1.12 feet).

1926–1928: Maximum discharge, that of March 11, 1928; minimum, 455 second-feet October 1 and 2, 1926.

REMARKS.—Records good except those for estimated periods, November 25–30, December 3–12, May 11–16, 18–31, and June 1–15, which are fair.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1,400 | 1,250 | 7,100 | 1,230 | 1,890 | 1,300 | 6,670 | 6,670 | | 1,770 | 672 | 495 |
| 2 | 1,450 | 1,300 | 7,150 | 1,400 | 1,830 | 1,210 | 6,200 | 6,040 | | 1,720 | 679 | 485 |
| 3 | 1,600 | 1,400 | | 1,550 | 1,830 | 1,240 | 5,740 | 5,600 | | 1,890 | 658 | 480 |
| 4 | 2,140 | 1,450 | | 1,770 | 1,890 | 1,300 | 5,460 | 5,330 | | 2,020 | 658 | 475 |
| 5 | 2,020 | 1,500 | | 2,020 | 1,890 | 1,450 | 4,930 | 5,600 | | 1,960 | 651 | 475 |
| 6 | 1,830 | 1,550 | | 2,340 | 2,080 | 1,770 | 4,350 | 6,990 | | 1,830 | 644 | 475 |
| 7 | 1,720 | 1,720 | | 2,530 | 2,080 | 2,400 | 3,850 | 8,850 | | 1,660 | 617 | 470 |
| 8 | 1,550 | 1,770 | 8,180 | 2,660 | 1,960 | 2,940 | 3,570 | 10,200 | 2,980 | 1,660 | 604 | 475 |
| 9 | 1,500 | 2,140 | | 2,660 | 1,770 | 5,740 | 3,320 | 10,600 | | 1,720 | 591 | 541 |
| 10 | 1,550 | 2,460 | | 2,660 | 1,720 | 8,260 | 3,080 | 9,200 | | 1,660 | 591 | 559 |
| 11 | 1,550 | 2,400 | | 2,660 | 1,720 | 13,800 | 2,940 | | | 1,500 | 584 | 523 |
| 12 | 1,500 | 2,270 | | 3,010 | 1,720 | 9,200 | 3,320 | | | 1,500 | 584 | 559 |
| 13 | 1,550 | 2,140 | 2,200 | 8,360 | 1,550 | 6,670 | 3,750 | | | 1,500 | 584 | 584 |
| 14 | 1,600 | 2,080 | 2,020 | 7,480 | 1,550 | 5,600 | 4,150 | 9,150 | | 1,500 | 584 | 578 |
| 15 | 1,600 | 2,530 | 2,080 | 5,600 | 1,350 | 4,570 | 4,250 | | | 1,400 | 584 | 572 |
| 16 | 1,600 | 3,480 | 2,200 | 4,680 | 1,400 | 4,250 | 4,250 | | 2,530 | 1,300 | 547 | 559 |
| 17 | 1,720 | 3,320 | 1,890 | 4,150 | 1,400 | 4,350 | 4,570 | 8,680 | 2,400 | 1,210 | 541 | 547 |
| 18 | 1,660 | 3,230 | 1,770 | 3,320 | 1,350 | 4,680 | 4,570 | | 2,140 | 1,190 | 535 | 535 |
| 19 | 1,600 | 3,160 | 1,660 | 2,940 | 1,400 | 4,930 | 4,460 | | 2,020 | 1,100 | 529 | 523 |
| 20 | 1,600 | 3,480 | 1,600 | 2,870 | 1,400 | 5,460 | 4,460 | | 2,080 | 1,040 | 529 | 517 |
| 21 | 1,600 | 3,480 | 1,550 | 2,730 | 1,400 | 6,040 | 4,250 | | 2,460 | 1,000 | 517 | 511 |
| 22 | 1,500 | 3,080 | 1,450 | 2,600 | 1,450 | 6,990 | 4,050 | | 2,400 | 941 | 505 | 505 |
| 23 | 1,450 | 2,800 | 1,450 | 2,460 | 1,400 | 7,820 | 4,250 | | 2,600 | 922 | 511 | 500 |
| 24 | 1,450 | 3,600 | 1,600 | 2,270 | 1,400 | 7,650 | 4,930 | 5,300 | 2,660 | 894 | 505 | 495 |
| 25 | 1,450 | | 1,500 | 2,140 | 1,350 | 6,990 | 5,060 | | 2,730 | 848 | 511 | 485 |
| 26 | 1,450 | | 1,450 | 2,020 | 1,350 | 6,040 | 5,460 | | 2,940 | 822 | 517 | 485 |
| 27 | 1,400 | 7,130 | 1,550 | 1,890 | 1,300 | 5,740 | 6,360 | | 2,800 | 806 | 523 | 485 |
| 28 | 1,450 | | 1,550 | 1,830 | 1,300 | 6,360 | 6,830 | | 2,400 | 772 | 529 | 475 |
| 29 | 1,450 | | 1,500 | 1,770 | 1,300 | 6,670 | 6,360 | | 2,140 | 732 | 523 | 475 |
| 30 | 1,350 | | 1,300 | 1,830 | ------- | 6,360 | 6,360 | | 1,960 | 708 | 523 | 475 |
| 31 | 1,300 | ------- | 1,120 | 1,890 | ------- | 6,510 | ------- | | ------- | 686 | 505 | ------- |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 2,140 | 1,300 | 1,570 | 96,500 |
| November | ------- | 1,250 | 3,350 | 199,000 |
| December | 7,150 | 1,120 | 2,500 | 154,000 |
| January | 8,360 | 1,230 | 2,880 | 177,000 |
| February | 2,080 | 1,300 | 1,590 | 91,500 |
| March | 13,800 | 1,210 | 5,300 | 326,000 |
| April | 6,830 | 2,940 | 4,730 | 281,000 |
| May | ------- | ------- | 6,870 | 422,000 |
| June | ------- | 1,960 | 2,700 | 161,000 |
| July | 2,020 | 686 | 1,300 | 79,900 |
| August | 679 | 505 | 569 | 35,000 |
| September | 584 | 470 | 511 | 30,400 |
| The year | 13,800 | 470 | 2,830 | 2,050,000 |

### 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, 1928. May, 1906, to May, 1907, at a station in sec. 3, T. 5 S., R. 40 E. August, 1911, to December, 1912, and March to September, 1915, at a station in SW. ¼ sec. 1, T. 5 S., R. 40 E. All records comparable.

EXTREMES.—Maximum discharge during year, 1,200 second-feet May 8 and 9 (gage height, 5.35 feet); minimum, 24 second-feet September 2–7 (gage height, 1.30 feet).

1906–7, 1911–12, 1915, 1918–19, 1925–1928: Maximum discharge, 1,240 second-feet May 21, 1912; minimum, 8 second-feet November 7, 1925 (gage height, 0.66 foot).

REMARKS.—Records good except those for estimated periods, December 18–31, January 1–10, and 17–31, which are fair. Station is below practically all diversions. Records furnished by State engineer of Oregon.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 91 | 91 | 245 | | 80 | 68 | 187 | 525 | 400 | 97 | 37 | 25 |
| 2 | 91 | 87 | 245 | | 80 | 71 | 187 | 490 | 370 | 94 | 37 | 24 |
| 3 | 94 | 87 | 262 | | 81 | 68 | 187 | 400 | 341 | 91 | 36 | 24 |
| 4 | 94 | 84 | 262 | | 84 | 68 | 187 | 400 | 313 | 88 | 36 | 24 |
| 5 | 97 | 84 | 262 | | 81 | 71 | 176 | 460 | 313 | 85 | 36 | 24 |
| 6 | 101 | 87 | 262 | 72 | 78 | 76 | 165 | 970 | 300 | 82 | 36 | 24 |
| 7 | 104 | 104 | 262 | | 76 | 78 | 155 | 1,100 | 273 | 82 | 34 | 24 |
| 8 | 111 | 104 | 262 | | 76 | 97 | 145 | 1,200 | 260 | 79 | 34 | 25 |
| 9 | 115 | 108 | 245 | | 73 | 138 | 145 | 1,200 | 235 | 79 | 33 | 39 |
| 10 | 111 | 108 | 245 | | 68 | 162 | 136 | 1,100 | 222 | 76 | 31 | 34 |
| 11 | 108 | 111 | 245 | 111 | 68 | 215 | 136 | 1,010 | 210 | 76 | 30 | 36 |
| 12 | 110 | 111 | 245 | 115 | 71 | 201 | 127 | 970 | 210 | 74 | 29 | 47 |
| 13 | 108 | 115 | 187 | 162 | 71 | 187 | 145 | 890 | 198 | 71 | 28 | 45 |
| 14 | 108 | 115 | 162 | 187 | 68 | 162 | 165 | 770 | 198 | 69 | 28 | 30 |
| 15 | 111 | 124 | 162 | 187 | 68 | 138 | 176 | 695 | 187 | 69 | 26 | 26 |
| 16 | 108 | 133 | 124 | 162 | 76 | 138 | 187 | 695 | 187 | 66 | 25 | 26 |
| 17 | 108 | 162 | 78 | | 73 | 138 | 187 | 730 | 176 | 64 | 25 | 26 |
| 18 | 104 | 187 | | | 73 | 201 | 187 | 770 | 176 | 62 | 25 | 26 |
| 19 | 104 | 201 | | | 76 | 278 | 187 | 850 | 165 | 57 | 25 | 26 |
| 20 | 108 | 201 | | | 78 | 363 | 187 | 890 | 165 | 55 | 25 | 26 |
| 21 | 104 | 201 | | | 91 | 380 | 187 | 930 | 165 | 53 | 26 | 26 |
| 22 | 104 | 215 | | | 78 | 448 | 187 | 850 | 155 | 51 | 26 | 26 |
| 23 | 104 | 215 | | | 73 | 400 | 210 | 810 | 145 | 49 | 26 | 25 |
| 24 | 104 | 215 | | | 66 | 400 | 370 | 730 | 136 | 47 | 26 | 25 |
| 25 | 101 | 245 | 65 | 87 | 64 | 370 | 430 | 770 | 127 | 45 | 28 | 26 |
| 26 | 97 | 245 | | | 66 | 341 | 460 | 850 | 118 | 45 | 28 | 26 |
| 27 | 97 | 245 | | | 66 | 273 | 625 | 770 | 110 | 43 | 28 | 26 |
| 28 | 101 | 245 | | | 68 | 235 | 695 | 625 | 110 | 43 | 26 | 25 |
| 29 | 97 | 245 | | | 68 | 210 | 625 | 590 | 104 | 42 | 26 | 26 |
| 30 | 94 | 245 | | | ------ | 187 | 590 | 525 | 100 | 40 | 26 | 26 |
| 31 | 94 | ------ | | | ------ | 127 | ------ | 400 | ------ | 39 | 25 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 115 | 91 | 103 | 6,330 |
| November | 245 | 84 | 157 | 9,340 |
| December | 262 | ---------- | 150 | 9,220 |
| January | 187 | ---------- | 95.1 | 5,850 |
| February | 91 | 64 | 73.8 | 4,240 |
| March | 448 | 68 | 203 | 12,500 |
| April | 695 | 127 | 258 | 15,400 |
| May | 1,200 | 400 | 773 | 47,500 |
| June | 400 | 100 | 206 | 12,300 |
| July | 97 | 39 | 64.9 | 3,990 |
| August | 37 | 25 | 29.3 | 1,800 |
| September | 47 | 24 | 27.9 | 1,660 |
| The year | 1,200 | 24 | 180 | 130,000 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 1,030 second-feet May 26 (gage height, 2.34 feet); minimum, 31 second-feet February 23 (gage height, 0.20 foot).

