1972

Water Resources Data for Idaho

Part 1. Surface Water Records

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the State of Idaho and with other agencies

CALENDAR FOR WATER YEAR 1972

OCTOBER 1971

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
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31						

NOVEMBER 1971

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DECEMBER 1971

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JANUARY 1972

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FEBRUARY 1972

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MARCH 1972

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APRIL 1972

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MAY 1972

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JUNE 1972

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JULY 1972

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23	24	25	26	27	28	29
30	31					

AUGUST 1972

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SEPTEMBER 1972

S	M	T	W	T	F	S
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10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

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Prepared in cooperation with the State of Idaho and with other agencies

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Idaho Department of Water Administration
Idaho Department of Highways
Corps of Engineers, Department of the Army
Bureau of Reclamation, U.S. Department of the Interior
U.S. Department of State
Forest Service, U.S. Department of Agriculture
Bureau of Sports Fisheries and Wildlife, U.S. Department of the Interior
Bureau of Land Management, U.S. Department of the Interior

Water-quality records for some of the gaging-station sites in this report will be contained in:

Water Resources Data for Idaho, 1972
Part 2. Water-Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
P.O. Box 036, Federal Building
550 West Fort Street
Boise, Idaho 83702

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WATER RESOURCES DATA FOR IDAHO, 1972

Part 1. Surface-Water Records

INTRODUCTION

Surface-water records for the 1972 water year for gaging stations, partial-record stations, and miscellaneous sites within the State of Idaho are given in this report and their locations shown in figures 2 and 3. Records for a few selected gaging stations in bordering States also are included. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey, under the direction of H. K. Hall, district chief, Water Resources Division.

Through September 30, 1960, the records of discharge and stage of streams and contents and stage of lakes or reservoirs were published in an annual series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Since 1951 there have been 20 volumes in the series; each volume covered an area whose boundaries coincided with those of certain natural drainage areas. The records in Idaho were contained in Parts 10, 12, and 13 of that series.

Beginning with the 1961 water year, streamflow records and related data have been released by the Geological Survey in annual reports on a State-boundary basis. Distribution of these basic-data reports is limited; they are designed primarily for rapid release of data shortly after the end of the water year to meet local needs. The discharge and reservoir-storage records are also being published at 5-year intervals in a Geological Survey water-supply paper series entitled "Surface Water Supply of the United States." These papers which show daily discharge and storage figures are compiled on the same geographical areas used for the annual series published through September 30, 1960. The daily records for 1961-65 are compiled in Water-Supply Papers 1927 (Part 10), 1933 (Part 12), and 1934 (Part 13), and the daily records for 1966-70 are compiled in Water-Supply Papers 2127 (Part 10), 2131 (Part 12, vol. 2), and 2132 (Part 13).

COOPERATION

Cooperative agreements between the U.S. Geological Survey and organizations of the State of Idaho for the systematic collection of streamflow records began in 1909. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreements with the Survey are:

Idaho Department of Water Administration, R. Keith Higginson, director.

Idaho Department of Highways, E. L. Mathes, State highway engineer.

Bear River Commission, E. O. Larson, chairman.

City of Kellogg, Roger Fulton, mayor.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, for operation of 21 gaging stations; by the Bureau of Reclamation, U.S. Department of the Interior, for 28 stations; by the U.S. Department of State, for 11 stations; by the Forest Service, U.S. Department of Agriculture, for two stations; by the Bureau of Land Management, U.S. Department of the Interior, for two stations; and by the Bureau of Sports Fisheries and Wildlife, U.S. Department of the Interior, for two stations.

The following organizations aided in collecting records:

Water Districts 01, 31, 33, 34, 37, 37N, and 65K; King Hill Irrigation District; Black Canyon Irrigation District; Idaho Power Co.; Washington Water Power Co.; Utah Power & Light Co.; Salmon River Canal Co.; and Blaine County Canal Co.

Organizations that supplied data are acknowledged in station descriptions.

DEFINITION OF TERMS

The terms related to streamflow and other hydrologic data, as used in this report, are defined as follows:

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or 325,851 gallons.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, or 646,317 gallons, and represents a runoff of 0.0372 inch from 1 square mile.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, a long reach of the channel, or an artificial structure.

Cubic foot per second (cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second, and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Discharge is the volume of water (or more broadly, total fluids) that passes a given point within a given period of time.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is obtained.

Mean altitude is the average elevation of the drainage area.

Partial-record station is a particular site where limited streamflow data are collected systematically over a period of years for use in hydrologic analyses.

Runoff in inches (IN.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

DOWNSTREAM ORDER AND STATION NUMBERS

Records are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all main-stream stations are listed before the first main-stream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of gaging stations in the front of this report, the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging stations, so that the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Gaps are left in the numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 13032500 includes the part number "13" plus a 6-digit station number. In this report, the records are listed in downstream order by parts. All records for a drainage basin encompassing more than one state could be arranged in downstream order by assembling pages from the various state reports by station number to include all records in the basin.

EXPLANATION OF SURFACE-WATER DATA

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals and stage and contents of lakes and reservoirs. In addition, observations of factors affecting the stage-discharge relation, weather records, and other information are used to supplement base data in determining the daily flow. The records of stage are obtained either from a water-stage recorder that gives a continuous graph of fluctuations (for digital recorders, a tape punched at 15-, 30-, or 60-minute intervals) or from direct readings on a nonrecording gage. Measurements of discharge are made with a current meter by the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks on the measurement of stream discharge. (See also SELECTED REFERENCES.)

For a stream-gaging station, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The application of the daily mean gage height to those rating tables gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is in effect the shifting-control method.

At some stream-gaging stations, the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. Information required for determining the slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations, the stage-discharge relation is affected by changing stage; at these stations, the rate of change in stage is used as a factor in determining discharge.

At some gaging stations, the stage-discharge relation is affected by ice during the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations, there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute the daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of basic data. For gaging stations on streams or canals, a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs, a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the 1972 water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the station gives the location, drainage area, mean altitude, if determined, period of record, type and history of gages, average discharge, extremes of discharge or contents, and general remarks. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION," is taken from the River Mile Index prepared by the Hydrology Subcommittee, CBIAC. These distances are determined from river surveys and by scaling from the best maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, and the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gages, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey, unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or the minimum contents), and the minimum gage height if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year:" the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record:" the data given are for the period of record given in the PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) corresponds to the crest stage obtained by use of a water-stage recorder (graph or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge or contents, it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of water-quality records, is given under "REMARKS;" for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is also given under "REMARKS."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years, only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

Skeleton rating tables are published for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

Skeleton capacity tables are published for all reservoirs for which records of contents are published on a daily basis.

The daily tables for stream-gaging stations give the discharge corresponding to the daily mean gage height unless there are large or rapid changes in the discharge during a day. For days having large or rapid changes, discharge for the day is computed by averaging the mean discharge for several parts of a day. For digital recorders, the daily mean discharge is always the average of the discharges at each punched reading. For stations equipped with nonrecording gages, the daily discharge corresponds to once-daily readings of the gage or to the mean of twice-daily readings; but for periods of rapidly changing stage, the discharge is determined from a gage-height graph based on gage readings.

The daily tables for reservoir stations give the contents corresponding to the water-surface elevation at a given time, usually at 2400 each day. For some reservoirs, the elevation at a given time is given in the daily table.

The monthly summary is given below the daily table. For stream-gaging stations, the line headed "TOTAL" gives the sum of the daily figures; it is the total cubic feet per second per day for the month. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN.") or in acre-feet (line headed "AC-FT"). Figures of cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average rainfall on the drainage basin is usually less than 20 inches.

For reservoir stations, the monthly summary gives the elevation (or gage height) at the end of the month and the change in contents during the month. If elevation or gage height is given in the daily table, the monthly summary gives the contents at the end of the month, rather than the elevation or gage height.

In the yearly summary below the monthly summary, the figures of maximum are the maximum daily discharges for the calendar and water years; likewise, the minimums in this summary are the minimum daily discharges.

For reservoir stations, the yearly summary gives the change in contents for the calendar year and for the water year. For some small reservoirs, only monthly and yearly summaries are published.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030 and 1:30 p.m. is 1330.

In a general footnote, introduced by the word "NOTE", certain periods are indicated for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs. Footnotes to reservoir tables may be used to explain the use of new capacity tables or for other special conditions.

Accuracy of Data

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges is within 5 percent; "good" within 10 percent, and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations. However, since measurements at miscellaneous sites are observed data and are often of a higher degree of accuracy, figures are usually carried to one more significant figure below 100 cfs.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumptive use, regulation, evaporation, or other factors. For such stations, discharge in cubic

feet per second per square mile and runoff in inches are not published unless satisfactory adjustments can be made for such effects. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or unadjusted losses (consumptive use, evaporation, seepage, etc.) are large in comparison with the observed discharge.

Publications

Each volume of the 1960 series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States" contains a listing of the numbers of all water-supply papers in which records of surface-water data were published for the area covered by the individual volumes. Each volume also contains a list of water-supply papers that give detailed information on major floods for the area. The new series of water-supply papers containing daily surface-water records for the 5-year periods October 1, 1960, to September 30, 1965, and October 1, 1965, to September 30, 1970 (WSP's 1927, 1933, 1935, 2127, 2131, and 2132) also contain lists of annual and special reports published as water-supply papers.

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Papers 1314(10), 1316(12), and 1317(13); records for October 1950 to September 1960 have been compiled and published in Water-Supply Papers 1734(10), 1736(12), and 1737(13). These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station.

Discharge measurements made at miscellaneous sites and peak discharges at partial-record stations are compiled for the period 1894-1967 in a special basic-data report. (See SELECTED REFERENCES.)

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other Data Available

Data collected at partial-record stations and at miscellaneous sites are given in four tables at the end of the surface-water records in this report. The first is a table of annual maximum stage and discharge at crest-stage stations, the second is a table of discharge measurements at miscellaneous sites, the third is a table showing the results of measurements made to determine flows passing selected lines across Boise River Valley, and the fourth is a table showing results of measurements made on the alluvial fan of Big Creek in Pahsimeroi River basin.

More detailed information than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Many gaging-station records in Idaho through 1968 have been analyzed to give several statistical summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; (3) the highest mean discharge for selected numbers of consecutive days in each year; (4) flood frequency by the Log-Pearson type III method; and (5) flow variability of annual and monthly flows.

At or near some gaging stations, water-quality records also are collected. Data are obtained on the chemical quality of the stream water, on water temperature, on suspended-sediment concentration, and on the particle-size distribution of suspended sediment and bed material. These data are given in Part 2 of this report. Under the "REMARKS" paragraph of the gaging-station description, reference is made to water-quality records collected on a regular basis.

HYDROLOGIC CONDITIONS

As in 1971, the mean streamflow for 1972 was excessive (in the highest 25 percent of the years of record) in nearly all streams. Highest mean annual flows of record occurred at many gaging stations including, but not limited to, the following: All gaging stations on Snake River between American Falls Dam and near Murphy, Blackfoot River near Blackfoot, Portneuf River at Topaz and at Pocatello, Little Lost River near Howe, Big Jacks Creek near Bruneau, Selway and Lochsa Rivers near Lowell, and Clark Fork at Whitehorse Rapids. Mean annual flow at other sites above American Falls and below the Murphy gage were exceeded only by 1971 during the periods of record. Sites on other streams where the mean annual flow has been exceeded only once in rather long periods of record includes Salt River above Palisades Reservoir, Falls River near Squirrel, and Clearwater River at Spalding. Kootenai River near the Canadian border was only slightly above average. The total runoff in the 1971-72 biennium far exceeded any previous 2 years of record at many sites. Runoff at several sites in the Clearwater River basin exceeded 50 inches (1.27 meters), which is rare in Idaho.

The 1972 water year began with above average flows and substantial carryover supplies in many of the reservoirs. Flows below reservoirs were augmented by releases for long periods to provide space for control of anticipated high winter and spring runoff from snowmelt. Localized flooding occurred in January near Moscow and at other sites as a result of rain and snowmelt on lower elevations. Record-high flows for some of the winter months occurred in several streams as a result of releases from reservoirs. March was exceptionally warm and record or near record volumes for the month occurred in many streams from the snowmelt. Flows decreased to near the median range for the month in April as a result of average temperatures 6° F or more below average. Snowpacks remained far above average. The exceptionally large runoff for the remainder of the season was featured by well-sustained high flows during the major snowmelt. Periods of hot weather were short, and only a few unusually high momentary peaks occurred. Storage in reservoirs further mitigated flooding in many channels. Salmon River Canal Co. reservoir reached the highest level since the dam was constructed in 1911. As the water year ended, carryover in many reservoirs was record high and above average in most others.

Monthly and annual mean discharge is compared with medians at two representative gaging stations in figure 1.

SELECTED REFERENCES

Carter, R. W., and Davidian, Jacob, 1968, General procedure for gaging streams: U.S. Geol. Survey Techniques Water-Resources Inv., book 3, chap. A6, 13 p.

Corbett, D. M., and others, 1943, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.

Decker, S. O., and others, 1970, Miscellaneous streamflow measurements in Idaho, 1894-1967: U.S. Geol. Survey basic-data report, 310 p.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

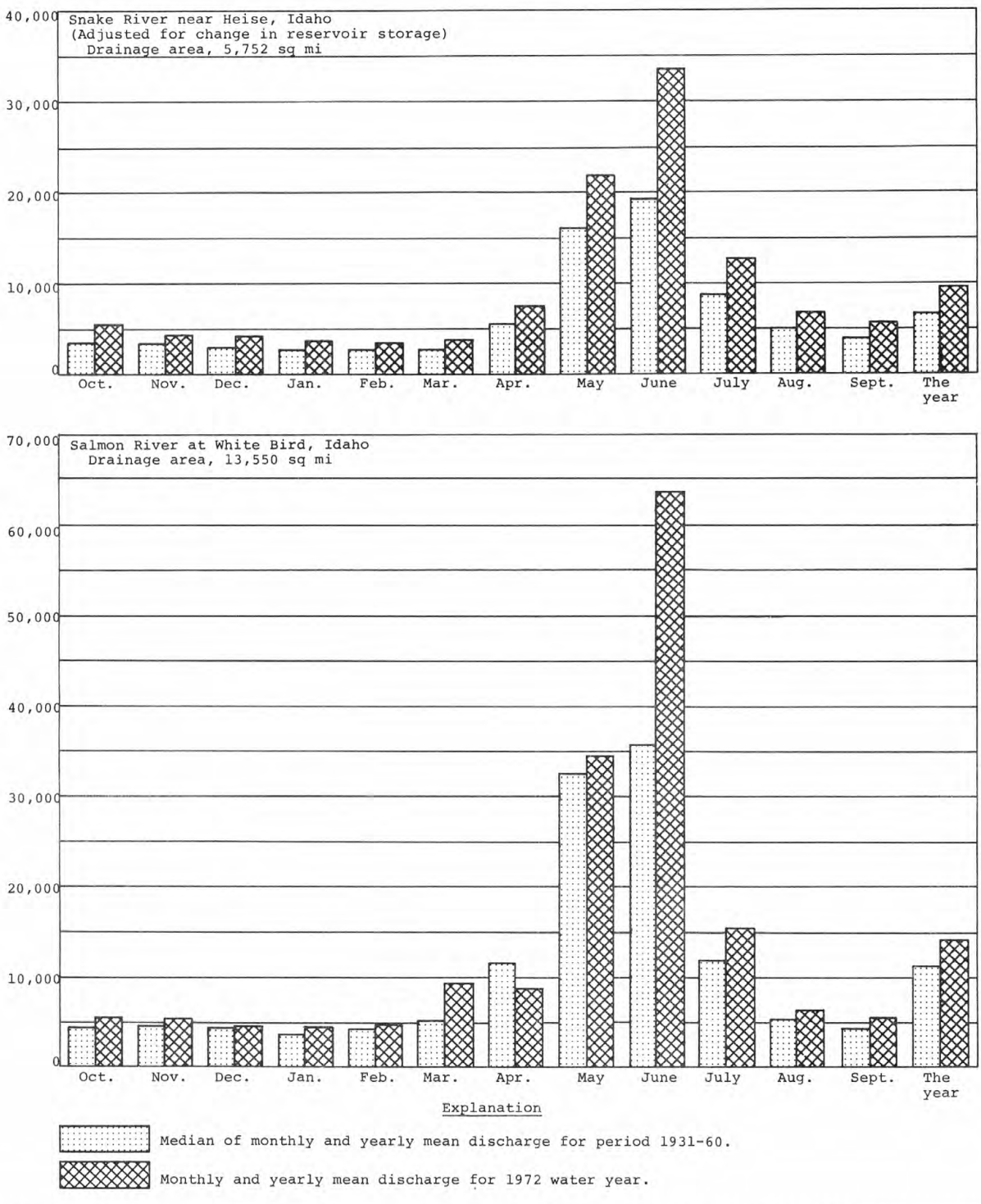


FIGURE 1. Comparison of discharge at two long-term representative gaging stations during 1972 water year with median discharge for period 1931-60.

THE GREAT BASIN

BEAR RIVER BASIN

10039500 Bear River at Border, Wyo.

LOCATION.--Lat 42°12'40", long 111°03'11", in NE¼NE¼ sec.15, T.14 S., R.46 E., Bear Lake County, Idaho, on left bank 0.2 mile west of Wyoming-Idaho State line, 0.5 mile west of Border, and 2.1 miles upstream from Thomas Fork.

DRAINAGE AREA.--2,490 sq mi, approximately.

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,051.63 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--35 years, 420 cfs (304,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,290 cfs June 18 (gage height, 8.64 ft); minimum daily, 218 cfs Sept. 1.
Period of record: Maximum discharge, 3,680 cfs May 11, 1952 (gage height, 8.89 ft); minimum daily, 30 cfs Aug. 18-22, 1940.

REMARKS.--Records good except those for winter months, which are fair. Diversions for irrigation of about 122,000 acres above station. Records of chemical analysis and water temperatures for the water year 1972 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	314	292	260	280	255	380	892	1,260	1,740	1,260	338	218
2	319	285	260	290	255	360	888	1,240	1,840	1,210	326	224
3	310	280	260	290	255	400	892	1,210	1,980	1,180	317	226
4	305	280	260	290	255	440	904	1,220	2,080	1,140	319	228
5	303	270	260	290	255	500	912	1,290	2,170	1,120	317	240
6	303	260	250	280	255	600	928	1,400	2,410	1,120	299	263
7	299	245	250	280	255	710	996	1,480	2,620	1,020	294	255
8	294	270	250	280	255	790	996	1,660	2,810	964	290	238
9	288	290	250	280	255	880	944	1,850	3,000	896	283	299
10	285	285	250	280	255	950	964	1,970	3,030	872	263	263
11	279	280	240	265	255	1,050	980	1,920	3,020	828	257	253
12	277	295	230	265	255	1,600	1,120	1,920	3,040	787	263	242
13	272	310	230	265	255	2,700	1,200	1,920	3,080	743	263	238
14	270	310	230	265	255	2,400	1,210	1,960	3,150	708	263	238
15	277	310	230	265	275	1,890	1,210	2,020	3,210	629	261	248
16	285	310	230	265	300	1,680	1,260	2,130	3,240	567	253	274
17	299	270	230	265	310	1,620	1,350	2,210	3,250	523	248	272
18	308	240	230	265	310	1,600	1,350	2,280	3,270	511	240	270
19	305	305	230	265	310	1,580	1,330	2,250	3,240	478	238	272
20	299	305	230	265	310	1,540	1,350	2,250	3,120	458	240	266
21	288	280	225	260	310	1,520	1,390	2,220	2,890	470	236	255
22	290	285	225	260	310	1,480	1,400	2,180	2,600	475	236	253
23	288	280	225	260	310	1,450	1,360	2,170	2,240	452	234	251
24	290	275	225	260	310	1,400	1,320	2,080	1,980	447	234	248
25	294	280	225	260	310	1,320	1,280	1,960	1,880	416	234	251
26	294	250	225	260	320	1,240	1,250	1,900	1,730	392	238	257
27	301	270	225	260	320	1,180	1,160	1,840	1,560	384	236	255
28	321	250	225	260	320	1,110	1,170	1,740	1,440	384	236	261
29	285	260	225	260	340	1,030	1,230	1,600	1,350	369	240	266
30	240	260	240	260	------	984	1,260	1,630	1,300	362	230	266
31	275	------	250	260	------	928	------	1,710	------	355	251	------
TOTAL	9,057	8,382	7,375	8,350	8,235	37,312	34,496	56,470	74,270	21,520	8,177	7,590
MEAN	292	279	238	269	284	1,204	1,150	1,822	2,476	694	264	253
MAX	321	310	260	290	340	2,700	1,400	2,280	3,270	1,260	338	299
MIN	240	240	225	260	255	360	888	1,210	1,300	355	230	218
AC-FT	17,960	16,630	14,630	16,560	16,330	74,010	68,420	112,000	147,300	42,680	16,220	15,050

CAL YR 1971 TOTAL 287,171 MEAN 787 MAX 2,800 MIN 205 AC-FT 569,600
WTR YR 1972 TOTAL 281,234 MEAN 768 MAX 3,270 MIN 218 AC-FT 557,800

10041000 Thomas Fork near Wyoming-Idaho State line

LOCATION.--Lat 42°24'10", long 111°01'30", in SE¼NW¼ sec.19, T.28 N., R.119 W., Lincoln County, Wyo., on right bank 1.3 miles upstream from State line, 1.5 miles downstream from Giraffe Creek, and 3.5 miles northeast of Geneva, Idaho.

DRAINAGE AREA.--113 sq mi.

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,280 ft (from topographic map). Prior to Aug. 23, 1957, at site 0.2 mile upstream at different datum.

AVERAGE DISCHARGE.--23 years, 54.6 cfs (39,560 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 806 cfs May 7 (gage height, 3.51 ft); minimum, 14 cfs Mar. 7.
Period of record: Maximum discharge, 1,040 cfs May 14, 1971 (gage height, 3.84 ft); minimum, 2.6 cfs Mar. 2, 1956, result of freezeup.

REMARKS.--Records good except those for winter periods, which are fair. No diversion above station. Records of chemical analysis for the water year 1972 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	25	23	21	20	20	42	315	299	90	49	32
2	32	25	23	21	20	20	50	320	300	88	48	32
3	31	24	23	21	20	26	61	362	289	87	47	31
4	29	24	23	21	20	25	67	455	266	86	45	30
5	28	24	23	21	20	22	71	527	252	83	44	38
6	27	24	22	20	20	23	127	580	254	81	43	52
7	27	23	22	20	22	24	123	731	243	80	42	36
8	26	23	22	20	23	69	115	701	243	77	41	32
9	26	23	22	20	25	89	128	641	217	75	41	30
10	26	23	22	20	21	30	139	569	203	73	38	31
11	25	25	22	20	18	24	174	560	193	72	38	29
12	25	27	22	20	18	25	198	548	179	69	37	28
13	25	29	22	20	18	28	153	551	168	67	39	28
14	25	27	22	20	18	36	137	599	160	66	38	28
15	28	25	22	20	21	35	143	649	152	65	37	27
16	28	24	22	20	18	36	166	679	157	63	37	27
17	34	23	22	20	18	38	195	680	144	62	37	26
18	30	21	22	20	18	42	175	646	144	61	36	26
19	28	20	22	20	18	45	161	598	140	59	37	32
20	26	22	22	20	18	43	155	564	127	63	36	30
21	26	23	22	20	18	43	158	513	120	64	34	27
22	25	23	23	20	81	48	165	471	119	59	34	26
23	25	24	24	20	19	58	174	427	125	57	34	26
24	25	22	22	20	18	54	214	401	134	55	34	25
25	26	22	22	20	18	55	243	381	147	55	34	26
26	25	22	24	20	18	52	231	362	117	54	33	26
27	27	24	22	20	20	56	262	346	108	56	31	27
28	26	23	20	20	19	60	299	335	102	53	31	30
29	25	24	21	20	24	41	374	329	97	51	31	26
30	25	24	21	20	------	39	363	315	93	50	31	26
31	25	------	21	20	------	39	------	306	------	50	31	------
TOTAL	840	712	687	625	629	1,245	5,063	15,461	5,292	2,071	1,168	890
MEAN	27.1	23.7	22.2	20.2	21.7	40.2	169	499	176	66.8	37.7	29.7
MAX	34	29	24	21	81	89	374	731	300	90	49	52
MIN	25	20	20	20	18	20	42	306	93	50	31	25
AC-FT	1,670	1,410	1,360	1,240	1,250	2,470	10,040	30,670	10,500	4,110	2,320	1,770

CAL YR 1971 TOTAL 39,075 MEAN 107 MAX 913 MIN 13 AC-FT 77,510
WTR YR 1972 TOTAL 34,683 MEAN 94.8 MAX 731 MIN 18 AC-FT 68,790

PEAK DISCHARGE (BASE, 150 CFS).--Apr. 12 (0200) 232 cfs (2.09 ft); May 7 (2300) 806 cfs (3.51 ft).

10044000 Bear River at Harer, Idaho

LOCATION.--Lat 42°11'50", long 111°10'05", in NW¼ sec.23, T.14 S., R.45 E., Bear Lake County, on right bank 400 ft downstream from Sheep Creek, 0.8 mile north of Harer siding on Union Pacific (Oregon Short Line) Railroad, and 5 miles southeast of Dingle.

DRAINAGE AREA.--2,780 sq mi, approximately.

PERIOD OF RECORD.--June 1913 to current year. Monthly discharge only October 1916 to December 1918 published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 6,000 ft (from topographic map). Prior to Aug. 24, 1914, nonrecording gage at site 1,500 ft downstream at different datum.

AVERAGE DISCHARGE.--59 years, 519 cfs (376,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,270 cfs June 19 (gage height, 10.22 ft); minimum daily, 190 cfs Dec. 3.
Period of record: Maximum discharge, 4,440 cfs May 7, 1952 (gage height, 11.04 ft); minimum daily, 26 cfs Aug. 21-27, 1934.

REMARKS.--Records good. Diversions above station for irrigation of about 140,000 acres.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	432	402	260	300	277	413	1,040	1,680	2,140	1,420	449	279
2	447	402	215	300	286	424	1,030	1,670	2,180	1,360	439	257
3	432	367	190	300	287	420	1,050	1,660	2,280	1,320	430	263
4	424	346	255	290	276	434	1,060	1,670	2,380	1,280	437	260
5	417	410	265	290	280	458	1,080	1,730	2,450	1,240	444	276
6	417	356	290	290	281	547	1,110	1,850	2,560	1,220	433	311
7	436	333	255	285	285	680	1,220	1,980	2,700	1,190	410	366
8	436	388	275	285	289	795	1,280	2,140	2,850	1,090	406	333
9	413	455	265	285	296	884	1,240	2,330	2,960	1,030	402	336
10	384	436	250	285	310	976	1,230	2,490	3,050	990	374	392
11	370	439	240	300	305	1,030	1,290	2,630	3,100	1,010	348	342
12	356	410	240	295	296	1,070	1,400	2,650	3,110	944	361	305
13	356	410	260	290	297	1,990	1,510	2,650	3,100	892	372	288
14	350	410	265	285	301	2,300	1,550	2,650	3,100	853	356	286
15	350	402	260	280	299	2,270	1,530	2,680	3,120	781	343	285
16	424	392	260	280	303	1,890	1,530	2,740	3,140	708	334	322
17	451	392	265	260	304	1,720	1,600	2,800	3,190	612	329	341
18	459	356	255	260	302	1,690	1,660	2,900	3,250	593	313	339
19	451	333	230	273	306	1,700	1,660	2,950	3,270	594	305	345
20	451	436	225	283	317	1,670	1,650	2,950	3,250	638	301	344
21	439	439	230	293	324	1,640	1,670	2,910	3,190	582	296	318
22	432	392	240	297	335	1,600	1,700	2,870	3,100	600	296	299
23	424	395	260	301	336	1,590	1,670	2,830	2,980	582	297	277
24	428	370	255	305	340	1,550	1,640	2,800	2,740	577	295	271
25	436	353	265	303	345	1,490	1,610	2,690	2,450	550	293	271
26	443	360	270	298	349	1,410	1,610	2,520	2,250	521	292	307
27	455	346	290	296	361	1,340	1,570	2,400	1,980	519	293	324
28	478	374	310	297	373	1,270	1,520	2,290	1,740	496	293	310
29	486	360	250	295	374	1,190	1,590	2,140	1,590	490	296	324
30	360	343	245	293	------	1,130	1,640	2,020	1,480	467	279	313
31	367	------	265	288	------	1,080	------	2,110	------	458	285	------
TOTAL	13,004	11,607	7,900	8,982	9,034	38,651	42,940	74,380	80,680	25,607	10,801	9,284
MEAN	419	387	255	290	312	1,247	1,431	2,399	2,689	826	348	309
MAX	486	455	310	305	374	2,300	1,700	2,950	3,270	1,420	449	392
MIN	350	333	190	260	276	413	1,030	1,660	1,480	458	279	257
AC-FT	25,790	23,020	15,670	17,820	17,920	76,660	85,170	147,500	160,000	50,790	21,420	18,410

CAL YR 1971 TOTAL 345,774 MEAN 947 MAX 3,560 MIN 150 AC-FT 685,800
WTR YR 1972 TOTAL 332,870 MEAN 909 MAX 3,270 MIN 190 AC-FT 660,200

10046000 Rainbow inlet canal near Dingle, Idaho

LOCATION.--Lat 42°13'48", long 111°17'43", in SE¼ sec.3, T.14 S., R.44 E., Bear Lake County, on left bank 1.5 miles west of Dingle and 1.8 miles downstream from headworks at Stewart Dam.

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only prior to October 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is 5,922.0 ft above mean sea level (by topographic survey). Prior to Oct. 1, 1923, at site 300 ft downstream at different datum; Oct. 1, 1923, to Oct. 27, 1944, at site 0.5 mile downstream at different datum.

AVERAGE DISCHARGE.--50 years, 330 cfs (239,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,780 cfs June 21 (gage height, 7.15 ft); minimum, 126 cfs Sept. 12. Period of record: Maximum discharge, 4,180 cfs May 7, 1952 (gage height, 8.62 ft); minimum daily, 1 cfs on several days in 1931, 1934, 1940, 1948.

REMARKS.--Records good. Discharge measurements generally made three to six times a week. Canal diverts from Bear River at Stewart Dam in NE¼ sec.34, T.13 S., R.44 E., for storage in Bear Lake. At times flow in canal is augmented by surplus water from Black Otter Slough entering at the station and by seepage and wastage from irrigation lands on both sides of canal. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	299	296	195	237	257	361	1,000	1,580	1,640	1,150	355	197
2	317	314	153	234	269	361	1,000	1,580	1,660	1,080	331	189
3	314	312	132	232	264	385	1,010	1,570	1,730	1,030	331	182
4	309	280	197	229	258	413	1,000	1,550	1,840	1,000	310	183
5	312	265	208	226	246	432	1,030	1,500	1,910	960	308	193
6	312	265	235	224	246	479	1,060	1,570	2,010	939	280	221
7	309	257	203	221	253	566	1,120	1,660	2,100	916	260	238
8	328	233	222	224	250	672	1,220	1,770	2,230	855	243	237
9	322	291	215	222	244	730	1,180	1,960	2,350	854	242	217
10	304	299	199	222	266	872	1,160	2,120	2,490	814	255	223
11	293	306	192	230	295	999	1,210	2,190	2,580	766	253	210
12	288	342	197	233	263	1,040	1,270	2,270	2,630	736	250	217
13	286	336	219	230	263	1,300	1,420	2,260	2,600	721	255	235
14	278	336	222	226	265	2,060	1,500	2,250	2,580	701	259	227
15	275	331	222	223	265	2,290	1,480	2,260	2,620	657	256	235
16	299	322	224	220	266	2,060	1,490	2,250	2,570	582	256	233
17	328	293	228	204	269	1,790	1,530	2,310	2,630	533	249	241
18	342	212	217	200	270	1,720	1,610	2,350	2,690	489	245	245
19	344	228	190	217	264	1,710	1,620	2,430	2,730	440	244	254
20	344	296	188	234	268	1,700	1,610	2,500	2,730	424	239	248
21	336	320	192	251	280	1,650	1,620	2,460	2,760	428	235	247
22	336	325	201	255	294	1,620	1,640	2,420	2,670	418	237	240
23	325	291	226	259	297	1,590	1,620	2,380	2,610	421	230	240
24	325	296	217	263	300	1,570	1,600	2,340	2,440	436	231	247
25	325	283	226	267	282	1,480	1,560	2,310	2,250	445	227	253
26	331	270	233	272	319	1,400	1,530	2,170	2,010	418	210	256
27	333	280	255	269	322	1,320	1,520	2,050	1,820	316	187	243
28	342	278	273	266	335	1,260	1,470	1,960	1,480	379	188	230
29	350	288	212	264	345	1,210	1,490	1,840	1,340	358	187	254
30	320	283	206	262	------	1,100	1,560	1,670	1,230	348	184	286
31	291	------	226	259	------	1,060	------	1,600	------	348	187	------
TOTAL	9,817	8,728	6,525	7,381	8,015	37,200	41,130	63,130	66,930	19,962	7,724	6,921
MEAN	317	291	210	238	276	1,200	1,371	2,036	2,231	644	249	231
MAX	350	342	273	272	345	2,290	1,640	2,500	2,760	1,150	355	286
MIN	275	212	132	200	244	361	1,000	1,500	1,230	316	184	182
AC-FT	19,470	17,310	12,940	14,640	15,900	73,790	81,580	125,200	132,800	39,590	15,320	13,730

CAL YR 1971 TOTAL 274,125 MEAN 751 MAX 3,200 MIN 121 AC-FT 543,700
WTR YR 1972 TOTAL 283,463 MEAN 774 MAX 2,760 MIN 132 AC-FT 562,200

10046500 Bear River below Stewart Dam, near Montpelier, Idaho

LOCATION.--Lat 42°15'14", long 111°17'35", in NE¼ sec.34, T.13 S., R.44 E., Bear Lake County, on right bank 300 ft downstream from Stewart Dam and 4.5 miles south of Montpelier.

DRAINAGE AREA.--2,820 sq mi, approximately.

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only January 1922 to September 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 5,950 ft (from topographic map).

AVERAGE DISCHARGE.--50 years, 50.9 cfs (36,880 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 20 cfs June 29 (gage height, 1.53 ft); minimum, 2.8 cfs Sept. 8.
Period of record: Maximum daily discharge, 3,050 cfs June 3, 1923; no flow July 15, 1956.

REMARKS.--Records good. Discharge measurements generally made once a week. Water diverted at Stewart Dam through Rainbow inlet canal (see sta 10046000) for storage and regulation in Bear Lake (see sta 10055000). Many diversions above station for irrigation.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	8.4	7.4	5.3	4.2	5.9	4.4	5.6	12	20	15	11
2	12	8.0	6.2	5.3	3.8	8.4	4.0	5.6	13	19	15	11
3	12	8.0	5.9	5.6	3.4	8.4	3.8	6.2	14	19	15	11
4	12	8.0	6.2	5.6	3.0	8.8	3.8	7.1	14	19	15	11
5	12	8.0	5.9	5.6	2.9	8.8	3.8	9.6	15	18	15	11
6	12	7.7	6.5	5.0	2.9	10	4.0	10	15	18	15	7.6
7	12	7.4	6.8	5.3	2.9	7.7	4.0	11	16	17	14	3.0
8	11	7.4	6.5	5.0	3.4	9.2	4.0	11	16	17	14	5.0
9	11	7.7	5.9	4.8	3.4	9.6	4.0	12	16	17	14	9.5
10	11	7.7	5.6	4.6	3.4	11	4.2	12	18	16	14	9.3
11	10	7.7	5.0	4.6	3.4	12	3.8	13	18	15	14	9.3
12	10	8.0	4.6	4.4	3.4	11	4.0	12	18	14	14	8.0
13	11	8.0	4.4	4.2	3.6	14	4.2	13	18	14	14	8.9
14	10	8.0	4.8	4.2	3.6	20	4.2	12	18	13	13	8.9
15	10	8.0	5.6	4.2	3.6	16	4.6	14	18	12	13	8.9
16	10	8.0	5.6	3.8	3.8	12	4.6	12	18	11	13	8.9
17	10	8.0	5.9	3.8	4.2	9.6	4.6	14	18	9.4	13	8.8
18	10	7.4	5.9	3.8	4.4	9.6	5.0	14	20	8.2	12	8.8
19	10	7.4	5.6	3.7	4.4	9.6	5.2	14	20	6.6	12	8.8
20	9.6	7.7	5.3	3.8	4.6	9.2	5.0	13	20	9.0	12	8.9
21	9.6	7.4	5.0	4.6	5.3	8.8	5.0	14	19	15	12	8.8
22	8.8	7.1	5.0	5.6	5.3	8.0	5.0	14	19	16	11	8.5
23	9.2	7.1	5.0	6.8	5.9	7.7	5.3	14	18	16	12	8.3
24	8.8	7.4	4.8	7.4	5.9	6.8	5.9	14	17	16	12	8.5
25	9.4	7.4	5.0	8.0	5.9	6.8	5.6	15	16	17	12	8.7
26	9.6	7.7	5.3	7.7	6.5	6.2	5.6	15	16	17	11	9.0
27	9.6	8.0	5.3	7.1	6.5	5.7	5.6	14	16	17	11	9.1
28	10	8.0	5.3	6.5	6.8	5.6	5.6	12	18	16	11	9.0
29	9.6	7.7	5.3	6.2	7.1	5.0	5.6	12	20	16	11	9.4
30	9.6	7.7	5.0	5.6	------	4.6	5.6	12	20	15	11	10
31	9.2	------	5.0	4.6	------	4.4	------	12	------	15	11	------
TOTAL	322.0	232.0	171.6	162.7	127.5	280.4	140.0	369.1	514	468.2	401	266.9
MEAN	10.4	7.73	5.54	5.25	4.40	9.05	4.67	11.9	17.1	15.1	12.9	8.90
MAX	13	8.4	7.4	8.0	7.1	20	5.9	15	20	20	15	11
MIN	8.8	7.1	4.4	3.7	2.9	4.4	3.8	5.6	12	6.6	11	3.0
AC-FT	639	460	340	323	253	556	278	732	1,020	929	795	529

CAL YR 1971 TOTAL 20,508.8 MEAN 56.2 MAX 751 MIN 1.3 AC-FT 40,680
WTR YR 1972 TOTAL 3,455.4 MEAN 9.44 MAX 20 MIN 2.9 AC-FT 6,850

10047500 Montpelier Creek at irrigators weir, near Montpelier, Idaho

LOCATION.--Lat 42°19'47", long 111°14'12", in SW¼SE¼ sec.31, T.12 S., R.45 E., Bear Lake County, on right bank 3 miles east of Montpelier and 3.5 miles downstream from South Fork.

DRAINAGE AREA.--50.9 sq mi.

PERIOD OF RECORD.--October 1942 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder and sharp-crested weir. Altitude of gage is 6,210 ft (from topographic map).

AVERAGE DISCHARGE.--28 years (1942-70), 21.2 cfs (15,360 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 138 cfs May 15 (gage height, 2.59 ft); minimum daily, 11 cfs Nov. 16-24, 26, 28-29.
Period of record: Maximum discharge, 224 cfs May 18, 1950; maximum gage height, 3.06 ft Apr. 28, 1962; minimum discharge, 0.40 cfs Jan. 28, 1961.

REMARKS.--Records excellent. One small diversion above station for irrigation. Flow regulated by Montpelier Creek reservoir (usable capacity, 3,840 acre-ft) between sill of outlet gate and elevation 6,515.2 ft (crest of spillway). Dead storage, 210 acre-ft. Earthfill dam 82 ft high, completed December 1970 and storage began Dec. 23, 1970. Storage in 1971 reached an elevation of 6,513.8 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	14	24	15	14	15	21	87	92	53	50	16
2	15	14	31	15	14	15	21	97	81	52	49	16
3	15	13	40	14	14	18	22	97	75	53	49	16
4	15	14	40	14	14	25	26	102	73	52	49	16
5	15	13	40	14	14	26	27	108	71	51	48	17
6	15	13	40	14	14	31	30	114	73	47	48	19
7	15	13	40	14	14	42	30	121	76	45	48	17
8	14	13	40	14	14	42	32	127	86	45	48	16
9	14	13	41	14	13	46	33	135	92	45	47	16
10	14	13	40	14	13	58	35	135	95	44	42	16
11	14	13	40	14	13	61	39	135	95	44	37	16
12	14	13	40	14	13	62	47	133	89	49	37	16
13	14	13	40	14	13	62	46	130	72	50	37	16
14	14	13	40	14	13	64	47	132	65	50	36	16
15	14	13	40	14	14	67	53	135	57	51	31	16
16	14	11	40	14	14	66	54	129	52	58	21	16
17	15	11	39	14	14	67	59	130	48	58	17	15
18	15	11	39	14	14	67	65	130	44	60	17	15
19	14	11	39	14	14	67	68	128	39	60	17	16
20	14	11	39	14	14	66	72	126	34	60	16	16
21	14	11	38	14	14	67	45	124	29	60	16	15
22	14	11	34	14	14	67	81	123	33	59	16	15
23	14	11	16	14	14	66	79	120	24	59	16	15
24	14	11	16	14	14	66	47	116	26	55	16	15
25	14	12	16	14	14	64	73	112	27	51	16	15
26	14	11	16	14	14	64	79	108	25	51	16	15
27	14	12	15	14	14	63	81	103	35	51	16	15
28	14	11	15	14	14	62	83	102	53	51	16	15
29	14	11	15	14	15	56	85	101	53	51	16	15
30	14	14	15	14	------	39	85	98	53	50	16	15
31	14	------	15	14	------	24	------	94	------	50	16	------
TOTAL	443	368	983	436	401	1,605	1,565	3,632	1,767	1,615	920	473
MEAN	14.3	12.3	31.7	14.1	13.8	51.8	52.2	117	58.9	52.1	29.7	15.8
MAX	15	14	41	15	15	67	85	135	95	60	50	19
MIN	14	11	15	14	13	15	21	87	24	44	16	15
AC-FT	879	730	1,950	865	795	3,180	3,100	7,200	3,500	3,200	1,820	938

CAL YR 1971 TOTAL 14,258.2 MEAN 39.1 MAX 151 MIN 3.3 AC-FT 28,280
WTR YR 1972 TOTAL 14,208.0 MEAN 38.8 MAX 135 MIN 11 AC-FT 28,180

10055500 Bear Lake at Lifton, near St. Charles, Idaho

LOCATION.--Lat 42°07'16", long 111°18'52", in NE¼ sec.16, T.15 S., R.44 E., Bear Lake County, in Lifton pumping plant of Utah Power & Light Company and 3.5 miles east of St. Charles.

DRAINAGE AREA.--435 sq mi, approximately (does not include Mud Lake drainage).

PERIOD OF RECORD.--October 1903 to June 1906 (elevations only), January 1921 to current year. Monthly contents only January 1921 to September 1945 published in WSP 1314. Published as Bear Lake at Fish Haven 1903-6.

GAGE.--Water-stage recorder. Datum of gage is 5,900 ft above mean sea level, unadjusted (levels by Utah Power & Light Co.). October 1903 to June 1906, nonrecording gage at different site and datum.