1924–1928: Maximum discharge during year, 1,250 second-feet June 26, 1927 (gage height, 2.65 feet); minimum, 28 second-feet from March 19 to April 2, 1927.

REMARKS.—Records good except those for discharges above 650 second-feet and for periods when mean discharge was estimated, January 12–19 and February 13–24, which are fair. Water diverted from East Fork for power purposes is returned to river above station. Records furnished by State engineer of Oregon.

*Daily and monthly discharge, in second-feet, 1927–28.*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 98 | 73 | 98 | 53 | 42 | 38 | 54 | 107 | 384 | 282 | 103 | 54 |
| 2 | 96 | 79 | 93 | 53 | 42 | 39 | 52 | 103 | 368 | 282 | 110 | 54 |
| 3 | 96 | 79 | 88 | 62 | 43 | 35 | 53 | 103 | 343 | 305 | 128 | 54 |
| 4 | 109 | 79 | 82 | 63 | 43 | 35 | 51 | 107 | 348 | 310 | 123 | 54 |
| 5 | 120 | 81 | 79 | 61 | 42 | 35 | 48 | 152 | 363 | 300 | 123 | 54 |
| 6 | 105 | 86 | 74 | 60 | 42 | 35 | 47 | 198 | 379 | 282 | 120 | 54 |
| 7 | 96 | 86 | 74 | 58 | 42 | 35 | 46 | 261 | 368 | 265 | 112 | 53 |
| 8 | 88 | 84 | 74 | 57 | 42 | 35 | 46 | 314 | 343 | 278 | 104 | 53 |
| 9 | 86 | 135 | 77 | 57 | 44 | 36 | 44 | 343 | 318 | 305 | 103 | 60 |
| 10 | 88 | 117 | 77 | 57 | 42 | 37 | 43 | 348 | 318 | 300 | 112 | 56 |
| 11 | 88 | 105 | 77 | 57 | 42 | 40 | 43 | 368 | 343 | 287 | 112 | 53 |
| 12 | 86 | 102 | 77 | 57 | 42 | 39 | 44 | 363 | 348 | 296 | 104 | 54 |
| 13 | 84 | 100 | 65 | 57 | 42 | 38 | 44 | 338 | 333 | 314 | 98 | 53 |
| 14 | 89 | 98 | 65 | 57 | 42 | 37 | 45 | 318 | 338 | 305 | 89 | 52 |
| 15 | 93 | 98 | 65 | 47 | 42 | 39 | 44 | 323 | 333 | 287 | 87 | 52 |
| 16 | 96 | 109 | 65 | 47 | 42 | 37 | 45 | 314 | 310 | 270 | 82 | 51 |
| 17 | 102 | 100 | 69 | 47 | 42 | 38 | 46 | 338 | 274 | 261 | 79 | 49 |
| 18 | 105 | 93 | 69 | 47 | 42 | 39 | 45 | 358 | 249 | 240 | 80 | 48 |
| 19 | 102 | 91 | 69 | 47 | 38 | 40 | 45 | 384 | 249 | 221 | 77 | 48 |
| 20 | 102 | 96 | 58 | 48 | 38 | 42 | 45 | 430 | 270 | 213 | 75 | 47 |
| 21 | 100 | 88 | 58 | 48 | 38 | 45 | 44 | 493 | 333 | 217 | 71 | 46 |
| 22 | 96 | 81 | 58 | 48 | 38 | 51 | 48 | 586 | 343 | 221 | 71 | 44 |
| 23 | 91 | 79 | 58 | 48 | 38 | 52 | 55 | 594 | 358 | 225 | 71 | 44 |
| 24 | 91 | 88 | 58 | 48 | 38 | 52 | 64 | 594 | 379 | 225 | 68 | 43 |
| 25 | 96 | 132 | 58 | 46 | 37 | 52 | 68 | 666 | 407 | 213 | 66 | 43 |
| 26 | 91 | 126 | 56 | 45 | 36 | 52 | 87 | 714 | 451 | 198 | 62 | 43 |
| 27 | 91 | 114 | 56 | 44 | 35 | 54 | 103 | 828 | 444 | 184 | 61 | 43 |
| 28 | 91 | 109 | 56 | 44 | 35 | 53 | 98 | 690 | 413 | 128 | 59 | 44 |
| 29 | 88 | 107 | 56 | 44 | 35 | 52 | 92 | 610 | 353 | 105 | 56 | 43 |
| 30 | 82 | 100 | 56 | 44 | ------ | 52 | 107 | 507 | 315 | 103 | 56 | 43 |
| 31 | 74 | ------ | 56 | 43 | ------ | 52 | ------ | 419 | ------ | 100 | 55 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 120 | 74 | 94.2 | 5,790 |
| November | 135 | 73 | 97.2 | 5,780 |
| December | 98 | ---------- | 66.4 | 4,080 |
| January | 63 | 43 | 50.5 | 3,110 |
| February | 44 | 35 | 39.4 | 2,270 |
| March | 54 | 35 | 42.5 | 2,610 |
| April | 107 | 43 | 56.5 | 3,360 |
| May | 828 | 103 | 396 | 24,300 |
| June | 451 | 249 | 346 | 20,600 |
| July | 314 | 100 | 243 | 14,900 |
| August | 128 | 55 | 87.6 | 5,390 |
| September | 60 | 43 | 49.6 | 2,950 |
| The year | 828 | 35 | 131 | 95,100 |

### EAST FORK OF WALLOWA RIVER NEAR JOSEPH, OREG.

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, 1928.

EXTREMES.—Maximum discharge during year, 120 second-feet May 26, 27, and 28 (gage height, 2.20 feet); minimum, 0.7 second-foot February 29 (gage height, 0.14 foot).

1924–1928: Maximum discharge, 203 second-feet June 26, 1927 (gage height, 2.20 feet); minimum, 0.5 second-foot January 31 and February 15, (gage height, 0.62 foot).

REMARKS.—Records fair. Practically entire low-water flow is diverted 1 mile upstream for power use.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13 | 12 | 12 | a 7.8 | 1.2 | 4.5 | 7.3 | 11 | 90 | 64 | 18 | 11 |
| 2 | 14 | 12 | 12 | 7.8 | 1.2 | 1.0 | 6.6 | 11 | 81 | 45 | 17 | 11 |
| 3 | 14 | 11 | 13 | 7.8 | 1.2 | 3.0 | 7.3 | 11 | 76 | 43 | 17 | 11 |
| 4 | 14 | 11 | 13 | 7.8 | 4.0 | 6.2 | 7.3 | 12 | 68 | 44 | 16 | 11 |
| 5 | 14 | 10 | 13 | 7.8 | 7.3 | 3.0 | 6.4 | 12 | 66 | 42 | 17 | 10 |
| 6 | 13 | 11 | 13 | 7.8 | 3.5 | 3.0 | 6.0 | 15 | 66 | 42 | 16 | 10 |
| 7 | 12 | 11 | a 12 | 7.0 | a 6.4 | 3.2 | 7.0 | 20 | 62 | 44 | 16 | 11 |
| 8 | 12 | 10 | a 11 | 7.8 | 3.8 | 3.5 | 7.8 | 25 | 60 | a 45 | 16 | 10 |
| 9 | 13 | 20 | 10 | 6.8 | 7.8 | 5.2 | 6.0 | 24 | 55 | 36 | 15 | 13 |
| 10 | 13 | 14 | 10 | 5.6 | 4.1 | 6.8 | 5.6 | 29 | 50 | 34 | 15 | 12 |
| 11 | 13 | 13 | a 10 | 1.6 | 5.4 | 6.8 | 5.8 | 41 | 57 | 34 | 15 | 11 |
| 12 | 11 | 11 | a 11 | 6.8 | 7.5 | 6.8 | 6.0 | 44 | 55 | 37 | 15 | 12 |
| 13 | 11 | 13 | a 12 | 5.6 | 8.6 | 6.8 | 5.6 | 45 | 51 | 34 | 14 | 11 |
| 14 | 12 | 13 | 13 | 7.3 | 7.8 | 6.0 | 5.6 | 43 | 47 | 36 | 14 | 10 |
| 15 | 12 | 13 | a 11 | | a 6.4 | 6.4 | 5.8 | 41 | 45 | 37 | 13 | 9.7 |
| 16 | 13 | 13 | 9.8 | | a 5.0 | 6.0 | 5.6 | 41 | 44 | 34 | 13 | 9.7 |
| 17 | 13 | 12 | a 9.8 | | 3.5 | 6.4 | 6.8 | 42 | 45 | 37 | 12 | 7.1 |
| 18 | 12 | 11 | 9.8 | a 7.6 | 1.2 | 7.8 | 6.0 | 45 | 40 | 31 | 12 | 7.1 |
| 19 | 12 | 11 | 8.3 | | 6.6 | 6.0 | 5.4 | 45 | 40 | 27 | 12 | 5.4 |
| 20 | 12 | 13 | 7.8 | | 6.2 | 6.4 | 6.0 | 55 | 39 | 25 | 12 | 8.3 |
| 21 | 11 | 12 | 7.8 | | 3.5 | 6.0 | 6.6 | 57 | 39 | 25 | 11 | 8.0 |
| 22 | 11 | 12 | 7.8 | 7.8 | 3.6 | 7.3 | 6.4 | 68 | 40 | 23 | 13 | 7.7 |
| 23 | 12 | 12 | 7.8 | 5.2 | 6.4 | 7.0 | 7.8 | 76 | 45 | 23 | 12 | 8.6 |
| 24 | 12 | 12 | 7.3 | 2.1 | 5.2 | 7.0 | 8.6 | 80 | 44 | 21 | 13 | 8.3 |
| 25 | 13 | 16 | 8.0 | 4.1 | 3.5 | 7.0 | 8.6 | 93 | 47 | 21 | 13 | 7.7 |
| 26 | 12 | 15 | 7.3 | 2.9 | a 3.4 | 6.4 | 9.6 | 114 | 57 | 18 | 12 | 7.7 |
| 27 | 11 | 16 | 7.8 | 2.9 | 3.3 | 6.8 | 11 | 114 | 55 | 18 | 11 | 7.7 |
| 28 | 12 | 13 | 7.0 | 3.8 | a 3.0 | 6.0 | 12 | 114 | 66 | 19 | 11 | 6.8 |
| 29 | 12 | 13 | 7.3 | 7.8 | 2.6 | 6.6 | 10 | 103 | 60 | 19 | 11 | 7.1 |
| 30 | 12 | 13 | 8.0 | 2.9 | ------ | 6.4 | 12 | 93 | 62 | 18 | 11 | 7.7 |
| 31 | 11 | ------ | a 8.0 | 1.2 | ------ | 7.5 | ------ | 90 | ------ | 19 | 11 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 14 | 11 | 12.3 | 756 |
| November | 20 | 10 | 12.6 | 750 |
| December | 13 | 7.0 | 9.86 | 606 |
| January | 7.8 | 1.2 | 6.10 | 375 |
| February | 8.6 | 1.2 | 4.59 | 264 |
| March | 7.8 | 1.0 | 5.77 | 355 |
| April | 12 | 5.4 | 7.28 | 433 |
| May | 114 | 11 | 52.1 | 3,200 |
| June | 90 | 39 | 55.1 | 3,280 |
| July | 64 | 18 | 32.1 | 1,970 |
| August | 18 | 11 | 13.7 | 842 |
| September | 13 | 5.4 | 9.29 | 553 |
| The year | 114 | 1.0 | 18.4 | 13,400 |

a Estimated or interpolated.

### 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 the West Fork of Wallowa River and 6 miles above Joseph.

RECORDS AVAILABLE.—August, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 16 second-feet January 9 and 17 (gage height, 0.80 foot); minimum, 5.0 second-feet July 16 (gage height 0.46 foot).

1924–1928: Maximum discharge, that of January 9 and 17, 1928; minimum, 3.5 second-feet November 2, 1924, and a few days in June, July, and August, 1925.

REMARKS.—Records fair. Discharge interpolated October 1–3 and July 1. 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 discharges into West Fork a quarter of a mile downstream.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 9.8 | 9.4 | 8.4 | 7.7 | 10 | 9.3 | 7.8 | 7.4 | 7.4 | 7.9 | 6.5 | 7.4 |
| 2 | | 7.4 | 8.2 | 8.6 | 10 | 9.7 | 7.8 | 7.4 | 7.8 | 6.9 | 6.5 | 7.1 |
| 3 | | 7.7 | 8.4 | 8.6 | 11 | 9.3 | 7.8 | 7.4 | 7.4 | 7.1 | 6.9 | 7.3 |
| 4 | 9.8 | 7.9 | 6.8 | 8.9 | 11 | 6.9 | 7.8 | 7.4 | 7.4 | 6.5 | 6.5 | 7.6 |
| 5 | 9.6 | 7.9 | 8.4 | 8.4 | 8.4 | 9.5 | 7.8 | 7.4 | 7.4 | 6.5 | 6.1 | 7.8 |
| 6 | 9.4 | 7.2 | 7.9 | 8.6 | 11 | 8.7 | 7.8 | 7.4 | 7.4 | 6.3 | 6.5 | 8.1 |
| 7 | 9.4 | 7.7 | 8.4 | 11 | 11 | 9.1 | 7.8 | 7.4 | 7.4 | 6.9 | 6.7 | 8.1 |
| 8 | 9.4 | 7.4 | 8.4 | 8.9 | 11 | 8.9 | 7.4 | 7.1 | 7.4 | 5.9 | 6.7 | 7.6 |
| 9 | 8.9 | 7.4 | 8.4 | 12 | 9.1 | 8.5 | 7.6 | 7.4 | 7.4 | 6.7 | 6.7 | 7.6 |
| 10 | 9.1 | 7.4 | 7.9 | 12 | 11 | 7.8 | 8.1 | 7.4 | 7.4 | 6.7 | 6.7 | 8.5 |
| 11 | 9.6 | 7.9 | 7.4 | 12 | 11 | 7.1 | 7.4 | 7.3 | 7.4 | 5.7 | 6.7 | 8.7 |
| 12 | 10 | 7.9 | 8.4 | 11 | 7.9 | 7.8 | 8.1 | 7.4 | 7.4 | 5.9 | 6.5 | 8.5 |
| 13 | 8.4 | 7.0 | 7.9 | 12 | 11 | 7.8 | 7.8 | 7.1 | 7.4 | 5.5 | 6.9 | 8.3 |
| 14 | 8.6 | 7.2 | 8.6 | 9.4 | 10 | 8.3 | 7.6 | 7.4 | 7.4 | 5.7 | 6.9 | 8.3 |
| 15 | 9.6 | 8.2 | 8.2 | 11 | 8.4 | 7.8 | 7.8 | 7.4 | 7.4 | 5.4 | 7.4 | 8.7 |
| 16 | 7.2 | 7.4 | 8.4 | 12 | 11 | 7.8 | 7.8 | 7.4 | 10 | 5.4 | 6.9 | 7.8 |
| 17 | 8.6 | 7.4 | 8.4 | 12 | 9.8 | 7.6 | 7.7 | 7.4 | 7.1 | 5.7 | 6.7 | 9.7 |
| 18 | 8.6 | 7.2 | 7.4 | 11 | 10 | 7.1 | 7.6 | 7.4 | 9.5 | 5.9 | 7.3 | 10 |
| 19 | 8.2 | 7.4 | 8.6 | 11 | 7.4 | 7.8 | 7.4 | 7.4 | 9.5 | 6.1 | 6.9 | 10 |
| 20 | 7.9 | 7.4 | 10 | 11 | 10 | 7.8 | 7.4 | 7.3 | 8.9 | 6.1 | 6.7 | 8.7 |
| 21 | 7.9 | 8.2 | 9.1 | 12 | 10 | 8.3 | 7.4 | 7.4 | 8.5 | 6.3 | 7.4 | 8.7 |
| 22 | 7.9 | 7.9 | 8.9 | 7.9 | 11 | 7.8 | 7.4 | 7.4 | 7.3 | 5.9 | 7.4 | 8.7 |
| 23 | 6.8 | 7.9 | 9.1 | 12 | 10 | 7.8 | 7.4 | 7.4 | 6.7 | 6.3 | 7.1 | 7.4 |
| 24 | 8.2 | 7.9 | 8.9 | 12 | 10 | 7.8 | 7.4 | 7.4 | 6.1 | 6.5 | 7.4 | 8.3 |
| 25 | 7.9 | 7.9 | 7.9 | 9.8 | 10 | 7.1 | 7.4 | 7.4 | 9.3 | 6.7 | 7.4 | 9.1 |
| 26 | 8.2 | 7.9 | 8.4 | 12 | 7.9 | 7.8 | 7.8 | 7.4 | 9.3 | 6.7 | 6.7 | 8.9 |
| 27 | 8.4 | 7.0 | 8.6 | 11 | 10 | 7.4 | 7.4 | 7.1 | 9.3 | 6.3 | 7.3 | 8.3 |
| 28 | 7.9 | 7.7 | 8.9 | 11 | 10 | 8.3 | 7.4 | 7.4 | 9.1 | 6.3 | 7.6 | 8.7 |
| 29 | 8.4 | 7.9 | 8.6 | 7.9 | 10 | 7.8 | 7.4 | 7.6 | 9.1 | 5.9 | 7.3 | 8.7 |
| 30 | 7.2 | 7.9 | 8.9 | 12 | ------ | 7.8 | 7.4 | 7.8 | 8.9 | 6.3 | 7.4 | 7.4 |
| 31 | 7.9 | ------ | 9.4 | 12 | ------ | 7.8 | ------ | 7.4 | ------ | 6.7 | 7.6 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 10 | 6.8 | 8.66 | 532 |
| November | 9.4 | 7.0 | 7.69 | 458 |
| December | 10 | 6.8 | 8.43 | 518 |
| January | 12 | 7.7 | 10.5 | 646 |
| February | 11 | 7.4 | 9.96 | 573 |
| March | 9.7 | 6.9 | 8.07 | 496 |
| April | 8.1 | 7.4 | 7.62 | 453 |
| May | 7.8 | 7.1 | 7.38 | 454 |
| June | 10 | 6.1 | 8.00 | 476 |
| July | 7.9 | 5.4 | 6.28 | 386 |
| August | 7.6 | 6.1 | 6.95 | 427 |
| September | 10 | 7.1 | 8.33 | 496 |
| The year | 12 | 5.4 | 8.15 | 5,920 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 716 second-feet May 26 (gage height, 2.65 feet); minimum, 21 second-feet March 4–10.

1915, 1924–1928: Maximum discharge, that of May 26, 1928; minimum, that of March 4–10, 1928.