EXTREMES.--Current year: Maximum contents, 1,403,000 acre-ft June 8 (elevation, 5,923.39 ft); minimum, 1,081,000 acre-ft Feb. 29 to Mar. 11 (elevation, 5,918.79 ft).
Period of record: Maximum contents, 1,423,000 acre-ft June 10, 1923 (elevation, 5,923.68 ft); no usable contents Nov. 9-19, 1935 (elevation, 5,902.00 ft, lower limit of pumps).

REMARKS.--Outflow regulated by gates and pumps at Bear Lake and by gates in dike at north end of Mud Lake. Inflow to lake augmented by water diverted from Bear River through Rainbow inlet canal and Dingle inlet canal, which empty into Mud Lake (see sta 10046000). Water from Mud Lake reaches Bear Lake by a sluice at pumping plant or by gates in causeway at south end of Mud Lake. Capacity, 1,421,000 acre-ft between elevations 5,902.00 (lower limit of pumps) and 5,923.65 ft (present feasible upper limit of storage with existing facilities). Storage water used for irrigation and power development. Figures given herein represent usable contents.

COOPERATION.--Gage heights furnished by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project. Contents computed by Geological Survey from capacity table based on data furnished by Utah Power & Light Co.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

5,918.50	1,060,400	5,920.50	1,199,900	5,922.00	1,305,000
5,919.00	1,095,200	5,921.00	1,234,900	5,922.50	1,340,100
5,919.50	1,130,000	5,921.50	1,269,900	5,923.40	1,403,600
5,920.00	1,164,900				

CONTENTS, IN THOUSANDS OF ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,232	1,195	1,159	1,121	1,104	1,081	1,129	1,205	1,303	1,398	1,363	1,287
2	1,230	1,194	1,158	1,120	1,104	1,081	1,130	1,206	1,306	1,397	1,361	1,285
3	1,228	1,192	1,157	1,119	1,103	1,081	1,131	1,208	1,311	1,396	1,361	1,282
4	1,226	1,190	1,155	1,118	1,102	1,081	1,133	1,208	1,315	1,396	1,359	1,280
5	1,224	1,189	1,154	1,117	1,100	1,081	1,134	1,209	1,320	1,395	1,358	1,279
6	1,223	1,187	1,152	1,116	1,099	1,081	1,136	1,210	1,326	1,394	1,356	1,278
7	1,222	1,186	1,150	1,115	1,099	1,081	1,138	1,212	1,332	1,394	1,355	1,276
8	1,220	1,184	1,148	1,114	1,098	1,081	1,140	1,213	1,339	1,393	1,354	1,273
9	1,219	1,183	1,147	1,113	1,097	1,081	1,142	1,215	1,346	1,392	1,351	1,271
10	1,217	1,182	1,145	1,113	1,097	1,081	1,143	1,217	1,350	1,390	1,346	1,270
11	1,216	1,181	1,145	1,112	1,096	1,081	1,145	1,220	1,353	1,390	1,343	1,268
12	1,215	1,181	1,144	1,112	1,094	1,082	1,148	1,222	1,355	1,388	1,340	1,267
13	1,213	1,180	1,143	1,111	1,094	1,082	1,150	1,224	1,357	1,387	1,337	1,265
14	1,212	1,180	1,141	1,110	1,093	1,083	1,154	1,228	1,359	1,385	1,335	1,263
15	1,210	1,180	1,140	1,110	1,092	1,083	1,158	1,231	1,361	1,384	1,333	1,262
16	1,210	1,179	1,139	1,109	1,092	1,084	1,162	1,236	1,363	1,382	1,331	1,259
17	1,209	1,178	1,138	1,108	1,091	1,085	1,167	1,242	1,366	1,382	1,329	1,257
18	1,208	1,176	1,137	1,108	1,090	1,087	1,172	1,248	1,369	1,380	1,326	1,254
19	1,207	1,174	1,136	1,108	1,089	1,089	1,179	1,252	1,373	1,379	1,324	1,251
20	1,206	1,172	1,134	1,108	1,088	1,091	1,184	1,257	1,375	1,378	1,321	1,248
21	1,204	1,170	1,132	1,107	1,088	1,094	1,190	1,262	1,378	1,375	1,318	1,245
22	1,203	1,169	1,131	1,107	1,086	1,097	1,194	1,267	1,380	1,373	1,314	1,243
23	1,201	1,167	1,129	1,107	1,085	1,102	1,197	1,272	1,382	1,372	1,311	1,240
24	1,201	1,165	1,128	1,107	1,085	1,105	1,199	1,276	1,386	1,370	1,307	1,238
25	1,200	1,164	1,127	1,107	1,084	1,109	1,201	1,280	1,390	1,369	1,303	1,236
26	1,199	1,162	1,126	1,106	1,083	1,113	1,201	1,284	1,396	1,368	1,299	1,234
27	1,198	1,161	1,125	1,106	1,083	1,117	1,202	1,287	1,398	1,366	1,297	1,231
28	1,198	1,161	1,124	1,106	1,082	1,120	1,203	1,291	1,403	1,366	1,295	1,229
29	1,198	1,160	1,124	1,106	1,081	1,122	1,203	1,294	1,399	1,365	1,293	1,226
30	1,197	1,159	1,122	1,106	------	1,125	1,204	1,296	1,398	1,364	1,292	1,224
31	1,196	------	1,122	1,105	------	1,127	------	1,299	------	1,363	1,290	------
MAX	1,232	1,195	1,159	1,121	1,104	1,127	1,204	1,299	1,403	1,398	1,363	1,287
MIN	1,196	1,159	1,122	1,105	1,081	1,081	1,129	1,205	1,303	1,363	1,290	1,224
(†)	5,920.45	5,919.92	5,919.38	5,919.14	5,918.80	5,919.46	5,920.56	5,921.92	5,923.32	5,922.83	5,921.78	5,920.85
(‡)	-38.0	-37.0	-37.0	-17.0	-24.0	+46.0	+77.0	+95.0	+99.0	-35.0	-73.0	-66.0

CAL YR 1971..... ‡ +14.0
WTR YR 1972..... ‡ -10.0

† Elevation, in feet, at end of month.
‡ Change in contents, in thousands of acre-feet.

10058600 Bloomington Creek at Bloomington, Idaho

LOCATION.--Lat 42°11'05", long 111°25'30", in SE¼SE¼ sec.21, T.14 S., R.43 E., Bear Lake County, on left bank 1 mile west of Bloomington.

DRAINAGE AREA.--24.4 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder 4 ft upstream from 8-ft concrete flume. Altitude of gage is 6,070 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 29.7 cfs (21,520 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 194 cfs June 1 (gage height, 4.10 ft); minimum, 10 cfs Jan. 12, but may have been less during periods of ice effect.
Period of record: Maximum discharge, 248 cfs June 11, 1971 (gage height, 4.66 ft); minimum, 9.4 cfs Jan. 27, 1961, Feb. 26, 1962.

REMARKS.--Records good. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	25	21	19	18	18	24	41	160	81	45	32
2	30	25	21	20	18	18	28	40	166	79	44	32
3	30	25	22	19	18	30	28	41	166	76	43	32
4	30	25	22	20	18	22	30	45	163	74	43	31
5	30	24	22	20	18	21	31	50	153	72	42	38
6	29	23	22	20	18	24	45	55	158	70	42	35
7	29	23	21	20	18	22	38	60	163	68	40	32
8	29	24	21	20	18	21	37	65	161	67	39	32
9	28	24	21	20	18	22	36	64	156	65	38	31
10	27	24	21	20	18	24	36	61	150	64	37	31
11	28	24	21	20	18	24	48	63	145	62	38	31
12	27	24	21	20	18	28	52	66	141	61	37	30
13	27	24	21	20	18	28	41	74	134	60	38	30
14	27	24	21	20	18	31	39	84	128	59	38	30
15	27	23	21	19	18	29	36	92	124	56	37	30
16	28	23	21	19	17	30	36	107	120	56	36	30
17	28	22	21	19	17	32	38	120	121	56	36	29
18	28	21	20	20	17	34	36	125	121	55	36	29
19	27	22	20	20	17	34	35	120	112	54	36	30
20	27	23	20	20	17	32	33	109	105	53	35	29
21	26	23	20	18	17	31	33	111	102	53	35	29
22	26	23	20	19	17	32	34	105	105	52	35	28
23	26	22	21	19	17	32	34	98	104	50	35	28
24	27	22	20	19	17	29	35	103	107	49	35	28
25	27	22	20	19	16	30	37	110	113	48	34	28
26	26	22	21	18	16	28	37	117	99	48	34	28
27	27	22	20	18	17	25	37	124	92	49	34	29
28	26	22	20	18	17	25	40	128	89	47	33	28
29	25	22	20	18	20	24	42	138	85	46	33	27
30	25	22	20	18	------	23	43	141	83	46	33	27
31	26	------	20	18	------	23	------	151	------	45	32	------
TOTAL	854	694	643	597	509	826	1,099	2,808	3,826	1,820	1,153	904
MEAN	27.5	23.1	20.7	19.3	17.6	26.6	36.6	90.6	128	58.7	37.2	30.1
MAX	31	25	22	20	20	34	52	151	166	81	45	38
MIN	25	21	20	18	16	18	24	40	83	45	32	27
AC-FT	1,690	1,380	1,280	1,180	1,010	1,640	2,180	5,570	7,590	3,610	2,290	1,790

CAL YR 1971 TOTAL 17,807 MEAN 48.8 MAX 218 MIN 15 AC-FT 35,320
WTR YR 1972 TOTAL 15,733 MEAN 43.0 MAX 166 MIN 16 AC-FT 31,210

10059500 Bear Lake outlet canal near Paris, Idaho

LOCATION.--Lat 42°13'00", long 111°20'35", in SW¼ sec.8, T.14 S., R.44 E., Bear Lake County, on right bank 2,000 ft downstream from headgates (at dike) and 3 miles southeast of Paris.

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only January 1922 to September 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage datum is 5,912.6 ft above mean sea level (from topographic survey).

AVERAGE DISCHARGE.--50 years, 357 cfs (258,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,660 cfs June 27 (gage height, 19.43 ft); minimum daily, 22 cfs on many days.
Period of record: Maximum daily discharge, 1,870 cfs Aug. 8, 1924; minimum daily, 1 cfs for many days in 1937, 1954, 1959, 1961, 1964.

REMARKS.--Records good. Discharge measurements generally made six times a week during periods of release from Bear Lake. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	991	974	883	862	905	915	596	1,020	368	1,550	1,390	1,170
2	819	924	859	862	915	840	602	987	75	1,480	1,340	1,160
3	825	902	871	621	924	859	604	1,000	25	1,440	1,350	1,150
4	868	890	899	692	934	834	599	1,000	25	1,370	1,380	1,150
5	954	883	890	795	924	780	594	991	25	1,310	1,370	1,200
6	1,040	908	874	810	915	747	594	998	111	1,320	1,340	1,190
7	1,010	896	883	828	931	569	588	992	409	1,300	1,320	1,100
8	1,020	899	934	868	912	453	607	1,020	710	1,270	1,370	1,100
9	1,170	902	890	877	877	415	607	1,020	1,190	1,260	1,360	1,030
10	1,170	937	896	822	890	390	566	1,040	1,320	1,240	1,400	1,020
11	1,160	934	868	789	899	354	492	1,040	1,330	1,230	1,410	610
12	1,140	937	865	816	902	397	394	1,030	1,320	1,220	1,420	393
13	1,120	941	877	810	899	359	255	1,040	1,320	1,220	1,430	677
14	1,100	931	880	834	902	218	56	1,030	1,280	1,200	1,430	1,000
15	1,100	915	883	852	902	129	25	948	1,320	1,260	1,420	1,150
16	1,100	902	886	852	871	22	25	717	1,340	1,230	1,340	1,150
17	1,100	874	921	849	960	22	25	744	1,350	1,240	1,330	1,150
18	1,120	871	941	886	957	22	134	744	1,320	1,310	1,390	1,150
19	1,050	921	931	868	964	22	259	786	1,320	1,290	1,400	1,170
20	951	941	918	883	974	22	289	756	1,330	1,340	1,390	1,100
21	944	964	908	868	980	22	418	767	1,350	1,390	1,380	1,060
22	944	977	944	886	984	22	588	749	1,420	1,350	1,400	905
23	970	944	886	893	957	22	670	766	1,610	1,330	1,370	779
24	967	951	908	871	915	22	839	768	1,470	1,330	1,400	795
25	970	957	954	807	912	22	944	736	1,540	1,340	1,410	818
26	970	921	941	837	924	22	1,060	759	1,570	1,380	1,330	818
27	967	896	928	852	947	129	1,160	756	1,660	1,400	1,250	790
28	977	877	905	874	941	318	1,110	738	1,610	1,380	1,200	757
29	990	883	915	886	896	418	883	729	1,610	1,350	1,170	749
30	970	890	896	893	------	561	1,000	712	1,620	1,300	1,180	751
31	967	------	877	902	------	607	------	633	------	1,310	1,170	------
TOTAL	31,444	27,542	27,911	26,045	26,813	10,534	16,583	27,016	32,948	40,940	41,840	29,042
MEAN	1,014	918	900	840	925	340	553	871	1,098	1,321	1,350	968
MAX	1,170	977	954	902	984	915	1,160	1,040	1,660	1,550	1,430	1,200
MIN	819	871	859	621	871	22	25	633	25	1,200	1,170	393
AC-FT	62,370	54,630	55,360	51,660	53,180	20,890	32,890	53,590	65,350	81,200	82,990	57,600

CAL YR 1971 TOTAL 335,548 MEAN 919 MAX 1,800 MIN 20 AC-FT 665,600
WTR YR 1972 TOTAL 338,658 MEAN 925 MAX 1,660 MIN 22 AC-FT 671,700

10068500 Bear River at Pescadero, Idaho

LOCATION.--Lat 42°24'30", long 111°21'30", in SE¼ sec.6, T.12 S., R.44 E., Bear Lake County, on left bank at Pescadero, 400 ft downstream from road bridge, 2 miles downstream from Bennington Creek, and 6.5 miles northwest of Montpelier.

PERIOD OF RECORD.--June 1969 to current year. October 1921 to September 1954. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 5,950 ft (from topographic map).

AVERAGE DISCHARGE.--36 years (1921-54, 1969-72), 591 cfs (428,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,190 cfs June 29 (gage height, 5.91 ft); minimum daily, 392 cfs Mar. 27.
Period of record: Maximum daily discharge, 3,840 cfs June 10, 1923; minimum daily, 23 cfs Mar. 14-17, 1936.

REMARKS.--Records good except those for winter months, which are fair. Many diversions above station for irrigation. Flow regulated by Bear Lake (see sta 10055000).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,340	1,140	1,120	1,100	1,100	1,080	890	1,370	1,080	2,170	1,520	1,300
2	1,110	1,130	1,100	1,100	1,100	1,020	884	1,380	633	2,140	1,530	1,290
3	1,020	1,120	1,100	780	1,100	1,000	872	1,350	492	2,100	1,520	1,290
4	1,010	1,110	1,100	848	1,100	1,000	872	1,370	460	2,040	1,530	1,290
5	1,090	1,110	1,150	1,020	1,100	1,040	878	1,360	464	1,980	1,510	1,320
6	1,160	1,110	1,150	1,030	1,100	1,020	908	1,370	590	1,910	1,510	1,360
7	1,180	1,100	1,150	1,050	1,100	1,000	926	1,370	878	1,840	1,480	1,310
8	1,180	1,100	1,150	1,080	1,100	896	950	1,390	1,140	1,790	1,500	1,250
9	1,290	1,110	1,150	1,100	1,100	830	944	1,410	1,590	1,750	1,480	1,200
10	1,340	1,130	1,150	1,050	1,100	914	932	1,450	1,840	1,720	1,500	1,170
11	1,350	1,140	1,150	1,050	1,100	932	902	1,490	1,940	1,670	1,520	1,110
12	1,340	1,150	1,150	1,050	1,100	1,030	944	1,510	1,960	1,630	1,540	433
13	1,330	1,180	1,150	1,050	1,100	1,140	842	1,500	1,970	1,590	1,550	644
14	1,320	1,180	1,150	1,050	1,100	1,120	644	1,490	1,920	1,560	1,560	920
15	1,300	1,180	1,150	1,050	1,100	1,090	570	1,480	1,880	1,550	1,540	1,200
16	1,310	1,160	1,150	1,050	1,100	938	523	1,320	1,870	1,500	1,500	1,270
17	1,320	1,130	1,200	1,050	1,150	872	482	1,240	1,870	1,500	1,500	1,270
18	1,330	1,110	1,200	1,050	1,150	842	469	1,270	1,850	1,530	1,530	1,270
19	1,320	1,120	1,200	1,050	1,150	776	622	1,320	1,840	1,520	1,530	1,280
20	1,200	1,160	1,200	1,050	1,150	710	704	1,470	1,850	1,510	1,530	1,250
21	1,150	1,180	1,200	1,050	1,150	677	758	1,530	1,870	1,540	1,510	1,220
22	1,140	1,200	1,200	1,050	1,150	638	956	1,500	1,910	1,560	1,510	1,130
23	1,150	1,200	1,200	1,050	1,150	570	1,020	1,470	1,990	1,530	1,530	992
24	1,150	1,200	1,200	1,050	1,150	510	1,140	1,450	2,060	1,530	1,530	938
25	1,160	1,200	1,200	1,000	1,150	456	1,220	1,460	2,120	1,500	1,540	932
26	1,160	1,180	1,200	1,000	1,130	428	1,410	1,440	2,140	1,520	1,530	938
27	1,170	1,160	1,200	1,000	1,120	392	1,500	1,390	2,150	1,560	1,460	944
28	1,170	1,140	1,200	1,000	1,100	555	1,530	1,340	2,170	1,560	1,400	902
29	1,190	1,140	1,150	1,050	1,100	704	1,430	1,320	2,180	1,560	1,340	878
30	1,180	1,140	1,150	1,050	------	734	1,360	1,300	2,160	1,530	1,320	878
31	1,150	------	1,150	1,050	------	866	------	1,250	------	1,460	1,300	------
TOTAL	37,610	34,410	36,070	32,008	32,400	25,780	28,082	43,400	48,867	51,850	46,350	33,179
MEAN	1,213	1,147	1,164	1,033	1,117	832	936	1,400	1,629	1,673	1,495	1,106
MAX	1,350	1,200	1,200	1,100	1,150	1,140	1,530	1,530	2,180	2,170	1,560	1,360
MIN	1,010	1,100	1,100	780	1,100	392	469	1,240	460	1,460	1,300	433
AC-FT	74,600	68,250	71,540	63,490	64,270	51,130	55,700	86,080	96,930	102,800	91,940	65,810

CAL YR 1971 TOTAL 470,048 MEAN 1,288 MAX 3,220 MIN 173 AC-FT 932,300
WTR YR 1972 TOTAL 450,006 MEAN 1,230 MAX 2,180 MIN 392 AC-FT 892,600

10072800 Eightmile Creek near Soda Springs, Idaho

LOCATION.--Lat 42°32'15", long 111°34'20", in SE¼ sec.20, T.10 S., R.42 E., Bear Lake County, on right bank just below Wilson Creek, 15 ft downstream from road bridge, 0.3 mile north of Eightmile ranger station, and 8.4 miles south of Soda Springs.

DRAINAGE AREA.--23.3 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,170 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 17.0 cfs (12,320 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 157 cfs June 3, 4, 5(gage height, 2.51 ft); minimum, 2.1 cfs Feb. 26.
Period of record: Maximum discharge, 160 cfs June 18, 1971 (gage height, 2.57 ft); minimum, 0.98 cfs Mar. 3-5, 10, 20, 21, 1969.

REMARKS.--Records excellent. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	6.8	4.6	4.8	3.6	4.2	11	36	127	44	16	9.4
2	8.7	6.7	4.5	4.4	3.6	4.3	14	36	131	42	15	9.2
3	8.7	6.6	4.7	4.7	3.6	6.2	14	38	149	38	15	8.9
4	8.4	6.3	4.6	4.5	3.6	6.2	15	43	148	36	14	8.6
5	8.4	6.2	4.5	4.8	3.6	6.3	17	49	154	35	14	12
6	8.2	5.8	4.8	4.8	3.6	6.2	27	58	150	34	13	12
7	8.0	6.0	4.8	4.8	3.6	5.9	27	73	153	33	13	9.1
8	7.7	6.0	4.5	4.8	3.6	5.6	27	85	146	31	13	8.6
9	7.4	6.1	4.9	4.7	3.6	6.3	28	83	142	30	12	8.6
10	7.3	6.1	5.0	4.6	3.4	7.4	28	82	137	29	12	8.6
11	7.2	6.1	5.0	4.5	3.4	8.5	31	83	131	28	12	7.9
12	7.0	6.5	5.0	4.4	3.4	9.1	33	79	125	27	11	7.9
13	6.8	7.0	5.0	4.3	3.4	11	30	79	128	26	12	7.9
14	7.2	6.5	5.0	4.1	3.4	12	29	86	125	25	12	7.9
15	7.7	6.2	5.0	4.0	3.4	12	27	93	117	25	11	7.8
16	8.3	6.0	5.0	3.9	3.4	13	27	103	112	24	11	7.7
17	8.4	5.6	4.9	4.0	3.4	15	27	118	113	23	11	7.6
18	8.3	5.1	4.8	3.8	3.5	18	26	135	103	22	11	7.7
19	8.1	5.3	4.9	4.0	3.5	19	25	134	97	22	11	9.1
20	8.1	5.5	5.0	4.0	3.7	18	24	132	89	22	10	7.9
21	8.1	5.7	4.9	4.0	3.6	17	24	130	83	21	10	7.7
22	7.5	5.5	5.0	4.0	3.6	19	25	128	77	20	10	7.6
23	7.2	5.6	5.0	3.8	3.4	21	26	123	73	19	10	7.4
24	7.6	5.7	5.0	3.5	3.5	19	28	122	75	19	9.9	7.4
25	7.6	5.7	5.2	3.8	3.3	17	29	120	65	18	9.6	7.4
26	7.3	5.6	5.7	3.8	3.1	16	29	119	59	18	9.2	7.4
27	7.5	5.7	4.8	3.8	3.6	14	31	119	55	18	8.6	10
28	7.2	5.5	4.9	3.8	4.4	13	33	117	51	17	8.5	8.0
29	6.8	5.4	5.2	3.6	5.2	12	37	121	48	17	9.3	7.3
30	6.5	5.2	5.2	3.6	------	12	37	132	46	17	9.5	7.1
31	6.7	------	5.0	3.6	------	11	------	136	------	16	9.1	------
TOTAL	238.6	178.0	152.4	129.2	104.0	365.2	786	2,992	3,209	796	352.7	251.7
MEAN	7.70	5.93	4.92	4.17	3.59	11.8	26.2	96.5	107	25.7	11.4	8.39
MAX	8.7	7.0	5.7	4.8	5.2	21	37	136	154	44	16	12
MIN	6.5	5.1	4.5	3.5	3.1	4.2	11	36	46	16	8.5	7.1
AC-FT	473	353	302	256	206	724	1,560	5,930	6,370	1,580	700	499

CAL YR 1971 TOTAL 10,448.5 MEAN 28.6 MAX 148 MIN 2.8 AC-FT 20,720
WTR YR 1972 TOTAL 9,554.8 MEAN 26.1 MAX 154 MIN 3.1 AC-FT 18,950

10075000 Bear River at Soda Springs, Idaho

LOCATION.--Lat 42°36'50", long 111°34'58", in NW¼SW¼NW¼ sec.29, T.9 S., R.42 E., Caribou County, on left bank 800 ft upstream from Bailey Creek road bridge and 2 miles south of Soda Springs.

DRAINAGE AREA.--3,970 sq mi, approximately.

PERIOD OF RECORD.--May to September 1896, May, June 1898, and October 1953 to current year in reports of Geological Survey. Irrigation season only during 1944-49, 1951-53 in reports of Bear River Hydrometric Data (Geological Survey open-file report).

GAGE.--Water-stage recorder. Altitude of gage is 5,760 ft (from topographic map). May 25 to Oct. 2, 1896, May 22 to July 1, 1898, nonrecording gage at different datum. During irrigation season 1944-49, 1950-53, water-stage recorder at site 800 ft downstream at different datum.

AVERAGE DISCHARGE.--19 years, 603 cfs (436,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,230 cfs June 29 (gage height, 5.58 ft); minimum, 447 cfs Sept. 13. Period of record: Maximum discharge, 6,380 cfs June 9, 15, 1896 (gage height, 8.40 ft, datum then in use); minimum daily, 60 cfs Dec. 6, 1960.

REMARKS.--Records good except those for winter period, which are fair. Many diversions for irrigation above station. Flow regulated by storage in Bear Lake (see sta 10055500).

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,430	1,170	1,120	1,100	1,110	1,350	1,070	1,550	1,480	2,200	1,490	1,310
2	1,240	1,160	1,080	1,010	1,100	1,200	1,100	1,560	1,200	2,190	1,530	1,300
3	1,080	1,160	1,080	951	1,100	1,320	1,090	1,580	971	2,130	1,510	1,290
4	1,040	1,160	1,100	923	1,100	1,260	1,070	1,580	943	2,080	1,510	1,280
5	1,060	1,150	1,090	895	1,100	1,250	1,070	1,590	908	2,030	1,500	1,320
6	1,140	1,130	1,010	934	1,100	1,250	1,240	1,610	943	1,950	1,490	1,410
7	1,190	1,130	951	1,030	1,100	1,300	1,220	1,680	1,150	1,880	1,480	1,360
8	1,190	1,130	949	1,120	1,100	1,080	1,190	1,710	1,400	1,840	1,460	1,290
9	1,230	1,130	934	1,130	1,100	992	1,180	1,730	1,730	1,790	1,460	1,250
10	1,320	1,150	947	1,110	1,100	1,020	1,180	1,730	2,040	1,740	1,470	1,210
11	1,340	1,160	1,000	1,060	1,100	1,080	1,300	1,760	2,140	1,700	1,490	1,190
12	1,330	1,180	1,070	1,010	1,100	1,150	1,370	1,780	2,170	1,670	1,500	812
13	1,330	1,210	1,060	982	1,100	1,280	1,340	1,760	2,160	1,610	1,520	595
14	1,330	1,220	1,060	976	1,100	1,340	1,100	1,760	2,100	1,560	1,540	820
15	1,320	1,200	1,060	992	1,110	1,300	985	1,770	2,020	1,560	1,540	1,090
16	1,330	1,180	1,110	1,030	1,110	1,200	929	1,720	2,000	1,530	1,510	1,240
17	1,350	1,150	1,140	1,060	1,130	1,120	894	1,610	1,990	1,490	1,470	1,260
18	1,360	1,120	1,160	1,090	1,140	1,130	852	1,640	2,000	1,500	1,490	1,260
19	1,340	1,170	1,190	1,120	1,170	1,140	861	1,690	1,990	1,520	1,510	1,280
20	1,280	1,160	1,220	1,150	1,190	1,010	950	1,760	1,970	1,500	1,510	1,250
21	1,200	1,190	1,250	1,170	1,210	971	992	1,850	1,950	1,530	1,500	1,220
22	1,170	1,200	1,270	1,160	1,220	964	1,120	1,820	1,960	1,560	1,490	1,170
23	1,160	1,200	1,280	1,150	1,210	979	1,260	1,780	2,040	1,520	1,500	1,050
24	1,180	1,200	1,300	1,130	1,190	863	1,330	1,760	2,160	1,530	1,520	952
25	1,190	1,220	1,300	1,110	1,180	787	1,450	1,770	2,230	1,510	1,540	934
26	1,180	1,200	1,240	1,100	1,190	742	1,590	1,760	2,230	1,510	1,540	940
27	1,200	1,190	1,200	1,100	1,230	660	1,730	1,700	2,210	1,550	1,490	960
28	1,200	1,160	1,160	1,100	1,270	685	1,750	1,640	2,230	1,560	1,420	941
29	1,210	1,160	1,090	1,110	1,300	865	1,760	1,610	2,230	1,550	1,380	897
30	1,200	1,160	1,080	1,110	------	926	1,600	1,610	2,220	1,540	1,340	882
31	1,190	------	1,120	1,100	------	968	------	1,580	------	1,480	1,320	------
TOTAL	38,310	35,100	34,621	33,013	33,260	33,182	36,573	52,450	54,765	52,310	46,020	33,763
MEAN	1,236	1,170	1,117	1,065	1,147	1,070	1,219	1,692	1,826	1,687	1,485	1,125
MAX	1,430	1,220	1,300	1,170	1,300	1,350	1,760	1,850	2,230	2,200	1,540	1,410
MIN	1,040	1,120	934	895	1,100	660	852	1,550	908	1,480	1,320	595
AC-FT	75,990	69,620	68,670	65,480	65,970	65,820	72,540	104,000	108,600	103,800	91,280	66,970

CAL YR 1971 TOTAL 500,816 MEAN 1,372 MAX 3,330 MIN 336 AC-FT 993,400
WTR YR 1972 TOTAL 483,367 MEAN 1,321 MAX 2,230 MIN 595 AC-FT 958,800

10076400 Soda Creek at Fivemile Meadows, near Soda Springs, Idaho

LOCATION.--Lat 42°43'45", long 111°36'55", in SE¼NW¼ sec.13, T.8 S., R.41 E., Caribou County, on right bank 100 ft southeast of Lau ranchhouse, 150 ft downstream from Schmidt ditch, and 5 miles north of Soda Springs.

DRAINAGE AREA.--49 sq mi, approximately.

PERIOD OF RECORD.--October 1964 to current year. April 1923 to October 1926 at this site published as "at Lau Ranch;" records not equivalent owing to diversion in Schmidt ditch during irrigation season.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,980 ft (from topographic map). April 1923 to October 1926 at different datum and Oct. 1, 1964, to Aug. 26, 1965, at site 400 ft upstream at different datum.

AVERAGE DISCHARGE.--8 years (1964-72), 15.9 cfs (11,520 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 71 cfs Mar. 18 (gage height, 1.96 ft); minimum daily, 16 cfs Feb. 21, 27.
Period of record: Maximum discharge, 98 cfs Apr. 2, 1965 (gage height, 4.01 ft, site and datum then in use); no flow Dec. 24, 1966.

REMARKS.--Records good except those for winter months and period of no gage-height record, which are fair. Records herein include flow of Schmidt ditch.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	25	25	24	19	20	27	31	34	35	31	32
2	33	25	24	24	19	20	27	31	35	35	31	33
3	31	26	26	24	19	23	27	31	36	34	30	32
4	29	26	25	24	19	21	27	31	38	34	31	31
5	28	26	25	24	19	21	27	30	37	34	31	35
6	27	24	26	23	19	23	29	31	36	34	31	41
7	26	23	25	22	19	25	29	34	34	34	30	34
8	26	24	25	23	19	24	28	38	35	34	30	33
9	26	24	25	23	19	24	28	37	35	33	30	32
10	25	24	28	23	19	24	28	34	34	32	30	33
11	25	25	25	22	19	26	29	34	33	31	29	32
12	24	28	25	22	19	30	35	34	32	31	29	31
13	24	33	25	22	19	35	39	34	33	31	31	30
14	26	29	24	22	19	43	37	34	33	30	32	30
15	27	28	24	22	18	51	34	33	32	30	32	30
16	28	28	24	21	18	58	32	33	33	29	32	30
17	30	27	23	21	18	62	31	33	34	30	31	30
18	29	26	24	21	17	65	31	34	34	29	31	29
19	30	25	23	21	17	65	30	34	34	29	30	33
20	28	25	24	21	17	55	30	34	34	32	31	31
21	27	25	23	20	16	48	30	34	34	36	31	29
22	26	26	24	20	17	47	30	35	34	33	31	28
23	26	25	24	20	17	44	29	36	38	32	32	28
24	26	26	25	20	17	35	29	37	46	32	32	28
25	27	27	25	20	17	32	29	37	44	32	32	28
26	26	25	28	20	17	30	29	36	41	33	32	28
27	27	25	26	20	16	29	29	36	38	33	31	29
28	26	25	26	20	19	28	29	35	36	32	31	29
29	25	25	25	20	20	28	30	34	35	31	31	28
30	25	25	25	20	------	28	31	34	34	32	32	28
31	25	------	24	20	------	28	------	34	------	32	33	------
TOTAL	841	775	770	669	527	1,092	900	1,053	1,066	999	961	925
MEAN	27.1	25.8	24.8	21.6	18.2	35.2	30.0	34.0	35.5	32.2	31.0	30.8
MAX	33	33	28	24	20	65	39	38	46	36	33	41
MIN	24	23	23	20	16	20	27	30	32	29	29	28
AC-FT	1,670	1,540	1,530	1,330	1,050	2,170	1,790	2,090	2,110	1,980	1,910	1,830

CAL YR 1971 TOTAL 8,605.9 MEAN 23.6 MAX 75 MIN 1.9 AC-FT 17,070
WTR YR 1972 TOTAL 10,578.0 MEAN 28.9 MAX 65 MIN 16 AC-FT 20,980

NOTE.--No gage-height record Jan. 9 to Feb. 11.

10079500 Bear River at Alexander, Idaho

LOCATION.--Lat 42°38'42", long 111°41'51", in NE¼SW¼NW¼ sec.17, T.9 S., R.41 E., Caribou County, on right bank 600 ft downstream from Soda hydroelectric plant of Utah Power & Light Co., 0.5 mile southeast of Alexander and 5 miles downstream from Soda Creek.

DRAINAGE AREA.--4,050 sq mi, approximately.

PERIOD OF RECORD.--March 1911 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 5,650 ft (from topographic map).

AVERAGE DISCHARGE.--61 years, 764 cfs (553,500 acre-ft per year); 15-year base period (1952-67), 604 cfs.

EXTREMES.--Current year: Maximum discharge, 2,370 cfs June 25 (gage height, 3.70 ft); minimum, 275 cfs May 2. Period of record: Maximum discharge observed, 4,740 cfs Mar. 31, 1911; maximum gage height, 15.95 ft Dec. 11, 1919 (backwater from ice); minimum discharge, 28 cfs at times when reservoir gates were closed.

REMARKS.--Records good. Flow regulated by Bear Lake Reservoir (see sta 10055500) and Soda hydroelectric plant. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,350	1,310	1,250	1,250	1,260	1,240	1,250	1,780	1,680	2,270	1,680	1,530
2	1,350	1,300	1,250	1,260	1,270	1,240	1,240	1,640	1,530	2,230	1,720	1,500
3	1,350	1,310	1,260	1,250	1,270	1,230	1,260	1,710	1,170	2,180	1,700	1,510
4	1,350	1,300	1,260	1,250	1,270	1,260	1,270	1,720	760	2,210	1,560	1,480
5	1,340	1,300	1,250	1,250	1,270	1,250	1,260	1,730	1,170	2,220	1,540	1,460
6	1,320	1,300	1,250	1,250	1,260	1,240	1,260	1,750	1,550	2,090	1,520	1,450
7	1,320	1,300	1,250	1,260	1,250	1,170	1,260	1,880	1,620	1,980	1,520	1,450
8	1,310	1,290	1,230	1,260	1,250	1,240	1,250	1,910	1,770	1,960	1,570	1,450
9	1,330	1,290	1,220	1,260	1,250	1,230	1,250	1,900	1,770	1,840	1,690	1,430
10	1,340	1,290	1,210	1,270	1,250	1,230	1,240	1,880	1,770	1,790	1,670	1,410
11	1,330	1,290	1,210	1,280	1,250	1,230	1,250	1,870	1,770	1,760	1,650	1,410
12	1,330	1,290	1,220	1,260	1,250	1,240	1,250	1,910	2,040	1,770	1,640	1,400
13	1,330	1,290	1,220	1,280	1,240	1,350	1,240	1,920	2,100	1,720	1,620	1,380
14	1,340	1,290	1,220	1,270	1,240	1,640	1,240	1,910	2,090	1,790	1,610	1,370
15	1,320	1,280	1,210	1,290	1,240	1,600	1,240	1,920	2,040	1,790	1,590	1,360
16	1,320	1,280	1,230	1,210	1,250	1,360	1,210	1,750	1,920	1,800	1,500	1,360
17	1,330	1,270	1,230	1,140	1,240	1,320	1,080	1,740	1,980	1,810	1,490	1,360
18	1,310	1,280	1,230	1,200	1,250	1,370	1,230	1,740	2,070	1,810	1,460	1,360
19	1,230	1,260	1,220	1,280	1,240	1,460	1,230	1,760	2,070	1,810	1,430	1,360
20	1,330	1,260	1,230	1,300	1,230	1,290	1,230	1,830	2,020	1,800	1,410	1,360
21	1,340	1,280	1,230	1,270	1,240	1,250	1,220	2,010	2,000	1,800	1,440	1,330
22	1,330	1,260	1,230	1,290	1,240	1,250	1,220	2,020	2,010	1,790	1,440	1,330
23	1,320	1,270	1,220	1,270	1,230	1,260	1,230	2,010	2,020	1,740	1,450	1,330
24	1,330	1,270	1,220	1,270	1,220	1,250	1,220	1,930	2,190	1,350	1,560	1,340
25	1,330	1,260	1,230	1,270	1,230	1,250	1,220	1,770	2,290	1,560	1,560	1,330
26	1,330	1,260	1,230	1,270	1,230	1,260	1,220	1,880	2,340	1,640	1,550	1,310
27	1,330	1,260	1,220	1,280	1,230	1,260	1,210	1,850	2,290	1,760	1,560	1,310
28	1,280	1,250	1,230	1,280	1,240	1,260	1,650	1,700	2,290	1,760	1,570	1,300
29	1,200	1,250	1,260	1,270	1,230	1,260	1,870	1,710	2,290	1,760	1,550	1,280
30	1,310	1,260	1,260	1,260	------	1,260	1,720	1,630	2,250	1,710	1,530	1,280
31	1,310	------	1,260	1,260	------	1,260	------	1,630	------	1,690	1,530	------
TOTAL	40,940	38,400	38,240	39,060	36,120	40,010	38,520	56,390	56,860	57,190	48,310	41,530
MEAN	1,321	1,280	1,234	1,260	1,246	1,291	1,284	1,819	1,895	1,845	1,558	1,384
MAX	1,350	1,310	1,260	1,300	1,270	1,640	1,870	2,020	2,340	2,270	1,720	1,530
MIN	1,200	1,250	1,210	1,140	1,220	1,170	1,080	1,630	760	1,350	1,410	1,280
AC-FT	81,200	76,170	75,850	77,480	71,640	79,360	76,400	111,800	112,800	113,400	95,820	82,370

CAL YR 1971 TOTAL 542,945 MEAN 1,488 MAX 3,530 MIN 884 AC-FT 1,077,000
WTR YR 1972 TOTAL 531,570 MEAN 1,452 MAX 2,340 MIN 760 AC-FT 1,054,000

10084500 Cottonwood Creek near Cleveland, Idaho

LOCATION.--Lat 42°19'57", long 111°46'27", in SW¼ sec.34, T.12 S., R.40 E., Franklin County, on right bank 500 ft upstream from Cleveland irrigation canal, 2.5 miles west of Cleveland, and 4 miles downstream from proposed Cottonwood Dam.

DRAINAGE AREA.--61.7 sq mi.

PERIOD OF RECORD.--November 1938 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,150 ft (from topographic map). Prior to Dec. 29, 1944, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years (1939-72), 30.8 cfs (22,310 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 388 cfs Apr. 6 (gage height, 3.25 ft); minimum, 4.5 cfs Nov. 6. Period of record: Maximum discharge, 773 cfs Apr. 27, 1952 (gage height, 3.83 ft); minimum, 0.1 cfs Aug. 11, 1961.

REMARKS.--Records good. A few small diversions for irrigation of meadowland in Cottonwood Valley above station. Treasureton Canal diverts from Cottonwood Creek 10.1 miles above station in SE¼ sec.8, T.12 S., R.39 E., for irrigation in Battle Creek basin in vicinity of Treasureton.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	14	7.7	20	16	20	80	193	76	17	9.3	8.1
2	20	14	6.3	20	16	26	130	191	72	16	9.6	8.5
3	21	12	8.0	19	14	43	143	204	69	16	9.6	11
4	21	13	7.4	19	15	41	156	234	63	17	9.4	12
5	18	15	7.4	19	16	40	178	251	58	16	9.2	12
6	16	9.5	6.8	19	16	43	297	257	58	16	9.6	12
7	15	12	6.6	19	17	45	283	310	53	14	11	12
8	15	16	7.7	19	17	45	257	304	52	13	15	10
9	14	16	6.3	19	17	51	259	257	53	13	14	10
10	14	19	6.6	19	17	71	247	227	46	13	14	10
11	14	17	7.4	19	16	86	283	214	40	12	13	11
12	13	17	8.3	20	17	96	308	201	38	11	14	10
13	13	21	9.1	20	16	128	236	202	36	11	12	10
14	14	20	11	19	16	161	201	207	33	11	9.8	12
15	15	19	12	19	16	163	188	215	31	10	13	12
16	16	16	14	19	16	178	190	216	28	10	14	11
17	22	13	16	19	16	208	193	212	31	10	13	11
18	22	13	17	19	17	236	183	202	37	10	13	11
19	19	12	17	21	17	233	166	186	28	11	12	15
20	20	17	18	22	18	195	158	170	26	15	12	14
21	19	16	19	22	19	195	159	157	25	13	11	7.9
22	17	16	20	22	19	233	169	145	23	12	8.3	6.8
23	16	16	21	21	19	258	163	136	26	11	8.0	6.5
24	16	16	21	17	19	192	185	128	41	11	7.8	6.6
25	17	16	24	17	18	168	200	121	32	11	8.2	7.0
26	16	12	30	19	16	136	188	109	27	11	8.3	7.6
27	18	17	19	20	22	112	194	102	24	10	7.6	12
28	16	14	17	19	22	101	216	101	21	9.6	7.1	17
29	13	16	19	19	26	94	239	99	19	9.2	17	15
30	9.9	17	19	18	------	84	218	90	18	9.6	14	14
31	15	------	20	16	------	82	------	80	------	9.1	9.3	------
TOTAL	515.9	461.5	429.6	599	506	3,764	6,067	5,721	1,184	378.5	343.1	323.0
MEAN	16.6	15.4	13.9	19.3	17.4	121	202	185	39.5	12.2	11.1	10.8
MAX	22	21	30	22	26	258	308	310	76	17	17	17
MIN	9.9	9.5	6.3	16	14	20	80	80	18	9.1	7.1	6.5
AC-FT	1,020	915	852	1,190	1,000	7,470	12,030	11,350	2,350	751	681	641

CAL YR 1971 TOTAL 20,548.9 MEAN 56.3 MAX 365 MIN 6.3 AC-FT 40,760
WTR YR 1972 TOTAL 20,292.6 MEAN 55.4 MAX 310 MIN 6.3 AC-FT 40,250

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-22	1930	3.06	317	5- 7	2200	3.18	342
4- 6	2000	3.25	388				

10086500 Bear River below Utah Power & Light Co.'s tailrace, at Oneida, Idaho

LOCATION.--Lat 42°16'00", long 111°45'04", in NE¼SE¼NW¼ sec.26, T.13 S., R.40 E., Franklin County, on right bank 200 ft downstream from tailrace of Oneida plant and 6 miles south of Cleveland.

DRAINAGE AREA.--4,400 sq mi, approximately.

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only October 1921 to September 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 4,800 ft (from topographic map).

AVERAGE DISCHARGE.--51 years, 811 cfs (587,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,890 cfs June 6; minimum, 34 cfs Apr. 29.
Period of record: Maximum daily discharge, 5,480 cfs May 8, 1922; minimum daily, 10 cfs Dec. 6, 1964.

REMARKS.--Records good. Many diversions above station. Flow regulated by Bear Lake (see sta 10055500) and Soda, Grace, and Oneida hydroelectric plants.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,500	1,440	1,500	1,560	1,610	1,490	1,410	1,980	1,350	2,440	1,560	1,510
2	1,540	1,520	1,340	1,400	1,070	1,640	1,710	2,190	1,300	2,170	1,480	1,590
3	1,590	1,660	1,500	1,220	1,170	1,870	1,680	2,620	1,520	2,110	1,510	1,570
4	1,560	1,310	1,460	1,080	1,490	1,750	1,480	2,300	537	2,060	1,300	1,490
5	1,540	1,370	1,440	1,230	1,580	1,750	1,730	2,150	1,360	2,050	1,290	1,640
6	1,520	1,580	1,420	1,250	1,630	1,610	1,890	2,220	904	2,100	1,390	1,650
7	1,650	1,330	1,470	1,880	1,570	1,790	1,780	2,230	1,490	1,980	927	1,620
8	1,540	1,440	1,090	1,740	1,570	1,550	1,780	2,430	1,600	1,800	1,660	1,750
9	1,480	1,510	1,210	1,520	1,430	1,510	1,770	2,660	1,780	1,730	1,300	1,490
10	1,520	1,250	1,340	1,460	1,520	1,830	1,790	2,670	1,410	1,650	1,860	1,510
11	1,490	1,710	1,590	1,210	1,350	1,640	1,710	2,600	1,700	1,710	1,090	1,510
12	1,510	1,450	1,540	1,670	1,420	1,680	1,890	2,130	1,630	1,500	1,450	1,570
13	1,490	1,610	1,520	1,400	1,500	1,760	2,070	2,340	1,950	1,250	1,160	1,580
14	1,330	1,530	1,310	1,430	1,370	2,070	1,720	2,440	2,020	1,100	1,060	1,750
15	1,670	1,470	1,340	1,450	1,500	2,120	1,760	2,440	1,790	1,620	1,490	1,370
16	1,510	1,280	1,500	1,470	1,550	2,150	1,650	2,360	1,860	1,410	1,770	1,730
17	1,670	1,380	1,670	1,500	1,400	1,860	1,700	2,350	1,940	1,550	1,500	1,460
18	1,630	1,400	1,540	1,190	1,490	1,920	1,650	2,250	1,800	1,560	1,190	1,560
19	1,350	1,540	1,350	1,710	1,560	1,930	1,560	2,160	1,790	1,360	1,270	1,530
20	1,510	1,370	1,510	1,400	1,410	1,950	1,790	2,100	1,910	1,540	1,500	1,650
21	1,460	1,540	1,430	1,590	1,540	1,770	1,570	2,320	1,900	1,500	1,270	1,650
22	1,440	1,520	1,490	1,570	1,650	1,820	1,620	2,260	1,920	1,430	1,440	1,680
23	1,740	1,420	1,600	1,670	1,530	1,830	1,710	2,400	1,820	1,520	1,290	1,600
24	1,560	1,580	1,410	1,590	1,390	1,820	1,720	2,290	1,910	1,390	1,390	1,360
25	1,460	1,420	1,550	1,450	1,450	1,700	1,500	2,080	2,390	1,570	1,500	1,720
26	1,510	1,540	1,430	1,500	1,510	1,800	1,850	2,090	2,040	1,070	1,530	1,410
27	1,480	1,460	1,740	1,380	1,550	1,560	1,730	2,020	2,310	1,140	1,500	1,660
28	1,590	1,420	1,530	1,720	1,480	1,640	1,620	2,030	2,270	1,610	1,580	1,900
29	1,500	1,490	1,590	1,350	1,790	1,660	2,020	1,970	2,240	1,430	1,580	1,370
30	1,560	1,520	1,620	1,350	------	1,460	2,590	1,800	2,110	1,440	1,440	1,620
31	1,370	------	1,120	1,390	------	1,710	------	1,570	------	1,420	1,560	------
TOTAL	47,270	44,060	45,150	45,330	43,080	54,640	52,450	69,450	52,551	50,210	43,837	47,500
MEAN	1,525	1,469	1,456	1,462	1,486	1,763	1,748	2,240	1,752	1,620	1,414	1,583
MAX	1,740	1,710	1,740	1,880	1,790	2,150	2,590	2,670	2,390	2,440	1,860	1,900
MIN	1,330	1,250	1,090	1,080	1,070	1,460	1,410	1,570	537	1,070	927	1,360
AC-FT	93,760	87,390	89,560	89,910	85,450	108,400	104,000	137,800	104,200	99,590	86,950	94,220

CAL YR 1971 TOTAL 609,275 MEAN 1,667 MAX 3,320 MIN 730 AC-FT 1,207,000
WTR YR 1972 TOTAL 595,528 MEAN 1,627 MAX 2,670 MIN 537 AC-FT 1,181,000

10090500 Bear River near Preston, Idaho

LOCATION.--Lat 42°10'05", long 111°50'59", in NW¼ sec.36, T.14 S., R.39 E., Franklin County, on left bank 600 ft downstream from headgates of West Cache Canal, 5 miles downstream from Mink Creek, 5 miles north of Preston, and 5.5 miles upstream from Battle Creek.

DRAINAGE AREA.--4,500 sq mi, approximately.

PERIOD OF RECORD.--October 1889 to December 1916, January to September 1917 (gage heights only), October 1943 to current year. Prior to 1903, published as "at Battlecreek." Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is 4,524.8 ft above mean sea level, unadjusted. October 1889 to September 1917 nonrecording gages at several sites within 5 miles downstream at different datums.

AVERAGE DISCHARGE.--29 years (1943-72), 841 cfs (609,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,210 cfs Jan. 29 (gage height, 4.67 ft); minimum, 65 cfs Aug. 7 (gage height, Q.72 ft); minimum daily, 809 cfs July 26.
Period of record (1889-1917): Maximum discharge, about 8,500 cfs June 9, 10, 1907, estimated on basis of records for station near Collinston, Utah; maximum gage height observed, 9.04 ft Jan. 17, 18, 1917 (backwater from ice), site and datum then in use; minimum discharge not determined.
(1943-72): Maximum discharge, 4,420 cfs Apr. 17, 1950 (gage height, 5.61 ft); minimum, 0.6 cfs June 14, 1949; minimum daily, 2.0 cfs May 11, 1968.

REMARKS.--Records good. Station is below all irrigation diversions from Bear River in Idaho except Cub River pumps in SE¼ sec.20, T.16 S., R.39 E. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 250: 1905-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,300	1,680	1,520	1,690	1,530	1,580	1,490	2,270	1,470	2,160	1,390	1,340
2	1,670	1,540	1,520	1,640	1,050	1,650	1,860	2,350	1,470	2,040	1,370	1,400
3	1,600	1,930	1,680	1,470	1,150	2,080	1,910	3,010	1,730	1,960	1,350	1,410
4	1,310	1,370	1,580	1,130	1,450	2,050	1,520	2,630	830	1,910	1,220	1,470
5	1,690	1,400	1,560	1,460	1,550	1,800	1,860	2,430	1,480	1,900	1,070	1,540
6	1,390	1,770	1,620	1,240	1,890	1,890	1,940	2,470	1,020	1,940	1,250	1,360
7	1,680	1,450	1,630	1,990	1,690	1,990	2,040	2,540	1,670	1,870	859	1,590
8	1,610	1,560	1,260	1,860	1,750	1,800	1,840	2,710	1,690	1,650	1,370	1,520
9	1,380	1,780	1,340	1,740	1,530	1,640	1,990	2,990	1,810	1,580	1,120	1,400
10	1,600	1,240	1,380	1,600	1,500	1,900	1,970	2,950	1,680	1,500	1,630	1,440
11	1,540	1,960	1,720	1,430	1,610	2,020	1,860	2,900	1,890	1,550	956	1,480
12	1,560	1,460	1,690	1,800	1,540	1,850	2,240	2,330	1,540	1,360	1,270	1,590
13	1,210	1,770	1,690	1,500	1,580	1,960	2,270	2,490	1,990	1,150	1,000	1,430
14	1,400	1,730	1,430	1,570	1,500	2,140	2,160	2,650	2,070	1,060	915	1,680
15	1,870	1,710	1,560	1,620	1,550	2,330	1,950	2,670	1,910	1,430	1,310	1,260
16	1,580	1,330	1,580	1,600	1,560	2,350	1,880	2,580	1,870	1,280	1,580	1,620
17	1,750	1,640	1,800	1,640	1,550	2,100	2,090	2,590	1,980	1,370	1,290	1,460
18	1,770	1,480	1,520	1,230	1,580	1,990	1,930	2,520	1,840	1,430	1,110	1,370
19	1,390	1,750	1,720	1,840	1,580	2,150	1,790	2,430	1,810	1,170	1,110	1,460
20	1,690	1,450	1,480	1,530	1,540	2,190	1,940	2,210	1,910	1,390	1,330	1,530
21	1,440	1,630	1,730	1,810	1,630	1,840	1,930	2,490	1,900	1,380	1,120	1,570
22	1,530	1,670	1,610	1,700	1,600	1,860	1,880	2,410	1,840	1,240	1,290	1,580
23	1,780	1,550	1,680	2,020	1,370	1,870	1,940	2,520	1,770	1,350	1,100	1,470
24	1,620	1,610	1,600	1,700	1,540	1,930	2,060	2,100	1,880	1,310	1,210	1,310
25	1,560	1,460	1,600	1,560	1,400	1,780	1,640	2,190	2,380	1,410	1,280	1,620
26	1,690	1,700	1,590	1,690	1,770	1,870	2,320	2,050	2,060	809	1,390	1,250
27	1,570	1,580	1,540	1,410	1,640	1,650	1,580	2,110	2,260	988	1,350	1,590
28	1,740	1,600	1,580	2,010	1,530	1,720	1,830	2,080	2,200	1,470	1,420	1,780
29	1,640	1,670	1,800	1,540	1,880	1,800	2,250	2,040	2,190	1,310	1,320	1,300
30	1,620	1,470	1,690	1,370	------	1,400	2,960	1,890	2,170	1,280	1,430	1,600
31	1,370	------	1,270	1,520	------	1,830	------	1,720	------	1,330	1,360	------
TOTAL	48,550	47,940	48,970	49,910	45,040	59,010	58,920	75,320	54,310	45,577	38,770	44,420
MEAN	1,566	1,598	1,580	1,610	1,553	1,904	1,964	2,430	1,810	1,470	1,251	1,481
MAX	1,870	1,960	1,800	2,020	1,890	2,350	2,960	3,010	2,380	2,160	1,630	1,780
MIN	1,210	1,240	1,260	1,130	1,050	1,400	1,490	1,720	830	809	859	1,250
AC-FT	96,300	95,090	97,130	99,000	89,340	117,000	116,900	149,400	107,700	90,400	76,900	88,110

CAL YR 1971 TOTAL 195,765 MEAN 536 MAX 3,930 MIN 859 AC-FT 388,300
WTR YR 1972 TOTAL 616,737 MEAN 1,685 MAX 3,010 MIN 809 AC-FT 1,223,000

10091200 Deep Creek near Clifton, Idaho

LOCATION.--Lat 42°12'00", long 111°59'05", in SE¼SW¼ sec.14, T.14 S., R.38 E., Franklin County, on right bank 40 ft above county road culvert, and 1.3 miles northeast of Clifton.

DRAINAGE AREA.--119 sq mi, approximately.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder and road culvert for medium and high stages. Altitude of gage is 4,705 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 12.1 cfs (8,770 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 129 cfs Mar. 3 (gage height, 6.13 ft); minimum, 1.4 cfs Sept. 11, 12, 15.
Period of record: Maximum discharge, 152 cfs Mar. 31, 1969 (gage height, 6.80 ft, from high-water mark on outside of well); minimum, 0.57 cfs Nov. 26, 27, 1966., Sept. 29, 1970.

REMARKS.--Records good except those for period of no gage-height record and winter periods, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	8.2	19	25	23	72	39	29	11	10	4.9	2.8
2	4.4	9.0	18	24	22	73	40	28	11	8.3	3.9	2.6
3	3.6	9.0	17	27	22	122	39	27	12	8.5	2.7	3.3
4	3.2	9.3	15	19	24	110	38	26	12	8.3	3.7	1.9
5	3.1	9.4	15	13	30	105	37	25	12	7.4	3.5	2.2
6	3.2	9.4	15	14	40	99	40	24	12	8.6	4.0	3.7
7	3.3	9.4	15	16	46	90	40	28	11	7.2	2.6	2.5
8	3.1	9.6	15	16	40	81	39	29	9.4	7.1	3.6	1.9
9	3.1	9.6	15	15	35	74	39	28	9.0	6.2	2.3	1.7
10	3.6	10	15	13	35	69	38	27	8.3	5.6	2.1	1.8
11	4.7	10	15	11	36	65	42	25	8.3	5.3	2.0	1.7
12	4.7	11	15	14	38	61	49	26	8.6	5.9	1.9	1.7
13	4.9	12	15	12	40	58	52	24	8.5	5.8	2.4	1.6
14	5.0	13	15	11	42	58	52	21	9.3	5.6	3.4	1.6
15	5.3	14	15	11	45	54	48	20	8.6	5.8	3.7	1.7
16	5.8	13	15	12	46	52	44	20	9.0	4.4	2.7	2.6
17	6.6	13	15	13	48	50	45	19	8.8	4.3	2.4	2.6
18	8.2	13	15	15	51	48	46	18	9.4	3.7	2.2	2.3
19	7.1	13	15	34	54	51	43	17	8.3	3.3	2.7	2.7
20	7.6	14	15	38	57	51	39	17	8.6	3.3	2.8	3.1
21	8.0	14	15	45	61	48	38	16	7.4	4.5	2.6	2.7
22	7.1	14	17	62	64	46	39	16	8.2	4.9	2.4	3.6
23	6.5	14	20	62	63	47	37	17	9.0	3.7	2.7	3.7
24	6.6	14	30	60	61	45	36	18	11	3.7	2.6	4.0
25	6.8	15	32	50	60	45	37	17	12	5.2	2.2	3.6
26	7.0	15	40	43	58	43	36	16	12	3.7	2.0	4.1
27	8.3	18	44	35	64	42	33	14	12	4.5	1.7	4.8
28	8.3	19	44	30	71	42	31	14	13	4.4	2.2	5.0
29	8.0	19	35	25	77	41	32	13	12	4.7	2.2	4.9
30	8.0	20	26	24	------	40	30	12	11	4.4	2.4	3.6
31	7.8	------	27	23	------	40	------	11	------	4.4	3.0	------
TOTAL	177.6	380.9	639	812	1,353	1,922	1,198	642	302.7	172.7	85.5	86.0
MEAN	5.73	12.7	20.6	26.2	46.7	62.0	39.9	20.7	10.1	5.57	2.76	2.87
MAX	8.3	20	44	62	77	122	52	29	13	10	4.9	5.0
MIN	3.1	8.2	15	11	22	40	30	11	7.4	3.3	1.7	1.6
AC-FT	352	756	1,270	1,610	2,680	3,810	2,380	1,270	600	343	170	171

CAL YR 1971 TOTAL 7,199.8 MEAN 19.7 MAX 79 MIN 1.0 AC-FT 14,280
WTR YR 1972 TOTAL 7,771.4 MEAN 21.2 MAX 122 MIN 1.6 AC-FT 15,410

NOTE.--No gage-height record Jan. 21 to Feb. 23.

10092700 Bear River at Idaho-Utah State line

LOCATION.--Lat 42°00'48", long 111°55'09", in NW¼NE¼ sec.29, T.16 S., R.39 E., Franklin County, Idaho, on left bank 1,050 ft downstream from inlet canal to Cub River pumps, 1.1 mile downstream from Weston Creek, 1.8 miles upstream from State line, and 3.5 miles southeast of Weston.

DRAINAGE AREA.--4,840 sq mi, approximately.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,420 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 3,100 cfs Apr. 13 (gage height, 6.95 ft); minimum daily, 863 cfs July 27.
Period of record: Maximum discharge, 4,190 cfs June 12, 1971 (gage height, 8.25 ft); minimum daily, 73 cfs Nov. 20.

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,810	1,780	1,660	1,700	1,630	2,030	1,840	2,430	1,590	2,070	1,190	1,420
2	1,710	1,550	1,620	1,610	1,750	1,800	1,750	2,380	1,750	2,080	1,330	1,430
3	1,780	1,980	1,810	1,550	1,300	2,100	1,920	3,000	1,530	2,010	1,230	1,400
4	1,740	1,820	1,600	1,380	1,350	2,380	1,990	2,700	1,660	1,810	1,410	1,320
5	1,730	1,590	1,690	1,500	1,500	2,100	1,750	2,630	1,040	1,840	980	1,650
6	1,790	1,540	1,730	2,100	1,650	2,180	1,990	2,370	1,470	1,810	1,100	1,480
7	1,660	1,830	1,630	2,050	1,900	2,220	2,250	2,590	1,530	1,790	1,010	1,550
8	1,930	1,670	1,450	1,900	1,800	2,240	2,080	2,680	1,680	1,580	1,060	1,660
9	1,650	1,630	1,700	1,860	1,600	1,860	2,120	3,040	1,880	1,470	1,090	1,460
10	1,770	1,760	1,700	1,600	1,650	2,000	2,120	3,050	1,960	1,460	1,240	1,480
11	1,720	1,740	1,650	1,480	1,650	2,220	2,170	3,000	1,760	1,360	1,320	1,550
12	1,940	1,770	1,680	1,800	1,650	2,020	2,350	2,470	1,730	1,290	945	1,540
13	1,520	1,700	1,700	1,700	1,650	2,250	2,530	2,480	1,810	1,290	983	1,530
14	1,730	1,890	1,700	1,700	1,650	2,250	2,410	2,670	2,200	965	1,040	1,580
15	1,700	1,940	1,700	1,700	1,650	2,560	2,210	2,680	2,010	1,140	986	1,500
16	1,830	1,690	1,700	1,700	1,690	2,600	2,310	2,630	2,020	1,210	1,210	1,460
17	1,750	1,660	1,700	1,700	1,820	2,400	2,090	2,600	2,070	1,200	1,210	1,560
18	1,950	1,590	1,700	1,700	1,740	2,140	2,110	2,480	1,950	1,130	1,260	1,460
19	1,930	1,650	1,700	1,700	1,700	2,370	2,150	2,600	1,910	1,270	980	1,560
20	1,740	1,620	1,700	1,700	1,880	2,410	1,950	2,110	1,990	1,220	1,040	1,550
21	1,830	1,700	1,700	1,900	1,620	2,140	2,110	2,570	1,960	1,300	1,130	1,570
22	1,650	1,830	1,700	1,900	1,970	2,150	2,040	2,390	1,900	1,230	1,100	1,590
23	1,660	1,710	1,700	2,050	1,890	2,150	2,120	2,610	1,880	1,150	1,140	1,500
24	1,820	1,650	1,700	1,700	1,560	2,200	2,160	2,410	1,970	1,460	1,370	1,350
25	1,770	1,690	1,700	1,700	1,880	1,990	2,110	2,390	2,420	1,230	1,160	1,550
26	1,810	1,740	1,700	1,700	1,670	2,060	2,080	2,130	2,200	1,070	1,290	1,360
27	1,730	1,750	1,700	1,700	1,740	1,930	2,100	2,080	2,330	863	1,330	1,600
28	1,740	1,680	1,810	1,990	1,920	1,890	2,020	2,160	2,270	1,150	1,380	1,560
29	1,690	1,820	1,790	1,780	1,840	1,890	2,280	2,100	2,250	1,350	1,360	1,730
30	1,700	1,660	1,580	1,570	------	1,900	2,960	2,020	2,290	1,060	1,350	1,370
31	1,650	------	1,700	1,790	------	1,750	------	1,940	------	1,420	1,370	------
TOTAL	54,430	51,630	52,300	53,910	49,300	66,180	64,070	77,390	57,010	43,278	36,594	45,320
MEAN	1,756	1,721	1,687	1,739	1,700	2,135	2,136	2,496	1,900	1,396	1,180	1,511
MAX	1,950	1,980	1,810	2,100	1,970	2,600	2,960	3,050	2,420	2,080	1,410	1,730
MIN	1,520	1,540	1,450	1,380	1,300	1,750	1,750	1,940	1,040	863	945	1,320
AC-FT	108,000	102,400	103,700	106,900	97,790	131,300	127,100	153,500	113,100	85,840	72,580	89,890

CAL YR 1971 TOTAL 733,734 MEAN 2,010 MAX 4,170 MIN 984 AC-FT 1,455,000
WTR YR 1972 TOTAL 651,412 MEAN 1,780 MAX 3,050 MIN 863 AC-FT 1,292,000

10093000 Cub River near Preston, Idaho

LOCATION.--Lat 42°08'28", long 111°41'19", in SW¼ sec.5, T.15 S., R.41 E., Franklin County, Cache National Forest, on right bank 0.2 mile upstream from headgates of Cub River-Worm Creek Canal, 0.7 mile upstream from forest boundary, and 10 miles east of Preston.

DRAINAGE AREA.--19.4 sq mi.

PERIOD OF RECORD.--March 1940 to September 1952, October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,285.1 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--29 years, 84.3 cfs (61,080 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 747 cfs June 3 (gage height, 2.88 ft); minimum, 15 cfs Jan. 10. Period of record: Maximum discharge, 803 cfs June 11, 1971 (gage height, 3.13 ft); maximum gage height, 3.83 ft June 2, 1943; no flow for part of Jan. 29, 1965, result of snowslide.

REMARKS.--Records good. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	32	26	26	23	26	38	98	660	204	71	44
2	42	32	26	26	23	28	42	96	691	195	69	43
3	41	32	27	26	22	45	42	101	715	183	68	43
4	40	32	26	26	22	34	46	121	705	172	66	42
5	40	32	27	25	22	33	50	156	674	165	65	48
6	40	31	28	25	22	35	76	190	659	159	63	43
7	40	31	26	25	22	36	85	224	693	153	62	42
8	40	30	26	25	22	36	82	256	662	145	61	41
9	40	29	26	25	22	40	84	262	621	139	60	40
10	40	29	26	25	22	51	85	246	570	134	59	40
11	40	29	26	25	22	57	103	228	536	127	58	39
12	39	30	26	25	22	56	122	225	509	123	57	39
13	38	31	26	24	22	59	115	239	478	120	57	38
14	38	31	26	24	22	63	103	280	430	116	56	38
15	38	30	26	23	22	59	95	335	400	113	55	37
16	38	29	26	23	22	60	92	396	393	109	53	36
17	36	29	25	23	22	68	97	452	396	106	52	36
18	37	28	25	24	22	75	94	484	392	102	52	36
19	35	28	25	25	22	78	87	473	365	100	51	36
20	34	28	25	25	23	68	80	437	329	98	50	35
21	34	28	25	26	23	60	75	421	300	95	49	34
22	34	28	25	26	24	62	71	389	293	92	49	34
23	34	28	26	26	24	71	69	331	283	89	49	34
24	34	27	26	25	24	64	72	300	274	86	48	33
25	34	27	27	25	24	59	79	321	274	84	48	33
26	33	28	31	24	24	54	77	388	266	82	47	32
27	35	28	29	24	23	49	77	417	243	79	46	33
28	34	27	28	24	25	45	83	453	229	78	46	32
29	33	27	28	24	26	42	95	484	218	76	45	31
30	33	26	28	24	------	40	100	535	211	74	45	31
31	32	------	27	23	------	38	------	603	------	73	44	------
TOTAL	1,150	877	820	766	660	1,591	2,416	9,941	13,469	3,671	1,701	1,123
MEAN	37.1	29.2	26.5	24.7	22.8	51.3	80.5	321	449	118	54.9	37.4
MAX	44	32	31	26	26	78	122	603	715	204	71	48
MIN	32	26	25	23	22	26	38	96	211	73	44	31
AC-FT	2,280	1,740	1,630	1,520	1,310	3,160	4,790	19,720	26,720	7,280	3,370	2,230

CAL YR 1971 TOTAL 47,556 MEAN 130 MAX 782 MIN 24 AC-FT 94,330
WTR YR 1972 TOTAL 38,185 MEAN 104 MAX 715 MIN 22 AC-FT 75,740

10125500 Malad River at Woodruff, Idaho

LOCATION.--Lat 42°01'48", long 112°13'45", in NE¼NE¼ sec.22, T.16 S., R.36 E., Oneida County, at left abutment of highway bridge at Woodruff, 2.1 miles north of Idaho-Utah State line.

DRAINAGE AREA.--485 sq mi, approximately.

PERIOD OF RECORD.--November 1938 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,355 ft (by barometer). Prior to Mar. 6, 1951, nonrecording gage at site 300 ft downstream at datum 0.27 ft lower. Mar. 6, 1951, to Sept. 30, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years (1939-72), 58.6 cfs (42,460 acre-ft per year); 15-year base period (1952-67), 48.7 cfs.

EXTREMES.--Current year: Maximum daily discharge, 380 cfs Jan. 24; minimum discharge, 19 cfs Aug. 24, 26, but may have been less during period of no gage-height record July 20 to Aug. 23.
Period of record: Maximum discharge, 2,530 cfs Feb. 12, 1962 (gage height, 8.93 ft); minimum, 1.8 cfs July 14, 1964 (gage height, 1.30 ft).

REMARKS.--Records excellent. Flow regulated by several small reservoirs above station. Diversions above station for irrigation of 25,000 to 30,000 acres. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Dec. 20-31, Mar. 27 to Apr. 24)

1.8	15	4.0	163
2.0	23	5.0	246
3.0	94	6.0	424

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	71	107	110	62	140	141	86	26	30	21	23
2	58	74	84	111	64	143	141	87	26	28	21	22
3	65	80	72	100	66	174	148	88	26	26	21	22
4	59	86	68	80	62	201	139	83	27	26	21	22
5	52	88	64	90	63	189	135	79	27	27	21	23
6	47	81	62	83	66	175	139	74	27	25	21	24
7	44	73	62	76	69	172	143	77	28	26	21	26
8	43	71	64	73	79	158	140	88	29	27	21	25
9	42	73	68	71	86	144	131	82	31	27	21	24
10	42	73	59	70	83	137	124	75	52	25	21	23
11	42	73	58	70	81	132	131	79	69	25	21	24
12	40	74	64	72	84	131	160	81	54	25	21	24
13	41	82	55	74	87	131	198	79	41	24	21	23
14	43	94	62	74	89	134	213	73	35	23	21	24
15	42	109	59	74	92	133	196	64	33	23	20	24
16	46	115	61	73	93	129	162	58	33	22	20	25
17	71	107	67	70	107	129	144	56	32	22	20	25
18	95	97	72	84	128	132	136	45	34	22	20	25
19	106	89	72	130	137	136	128	41	42	23	20	25
20	94	88	69	190	148	144	124	38	40	21	20	24
21	79	89	67	350	160	145	119	39	34	22	21	27
22	72	87	67	320	160	146	120	38	31	22	21	27
23	69	86	78	350	154	148	121	37	31	22	20	26
24	66	86	100	380	148	160	116	41	33	22	20	26
25	66	85	131	360	131	159	113	43	41	21	20	26
26	66	83	185	250	123	151	109	39	47	21	20	27
27	67	87	241	170	124	139	106	36	43	21	20	29
28	78	103	229	140	136	138	106	32	40	21	21	33
29	70	101	162	120	147	140	102	30	37	21	21	37
30	68	109	118	110	------	145	92	28	34	21	21	37
31	65	------	112	70	------	146	------	27	------	21	21	------
TOTAL	1,878	2,614	2,839	4,395	3,029	4,581	4,077	1,823	1,083	732	640	772
MEAN	60.6	87.1	91.6	142	104	148	136	58.8	36.1	23.6	20.6	25.7
MAX	106	115	241	380	160	201	213	88	69	30	21	37
MIN	40	71	55	70	62	129	92	27	26	21	20	22
AC-FT	3,730	5,180	5,630	8,720	6,010	9,090	8,090	3,620	2,150	1,450	1,270	1,530

CAL YR 1971 TOTAL 26,902 MEAN 73.7 MAX 378 MIN 19 AC-FT 53,360
WTR YR 1972 TOTAL 28,463 MEAN 77.8 MAX 380 MIN 20 AC-FT 56,460

UPPER COLUMBIA RIVER BASIN

KOOTENAI RIVER BASIN

12303000 Kootenai River at Libby, Mont.

LOCATION.--Lat 48°24'03", long 115°33'08", in SW¼SE¼SW¼ sec.34, T.31 N., R.31 W., Lincoln County, on right bank 1,800 ft downstream from highway bridge at Libby, 0.8 mile downstream from Libby Creek, and at mile 204.3.

DRAINAGE AREA.--10,240 sq mi, approximately.

PERIOD OF RECORD.--October 1910 to current year. Monthly discharge only for some periods, published in WSP 1316.

GAGE.--Water-stage recorder. Datum of gage is 2,041.54 ft above mean sea level. Prior to Apr. 28, 1931, non-recording gages at site 1,800 ft upstream at different datum.

AVERAGE DISCHARGE.--62 years, 12,170 cfs (16.14 inches per year, 8,817,000 acre-ft per year), adjusted for change in contents in Lake Koocanusa since Feb. 29, 1972.

EXTREMES.--Current year: Maximum discharge, 37,900 cfs June 14 (gage height, 10.21 ft); minimum daily, 2,200 cfs Jan. 29.
Period of record: Maximum discharge, 121,000 cfs June 21, 1916 (gage height, 20.7 ft, present datum, derived from gage-relation study); minimum observed, 895 cfs Jan. 11, 1930 (discharge measurement).

REMARKS.--Records good. Flow regulated since Mar. 21, 1972, by Lake Koocanusa. Diversions for irrigation of about 14,500 acres from tributaries above station in Canada and the United States. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1042: 1933. WSP 1246: 1912(M), 1915(M), 1916, 1918-19(M), 1924-27(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,100	4,160	3,610	2,790	2,700	7,560	4,160	11,000	29,800	29,700	27,200	8,580
2	5,130	4,220	3,520	2,860	2,900	6,750	4,950	11,400	29,800	29,300	33,300	7,950
3	5,030	4,280	3,380	3,040	3,100	6,250	5,630	11,900	29,000	28,700	33,900	7,800
4	4,900	4,380	3,200	3,200	3,300	5,750	6,200	11,800	29,000	28,100	29,800	6,550
5	4,850	4,640	3,170	3,100	3,400	5,500	6,500	12,600	29,900	26,400	20,300	7,170
6	4,880	4,600	3,060	3,000	3,300	6,330	6,080	14,600	30,900	16,000	17,100	7,980
7	5,080	4,220	2,910	2,900	3,200	6,430	6,050	16,000	31,500	10,900	16,000	8,070
8	5,280	4,000	2,810	2,910	3,100	6,280	9,810	16,600	32,000	4,300	17,600	8,280
9	5,400	3,920	2,510	2,860	3,000	6,150	9,840	12,500	32,500	4,680	20,700	9,210
10	5,430	4,160	2,620	2,820	2,900	6,250	9,750	17,600	32,900	4,720	18,800	9,300
11	5,330	4,340	2,690	2,770	2,750	7,050	9,630	17,500	33,200	4,360	16,000	9,150
12	5,180	4,680	2,540	2,510	2,790	7,560	9,470	17,200	34,100	4,080	15,200	13,800
13	5,130	4,700	2,360	2,400	3,040	8,100	9,300	19,400	35,900	5,650	14,900	26,000
14	5,230	4,680	2,450	2,300	3,190	9,000	9,060	22,800	36,000	14,800	13,900	32,800
15	5,350	4,640	2,990	2,300	3,330	9,330	8,880	25,500	36,400	28,100	13,100	32,100
16	5,400	4,560	2,960	2,400	3,590	10,200	8,790	27,500	36,200	26,100	16,300	31,200
17	5,380	4,460	2,890	2,460	4,060	12,100	8,610	30,000	36,000	24,200	17,600	29,900
18	5,130	4,340	3,220	2,560	4,040	13,500	7,740	30,300	36,000	19,200	11,300	32,200
19	4,900	4,220	3,040	2,560	3,780	13,500	5,800	29,100	36,100	20,000	4,320	32,400
20	4,850	4,100	3,200	2,640	3,440	13,100	6,700	28,000	36,000	32,400	4,880	32,800
21	4,950	4,100	3,220	3,220	3,840	10,400	6,100	29,000	36,200	26,100	4,850	32,600
22	4,950	4,120	3,220	3,780	3,960	7,000	7,500	29,600	35,600	21,600	4,880	23,700
23	4,830	4,120	3,440	3,690	3,940	6,850	8,940	29,200	35,600	20,900	4,880	10,900
24	4,780	4,080	3,420	3,370	3,840	6,400	8,070	28,400	35,800	21,400	4,660	24,200
25	4,720	4,020	3,290	2,900	3,720	6,100	7,440	27,700	34,900	27,100	4,640	32,000
26	4,740	3,940	3,200	2,700	3,610	5,650	7,350	27,100	34,600	25,100	4,540	31,500
27	4,850	3,860	2,890	2,500	3,720	5,230	7,680	26,400	33,100	23,700	4,540	32,000
28	4,900	3,800	2,800	2,300	5,800	4,760	9,090	26,900	30,000	27,000	4,830	30,900
29	4,640	3,760	2,700	2,200	8,250	4,620	10,200	27,800	30,100	33,100	6,000	31,200
30	4,380	3,690	2,600	2,300	------	4,850	10,700	28,400	29,500	32,900	5,880	31,900
31	4,200	------	2,700	2,500	------	4,880	------	29,600	------	32,600	7,170	------
TOTAL	154,900	126,790	92,610	85,840	105,590	233,430	236,020	693,400	998,600	653,190	419,070	634,140
MEAN	4,997	4,226	2,987	2,769	3,641	7,530	7,867	22,370	33,290	21,070	13,520	21,140
MAX	5,430	4,700	3,610	3,780	8,250	13,500	10,700	30,300	36,400	33,100	33,900	32,800
MIN	4,200	3,690	2,360	2,200	2,700	4,620	4,160	11,000	29,000	4,080	4,320	6,550
AC-FT	307,200	251,500	183,700	170,300	209,400	463,000	468,100	1,375M	1,981M	1,296M	831,200	1,258M
MEAN†	4,997	4,226	2,987	2,769	3,641	9,765	8,941	37,810	64,030	30,200	14,620	7,781
CFSM†	.49	.41	.29	.27	.36	.95	.87	3.69	6.25	2.95	1.43	.76
IN.†	.56	.46	.34	.31	.38	1.10	.97	4.26	6.98	3.40	1.65	.85
AC-FT†	307,200	251,500	183,700	170,300	209,400	600,400	532,000	2,325M	3,810M	1,857M	899,200	463,000

CAL YR 1971	TOTAL 5,272,610	MEAN 14,450	MAX 68,700	MIN 1,700	AC-FT 10,460,000
WTR YR 1972	TOTAL 4,433,580	MEAN 12,110	MAX 36,400	MIN 2,200	AC-FT 8,794,000
CAL YR 1971†	TOTAL 5,272,610	MEAN 14,450	CFSM 1.41	IN. 19.15	AC-FT 10,460,000
WTR YR 1972†	TOTAL 5,852,707	MEAN 15,990	CFSM 1.56	IN. 21.26	AC-FT 11,610,000

M Expressed in thousands.
† Adjusted for change in contents in Lake Koocanusa.

12304500 Yaak River near Troy, Mont.

LOCATION.--Lat 48°33'43", long 115°58'09", in NE¼SE¼SE¼ sec.5, T.32 N., R.34 W., Lincoln County, Kootenai National Forest, on right bank 500 ft upstream from bridge on U.S. Highway 2, 0.2 mile upstream from mouth, and 7.7 miles northwest of Troy.

DRAINAGE AREA.--766 sq mi.

PERIOD OF RECORD.--October 1910 to September 1916 (fragmentary record), March 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,839.2 ft above mean sea level. Oct. 15, 1910, to Sept. 30, 1916, nonrecording gage at several sites within 11 miles of present site at various datums.

AVERAGE DISCHARGE.--16 years, 940 cfs (16.67 inches per year, 681,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,840 cfs May 16 (gage height, 8.56 ft); minimum daily, 100 cfs Jan. 28.

Period of record: Maximum discharge, 12,100 cfs May 21, 1956 (gage height, 9.70 ft in gage well, 10.8 ft from outside gage); minimum daily, 80 cfs Jan. 19, 1957, Jan. 2, 1958, Dec. 13, 1967.

Flood in May to June 1948 reached a stage of 11.0 ft from floodmarks (discharge, 12,500 cfs). Flood in May 1954 reached a stage of 11.4 ft from floodmarks (discharge, 13,400 cfs).

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 30 acres above station. Records of water temperatures for the water year 1972 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	181	192	170	180	1,670	1,300	1,860	7,170	1,250	378	156
2	174	176	160	150	160	1,210	1,570	1,970	6,260	1,100	375	155
3	166	183	163	120	190	953	1,580	2,280	5,150	1,000	381	150
4	166	252	144	130	220	799	1,520	2,700	4,420	950	356	150
5	163	277	179	140	250	745	1,470	3,260	4,200	915	334	146
6	160	201	176	150	280	1,020	1,830	3,580	4,140	887	316	150
7	156	192	130	160	300	1,030	2,260	3,260	4,040	942	303	153
8	150	205	120	170	290	900	2,050	3,230	3,820	912	292	153
9	145	192	130	180	280	818	1,810	3,280	3,660	880	280	152
10	142	270	140	170	270	886	1,610	3,320	3,640	883	267	147
11	139	390	150	160	280	1,390	1,500	3,590	3,570	790	255	148
12	137	357	160	140	290	1,570	1,420	4,300	3,130	776	248	148
13	168	347	170	110	300	1,770	1,350	5,440	2,630	1,200	240	147
14	232	324	180	120	310	2,300	1,280	7,010	2,220	1,090	236	144
15	199	295	170	140	320	2,060	1,230	8,160	2,050	889	234	139
16	182	272	160	150	330	2,390	1,240	8,300	2,150	784	240	134
17	162	251	180	160	340	3,560	1,190	7,940	2,190	738	244	133
18	156	226	190	170	350	4,020	1,120	7,850	1,970	697	238	132
19	168	216	200	180	360	3,720	1,060	6,710	1,760	719	228	130
20	219	229	210	190	370	3,190	1,040	6,540	1,630	660	219	135
21	215	251	220	200	360	2,720	1,120	6,570	1,840	612	211	160
22	198	257	220	210	350	2,400	1,150	6,540	1,800	641	215	264
23	186	239	230	200	340	2,690	1,090	6,110	1,700	603	220	276
24	197	226	230	180	330	2,720	1,110	5,270	1,680	562	214	237
25	199	225	220	160	320	2,340	1,160	4,480	1,540	550	206	210
26	252	225	200	140	310	1,980	1,230	4,180	1,710	529	198	194
27	255	216	180	120	350	1,730	1,410	4,320	1,610	492	187	187
28	192	209	150	100	900	1,530	1,870	5,060	1,450	461	188	179
29	149	205	160	120	1,970	1,390	2,050	6,000	1,470	436	175	174
30	152	198	170	150	------	1,290	1,950	6,740	1,380	413	164	171
31	167	------	180	190	------	1,230	------	7,400	------	395	156	------
TOTAL	5,531	7,287	5,464	4,830	10,900	58,021	43,570	157,250	85,980	23,756	7,798	4,954
MEAN	178	243	176	156	376	1,872	1,452	5,073	2,866	766	252	165
MAX	255	390	230	210	1,970	4,020	2,260	8,300	7,170	1,250	381	276
MIN	137	176	120	100	160	745	1,040	1,860	1,380	395	156	130
CFSM	.23	.32	.23	.20	.49	2.44	1.90	6.62	3.74	1.00	.33	.22
IN.	.27	.35	.27	.23	.53	2.82	2.12	7.64	4.18	1.15	.38	.24
AC-FT	10,970	14,450	10,840	9,580	21,620	115,100	86,420	311,900	170,500	47,120	15,470	9,830

CAL YR 1971 TOTAL 399,763 MEAN 1,095 MAX 8,890 MIN 95 CFSM 1.43 IN 19.41 AC-FT 792,900
WTR YR 1972 TOTAL 415,341 MEAN 1,135 MAX 8,300 MIN 100 CFSM 1.48 IN 20.17 AC-FT 823,800

PEAK DISCHARGE (BASE, 5,000 CFS).--May 16 (0100) 8,840 cfs (8.56 ft); June 1 (0045) 8,270 cfs (8.39 ft).

12305000 Kootenai River at Leonia, Idaho

LOCATION.--Lat 48°37'04", long 116°02'47", in NW¼NW¼ sec.20, T.33 N., R.34 W., Principal meridian, Lincoln County, Mont., on right bank at Leonia, 450 ft east of Montana-Idaho State line, 0.5 mile upstream from Boulder Creek, and at mile 171.6.

DRAINAGE AREA.--11,740 sq mi, approximately.

PERIOD OF RECORD.--March 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,790.25 ft above mean sea level. Prior to Oct. 1, 1970, at datum 90 ft lower. Prior to Nov. 13, 1928, nonrecording gage on bridge 250 ft upstream at datum 0.41 ft lower.

AVERAGE DISCHARGE.--44 years, 14,060 cfs (16.26 inches per year, 10,190,000 acre-ft per year); 15-year base period (1952-67), 15,290 cfs.

EXTREMES.--Current year: Maximum discharge, 47,100 cfs June 1 (gage height, 22.57 ft); minimum daily, 1,900 cfs Jan. 28, 29.
Period of record: Maximum discharge, 123,000 cfs May 28, 1948 (gage height, 33.40 ft); minimum, 996 cfs Dec. 9, 1936; minimum gage height, 7.56 ft Dec. 10, 1929.
Floods of June 1894 and 1916 reached stages of 124.6 and 121.6 ft, respectively, from information by Great Northern Railway.