REMARKS.—Records good except those for discharge above 400 second-feet and for periods when mean discharge is estimated, October 1–14, 22–27, December 15 to January 8, July 3 and 4, which are fair. No diversions. Records furnished by State engineer of Oregon.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 65 | 69 | | 36 | 23 | 29 | 87 | 235 | 150 | 89 | 36 |
| 2 | | 65 | 67 | | 33 | 21 | 29 | 76 | 229 | 155 | 84 | 36 |
| 3 | | 67 | 65 | | 31 | 22 | 29 | 76 | 207 | 157 | 84 | 36 |
| 4 | | 67 | 65 | | 31 | 21 | 29 | 79 | 216 | 158 | 87 | 36 |
| 5 | | 67 | 64 | 38 | 31 | 21 | 30 | 96 | 239 | 160 | 87 | 36 |
| 6 | | 65 | 60 | | 31 | 21 | 30 | 137 | 242 | 155 | 84 | 35 |
| 7 | | 67 | 58 | | 31 | 21 | 28 | 203 | 232 | 155 | 82 | 35 |
| 8 | 76 | 65 | 58 | | 31 | 21 | 28 | 99 | 226 | 169 | 82 | 36 |
| 9 | | 72 | 58 | 36 | 31 | 21 | 28 | 108 | 219 | 175 | 76 | 36 |
| 10 | | 69 | 58 | 36 | 31 | 21 | 28 | 255 | 223 | 169 | 76 | 36 |
| 11 | | 62 | 58 | 36 | 30 | 30 | 28 | 272 | 245 | 172 | 72 | 34 |
| 12 | | 65 | 57 | 36 | 29 | 33 | 28 | 307 | 239 | 177 | 65 | 34 |
| 13 | | 65 | 57 | 36 | 28 | 31 | 28 | 282 | 235 | 189 | 60 | 34 |
| 14 | | 65 | 57 | 36 | 26 | 28 | 28 | 262 | 235 | 186 | 57 | 34 |
| 15 | 76 | 65 | | 36 | 26 | 24 | 28 | 255 | 239 | 172 | 53 | 34 |
| 16 | 79 | 72 | | 36 | 26 | 22 | 28 | 255 | 207 | 166 | 48 | 34 |
| 17 | 83 | 69 | | 36 | 26 | 22 | 29 | 279 | 186 | 161 | 47 | 34 |
| 18 | 81 | 69 | | 36 | 26 | 22 | 28 | 311 | 166 | 147 | 45 | 34 |
| 19 | 81 | 69 | | 37 | 26 | 22 | 29 | 329 | 155 | 132 | 44 | 35 |
| 20 | 81 | 69 | | 38 | 26 | 22 | 28 | 358 | 163 | 134 | 43 | 35 |
| 21 | 79 | 69 | | 38 | 26 | 23 | 28 | 404 | 216 | 134 | 42 | 36 |
| 22 | | 69 | 50 | 38 | 26 | 28 | 29 | 485 | 223 | 134 | 42 | 36 |
| 23 | | 69 | | 38 | 26 | 28 | 31 | 392 | 239 | 134 | 42 | 34 |
| 24 | | 69 | | 38 | 26 | 28 | 38 | 392 | 271 | 137 | 41 | 34 |
| 25 | 72 | 90 | | 38 | 26 | 28 | 42 | 485 | 292 | 132 | 42 | 33 |
| 26 | | 87 | | 38 | 26 | 28 | 52 | 558 | 299 | 122 | 41 | 33 |
| 27 | | 74 | | 38 | 26 | 28 | 62 | 502 | 242 | 115 | 41 | 33 |
| 28 | 65 | 72 | | 38 | 26 | 28 | 67 | 459 | 201 | 112 | 41 | 33 |
| 29 | 65 | 69 | | 38 | 25 | 28 | 64 | 398 | 175 | 110 | 39 | 33 |
| 30 | 65 | 69 | | 38 | ------ | 29 | 72 | 302 | 158 | 105 | 37 | 33 |
| 31 | 67 | ------ | | 38 | ------ | 29 | ------ | 248 | ------ | 94 | 38 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | ------ | 65 | 74.8 | 4,600 |
| November | 90 | 62 | 69.2 | 4,120 |
| December | 69 | ------ | 54.9 | 3,380 |
| January | ------ | ------ | 37.3 | 2,290 |
| February | 36 | 25 | 28.2 | 1,620 |
| March | 33 | 21 | 25.0 | 1,540 |
| April | 72 | 28 | 35.2 | 2,090 |
| May | 558 | 76 | 282 | 17,300 |
| June | 299 | 155 | 222 | 13,200 |
| July | 189 | 94 | 147 | 9,040 |
| August | 89 | 37 | 58.4 | 3,590 |
| September | 36 | 33 | 34.6 | 2,060 |
| The year | 558 | 21 | 89.4 | 64,800 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 2,010 second-feet during period May 25–30 (gage height, 6.60 feet); minimum, 20 second-feet September 29 (gage height, 0.30 foot).

1912–1914, 1915, 1925–1928: Maximum discharge, 2,540 second-feet May 27, 1913; minimum, 18 second-feet August 29, 1926 (gage height, 0.17 foot).

REMARKS.—Records fair. Discharge estimated or interpolated May 25–30, March 2, April 5, and July 16–19. No large diversions above station. Flow regulated by storage in Minam Lake Reservoir. Records furnished by State engineer of Oregon.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 111 | 155 | 33 | 109 | 332 | 705 | 451 | 144 | 48 |
| 2 | 160 | 176 | 40 | 104 | 300 | 690 | 464 | 122 | 43 |
| 3 | 183 | 195 | 46 | 101 | 278 | 630 | 529 | 112 | 42 |
| 4 | 215 | 207 | 34 | 92 | 289 | 705 | 501 | 108 | 39 |
| 5 | 189 | 225 | 31 | 90 | 355 | 770 | 451 | 99 | 37 |
| 6 | 172 | 235 | 32 | 88 | 515 | 788 | 414 | 96 | 33 |
| 7 | 158 | 231 | 34 | 84 | 722 | 722 | 390 | 92 | 32 |
| 8 | 155 | 209 | 37 | 79 | 857 | 645 | 426 | 90 | 31 |
| 9 | 157 | 245 | 48 | 82 | 910 | 602 | 464 | 87 | 45 |
| 10 | 164 | 247 | 49 | 80 | 910 | 630 | 451 | 87 | 42 |
| 11 | 153 | 219 | 70 | 78 | 910 | 770 | 438 | 87 | 38 |
| 12 | 155 | 207 | 57 | 79 | 928 | 788 | 438 | 82 | 39 |
| 13 | 179 | 199 | 51 | 82 | 875 | 722 | 476 | 76 | 41 |
| 14 | 199 | 191 | 48 | 80 | 840 | 705 | 464 | 72 | 46 |
| 15 | 209 | 183 | 45 | 79 | 840 | 660 | 438 | 66 | 38 |
| 16 | 233 | 258 | 48 | 79 | 840 | 558 | 398 | 60 | 34 |
| 17 | 264 | 231 | 54 | 90 | 875 | 476 | 358 | 56 | 32 |
| 18 | 255 | 217 | 63 | 88 | 928 | 414 | 318 | 53 | 30 |
| 19 | 251 | 211 | 78 | 85 | 965 | 402 | 278 | 51 | 28 |
| 20 | 255 | 211 | 95 | 82 | 1,080 | 356 | 239 | 48 | 28 |
| 21 | 251 | 195 | 117 | 85 | 1,200 | 587 | 239 | 47 | 26 |
| 22 | 237 | 176 | 155 | 95 | 1,370 | 660 | 237 | 47 | 23 |
| 23 | 225 | 172 | 160 | 124 | 1,280 | 722 | 239 | 47 | 21 |
| 24 | 225 | 193 | 151 | 166 | 1,260 | 788 | 243 | 48 | 21 |
| 25 | 229 | 390 | 135 | 172 | | 875 | 233 | 48 | 22 |
| 26 | 221 | 355 | 124 | 221 | | 945 | 213 | 46 | 22 |
| 27 | 205 | 289 | 128 | 289 | 1,300 | 840 | 201 | 47 | 22 |
| 28 | 205 | 289 | 117 | 300 | | 675 | 201 | 46 | 22 |
| 29 | 203 | 253 | 111 | 268 | | 572 | 189 | 52 | 21 |
| 30 | 183 | 229 | 109 | 278 | | 476 | 176 | 56 | 21 |
| 31 | 162 | ------ | 109 | ------ | 705 | ------ | 151 | 49 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 264 | 111 | 199 | 12,200 |
| November | 355 | 155 | 226 | 13,400 |
| March | 160 | 31 | 77.7 | 4,780 |
| April | 300 | 78 | 124 | 7,380 |
| May | ------ | 278 | 909 | 55,900 |
| June | 945 | 356 | 663 | 39,500 |
| July | 529 | 151 | 345 | 21,200 |
| August | 144 | 46 | 71.6 | 4,400 |
| September | 48 | 21 | 32.2 | 1,920 |

### 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, 1928. April to September, 1915, comparable record at site half a mile downstream.

EXTREMES.—Maximum discharge during year, 1,220 second-feet May 21 (gage height, 3.98 feet); minimum, 6 second-feet September 5 and 6 (gage height, 0.86 foot).

1915, 1924–1928: Maximum discharge, 1,480 second-feet June 8, 1927 (gage height, 4.55 feet); minimum, 6 second-feet September 30, 1924 August 14, 1926, and September 5 and 6, 1928.

REMARKS.—Records good except those for estimated periods, October 5–13, 30, 31, February 1–3, 9–17, 19–29, March 4–16, August 8–11, and 31, and for March and April, which are fair. No diversions. Records furnished by State engineer of Oregon.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 106 | | 269 | | | 48 | 143 | 356 | 292 | 13[illegible] | 32 | 11 |
| 2 | 105 | | 277 | | 51 | 48 | 140 | 300 | 284 | 140 | 30 | 9 |
| 3 | 143 | | 261 | | | 48 | 131 | 269 | 273 | 160 | 29 | 8 |
| 4 | 192 | | | | 52 | | 140 | 273 | 325 | 160 | 29 | 7 |
| 5 | | | | | 52 | | 160 | 356 | 360 | 145 | 33 | 7 |
| 6 | | | | | 52 | | 163 | 673 | 364 | 137 | 33 | 7 |
| 7 | | | | | 57 | | 160 | 755 | 334 | 13[illegible] | 34 | 7 |
| 8 | | | | | 66 | | 156 | 815 | 288 | 140 | 34 | 8 |
| 9 | 185 | | | | | | 156 | 845 | 265 | 131 | 33 | 20 |
| 10 | | | | | | 63 | 156 | 785 | 288 | 123 | 32 | 14 |
| 11 | | | | | | | 156 | 743 | 364 | 112 | 31 | 10 |
| 12 | | | | | | | 134 | 755 | 346 | 112 | 31 | 14 |
| 13 | | | | | | | 101 | 678 | 321 | 114 | 27 | 13 |
| 14 | 178 | | | | 60 | | 97 | 651 | 304 | 97 | 22 | 13 |
| 15 | 218 | | | | | | 101 | 651 | 254 | 86 | 18 | 12 |
| 16 | 236 | | | | | | 106 | 640 | 202 | 73 | 16 | 12 |
| 17 | 195 | | 73 | | | 78 | 118 | 678 | 175 | 73 | 13 | 10 |
| 18 | 183 | | | | 54 | 87 | 120 | 737 | 160 | 74 | 13 | 10 |
| 19 | 180 | 208 | | | | 129 | 116 | 785 | 172 | 64 | 12 | 10 |
| 20 | 163 | 222 | | | | 183 | 112 | 875 | 205 | 58 | 11 | 10 |
| 21 | 146 | 215 | | 101 | | 205 | 103 | 940 | 247 | 57 | 10 | 9 |
| 22 | 134 | 202 | | | | 239 | 101 | 1,010 | 261 | 53 | 10 | 9 |
| 23 | 134 | 189 | | | | 257 | 131 | 845 | 277 | 51 | 10 | 8 |
| 24 | 129 | 199 | | | 51 | 239 | 189 | 815 | 288 | 48 | 9 | 8 |
| 25 | 116 | 445 | | | | 208 | 199 | 975 | 308 | 44 | 9 | 8 |
| 26 | 112 | 515 | | | | 183 | 250 | 1,080 | 308 | 42 | 10 | 9 |
| 27 | 110 | 406 | | | | 178 | 351 | 908 | 257 | 40 | 11 | 10 |
| 28 | 110 | 364 | | | | 169 | 387 | 678 | 205 | 39 | 11 | 11 |
| 29 | 136 | 334 | | | | 158 | 313 | 565 | 180 | 38 | 11 | 11 |
| 30 | 136 | 288 | | | | 143 | 325 | 392 | 146 | 35 | 11 | 10 |
| 31 | 136 | | | | | 140 | | 313 | | 33 | 11 | |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 236 | 105 | 151 | 9,280 |
| February | | | 46.0 | 2,650 |
| March | 257 | | 115.0 | 7,070 |
| April | 387 | 97 | 167.0 | 9,940 |
| May | 1,080 | 269 | 682.0 | 41,900 |
| June | 364 | 146 | 268 0 | 15,900 |
| July | 169 | 33 | 89.2 | 5,480 |
| August | 34 | 9 | 20.2 | 1,240 |
| September | 20 | 7 | 10.2 | 607 |

### 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, 1928.

EXTREMES.—Maximum discharge during year, 72,100 second-feet May 26 (gage height, 15.5 feet); minimum, 1,280 second-feet September 6–8, 20, 21, 24–28, and 30 (gage height, 2.4 feet).