REMARKS.--Records excellent except those for winter periods, which are fair. Diversions above station for irrigation of about 14,600 acres. Records of water temperatures for water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 31 to May 14, Aug. 17 to Sept. 27; stage-discharge relation affected by ice Dec. 1 to Feb. 14)

11.2	4,270	15.0	14,800
12.0	5,750	18.0	25,900
13.0	8,310	23.0	50,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,730	4,750	4,420	2,650	2,900	12,300	7,670	14,400	45,000	31,800	27,300	9,040
2	5,770	4,730	4,340	2,800	3,160	10,300	8,560	14,800	42,700	31,000	32,900	8,670
3	5,730	4,830	4,260	2,860	3,300	9,180	9,150	15,700	39,600	30,200	33,900	8,560
4	5,670	5,040	4,160	3,020	3,450	8,420	9,560	16,300	37,900	29,200	31,900	7,360
5	5,570	5,330	4,020	3,140	3,600	8,030	9,990	17,800	38,400	29,200	20,900	6,940
6	5,810	5,350	3,920	3,230	3,500	9,010	10,200	19,900	39,400	18,400	17,200	8,670
7	5,510	4,940	3,770	3,300	3,300	9,380	10,400	21,200	40,200	14,200	15,900	8,670
8	5,710	4,700	3,560	3,300	3,200	8,950	13,900	21,700	40,500	8,340	16,500	8,650
9	5,790	4,390	3,300	3,220	3,250	8,670	13,900	18,200	40,700	7,500	20,500	9,470
10	5,830	4,830	3,270	3,180	3,330	8,760	13,500	22,700	41,200	7,300	19,000	9,620
11	5,810	5,170	3,340	3,140	3,380	10,400	13,100	23,400	41,100	6,650	16,000	9,530
12	5,670	5,550	3,100	3,020	3,400	11,400	12,800	24,200	40,400	6,000	15,100	11,500
13	5,730	5,690	3,000	2,820	3,500	12,500	12,500	28,500	41,200	6,810	14,800	22,800
14	5,830	5,630	3,020	2,680	3,650	14,700	12,100	35,300	40,400	13,400	14,100	32,600
15	5,880	5,550	3,100	2,600	3,800	14,600	11,800	40,400	40,800	28,800	12,600	32,000
16	5,880	5,510	3,380	2,630	4,000	15,600	11,700	42,000	40,800	26,700	15,500	31,500
17	5,920	5,370	3,480	2,720	4,400	19,500	11,400	44,500	40,500	24,900	17,600	29,100
18	5,750	5,190	3,520	2,800	4,600	22,000	10,500	44,800	39,800	21,100	14,000	31,900
19	5,610	5,000	3,490	2,820	4,300	21,600	9,150	41,600	39,500	17,000	4,910	32,000
20	5,650	4,890	3,480	2,940	4,100	20,100	9,470	40,300	39,100	33,500	4,910	32,600
21	5,610	4,850	3,530	3,500	4,500	17,900	8,560	41,800	39,900	26,800	5,110	32,500
22	5,650	4,920	3,530	4,000	4,700	12,800	9,960	42,800	39,100	21,600	5,060	28,500
23	5,570	4,920	3,630	4,600	4,600	12,900	10,600	41,400	39,100	21,000	5,070	9,680
24	5,490	4,940	3,700	4,500	4,500	12,500	10,700	38,900	39,200	20,100	4,780	20,500
25	5,450	4,890	3,640	4,160	4,450	11,600	10,300	36,100	38,000	27,000	4,660	31,900
26	5,550	4,780	3,400	3,600	4,300	10,400	10,000	34,900	37,700	25,100	4,580	30,900
27	5,610	4,700	2,800	3,000	4,500	9,530	10,100	34,300	36,700	23,500	4,510	31,900
28	5,610	4,630	2,540	2,560	8,700	8,930	12,000	36,600	32,400	25,100	4,530	30,300
29	5,370	4,560	2,460	2,400	13,700	8,310	13,800	39,900	32,700	33,000	5,960	30,600
30	5,110	4,490	2,420	2,500	------	8,310	14,200	42,100	31,900	32,900	5,790	30,700
31	4,830	------	2,520	2,700	------	8,390	------	44,800	------	32,700	7,160	------
TOTAL	174,700	150,120	106,100	96,390	126,070	376,970	331,570	981,300	1,175.9M	680,800	422,730	628,660
MEAN	5,635	5,004	3,423	3,109	4,347	12,160	11,050	31,650	39,200	21,960	13,640	20,960
MAX	5,920	5,690	4,420	4,600	13,700	22,000	14,200	44,800	45,000	33,500	33,900	32,600
MIN	4,830	4,390	2,420	2,400	2,900	8,030	7,670	14,400	31,900	6,000	4,510	6,940
AC-FT	346,500	297,800	210,400	191,200	250,100	747,700	657,700	1,946M	2,332M	1,350M	838,500	1,247M

CAL YR 1971 TOTAL 6,365,810 MEAN 17,440 MAX 80,000 MIN 2,420 AC-FT 12,630,000
WTR YR 1972 TOTAL 5,251,310 MEAN 14,350 MAX 45,000 MIN 2,400 AC-FT 10,420,000

M Expressed in thousands.

12306500 Moyie River at Eastport, Idaho
(International gaging station)

LOCATION.--Lat 48°59'58", long 116°10'43", in NE¼SE¼ sec.10, T.65 N., R.2 E., Boundary County, Kaniksu National Forest, on left bank at Eastport, 1,000 ft downstream from international boundary, and at mile 25.0.

DRAINAGE AREA.--570 sq mi, approximately.

PERIOD OF RECORD.--January to December 1915, March to December 1916, August 1929 to current year in reports of Geological Survey. Monthly discharge only for some periods, published in WSP 1736.

GAGE.--Water-stage recorder. Datum of gage is 2,620.06 ft above mean sea level. January 1915 to December 1916 nonrecording gage at site 0.2 mile upstream at different datum.

AVERAGE DISCHARGE.--43 years (1929-72), 715 cfs (17.03 inches per year, 518,000 acre-ft per year); 15-year base period (1952-67), 756 cfs.

EXTREMES.--Current year: Maximum discharge, 7,380 cfs June 1 (gage height, 9.35 ft); minimum, 60 cfs Jan. 28, 29; minimum gage height, 3.52 ft Oct. 17.
Period of record: Maximum discharge observed, 10,600 cfs June 19, 1916; maximum gage height, 10.55 ft May 20, 1954; minimum discharge, 23 cfs Nov. 7, 1936 (gage height, 3.20 ft).

REMARKS.--Records good except those for winter period, which are fair. No regulation or diversion above station.

COOPERATION.--This station is one of the international gaging stations maintained by the United States under agreement with Canada.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Mar. 8 to Apr. 1, May 14-24, June 21 to July 16; stage-discharge relation affected by ice Oct. 29 to Nov. 1, Nov. 5-9, Dec. 3 to Feb. 19)

3.2	20	4.5	495
3.4	50	5.0	860
3.6	95	6.0	1,900
3.8	155	8.0	4,760
4.0	230	9.5	7,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	94	109	78	70	370	846	1,370	6,880	1,420	391	126
2	84	95	102	79	77	347	1,110	1,520	6,300	1,280	368	127
3	82	114	100	81	82	313	1,080	1,740	5,790	1,160	368	124
4	81	126	94	82	88	279	1,040	2,070	5,190	1,070	347	120
5	81	115	92	86	92	271	1,020	2,470	4,850	984	327	120
6	79	105	88	90	98	329	1,300	2,660	4,660	912	302	115
7	78	92	86	91	102	346	1,490	2,500	4,510	959	282	117
8	76	94	82	92	102	319	1,400	2,520	4,280	873	271	116
9	76	98	78	90	101	306	1,280	2,460	4,160	893	257	115
10	76	119	76	88	101	341	1,170	2,520	4,150	909	240	119
11	74	144	74	87	103	473	1,090	2,810	4,070	834	229	115
12	73	143	70	82	107	522	1,030	3,570	3,860	810	215	112
13	78	140	70	73	110	645	967	4,510	3,450	1,080	206	111
14	93	141	70	74	115	915	896	5,520	3,010	1,100	207	108
15	84	136	70	78	118	880	875	6,200	2,690	1,000	197	103
16	78	132	70	83	122	1,060	861	6,280	2,640	920	190	100
17	73	121	72	88	125	1,510	827	6,430	2,570	872	190	98
18	77	117	74	92	127	1,720	777	6,760	2,460	805	180	98
19	80	120	78	96	130	1,780	737	5,980	2,280	839	176	100
20	104	118	82	100	132	1,660	716	6,130	2,120	806	172	107
21	96	121	90	102	133	1,510	753	6,170	2,200	763	167	119
22	89	125	92	102	131	1,400	743	6,110	2,090	741	162	196
23	90	113	94	96	125	1,500	725	5,970	1,990	708	164	158
24	96	123	96	86	123	1,440	751	5,500	1,930	656	163	152
25	99	122	96	75	119	1,280	784	4,930	1,840	625	155	148
26	113	116	94	68	115	1,150	825	4,610	2,000	597	152	146
27	106	115	90	64	121	1,020	945	4,650	1,870	550	151	151
28	94	115	87	60	182	928	1,300	5,200	1,740	510	145	148
29	82	114	82	60	368	847	1,370	5,740	1,640	477	140	145
30	86	110	80	62	------	789	1,370	6,170	1,530	444	139	142
31	92	------	79	65	------	760	------	6,730	------	415	132	------
TOTAL	2,656	3,538	2,617	2,550	3,519	27,010	30,078	137,800	98,750	26,012	6,785	3,756
MEAN	85.7	118	84.4	82.3	121	871	1,003	4,445	3,292	839	219	125
MAX	113	144	109	102	368	1,780	1,490	6,760	6,880	1,420	391	196
MIN	73	92	70	60	70	271	716	1,370	1,530	415	132	98
CFSM	.15	.21	.15	.14	.21	1.53	1.76	7.80	5.78	1.47	.38	.22
IN.	.17	.23	.17	.17	.23	1.76	1.96	8.99	6.44	1.70	.44	.25
AC-FT	5,270	7,020	5,190	5,060	6,980	53,570	59,660	273,300	195,900	51,590	13,460	7,450

CAL YR 1971 TOTAL 316,967 MEAN 868 MAX 7,260 MIN 47 CFSM 1.52 IN 20.69 AC-FT 628,700
WTR YR 1972 TOTAL 345,071 MEAN 943 MAX 6,880 MIN 60 CFSM 1.65 IN 22.52 AC-FT 684,400

PEAK DISCHARGE (BASE, 2,900 CFS).--May 18 (0330) 7,140 cfs (9.15 ft); June 1 (0030) 7,380 cfs (9.35 ft).

12307500 Moyie River at Eileen, Idaho

LOCATION.--Lat 48°46'27", long 116°09'26", in NE¼NE¼ sec.35, T.63 N., R.2 E., Boundary County, on right bank 800 ft downstream from Skin Creek, 0.3 mile southeast of Eileen, and at mile 5.0.

DRAINAGE AREA.--755 sq mi.

PERIOD OF RECORD.--October 1925 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,124.5 ft above mean sea level (river-profile survey). Prior to June 1, 1928, nonrecording gage and June 1, 1928, to Sept. 30, 1944, water-stage recorder at same site at datum 1.0 ft higher.

AVERAGE DISCHARGE.--47 years, 888 cfs (15.98 inches per year, 643,400 acre-ft per year); 15-year base period (1952-67), 954 cfs.

EXTREMES.--Current year: Maximum discharge, 8,080 cfs May 18 (gage height, 6.09 ft); minimum daily, 86 cfs Jan. 28, 29, 30; minimum gage height, 1.57 ft Oct. 18.
Period of record: Maximum discharge, 11,000 cfs May 20, 1954 (gage height, 6.99 ft); minimum, 40 cfs Nov. 27, 1936, and Dec. 17, 1964, both the result of freezeup; minimum gage height, 0.50 ft Feb. 22, 1944, present datum.
Flood of June 19, 1916, was about 12,000 cfs.

REMARKS.--Records good except those for winter period or no gage-height record, which are fair. No regulation or diversion above station.

Rating table (gage height, in feet, and discharge, in cubic feet per second),
(Shifting-control method used July 10 to Sept. 31; stage-discharge relation affected by ice Nov. 7, 8, Dec. 3 to Feb. 18)

1.5	82	3.5	1,470
1.8	172	4.0	2,180
2.1	298	5.0	4,260
2.5	540	6.0	7,450
3.0	940	7.0	11,300

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	145	159	100	90	746	1,140	1,520	7,800	1,700	510	185
2	132	145	148	101	95	650	1,410	1,650	7,210	1,560	480	180
3	132	152	140	103	105	575	1,400	1,860	6,610	1,430	470	180
4	129	195	130	108	110	512	1,360	2,200	5,950	1,330	460	175
5	126	176	120	115	125	519	1,340	2,760	5,610	1,240	435	175
6	126	152	110	120	135	634	1,610	3,080	5,400	1,150	410	173
7	123	138	98	125	150	626	1,870	2,870	5,250	1,190	375	170
8	120	145	94	125	165	596	1,770	2,910	4,980	1,090	360	165
9	120	155	92	120	180	561	1,640	2,800	4,830	1,140	340	163
10	117	191	92	115	200	603	1,510	2,850	4,800	1,130	320	167
11	117	202	92	110	205	810	1,410	3,140	4,690	1,060	305	167
12	114	214	94	105	215	895	1,350	3,920	4,440	1,050	285	162
13	120	214	96	92	225	1,040	1,280	5,130	3,950	1,350	275	162
14	129	214	100	88	235	1,410	1,210	6,400	3,460	1,310	270	157
15	132	202	103	90	245	1,370	1,160	7,210	3,060	1,200	260	152
16	120	195	107	94	255	1,520	1,140	7,310	3,010	1,110	250	148
17	117	187	110	102	265	2,080	1,100	7,350	2,970	1,050	250	145
18	114	176	114	110	275	2,420	1,040	7,800	2,780	994	240	141
19	135	176	117	120	281	2,460	994	6,930	2,590	1,010	235	143
20	158	176	119	130	292	2,280	976	7,070	2,400	967	225	150
21	155	180	121	130	269	2,070	1,000	7,100	2,530	913	220	172
22	138	183	125	135	241	1,920	994	6,930	2,460	922	220	239
23	138	180	125	130	234	2,020	949	6,790	2,320	850	215	240
24	148	176	123	125	233	1,960	967	6,260	2,300	802	210	218
25	148	183	120	115	220	1,770	994	5,610	2,150	786	205	210
26	169	176	114	105	215	1,600	1,020	5,250	2,390	730	205	205
27	162	172	108	90	243	1,430	1,110	5,280	2,250	690	200	210
28	141	172	105	86	433	1,310	1,450	5,910	2,080	642	200	207
29	126	169	103	86	784	1,210	1,550	6,610	1,990	603	195	202
30	135	165	102	86	------	1,130	1,540	7,070	1,840	568	190	198
31	141	------	100	88	------	1,090	------	7,560	------	533	190	------
TOTAL	4,118	5,306	3,481	3,349	6,720	39,817	38,284	157,130	114,100	32,100	9,005	5,361
MEAN	133	177	112	108	232	1,284	1,276	5,069	3,803	1,035	290	179
MAX	169	214	159	135	784	2,460	1,870	7,800	7,800	1,700	510	240
MIN	114	138	92	86	90	512	949	1,520	1,840	533	190	141
CFSM	.18	.23	.15	.14	.31	1.70	1.69	6.71	5.04	1.37	.38	.24
IN.	.20	.26	.17	.17	.33	1.96	1.89	7.74	5.62	1.58	.44	.26
AC-FT	8,170	10,520	6,900	6,640	13,330	78,980	75,940	311,700	226,300	63,670	17,860	10,630

CAL YR 1971 TOTAL 390,344 MEAN 1,069 MAX 8,470 MIN 92 CFSM 1.42 IN 19.23 AC-FT 774,200
WTR YR 1972 TOTAL 418,771 MEAN 1,144 MAX 7,800 MIN 86 CFSM 1.52 IN 20.63 AC-FT 830,600

PEAK DISCHARGE((BASE, 3,500 CFS).--May 18 (0530) 8,080 cfs (6.09 ft); June 1 (0615) 8,080 cfs (6.09 ft).

NOTE.--No gage-height record Aug. 1 to Sept. 8.

12309500 Kootenai River at Bonners Ferry, Idaho

LOCATION.--Lat 48°42'00", long 116°18'45", in NE¼ sec.27, T.62 N., R.1 E., Boundary County, on left bank 43 ft downstream from highway bridge at Bonners Ferry, and at mile 152.8.

DRAINAGE AREA.--13,000 sq mi, approximately.

PERIOD OF RECORD.--May to October 1904, October 1927 to current year (elevations only prior to March 1928 and October 1960 to current year). Gage heights collected in this vicinity since 1904 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,743.00 ft above mean sea level with respect to Geological Survey bench mark V-3-1929 at elevation 1,777.08 ft. Gage heights have been reduced to elevations above mean sea level. Datum of 1929, supplementary adjustment of 1947, is 0.02 ft higher. May 1 to Oct. 15, 1904, nonrecording gage on railroad bridge 0.8 mile downstream at different datum. Oct. 1, 1927, to Nov. 30, 1929, nonrecording gage near left bank. Dec. 1, 1929, to June 12, 1933, nonrecording gages on old highway bridge 40 ft downstream. Nonrecording gage near right bank on downstream side of highway bridge at Bonners Ferry June 13, 1933, to Sept. 30, 1960, and supplementary gage thereafter. Datum of gages Oct. 1, 1927, to Jan. 2, 1931, was about 0.23 ft lower.

EXTREMES.--Current year: Maximum elevation, 1,766.97 ft June 1; minimum daily, 1,745.27 ft Feb. 27.
Period of record: Maximum elevation, 1,780.13 ft May 29, 1961; minimum, 1,741.14 ft Dec. 5, 1929, Dec. 29, 1930, datum then in use.
Flood of June 1894 reached a stage of 1,777.2 ft, present datum.

REMARKS.--Elevations affected by backwater from Kootenay Lake. No drainage district dike failed during year.

REVISIONS (WATER YEARS).--WSP 1716: 1959 (maximum elevation).

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46.73	46.14	47.68	46.05	47.37	51.42	45.64	48.78	66.81	60.52	57.88	47.01
2	46.83	46.13	46.45	46.30	47.45	48.97	46.04	49.06	66.47	60.16	57.20	47.16
3	46.82	46.23	46.43	46.21	47.50	47.15	46.42	49.54	65.73	59.71	58.50	47.12
4	46.85	46.44	46.48	46.45	47.30	46.50	46.58	50.09	64.95	59.25	58.56	46.89
5	46.84	46.63	46.41	46.56	47.25	45.94	46.76	50.91	64.70	59.15	55.82	46.53
6	46.85	46.68	46.60	46.60	47.20	46.50	47.08	51.97	64.76	56.88	53.81	47.19
7	46.88	46.58	46.40	46.46	47.08	46.69	47.44	52.76	65.07	54.69	52.83	47.29
8	46.94	46.61	46.62	46.41	47.11	46.45	48.28	53.08	65.18	52.64	52.53	47.34
9	46.96	46.55	47.11	46.37	47.09	46.14	48.85	52.73	65.31	51.40	53.70	47.63
10	46.99	46.69	47.94	46.34	47.00	46.03	48.65	52.80	65.49	51.10	53.67	47.86
11	47.02	47.88	47.80	46.35	46.94	46.80	48.45	53.97	65.44	50.57	52.63	47.94
12	46.97	47.99	47.17	46.54	47.02	47.53	48.20	54.74	65.15	50.10	51.95	48.02
13	46.93	48.05	47.13	46.46	46.75	48.00	48.05	56.32	65.00	50.45	51.66	51.35
14	47.02	48.07	47.05	46.56	46.73	47.90	47.81	59.01	64.62	51.68	51.38	55.57
15	47.04	48.16	47.30	46.56	46.60	49.47	47.64	61.53	64.29	55.64	50.72	56.24
16	47.06	48.18	47.24	46.55	46.70	49.70	47.59	62.73	64.17	57.05	51.09	56.19
17	46.99	48.07	47.34	46.70	46.85	51.24	47.40	63.51	64.11	56.61	51.98	55.58
18	46.86	47.98	47.40	46.62	46.90	52.66	47.11	64.42	63.89	55.80	51.48	55.90
19	46.76	47.85	47.22	46.83	46.65	53.08	46.38	63.73	63.59	53.51	48.26	56.27
20	46.79	47.92	47.51	46.56	46.10	52.65	46.11	63.26	63.34	57.77	47.08	56.38
21	46.81	47.23	47.38	47.50	46.20	51.90	45.76	63.57	63.36	57.49	46.95	56.46
22	46.81	47.83	47.22	47.60	46.30	49.90	46.23	64.09	63.31	55.79	46.70	56.34
23	46.78	47.85	47.15	47.62	46.45	49.22	46.45	64.18	63.08	55.15	46.55	50.24
24	46.75	47.92	47.97	46.96	46.37	49.40	46.89	63.65	63.02	54.57	46.37	50.57
25	46.55	47.85	47.74	47.00	45.73	48.70	46.60	62.71	62.66	55.98	46.20	55.21
26	46.65	47.82	47.60	46.83	45.42	48.00	46.43	62.04	62.56	56.19	46.06	55.87
27	46.75	47.81	47.63	47.00	45.27	47.35	46.54	61.81	62.39	55.66	45.93	56.20
28	46.62	47.79	46.28	46.90	46.73	46.80	47.14	62.39	61.33	55.33	45.86	55.97
29	46.44	47.78	46.10	47.01	51.11	46.31	48.15	63.62	61.01	57.67	46.06	55.93
30	46.31	47.75	46.50	47.21	------	46.07	48.63	64.73	60.75	58.20	46.28	55.95
31	46.17	------	46.35	47.06	------	45.97	------	65.93	------	58.23	46.43	------
MEAN	46.80	47.42	47.07	46.72	46.87	48.40	47.18	58.51	64.05	55.64	50.71	52.01
MAX	47.06	48.18	47.97	47.62	51.11	53.08	48.85	65.93	66.81	60.52	58.56	56.46
MIN	46.17	46.13	46.10	46.05	45.27	45.94	45.64	48.78	60.75	50.10	45.86	46.53

NOTE.--Add 1,700 ft to obtain elevation above mean sea level.

12313500 Ball Creek near Bonners Ferry, Idaho

LOCATION.--Lat 48°47'40", long 116°24'54", in SW¼NW¼SW¼ sec.24, T.63 N., R.1 W., Boundary County, on right bank 600 ft above county road bridge, 0.5 mile upstream from mouth, and 8.2 miles northwest of Bonners Ferry.

DRAINAGE AREA.--26.6 sq mi.

PERIOD OF RECORD.--June to September 1928, April to August 1929, April to September 1930, March to September 1931-34, September 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,820 ft (from topographic map). June 1928 to September 1934 nonrecording gage at site 30 ft downstream at same datum.

EXTREMES.--September 1971 to September 1972: Maximum discharge, 1,190 cfs May 30 (gage height, 6.50 ft); minimum discharge, 2.3 cfs Oct. 17 (gage height, 2.78 ft).
Period of record: Maximum discharge, 1,190 cfs May 30 (gage height 6.50 ft); minimum discharge observed, 2 cfs Sept. 10, 1934.

REMARKS.--Records fair. Diversion above station varies from 10 cfs during high stages to approximately 50 percent of flow during July to September.

Rating table (gage height, in feet, and discharge in cubic feet per second)
(Stage-discharge relation affected by ice Oct. 28-29, Nov. 17-18, Dec. 2-17, 20, 27-30, Jan. 11-14, Jan. 24 to Feb. 11)

2.9	4.1	4.0	88.0
3.0	6.9	4.5	185
3.1	10.2	5.0	340
3.3	19.5	5.5	545
3.6	41.5	6.1	880

DISCHARGE, IN CUBIC FEET PER SECOND, 1971

Sept. 16	3.9	Sept. 21	5.5	Sept. 26	5.5
17	4.1	22	4.9	27	5.8
18	4.1	23	4.7	28	8.6
19	4.1	24	4.7	29	9.5
20	5.5	25	4.7	30	8.9

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	7.9	8.5	6.8	6.6	51	49	54	722	182	41	9.6
2	7.2	6.1	8.0	6.8	6.7	47	52	62	610	152	42	9.3
3	6.9	6.1	7.5	6.4	6.9	43	44	68	522	138	40	8.9
4	7.6	16	7.0	6.4	7.1	42	43	84	482	140	35	8.6
5	7.9	14	6.6	6.3	7.2	40	48	117	522	115	32	8.3
6	6.9	7.5	6.3	6.3	7.4	42	73	118	540	132	30	8.2
7	6.3	6.0	6.2	6.4	7.5	44	79	114	563	135	28	8.3
8	6.1	6.4	6.3	6.1	7.2	43	76	120	576	118	26	8.3
9	5.5	6.9	6.4	6.1	7.0	44	64	112	586	109	25	8.0
10	5.2	16	6.6	6.2	6.8	47	54	132	550	71	23	7.9
11	5.2	16	6.8	6.4	6.8	54	52	154	435	96	22	7.9
12	4.9	14	7.0	6.5	6.9	62	50	195	350	166	21	7.6
13	6.1	14	7.1	5.2	7.8	70	49	264	264	273	20	6.6
14	8.2	12	7.3	5.7	7.2	88	47	383	210	142	20	5.5
15	6.3	11	7.5	6.0	7.3	76	45	411	228	103	20	5.2
16	5.2	11	7.6	6.0	8.9	93	44	443	361	99	19	4.7
17	4.7	10	7.8	6.2	9.8	129	41	443	320	86	19	4.7
18	5.8	9.8	7.9	5.9	9.3	134	46	536	255	93	18	4.4
19	6.9	11	7.5	6.4	9.0	129	46	379	231	88	17	4.4
20	14	12	7.3	67	11	113	48	431	228	78	15	4.7
21	8.6	13	7.1	34	11	99	52	540	237	74	14	21
22	6.9	12	7.6	18	11	91	45	563	234	73	16	19
23	7.6	11	7.9	14	10	95	42	509	228	68	16	17
24	8.9	11	7.8	11	9.4	84	39	383	205	63	14	12
25	7.6	10	7.6	9.0	9.1	78	36	316	188	60	13	11
26	11	9.9	7.0	7.6	8.8	69	37	302	198	58	12	11
27	7.2	10	6.6	6.6	14	66	41	368	192	54	12	10
28	5.2	10	7.4	6.2	55	58	50	545	219	52	12	9.5
29	6.0	9.8	7.0	6.2	90	56	51	668	237	47	11	8.9
30	6.9	9.4	7.0	6.3	------	47	52	822	219	44	10	9.9
31	6.6	------	6.9	6.4	------	45	------	880	------	41	9.9	------
TOTAL	217.3	319.8	223.1	310.4	372.7	2,179	1,495	10,516	10,712	3,150	652.9	270.4
MEAN	7.01	10.7	7.20	10.0	12.9	70.3	49.8	339	357	102	21.1	9.01
MAX	14	16	8.5	67	90	134	79	880	722	273	42	21
MIN	4.7	6.0	6.2	5.2	6.6	40	36	54	188	41	9.9	4.4
CFSM	.26	.40	.27	.38	.49	2.64	1.87	12.7	13.4	3.83	.79	.34
IN.	.30	.45	.31	.43	.52	3.05	2.09	14.71	14.98	4.41	.91	.38
AC-FT	431	634	443	616	739	4,320	2,970	20,860	21,250	6,250	1,300	536

WTR YR 1972 TOTAL 30,418.6 MEAN 83.1 MAX 880 MIN 4.4 CFSM 3.12 IN 42.54 AC-FT 60,340

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-21	2030	5.65	615	6-16	1630	5.20	427
5-30	2230	6.50	1 190	7-12	2330	5.43	536

12314000 Kootenai River at Klockmann Ranch, near Bonners Ferry, Idaho

LOCATION.--Lat 48°47'38", long 116°22'51", in SE¼NW¼SE¼ sec.19, T.63 N., R.1 E., Boundary County, on right bank, 0.3 mile downstream from dike of drainage district No. 5, 8 miles north of Bonners Ferry, and at mile 139.7.

DRAINAGE AREA.--13,300 sq mi, approximately.

PERIOD OF RECORD.--May to July, September to November 1928, April to September, December 1929, April 1930 to current year (elevations only, fragmentary prior to April 1930).

GAGE.--Water-stage recorder. Datum of gage is 1,700.00 ft above mean sea level, levels by Topographic Division in 1928. Gage readings have been reduced to elevations above mean sea level. Datum of 1929 is about 0.03 ft higher. Prior to Sept. 12, 1928, several nonrecording gages within 300 ft at different datums.

EXTREMES.--Current year: Maximum elevation, 1,764.46 ft June 1; minimum, 1,743.40 ft Apr. 22.
Period of record: Maximum elevation, 1,776.41 ft June 7, 1961; minimum, 1,738.76 ft Apr. 1, 1944.

REMARKS.--Elevations affected by backwater from Kootenay Lake. No drainage district dike failed during year. Flow regulated by Libby Dam since Mar. 18, 1972 (see sta 12305000).

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46.13	45.46	46.12	45.10	44.79	47.69	43.80	46.00	64.28	58.40	55.59	45.60
2	46.11	45.48	45.96	45.11	44.79	46.38	43.81	46.22	64.10	58.04	54.68	45.82
3	46.11	45.59	45.88	44.99	44.79	46.70	44.16	46.67	63.53	57.62	55.89	45.80
4	46.15	45.83	45.82	44.94	44.79	45.06	44.28	47.24	62.79	57.18	56.04	45.76
5	46.16	45.92	45.88	44.94	44.79	44.68	44.40	47.99	62.49	57.02	53.94	45.55
6	46.17	45.98	46.08	44.97	44.76	44.72	44.68	49.02	62.52	55.24	52.11	45.84
7	46.22	45.96	45.91	45.01	44.67	45.02	45.05	49.88	62.82	53.41	51.21	46.00
8	46.24	45.99	45.78	45.03	44.61	44.76	45.57	50.22	62.95	51.79	50.88	46.06
9	46.24	45.99	45.84	45.04	44.60	44.50	46.30	50.25	63.10	50.76	51.62	46.24
10	46.25	46.04	45.87	45.04	44.53	44.34	46.17	49.83	63.28	50.41	51.73	46.45
11	46.28	46.18	45.85	45.07	44.47	44.66	45.95	51.11	63.25	49.90	50.93	46.54
12	46.25	46.26	45.78	44.98	44.43	45.25	45.79	51.88	63.02	49.47	50.31	46.59
13	46.25	46.35	45.72	44.85	44.41	45.65	45.64	53.31	62.80	49.73	50.02	48.74
14	46.29	46.39	45.72	44.67	44.44	46.64	45.40	55.83	62.44	50.48	49.78	52.55
15	46.30	46.45	45.72	44.64	44.42	47.07	45.21	58.39	62.08	53.40	49.25	53.50
16	46.29	46.48	45.63	44.59	44.51	47.15	45.16	59.71	61.95	54.77	49.30	53.47
17	46.22	46.43	45.63	44.66	44.62	48.34	45.02	60.45	61.91	54.41	49.95	53.03
18	46.13	46.39	45.74	44.68	44.63	49.87	44.82	61.36	61.70	53.76	49.72	53.09
19	46.03	46.33	45.69	44.71	44.57	50.40	44.29	60.88	61.40	51.90	47.52	53.46
20	46.07	46.34	45.62	44.92	44.46	50.15	43.74	60.49	61.12	55.05	46.44	53.54
21	46.09	46.26	45.63	45.21	44.32	49.53	43.65	60.79	61.11	55.25	46.24	53.66
22	46.07	46.25	45.65	45.50	44.34	47.91	43.65	61.33	61.05	53.83	46.00	53.71
23	46.05	46.27	45.71	45.50	44.29	46.98	43.95	61.53	60.83	53.16	45.82	49.13
24	46.04	46.30	45.71	45.43	44.26	46.96	44.32	61.15	60.74	52.65	45.65	48.13
25	45.90	46.30	45.77	45.28	44.16	46.56	44.15	60.31	60.43	53.59	45.48	52.04
26	45.93	46.23	45.80	44.91	44.03	46.03	43.98	59.64	60.30	53.94	45.34	53.11
27	45.96	46.25	45.60	44.84	43.98	45.46	43.98	59.39	60.13	53.49	45.21	53.38
28	45.83	46.23	45.38	44.83	44.49	44.94	44.36	59.87	59.24	53.11	45.12	53.27
29	45.69	46.21	45.26	44.83	46.54	44.50	45.24	61.01	58.88	54.97	45.14	53.17
30	45.59	46.19	45.18	44.82	------	44.19	45.83	62.14	58.64	55.63	45.32	53.19
31	45.50	------	45.16	44.80	------	44.02	------	63.30	------	55.69	45.35	------
MEAN	46.08	46.14	45.71	44.96	44.57	46.33	44.75	55.72	61.83	53.81	49.28	49.88
MAX	46.30	46.48	46.12	45.50	46.54	50.40	46.30	63.30	64.28	58.40	56.04	53.71
MIN	45.50	45.46	45.16	44.59	43.98	44.02	43.65	46.00	58.64	49.47	45.12	45.55

CAL YR 1971 MEAN 49.56 MAX 70.27 MIN 41.40
WTR YR 1972 MEAN 49.10 MAX 64.28 MIN 43.65

NOTE.--Add 1,700 ft to obtain elevation above mean sea level.

12316800 Mission Creek near Copeland, Idaho

LOCATION.--Lat 48°55'54", long 116°20'00", in SW¼NE¼NE¼ sec.4, T.64 N., R.1 E., Boundary County, on left bank, 0.1 mile upstream from bridge crossing, 4 miles northeast of Copeland, at mile 6.0, and 17 miles north of Bonners Ferry.

DRAINAGE AREA.--23 sq mi, approximately.

PERIOD OF RECORD.--September 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,814.5 ft, unadjusted.

AVERAGE DISCHARGE.--14 years, 38.7 cfs (22.85 inches per year, 28,040 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 398 cfs May 14 (gage height, 4.86 ft); minimum,daily, 2.5 cfs Jan. 4, 13, 14; minimum gage height, 1.83 ft Dec. 7.
Period of record: Maximum discharge, 528 cfs May 26, 1961 (gage height, 5.52 ft); from rating curve extended above 250 cfs on basis of indirect measurement of peak flow; minimum daily, 1.6 cfs Jan. 10-13, 1968.

REMARKS.--Records good except those for winter periods, which are fair. No regulation or diversion above station.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Oct. 30, Dec. 2 to Feb. 25)

1.8	2.1	2.5	27
1.9	3.4	3.0	67
2.0	5.3	3.5	132
2.1	8.1	4.1	240
2.3	16	4.7	360

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	4.9	5.6	2.9	3.1	73	45	65	298	60	15	5.2
2	5.1	4.7	5.1	2.8	3.2	53	52	77	247	56	16	5.1
3	4.9	4.9	4.8	2.6	3.3	46	50	92	213	52	15	5.1
4	4.7	7.3	4.4	2.5	3.4	38	49	113	186	47	14	4.9
5	4.5	7.0	4.0	2.6	3.5	35	50	142	169	44	12	4.9
6	4.4	5.6	3.7	2.7	3.5	26	74	144	161	41	12	5.6
7	4.4	5.3	3.4	2.8	3.6	25	81	130	153	40	11	5.3
8	4.2	5.1	3.2	2.9	3.6	23	71	136	147	37	11	5.1
9	4.4	4.5	3.1	3.0	3.7	17	62	130	142	38	10	5.1
10	4.4	8.1	3.0	2.9	3.7	21	56	142	132	35	9.4	5.6
11	4.2	8.8	3.0	2.8	3.9	27	52	164	126	33	9.0	5.2
12	4.2	7.8	3.0	2.6	4.0	32	50	211	118	38	8.7	4.9
13	4.2	9.6	3.0	2.5	4.1	46	48	268	101	47	9.2	4.9
14	4.4	8.8	3.0	2.5	4.3	63	46	337	88	39	8.5	4.7
15	4.2	7.5	3.0	2.6	4.5	54	44	354	78	36	9.3	4.6
16	4.0	7.0	3.1	2.7	4.7	59	43	324	85	33	10	4.5
17	4.0	6.4	3.2	2.8	5.0	73	41	309	82	31	8.6	4.5
18	4.2	6.7	3.3	2.9	5.2	88	38	303	76	32	8.0	4.5
19	5.1	5.9	3.3	3.3	5.8	94	37	266	68	31	7.5	4.8
20	10	6.1	3.3	6.0	6.4	80	36	287	64	28	7.2	6.3
21	5.9	6.7	3.3	5.0	7.4	71	39	290	68	27	7.3	10
22	5.1	6.7	3.3	4.4	8.3	65	36	294	66	29	8.2	12
23	5.6	6.1	3.3	3.9	9.6	75	35	282	64	26	7.6	9.6
24	7.3	6.1	3.2	3.3	11	70	37	249	62	25	7.0	8.5
25	6.1	6.1	3.1	2.9	14	61	39	218	66	23	6.5	8.0
26	7.8	5.9	3.1	2.8	19	54	40	203	89	22	6.1	7.4
27	6.1	5.6	3.0	2.8	26	49	49	210	82	20	5.9	7.2
28	4.2	5.9	3.0	2.8	52	45	67	241	74	18	5.9	6.7
29	4.5	5.6	3.0	2.9	76	42	66	276	69	17	5.6	6.3
30	4.4	5.3	3.0	3.0	------	39	64	295	64	16	5.3	6.7
31	4.9	------	3.0	3.0	------	39	------	317	------	15	5.2	------
TOTAL	157.6	192.0	105.8	95.2	305.8	1,583	1,497	6,869	3,438	1,036	282.0	183.2
MEAN	5.08	6.40	3.41	3.07	10.5	51.1	49.9	222	115	33.4	9.10	6.11
MAX	10	9.6	5.6	6.0	76	94	81	354	298	60	16	12
MIN	4.0	4.5	3.0	2.5	3.1	17	35	65	62	15	5.2	4.5
CFSM	.22	.28	.15	.13	.46	2.22	2.17	9.65	5.00	1.45	.40	.27
IN.	.25	.31	.17	.15	.49	2.56	2.42	11.11	5.56	1.68	.46	.30
AC-FT	313	381	210	189	607	3,140	2,970	13,620	6,820	2,050	559	363

CAL YR 1971 TOTAL 15,891.6 MEAN 43.5 MAX 399 MIN 3.0 CFSM 1.89 IN 25.70 AC-FT 31,520
WTR YR 1972 TOTAL 15,744.6 MEAN 43.0 MAX 354 MIN 2.5 CFSM 1.87 IN 25.47 AC-FT 31,230

PEAK DISCHARGE (BASE, 170 CFS).--May 14 (2200) 398 cfs (4.86 ft); May 31 (2000) 348 cfs (4.61 ft).

12318500 Kootenai River near Copeland, Idaho
(International gaging station)

LOCATION.--Lat 48°54'43", long 116°24'59", in NW¼NW¼SW¼ sec.12, T.64 N., R.1 W., Boundary County, on right bank at Andrews Ranch, 0.8 mile downstream from Mission Creek, 1.5 miles northwest of Copeland, and at mile 123.2.

DRAINAGE AREA.--13,400 sq mi, approximately.

PERIOD OF RECORD.--October 1927 to current year (elevation record only prior to May 1929). Published as "at Copeland" 1927-29. April 1925 to September 1927 (gage heights only) in reports of Water Survey of Canada, Department of Energy, Mines and Resources.

GAGE.--Water-stage recorder. Datum of gage is 1,700.00 ft above mean sea level, referred to bench mark T-10-1914, elevation, 1,791.49 ft (datum of 1929 is about 0.04 ft higher). Prior to Nov. 20, 1929, nonrecording or recording gage at site 0.8 mile upstream; datum 40.77 ft higher prior to Apr. 18, 1929. Gage readings have been reduced to elevations above mean sea level.

AVERAGE DISCHARGE.--43 years, 15,750 cfs (15.95 inches per year, 11,410,000 acre-ft per year); 15-year base period (1952-67), 16,960 cfs.

EXTREMES.--Current year: Maximum discharge, 57,300 cfs May 18; maximum elevation, 1,761.68 ft June 1; minimum daily discharge, 1,900 cfs Jan. 31; minimum elevation, 1,742.00 ft Apr. 21-22.
Period of record: Maximum daily discharge, 124,000 cfs May 30, 1948; maximum elevation, 1,772.55 ft June 6, 1961; minimum daily discharge, 1,350 cfs Feb. 8, 1936; minimum elevation, 1,738.52 ft Apr. 2, 3, 1944.

REMARKS.--Records excellent except those for winter period, which are fair. Stage-discharge relation affected by backwater from Kootenay Lake. No drainage district dike failed during year. Discharge computed from slope and conveyance of the reach between stations at Klockmann Ranch and at Porthill, and discharge measurements made at station near Copeland. Records of water temperatures and suspended sediment loads for the water year 1972 are published in Part 2 of this report.

COOPERATION.--The station is maintained by the United States under agreement with Canada.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,990	4,800	4,490	2,800	3,100	17,300	9,490	17,300	56,200	37,300	34,300	7,510
2	5,840	4,610	4,130	2,900	3,000	13,500	9,590	17,800	53,900	36,600	31,200	8,020
3	5,830	4,950	4,230	2,950	2,900	11,000	10,900	18,900	51,000	35,500	36,100	7,730
4	5,820	5,620	3,970	3,100	3,200	9,430	11,400	20,200	47,800	34,300	36,200	7,290
5	5,670	5,380	4,100	3,200	3,520	8,610	11,800	22,200	46,800	34,400	26,500	6,340
6	5,590	5,440	3,900	3,400	3,670	9,090	12,500	25,000	47,400	25,300	20,400	7,330
7	5,670	4,990	3,700	3,500	3,290	10,200	13,500	27,300	48,200	18,500	17,700	7,640
8	5,830	4,700	3,400	3,500	3,230	9,520	15,200	27,700	48,300	11,900	17,100	7,750
9	5,960	4,340	3,350	3,450	3,410	9,060	17,100	26,800	48,300	9,280	21,000	8,160
10	6,020	4,670	3,300	3,380	3,480	8,890	16,600	26,000	48,700	9,070	21,200	8,740
11	6,140	5,350	3,400	3,300	3,620	10,300	16,000	29,800	48,500	8,480	18,100	8,800
12	5,830	5,610	3,200	3,200	3,730	12,300	15,600	31,400	47,500	8,140	17,100	8,670
13	5,820	5,870	3,100	3,050	3,890	13,500	15,200	34,900	47,600	9,390	15,500	17,400
14	6,030	5,730	3,150	2,800	4,000	16,600	14,700	42,100	46,700	13,900	14,900	30,900
15	6,220	5,710	3,200	2,650	4,050	17,500	14,100	49,400	46,400	27,800	13,300	32,600
16	6,300	5,560	3,500	2,700	4,450	17,800	14,100	52,500	46,400	31,700	14,800	32,400
17	5,980	5,220	3,700	2,750	4,970	22,100	13,800	54,600	46,300	30,000	17,800	30,600
18	5,790	5,050	3,800	2,900	5,400	26,800	13,300	56,700	45,600	26,900	16,800	31,500
19	5,560	4,880	3,850	3,000	5,410	27,300	11,800	53,300	45,000	18,600	7,740	32,700
20	5,770	4,920	3,800	3,200	5,270	25,700	10,600	51,100	44,400	34,900	5,270	32,900
21	5,760	4,600	3,850	3,700	4,930	23,500	10,500	51,400	44,900	33,200	6,010	33,200
22	5,690	4,850	3,850	4,300	5,330	18,200	10,700	52,400	44,900	30,000	5,600	32,800
23	5,620	4,970	3,900	4,900	5,300	16,300	11,600	51,900	44,500	25,400	5,630	15,500
24	5,530	5,070	4,000	4,800	5,220	16,300	12,900	49,700	44,700	23,700	5,650	15,000
25	5,220	4,980	4,000	4,400	4,980	15,200	12,300	46,400	43,800	28,800	5,460	28,900
26	5,670	4,830	3,700	3,800	4,810	13,700	11,900	44,100	43,500	29,500	5,450	31,500
27	5,860	4,980	3,000	3,200	4,990	12,400	12,000	42,900	43,100	27,700	5,220	32,300
28	5,570	4,870	2,700	2,800	7,370	11,300	13,200	44,400	39,200	26,300	5,180	31,600
29	5,300	4,760	2,600	2,600	14,500	10,300	15,500	48,000	38,400	34,500	5,570	31,400
30	5,110	4,660	2,500	2,700	------	9,870	17,000	49,400	37,600	35,900	6,040	31,300
31	4,740	------	2,600	2,900	------	9,780	------	53,900	------	35,600	6,400	------
TOTAL	177,730	151,970	109,970	101,830	135,020	453,350	394,880	1,219.5M	1,385.6M	792,560	465,220	618,480
MEAN	5,733	5,066	3,547	3,285	4,656	14,620	13,160	39,340	46,190	25,570	15,010	20,620
MAX	6,300	5,870	4,490	4,900	14,500	27,300	17,100	56,700	56,200	37,300	36,200	33,200
MIN	4,740	4,340	2,500	2,600	2,900	8,610	9,490	17,300	37,600	8,140	5,180	6,340
AC-FT	352,500	301,400	218,100	202,000	267,800	899,200	783,200	2,419M	2,748M	1,572M	922,800	1,227M

CAL YR 1971 TOTAL 6,760,430 MEAN 18,520 MAX 87,200 MIN 2,500 AC-FT 13,410,000
WTR YR 1972 TOTAL 6,006,110 MEAN 16,410 MAX 56,700 MIN 2,500 AC-FT 11,910,000

M Expressed in thousands.

12318500 Kootenai River near Copeland, Idaho--Continued

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45.91	45.25	45.95	45.02	44.63	45.71	42.56	43.75	61.53	56.30	53.16	45.04
2	45.90	45.30	45.85	45.00	44.59	45.13	42.63	43.95	61.46	55.96	52.41	45.16
3	45.90	45.40	45.75	44.95	44.55	44.45	42.75	44.33	61.03	55.57	53.32	45.19
4	45.91	45.49	45.70	44.85	44.50	43.96	42.77	44.82	60.42	55.19	53.47	45.19
5	45.92	45.64	45.75	44.82	44.44	43.71	42.86	45.47	60.16	54.98	52.10	45.13
6	45.94	45.72	45.85	44.80	44.41	43.68	43.06	46.32	60.15	53.89	50.70	45.34
7	45.96	45.77	45.80	44.80	44.41	43.78	43.33	47.05	60.43	52.51	50.00	45.43
8	45.99	45.81	45.72	44.85	44.39	43.54	43.63	47.40	60.58	51.37	49.69	45.49
9	46.00	45.85	45.75	44.85	44.35	43.32	44.15	47.54	60.74	50.50	50.03	45.64
10	46.01	45.88	45.78	44.88	44.27	43.18	44.09	47.19	60.91	50.11	50.13	45.75
11	46.02	46.00	45.78	44.90	44.20	43.32	43.92	48.29	60.91	49.62	49.59	45.86
12	46.03	46.05	45.70	44.80	44.13	43.61	43.80	49.05	60.70	49.22	49.13	45.91
13	46.04	46.10	45.65	44.70	44.13	43.89	43.68	50.34	60.44	49.41	48.87	47.07
14	46.06	46.20	45.65	44.60	44.15	44.54	43.50	52.58	60.09	49.75	48.67	49.64
15	46.06	46.22	45.65	44.55	44.14	44.86	43.39	54.94	59.70	51.46	48.26	50.61
16	46.06	46.25	45.58	44.50	44.20	44.90	43.32	56.20	59.56	52.58	48.13	50.59
17	46.00	46.20	45.55	44.55	44.22	45.73	43.20	56.89	59.52	52.33	48.45	50.30
18	45.90	46.15	45.60	44.58	44.17	46.98	43.05	57.81	59.33	51.90	48.32	50.23
19	45.80	46.10	45.55	44.58	44.10	47.55	42.66	57.58	59.04	50.70	46.95	50.53
20	45.85	46.15	45.50	44.68	43.98	47.44	42.30	57.36	58.78	52.49	46.18	50.61
21	45.85	46.10	45.48	44.83	43.90	47.00	42.17	57.71	58.72	52.95	45.92	50.74
22	45.85	46.05	45.46	45.01	43.86	45.91	42.20	58.27	58.65	52.94	45.74	50.88
23	45.82	46.05	45.50	45.05	43.83	45.11	42.36	58.59	58.44	51.37	45.50	47.98
24	45.80	46.10	45.50	45.09	43.82	45.09	42.55	58.30	58.32	50.97	45.34	46.66
25	45.75	46.10	45.55	44.97	43.72	44.77	42.42	57.61	58.04	51.44	45.18	49.16
26	45.70	46.05	45.60	44.79	43.59	44.39	42.30	57.06	57.91	51.79	45.04	50.26
27	45.70	46.08	45.50	44.76	43.54	43.95	42.31	56.90	57.75	51.46	44.92	50.48
28	45.60	46.08	45.35	44.69	43.71	43.56	42.56	57.35	57.12	51.16	44.83	50.47
29	45.50	46.06	45.20	44.68	44.86	43.21	43.18	58.38	56.74	52.38	44.81	50.37
30	45.40	46.04	45.10	44.63	------	42.95	43.60	59.45	56.54	53.04	44.97	50.39
31	45.30	------	45.08	44.65	------	42.77	------	60.58	------	53.14	44.91	------
MEAN	45.86	45.94	45.59	44.79	44.17	44.58	43.01	52.87	59.46	52.21	48.22	48.07
MAX	46.06	46.25	45.95	45.09	44.86	47.55	44.15	60.58	61.53	56.30	53.47	50.88
MIN	45.30	45.25	45.08	44.50	43.54	42.77	42.17	43.75	56.54	49.22	44.81	45.04

CAL YR 1971 MEAN 48.44 MAX 66.33 MIN 40.55
WTR YR 1972 MEAN 47.90 MAX 61.53 MIN 42.17

NOTE.--Add 1,700 ft to obtain elevation above mean sea level.

12321500 Boundary Creek near Porthill, Idaho
(International gaging station)

LOCATION.--Lat 48°59'50", long 116°34'05", in SW¼ sec.11, T.65 N., R.2 W., Boundary County, on left bank near mouth of canyon, 0.2 mile south of international boundary, 3 miles west of Porthill, and at mile 3.5.

DRAINAGE AREA.--97 sq mi, approximately.

PERIOD OF RECORD.--May 1928 to current year (no winter records 1929, 1930).

GAGE.--Water-stage recorder. Altitude of gage is 1,770 ft (from topographic map). Prior to Apr. 24, 1929, non-recording gage at site 140 ft upstream at different datum.

AVERAGE DISCHARGE.--42 years (1930-72), 196 cfs (27.44 inches per year, 142,000 acre-ft per year); 15-year base period (1952-67), 208 cfs.

EXTREMES.--Current year: Maximum discharge, 2,810 cfs May 31 (gage height, 5.48 ft); minimum daily, 20 cfs Jan. 27; minimum gage height, 0.77 ft Oct. 17.
Period of record: Maximum discharge, 3,540 cfs June 2, 1968 (gage height, 6.00 ft); from rating curve extended above 2,000 cfs; minimum, 5 cfs sometime between Nov. 10 and Dec. 3, 1936; minimum gage height, 0.24 ft Nov. 22, 1952.

REMARKS.--Records excellent except those for winter periods, which are fair. No regulation or diversion above station.

COOPERATION.--This station is maintained by the United States under agreement with Canada.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Aug. 14-25; stage-discharge relation affected by ice Oct. 29-31, Nov. 7-8, Dec. 3-22, Dec. 27 to Jan. 6, Jan. 11-19, Jan. 23 to Feb. 18)

0.7	17	2.5	365
1.0	37	3.0	585
1.5	94	4.0	1,310
2.0	203	5.1	2,450

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	40	39	30	23	82	158	216	1,990	366	90	36
2	47	41	30	28	24	74	186	260	1,630	315	97	37
3	46	38	28	28	25	66	177	304	1,430	286	85	36
4	45	45	27	29	25	63	173	368	1,320	270	78	36
5	43	39	26	30	26	65	182	484	1,370	259	74	36
6	42	41	26	30	26	79	300	526	1,440	252	70	36
7	40	39	26	31	27	78	305	471	1,430	319	66	36
8	39	38	26	31	27	75	264	503	1,440	246	63	36
9	38	46	26	31	27	67	234	482	1,450	376	60	38
10	36	52	27	31	27	84	212	536	1,270	289	57	47
11	36	63	27	30	27	108	201	668	1,050	240	55	41
12	36	61	28	29	27	114	191	928	873	438	53	39
13	38	57	29	28	27	159	177	1,210	738	567	53	37
14	43	54	30	28	27	215	167	1,520	638	362	51	37
15	38	49	32	29	27	236	163	1,600	664	298	56	38
16	34	46	33	30	28	213	158	1,460	895	261	58	36
17	31	41	35	32	28	239	149	1,400	744	235	55	35
18	38	38	36	35	30	275	139	1,480	639	219	57	36
19	40	42	36	50	32	282	134	1,230	573	205	52	42
20	66	46	37	111	37	264	133	1,480	577	186	48	45
21	48	52	37	55	36	234	138	1,640	638	181	48	204
22	43	48	37	42	36	215	131	1,660	573	182	51	93
23	45	37	36	38	35	231	125	1,690	537	157	50	90
24	55	47	35	31	34	231	130	1,360	478	146	46	77
25	48	44	35	26	34	207	137	1,050	505	143	44	68
26	50	41	34	22	33	186	139	1,080	653	128	43	64
27	32	40	33	20	37	170	164	1,340	519	118	41	62
28	28	40	34	21	85	156	223	1,680	502	110	40	60
29	31	39	34	21	189	146	213	1,920	485	102	39	57
30	34	33	34	22	------	138	208	2,110	435	96	38	59
31	37	------	33	22	------	137	------	2,410	------	90	36	------
TOTAL	1,277	1,337	986	1,021	1,066	4,889	5,411	35,066	27,486	7,442	1,754	1,594
MEAN	41.2	44.6	31.8	32.9	36.8	158	180	1,131	916	240	56.6	53.1
MAX	66	63	39	111	189	282	305	2,410	1,990	567	97	204
MIN	28	33	26	20	23	63	125	216	435	90	36	35
CFSM	.42	.46	.33	.34	.38	1.63	1.86	11.7	9.44	2.47	.58	.55
IN.	.49	.51	.38	.39	.41	1.87	2.08	13.45	10.54	2.85	.67	.61
AC-FT	2,530	2,650	1,960	2,030	2,110	9,700	10,730	69,550	54,520	14,760	3,480	3,160

CAL YR 1971 TOTAL 91,344 MEAN 250 MAX 2,520 MIN 26 CFSM 2.58 IN 35.03 AC-FT 181,200
WTR YR 1972 TOTAL 89,329 MEAN 244 MAX 2,410 MIN 20 CFSM 2.52 IN 34.26 AC-FT 177,200

PEAK DISCHARGE (BASE, 1,300 CFS).--May 14 (2400) 1,860 cfs (4.63 ft); May 31 (2030) 2,810 cfs (5.48 ft).

12322000 Kootenai River at Porthill, Idaho
(International gaging station)

LOCATION.--Lat 49°00'00", long 116°30'10", in SW¼ sec.8, T.65 N., R.1 W., Boundary County, on right bank, 300 ft south of international boundary at Porthill, and at mile 105.63.

DRAINAGE AREA.--13,700 sq mi, approximately.

PERIOD OF RECORD.--May to July 1904 and October 1927 to March 1928 (elevations only), and April 1928 to current year in reports of Geological Survey. October 1924 to September 1927 (gage heights only) in reports of Water Survey of Canada, Department of Energy, Mines and Resources.

GAGE.--Water-stage recorder. Datum of gage is 1,700.00 ft above mean sea level referred to bench mark "10-M-1928", at elevation 1,767.68 ft. Gage readings have been reduced to elevations above mean sea level. Datum of 1929 and datum of Geodetic Survey of Canada, Pub. 24, 1951 edition, are 0.03 ft higher. Prior to May 17, 1928, non-recording gages at approximately same site. Datum of gages prior to July 28, 1928, 38.34 ft higher, except in 1904 when different datum was used.

AVERAGE DISCHARGE.--44 years, 16,120 cfs (15.98 inches per year, 11,680,000 acre-ft per year); 15-year base period (1952-67), 17,490 cfs.

EXTREMES.--Current year: Maximum daily discharge, 60,200 cfs June 1; maximum elevation, 1,758.84 ft June 2; minimum daily discharge, 1,960 cfs Jan. 31; minimum elevation, 1,741.46 ft Apr. 22.
Period of record: Maximum daily discharge, 125,000 cfs June 1, 1948; maximum elevation, 1,767.61 ft June 7, 1961; minimum daily discharge, 1,380 cfs Feb. 8, 1936; minimum elevation, 1,738.21 ft Apr. 3, 1944.
Maximum elevation known, 1,772.7 ft in June 1894, present datum.

REMARKS.--Records excellent. Daily discharge represents entire flow passing international boundary, and is computed by adding tributary inflow for intervening area to flow at station near Copeland and correcting for channel storage between stations near Copeland and at Porthill. Boundary dike of Reclamation Farm and U.S. Forest Service roadway dike (south side of Boundary Creek) remained intact and flow of river was confined throughout year to main channel on which gage is located. Elevations affected by backwater from Kootenay Lake. No drainage dike failed during year. Records of water temperatures for water year 1972 are published in Part 2 of this report. Flow regulated by Libby Dam started on Mar. 18, 1972 (see sta 12305000).

COOPERATION.--This station is maintained by the United States under agreement with Canada.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,120	4,920	4,610	2,900	3,150	17,200	10,000	17,800	60,200	38,500	34,500	7,580
2	5,950	4,690	4,270	2,980	3,080	13,800	10,100	18,400	57,900	37,700	31,800	8,040
3	5,950	5,010	4,340	3,070	2,980	11,400	11,400	19,600	54,900	36,600	36,000	7,800
4	5,910	5,640	4,050	3,200	3,280	9,820	11,900	21,000	51,700	35,300	36,300	7,340
5	5,760	5,410	4,140	3,290	3,610	8,910	12,300	23,300	50,500	35,300	27,100	6,440
6	5,680	5,510	3,880	3,490	3,760	9,360	13,200	26,100	51,100	26,400	21,100	7,360
7	5,750	5,070	3,780	3,560	3,350	10,400	14,200	28,300	51,500	20,000	18,200	7,670
8	5,920	4,760	3,520	3,570	3,310	9,790	15,800	28,800	51,800	13,100	17,400	7,810
9	6,060	4,440	3,400	3,520	3,480	9,340	17,500	28,000	51,800	10,700	21,100	8,200
10	6,110	4,790	3,350	3,440	3,580	9,190	17,200	27,600	51,700	10,100	21,300	8,800
11	6,220	5,470	3,470	3,360	3,720	10,600	16,600	31,200	51,200	9,380	18,400	8,850
12	5,920	5,740	3,300	3,290	3,820	12,600	16,200	33,500	49,900	9,500	17,400	8,730
13	5,910	5,990	3,200	3,150	3,970	13,900	15,700	37,500	49,900	10,800	15,800	17,200
14	6,130	5,840	3,230	2,930	4,050	17,000	15,200	45,000	48,700	14,800	15,100	30,200
15	6,320	5,800	3,270	2,750	4,120	18,000	14,600	52,100	48,500	28,100	13,600	32,200
16	6,390	5,660	3,620	2,800	4,490	18,400	14,600	55,300	48,900	31,800	15,100	32,500
17	6,070	5,330	3,810	2,830	5,020	22,600	14,300	57,700	48,300	30,700	17,900	30,800
18	5,920	5,170	3,870	2,980	5,500	27,200	13,800	59,800	47,400	27,600	17,000	31,700
19	5,700	5,010	3,970	3,130	5,520	27,700	12,300	56,500	46,800	19,500	8,250	32,700
20	5,930	5,030	3,920	3,480	5,410	26,400	11,100	55,000	46,200	35,000	5,780	33,000
21	5,870	4,770	3,950	3,780	5,060	24,300	10,900	55,300	46,500	33,300	6,280	33,700
22	5,800	4,980	3,940	4,330	5,450	19,100	11,100	56,100	46,500	30,900	5,860	33,000
23	5,740	5,060	3,980	4,940	5,410	17,300	11,900	55,800	46,100	26,100	5,850	16,600
24	5,670	5,170	4,080	4,840	5,300	16,900	13,200	53,300	46,100	24,300	5,850	15,800
25	5,400	5,090	4,050	4,460	5,100	15,900	12,700	49,600	45,400	29,100	5,650	28,300
26	5,800	4,960	3,740	3,930	4,950	14,400	12,300	47,300	45,300	29,700	5,640	31,300
27	5,940	5,070	3,130	3,260	5,140	13,000	12,500	46,400	44,600	28,100	5,380	32,400
28	5,690	4,970	2,850	2,870	7,630	11,900	13,800	48,200	40,900	26,700	5,330	31,800
29	5,440	4,870	2,750	2,660	14,800	10,900	15,900	52,000	40,000	34,400	5,700	31,600
30	5,230	4,740	2,620	2,770	------	10,400	17,400	53,700	38,900	35,800	6,080	31,400
31	4,860	------	2,720	2,950	------	10,300	------	58,800	------	35,800	6,510	------
TOTAL	181,160	154,960	112,810	104,510	138,040	468,010	409,700	1,299.0M	1,459.2M	815,080	473,260	620,820
MEAN	5,844	5,165	3,639	3,371	4,760	15,100	13,660	41,900	48,640	26,290	15,270	20,690
MAX	6,390	5,990	4,610	4,940	14,800	27,700	17,500	59,800	60,200	38,500	36,300	33,700
MIN	4,860	4,440	2,620	2,660	2,980	8,910	10,000	17,800	38,900	9,380	5,330	6,440
AC-FT	359,300	307,400	223,800	207,300	273,800	928,300	812,600	2,577M	2,894M	1,617M	938,700	1,231M

CAL YR 1971 TOTAL 6,999,460 MEAN 19,180 MAX 90,200 MIN 2,620 AC-FT 13,880,000
WTR YR 1972 TOTAL 6,236,550 MEAN 17,040 MAX 60,200 MIN 2,620 AC-FT 12,370,000

M Expressed in thousands.

12322000 Kootenai River at Porthill, Idaho--Continued

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45.73	45.15	45.89	44.95	44.54	44.56	42.06	42.51	58.67	54.47	51.16	44.64
2	45.72	45.19	45.75	44.92	44.50	44.43	42.06	42.67	58.78	54.16	50.68	44.77
3	45.72	45.26	45.66	44.82	44.45	43.93	42.10	42.95	58.55	53.81	51.20	44.81
4	45.76	45.44	45.63	44.75	44.40	43.53	42.09	43.33	58.12	53.48	51.34	44.87
5	45.79	45.56	45.66	44.71	44.34	43.30	42.13	43.80	57.90	53.26	50.64	44.84
6	45.81	45.61	45.81	44.67	44.29	43.21	42.26	44.40	57.84	52.67	49.64	44.95
7	45.84	45.64	45.77	44.69	44.29	43.27	42.44	45.00	58.09	51.69	49.10	45.05
8	45.85	45.71	45.66	44.70	44.25	43.15	42.59	45.40	58.25	50.89	48.82	45.10
9	45.84	45.74	45.68	44.71	44.23	42.96	42.98	45.66	58.42	50.16	48.90	45.20
10	45.84	45.76	45.71	44.74	44.15	42.82	43.00	45.35	58.59	49.78	48.97	45.31
11	45.86	45.84	45.70	44.76	44.07	42.80	42.88	46.10	58.61	49.32	48.65	45.40
12	45.86	45.89	45.64	44.71	44.02	42.92	42.79	46.78	58.46	48.92	48.30	45.47
13	45.86	45.95	45.59	44.65	43.99	43.08	42.71	47.89	58.17	49.03	48.09	45.93
14	45.88	46.01	45.58	44.52	44.01	43.44	42.57	49.76	57.85	49.15	47.92	47.41
15	45.86	46.08	45.60	44.46	44.00	43.74	42.48	51.80	57.47	49.97	47.62	48.29
16	45.84	46.12	45.52	44.41	44.04	43.77	42.43	53.02	57.30	50.87	47.37	48.28
17	45.81	46.11	45.47	44.41	44.07	44.13	42.34	53.65	57.27	50.73	47.47	48.15
18	45.74	46.07	45.51	44.42	44.02	44.90	42.22	54.49	57.12	50.52	47.39	47.99
19	45.66	46.03	45.44	44.41	43.95	45.55	42.00	54.51	56.85	49.88	46.69	48.16
20	45.68	46.05	45.38	44.45	43.86	45.68	41.69	54.42	56.61	50.52	45.96	48.23
21	45.70	45.99	45.37	44.56	43.78	45.43	41.60	54.78	56.51	51.09	45.68	48.31
22	45.69	45.97	45.37	44.71	43.72	44.78	41.52	55.32	56.44	50.48	45.43	48.48
23	45.67	45.98	45.39	44.80	43.67	44.09	41.62	55.70	56.24	50.03	45.25	46.81
24	45.67	46.01	45.39	44.86	43.67	44.05	41.69	55.58	56.10	49.74	45.10	45.73
25	45.56	46.01	45.45	44.85	43.60	43.86	41.64	55.10	55.85	49.87	44.95	47.19
26	45.55	45.96	45.53	44.70	43.49	43.59	41.56	54.67	55.75	50.14	44.80	47.95
27	45.55	45.97	45.43	44.66	43.40	43.26	41.53	54.56	55.58	49.93	44.70	48.13
28	45.45	45.97	45.29	44.62	43.39	42.96	41.65	54.93	55.15	49.74	44.61	48.14
29	45.33	45.95	45.16	44.59	43.89	42.68	42.04	55.76	54.84	50.36	44.55	48.08
30	45.25	45.94	45.08	44.54	------	42.43	42.38	56.71	54.68	50.93	44.65	48.11
31	45.19	------	45.01	44.54	------	42.25	------	57.74	------	51.06	44.61	------
MEAN	45.70	45.83	45.52	44.65	44.00	43.70	42.17	50.46	57.20	50.86	47.43	46.66
MAX	45.88	46.12	45.89	44.95	44.54	45.68	43.00	57.74	58.78	54.47	51.34	48.48
MIN	45.19	45.15	45.01	44.41	43.39	42.25	41.52	42.51	54.68	48.92	44.55	44.64

CAL YR 1971 MEAN 47.51 MAX 61.92 MIN 40.19
WTR YR 1972 MEAN 47.02 MAX 58.78 MIN 41.52

NOTE.--Add 1,700 ft to obtain elevation above mean sea level.

12322500 Kootenay Lake at Kuskonook, British Columbia

LOCATION.--Lat 49°17'56", long 116°39'31", on east shore of lake at Kuskonook and at mile 74.5.

PERIOD OF RECORD.--April 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,735.20 ft above mean sea level, Geodetic Survey of Canada, datum of Pub. 24-A (1961), which is the same at Porthill as datum of 1929, supplementary adjustment of 1947, and 0.03 ft higher than datum in use at station Kootenai River at Porthill. Gage heights have been reduced to elevations above datum in use at station Kootenai River at Porthill. Prior to Apr. 25, 1938, nonrecording gage at same site at datum 3.00 ft higher.

EXTREMES.--Current year: Maximum elevation, 1,754.70 ft June 11; minimum daily, 1,740.25 ft Apr. 28.
Period of record: Maximum elevation, 1,762.42 ft June 9, 1961; minimum daily, 1,737.86 ft Apr. 5, 6, 1944.

REMARKS.--Elevation is subject to partial regulation by Corra Linn Dam on Kootenay River below outlet. Major inflow is from Kootenai River (see sta 12322000). Diversions for irrigation of about 14,600 acres above Kootenay Lake.

COOPERATION.--This station is maintained by Canada under agreement with the United States.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45.34	44.83	45.55	44.60	44.18	42.89	41.21	40.44	52.71	51.55	48.21	44.17
2	45.32	44.88	45.42	44.51	44.12	42.80	41.08	40.55	53.29	51.34	48.24	44.25
3	45.34	45.03	45.35	44.40	44.07	42.60	40.97	40.64	53.61	51.11	48.27	44.33
4	45.39	45.19	45.35	44.32	44.00	42.46	40.91	40.77	53.75	50.91	48.30	44.40
5	45.41	45.23	45.40	44.32	43.94	42.37	40.95	40.95	53.78	50.72	48.29	44.46
6	45.44	45.28	45.49	44.33	43.89	42.31	40.95	41.15	53.77	50.58	48.13	44.52
7	45.48	45.33	45.45	44.33	43.88	42.19	40.94	41.39	53.88	50.34	47.91	44.59
8	45.46	45.43	45.39	44.34	43.84	42.09	40.96	41.64	54.04	50.01	47.72	44.64
9	45.44	45.46	45.44	44.37	43.79	41.98	41.01	41.90	54.21	49.61	47.56	44.70
10	45.44	45.47	45.44	44.39	43.71	41.88	41.03	42.11	54.42	49.22	47.48	44.75
11	45.48	45.53	45.37	44.40	43.64	41.74	41.03	42.35	54.62	48.77	47.36	44.85
12	45.46	45.58	45.36	44.33	43.58	41.69	41.05	42.67	54.63	48.42	47.23	44.98
13	45.46	45.64	45.32	44.29	43.56	41.73	41.03	43.07	54.43	48.37	47.07	45.03
14	45.47	45.70	45.34	44.18	43.55	41.71	40.99	43.68	54.12	48.29	46.87	44.99
15	45.44	45.77	45.32	44.11	43.54	41.68	40.99	44.48	53.78	48.21	46.65	44.92
16	45.41	45.81	45.22	44.09	43.60	41.67	40.92	45.34	53.51	48.30	46.41	44.90
17	45.37	45.80	45.20	44.08	43.51	41.70	40.87	46.12	53.46	48.34	46.22	44.84
18	45.32	45.77	45.18	44.08	43.46	41.80	40.82	46.87	53.40	48.37	46.10	44.73
19	45.29	45.76	45.09	44.07	43.37	41.97	40.74	47.52	53.26	48.34	45.89	44.67
20	45.33	45.76	45.08	44.10	43.29	42.15	40.64	48.00	53.10	48.21	45.57	44.67
21	45.32	45.72	45.09	44.16	43.21	42.27	40.57	48.53	52.94	48.24	45.30	44.71
22	45.30	45.69	45.09	44.23	43.14	42.31	40.50	49.06	52.82	48.24	45.08	44.81
23	45.28	45.72	45.09	44.32	43.13	42.29	40.44	49.57	52.69	48.11	44.91	44.82
24	45.25	45.73	45.07	44.42	43.12	42.24	40.36	49.94	52.54	47.94	44.75	44.58
25	45.20	45.73	45.14	44.38	43.06	42.17	40.33	50.13	52.37	47.84	44.60	44.45
26	45.19	45.71	45.16	44.33	42.95	42.08	40.30	50.19	52.24	47.78	44.48	44.52
27	45.12	45.69	45.06	44.32	42.85	41.96	40.29	50.24	52.09	47.75	44.38	44.60
28	45.05	45.68	44.94	44.27	42.77	41.82	40.25	50.39	51.92	47.74	44.29	44.67
29	44.94	45.63	44.86	44.23	42.80	41.65	40.33	50.75	51.79	47.80	44.21	44.70
30	44.87	45.62	44.77	44.19	------	41.49	40.38	51.27	51.71	47.94	44.22	44.74
31	44.83	------	44.69	44.20	------	41.35	------	51.94	------	48.12	44.18	------
MEAN	45.30	45.54	45.22	44.28	43.50	42.03	40.76	45.60	53.30	48.92	46.32	44.67
MAX	45.48	45.81	45.55	44.60	44.18	42.89	41.21	51.94	54.63	51.55	48.30	45.03
MIN	44.83	44.83	44.69	44.07	42.77	41.35	40.25	40.44	51.71	47.74	44.18	44.17

NOTE.--Add 1,700 ft to botain elevation above mean sea level.

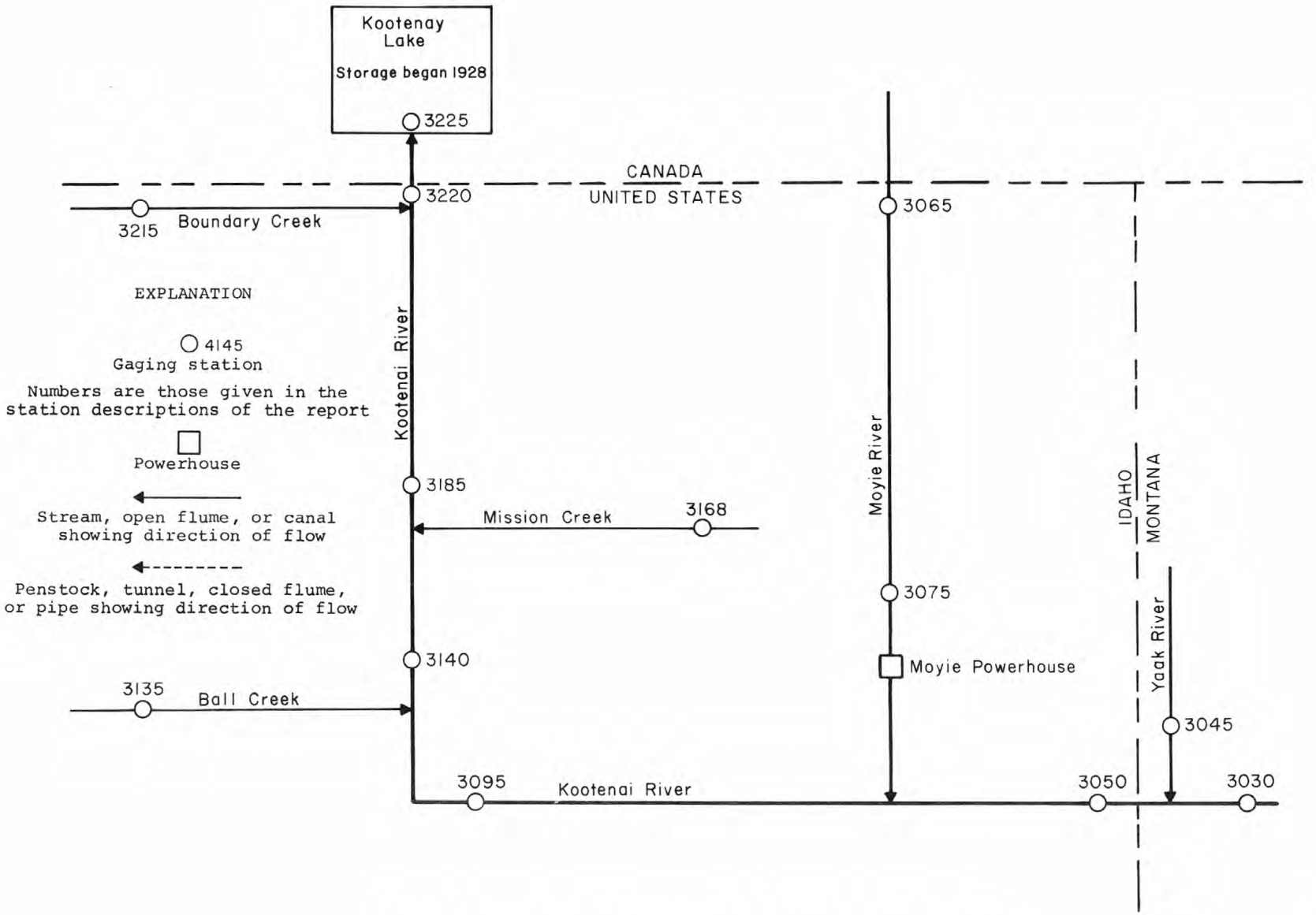


FIGURE 2. Schematic diagram showing Kootenai River basin.

12392000 Clark Fork at Whitehorse Rapids, near Cabinet, Idaho

LOCATION.--Lat 48°05'10", long 116°03'50", in NE¼SW¼ sec.27, T.55 N., R.3 E., Bonner County, on left bank at Cabinet, 0.4 mile downstream from Cabinet Gorge Dam, 1.7 miles downstream from Blue Creek, 6.5 miles southeast of Clark Fork, and at mile 149.5. Measuring cableway 0.4 mile downstream. Discharge computed at Whitehorse Rapids, 2.7 miles downstream.
DRAINAGE AREA.--22,067 sq mi, based on revised area of 22,006 sq mi for site near Heron.
PERIOD OF RECORD.--September 1928 to current year. Prior to October 1952, published as "near Heron, Mont."
GAGE.--Water-stage recorder. Datum of gage is 2,060.00 ft above mean sea level, levels by Washington Water Power Co. Prior to Oct. 30, 1928, nonrecording gage, and Oct. 30, 1928, to Apr. 8, 1952, water-stage recorder at site near Heron, 4 miles upstream at datum 28.00 ft higher prior to Jan. 2, 1931, and 18.00 ft higher thereafter. Apr. 9 to Sept. 30, 1952, nonrecording gage just upstream from present site at datum approximately 60.0 ft lower, and Oct. 1, 1952, to Sept. 30, 1964, water-stage recorder at datum 60.00 ft lower.
AVERAGE DISCHARGE.--44 years, 22,350 cfs (16,190,000 acre-ft per year); 15-year base period (1952-67), 24,140 cfs.
EXTREMES.--Current year: Maximum discharge, 190,000 cfs June 10 (gage height, 29.71 ft); minimum, 665 cfs Sept. 16 (gage height, 3.57 ft); minimum daily, 780 cfs Sept. 16.
Period of record: Maximum discharge, 153,000 cfs May 29 to June 1, 1948; maximum gage height, 50.97 ft May 31, 1948, site and datum then in use; minimum observed, 270 cfs Aug. 12, 1952 (discharge measurement), at present site during filling of Cabinet Gorge reservoir; minimum daily since reservoir filled, 762 cfs Sept. 2, 1962.
Maximum discharge known, 195,000 cfs June 1894 (elevation of floodmark at site about 4 miles upstream and 0.1 mile below "near Heron" site, 2,137.1 ft).
REMARKS.--Records good. Flow regulated by Hungry Horse Reservoir and Flathead Lake. Extreme diurnal fluctuation caused by powerplant at Cabinet Gorge Dam. Diversions above station for irrigation of about 354,000 acres. Discharge measurements indicate about 800 cfs ground-water inflow between Cabinet Gorge Dam and Whitehorse Rapids. Records given herein represent flow at Whitehorse Rapids, computed by adding 600 cfs to observed flows at the measuring cableway, and are considered comparable to records at former site near Heron, except for minor surface inflow from additional drainage area. To determine flow at Cabinet Gorge Dam, 800 cfs should be deducted from discharges published herein.
REVISIONS (WATER YEARS).--WSP 1182: 1936. WSP 1736: 1931, 1936(m), 1937.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12,900	12,200	15,200	13,300	11,600	20,100	39,800	33,600	118,000	51,700	20,500	5,560
2	13,100	13,600	17,200	13,000	14,000	20,200	40,400	37,100	124,000	52,000	15,700	5,240
3	8,330	12,800	17,800	19,400	15,100	27,800	41,600	33,300	127,000	50,600	18,100	7,810
4	15,700	11,700	16,500	20,000	17,700	24,000	39,800	32,200	129,000	44,900	22,200	10,800
5	18,100	16,100	14,600	18,100	14,000	20,800	42,400	40,500	130,000	41,200	17,500	8,920
6	13,300	12,500	20,700	15,800	15,900	22,800	42,600	46,100	127,000	37,200	13,900	13,700
7	8,940	13,900	20,200	16,200	19,100	23,700	45,600	47,500	128,000	37,600	18,400	16,800
8	10,800	15,600	20,300	16,100	19,200	26,300	44,500	47,300	129,000	37,200	13,500	4,300
9	9,060	14,400	19,700	14,800	20,900	24,800	43,100	49,900	131,000	33,900	16,100	4,570
10	6,830	11,400	17,800	18,900	23,100	26,500	41,900	49,200	132,000	41,900	15,300	11,000
11	12,800	14,200	13,600	19,000	21,700	26,800	42,400	49,500	132,000	37,300	15,000	15,000
12	14,300	16,200	14,400	18,300	20,000	25,600	39,600	48,600	127,000	36,900	11,900	12,100
13	14,700	14,900	18,200	17,700	9,450	30,300	41,000	53,300	122,000	33,400	8,700	12,700
14	15,600	13,600	16,800	18,100	17,000	37,000	38,800	59,200	114,000	34,700	15,100	12,900
15	17,000	15,400	18,000	13,300	16,700	38,000	39,300	61,000	103,000	30,700	15,400	3,170
16	15,700	14,500	19,700	16,400	12,800	35,900	38,500	66,300	91,000	36,600	14,700	780
17	7,900	15,400	16,600	17,800	17,600	43,600	37,900	73,800	84,100	36,000	12,800	3,070
18	17,400	15,500	13,300	20,900	21,000	48,300	35,900	83,500	88,400	32,800	13,300	11,100
19	15,100	14,900	12,800	18,500	16,700	51,400	32,300	82,500	85,300	29,800	13,500	12,800
20	15,600	12,500	17,600	19,600	12,800	50,900	34,200	80,300	82,700	29,800	12,100	16,300
21	14,100	13,400	17,000	20,500	20,500	51,200	37,700	84,700	68,600	31,600	18,000	13,000
22	10,400	12,500	18,100	22,400	20,600	50,600	38,400	93,200	63,900	27,400	21,600	12,100
23	13,800	17,800	19,700	21,800	21,000	51,100	36,000	96,000	62,900	22,100	15,300	9,160
24	10,300	17,900	14,100	26,100	22,200	47,500	36,100	92,900	57,700	26,700	15,400	5,310
25	16,600	12,300	13,300	20,700	21,900	46,600	34,600	90,200	55,500	25,700	8,680	9,850
26	16,800	12,400	14,700	14,600	21,600	45,300	32,500	86,700	53,200	27,400	9,420	15,200
27	15,700	12,100	16,900	16,600	14,400	44,900	32,300	82,900	53,700	24,100	4,220	12,800
28	16,600	13,800	16,700	12,600	17,400	41,300	28,800	84,300	51,400	23,700	13,500	16,200
29	16,400	13,200	17,000	8,850	19,500	43,300	21,500	88,300	50,000	17,400	12,200	15,800
30	12,100	14,100	17,500	5,730	------	40,600	10,600	97,000	51,700	11,400	12,900	13,800
31	11,900	------	17,900	17,100	------	39,600	------	108,000	------	19,200	15,000	------
TOTAL	417,860	420,800	523,900	532,180	515,450	1,126.8M	1,110.1M	2,078.9M	2,873.1M	1,022.9M	449,920	311,840
MEAN	13,480	14,030	16,900	17,170	17,770	36,350	37,000	67,060	95,770	33,000	14,510	10,390
MAX	18,100	17,900	20,700	26,100	23,100	51,400	45,600	108,000	132,000	52,000	22,200	16,800
MIN	6,830	11,400	12,800	5,730	9,450	20,100	10,600	32,200	50,000	11,400	4,220	780
AC-FT	828,800	834,700	1,039M	1,056M	1,022M	2,235M	2,202M	4,123M	5,699M	2,029M	892,400	618,500

CAL YR 1971 TOTAL 10,644,870 MEAN 29,160 MAX 104,000 MIN 3,210 AC-FT 21,110,000
WTR YR 1972 TOTAL 11,383,750 MEAN 31,100 MAX 132,000 MIN 780 AC-FT 22,580,000

12392300 Pack River near Colburn, Idaho

LOCATION.--Lat 48°25'12", long 116°30'02", in NW¼SW¼ sec.32, T.59 N., R.1 W., Bonner County, on left bank, 50 ft downstream from bridge on U.S. Highway 95, 2.2 miles northeast of Colburn, 10 miles north of Sandpoint, and at mile 28.07.

DRAINAGE AREA.--124 sq mi. Mean altitude, 4,210 ft.

PERIOD OF RECORD.--September 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,130 ft (from topographic map).

AVERAGE DISCHARGE.--14 years, 333 cfs (36.46 inches per year, 241,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,760 cfs May 15 (gage height, 11.27 ft); minimum, 32 cfs Sept. 17, 18, 19 (gage height, 0.96 ft).
Period of record: Maximum discharge, 4,370 cfs May 30, 1969 (gage height, 13.69 ft); minimum, 15 cfs Sept. 2, 3, 1967 (gage height, 0.86 ft).

REMARKS.--Records good except those for ice-affected periods, which are fair. No regulation or diversion above station.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 10 to May 7; stage-discharge relation affected by ice Oct. 30, Nov. 7-8, Dec. 3, 7-18, Dec. 26 to Jan. 6, Jan. 11-18, Jan. 25 to Feb. 11)

0.8	20	5.0	654
1.1	38	7.0	1,150
1.5	68	10.0	2,170
2.0	117	13.0	3,820
3.0	256		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	62	81	61	96	589	552	545	2,080	493	101	41
2	54	62	71	58	97	472	605	634	1,620	397	108	40
3	58	59	68	56	97	400	568	729	1,400	363	108	39
4	71	99	75	58	100	355	559	820	1,140	350	94	38
5	95	84	80	65	103	368	571	1,010	1,240	337	87	38
6	81	65	75	70	105	526	745	1,130	1,250	330	83	38
7	70	62	68	73	107	438	764	926	1,280	317	79	40
8	61	62	74	73	107	392	666	977	1,210	295	76	38
9	55	64	80	69	108	368	602	935	1,280	349	71	37
10	51	117	82	69	108	460	553	881	1,180	270	67	37
11	48	149	81	66	110	639	525	958	987	232	64	36
12	46	129	80	62	109	710	518	1,320	776	311	60	36
13	48	139	80	57	149	974	492	1,690	696	734	59	36
14	60	129	80	54	130	1,100	458	2,070	586	436	59	35
15	51	115	80	60	116	879	445	2,390	593	332	59	34
16	48	106	79	70	148	962	434	2,090	792	284	66	33
17	45	101	80	79	156	1,210	411	1,920	782	253	70	33
18	45	95	87	84	136	1,300	386	2,100	623	232	62	32
19	66	93	93	94	132	1,250	371	1,510	575	232	58	33
20	106	99	84	197	162	1,050	370	1,830	551	198	54	33
21	73	105	234	683	160	939	394	2,130	627	187	52	43
22	64	102	214	355	152	882	388	2,130	719	192	56	129
23	64	95	129	223	145	969	366	1,850	613	182	77	81
24	74	97	95	184	138	864	381	1,390	588	171	65	80
25	68	95	88	170	133	758	407	1,130	581	168	54	65
26	89	93	80	150	129	675	396	1,080	716	157	49	59
27	81	91	76	130	212	615	450	1,350	570	141	47	56
28	59	92	72	115	636	566	569	1,660	553	133	46	53
29	53	89	68	105	902	528	518	1,920	627	123	44	51
30	55	85	65	100	------	500	522	2,080	558	114	43	52
31	61	------	63	96	------	495	------	2,210	------	107	42	------
TOTAL	1,955	2,835	2,762	3,786	4,983	22,233	14,986	45,395	26,793	8,420	2,060	1,396
MEAN	63.1	94.5	89.1	122	172	717	500	1,464	893	272	66.5	46.5
MAX	106	149	234	683	902	1,300	764	2,390	2,080	734	108	129
MIN	45	59	63	54	96	355	366	545	551	107	42	32
CFSM	.51	.76	.72	.98	1.39	5.78	4.03	11.8	7.20	2.19	.54	.38
IN.	.59	.85	.83	1.14	1.49	6.67	4.50	13.62	8.04	2.53	.62	.42
AC-FT	3,880	5,620	5,480	7,510	9,880	44,100	29,720	90,040	53,140	16,700	4,090	2,770

CAL YR 1971 TOTAL 135,305 MEAN 371 MAX 3,140 MIN 29 CFSM 2.99 IN 40.59 AC-FT 268,400
WTR YR 1972 TOTAL 137,604 MEAN 376 MAX 2,390 MIN 32 CFSM 3.03 IN 41.28 AC-FT 272,900

PEAK DISCHARGE (BASE, 1,450 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-15	0500	11.27	2,760	5-31	0500	10.91	2,560
5-21	0600	10.41	2,330				

12392500 Pend Oreille Lake at Hope, Idaho

LOCATION.--Lat 48°14'50", long 116°18'30", in lot 2, NW¼ sec.35, T.57 N., R.1 E., Bonner County, near Burlington Northern siding at Hope.