1910–1928: 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. Discharge estimated January 3 and 4. Several diversions for irrigation above station. Gage-height record furnished by United States Weather Bureau.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4,960 | 4,300 | 16,600 | 5,200 | 7,480 | 4,100 | 12,700 | 33,100 | 29,800 | 9,920 | 2,880 | 1,410 |
| 2 | 4,300 | 4,730 | 22,700 | 4,960 | 7,480 | 4,100 | 14,000 | 29,200 | 26,700 | 9,920 | 2,880 | 1,540 |
| 3 | 4,300 | 8,150 | 24,900 | 5,000 | 6,850 | 3,910 | 13,100 | 26,100 | 27,300 | 9,920 | 2,880 | 1,540 |
| 4 | 5,710 | 11,500 | 20,600 | 7,500 | 6,850 | 3,910 | 12,300 | 24,900 | 26,100 | 11,100 | 2,720 | 1,410 |
| 5 | 6,260 | 43,900 | 19,600 | 11,500 | 5,980 | 4,100 | 11,500 | 27,300 | 26,100 | 10,700 | 2,720 | 1,410 |
| 6 | 5,450 | 35,100 | 18,000 | 9,920 | 7,160 | 4,730 | 10,700 | 35,800 | 26,700 | 9,920 | 3,210 | 1,280 |
| 7 | 5,200 | 32,400 | 15,300 | 9,920 | 7,160 | 4,960 | 9,190 | 45,400 | 24,900 | 8,840 | 2,720 | 1,280 |
| 8 | 4,960 | 24,400 | 14,000 | 9,550 | 6,850 | 5,200 | 9,190 | 58,700 | 21,600 | 8,150 | 2,560 | 1,280 |
| 9 | 4,510 | 18,500 | 13,500 | 8,490 | 6,550 | 5,450 | 8,490 | 65,700 | 20,100 | 7,480 | 2,560 | 1,410 |
| 10 | 4,510 | 22,700 | 12,300 | 8,150 | 6,260 | 5,980 | 8,490 | 63,900 | 20,600 | 7,160 | 2,410 | 2,560 |
| 11 | 5,980 | 18,000 | 9,550 | 8,150 | 6,260 | 11,900 | 8,840 | 63,900 | 19,000 | 7,160 | 2,260 | 2,110 |
| 12 | 5,710 | 16,200 | 10,300 | 11,100 | 5,710 | 10,700 | 8,150 | 62,200 | 19,600 | 6,850 | 2,260 | 1,960 |
| 13 | 5,710 | 14,000 | 10,300 | 17,600 | 5,450 | 10,700 | 8,150 | 57,000 | 18,500 | 6,550 | 2,260 | 2,260 |
| 14 | 5,710 | 13,500 | 10,300 | 21,600 | 5,450 | 9,920 | 8,490 | 51,100 | 18,500 | 5,980 | 1,960 | 2,260 |
| 15 | 5,980 | 16,200 | 8,490 | 16,600 | 5,200 | 8,490 | 8,490 | 44,600 | 20,100 | 5,710 | 2,110 | 2,110 |
| 16 | 6,260 | 16,600 | 8,840 | 13,100 | 5,200 | 8,150 | 8,490 | 47,000 | 19,600 | 5,200 | 1,960 | 1,820 |
| 17 | 6,850 | 16,200 | 7,810 | 9,920 | 4,960 | 7,810 | 9,920 | 49,400 | 16,200 | 5,200 | 1,960 | 1,410 |
| 18 | 7,160 | 16,600 | 7,160 | 9,920 | 4,960 | 7,810 | 11,500 | 48,600 | 14,800 | 4,960 | 1,960 | 1,410 |
| 19 | 6,550 | 16,600 | 6,550 | 8,490 | 4,730 | 8,150 | 11,500 | 52,700 | 16,600 | 4,730 | 1,680 | 1,410 |
| 20 | 6,260 | 16,200 | 6,550 | 8,490 | 4,510 | 9,190 | 12,300 | 54,400 | 15,700 | 4,510 | 1,680 | 1,280 |
| 21 | 5,710 | 19,000 | 6,550 | 8,150 | 4,510 | 11,900 | 10,700 | 62,200 | 15,700 | 4,510 | 1,680 | 1,280 |
| 22 | 5,710 | 16,200 | 6,260 | 8,150 | 4,510 | 13,500 | 10,300 | 58,700 | 17,100 | 4,100 | 1,540 | 1,410 |
| 23 | 5,200 | 14,400 | 6,260 | 7,480 | 4,510 | 16,200 | 10,700 | 59,500 | 16,600 | 3,910 | 1,540 | 1,410 |
| 24 | 5,200 | 13,100 | 5,200 | 7,480 | 3,730 | 14,400 | 15,700 | 64,800 | 17,100 | 3,730 | 1,540 | 1,280 |
| 25 | 4,960 | 16,600 | 5,980 | 6,850 | 3,730 | 14,000 | 17,100 | 65,700 | 16,600 | 3,730 | 1,820 | 1,280 |
| 26 | 4,960 | 29,200 | 5,710 | 6,550 | 3,910 | 13,100 | 21,600 | 72,100 | 16,200 | 3,380 | 1,960 | 1,280 |
| 27 | 4,960 | 23,800 | 5,980 | 6,850 | 4,300 | 13,500 | 29,200 | 65,700 | 16,200 | 3,210 | 1,680 | 1,280 |
| 28 | 4,960 | 20,600 | 5,980 | 6,550 | 4,300 | 13,100 | 29,800 | 54,400 | 15,300 | 3,380 | 1,540 | 1,280 |
| 29 | 4,960 | 22,200 | 6,260 | 5,980 | 4,100 | 12,300 | 32,400 | 38,600 | 14,000 | 3,210 | 1,540 | 1,540 |
| 30 | 4,960 | 18,000 | 5,450 | 6,850 | ------- | 12,300 | 27,300 | 38,600 | 11,900 | 3,040 | 1,680 | 1,280 |
| 31 | 4,730 | ------- | 5,450 | 7,480 | ------- | 11,900 | ------- | 36,500 | ------- | 2,880 | 1,540 | ------- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 7,160 | 4,300 | 5,440 | 1.12 | 1.29 | 334,000 |
| November | 43,900 | 4,300 | 18,600 | 3.84 | 4.28 | 1,110,000 |
| December | 24,900 | 5,200 | 10,600 | 2.19 | 2.52 | 652,000 |
| January | 21,600 | 4,960 | 9,150 | 1.89 | 2.18 | 563,000 |
| February | 7,480 | 3,730 | 5,470 | 1.13 | 1.22 | 315,000 |
| March | 16,200 | 3,910 | 9,210 | 1.90 | 2.19 | 566,000 |
| April | 32,400 | 8,150 | 13,700 | 2.82 | 3.15 | 815,000 |
| May | 72,100 | 24,900 | 50,300 | 10.4 | 11.99 | 3,090,000 |
| June | 29,800 | 11,900 | 19,500 | 4.02 | 4.48 | 1,160,000 |
| July | 11,100 | 2,880 | 6,100 | 1.26 | 1.45 | 375,000 |
| August | 3,210 | 1,540 | 2,120 | .437 | .50 | 130,000 |
| September | 2,560 | 1,280 | 1,550 | .320 | .36 | 92,200 |
| The year | 72,100 | 1,280 | 12,700 | 2.62 | 35.61 | 9,200,000 |

### CLEARWATER RIVER AT SPALDING, IDAHO

LOCATION.—Staff gage in NE. ¼ sec. 22, T. 36 N., R. 4 W., just above Lapwai Creek and a quarter mile northeast of Spalding post office at Joseph Junction.
RECORDS AVAILABLE.—March, 1926, to September, 1928.
DRAINAGE AREA.—9,570 square miles.
EXTREMES.—Maximum discharge, 107,000 second-feet May 26; maximum gage height, 23.6 feet January 5; minimum discharge, 2,450 second-feet September 28–30 (gage height, 0.70 foot).

1926–1928: Maximum discharge, 109,000 second-feet June 9, 1927; maximum stage, that of January 5, 1928; minimum discharge, 2,020 second-feet August 16 and 17, 1926 (gage height, 0.4 foot).