DRAINAGE AREA.--22,900 sq mi, approximately (natural drainage area above mouth of lake at Sandpoint).

PERIOD OF RECORD.--March 1914 to current year. Published as "at Sandpoint" 1914-22. Records published for both sites September 1921 to September 1922.

GAGE.--Water-stage recorder. Datum of gage is 2,000.00 ft above mean sea level; gage readings have been reduced to elevations above mean sea level. Prior to Oct. 1, 1921, nonrecording gage at Sandpoint at datum 42.18 ft higher. Oct. 1, 1921, to Sept. 30, 1929, nonrecording gage at present site at datum 45.47 ft higher than present datum. Oct. 1, 1929, to Sept. 30, 1950, water-stage recorder at present site at datum 0.20 ft lower than present datum.

EXTREMES.--Current year: Maximum elevation, 2,065.72 ft June 12 (contents, 1,871,000 acre-ft); minimum, 2,050.93 ft Nov. 30 (contents, 512,500 acre-ft).
Period of record: Maximum elevation, 2,071.62 ft, present datum, June 9, 1948 (contents, 2,462,000 acre-ft); minimum, 2,046.27 ft, present datum, Feb. 17, 1936 (contents, 117,700 acre-ft).
Maximum elevation known, 2,075.88 ft, present datum, June 1894 (contents, 2,905,000 acre-ft).

REMARKS.--Regulation at Albeni Falls Dam beginning June 4, 1952. Contents shown is that above elevation 2,044.8 ft but does not include storage in Pend Oreille River above Albeni Falls Dam.

REVISIONS (WATER YEARS).--WSP 1122: 1946.

Capacity table (elevation, in feet, and contents, in acre-feet)

2,050	432,000
2,055	871,600
2,060	1,327,000
2,066	1,898,000

ELEVATION, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61.01	55.55	51.07	51.40	51.50	52.11	55.82	53.58	62.54	62.48	62.52	62.36
2	60.80	55.35	51.19	51.32	51.45	52.18	55.71	53.73	63.08	62.51	62.44	62.22
3	60.48	55.15	51.31	51.34	51.43	52.30	55.65	53.78	63.56	62.51	62.44	62.16
4	60.32	54.98	51.39	51.35	51.45	52.37	55.54	53.76	63.97	62.39	62.52	62.22
5	60.20	54.83	51.39	51.33	51.39	52.47	55.49	53.98	64.34	62.26	62.52	62.25
6	60.13	54.60	51.40	51.33	51.41	52.53	55.48	54.30	64.59	62.23	62.44	62.24
7	59.93	54.44	51.32	51.35	51.45	52.60	55.54	54.65	64.80	62.27	62.45	62.37
8	59.76	54.30	51.37	51.36	51.52	52.70	55.56	54.93	65.06	62.38	62.41	62.18
9	59.58	54.14	51.36	51.33	51.56	52.77	55.52	55.15	65.30	62.45	62.43	61.97
10	59.35	54.02	51.31	51.34	51.65	52.90	55.45	55.32	65.50	62.52	62.41	61.86
11	59.17	53.84	51.19	51.40	51.74	53.11	55.41	55.50	65.68	62.43	62.40	61.85
12	58.95	53.72	51.09	51.40	51.83	53.30	55.35	55.60	65.70	62.42	62.37	61.81
13	58.81	53.58	51.11	51.37	51.66	53.61	55.28	55.80	65.59	62.43	62.22	61.76
14	58.62	53.40	51.15	51.36	51.63	54.07	55.16	56.14	65.36	62.42	62.26	61.72
15	58.43	53.24	51.22	51.27	51.60	54.45	55.08	56.49	65.13	62.36	62.33	61.51
16	58.27	53.06	51.35	51.21	51.53	54.65	54.99	56.92	64.85	62.42	62.38	61.24
17	57.98	52.88	51.43	51.29	51.59	54.92	54.89	57.44	64.42	62.40	62.38	61.10
18	57.82	52.68	51.38	51.37	51.70	55.27	54.79	58.05	64.14	62.39	62.36	60.99
19	57.70	52.48	51.27	51.43	51.74	55.65	54.68	58.52	64.02	62.33	62.37	60.94
20	57.56	52.25	51.30	51.62	51.67	55.94	54.63	58.88	63.84	62.35	62.35	60.90
21	57.35	52.03	51.34	51.72	51.70	56.14	54.69	59.27	63.51	62.41	62.42	60.87
22	57.09	51.79	51.41	51.86	51.77	56.25	54.71	59.84	63.16	62.38	62.59	60.82
23	56.93	51.68	51.46	51.96	51.80	56.43	54.68	60.32	62.96	62.23	62.55	60.87
24	56.72	51.64	51.35	52.10	51.85	56.49	54.69	60.65	62.77	62.23	62.51	60.78
25	56.63	51.48	51.23	52.14	51.87	56.48	54.66	60.86	62.63	62.24	62.46	60.66
26	56.55	51.32	51.17	52.11	51.86	56.42	54.59	60.94	62.46	62.33	62.40	60.63
27	56.37	51.18	51.19	52.15	51.84	56.37	54.50	60.96	62.39	62.38	62.25	60.57
28	56.25	51.11	51.18	52.11	51.90	56.23	54.39	60.99	62.38	62.46	62.28	60.59
29	56.12	51.01	51.23	51.93	52.07	56.15	54.12	61.15	62.40	62.49	62.27	60.63
30	55.91	51.00	51.32	51.66	------	56.02	53.66	61.45	62.40	62.40	62.34	60.75
31	55.72	------	51.43	51.65	------	55.87	------	61.95	------	62.49	62.42	------
MEAN	58.27	53.09	51.29	51.57	51.66	54.48	55.02	57.45	63.95	62.39	62.40	61.43
MAX	61.01	55.55	51.46	52.15	52.07	56.49	55.82	61.95	65.70	62.52	62.59	62.37
MIN	55.72	51.00	51.07	51.21	51.39	52.11	53.66	53.58	62.38	62.23	62.22	60.57
(†)	936.3	518.6	556.0	575.2	612.0	949.8	752.2	1,509	1,552	1,560	1,554	1,397
(‡)	-505.7	-417.7	+37.4	+19.2	+36.8	+337.8	-197.6	+756.8	+43.0	+8.0	-6.0	-157.0

CAL YR 1971..... ‡ +5.2
WTR YR 1972..... ‡ -45.0

† Contents, in thousands of acre-feet, at end of month.
‡ Change in contents, in thousands of acre-feet.
NOTE.--Add 2,000 ft to obtain elevation above mean sea level.

12393000 Priest Lake at outlet, near Coolin, Idaho

LOCATION.--Lat 48°29'30", long 116°53'00", in SE¼ sec.5, T.59 N., R.4 W., Bonner County, 0.5 mile east of outlet, 1.8 miles northwest of Coolin, and 44 miles upstream from mouth of Priest River.

DRAINAGE AREA.--572 sq mi.

PERIOD OF RECORD.--June 1911 to September 1913 (fragmentary gage-height records at Coolin, published as part of records for Priest River at outlet of Priest Lake, at Coolin), April 1928 to July 1950 (gage-height record only), August 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,434.64 ft above mean sea level. June 18, 1911, to Sept. 30, 1913, nonrecording gages at Coolin at different datums. Apr. 21, 1928, to Oct. 18, 1939, nonrecording gage at site 400 ft north of lake outlet at present datum.

EXTREMES.--Current year: Maximum gage height, 5.62 ft June 2 (contents, 182,900 acre-ft); minimum, -0.11 ft Jan. 17 (contents, 45,700 acre-ft).
Period of record: Maximum gage height, 6.46 ft May 29, 30, 1948 (contents, 202,200 acre-ft); minimum, -0.23 ft Mar. 18, 1962 (contents, 42,900 acre-ft).

REMARKS.--Flow from Priest Lake is regulated to hold lake at heights desirable for recreation interests during summer months and storage is released for power use downstream during winter months. Storage began Aug. 9, 1950. Prior to Aug. 9, 1950, some regulation resulted from logging operations in the outlet channel. Figures given herein represent contents above gage height of about -2 ft. Capacity table is based on area measured from Priest Lake quadrangle (scale 1:250,000) and reconnaissance survey of marginal areas and is only approximate.

Capacity table (gage height, in feet, and contents, in acre-feet)

-0.1	46,000
0.0	48,000
5.0	167,000

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.23	1.89	.32	.05	.02	.23	1.54	1.50	5.60	3.41	3.30	2.98
2	3.23	1.76	.31	.03	.02	.26	1.54	1.53	5.61	3.40	3.33	2.96
3	3.23	1.65	.29	.01	.00	.28	1.53	1.57	5.54	3.37	3.35	2.95
4	3.25	1.58	.29	.01	-.01	.29	1.52	1.63	5.43	3.35	3.38	2.95
5	3.25	1.46	.29	.01	.00	.32	1.58	1.73	5.32	3.32	3.39	2.90
6	3.26	1.36	.25	-.02	-.02	.34	1.62	1.86	5.23	3.30	3.41	2.92
7	3.26	1.27	.19	-.03	-.02	.35	1.67	1.98	5.14	3.26	3.42	2.92
8	3.27	1.18	.24	-.04	.00	.36	1.71	2.12	5.09	3.26	3.42	2.90
9	3.26	1.11	.21	-.03	-.05	.37	1.72	2.25	5.07	3.30	3.40	2.90
10	3.26	1.07	.23	-.03	-.06	.40	1.71	2.35	4.97	3.31	3.40	2.90
11	3.26	.99	.21	-.01	-.06	.44	1.74	2.48	4.86	3.33	3.37	2.89
12	3.25	.98	.18	.00	-.03	.53	1.76	2.67	4.73	3.47	3.36	2.88
13	3.27	.92	.18	-.03	-.03	.67	1.74	2.89	4.53	3.56	3.37	2.88
14	3.27	.87	.18	-.03	-.01	.81	1.72	3.20	4.35	3.58	3.35	2.88
15	3.25	.82	.16	-.05	-.03	.83	1.69	3.53	4.20	3.57	3.33	2.87
16	3.23	.78	.14	-.07	-.03	.88	1.66	3.79	4.09	3.56	3.32	2.88
17	3.22	.72	.14	-.07	-.02	.97	1.64	4.06	3.98	3.52	3.27	2.88
18	3.21	.67	.13	-.07	-.01	1.07	1.62	4.26	3.88	3.51	3.23	2.89
19	3.27	.63	.11	-.06	-.01	1.19	1.60	4.39	3.82	3.46	3.17	2.88
20	3.29	.58	.11	.03	.00	1.27	1.56	4.53	3.77	3.40	3.13	2.90
21	3.28	.58	.15	.03	-.01	1.33	1.57	4.74	3.79	3.38	3.11	2.98
22	3.23	.54	.20	.04	.01	1.37	1.55	4.97	3.73	3.35	3.10	3.04
23	3.11	.54	.20	.10	.02	1.48	1.51	5.15	3.69	3.33	3.06	3.11
24	2.92	.51	.17	.11	.02	1.55	1.49	5.21	3.61	3.29	3.05	3.12
25	2.81	.47	.15	.10	.01	1.59	1.48	5.16	3.58	3.25	3.04	3.12
26	2.67	.46	.13	.07	.01	1.60	1.47	5.09	3.59	3.22	3.03	3.12
27	2.52	.44	.10	.07	.02	1.60	1.45	5.05	3.56	3.20	3.03	3.11
28	2.37	.42	.10	.05	.12	1.60	1.48	5.12	3.52	3.18	3.03	3.08
29	2.25	.39	.07	.05	.16	1.59	1.48	5.22	3.47	3.19	3.01	3.06
30	2.14	.35	.08	.03	------	1.56	1.49	5.35	3.43	3.22	3.00	3.04
31	2.00	------	.05	.04	------	1.55	------	5.50	------	3.24	3.00	------
MEAN	3.04	.90	.18	.01	.00	.93	1.59	3.58	4.37	3.36	3.23	2.96
MAX	3.29	1.89	.32	.11	.16	1.60	1.76	5.50	5.61	3.58	3.42	3.12
MIN	2.00	.35	.05	-.07	-.06	.23	1.45	1.50	3.43	3.18	3.00	2.87
(†)	95,500	56,500	49,500	49,200	52,100	84,900	83,400	179,000	129,500	125,000	119,300	120,200
(‡)	-29,000	-39,000	-7,000	-300	+2,900	+32,800	-1,500	+95,600	-49,500	-4,500	-5,700	+900

CAL YR 1971..... ‡ -900
WTR YR 1972..... ‡ -4,300

† Contents, in acre-feet, at end of month.
‡ Change in contents, in acre-feet.

12394000 Priest River near Coolin, Idaho

LOCATION.--Lat 48°26'50", long 116°53'50", in SE¼ sec.19, T.59 N., R.4 W., Bonner County, on left bank 190 ft downstream from Dickensheet Bridge, 2.5 miles downstream from Binarch Creek, 3 miles southwest of Coolin, 5.2 miles downstream from outlet of Priest Lake, and at mile 38.8.

DRAINAGE AREA.--611 sq mi.

PERIOD OF RECORD.--October 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,338.24 ft above mean sea level. Prior to Feb. 23, 1949, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--24 years, 1,328 cfs (29.52 inches per year, 962,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,080 cfs June 2 (gage height, 7.60 ft); minimum, 93 cfs Sept. 19, 20 (gage height, 1.72 ft).
Period of record: Maximum discharge, 8,130 cfs May 27, 1956 (gage height, 8.15 ft); minimum observed, 26 cfs Sept. 25, 1958 (gage height, 1.16 ft), but may have been less Sept. 11, 1953, Sept. 24, 1958, when stage was below intake.
Maximum stage known since at least 1913, 8.40 ft on May 29, 1948 (discharge, 8,670 cfs).

REMARKS.--Records excellent except those for January, which are fair. No diversion above station. Flow partly regulated by Priest Lake (see sta 12393000).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.6	76	4.0	1,400
2.0	152	5.0	2,690
2.5	315	6.0	4,190
3.0	570	7.0	5,850
3.5	930	7.6	7,130

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	2,130	687	470	480	622	1,800	1,720	6,820	2,320	198	284
2	216	1,980	668	470	475	648	1,800	1,730	6,950	1,910	183	277
3	218	1,870	661	470	465	668	1,780	1,770	6,870	1,900	188	273
4	219	1,780	642	470	460	674	1,770	1,820	6,730	1,870	192	270
5	222	1,680	648	465	465	700	1,800	1,910	6,540	1,840	240	208
6	227	1,560	635	460	460	721	1,860	2,040	6,390	1,810	277	159
7	232	1,460	603	450	455	728	1,910	2,170	6,270	1,780	284	163
8	233	1,390	596	450	450	735	1,950	2,300	6,160	1,750	344	163
9	234	1,310	609	450	445	735	1,990	2,430	6,100	1,450	469	156
10	234	1,270	603	450	445	749	1,980	2,550	6,070	1,090	461	159
11	234	1,230	603	460	445	802	1,980	2,660	5,920	1,090	450	157
12	234	1,180	583	465	440	858	2,020	2,860	5,720	1,140	437	154
13	233	1,160	577	450	455	957	2,030	3,100	5,510	1,380	432	152
14	234	1,120	577	450	455	1,070	2,000	3,410	5,250	1,540	504	148
15	238	1,070	577	440	455	1,120	1,970	3,820	5,010	1,560	684	121
16	226	1,040	577	430	450	1,160	1,950	4,180	4,830	1,550	840	98
17	215	1,000	558	430	455	1,240	1,910	4,480	4,670	1,520	918	95
18	211	957	552	430	461	1,330	1,870	4,780	4,100	1,510	889	96
19	311	922	540	435	461	1,440	1,840	5,010	3,400	1,460	850	94
20	590	898	534	480	466	1,520	1,800	5,170	3,340	1,410	820	94
21	593	874	546	485	466	1,580	1,800	5,420	3,320	1,370	797	97
22	885	842	577	490	466	1,640	1,780	5,740	3,320	1,360	777	96
23	1,940	818	583	520	483	1,720	1,740	6,050	3,260	1,330	757	142
24	2,470	810	583	530	483	1,810	1,720	6,210	3,220	1,290	575	258
25	2,320	794	564	520	472	1,840	1,710	6,250	3,130	1,270	371	261
26	2,180	778	546	500	466	1,860	1,690	6,170	3,130	1,240	309	266
27	2,050	756	534	500	477	1,860	1,680	6,050	3,110	994	307	371
28	1,880	742	522	495	516	1,860	1,680	6,070	3,070	853	306	511
29	1,740	728	505	495	590	1,850	1,710	6,140	3,020	642	302	561
30	1,940	707	490	485	------	1,820	1,710	6,330	2,960	348	297	546
31	2,240	------	480	490	------	1,810	------	6,560	------	222	290	------
TOTAL	25,182	34,856	17,960	14,585	13,562	38,127	55,230	126,900	144,190	42,799	14,748	6,430
MEAN	812	1,162	579	470	468	1,230	1,841	4,094	4,806	1,381	476	214
MAX	2,470	2,130	687	530	590	1,860	2,030	6,560	6,950	2,320	918	561
MIN	183	707	480	430	440	622	1,680	1,720	2,960	222	183	94
AC-FT	49,950	69,140	35,620	28,930	26,900	75,620	109,500	251,700	286,000	84,890	29,250	12,750

CAL YR 1971 TOTAL 505,666 MEAN 1,385 MAX 6,290 MIN 101 AC-FT 1,003,000
WTR YR 1972 TOTAL 534,569 MEAN 1,461 MAX 6,950 MIN 94 AC-FT 1,060,000

NOTE.--No gage-height record Dec. 30 to Feb. 9.

12395000 Priest River near Priest River, Idaho

LOCATION .--Lat 48°12'31", long 116°54'49", in NW¼SW¼NW¼ sec.12, T.56 N., R.5 W., Bonner County, on right bank 500 ft downstream from Saddler Creek, 0.4 mile downstream from Lower West Branch, 2.7 miles north of Priest River, and at mile 3.8.

DRAINAGE AREA.--902 sq mi.

PERIOD OF RECORD.--June 1903 to April 1905, November 1910 to April 1911, May to December 1923, February 1929 to current year. Prior to October 1930, published as "at Priest River."

GAGE.--Water-stage recorder. Altitude of gage is 2,090 ft (from river-profile map). Prior to May 15, 1929, and Sept. 18, 1929, to Apr. 28, 1930, nonrecording gages at site 3 miles downstream at altitude about 40 ft lower. June 4 to Sept. 17, 1929, and Apr. 29 to Sept. 11, 1930, nonrecording gages at or near present site at present datum.

AVERAGE DISCHARGE.--44 years (1903-4, 1929-72), 1,673 cfs (25.19 inches per year, 1,212,000 acre-ft per year); 15-year base period (1952-67), 1,787 cfs.

EXTREMES.--Current year: Maximum discharge, 8,080 cfs June 2 (gage height, 7.60 ft); minimum daily, 220 cfs Sept. 21 minimum gage height, unknown.
Period of record: Maximum discharge, 10,500 cfs May 29, 30, 1948; maximum gage height, 8.97 ft May 29, 1948; minimum discharge, 165 cfs Sept. 26, 1958 (gage height, 0.46 ft).

REMARKS.--Records excellent except those for winter period and no gage-height record, which are good. No diversion above station. Some regulation on tributary and, since Aug. 9, 1950, flow partly regulated by Priest Lake (see sta 12393000).

REVISIONS (WATER YEARS).--WSP 572: 1903-5.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 28 to Jan. 9, Jan. 12-18, Jan. 28 to Feb. 10)

0.6	205	3.0	1,910
1.0	375	4.0	3,000
1.5	680	5.0	4,260
2.0	1,040	7.7	8,190

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	330	2,350	883	620	650	1,660	2,690	2,450	7,980	3,100	392	430
2	375	2,210	848	610	670	1,490	2,690	2,460	8,050	2,270	381	419
3	386	2,090	848	600	700	1,350	2,640	2,510	7,980	2,230	365	414
4	386	2,020	820	590	710	1,260	2,610	2,580	7,810	2,200	365	408
5	386	1,910	841	610	720	1,290	2,640	2,690	7,590	2,160	360	403
6	386	1,790	827	620	730	1,510	2,940	2,880	7,410	2,130	430	325
7	397	1,700	778	641	764	1,410	3,080	3,060	7,260	2,100	454	298
8	392	1,620	848	622	764	1,340	3,050	3,220	7,170	2,050	454	298
9	386	1,540	827	608	764	1,320	3,050	3,410	7,090	2,070	622	298
10	386	1,510	820	602	750	1,390	2,960	3,560	7,020	1,440	628	289
11	386	1,490	792	628	722	1,700	2,920	3,660	6,840	1,390	615	294
12	381	1,450	771	570	729	2,070	3,050	3,840	6,630	1,420	602	294
13	386	1,420	757	540	820	2,680	3,130	4,100	6,370	1,580	589	289
14	381	1,380	764	540	820	3,050	2,960	4,520	6,060	1,840	596	285
15	381	1,330	750	580	778	2,860	2,870	5,040	5,750	1,830	736	280
16	381	1,280	764	620	848	2,760	2,810	5,510	5,570	1,800	935	252
17	365	1,230	743	715	890	2,920	2,740	5,940	5,390	1,770	1,090	233
18	360	1,180	757	648	820	3,130	2,660	6,390	5,120	1,750	1,060	226
19	408	1,140	743	641	799	3,340	2,600	6,490	4,010	1,750	1,030	226
20	736	1,110	729	862	820	3,340	2,540	6,610	3,880	1,670	988	226
21	813	1,090	736	1,360	827	3,200	2,580	6,880	3,960	1,630	958	220
22	813	1,050	771	1,240	813	3,080	2,600	7,270	3,970	1,600	973	225
23	1,410	1,020	841	1,070	799	3,170	2,490	7,510	3,860	1,570	943	240
24	2,710	1,030	827	943	785	3,260	2,450	7,600	3,790	1,530	898	340
25	2,550	1,010	799	869	771	3,180	2,450	7,620	3,700	1,500	648	400
26	2,420	988	764	694	750	3,050	2,440	7,440	3,690	1,470	490	410
27	2,270	973	757	583	898	2,940	2,410	7,260	3,620	1,380	466	600
28	2,100	973	710	530	1,580	2,840	2,450	7,200	3,530	1,070	460	800
29	1,950	943	690	550	2,000	2,800	2,490	7,300	3,440	1,030	454	900
30	1,860	913	660	590	------	2,730	2,460	7,530	3,370	715	442	860
31	2,450	------	640	620	------	2,670	------	7,770	------	436	430	------
TOTAL	29,321	41,740	24,105	21,516	24,491	74,790	81,450	162,300	167,910	52,481	19,854	11,182
MEAN	946	1,391	778	694	845	2,413	2,715	5,235	5,597	1,693	640	373
MAX	2,710	2,350	883	1,360	2,000	3,340	3,130	7,770	8,050	3,100	1,090	900
MIN	330	913	640	530	650	1,260	2,410	2,450	3,370	436	360	220
AC-FT	58,160	82,790	47,810	42,680	48,580	148,300	161,600	321,900	333,000	104,100	39,380	22,180

CAL YR 1971 TOTAL 678,931 MEAN 1,860 MAX 7,860 MIN 257 AC-FT 1,347,000
WTR YR 1972 TOTAL 711,140 MEAN 1,943 MAX 8,050 MIN 220 AC-FT 1,411,000

12395500 Pend Oreille River at Newport, Wash.

LOCATION.--Lat 48°11'00", long 117°02'00", in SE¼SW¼ sec.24, T.56 N., R.6 W. (Boise meridian), Bonner County, on left bank at Newport, 0.2 mile upstream from bridge on U.S. Highway 2, 0.2 mile east of Idaho-Washington State line, 1.6 miles downstream from Albeni Falls Dam, and at mile 88.5.

DRAINAGE AREA.--24,200 sq mi, approximately.

PERIOD OF RECORD.--June 1903 to September 1941, October 1952 to current year. Prior to October 1921, published as Clark Fork at Newport, Wash., October 1921 to September 1937, as Clark Fork at Priest River, Idaho, and October 1937 to September 1941, as Pend Oreille River at Priest River, Idaho.

GAGE.--Water-stage recorder. Datum of gage is 1,999.7 ft above mean sea level. Prior to Sept. 22, 1928, non-recording gages at Priest River, Newport, or Metaline Falls at various datums (see description, WSP 532, p. 92). Sept. 22, 1928, to Sept. 30, 1935, at datum 2,040.14 ft above mean sea level, and Oct. 1, 1935, to Sept. 30, 1941, at datum 2,000 ft above mean sea level, water-stage recorder at Priest River. Since December 1952, auxiliary water-stage recorder 2.74 miles downstream from base gage.

AVERAGE DISCHARGE.--58 years (1903-41, 1952-72), 25,990 cfs (18,830,000 acre-ft per year); 15-year base period (1952-67), 27,700 cfs.

EXTREMES.--Current year: Maximum discharge, 136,000 cfs June 12; maximum gage height, 53.01 ft June 13; minimum discharge, 6,240 cfs Sept. 6; minimum gage height, 31.52 ft Oct. 31, Sept. 1.
Period of record: Maximum discharge, 136,000 cfs June 15, 1913, June 21, 1933, June 12, 1972; minimum, 1,280 cfs Sept. 1, 1961.
Maximum stage known, about 64.0 ft in June 1894, present site and datum, from water-surface profiles (discharge, about 200,000 cfs).

REMARKS.--Records excellent except those for October, which are good. Flow regulated at Albeni Falls Dam and affected by storage in Pend Oreille Lake (see sta 12392500), Flathead Lake, Hungry Horse Reservoir, and several smaller reservoirs. Diversions above station for irrigation of about 354,000 acres.

REVISIONS (WATER YEARS).--WSP 532: 1903-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24,600	25,100	13,700	16,400	18,300	24,200	50,300	36,900	102,000	53,900	18,500	9,380
2	25,000	25,100	13,900	18,000	17,300	24,000	49,900	36,500	106,000	53,500	19,400	11,800
3	25,000	25,000	14,600	20,200	17,100	24,300	49,800	36,600	112,000	53,900	17,800	9,580
4	25,100	25,200	15,900	20,300	18,300	24,600	50,800	36,600	116,000	54,100	17,800	7,680
5	25,100	25,200	18,600	20,500	18,300	25,100	51,300	36,700	120,000	49,700	17,800	9,750
6	20,000	25,000	22,300	17,700	18,100	24,400	50,500	37,300	123,000	43,300	17,800	8,450
7	20,000	24,800	24,000	17,800	18,900	25,200	50,400	38,500	125,000	38,200	17,900	9,650
8	20,200	25,200	22,500	17,800	20,100	25,600	51,300	43,200	127,000	34,200	15,600	14,800
9	20,000	25,300	22,200	17,400	20,100	25,700	51,100	47,600	129,000	34,000	15,700	14,600
10	20,100	22,200	22,400	19,500	20,400	25,800	51,100	48,700	130,000	38,100	15,500	14,600
11	22,600	25,400	21,100	19,200	20,500	26,300	50,500	49,500	132,000	43,200	15,600	14,500
12	25,000	25,600	21,400	20,000	20,000	27,100	50,600	51,800	133,000	39,400	14,800	14,500
13	25,100	25,000	19,000	19,700	19,700	27,600	50,300	53,800	133,000	37,500	14,800	14,700
14	25,000	25,200	18,200	20,200	19,800	28,400	50,200	55,300	131,000	36,900	13,800	14,600
15	25,000	25,100	16,300	19,100	20,300	30,300	49,400	57,800	122,000	34,900	10,500	14,600
16	24,900	25,700	15,900	18,700	20,000	36,800	49,600	60,800	115,000	35,500	13,500	12,700
17	25,100	26,600	18,100	17,000	17,900	41,400	48,100	64,000	115,000	38,000	14,100	10,000
18	25,100	26,600	19,400	18,400	18,900	43,300	44,400	67,800	108,000	36,100	14,000	14,600
19	25,000	26,300	20,100	19,600	19,900	45,200	41,200	71,800	96,500	32,100	13,900	16,000
20	25,100	26,100	19,100	21,700	19,600	47,400	40,100	75,400	96,200	30,900	13,800	16,700
21	25,000	26,100	18,400	21,600	21,400	52,000	40,500	77,700	93,000	29,900	14,900	15,900
22	25,000	25,200	18,600	22,100	21,900	53,500	41,000	81,300	86,500	30,700	16,100	14,700
23	25,100	24,800	20,200	22,000	22,100	53,600	40,600	85,700	81,800	30,600	17,100	8,440
24	25,000	23,900	21,800	22,200	22,200	54,900	40,200	88,900	73,400	28,700	17,100	9,510
25	24,800	22,300	19,700	23,000	23,100	54,800	40,500	91,400	69,400	26,500	13,100	15,800
26	25,100	22,900	19,100	20,500	23,900	54,700	40,000	92,700	67,700	24,400	12,600	15,700
27	25,000	20,200	18,500	14,800	23,800	54,300	39,700	93,100	62,400	24,100	12,100	15,500
28	25,300	20,100	19,000	16,700	23,600	53,700	39,200	93,000	57,400	20,400	11,200	15,600
29	25,300	20,200	16,300	17,700	23,800	53,000	39,300	93,700	55,500	17,100	12,800	12,500
30	25,000	15,700	15,400	18,100	------	52,300	38,500	95,100	54,700	17,100	9,300	8,650
31	24,800	------	15,300	17,100	------	51,400	------	97,900	------	14,800	7,870	------
TOTAL	748,400	727,100	581,000	595,000	589,300	1,190.9M	1,380.4M	1,997.1M	3,073.5M	1,081.7M	456,770	385,490
MEAN	24,140	24,240	18,740	19,190	20,320	38,420	46,010	64,420	102,500	34,890	14,730	12,850
MAX	25,300	26,600	24,000	23,000	23,900	54,900	51,300	97,900	133,000	54,100	19,400	16,700
MIN	20,000	15,700	13,700	14,800	17,100	24,000	38,500	36,500	54,700	14,800	7,870	7,680
AC-FT	1,484M	1,442M	1,152M	1,180M	1,169M	2,362M	2,738M	3,961M	6,096M	2,146M	906,000	764,600

CAL YR 1971 TOTAL 12,206,730 MEAN 33,440 MAX 103,000 MIN 6,230 AC-FT 24,210,000
WTR YR 1972 TOTAL 12,806,660 MEAN 34,990 MAX 133,000 MIN 7,680 AC-FT 25,400,000

M Expressed in thousands.

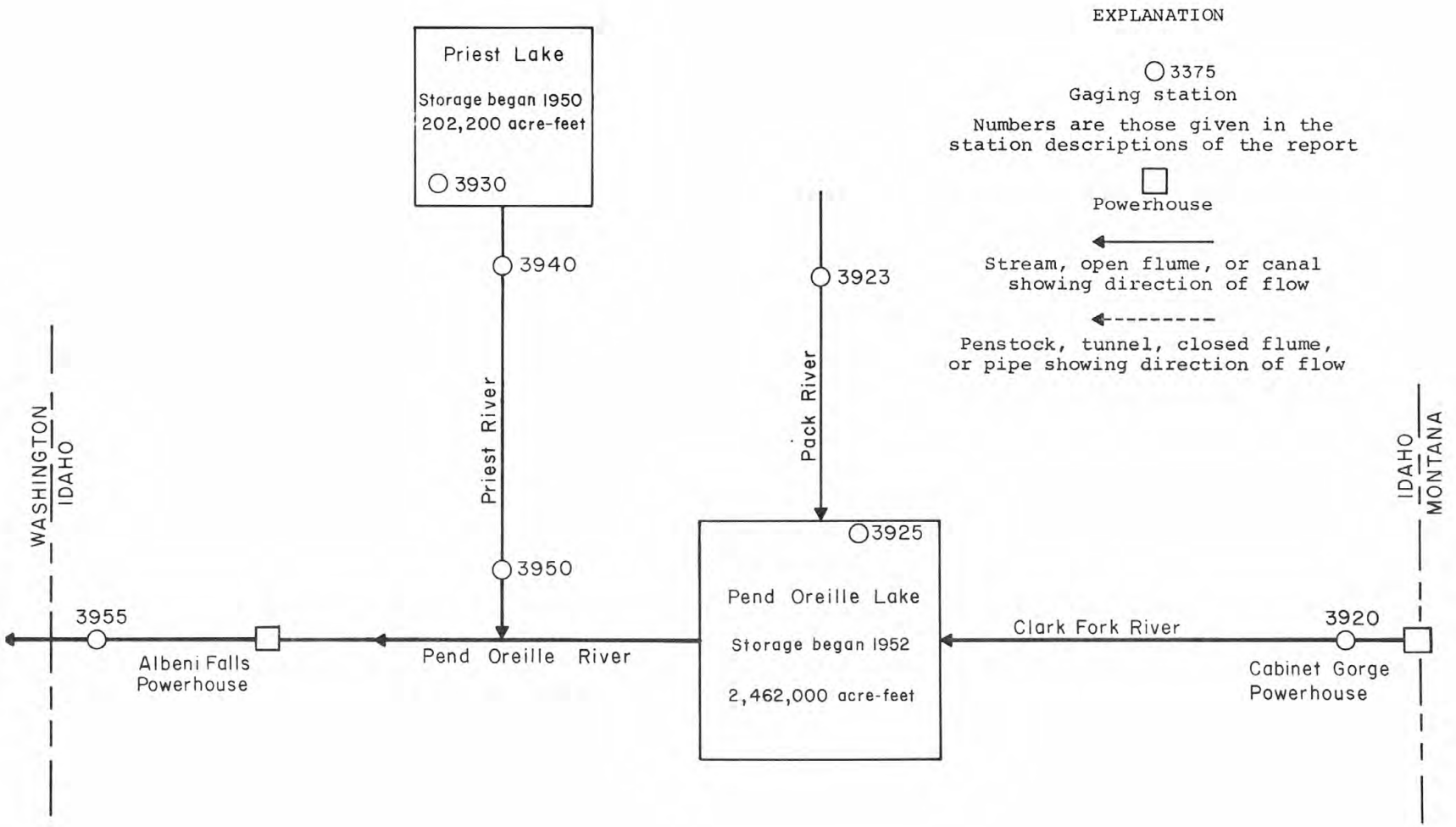


FIGURE 3. Schematic diagram showing Pend Oreille River basin.

12411000 Coeur d'Alene River above Shoshone Creek, near Prichard, Idaho

LOCATION.--Lat 47°42'30", long 115°58'35", in NE¼SW¼ sec.5, T.50 N., R.4 E., Shoshone County, in Coeur d'Alene National Forest, on left bank at Shoshone Creek ranger station, 0.1 mile downstream from Uranus Creek, 0.5 mile upstream from Shoshone Creek, 3.5 miles north of Prichard, and 200.0 miles upstream from mouth of Spokane River.

DRAINAGE AREA.--335 sq mi.

PERIOD OF RECORD.--December 1950 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,485 ft (from river-profile map).

AVERAGE DISCHARGE.--21 years (1951-72), 753 cfs (30.53 inches per year, 545,500 acre-ft per year); 15-year base period 1952-67), 750 cfs.

EXTREMES.--Current year: Maximum discharge, 5,880 cfs May 15 (gage height, 6.09 ft); maximum gage height, 8.09 ft Jan. 21 (ice jam); minimum, 70 cfs Dec. 8 (gage height, 0.67 ft).
Period of record: Maximum discharge, 11,900 cfs Dec. 23, 1964 (gage height, 8.37 ft); maximum gage height, 11.55 ft Feb. 4, 1963 (backwater from ice); minimum discharge, 34 cfs Dec. 26, 1952 (gage height, 0.69 ft); minimum gage height, 0.67 ft Dec. 8, 1972.

REMARKS.--Records excellent except those for winter period, which are fair. No regulation or diversion above station.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 6 to Jan. 21, Jan. 27 to Feb. 11)

0.7	75	2.5	910
1.0	143	3.0	1,340
1.3	236	4.0	2,490
1.6	360	5.0	3,940
2.0	570	6.4	6,560

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	154	146	140	360	3,410	1,660	2,080	2,410	591	202	118
2	120	140	130	130	340	2,330	2,270	2,160	1,980	553	207	118
3	116	130	138	130	320	1,700	2,350	2,410	1,670	515	201	116
4	114	149	136	130	320	1,330	2,280	2,780	1,460	483	191	116
5	111	168	157	140	330	1,220	2,100	3,530	1,300	459	185	114
6	109	149	120	140	320	1,870	2,570	4,400	1,250	433	179	114
7	109	174	94	145	300	2,100	3,140	4,090	1,210	450	175	114
8	107	157	92	140	260	1,770	2,830	3,780	1,210	411	172	114
9	105	138	92	130	250	1,510	2,360	3,700	1,190	415	169	126
10	105	136	105	120	250	1,540	1,990	3,470	1,130	389	164	129
11	103	151	120	108	255	2,230	1,800	3,260	1,060	381	158	119
12	103	157	125	102	266	2,900	1,680	3,640	1,060	369	157	122
13	120	174	125	91	415	3,410	1,510	4,520	1,020	372	154	127
14	154	193	120	85	494	5,160	1,340	5,340	952	350	156	120
15	130	190	120	100	472	4,250	1,300	5,720	893	324	165	115
16	118	186	122	120	564	3,680	1,330	5,280	853	309	188	112
17	111	177	160	140	826	4,540	1,280	5,080	810	297	172	110
18	107	168	180	260	805	5,320	1,200	4,890	759	295	157	107
19	136	163	200	500	700	4,400	1,140	3,760	690	323	149	109
20	259	154	210	1,350	770	3,730	1,140	3,560	648	287	146	113
21	190	157	190	3,300	950	3,280	1,260	3,830	687	276	141	117
22	157	157	180	2,480	958	2,990	1,300	3,530	643	276	148	152
23	143	151	180	1,450	854	3,420	1,320	3,340	690	260	171	156
24	149	165	190	942	749	3,520	1,510	2,970	665	252	153	185
25	154	168	200	714	665	2,900	1,650	2,490	655	249	144	160
26	209	163	190	466	582	2,330	1,660	2,100	724	236	138	146
27	259	160	180	390	1,060	1,920	1,840	2,080	713	227	133	131
28	183	160	170	360	4,220	1,640	2,490	2,420	701	220	130	122
29	154	157	160	350	5,200	1,450	2,430	2,660	666	215	127	117
30	160	154	150	380	------	1,310	2,230	2,700	626	206	123	114
31	146	------	140	400	------	1,300	------	2,670	------	202	120	------
TOTAL	4,371	4,800	4,622	15,433	23,855	84,460	54,960	108,240	30,325	10,625	4,975	3,733
MEAN	141	160	149	498	823	2,725	1,832	3,492	1,011	343	160	124
MAX	259	193	210	3,300	5,200	5,320	3,140	5,720	2,410	591	207	185
MIN	103	130	92	85	250	1,220	1,140	2,080	626	202	120	107
CFSM	.42	.48	.44	1.49	2.46	8.13	5.47	10.4	3.02	1.02	.48	.37
IN.	.49	.53	.51	1.71	2.65	9.38	6.10	12.02	3.37	1.18	.55	.41
AC-FT	8,670	9,520	9,170	30,610	47,320	167,500	109,000	214,700	60,150	21,070	9,870	7,400

CAL YR 1971 TOTAL 348,548 MEAN 955 MAX 5,720 MIN 85 CFSM 2.85 IN 38.70 AC-FT 691,300
WTR YR 1972 TOTAL 350,399 MEAN 957 MAX 5,720 MIN 85 CFSM 2.86 IN 38.91 AC-FT 695,000

PEAK DISCHARGE (BASE, 3,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-29	0500	5.95	5,600	5- 6	1500	5.33	4,540
3-14	1430	5.88	5,500	5-15	1230	6.09	5,880
3-18	1000	5.89	5,520				

12413000 Coeur d'Alene River at Enaville, Idaho

LOCATION.--Lat 47°34'20", long 116°15'10", in NW¼NE¼ sec.30, T.49 N., R.2 E., Shoshone County, on right bank 800 ft upstream from highway bridge, 0.2 mile northwest of Enaville Post Office, 1.1 miles upstream from South Fork, 3.5 miles downstream from North Fork, and 168.9 miles upstream from mouth of Spokane River.

DRAINAGE AREA.--895 sq mi.

PERIOD OF RECORD.--March 1911 to April 1913 (fragmentary), October 1939 to current year. Published as North Fork of Coeur d'Alene River at Enaville 1911-13.

GAGE.--Water-stage recorder. Datum of gage is 2,100.00 ft above mean sea level. Mar. 3, 1911, to Apr. 12, 1913, nonrecording gage at site 0.2 mile downstream at different datum. Oct. 18 to Dec. 22, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--33 years (1939-72), 1,976 cfs (29.98 inches per year, 1,432,000 acre-ft per year); 15-year base period 1952-67), 2,027 cfs.

EXTREMES.--Current year: Maximum discharge, 17,300 cfs Feb. 29 (gage height, 71.63 ft); minimum, 145 cfs Dec. 9 (gage height, 61.14 ft).
Period of record: Maximum discharge, 34,800 cfs Dec. 23, 1964 (gage height, 77.15 ft); minimum, 104 cfs Dec. 26, 1952 (gage height, 60.10 ft).
Flood in December 1933 reached a stage of 79.47 ft and that in April 1938 a stage of 78.16 ft, from local information concerning high-water marks.

REMARKS.--Records excellent except those for winter periods, which are good. No appreciable regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1396: 1945.