REMARKS.—Records excellent except those for estimated period, December 21 to January 7, which are fair. No diversions.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10,200 | 8,660 | 42,400 | | 18,000 | 8,660 | 46,000 | 55,800 | 46,700 | 18,500 | 4,720 | 2,940 |
| 2 | 8,360 | 8,070 | 55,800 | 11,700 | 17,100 | 8,360 | 41,700 | 51,900 | 43,800 | 16,600 | 4,720 | 2,770 |
| 3 | 8,360 | 9,580 | 63,000 | | 17,500 | 8,360 | 36,900 | 46,000 | 43,800 | 15,800 | 4,950 | 2,770 |
| 4 | 13,000 | 18,900 | 51,900 | | 17,100 | 9,270 | 33,700 | 43,100 | 41,700 | 16,200 | 4,950 | 2,770 |
| 5 | 16,200 | 67,100 | 43,100 | | 18,000 | 9,580 | 29,300 | 50,400 | 40,300 | 16,200 | 4,720 | 2,610 |
| 6 | 12,600 | 62,100 | 38,900 | 38,800 | 20,400 | 12,300 | 26,300 | 57,300 | 41,000 | 15,000 | 4,950 | 2,610 |
| 7 | 11,200 | 59,700 | 31,100 | 28,500 | 19,400 | 14,600 | 23,000 | 71,300 | 38,300 | 14,200 | 4,950 | 2,610 |
| 8 | 9,900 | 45,200 | 29,300 | 25,200 | 17,500 | 16,600 | 21,400 | 87,400 | 34,300 | 13,000 | 4,280 | 2,610 |
| 9 | 9,270 | 36,900 | 27,500 | 21,900 | 16,200 | 23,500 | 19,900 | 98,000 | 31,100 | 12,300 | 4,070 | 2,610 |
| 10 | 9,900 | 40,300 | 25,200 | 18,500 | 15,000 | 33,000 | 19,400 | 98,000 | 30,500 | 11,900 | 4,070 | 3,290 |
| 11 | 11,900 | 33,000 | 21,400 | 17,500 | 14,200 | 57,300 | 18,500 | 94,100 | 30,500 | 11,600 | 3,870 | 3,670 |
| 12 | 11,200 | 28,700 | 20,900 | 21,400 | 14,200 | 49,600 | 18,900 | 96,100 | 30,500 | 10,900 | 3,670 | 3,290 |
| 13 | 10,900 | 26,300 | 21,900 | 53,400 | 13,400 | 34,900 | 21,400 | 91,200 | 29,300 | 10,600 | 3,670 | 3,290 |
| 14 | 11,200 | 26,300 | 19,900 | 54,200 | 12,300 | 27,500 | 19,900 | 81,000 | 28,700 | 9,900 | 3,670 | 4,070 |
| 15 | 11,600 | 29,300 | 16,200 | 33,000 | 11,900 | 22,500 | 20,400 | 75,700 | 30,500 | 9,580 | 3,480 | 3,670 |
| 16 | 11,900 | 30,500 | 17,500 | 31,800 | 11,600 | 20,400 | 20,400 | 75,700 | 29,900 | 8,960 | 3,480 | 3,480 |
| 17 | 11,900 | 33,700 | 15,800 | 25,800 | 11,200 | 20,400 | 20,400 | 78,300 | 25,800 | 8,660 | 3,480 | 3,110 |
| 18 | 11,900 | 34,300 | 14,200 | 21,900 | 10,900 | 20,400 | 25,800 | 79,200 | 23,500 | 8,660 | 3,290 | 2,940 |
| 19 | 11,200 | 31,800 | 13,800 | 20,400 | 10,600 | 20,900 | 25,200 | 83,700 | 25,800 | 8,070 | 3,290 | 2,770 |
| 20 | 10,900 | 36,300 | 14,600 | 18,000 | 10,600 | 22,500 | 23,500 | 84,700 | 23,500 | 8,070 | 3,290 | 2,770 |
| 21 | 10,600 | 45,200 | | | 17,100 | 10,200 | 26,300 | 22,500 | 90,300 | 23,500 | 7,780 | 3,110 | 2,610 |
| 22 | 9,900 | 37,600 | | | 17,500 | 10,600 | 31,800 | 21,400 | 98,000 | 25,200 | 7,220 | 3,110 | 2,610 |
| 23 | 9,270 | 31,800 | | | 16,600 | 9,900 | 41,000 | 23,500 | 103,000 | 24,600 | 6,680 | 3,110 | 2,610 |
| 24 | 9,270 | 30,500 | | | 15,800 | 8,660 | 39,600 | 29,300 | 94,100 | 24,600 | 6,420 | 3,110 | 2,610 |
| 25 | 9,580 | 62,100 | | | 14,200 | 8,360 | 35,600 | 34,300 | 94,100 | 24,600 | 6,160 | 3,290 | 2,610 |
| 26 | 9,270 | 81,000 | | 13,200 | 13,800 | 9,270 | 30,500 | 38,300 | 104,000 | 23,500 | 5,910 | 3,290 | 2,610 |
| 27 | 9,270 | 56,500 | | | 13,400 | 9,580 | 31,800 | 49,600 | 100,000 | 23,500 | 5,660 | 3,290 | 2,610 |
| 28 | 8,960 | 57,300 | | | 12,600 | 9,270 | 32,400 | 60,500 | 82,800 | 23,500 | 5,420 | 3,290 | 2,450 |
| 29 | 8,960 | 55,000 | | | 12,600 | 8,960 | 30,500 | 56,500 | 73,900 | 20,900 | 5,420 | 3,290 | 2,450 |
| 30 | 9,900 | 44,500 | | | 15,000 | ------- | 34,300 | 48,200 | 62,100 | 20,400 | 5,180 | 3,110 | 2,450 |
| 31 | 9,270 | ------- | | | 18,000 | ------- | 42,400 | ------- | 51,900 | ------- | 4,950 | 2,940 | ------- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 16,200 | 8,360 | 10,600 | 1.11 | 1.28 | 652,000 |
| November | 81,000 | 8,070 | 38,900 | 4.06 | 4.53 | 2,310,000 |
| December | 63,000 | ---------- | 23,500 | 2.46 | 2.84 | 1,440,000 |
| January | 54,200 | ---------- | 22,000 | 2.30 | 2.65 | 1,350,000 |
| February | 20,400 | 8,360 | 13,200 | 1.38 | 1.49 | 759,000 |
| March | 57,300 | 8,360 | 26,300 | 2.75 | 3.17 | 1,620,000 |
| April | 60,500 | 18,500 | 29,900 | 3.12 | 3.48 | 1,780,000 |
| May | 104,000 | 43,100 | 79,100 | 8.27 | 9.53 | 4,860,000 |
| June | 46,700 | 20,400 | 30,100 | 3.15 | 3.51 | 1,790,000 |
| July | 18,500 | 4,950 | 10,000 | 1.04 | 1.20 | 615,000 |
| August | 4,950 | 2,940 | 3,760 | .393 | .45 | 231,000 |
| September | 4,070 | 2,450 | 2,880 | .301 | .34 | 171,000 |
| The year | 104,000 | 2,450 | 24,200 | 2.53 | 34.47 | 17,600,000 |

### 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; April, 1923, to September, 1928.

EXTREMES.—Maximum discharge during year, 7,560 second-feet May 9 and 10 (gage height. 9.35 feet); minimum, 131 second-feet September 27 (gage height, 2.80 feet).

1910–1916, 1923–1928: Maximum discharge, 9,830 second-feet May 30, 1912 (gage height, 9.7 feet); minimum, 40 second-feet September 24, 1924.

REMARKS.—Records good except those for August and September, which are fair. Low-water flow diverted through power plant but returned to river above gage. Some diurnal regulation during low water owing to power-plant operation. Gage-height record furnished by Inland Power & Light Co.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 680 | 397 | 1,660 | 685 | 870 | 444 | 1,850 | 5,580 | 2,270 | 870 | 254 | 176 |
| 2 | 548 | 374 | 2,740 | 685 | 870 | 444 | 1,750 | 4,920 | 2,160 | 838 | 272 | 158 |
| 3 | 575 | 469 | 2,740 | 838 | 838 | 444 | 1,660 | 4,290 | 2,270 | 805 | 291 | 153 |
| 4 | 870 | 548 | 2,270 | 1,660 | 805 | 469 | 1,660 | 4,140 | 2,050 | 935 | 291 | 142 |
| 5 | 685 | 1,400 | 2,050 | 1,850 | 838 | 521 | 1,570 | 4,290 | 1,850 | 935 | 254 | 139 |
| 6 | 602 | 1,310 | 1,850 | 1,570 | 838 | 521 | 1,480 | 5,080 | 1,850 | 870 | 254 | 144 |
| 7 | 521 | 1,750 | 1,570 | 1,310 | 745 | 548 | 1,310 | 6,090 | 1,660 | 805 | 254 | 144 |
| 8 | 495 | 1,400 | 1,570 | 1,230 | 805 | 630 | 1,310 | 6,810 | 1,570 | 745 | 237 | 144 |
| 9 | 469 | 1,230 | 1,480 | 1,150 | 630 | 745 | 1,400 | 7,180 | 1,480 | 685 | 220 | 352 |
| 10 | 658 | 1,480 | 1,310 | 1,150 | 630 | 805 | 1,400 | 7,180 | 1,480 | 630 | 220 | 469 |
| 11 | 630 | 1,150 | 902 | 1,150 | 658 | 935 | 1,230 | 6,810 | 1,400 | 602 | 220 | 331 |
| 12 | 630 | 1,080 | 1,230 | 1,310 | 745 | 1,150 | 1,310 | 6,270 | 1,570 | 575 | 220 | 272 |
| 13 | 630 | 1,000 | 1,230 | 1,950 | 548 | 902 | 1,310 | 5,750 | 1,480 | 548 | 204 | 420 |
| 14 | 630 | 1,000 | 1,000 | 2,160 | 685 | 902 | 1,480 | 5,410 | 1,400 | 521 | 204 | 374 |
| 15 | 575 | 1,080 | 935 | 1,850 | 575 | 685 | 1,480 | 5,080 | 1,660 | 469 | 204 | 291 |
| 16 | 575 | 1,150 | 1,000 | 1,660 | 630 | 902 | 1,570 | 4,760 | 1,310 | 469 | 188 | 254 |
| 17 | 521 | 1,230 | 805 | 1,400 | 685 | 935 | 2,270 | 4,760 | 1,310 | 575 | 204 | 220 |
| 18 | 469 | 1,310 | 745 | 1,400 | 630 | 1,000 | 2,270 | 4,760 | 1,480 | 521 | 188 | 220 |
| 19 | 469 | 1,230 | 775 | 1,310 | 602 | 1,150 | 2,050 | 4,600 | 1,480 | 495 | 182 | 204 |
| 20 | 420 | 1,570 | 805 | 1,310 | 575 | 1,400 | 2,050 | 4,600 | 1,310 | 469 | 188 | 182 |
| 21 | 397 | 1,570 | 745 | 1,310 | 602 | 1,660 | 1,850 | 4,760 | 1,230 | 420 | 167 | 188 |
| 22 | 420 | 1,400 | 715 | 1,310 | 630 | 2,050 | 1,950 | 4,760 | 1,230 | 374 | 173 | 170 |
| 23 | 374 | 1,230 | 685 | 1,150 | 495 | 2,160 | 2,500 | 4,440 | 1,150 | 374 | 188 | 158 |
| 24 | 374 | 1,320 | 685 | 1,080 | 469 | 2,270 | 3,000 | 4,290 | 1,150 | 331 | 182 | 185 |
| 25 | 397 | 1,660 | 685 | 1,000 | 521 | 2,050 | 3,000 | 4,290 | 1,000 | 331 | 185 | 164 |
| 26 | 420 | 2,500 | 685 | 1,000 | 602 | 1,850 | 3,690 | 4,290 | 1,000 | 331 | 176 | 173 |
| 27 | 420 | 2,160 | 715 | 935 | 575 | 2,050 | 4,760 | 4,140 | 1,000 | 311 | 176 | 158 |
| 28 | 420 | 2,050 | 745 | 902 | 548 | 1,850 | 5,410 | 3,550 | 1,000 | 311 | 179 | 170 |
| 29 | 469 | 1,950 | 685 | 870 | 521 | 1,750 | 4,760 | 3,270 | 935 | 291 | 182 | 161 |
| 30 | 469 | 1,660 | 575 | 935 | ------- | 1,750 | 4,440 | 2,870 | 1,000 | 291 | 173 | 161 |
| 31 | 420 | ------- | 444 | 935 | ------- | 1,750 | ------- | 2,500 | ------- | 272 | 173 | ------- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 870 | 374 | 522 | 0.603 | 0.70 | 32,100 |
| November | 2,500 | 374 | 1,320 | 1.53 | 1.71 | 78,600 |
| December | 2,740 | 444 | 1,160 | 1.34 | 1.54 | 71,300 |
| January | 2,160 | 685 | 1,260 | 1.46 | 1.68 | 77,500 |
| February | 870 | 469 | 661 | .764 | .82 | 38,000 |
| March | 2,270 | 444 | 1,180 | 1.36 | 1.57 | 72,600 |
| April | 5,410 | 1,230 | 2,260 | 2.61 | 2.91 | 134,000 |
| May | 7,180 | 2,500 | 4,890 | 5.65 | 6.51 | 301,000 |
| June | 2,270 | 935 | 1,460 | 1.69 | 1.89 | 86,900 |
| July | 935 | 272 | 548 | .634 | .73 | 33,700 |
| August | 291 | 167 | 210 | .243 | .28 | 12,900 |
| September | 469 | 139 | 216 | .250 | .28 | 12,900 |
| The year | 7,180 | 139 | 1,310 | 1.51 | 20.62 | 952,000 |

### 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, 1½ miles northeast of Ahsahka and 2 miles above mouth.

DRAINAGE AREA.—2,440 square miles.

RECORDS AVAILABLE.—August, 1926, to September, 1928.

EXTREMES.—Maximum discharge during year, 40,300 second-feet May 10 (gage height, 21.2 feet); minimum, 1,040 second-feet September 24–30 (gage height, 0.7 foot).

1926–1928: Maximum discharge, that of May 10, 1928; minimum, 920 second-feet August 30, 1926 (gage height, 0.49 foot).

REMARKS.—Records fair. No diversions.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3,400 | 3,400 | 17,000 | | | 3,100 | 21,500 | 20,800 | 16,200 | | 1,880 | 1,240 |
| 2 | 3,200 | 5,000 | 22,400 | | | 3,000 | 18,800 | 20,100 | 15,200 | | e1,850 | e1,200 |
| 3 | 3,200 | 11,800 | 26,500 | e4,500 | | 3,000 | 14,600 | 17,900 | 14,200 | | e1,820 | 1,170 |
| 3 | 6,550 | 14,000 | 20,100 | | | 3,100 | 12,000 | 16,600 | 13,400 | e4,500 | 1,790 | e1,140 |
| 5 | 6,400 | 24,100 | 17,900 | | | 3,300 | 10,600 | 18,100 | 12,900 | | e1,740 | 1,100 |
| 6 | 4,050 | 22,900 | 16,000 | | e6,000 | 5,260 | 9,760 | e23,600 | 12,700 | | 1,700 | e1,100 |
| 7 | 4,510 | 21,700 | 13,200 | | | 6,100 | 8,930 | 29,200 | 12,300 | | e1,660 | e1,100 |
| 8 | 4,050 | 21,000 | 11,800 | | | | 7,960 | 34,900 | 11,800 | | 1,620 | 1,100 |
| 9 | 3,830 | 17,200 | 10,800 | | | e6,000 | 7,480 | 37,500 | 10,900 | | e1,590 | e1,100 |
| 10 | 4,630 | 18,300 | 9,920 | | | | 7,170 | 39,600 | e10,800 | | e1,570 | 1,100 |
| 11 | 4,510 | 13,400 | 9,420 | e11,000 | | | 8,580 | 37,500 | e10,600 | e3,500 | 1,540 | e1,140 |
| 12 | 4,390 | 11,500 | 8,280 | | | | 7,320 | 36,700 | 10,500 | | e1,500 | 1,170 |
| 13 | 4,390 | 10,400 | 7,640 | | e5,000 | e9,000 | 7,320 | 35,400 | | | 1,460 | e1,220 |
| 14 | 4,390 | 10,800 | 7,480 | | | | 7,350 | 35,200 | | | e1,460 | e1,260 |
| 15 | 4,630 | 9,590 | 7,170 | | | | 7,640 | 33,900 | e10,000 | | 1,460 | 1,310 |
| 16 | 4,630 | 9,760 | 7,020 | | 4,040 | 7,020 | 7,690 | 33,300 | | 2,940 | e1,430 | e1,200 |
| 17 | 4,510 | 13,100 | 5,810 | | 4,040 | e7,250 | 8,930 | e31,900 | | e2,880 | e1,410 | 1,100 |
| 18 | 4,280 | 14,200 | | | e3,920 | 7,480 | 9,260 | 30,500 | | 2,830 | 1,380 | e1,100 |
| 19 | 4,050 | 15,200 | | | 3,810 | | 8,580 | 37,500 | | e2,760 | e1,340 | 1,100 |
| 20 | 3,830 | 19,200 | | | 3,700 | | 8,280 | 35,400 | | e2,700 | 1,310 | e1,100 |
| 21 | 3,720 | 17,700 | | e7,000 | 3,040 | e12,000 | e8,040 | 32,600 | | 2,630 | e1,310 | e1,100 |
| 22 | 3,620 | 15,600 | | | 2,940 | | 7,800 | 35,200 | e7,500 | e2,530 | 1,310 | 1,100 |
| 23 | 3,400 | 13,100 | | | 3,040 | | 8,930 | 33,900 | | 2,430 | e1,330 | e1,070 |
| 24 | 3,510 | 17,900 | | | 3,040 | 16,600 | 13,100 | 34,900 | | e2,330 | e1,360 | 1,040 |
| 25 | 3,510 | 29,000 | e5,500 | | 2,940 | 14,800 | e14,700 | 34,900 | | 2,240 | 1,380 | e1,040 |
| 26 | 3,400 | 37,200 | | | e3,320 | 14,600 | e16,300 | 36,500 | | e2,180 | e1,420 | 1,040 |
| 27 | 3,400 | 25,000 | | | 3,700 | 15,000 | 17,900 | 31,800 | | e2,120 | 1,460 | 1,040 |
| 28 | 3,300 | 23,800 | | | 3,470 | 15,200 | 24,100 | 27,500 | e6,500 | 2,060 | e1,460 | e1,040 |
| 29 | 3,620 | 21,000 | | e5,500 | 3,250 | 17,000 | 21,200 | 23,400 | | e2,060 | 1,460 | 1,040 |
| 30 | 3,510 | 19,000 | | | -------- | 17,500 | 20,600 | 20,100 | 5,920 | 2,060 | 1,380 | e1,040 |
| 31 | 3,400 | -------- | | | -------- | 19,800 | -------- | 18,100 | -------- | e1,970 | 1,310 | -------- |

| Month | Maximum | Minimum | Mean | Per square mile | Run-off | |
|---|---|---|---|---|---|---|
| | | | | | Inches | Acre-feet |
| October | 6,550 | 3,200 | 4,060 | 1.66 | 1.91 | 250,000 |
| November | 37,200 | 3,400 | 16,900 | 6.93 | 7.73 | 1,010,000 |
| December | 26,500 | ---------- | 9,530 | 3.91 | 4.51 | 586,000 |
| January | ---------- | ---------- | 7,940 | 3.25 | 3.75 | 488,000 |
| February | ---------- | 2,940 | 4,590 | 1.88 | 2.03 | 264,000 |
| March | 19,800 | 3,000 | 9,750 | 4.00 | 4.61 | 600,000 |
| April | 24,100 | 7,170 | 11,700 | 4.80 | 5.36 | 696,000 |
| May | 39,600 | 16,600 | 30,100 | 12.3 | 14.18 | 1,850,000 |
| June | 16,200 | 5,920 | 9,810 | 4.02 | 4.48 | 584,000 |
| July | ---------- | 1,970 | 3,140 | 1.29 | 1.49 | 193,000 |
| August | 1,880 | 1,310 | 1,510 | .619 | .71 | 92,800 |
| September | 1,310 | 1,040 | 1,120 | .459 | .51 | 66,600 |
| The year | 39,600 | 1,040 | 9,200 | 3.77 | 51.27 | 6,680,000 |

e Estimated or interpolated.

### TUCANNON RIVER NEAR POMEROY, WASH.

LOCATION.—Staff gage in sec. 13, T. 11 N., R. 40 E., at highway bridge 9 miles southwest of Pomeroy and 14 miles above Petaha Creek.

DRAINAGE AREA.—109 square miles.

RECORDS AVAILABLE.—August, 1913, to June, 1915; March, 1924, to September, 1928.

EXTREMES.—Maximum discharge during year, 1,630 second-feet January 13 (gage height, 6.4 feet); minimum, 56 second-feet August 16–19, 25–28, and September 1–7 (gage height, 4.16 feet).

1913–1915, 1924–1928: Maximum discharge, that of January 13, 1928; minimum, 25 second-feet December 24, 1914 (gage height, 1.2 feet).

REMARKS.—Records good. Discharge estimated December 30 to January 5. Several small diversions upstream for irrigation.

*Daily and monthly discharge, in second-feet, 1927–28*

| Day | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 103 | 89 | 404 | 115 | 162 | 65 | 430 | 375 | 247 | 103 | 61 | 56 |
| 2 | 103 | 92 | 385 | 124 | 162 | 65 | 458 | 325 | 237 | 103 | 63 | 56 |
| 3 | 105 | 92 | 346 | 132 | 170 | 63 | 430 | 310 | 228 | 107 | 63 | 56 |
| 4 | 164 | 92 | 346 | 137 | 170 | 63 | 350 | 295 | 214 | 111 | 63 | 56 |
| 5 | 134 | 96 | 346 | 200 | 170 | 72 | 350 | 310 | 206 | 107 | 63 | 56 |
| 6 | 129 | 124 | 320 | 320 | 170 | 89 | 310 | 375 | 192 | 107 | 63 | 56 |
| 7 | 124 | 143 | 295 | 474 | 179 | 89 | 270 | 430 | 183 | 107 | 63 | 56 |
| 8 | 115 | 146 | 280 | 474 | 179 | 107 | 252 | 430 | 183 | 89 | 61 | 58 |
| 9 | 108 | 180 | 258 | 474 | 170 | 128 | 237 | 458 | 179 | 89 | 61 | 61 |
| 10 | 110 | 152 | 229 | 514 | 170 | 201 | 228 | 458 | 170 | 89 | 58 | 61 |
| 11 | 113 | 146 | 184 | 805 | 166 | 514 | 214 | 458 | 170 | 82 | 58 | 61 |
| 12 | 108 | 143 | 211 | 900 | 140 | 710 | 237 | 458 | 166 | 79 | 58 | 63 |
| 13 | 103 | 134 | 211 | 1,410 | 128 | 514 | 237 | 430 | 157 | 75 | 58 | 65 |
| 14 | 101 | 132 | 184 | 1,410 | 128 | 430 | 242 | 458 | 149 | 75 | 58 | 65 |
| 15 | 98 | 143 | 184 | 965 | 111 | 350 | 242 | 402 | 140 | 75 | 58 | 63 |
| 16 | 98 | 149 | 177 | 542 | 107 | 310 | 247 | 375 | 136 | 75 | 56 | 63 |
| 17 | 94 | 158 | 161 | 430 | 107 | 285 | 247 | 375 | 136 | 72 | 56 | 63 |
| 18 | 92 | 174 | 152 | 375 | 96 | 261 | 247 | 375 | 132 | 72 | 56 | 63 |
| 19 | 89 | 170 | 146 | 325 | 89 | 261 | 237 | 375 | 128 | 72 | 56 | 61 |
| 20 | 89 | 174 | 140 | 285 | 89 | 285 | 237 | 375 | 124 | 72 | 58 | 61 |
| 21 | 85 | 207 | 137 | 261 | 89 | 305 | 224 | 375 | 120 | 72 | 58 | 61 |
| 22 | 83 | 225 | 132 | 237 | 89 | 350 | 210 | 402 | 120 | 68 | 58 | 58 |
| 23 | 83 | 236 | 132 | 214 | 89 | 430 | 233 | 402 | 107 | 68 | 58 | 58 |
| 24 | 85 | 305 | 132 | 192 | 85 | 375 | 285 | 375 | 103 | 68 | 58 | 58 |
| 25 | 89 | 852 | 126 | 179 | 85 | 350 | 295 | 375 | 99 | 68 | 56 | 61 |
| 26 | 89 | 900 | 124 | 162 | 79 | 310 | 300 | 375 | 96 | 65 | 56 | 61 |
| 27 | 87 | 665 | 126 | 149 | 72 | 310 | 350 | 375 | 96 | 63 | 56 | 61 |
| 28 | 92 | 557 | 132 | 136 | 72 | 300 | 375 | 350 | 99 | 63 | 56 | 61 |
| 29 | 89 | 557 | 132 | 149 | 68 | 285 | 350 | 325 | 99 | 61 | 58 | 61 |
| 30 | 89 | 474 | 121 | 214 | ------ | 300 | 350 | 295 | 107 | 58 | 58 | 61 |
| 31 | 92 | ------ | 110 | 192 | ------ | 350 | ------ | 261 | ------ | 58 | 58 | ------ |