Rating tables (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Mar. 25 to Apr. 17; stage-discharge relation affected by ice Dec. 8, Jan. 3-6, 14-15, Jan. 27 to Feb. 11)

May 18 to Sept. 30				Oct. 1 to May 17			
60.9	203	63.4	2,000	61.2	170	65.0	4,000
61.4	385	65.0	4,000	61.8	520	67.0	7,380
61.9	690	67.0	7,380	62.5	1,050	69.0	11,300
62.4	1,040	69.0	11,300	63.5	1,980	71.3	16,700
		71.3	16,700				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	349	373	455	498	1,400	11,100	4,420	5,380	7,170	1,600	548	332
2	311	372	436	484	1,300	7,370	6,520	5,480	5,960	1,510	580	328
3	287	333	405	470	1,300	5,430	6,590	5,980	5,080	1,400	560	324
4	272	360	403	370	1,350	4,150	6,200	6,810	4,420	1,320	524	320
5	261	410	402	400	1,350	3,770	5,690	8,330	3,940	1,250	506	316
6	248	430	420	488	1,400	5,600	6,950	10,300	3,890	1,190	488	316
7	243	430	413	518	1,300	6,910	8,600	10,100	3,930	1,180	476	312
8	236	420	320	502	1,200	5,790	7,790	9,230	3,890	1,130	464	312
9	234	400	243	470	1,100	4,790	6,470	8,900	3,860	1,120	452	320
10	230	390	314	437	1,000	4,650	5,400	8,410	3,760	1,080	440	336
11	225	410	359	550	1,010	6,490	4,780	7,840	3,480	1,040	429	324
12	222	450	352	501	1,020	9,390	4,430	8,140	3,260	1,000	424	320
13	265	480	331	446	1,620	10,600	4,030	9,910	3,010	988	418	332
14	376	510	331	390	1,860	14,700	3,570	12,000	2,710	973	413	324
15	346	520	324	410	1,760	12,600	3,420	13,200	2,520	890	452	312
16	296	520	284	435	2,010	10,500	3,550	12,500	2,460	848	512	308
17	264	510	340	463	2,830	12,400	3,430	11,700	2,410	814	512	304
18	247	480	617	436	2,760	15,000	3,230	11,200	2,240	801	458	297
19	299	445	810	572	2,420	12,800	3,030	9,140	2,060	855	429	297
20	649	425	751	3,550	2,590	10,800	2,990	8,290	1,930	801	407	304
21	566	419	664	12,100	3,300	9,440	3,220	9,040	1,950	762	396	308
22	431	419	609	8,720	3,350	8,410	3,520	8,580	1,930	749	402	372
23	373	411	698	5,130	2,930	9,610	3,520	7,820	1,940	716	446	407
24	367	429	713	3,370	2,500	10,200	3,860	7,060	1,930	690	429	458
25	369	475	703	2,460	2,170	8,400	4,340	6,150	1,850	671	402	446
26	483	479	651	1,840	1,900	6,630	4,440	5,220	1,920	645	385	391
27	632	478	592	1,600	3,270	5,460	4,700	4,990	1,850	619	372	363
28	537	495	552	1,400	12,600	4,670	6,160	5,930	1,790	599	363	340
29	410	496	493	1,500	16,300	4,060	6,510	6,850	1,730	580	354	320
30	377	472	491	1,700	------	3,610	5,890	7,300	1,670	560	345	316
31	370	------	516	1,500	------	3,430	------	7,550	------	548	336	------
TOTAL	10,775	13,241	14,992	53,710	80,900	248,760	147,250	259,330	90,540	28,929	13,722	10,059
MEAN	348	441	484	1,733	2,790	8,025	4,908	8,365	3,018	933	443	335
MAX	649	520	810	12,100	16,300	15,000	8,600	13,200	7,170	1,600	580	458
MIN	222	333	243	370	1,000	3,430	2,990	4,990	1,670	548	336	297
CFSM	.39	.49	.54	1.94	3.12	8.97	5.48	9.35	3.37	1.04	.50	.37
IN.	.45	.55	.62	2.23	3.36	10.34	6.12	10.78	3.76	1.20	.57	.42
AC-FT	21,370	26,260	29,740	106,500	160,500	493,400	292,100	514,400	179,600	57,380	27,220	19,950

CAL YR 1971 TOTAL 851,076 MEAN 2,332 MAX 13,700 MIN 222 CFSM 2.61 IN 35.37 AC-FT 1,688,000
WTR YR 1972 TOTAL 972,208 MEAN 2,656 MAX 16,300 MIN 222 CFSM 2.97 IN 40.41 AC-FT 1,928,000

PEAK DISCHARGE (BASE, 8,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	1830	69.98	13,500	3-18	1415	70.89	15,500
2-29	0830	71.63	17,300	4- 7	1215	67.88	8,820
3-14	1700	70.95	15,700	5-15	1415	70.01	13,600

12413140 Placer Creek at Wallace, Idaho

LOCATION.--Lat 47°27'50", long 115°56'10", in NE¼SW¼ sec.34, T.48 N., R.4 E., Shoshone County, on right bank about 400 ft upstream from county road bridge, 0.3 mile downstream from West Fork, 0.4 mile south of Wallace city limits, and at mile 1.0.

DRAINAGE AREA.--14.9 sq mi.

PERIOD OF RECORD.--November 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,840 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 494 cfs May 15 (gage height, 3.79 ft); minimum, 3.1 cfs Dec. 7 (gage height, 1.58 ft).
Period of record: Maximum discharge, 517 cfs May 13, 1971 (gage height, 3.92 ft); minimum, 3.1 cfs Nov. 29, 30, Dec. 1, 2, 1969, Dec. 7, 1971.; minimum gage height, 1.58 ft Dec. 7, 1971.
Flood of Dec. 23, 1964, estimated at 1,300 cfs by Idaho Department of Highways on basis of observed depths in concrete flume downstream. Flood in December 1933 reported slightly higher than 1964.

REMARKS.--Records good. Water for town of Wallace is diverted above the station.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 30 to July 22)

1.5	2.6	2.5	55
1.6	3.8	2.8	100
1.8	7.9	3.2	200
2.0	14.8	3.7	400
2.2	26.1		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	5.6	4.9	4.8	10	106	71	117	324	37	14	6.7
2	6.3	5.6	4.9	5.3	9.9	71	93	137	235	36	13	6.7
3	6.1	5.5	4.9	3.7	9.6	53	90	160	204	35	13	6.6
4	5.3	7.2	4.9	4.8	9.6	43	92	185	188	33	12	6.5
5	4.4	6.8	4.9	4.8	9.4	51	88	197	191	33	12	6.3
6	4.4	5.5	5.1	4.6	9.4	110	132	207	197	31	11	6.6
7	4.4	5.5	3.6	4.8	9.9	93	132	185	204	31	11	6.5
8	4.4	5.3	4.2	4.8	9.9	70	108	182	188	30	10	6.4
9	4.2	5.3	4.6	4.8	9.6	62	88	173	173	28	10	7.0
10	4.4	5.3	4.8	4.6	9.4	83	77	165	154	26	9.7	6.6
11	4.4	5.5	4.8	4.8	9.4	119	72	160	135	26	9.5	6.4
12	4.4	5.5	4.4	4.6	11	160	70	185	117	26	9.6	6.6
13	5.6	5.6	4.2	4.2	24	162	60	249	100	30	9.4	6.4
14	6.6	5.6	4.4	4.0	20	160	55	382	90	26	9.3	6.0
15	5.9	5.6	4.4	4.2	19	135	56	396	86	25	9.6	5.8
16	5.3	5.6	4.2	4.4	30	152	56	375	85	23	11	5.7
17	5.3	5.5	5.1	4.4	38	188	53	360	76	22	9.5	5.7
18	5.1	5.5	5.5	4.4	30	207	50	290	70	25	9.1	5.6
19	7.7	5.3	5.5	18	29	170	51	242	64	24	8.8	6.2
20	9.4	5.3	5.3	72	31	152	53	306	62	22	8.5	8.0
21	6.8	5.3	5.1	130	32	144	60	328	59	22	8.2	7.9
22	6.3	5.3	5.5	50	31	137	60	260	55	21	8.5	7.6
23	6.1	5.3	6.3	28	28	162	71	218	54	19	8.7	7.4
24	6.1	5.3	6.3	21	26	139	93	204	51	18	8.4	6.9
25	5.9	5.3	5.9	18	24	108	95	179	50	17	8.0	6.6
26	9.9	5.3	5.6	15	23	90	95	160	48	16	7.6	6.3
27	7.9	5.3	5.3	14	74	74	123	194	44	15	7.4	6.0
28	6.1	5.3	4.6	14	200	64	147	260	42	15	7.2	5.8
29	5.5	5.3	5.1	12	173	56	128	302	40	14	6.9	5.7
30	5.3	5.3	4.9	11	------	52	115	369	39	14	6.7	5.6
31	5.3	------	4.8	10	------	51	------	391	------	14	6.6	------
TOTAL	181.1	165.6	154.0	495.0	949.1	3,424	2,534	7,518	3,425	754	294.2	194.1
MEAN	5.84	5.52	4.97	16.0	32.7	110	84.5	243	114	24.3	9.49	6.47
MAX	9.9	7.2	6.3	130	200	207	147	396	324	37	14	8.0
MIN	4.2	5.3	3.6	3.7	9.4	43	50	117	39	14	6.6	5.6
CFSM	.39	.37	.33	1.07	2.19	7.38	5.67	16.3	7.65	1.63	.64	.43
IN.	.45	.41	.38	1.24	2.37	8.55	6.33	18.77	8.55	1.88	.73	.48
AC-FT	359	328	305	982	1,880	6,790	5,030	14,910	6,790	1,500	584	385

CAL YR 1971 TOTAL 17,501.7 MEAN 47.9 MAX 430 MIN 3.6 CFSM 3.21 IN 43.70 AC-FT 34,710
WTR YR 1972 TOTAL 20,088.1 MEAN 54.9 MAX 396 MIN 3.6 CFSM 3.68 IN 50.15 AC-FT 39,840

PEAK DISCHARGE (BASE, 175 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-28	2030	3.29	249	5-21	0400	3.57	382
3-17	2200	3.35	270	5-30	2300	3.66	430
5-15	0130	3.79	494				

12413150 South Fork Coeur d'Alene River at Silverton, Idaho

LOCATION.--Lat 47°28'20", long 115°57'00", in SW¼SE¼ sec.21, T.48 N., R.4 E., Shoshone County, on upstream side of State road bridge at Silverton, 500 ft upstream from Lake Creek, 0.2 mile upstream from Revenue Gulch, 1.2 miles northwest of Wallace, and at mile 17.8.

DRAINAGE AREA.--103 sq mi.

PERIOD OF RECORD.--November 1967 to current year.

GAGE.--Nonrecording and crest-stage gages. Altitude of gage is 2,640 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 2,080 cfs May 15 (gage height, 7.73 ft); minimum daily, 36 cfs Jan. 3; minimum gage height observed, 3.05 ft Jan. 3.
Period of record: Maximum discharge, 2,360 cfs May 13, 1971 (gage height, 8.00 ft); minimum daily, 36 cfs Jan. 3, 1972; minimum gage height observed, 3.05 ft Jan. 3, 1972.

REMARKS.--Records fair. Some flow is diverted through smelters and returned to stream above station.

Rating tables (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 26 to Apr. 11; stage-discharge relation affected by ice Dec. 8-10, Dec. 29 to Jan. 5, Jan. 14, 15, Jan. 25 to Feb. 8)

Oct. 1 to Apr. 11				Apr. 12 to Sept. 30			
3.1	38	4.5	305	3.1	58	5.0	518
3.4	75	5.0	450	3.3	90	6.0	930
3.6	107	6.0	865	3.6	142	7.0	1,470
4.0	185	7.0	1,450	4.0	224	8.0	2,360

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	57	50	44	74	487	348	561	1,710	477	166	88
2	56	54	50	39	72	380	390	620	1,400	426	155	92
3	56	50	48	36	76	300	399	680	1,390	413	144	88
4	56	72	46	42	80	278	402	732	1,560	396	147	85
5	54	62	49	48	70	278	555	940	1,460	379	139	84
6	54	50	50	55	82	494	579	1,100	1,460	372	135	84
7	55	57	38	55	74	387	608	1,020	1,640	363	131	84
8	53	56	42	50	74	393	555	980	1,500	353	124	84
9	53	55	45	46	65	295	438	876	1,520	350	122	92
10	56	56	47	42	65	393	399	776	1,500	344	117	76
11	54	55	50	51	68	579	375	750	1,270	328	121	74
12	50	56	46	45	71	930	379	885	866	289	121	84
13	72	60	39	41	121	770	330	1,240	750	399	128	76
14	50	57	50	38	104	770	299	1,540	644	274	119	72
15	51	55	48	39	96	842	304	2,030	615	246	119	69
16	51	53	47	41	161	842	317	1,840	685	253	124	71
17	54	50	47	49	157	995	299	1,670	640	250	121	74
18	53	54	59	46	155	1,160	279	1,380	640	246	117	76
19	53	55	51	125	143	995	277	1,320	601	248	117	74
20	74	56	50	252	159	762	265	1,430	576	238	116	77
21	57	53	49	435	175	739	279	1,560	532	226	109	69
22	56	47	59	312	173	636	304	1,340	518	215	107	90
23	55	45	67	191	157	888	296	1,190	515	200	104	90
24	59	54	59	165	143	748	392	1,080	515	191	105	80
25	80	60	55	130	131	604	342	925	467	191	98	72
26	62	56	51	110	127	512	342	822	447	184	102	66
27	57	60	48	90	360	450	426	1,060	426	172	98	68
28	56	56	45	88	770	396	597	1,390	460	170	95	71
29	55	56	46	86	838	366	604	1,800	470	172	92	63
30	51	54	47	84	------	328	498	2,080	494	168	90	66
31	51	------	45	82	------	302	------	2,050	------	160	90	------
TOTAL	1,751	1,661	1,523	2,957	4,841	18,299	11,877	37,667	27,271	8,693	3,673	2,339
MEAN	56.5	55.4	49.1	95.4	167	590	396	1,215	909	280	118	78.0
MAX	80	72	67	435	838	1,160	608	2,080	1,710	477	166	92
MIN	50	45	38	36	65	278	265	561	426	160	90	63
CFSM	.55	.54	.48	.93	1.62	5.73	3.84	11.8	8.83	2.72	1.15	.76
IN.	.63	.60	.55	1.07	1.75	6.61	4.29	13.60	9.85	3.14	1.33	.84
AC-FT	3,470	3,290	3,020	5,870	9,600	36,300	23,560	74,710	54,090	17,240	7,290	4,640

CAL YR 1971 TOTAL 120,808 MEAN 331 MAX 2,150 MIN 38 CFSM 3.21 IN 43.63 AC-FT 239,600
WTR YR 1972 TOTAL 122,552 MEAN 335 MAX 2,080 MIN 36 CFSM 3.25 IN 44.26 AC-FT 243,100

12413180 Big Creek near Kellogg, Idaho

LOCATION.--Lat 47°29'07", long 116°03'46", in NE¼NE¼NW¼ sec.27, T.48 N., R.3 E., on right bank 0.4 mile upstream from West Fork, 1.2 miles downstream from East Fork, 3.3 miles upstream from mouth, and 4 miles southeast of Kellogg.

DRAINAGE AREA.--20.9 sq mi.

PERIOD OF RECORD.--December 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft (from topographic map). No previous records obtained at this site.

EXTREMES.--Current year: Maximum discharge, 926 cfs May 15 (gage height, 7.58 ft); minimum, 4.0 cfs Oct. 13 (gage height, 4.00 ft).
Period of record: Maximum discharge, 966 cfs May 13, 1971 (gage height, 7.56 ft); maximum gage height, 7.58 ft May 15, 1972; minimum, 4.0 cfs Oct. 13, 1972 (gage height, 4.00 ft).

REMARKS.--Records good.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

4.0	4.3	5.3	126
4.2	9.7	5.8	234
4.4	19.2	6.3	380
4.6	33	7.0	666
4.9	65		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	10	10	9.7	17	158	91	168	380	66	22	13
2	5.9	10	11	11	14	95	112	175	310	61	21	13
3	5.7	10	11	7.8	15	75	112	210	265	59	20	13
4	5.5	11	11	11	15	64	112	268	239	58	20	13
5	5.2	14	11	11	14	69	112	313	237	57	19	13
6	5.0	11	11	10	15	148	136	346	242	55	19	13
7	5.0	11	7.6	10	15	126	154	319	239	54	19	13
8	4.8	10	11	11	15	91	142	316	222	52	18	12
9	4.5	10	11	10	15	84	124	328	210	50	18	13
10	4.3	10	11	9.7	15	121	112	313	156	46	17	12
11	4.3	10	11	11	15	160	100	304	108	44	17	12
12	6.3	10	11	12	18	270	95	334	121	45	17	13
13	4.5	11	11	9.7	38	286	95	507	124	46	15	13
14	5.7	11	11	10	33	232	95	620	119	43	15	12
15	5.7	11	11	11	25	181	97	460	115	38	15	12
16	5.5	11	11	11	40	203	97	414	119	38	18	12
17	5.2	9.7	12	10	57	289	79	400	119	36	17	12
18	5.0	9.7	13	10	47	298	75	273	115	42	15	11
19	7.2	9.7	11	32	41	244	77	206	112	38	15	11
20	13	9.7	11	95	44	217	79	346	110	36	15	13
21	14	9.4	11	199	46	195	89	397	103	35	14	13
22	13	9.4	13	89	45	188	92	322	94	32	14	13
23	12	9.1	17	55	43	227	97	255	94	31	14	13
24	11	9.4	14	38	38	184	115	237	89	29	14	13
25	12	11	13	31	36	132	128	250	88	29	14	13
26	14	11	12	24	35	103	128	244	86	28	14	13
27	16	11	11	22	110	85	140	224	81	26	14	12
28	12	11	9.1	20	170	75	158	319	81	24	13	11
29	11	10	12	20	264	68	164	373	74	24	13	11
30	10	10	11	19	------	64	166	452	68	24	13	11
31	10	------	10	18	------	64	------	597	------	22	13	------
TOTAL	250.8	311.1	351.7	847.9	1,295	4,796	3,373	10,290	4,520	1,268	502	372
MEAN	8.09	10.4	11.3	27.4	44.7	155	112	332	151	40.9	16.2	12.4
MAX	16	14	17	199	264	298	166	620	380	66	22	13
MIN	4.3	9.1	7.6	7.8	14	64	75	168	68	22	13	11
CFSM	.39	.50	.54	1.31	2.14	7.42	5.36	15.9	7.22	1.96	.78	.59
IN.	.45	.55	.63	1.51	2.30	8.54	6.00	18.32	8.05	2.26	.89	.66
AC-FT	497	617	698	1,680	2,570	9,510	6,690	20,410	8,970	2,520	996	738

CAL YR 1971 TOTAL 25,318.6 MEAN 69.4 MAX 790 MIN 4.3 CFSM 3.32 IN 45.06 AC-FT 50,220
WTR YR 1972 TOTAL 28,177.5 MEAN 77.0 MAX 620 MIN 4.3 CFSM 3.68 IN 50.15 AC-FT 55,890

PEAK DISCHARGE (BASE, 500 CFS).--May 15 (0015) 926 cfs (7.58 ft); May 31 (0430) 887 cfs (7.48 ft).

12413300 South Fork Coeur d'Alene River at Smelterville, Idaho

LOCATION.--Lat 47°32'55", long 116°10'25", in SW¼ sec.35, T.49 N., R.2 E., Shoshone County, on left bank 490 ft downstream from county road bridge, 0.2 mile downstream from Government Gulch, 0.6 mile northwest of Smelterville Post Office, and at mile 5.

DRAINAGE AREA.--202 sq mi.

PERIOD OF RECORD.--December 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,220 ft (from topographic map).

AVERAGE DISCHARGE.--5 years (1967-72), 496 cfs (33.34 inches per year, 359,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,020 cfs May 16, determined by a hydrologic study of runoff using correlation methods; minimum daily, 74 cfs Dec. 8.
Period of record: Maximum discharge, 4,060 cfs Jan. 31, 1971 (gage height, 7.98 ft); minimum daily, 74 cfs Dec. 8, 1971; minimum gage height, 2.67 ft Sept. 20, 1971.

REMARKS.--Records good except October to December and May, which are poor. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Jan. 28 to Feb. 1)

2.4	64	4.5	795
2.6	98	5.0	1,120
3.0	185	6.0	1,940
3.5	337	7.0	3,080
4.0	540	8.0	4,540

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	88	111	104	240	1,410	756	960	2,700	655	220	139
2	124	92	105	102	236	987	867	1,020	2,460	605	220	139
3	119	102	102	96	239	795	855	1,100	2,190	562	217	139
4	117	106	96	92	236	665	843	1,200	1,900	531	204	139
5	111	108	94	100	239	707	849	1,500	1,820	513	198	137
6	108	106	92	140	239	1,280	1,180	1,800	1,910	504	193	137
7	109	104	86	145	245	1,240	1,200	1,700	2,030	500	188	135
8	109	100	74	135	254	980	1,020	1,600	1,990	482	183	132
9	108	97	80	125	245	879	897	1,500	1,950	478	180	139
10	109	95	84	115	234	1,060	819	1,450	1,880	436	175	139
11	107	97	87	133	234	1,540	784	1,400	1,700	419	173	135
12	103	100	89	115	259	2,210	756	1,600	1,450	384	175	137
13	105	106	90	100	415	2,220	702	1,900	1,250	411	175	137
14	125	108	84	96	373	2,350	655	2,500	1,110	392	173	132
15	100	110	86	111	344	1,860	645	3,600	1,060	369	180	132
16	94	110	90	109	518	1,880	655	3,900	1,080	348	207	128
17	95	108	90	119	620	2,310	630	2,800	1,110	333	180	132
18	98	106	92	115	526	2,530	600	2,600	1,060	359	173	126
19	103	104	105	232	508	2,160	576	2,500	980	355	168	130
20	110	102	102	916	610	1,780	576	2,900	934	315	163	141
21	140	102	100	1,900	640	1,570	590	3,100	903	312	161	146
22	115	101	108	784	615	1,480	580	2,700	861	305	166	161
23	100	102	112	680	554	1,770	585	2,450	873	284	171	152
24	97	103	116	522	504	1,610	665	2,200	831	275	161	157
25	101	104	118	436	453	1,290	718	1,950	795	265	154	152
26	120	105	114	348	411	1,020	780	1,900	756	256	150	139
27	135	106	112	308	909	897	900	2,000	712	251	150	132
28	115	108	112	285	2,440	813	1,100	2,500	675	245	146	132
29	98	109	100	270	2,290	751	1,050	3,000	660	239	141	128
30	93	110	102	260	------	690	990	3,600	670	231	141	132
31	89	------	103	245	------	665	------	3,200	------	226	141	------
TOTAL	3,385	3,099	3,036	9,238	15,630	43,399	23,823	68,130	40,300	11,840	5,427	4,136
MEAN	109	103	97.9	298	539	1,400	794	2,198	1,343	382	175	138
MAX	140	110	118	1,900	2,440	2,530	1,200	3,900	2,700	655	220	161
MIN	89	88	74	92	234	665	576	960	660	226	141	126
CFSM	.54	.51	.48	1.48	2.67	6.93	3.93	10.9	6.65	1.89	.87	.68
IN.	.62	.57	.56	1.70	2.88	7.99	4.39	12.55	7.42	2.18	1.00	.76
AC-FT	6,710	6,150	6,020	18,320	31,000	86,080	47,250	135,100	79,940	23,480	10,760	8,200

CAL YR 1971 TOTAL 203,995 MEAN 559 MAX 3,660 MIN 74 CFSM 2.77 IN 37.57 AC-FT 404,600
WTR YR 1972 TOTAL 231,443 MEAN 632 MAX 3,900 MIN 74 CFSM 3.13 IN 42.62 AC-FT 459,100

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	0300	6.44	2,340	5-16	unknown	unknown	4,020
2-28	2200	6.84	2,770	5-30	unknown	unknown	3,710
3-18	0230	6.78	2,700				

12413500 Coeur d'Alene River near Cataldo, Idaho

LOCATION.--Lat 47°33'50", long 116°18'25", in NW¼SW¼ sec.26, T.49 N., R.1 E., Shoshone County, on left bank 1.5 miles upstream from Cataldo, 3.6 miles downstream from South Fork, and 164.2 miles upstream from mouth of Spokane River.

DRAINAGE AREA.--1,220 sq mi, approximately.

PERIOD OF RECORD.--April 1911 to December 1912, July 1920 to September 1972 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 2,097.16 ft above mean sea level. Apr. 25, 1911, to Dec. 31, 1912, nonrecording at site 300 ft downstream at different datum. July 29, 1920, to Oct. 10, 1925, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--53 years, 2,553 cfs (28.42 inches per year, 1,850,000 acre-ft per year); 15-year base period (1952-67), 2,696 cfs.

EXTREMES.--Current year: Maximum discharge, 22,800 cfs Feb. 29, from correlation with record of Coeur d'Alene River at Enaville (see sta 12413000); minimum, 355 cfs Dec. 8 (gage height, 38.84 ft).
Period of record: Maximum discharge, 67,000 cfs Dec. 22 or 23, 1933 (gage height, 56.9 ft, from floodmark), from rating curve extended above 24,000 cfs; minimum, 122 cfs Dec. 4, 1929; minimum gage height, 37.03 ft Sept. 6, 1931.

REMARKS.--Records good except those for September, which are fair. No appreciable regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1396: 1945. WSP 1736: 1934(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

38.7	282	42.0	5,180
39.0	456	43.0	8,150
39.5	850	44.0	10,850
40.0	1,380	47.0	18,350
41.0	2,920		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	576	555	630	688	2,000	14,100	5,130	6,730	11,400	2,240	742	430
2	541	548	614	679	1,800	9,920	7,950	7,100	9,530	2,120	787	425
3	527	514	590	562	1,600	7,140	8,120	7,900	8,180	2,020	760	415
4	507	562	583	456	1,550	5,260	7,690	9,290	7,070	1,940	715	410
5	501	638	598	541	1,700	4,940	7,070	11,400	6,300	1,830	662	405
6	475	576	614	654	1,500	8,250	9,080	13,300	6,330	1,780	638	400
7	444	541	507	697	1,400	9,590	11,200	12,800	6,560	1,740	622	405
8	420	562	384	679	1,300	7,800	10,000	12,000	6,400	1,680	598	415
9	420	534	420	670	1,300	6,240	8,180	11,500	6,270	1,660	576	445
10	414	514	514	622	1,250	6,430	6,690	10,800	6,020	1,580	562	470
11	414	534	548	679	1,260	6,300	5,820	10,200	5,400	1,550	555	450
12	408	569	541	733	1,310	13,400	5,450	10,900	4,810	1,490	541	440
13	444	590	514	598	2,310	14,300	4,940	13,300	4,280	1,490	541	430
14	548	654	520	527	2,580	17,700	4,400	15,600	3,830	1,480	534	450
15	501	662	520	606	2,380	15,900	4,230	16,900	3,600	1,370	569	420
16	456	654	488	654	2,900	13,800	4,380	16,200	3,600	1,310	662	410
17	444	646	527	697	3,740	15,800	4,210	15,600	3,560	1,230	646	405
18	420	622	778	688	3,560	18,200	4,020	15,000	3,340	1,230	583	400
19	456	606	970	922	3,240	16,300	3,830	12,800	3,140	1,300	548	400
20	814	576	922	5,170	3,520	14,100	3,790	12,100	2,970	1,200	514	415
21	733	576	841	16,000	4,210	12,400	4,090	13,000	2,960	1,150	494	430
22	598	576	832	11,200	4,230	11,200	4,280	12,300	2,880	1,120	507	560
23	548	576	1,020	6,330	3,700	12,600	4,300	11,300	2,900	1,060	555	620
24	548	590	1,010	4,020	3,260	13,100	4,730	10,300	2,850	1,010	590	720
25	548	638	980	3,100	2,870	11,000	5,290	8,750	2,720	980	540	680
26	638	646	922	2,600	2,560	8,600	5,370	7,580	2,700	931	520	620
27	760	654	841	2,200	5,130	6,930	5,880	7,520	2,610	904	495	550
28	688	662	688	1,900	15,000	5,730	8,000	9,020	2,490	859	480	500
29	576	654	622	2,100	21,700	4,940	8,120	10,700	2,450	823	465	470
30	541	654	688	2,300	------	4,400	7,340	11,500	2,330	796	450	440
31	541	------	715	2,200	------	4,140	------	12,000	------	778	435	------
TOTAL	16,449	17,883	20,941	71,472	104,860	320,510	183,580	355,390	139,480	42,651	17,886	14,030
MEAN	531	596	676	2,306	3,616	10,340	6,119	11,460	4,649	1,376	577	468
MAX	814	662	1,020	16,000	21,700	18,200	11,200	16,900	11,400	2,240	787	720
MIN	408	514	384	456	1,250	4,140	3,790	6,730	2,330	778	435	400
CFSM	.44	.49	.55	1.89	2.96	8.48	5.02	9.39	3.81	1.13	.47	.38
IN.	.50	.55	.64	2.18	3.20	9.77	5.60	10.84	4.25	1.30	.55	.43
AC-FT	32,630	35,470	41,540	141,800	208,000	635,700	364,100	704,900	276,700	84,600	35,480	27,830

CAL YR 1971 TOTAL 1,121,520 MEAN 3,073 MAX 17,200 MIN 384 CFSM 2.52 IN 34.20 AC-FT 2,225,000
WTR YR 1972 TOTAL 1,305,132 MEAN 3,566 MAX 21,700 MIN 384 CFSM 2.92 IN 39.80 AC-FT 2,589,000

PEAK DISCHARGE (BASE, 11,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	unknown	unknown	22,800	4- 7	1200	44.32	11,400
2-29	unknown	unknown	17,600	5-15	1230	46.51	17,100
3-18	1300	47.15	18,600	5-31	1000	44.60	12,200

NOTE.--No gage-height record Feb. 28, 29, and Aug. 24 to Sept. 30.

12414500 St. Joe River at Calder, Idaho

LOCATION.--Lat 47°16'30", long 116°11'15", in NW¼SE¼ sec.3, T.45 N., R.2 E., Shoshone County, on right bank 150 ft southwest of Chicago, Milwaukee, St. Paul, and Pacific Railroad station at Calder, and at mile 42.9.

DRAINAGE AREA.--1,030 sq mi, approximately.

PERIOD OF RECORD.--April 1911 to September 1912 (published as "near Calder"), July 1920 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,171.76 ft above mean sea level, or 2,175 ft above mean sea level, datum of Geological Survey as given in Bulletin 567. Apr. 14, 1911, to Sept. 30, 1912, nonrecording gage at site 2.5 miles downstream at different datum. July 13 to Dec. 21, 1920, nonrecording gage at present site and at datum 60 ft lower. Dec. 22, 1920, to Sept. 30, 1966, water-stage recorder at present site at datum 60 ft lower. Oct. 1, 1966, to Aug. 14, 1972, water-stage recorder at present site at datum 15 ft lower.

AVERAGE DISCHARGE.--53 years, 2,381 cfs (31.38 inches per year, 1,725,000 acre-ft per year); 15-year base period (1952-67), 2,480 cfs.

EXTREMES.--Current year: Maximum discharge, 21,600 cfs June 1 (gage height, 13.53 ft); minimum discharge, 268 cfs Dec. 7 (gage height, 4.26 ft).
Period of record: Maximum discharge, 53,000 cfs Dec. 23, 1933, computed on basis of slope between gages downstream; maximum gage height, 18.1 ft Apr. 18, 1938, from floodmark, present datum; minimum discharge, 91 cfs Nov. 27, 1952; minimum gage height, 3.43 ft Dec. 5, 1928, present datum.

REMARKS.--Records good except for winter periods, which are fair. No diversion above gage.

REVISIONS.--WSP 1182: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 26 to Jan. 18, Jan. 27 to Feb. 19)

4.4	320	8.0	4,490
5.0	610	9.5	7,500
5.5	960	11.5	13,000
6.5	2,120	13.5	23,100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	500	490	430	430	950	5,900	4,340	5,380	20,400	4,100	1,030	505
2	485	485	316	400	850	4,420	5,380	5,940	18,500	3,830	987	545
3	475	455	400	380	750	3,540	5,220	6,660	16,500	3,590	996	530
4	465	520	465	400	740	2,930	5,160	8,010	13,800	3,390	928	520
5	460	480	435	430	820	2,790	4,870	9,830	13,100	3,290	888	500
6	455	450	455	450	780	4,200	6,880	11,600	13,700	3,290	852	510
7	445	500	344	460	730	4,690	7,960	11,000	14,600	3,370	838	520
8	440	490	336	450	700	3,980	6,620	10,700	14,700	3,170	810	510
9	435	485	455	440	680	3,470	5,580	9,950	14,100	3,020	789	500
10	425	485	525	420	670	3,810	4,900	9,200	13,400	2,750	761	490
11	420	520	540	400	660	5,320	4,620	8,380	12,300	2,700	740	490
12	415	515	556	370	700	8,150	4,320	9,030	9,850	2,480	733	490
13	455	580	515	350	850	8,330	3,930	12,500	8,080	2,370	719	520
14	622	568	510	320	1,300	10,200	3,570	17,100	6,990	2,300	705	510
15	495	515	520	340	1,200	8,180	3,490	19,700	6,820	2,150	789	500
16	445	490	556	390	1,400	8,200	3,570	19,600	7,210	2,040	789	510
17	430	475	540	480	1,600	10,300	3,330	19,900	7,480	1,940	677	520
18	425	460	604	640	1,900	12,200	3,090	18,500	6,930	1,860	640	520
19	470	450	592	912	1,700	10,500	2,990	15,400	6,320	1,960	634	520
20	782	450	556	3,210	2,190	9,130	3,120	16,600	5,820	1,860	622	540
21	592	480	545	5,900	2,060	8,060	3,280	18,100	5,600	1,820	598	580
22	490	465	550	3,290	2,040	7,540	3,210	17,200	5,220	1,720	592	750
23	465	425	616	2,020	1,830	9,280	3,310	15,300	5,200	1,550	586	710
24	490	475	610	1,380	1,650	7,980	4,150	13,600	4,890	1,470	568	860
25	480	525	556	1,100	1,440	6,480	4,420	11,200	4,620	1,410	562	1,000
26	652	485	490	900	1,280	5,360	4,320	9,730	4,410	1,330	550	820
27	740	490	410	740	2,520	4,600	5,050	10,500	4,100	1,270	550	720
28	485	495	400	800	8,830	4,100	6,660	13,900	3,910	1,210	530	650
29	336	495	420	900	8,900	3,670	6,080	17,300	4,050	1,150	520	720
30	445	485	430	1,100	------	3,360	5,560	19,200	4,150	1,100	525	810
31	510	------	440	1,150	------	3,340	------	20,600	------	1,060	505	------
TOTAL	15,229	14,683	15,117	30,952	51,720	194,010	138,980	411,610	276,750	70,550	22,013	17,870
MEAN	491	489	488	998	1,783	6,258	4,633	13,280	9,225	2,276	710	596
MAX	782	580	616	5,900	8,900	12,200	7,960	20,600	20,400	4,100	1,030	1,000
MIN	336	425	316	320	660	2,790	2,990	5,380	3,910	1,060	505	490
AC-FT	30,210	29,120	29,980	61,390	102,600	384,800	275,700	816,400	548,900	139,900	43,660	35,450

CAL YR 1971 TOTAL 1,257,278 MEAN 3,445 MAX 22,200 MIN 316 AC-FT 2,494,000
WTR YR 1972 TOTAL 1,259,484 MEAN 3,441 MAX 20,600 MIN 316 AC-FT 2,498,000

PEAK DISCHARGE (BASE, 8,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	0130	24.92	8,750	5- 5	0815	26.46	12,000
2-28	2145	26.37	13,200	5-17	0545	28.36	20,500
3-18	0630	26.45	13,000	6- 1	0645	28.53	21,600

12414900 St. Maries River near Santa, Idaho

LOCATION.--Lat 47°10'35", long 116°29'30", in SE¼NW¼ sec.8, T.44 N., R.1 W., Benewah County, on right bank 450 ft upstream from bridge on U.S. Highway 95 Alternate, 0.3 mile upstream from Santa Creek, 2.7 miles northwest of Santa, and at mile 24.6.
DRAINAGE AREA.--275 sq mi.
PERIOD OF RECORD.--October 1965 to current year.
GAGE.--Water-stage recorder. Datum of gage is 2,574.56 ft above mean sea level.
AVERAGE DISCHARGE.--7 years, 371 cfs (18.27 inches per year, 268,800 acre-ft per year).
EXTREMES.--Current year: Maximum discharge, 6,290 cfs Jan. 21 (gage height, 9.33 ft); minimum, 43 cfs Nov. 6 (gage height, 3.47 ft).
Period of record: Maximum discharge, 8,000 cfs Feb. 20, 1968 (gage height, 9.90 ft; minimum, 23 cfs Nov. 26, 1967 (gage height, 3.42 ft).
REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in WRD for Idaho 1968, 1969, and 1970.

Water year	Date	Discharge (cfs)	Gage height (feet)
1968	Feb. 20, 1968	8,000	9.90
1969	Apr. 24, 1969	4,380	8.65
1970	Jan. 23, 1970	4,480	8.69

REMARKS.--Records good except those for November to January, which are fair.
REVISIONS.--Revised figures of discharge, in cubic feet per second, for high-water period in water year 1968, superseding figures published in WRD for Idaho 1968, are given below:

1968

Feb. 19	3,860	Feb. 22	3,190
20	6,260	23	2,360
21	3,500	24	2,360

FEB. 1968: TOTAL 30,833 MEAN 1,063 MAX 6,260 MIN 120 CFSM 3.87 IN 4.17 AC-FT 61,160
WTR YR 1968: TOTAL 89,079 MEAN 243 MAX 6,260 MIN 27 CFSM .884 IN 12.05 AC-FT 176,700

REVISED PEAK DISCHARGE.--1968: Feb. 20 (unknown) 8,000 cfs (9.90 ft).
1969: Apr. 6 (1000) 2,720 cfs (7.75 ft); Apr. 24 (unknown) 4,380 cfs (8.65 ft); May 11 (1100) 1,770 cfs (7.00 ft).
1970: Jan. 23 (1200) 4,480 cfs (8.69 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	78	120	110	640	1,960	1,260	1,060	1,100	230	105	67
2	77	100	89	105	560	1,420	1,660	1,080	984	220	101	68
3	74	85	90	100	670	1,260	1,450	1,190	888	211	97	67
4	71	93	91	100	435	1,010	1,360	1,350	798	208	95	67
5	68	96	92	110	440	1,060	1,320	1,570	722	202	93	65
6	66	75	88	115	435	1,730	2,020	1,750	672	197	90	65
7	67	73	90	120	435	1,590	2,470	1,920	655	197	88	68
8	67	77	100	120	453	1,270	1,930	1,950	655	191	88	65
9	66	82	110	115	515	1,140	1,540	2,310	672	188	86	64
10	66	93	120	112	490	1,390	1,310	2,170	622	185	81	63
11	65	103	120	110	466	2,020	1,250	1,920	633	191	79	62
12	63	108	115	110	458	2,950	1,320	1,850	573	197	79	61
13	66	150	115	105	796	3,540	1,210	1,950	494	175	79	67
14	94	136	115	100	976	5,120	1,020	2,170	450	164	79	65
15	81	112	115	100	820	3,360	1,000	2,360	408	157	84	63
16	72	101	120	105	1,020	3,090	1,210	2,230	386	149	114	62
17	70	98	130	105	1,020	3,880	1,090	2,190	373	142	108	64
18	68	93	135	110	1,060	4,300	952	2,060	360	140	90	65
19	88	91	140	400	1,110	4,000	848	1,610	336	169	81	64
20	245	89	140	1,000	1,050	3,040	926	1,530	320	162	79	68
21	120	96	140	4,220	992	2,440	968	1,520	312	175	76	81
22	93	93	140	2,540	918	2,200	1,050	1,640	301	188	73	97
23	85	77	150	1,420	855	2,710	952	1,610	320	149	101	91
24	100	110	155	925	790	2,260	1,100	1,380	312	137	95	122
25	100	148	155	694	688	1,870	1,160	1,170	301	133	81	131
26	118	130	145	560	616	1,430	1,120	1,020	298	127	74	101
27	153	140	135	560	1,350	1,200	1,170	976	283	120	74	88
28	93	158	130	540	3,900	1,060	1,440	1,000	265	114	70	79
29	67	161	125	530	3,320	992	1,340	1,070	248	110	70	95
30	66	166	120	515	------	920	1,170	1,130	233	108	67	106
31	70	------	115	598	------	928	------	1,140	------	106	65	------
TOTAL	2,684	3,212	3,745	16,454	27,278	67,140	38,616	49,876	14,974	5,142	2,642	2,291
MEAN	86.6	107	121	531	941	2,166	1,287	1,609	499	166	85.2	76.4
MAX	245	166	155	4,220	3,900	5,120	2,470	2,360	1,100	230	114	131
MIN	63	73	88	100	435	920	848	976	233	106	65	61
CFSM	.31	.39	.44	1.93	3.42	7.88	4.68	5.85	1.81	.60	.31	.28
IN.	.36	.43	.51	2.23	3.69	9.08	5.22	6.75	2.03	.70	.36	.31
AC-FT	5,320	6,370	7,430	32,640	54,110	133,200	76,590	98,930	29,700	10,200	5,240	4,540

CAL YR 1971 TOTAL 164,249 MEAN 450 MAX 1,980 MIN 59 CFSM 1.64 IN 22.22 AC-FT 325,800
WTR YR 1972 TOTAL 234,054 MEAN 639 MAX 5,120 MIN 61 CFSM 2.32 IN 31.66 AC-FT 464,200

PEAK DISCHARGE (BASE, 1,500 CFS)

12415500 Coeur d'Alene Lake at Coeur d'Alene, Idaho

LOCATION.--Lat 47°39'55", long 116°46'05", in NW¼SE¼ sec.24, T.50 N., R.4 W., Kootenai County, 500 ft southwest of south end of Eleventh Street, Coeur d'Alene, and 113.1 miles upstream from mouth of Spokane River.

DRAINAGE AREA.--3,700 sq mi, approximately.

PERIOD OF RECORD.--April 1903 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,100.00 ft above mean sea level, referred to originally accepted elevation (2,157.40 ft) of Geological Survey bench mark in southeast corner of Idaho First National Bank Building (see WSP 882). Gage heights reduced to elevations above mean sea level, based on the above datum. Latest adjusted datum of gage is 2,097.00 ft above mean sea level. Apr. 26, 1903, to Feb. 14, 1905, nonrecording gage at mouth of St. Joe River at datum about 18.7 ft higher. Feb. 15, 1905, to Mar. 23, 1921, nonrecording gage and Mar. 24, 1921, to Dec. 22, 1930, water-stage recorder, at Johnson Wharf 800 ft southeast of railroad station and 1 mile northwest of present site at datum 19.75 ft higher. Dec. 23, 1930, to Feb. 9, 1931, nonrecording gage at present site and datum.