| Month | Maximum | Minimum | Mean | Run-off in acre-feet |
|---|---|---|---|---|
| October | 164 | 83 | 101 | 6,210 |
| November | 900 | 89 | 257 | 15,300 |
| December | 404 | 110 | 205 | 12,600 |
| January | 1,410 | 115 | 403 | 24,800 |
| February | 179 | 68 | 124 | 7,130 |
| March | 710 | 63 | 275 | 16,900 |
| April | 458 | 210 | 289 | 17,200 |
| May | 458 | 261 | 379 | 23,300 |
| June | 247 | 96 | 151 | 8,980 |
| July | 111 | 58 | 79.8 | 4,910 |
| August | 63 | 56 | 58.7 | 3,610 |
| September | 65 | 56 | 60.0 | 3,570 |
| The year | 1,410 | 56 | 199 | 145,000 |

## MISCELLANEOUS DISCHARGE MEASUREMENTS

In addition to the records of flow obtained at the gaging stations and reported in the preceding pages, measurements were made at other points, as shown by the following table:

*Miscellaneous discharge measurements in Snake River drainage basin during the year ending September 30, 1928*

| Date | Stream | Tributary to or diverting from— | Locality | Gage height | Discharge |
|---|---|---|---|---|---|
| | | | | *Feet* | *Sec.-ft.* |
| July 14 | Market Lake Springs Creek. | Snake River | Three-quarters of a mile above mouth, near Roberts, Idaho. | 1.35 | 4.8 |
| 18 | do | do | do | 1.07 | 4.3 |
| Aug. 2 | do | do | do | .90 | 3.0 |
| 16 | do | do | do | .85 | 2.7 |
| Sept. 8 | do | do | do | .68 | 2.4 |
| July 31 | Henrys Fork | do | Below Consolidated Farmers Dam near St. Anthony, Idaho. | | 5.5 |
| 26 | Big Springs | Henrys Fork | Big Springs, Idaho | .89 | 208 |
| Sept. 7 | do | do | do | .89 | 187 |
| 7 | Moose Creek | Big Springs | do | 2.54 | 56.3 |
| Aug. 24 | South Channel, Teton River. | Henrys Fork | Below diversions near Rexburg, Idaho. | | 8.6 |
| 24 | North Channel, Teton River. | do | do | | 45.3 |
| July 26 | Palisade Creek | Snake River | Above upper Palisade Lake outlet in sec. 10, T. 1 N., R. 45 E., 6 miles northeast of Irwin, Idaho. | | 37.8 |
| 27 | do | do | Below upper Palisade Lake outlet in sec. 16, T. 1 N., R. 45 E., 6 miles northeast of Irwin, Idaho. | | 101 |
| 27 | do | do | Below lower Palisade Lake outlet in sec. 17, T. 1 N., R. 45 E., 5 miles northeast of Irwin, Idaho. | | 121 |
| Sept. 3 | Camas Creek | Mud Lake | Sec. 34, T. 7 N., R. 35 E., 6 miles northeast of Terreton, Idaho. | 1.30 | [a] 18 |
| Aug. 2 | Birch Creek | Marsh Creek | Below tailrace, sec. 28, T. 12 S., R. 36 E., 10 miles north of Malad, Idaho. | | 8.4 |
| Mar. 9 | do | do | do | | 7.7 |
| Aug. 20 | Little Lost River | Snake River | Below mouth of Wet Creek, sec. 4, T. 9 N., R. 27 E., 27 miles northwest of Howe, Idaho. | | 46.9 |
| 20 | do | do | Above Knollin ranch, about sec. 13, T. 7 N., R. 27 E., about 14 miles northwest of Howe, Idaho. | | 40.9 |
| 20 | do | do | Below Knollin ranch, about sec. 13, T. 7 N., R. 27 E., about 14 miles northwest of Howe, Idaho. | | 42.9 |
| 19 | Diversion canal | Dry Creek | About sec. 30, T. 10 N., R. 25 E., an eighth of a mile below lower end of pipe line, 1 mile below Dry Creek Dam, 36 miles northwest of Howe, Idaho. | .68 | 20.3 |
| 19 | Wet Creek | Little Lost River | Above Corral Creek, sec. 8, T. 9 N., R. 26 E., 30 miles northwest of Howe, Idaho. | | 13.1 |
| 19 | do | do | At mouth, sec. 4, T. 9 N., R. 27 E., 27 miles uorthwest of Howe, Idaho. | | 21.2 |
| 19 | Corral Creek | Wet Creek | At mouth, sec. 8, T. 9 N., R. 26 E., 30 miles northwest of Howe, Idaho. | | 14.5 |
| 20 | Deer Creek | Little Lost River | At mouth, sec. 34, T. 9 N., R. 27 E, 22 miles northwest of Howe, Idaho. | | 1.7 |
| 20 | Badger Creek | do | At mouth, sec. 34, T. 9 N., R. 27 E, 22 miles northwest of Howe, Idaho. | | 2.6 |
| 20 | Spring Creek | do | At mouth, sec. 20, T. 7 N., R. 28 E., 11 miles northwest of Howe, Idaho. | | 22.9 |
| 20 | Teeny Creek | do | At mouth, about sec. 20, T. 7 N., R. 28 E., 11 miles northwest of Howe, Idaho. | | 1.1 |
| 6 | Blue Lakes outlet (east channel). | Snake River | 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. | .94 | 153 |

[a] Estimated.

*Miscellaneous discharge measurements in Snake River drainage basin during the year ending September 30, 1928*—Continued

| Date | Stream | Tributary to or diverting from— | Locality | Gage height | Discharge |
|---|---|---|---|---|---|
| | | | | *Feet* | *Sec.-ft.* |
| Sept. 10 | Blue Lakes outlet | Snake River | 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. | 1.00 | 221 |
| Aug. 10 | High Line Canal | do | Sec. 6, T. 6 S., R. 8 E., 3 miles southwest of Hammett, Idaho. | | 10.2 |
| 10 | do | do | do | | 6.5 |
| 10 | do | do | do | | 17.5 |
| 9 | Low Line Canal | do | do | | 19.2 |
| 10 | do | do | do | | 12.3 |
| 10 | do | do | do | | 7.9 |
| May 4 | Ake No. 2 lateral | do | do | | 6.2 |
| June 18 | do | do | do | | 4.8 |
| Aug. 11 | do | do | do | | 3.9 |
| Nov. 5 | Squaw Creek | Payette River | Sec. 19, T. 13 N., R. 2 E., 10 miles north of Gross, Idaho. | 1.14 | 10.1 |
| Feb. 15 | South Side Canal of Emmett Irrigation District. | do | At Black Canyon Dam, sec. 22, T. 7 N., R. 1 W., 5½ miles northeast of Emmett, Idaho. | | 0 |
| July 16 | do | do | do | 8.79 | 92.0 |
| Sept. 27 | do | do | do | 8.38 | 76.2 |
| June 19 | Sheep Creek | Imnaha River | Mouth at Imnaha, Idaho | | 146 |
| July 23 | do | do | do | | 65 |
| Aug. 31 | Pahsimeroi River | Salmon River | Mouth, sec. 25, T. 16 N., R. 20 E., 10 miles northwest of May, Idaho. | 1.98 | 163 |
| Apr. 26 | Tailrace of Salmon River Power & Light Co.'s plant. | Lemhi River | NE. ¼ NW. ¼ sec. 5, T. 21 N., R. 22 E. at Salmon, Idaho. | | 128 |
| 27 | do | do | do | | 198 |
| 27 | do | do | do | | 186 |
| Aug. 30 | North Fork of Salmon River. | Salmon River | E. ½ sec. 17, T. 24 N., R. 21 E. at North Fork, Idaho. | 1.50 | 56.5 |
| July 13 | Elk Creek | Bear Valley Creek | In about sec. 35, T. 13 N., R. 8 E., three-eighths mile below mouth of Beaver Creek, 2½ miles west of Elk Creek ranger station and 14 miles west of Cape Horn, Idaho. | 2.53 | 105 |
| 13 | Beaver Creek | Elk Creek | In about 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. | 2.44 | 30.0 |
| 13 | do | do | do | 2.44 | 30.0 |
| Sept. 10 | East Fork of South Fork of Salmon River. | South Fork of Salmon River. | Above mouth of Johnson Creek, sec. 20, T. 19 N., R. 8 E., at Yellow Pine, Idaho. | | 84.0 |
| 10 | do | do | Below mouth of Johnson Creek, sec. 20, T. 19 N., R. 8 E., at Yellow Pine, Idaho. | | 165 |
| 29 | Lochsa River | Middle Fork of Clearwater River. | Just above Pete King ranger station, sec. 33, T. 33 N., R. 7 E., at Lowell, Idaho. | .95 | 404 |
| 30 | Selway River | do | Sec. 25, T. 32 N., R. 7 E., 6 miles southeast of Lowell, Idaho. | .70 | 625 |
| 27 | Lolo Creek | Clearwater River | Sec. 14, T. 35 N., R. 2 E., 1 mile southeast of Greer, Idaho. | .91 | 28.9 |
| 24 | Potlatch Creek | do | 2.2 miles above mouth, sec. 31, T. 37 N., R. 3 W., 5 miles northeast of Arrow, Idaho. | −0.29 | 9.0 |
| May 4 | Tailrace of Inland Power & Light Co.'s plant. | do | Sec. 33, T. 36 N., R. 5 W., 3 miles east of Lewiston, Idaho. | | 2,040 |
| 4 | do | do | do | | 1,550 |
| 5 | do | do | do | | 4,190 |
| Dec. 21 | Palouse River | Snake River | Former gaging station at Hooper, Wash. | 3.43 | 463 |

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