EXTREMES.--Current year: Maximum contents, 552,800 acre-ft May 26 (elevation, 2,133.97 ft); minimum, 47,500 acre-ft Jan. 18, 19 (elevation, 2,121.77 ft).
Period of record: Maximum contents, 834,900 acre-ft Dec. 25, 1933 (elevation, 2,139.05 ft); minimum, 2,700 acre-ft below zero of contents table Oct. 10-12, 1904, Sept. 24, 25, 1905, Oct. 14 to Nov. 3, 1906 (elevation, 2,119.9 ft).
Maximum contents known prior to 1903, 753,300 acre-ft May 31, 1894 (elevation, 2,137.6 ft, from high-water marks).

REMARKS.--The Washington Water Power Co. stores water in Coeur d'Alene Lake by regulation at Post Falls Dam for power generation at Post Falls and other plants on Spokane River. Storage is within natural range of lake stage. Contents given herein are those above elevation 2,120.0 ft. Capacity of lake between elevations 2,120 and 2,140 ft, 889,000 acre-ft.

COOPERATION.--Water-stage-recorder graph furnished by Washington Water Power Co.

Capacity table (elevation, in feet, and contents, in acre-feet)

2,122.0	53,700	2,130.0	339,700
2,124.0	107,900	2,132.0	446,000
2,126.0	162,900	2,134.0	554,400
2,128.0	238,500		

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.72	25.75	24.22	22.73	25.75	29.28	29.96	27.72	32.85	27.00	27.92	27.46
2	26.68	25.70	24.11	22.67	25.57	29.60	29.82	27.79	32.97	27.21	27.92	27.43
3	26.62	25.71	23.99	22.67	25.38	29.62	29.74	27.90	32.92	27.42	27.94	27.39
4	26.59	25.61	23.95	22.50	25.19	29.43	29.64	28.09	32.73	27.61	27.97	27.35
5	26.58	25.59	23.93	22.42	25.03	29.26	29.58	28.39	32.45	27.72	27.96	27.36
6	26.52	25.51	23.87	22.32	24.88	29.21	29.60	28.85	32.18	27.81	27.95	27.26
7	26.47	25.50	23.78	22.27	24.72	29.29	29.81	29.34	31.96	27.87	27.94	27.23
8	26.42	25.45	23.77	22.27	24.59	29.27	29.98	29.79	31.80	27.90	27.94	27.24
9	26.38	25.40	23.67	22.17	24.44	29.15	29.96	30.17	31.68	27.98	27.93	27.24
10	26.33	25.36	23.59	22.12	24.32	29.06	29.84	30.43	31.52	28.01	27.92	27.19
11	26.29	25.32	23.48	22.03	24.18	29.26	29.65	30.56	31.34	28.00	27.90	27.18
12	26.25	25.31	23.42	22.01	24.14	29.88	29.50	30.64	31.10	27.95	27.87	27.21
13	26.25	25.30	23.39	21.97	24.25	30.64	29.27	30.81	30.75	27.94	27.87	27.23
14	26.18	25.28	23.31	21.92	24.44	31.43	29.01	31.20	30.34	27.91	27.89	27.26
15	26.09	25.24	23.23	21.89	24.55	32.04	28.72	31.78	29.91	27.91	27.97	27.27
16	26.04	25.20	23.13	21.85	24.76	32.38	28.51	32.38	29.61	27.89	28.03	27.25
17	25.99	25.13	23.05	21.80	25.10	32.76	28.29	32.98	29.30	27.93	28.02	27.24
18	25.94	25.08	23.03	21.77	25.33	33.29	28.07	33.36	29.01	27.91	27.98	27.19
19	26.00	25.03	23.01	21.87	25.52	33.73	27.83	33.56	28.71	27.90	28.00	27.19
20	25.99	24.96	23.02	22.75	25.74	33.89	27.62	33.57	28.43	27.91	27.97	27.14
21	25.97	24.90	22.99	24.44	25.92	33.83	27.45	33.65	28.13	27.95	27.96	27.15
22	25.94	24.83	23.00	25.75	26.08	33.61	27.31	33.71	27.87	27.90	27.95	27.13
23	25.94	24.80	22.99	26.33	26.13	33.48	27.20	33.69	27.63	27.86	27.96	27.12
24	25.90	24.76	23.00	26.53	26.14	33.44	27.16	33.58	27.41	27.85	27.94	27.13
25	25.90	24.71	22.99	26.62	26.03	33.24	27.15	33.34	27.18	27.88	27.88	27.12
26	25.86	24.66	23.00	26.52	25.89	32.88	27.15	32.97	26.96	27.93	27.84	27.09
27	25.87	24.59	22.95	26.38	26.16	32.40	27.20	32.60	26.74	27.95	27.78	27.08
28	25.86	24.55	22.90	26.22	27.30	31.87	27.37	32.36	26.52	27.94	27.73	27.05
29	25.80	24.46	22.84	26.14	28.49	31.34	27.55	32.32	26.56	27.94	27.68	27.02
30	25.77	24.36	22.85	26.05	------	30.81	27.66	32.41	26.80	27.93	27.59	26.99
31	25.79	------	22.78	25.91	------	30.32	------	32.63	------	27.92	27.50	------
MEAN	26.16	25.14	23.33	23.58	25.38	31.28	28.59	31.37	29.78	27.83	27.89	27.21
MAX	26.72	25.75	24.22	26.62	28.49	33.89	29.98	33.71	32.97	28.01	28.03	27.46
MIN	25.77	24.36	22.78	21.77	24.14	29.06	27.15	27.72	26.52	27.00	27.50	26.99
(†)	157,000	117,700	74,800	160,400	262,400	356,500	222,500	480,000	188,000	234,700	215,400	194,900
(‡)	-29,200	-39,300	-42,900	+85,600	+102,000	+94,100	-134,000	+257,500	-292,000	+46,700	-19,300	-20,500

CAL YR 1971..... ‡ -1,600
WTR YR 1972..... ‡ -8,700

† Contents, in acre-feet, at end of month.
‡ Change in contents, in acre-feet.
NOTE.--Add 2,100 ft to obtain elevation above mean sea level.

12416000 Hayden Creek below North Fork, near Hayden Lake, Idaho
(Hydrologic bench-mark station)

LOCATION.--Lat 46°49'22", long 116°39'10", in NW¼SW¼ sec.25, T.52 N., R.3 W., Kootenai County, on right bank 0.3 mile downstream from confluence of East Fork and North Fork, and 7.5 miles northeast of Hayden Lake Post Office.

DRAINAGE AREA.--22.0 sq mi.

PERIOD OF RECORD.--April 1948 to December 1953, October 1958 to September 1959, September 1961 to September 1965 (annual maximum), October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,370 ft (from topographic map). April 22, 1948, to Nov. 1, 1948, nonrecording gage and Nov. 2, 1948, to June 26, 1951, water-stage recorder at site 200 ft downstream at datum 0.98 ft lower. June 27, 1951, to Dec. 4, 1953, Oct. 1, 1958, to Sept. 30, 1959, water-stage recorder, Sept. 16, 1961, to Sept. 30, 1965, crest-stage gage, at datum 0.41 ft higher.

AVERAGE DISCHARGE.--13 years (1948-53, 1958-59, 1965-72), 31.9 cfs (19.69 inches per year, 23,110 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 770 cfs Mar. 14 (gage height, 4.26 ft); minimum, 3.9 cfs Nov. 6, Dec. 6 (gage height, 2.37 ft).
Period of record: Maximum discharge, 790 cfs Dec. 23, 1964 (gage height, 4.56 ft, present site and datum), from rating curve extended above 270 cfs on basis of slope-area measurement; maximum gage height, 4.93 ft Feb. 11, 1951 (ice jam), site and datum then in use; minimum discharge recorded, 2.4 cfs Dec. 2, 1969 (gage height, 2.26 ft).

REMARKS.--Records good except those for winter period, which are fair. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

2.3	2.9	2.9	39
2.4	4.3	3.1	74
2.5	6.4	3.4	164
2.6	10.0	3.7	300
2.7	16.5	4.1	590

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	5.4	8.2	4.5	11	168	72	66	42	14	7.2	5.3
2	5.6	4.7	7.5	4.4	11	117	87	64	38	13	7.4	5.2
3	5.4	4.5	7.5	4.3	11	86	92	65	36	12	6.8	5.2
4	5.4	6.2	6.4	4.3	11	64	87	72	33	12	6.6	5.1
5	5.4	5.6	7.1	5.8	11	68	84	85	29	12	6.4	5.1
6	5.4	4.7	6.0	6.2	12	102	105	92	27	12	6.3	5.1
7	5.4	4.7	4.5	6.2	12	108	117	88	25	12	6.2	5.1
8	5.1	4.7	5.0	6.2	13	92	102	80	27	11	6.1	5.2
9	5.1	4.9	5.4	6.0	11	77	82	79	25	12	6.0	5.5
10	5.1	6.2	5.8	6.2	11	87	72	83	23	11	5.9	5.3
11	5.1	6.4	5.6	6.2	13	204	70	84	25	12	5.9	5.1
12	5.1	8.9	5.4	5.8	16	398	68	84	23	11	5.9	6.0
13	5.8	11	5.7	4.8	33	462	64	91	21	11	5.9	5.5
14	5.6	9.3	6.0	4.5	33	582	62	96	19	9.5	6.1	5.3
15	5.4	8.2	6.2	5.2	30	285	62	92	18	9.4	7.7	5.1
16	5.4	7.8	9.6	5.8	38	227	62	78	19	9.1	9.2	5.1
17	5.1	7.1	7.8	6.2	45	307	58	77	17	9.0	6.7	5.1
18	5.1	7.1	11	6.0	45	346	56	70	16	9.0	6.3	5.0
19	7.5	6.4	8.9	5.8	45	259	54	59	16	8.8	6.1	5.1
20	7.2	6.8	8.2	140	79	196	54	57	15	8.7	6.0	4.9
21	5.8	6.8	7.8	180	108	143	64	57	18	8.7	5.8	6.7
22	5.6	6.4	9.3	86	86	126	68	57	17	8.6	7.4	6.5
23	5.8	6.0	11	56	66	168	70	57	17	8.4	6.7	8.5
24	7.1	7.5	11	38	54	157	70	53	16	8.4	6.4	7.1
25	6.0	11	9.0	30	48	123	70	48	17	8.2	6.2	6.1
26	6.4	8.9	7.6	20	44	97	68	44	17	7.9	6.0	5.7
27	5.6	9.6	6.3	18	92	79	68	41	16	7.8	5.7	5.5
28	4.9	10	5.8	16	285	72	77	42	16	7.6	5.7	5.4
29	4.7	9.6	5.3	14	279	68	79	43	15	7.5	5.6	5.1
30	4.7	9.3	5.0	13	------	64	70	43	14	7.4	5.4	5.2
31	4.7	------	4.7	12	------	62	------	44	------	7.3	5.3	------
TOTAL	172.5	215.7	220.6	727.4	1,553	5,394	2,214	2,091	657	306.3	196.9	166.1
MEAN	5.56	7.19	7.12	23.5	53.6	174	73.8	67.5	21.9	9.88	6.35	5.54
MAX	7.5	11	11	180	285	582	117	96	42	14	9.2	8.5
MIN	4.7	4.5	4.5	4.3	11	62	54	41	14	7.3	5.3	4.9
CFSM	.25	.33	.32	1.07	2.44	7.91	3.35	3.07	1.00	.45	.29	.25
IN.	.29	.36	.37	1.23	2.63	9.12	3.74	3.54	1.11	.52	.33	.28
AC-FT	342	428	438	1,440	3,080	10,700	4,390	4,150	1,300	608	391	329

CAL YR 1971 TOTAL 10,971.1 MEAN 30.1 MAX 146 MIN 4.5 CFSM 1.37 IN 18.55 AC-FT 21,760
WTR YR 1972 TOTAL 13,914.5 MEAN 38.0 MAX 582 MIN 4.3 CFSM 1.73 IN 23.53 AC-FT 27,600

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-20	1430	3.67	274	3-14	0600	4.26	770
2-28	2230	3.71	326				

12417000 Hayden Lake at Hayden Lake, Idaho

LOCATION.--Lat 47°46'02", long 116°45'12", 300 ft north of center of sec.18, T.51 N., R.3 W., Kootenai County, at Avondale pumping plant, 1.6 miles northeast of Hayden Lake Post Office.

DRAINAGE AREA.--62.3 sq mi.

PERIOD OF RECORD.--May 1920 to current year.

GAGE.--Nonrecording gage read once daily. Datum of gage is 2,200.21 ft above mean sea level. Prior to Oct. 1, 1925, at datum 30.35 ft higher. Oct. 1, 1925, to Mar. 26, 1931, at datum 21.60 ft higher.

EXTREMES.--Current year: Maximum gage height observed, 40.54 ft Mar. 25, 26; minimum observed, 35.56 ft Sept. 30.
Period of record: Maximum gage height observed, 42.46 ft Apr. 22, 1956; minimum observed, 19.38 ft Dec. 16, 1931.

REMARKS.--Water is pumped from lake for irrigation and domestic supply. Lake has no natural surface outlet. Some surface flow leaves the lake during high stages (most years) through a controlled outlet in the dike at the southeast corner. Due to the permeability of the lakebed and outlet area, the excess flow leaves the area by infiltration to the ground water of Rathdrum Prairie.

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.28	35.84	35.62	35.72	36.24	37.72	40.32	39.98	39.68	38.68	37.52	36.48
2	36.26	35.82	35.60	35.72	36.24	37.90	40.30	39.96	39.62	38.66	37.50	36.46
3	36.26	35.80	35.60	35.72	36.24	37.96	40.26	39.94	39.56	38.58	37.44	36.42
4	36.24	35.78	35.60	35.70	36.26	38.02	40.24	39.94	39.52	38.56	37.40	36.38
5	36.20	35.76	35.62	35.68	36.26	38.08	40.24	39.92	39.46	38.52	37.36	36.34
6	36.20	35.74	35.64	35.66	36.26	38.14	40.26	39.92	39.40	38.48	37.30	36.30
7	36.18	35.72	35.62	35.64	36.26	38.20	40.28	39.92	39.34	38.46	37.24	36.26
8	36.16	35.70	35.60	35.64	36.26	38.26	40.32	39.94	39.30	38.38	37.20	36.20
9	36.14	35.70	35.68	35.64	36.30	38.32	40.32	39.98	39.24	38.34	37.14	36.14
10	36.12	35.70	35.66	35.64	36.30	38.36	40.30	40.02	39.18	38.30	37.10	36.08
11	36.10	35.70	35.66	35.64	36.30	38.46	40.28	40.06	39.12	38.28	37.06	36.02
12	36.10	35.70	35.68	35.64	36.32	38.72	40.28	40.06	39.08	38.24	37.02	35.98
13	36.08	35.70	35.68	35.64	36.36	39.04	40.28	40.04	39.06	38.22	36.96	35.94
14	36.08	35.70	35.70	35.64	36.36	39.36	40.28	40.06	39.02	38.20	36.94	35.92
15	36.04	35.70	35.70	35.64	36.38	39.64	40.26	40.06	38.96	38.18	36.92	35.88
16	36.02	35.68	35.70	35.62	36.42	39.80	40.24	40.04	38.94	38.10	36.90	35.86
17	35.98	35.66	35.70	35.60	36.46	39.94	40.20	40.06	38.90	38.04	36.88	35.82
18	35.96	35.66	35.70	35.58	36.52	40.10	40.20	40.12	38.88	38.00	36.86	35.78
19	35.94	35.64	35.70	35.60	36.56	40.28	40.16	40.12	38.86	37.96	36.84	35.74
20	35.96	35.64	35.70	35.62	36.64	40.40	40.14	40.10	38.84	37.92	36.82	35.70
21	35.96	35.62	35.72	35.86	36.74	40.44	40.12	40.08	38.82	37.90	36.78	35.68
22	35.96	35.60	35.74	36.02	36.84	40.46	40.10	40.06	38.82	37.88	36.74	35.66
23	35.94	35.60	35.76	36.16	36.94	40.48	40.08	40.02	38.80	37.84	36.72	35.64
24	35.96	35.62	35.76	36.24	36.98	40.50	40.06	39.98	38.80	37.82	36.70	35.64
25	35.94	35.62	35.74	36.24	37.06	40.54	40.04	39.96	38.78	37.80	36.68	35.68
26	35.94	35.62	35.74	36.24	37.06	40.54	40.04	39.94	38.78	37.76	36.64	35.64
27	35.92	35.62	35.74	36.22	37.16	40.50	40.02	39.92	38.76	37.72	36.62	35.62
28	35.90	35.62	35.76	36.22	37.26	40.48	40.00	39.86	38.70	37.68	36.60	35.60
29	35.86	35.64	35.74	36.22	37.50	40.44	40.00	39.82	38.70	37.66	36.54	35.58
30	35.84	35.64	35.72	36.24	------	40.40	39.98	39.76	38.68	37.62	36.52	35.56
31	35.80	------	35.74	36.24	------	40.34	------	39.72	------	37.58	36.50	------
MEAN	36.04	35.68	35.69	35.83	36.57	39.41	40.19	39.98	39.05	38.11	36.95	35.93
MAX	36.28	35.84	35.76	36.24	37.50	40.54	40.32	40.12	39.68	38.68	37.52	36.48
MIN	35.80	35.60	35.60	35.58	36.24	37.72	39.98	39.72	38.68	37.58	36.50	35.56

12418000 Rathdrum Prairie Canal at Huetter, Idaho

LOCATION.--Lat 47°42'35", long 116°52'05", in SE¼NE¼ sec.6, T.50 N., R.4 W., Kootenai County, on left bank 815 ft downstream from outlet of discharge pipe, 0.6 mile north of pumping plant, and 0.8 mile northwest of Huetter.

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for October 1945 to March 1946, published in WSP 1316.

GAGE.--Water-stage recorder. Datum of gage is 2,272.02 ft above mean sea level (Bureau of Reclamation bench mark). Prior to Oct. 5, 1967, water-stage recorder at site 365 ft upstream at datum 1.00 ft higher.

EXTREMES.--Period of record: Maximum daily discharge, 66 cfs June 29 to July 2, 1947; no flow for long periods in each year.

REMARKS.--Records good. Canal carries water which is pumped from Spokane River in sec.7, T.50 N., R.4 W., for irrigation of first unit of Rathdrum Prairie project (about 3,000 acres).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0							0	47	14	34	51
2	0							12	47	45	34	51
3	0							17	47	46	51	51
4	0							18	46	47	51	51
5	0							18	48	48	52	51
6	0							18	49	48	52	51
7	0							19	49	47	52	50
8	0							1.6	49	47	52	50
9	0							7.0	49	48	52	50
10	0							23	49	48	50	50
11	0							23	49	48	50	50
12	0							23	49	47	50	50
13	0							26	49	48	50	49
14	0							26	49	48	35	48
15	0							26	48	48	27	50
16	0							27	48	43	1.0	49
17	0							28	48	49	33	48
18	0							28	47	49	51	48
19	0							29	47	49	52	48
20	3.0							29	47	49	52	48
21	0							29	46	50	52	20
22	0							29	45	50	28	0
23	0							28	44	49	0	0
24	0							28	43	51	32	0
25	0							28	42	52	50	0
26	0							27	7.1	52	51	0
27	0							25	0	52	51	0
28	0							28	0	52	50	0
29	0							39	0	51	50	0
30	0				------			48	0	51	50	0
31	0	------			------		------	47	------	51	50	------
TOTAL	3.0	0	0	0	0	0	0	754.6	1,188.1	1,477	1,345.0	1,014
MEAN	.097	0	0	0	0	0	0	24.3	39.6	47.6	43.4	33.8
MAX	3.0	0	0	0	0	0	0	48	49	52	52	51
MIN	0	0	0	0	0	0	0	0	0	14	0	0
AC-FT	6.0	0	0	0	0	0	0	1,500	2,360	2,930	2,670	2,010

CAL YR 1971 TOTAL 5,822.0 MEAN 15.9 MAX 56 MIN 0 AC-FT 11,550
WTR YR 1972 TOTAL 5,781.7 MEAN 15.8 MAX 52 MIN 0 AC-FT 11,470

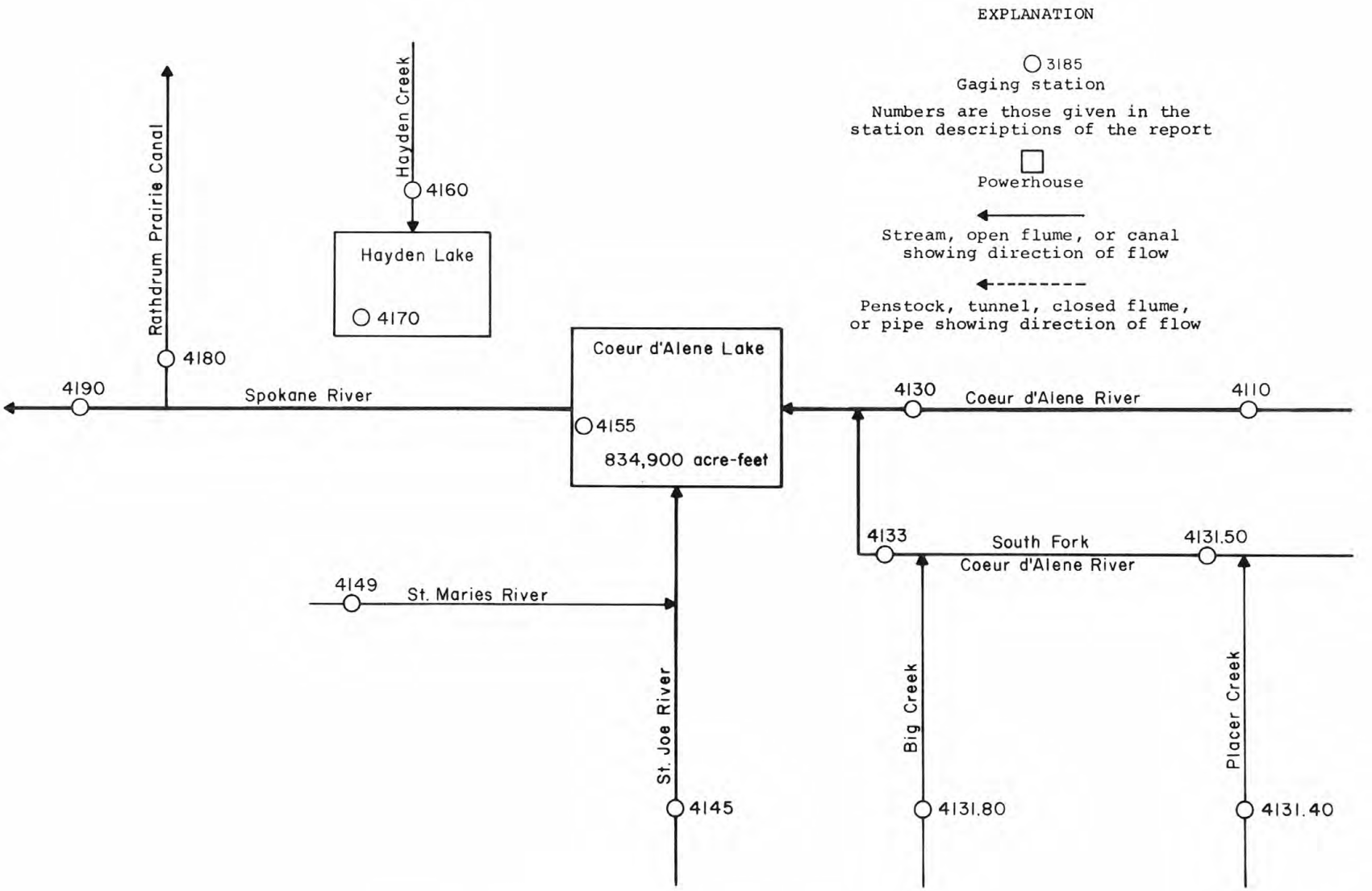


FIGURE 4. Schematic diagram showing Spokane River basin.

12419000 Spokane River near Post Falls, Idaho

LOCATION.--Lat 47°42'10", long 116°58'40", in SW¼SW¼ sec.4, T.50 N., R.5 W., Kootenai County, on right bank 1 mile downstream from powerplant of Washington Water Power Co., 1.5 miles southwest of Post Falls, and at mile 100.7.

DRAINAGE AREA.--3,840 sq mi, approximately, of which about 122 sq mi in the vicinity of Hayden Lake is noncontributing to this station.

PERIOD OF RECORD.--October 1912 to current year (prior to January 1913 monthly discharge only, published in WSP 870 and 1736). Prior to October 1949, published as "at Post Falls".

GAGE.--Water-stage recorder. Datum of gage is 2,050 ft above mean sea level, referenced to same datum as gage on Coeur d'Alene Lake at Coeur d'Alene (see sta 12415500). Datum of gage is 2,053 ft above mean sea level. Jan. 1, 1913, to Nov. 21, 1920, nonrecording gage and Nov. 22, 1920, to Sept. 30, 1964, water-stage recorder at present site or 0.6 or 0.8 mile upstream at datum 50 ft lower than present datum.

AVERAGE DISCHARGE.--River only, 60 years, 6,315 cfs (4,575,000 acre-ft per year); 15-year base period (1952-67), 6,697 cfs; combined river and diversions above gage, 60 years, 6,411 cfs (4,645,000 acre-ft per year); 15-year base period (1952-67), 6,794 cfs.

EXTREMES.--Current year: Maximum discharge, 34,000 cfs May 23 (gage height, 22.22 ft); minimum, 78 cfs Sept. 15, (gage height, 4.94 ft).
Period of record: Maximum discharge, 50,100 cfs when recorder was not operating Dec. 25, 1933 (determined from unpublished records collected by Washington Water Power Co. for station at Liberty Bridge); minimum, 78 cfs Aug. 15, 1968, Jan. 15, 16, 1971; Sept. 15, 1972; minimum gage height, 4.94 ft Jan. 15, 16, 1971, Sept. 15, 1972.

REMARKS.--Records excellent except those for period of no gage-height record, which are good. Rathdrum Prairie Canal (see sta 12418000) diverts water above gage for irrigation. Figures of daily discharge do not include water diverted by this canal. Flow regulated by dam at Post Falls and affected by storage in Coeur d'Alene Lake (see sta 12415500).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,850	1,980	3,890	2,520	7,590	18,300	22,100	14,500	29,700	2,380	1,400	1,650
2	1,840	2,080	3,950	2,630	7,570	19,900	21,000	14,600	30,300	1,990	1,400	1,650
3	1,830	2,070	3,250	2,930	7,560	20,500	20,700	14,900	30,500	1,670	1,350	1,650
4	1,830	2,070	2,690	2,940	7,550	20,200	20,400	15,200	30,100	1,880	1,450	1,640
5	940	1,920	2,690	2,880	7,480	19,800	20,200	15,800	29,400	2,760	1,450	1,620
6	2,160	2,060	2,720	2,960	7,220	19,300	20,000	16,800	28,400	3,400	1,450	1,520
7	1,840	2,080	2,720	2,680	6,470	19,400	20,400	18,200	27,700	4,170	1,450	758
8	1,840	2,080	2,710	2,810	6,010	19,500	20,900	19,600	27,000	3,770	1,350	955
9	1,830	2,080	2,720	2,720	6,040	19,200	21,200	20,900	26,600	3,070	1,350	682
10	1,840	2,070	2,740	2,570	6,090	18,900	21,100	21,900	26,300	3,910	1,350	918
11	1,840	2,070	2,750	2,590	5,970	19,000	20,700	22,600	25,700	4,640	1,350	676
12	1,850	2,080	2,750	2,430	5,840	20,100	20,100	22,800	25,100	4,840	1,200	978
13	925	2,070	2,760	2,400	5,220	22,200	19,500	22,900	24,100	4,670	900	669
14	2,350	2,080	2,760	2,420	5,290	24,700	18,900	23,800	22,900	4,350	700	85
15	2,020	2,260	2,770	2,360	6,130	27,200	18,100	25,700	21,500	3,660	700	461
16	1,850	2,390	2,780	2,300	6,450	28,300	17,500	27,500	20,400	3,050	1,050	963
17	1,850	2,390	2,680	2,440	6,960	29,300	16,800	29,700	19,400	2,540	1,600	978
18	1,850	2,390	2,400	2,330	7,520	30,600	16,100	31,200	18,600	2,750	1,150	1,120
19	1,860	2,380	2,420	2,320	8,020	32,200	15,500	32,000	17,800	3,050	1,200	1,240
20	1,860	2,370	2,420	2,720	8,360	33,200	14,900	32,300	16,900	3,050	1,200	1,250
21	1,850	2,370	2,420	4,450	8,870	33,100	14,300	32,600	16,100	3,200	1,600	1,330
22	1,840	2,390	2,420	7,280	9,560	32,900	13,800	32,900	15,300	4,000	1,300	1,440
23	1,850	2,380	2,430	9,540	10,100	32,400	13,300	33,000	14,600	3,400	1,370	1,480
24	1,850	2,380	2,430	8,510	10,200	31,900	13,200	32,800	13,900	2,500	1,570	1,480
25	1,860	2,550	2,440	7,840	10,100	31,700	13,100	32,200	13,000	1,500	2,120	1,480
26	1,860	2,830	2,450	7,710	9,860	30,900	13,100	31,300	12,600	1,500	2,080	1,530
27	1,860	3,020	2,470	7,670	9,800	30,000	13,100	30,100	12,100	1,700	2,070	1,480
28	1,850	3,010	2,470	7,620	11,700	28,500	13,400	29,000	11,300	2,000	2,060	1,270
29	1,860	3,450	2,480	7,620	15,300	26,800	13,900	28,400	5,530	2,000	2,060	1,480
30	1,850	3,800	2,490	7,610	------	25,100	14,300	28,600	2,520	2,000	2,110	1,620
31	1,860	------	2,510	7,600	------	23,400	------	29,100	------	1,900	1,900	------
TOTAL	56,445	71,150	83,580	135,400	230,830	788,500	521,600	782,900	615,350	91,300	45,290	36,053
MEAN	1,821	2,372	2,696	4,368	7,960	25,440	17,390	25,250	20,510	2,945	1,461	1,202
MAX	2,350	3,800	3,950	9,540	15,300	33,200	22,100	33,000	30,500	4,840	2,120	1,650
MIN	925	1,920	2,400	2,300	5,220	18,300	13,100	14,500	2,520	1,500	700	85
AC-FT	112,000	141,100	165,800	268,600	457,900	1,564M	1,035M	1,553M	1,221M	181,100	89,830	71,510
MEAN†	1,821	2,372	2,696	4,368	7,960	25,440	17,390	25,280	20,550	2,993	1,504	1,236
AC-FT†	112,000	141,100	165,800	268,600	457,900	1,564M	1,035M	1,554M	1,223M	184,000	92,500	73,520

CAL YR 1971 TOTAL 2,949,698 MEAN 8,081 MAX 32,900 MIN 492 AC-FT 5,851,000 MEAN† 8,097 AC-FT† 5,862,000

WTR YR 1972 TOTAL 3,458,398 MEAN 9,449 MAX 33,200 MIN 85 AC-FT 6,860,000 MEAN† 9,465 AC-FT† 6,871,000

† Adjusted for diversion through Rathdrum Prairie Canal.
M Expressed in thousands.

SNAKE RIVER MAIN STEM

13010500 Jackson Lake near Moran, Wyo.

LOCATION.--Lat 43°51'33", long 110°35'23", in SE¼SW¼ sec.18, T.45 N., R.114 W., Teton County, in Grand Teton National Park, near left end of spillway over dam on Snake River, 4.3 miles west of Moran, and at mile 1,000.2.

DRAINAGE AREA.--824 sq mi.

PERIOD OF RECORD.--July 1908 to current year (1908-10 fragmentary). Prior to October 1968, published as "at Moran".

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (Bureau of Reclamation datum). Datum of Geological Survey, unadjusted, is 2.08 ft lower. Prior to June 1, 1941, at site 300 ft upstream at same datum.

EXTREMES.--Current year: Maximum contents, 848,200 acre-ft July 9-11 (elevation, 6,769.05 ft); minimum, 424,100 acre-ft May 16 (elevation, 6,751.39 ft).
Period of record: Maximum contents, 859,530 acre-ft July 11, 1965 (elevation, 6,769.49 ft); no usable contents for several days during period August to October 1919.

REMARKS.--Reservoir was formed by log crib dam built in the outlet of the natural lake in 1906. Usable capacity was 300,000 acre-ft. This dam washed out in July 1910 and was replaced by an earth dam, forming a reservoir with a usable capacity of 380,000 acre-ft. The earth dam was raised in 1916, increasing the usable capacity to 790,000 acre-ft. In 1917, by dredging the outlet, the capacity was further increased to 847,000 acre-ft between elevations 6,730 (top of baffles to sluices) and 6,769 ft (top of spillway gates). Reservoir is used to store water for irrigation in Snake River valley, Idaho. Figures given herein represent usable contents.

COOPERATION.--Reservoir elevations and capacity table furnished by Bureau of Reclamation.

REVISIONS.--WSP 1217: Drainage area.

Capacity table (elevation, in feet, and contents, in acre-feet)

6,740	182,500
6,750	392,900
6,760	624,400
6,770	872,600

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	599,800	599,800	606,000	621,700	630,800	629,900	586,200	493,900	472,000	835,800	808,600	690,900
2	601,200	600,500	606,000	622,000	630,400	630,100	584,300	486,700	486,900	838,800	807,400	685,800
3	601,400	600,500	605,700	622,200	629,900	631,600	582,700	479,300	505,400	839,600	804,800	680,700
4	601,400	600,500	606,000	622,200	629,600	631,300	580,800	472,700	522,400	841,900	802,100	675,800
5	601,400	600,700	607,200	622,400	629,400	630,600	579,100	466,500	540,100	844,200	799,300	670,700
6	601,400	600,500	608,400	622,000	629,200	629,900	577,500	461,500	561,200	845,400	796,300	667,000
7	601,700	600,500	609,100	621,700	629,200	628,900	576,300	457,400	578,600	846,000	793,300	663,400
8	601,700	600,500	609,100	621,700	629,200	627,000	574,600	453,700	597,600	847,500	790,000	658,600
9	601,700	600,500	609,600	622,200	629,400	625,300	573,000	450,800	620,500	848,200	786,500	654,500
10	601,700	600,500	609,800	622,700	629,400	623,400	571,300	446,500	641,000	848,200	783,000	651,600
11	601,700	600,700	609,800	622,900	629,200	621,500	569,900	441,700	658,300	848,200	779,700	648,600
12	601,700	600,700	610,000	622,900	628,900	619,600	570,200	436,700	677,200	848,000	776,700	645,000
13	601,400	601,200	610,000	622,400	629,400	617,900	569,000	432,000	694,800	847,500	773,400	640,500
14	601,900	601,200	610,500	622,000	630,400	616,200	567,800	427,700	709,500	847,000	771,200	635,900
15	602,100	601,900	611,200	622,200	629,900	614,600	566,200	425,000	722,600	846,200	768,200	631,100
16	602,400	601,900	611,900	622,200	630,400	612,400	564,500	424,100	734,900	844,700	763,700	626,300
17	602,600	601,700	612,200	622,000	630,100	610,700	562,800	425,200	751,800	843,200	760,000	621,500
18	603,100	601,700	612,400	622,200	630,100	608,800	561,000	427,400	764,000	841,100	756,000	616,700
19	603,300	601,900	612,900	623,900	630,400	607,400	558,100	429,900	774,700	839,300	752,300	612,900
20	603,100	601,900	613,100	625,600	629,900	606,000	554,600	433,300	783,200	836,300	748,300	610,300
21	603,100	602,100	613,600	628,000	629,600	604,300	550,800	436,200	789,700	836,800	743,800	606,700
22	602,600	602,100	613,800	630,600	629,200	602,600	545,700	439,000	794,800	835,800	738,900	603,100
23	602,400	602,100	615,500	632,500	629,200	600,700	540,600	440,500	801,300	833,000	733,900	599,500
24	602,100	602,400	617,700	633,500	629,400	599,300	535,600	440,500	809,900	829,200	729,500	596,200
25	601,900	602,600	618,400	633,200	628,900	598,300	529,800	440,100	816,700	826,900	724,800	592,900
26	601,700	602,600	620,500	632,800	628,400	596,900	524,000	440,100	822,000	824,300	720,100	589,300
27	601,700	605,000	620,800	632,500	628,400	595,200	518,200	440,100	823,800	821,500	715,400	587,700
28	601,200	605,500	621,000	632,300	628,900	593,400	511,900	442,100	824,800	819,000	710,800	587,900
29	601,000	605,700	621,000	631,800	630,400	591,500	506,600	446,000	826,600	816,500	705,400	586,200
30	600,500	605,500	621,200	631,600	------	590,000	500,600	451,700	830,900	814,000	700,700	584,800
31	600,000	------	621,500	631,100	------	588,100	------	460,100	------	811,400	695,800	------
MAX	603,300	605,700	621,500	633,500	630,800	631,600	586,200	493,900	830,900	848,200	808,600	690,900
MIN	599,800	599,800	605,700	621,700	628,400	588,100	500,600	424,100	472,000	811,400	695,800	584,800
(†)	6,758.98	6,759.21	6,759.88	6,760.28	6,760.25	6,758.48	6,754.74	6,752.98	6,768.35	6,767.60	6,762.95	6,758.34
(‡)	+1,700	+5,500	+16,000	+9,600	-700	-42,300	-87,500	-40,500	+370,800	-19,500	-115,600	-111,000

CAL YR 1971 ‡ +42,100
WTR YR 1972 ‡ -13,500

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

13011000 Snake River near Moran, Wyo.

LOCATION.--Lat 43°51'31", long 110°35'09", in SW¼SE¼ sec.18, T.45 N., R.114 W., Teton County, Grand Teton National Park, on left bank, 1,000 ft downstream from Jackson Lake Dam, 4.1 miles west of Moran, and at mile 1,000.1.

DRAINAGE AREA.--824 sq mi. Mean altitude, 8,040 ft.

PERIOD OF RECORD.--September 1903 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as "South Fork Snake River at Moran" prior to October 1910 and as "Snake River at Moran" October 1910 to September 1968.

GAGE.--Water-stage recorder. Datum of gage is 6,727.84 ft above mean sea level, unadjusted. Prior to June 13, 1917, nonrecording gage, and June 14, 1917, to May 20, 1940, water-stage recorder, at site 1.5 miles downstream at different datums.

AVERAGE DISCHARGE.--69 years, 1,438 cfs (1,042,000 acre-ft per year); 15-year base period (1952-67), 1,392 cfs.

EXTREMES.--Current year: Maximum discharge, 5,200 cfs May 30 (gage height, 7.44 ft); minimum, 408 cfs Oct. 2 (gage height, 2.64 ft).
Period of record: Maximum discharge, 15,100 cfs June 12, 1918 (gage height, 10.41 ft, site and datum then in use); minimum, 0.30 cfs Oct. 26, 27, 28, 1969 (gage height, 0.89 ft).
Flood during early June 1894 was considerably higher than that of June 12, 1918.

REMARKS.--Records excellent. Flow regulated by Jackson Lake (see sta 13010500).

COOPERATION.--Gage-height record furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1217: 1944(m), drainage area. WSP 1347: 1906-10.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 30 to May 30, June 20-28)

2.0	168	5.0	2,110
2.5	345	6.0	3,250
3.0	580	7.0	4,670
4.0	1,210	8.0	6,300

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	624	548	466	476	591	993	1,490	4,860	2,060	3,340	2,880	3,440
2	652	454	466	479	591	988	1,490	4,830	1,490	3,590	2,890	3,420
3	707	457	467	480	592	989	1,480	4,840	1,050	3,120	2,870	3,400
4	707	452	467	481	595	990	1,480	4,860	1,060	2,630	2,850	3,380
5	707	446	467	524	597	990	1,480	4,840	1,080	2,800	2,840	3,380
6	703	445	467	578	596	981	1,490	4,820	1,090	2,910	2,830	3,380
7	698	444	469	584	598	1,090	1,480	4,790	1,110	2,640	2,920	3,360
8	696	450	470	584	597	1,360	1,480	4,770	1,120	2,880	2,970	3,350
9	696	449	471	584	597	1,540	1,480	4,800	1,130	3,080	2,960	3,340
10	696	449	471	586	596	1,540	1,480	4,900	1,130	3,080	2,950	3,340
11	693	449	467	585	597	1,540	1,480	5,060	1,150	3,080	2,940	3,330
12	691	449	467	584	595	1,540	1,480	5,030	1,170	3,070	2,940	3,310
13	690	453	467	582	591	1,540	1,480	5,000	1,180	3,140	2,930	3,300
14	685	453	467	586	593	1,540	1,480	5,070	1,230	3,130	2,920	3,290
15	686	453	467	590	592	1,540	1,480	5,130	1,250	3,150	3,120	3,270
16	688	452	468	591	591	1,540	1,480	5,120	1,800	3,140	3,250	3,250
17	690	453	471	592	590	1,530	1,610	5,110	2,650	3,130	3,330	3,240
18	689	453	471	591	588	1,530	2,210	5,120	3,090	3,150	3,220	2,940
19	728	453	471	594	586	1,530	2,430	5,130	3,210	3,140	3,210	2,550
20	755	453	471	589	586	1,530	2,430	5,150	3,550	3,140	3,250	2,450
21	751	453	471	579	586	1,530	2,850	5,160	3,560	3,160	3,400	2,450
22	751	457	471	579	584	1,530	3,470	5,160	3,580	3,150	3,460	2,440
23	749	458	471	579	586	1,530	3,460	5,170	3,590	3,140	3,450	2,430
24	745	457	471	582	716	1,520	3,660	5,160	3,620	3,130	3,440	2,420
25	750	455	471	586	923	1,520	3,880	5,150	3,830	3,120	3,410	2,410
26	748	453	471	586	990	1,520	3,860	5,140	4,070	3,120	3,400	2,400
27	741	459	467	586	990	1,510	4,110	5,140	4,010	3,120	3,390	2,120
28	710	458	467	586	993	1,510	4,270	5,150	3,510	3,020	3,440	1,780
29	641	458	467	586	994	1,510	4,250	5,170	2,930	2,890	3,480	1,580
30	646	458	472	590	------	1,510	4,550	4,740	2,950	2,890	3,480	1,460
31	646	------	476	591	------	1,500	------	3,210	------	2,890	3,470	------
TOTAL	21,759	13,681	14,543	17,670	19,221	43,511	70,750	153,580	68,250	94,970	97,890	86,210
MEAN	702	456	469	570	663	1,404	2,358	4,954	2,275	3,064	3,158	2,874
MAX	755	548	476	594	994	1,540	4,550	5,170	4,070	3,590	3,480	3,440
MIN	624	444	466	476	584	981	1,480	3,210	1,050	2,630	2,830	1,460
AC-FT	43,160	27,140	28,850	35,050	38,120	86,300	140,300	304,600	135,400	188,400	194,200	171,000

CAL YR 1971 TOTAL 741,088 MEAN 2,030 MAX 6,930 MIN 444 AC-FT 1,470,000
WTR YR 1972 TOTAL 702,035 MEAN 1,918 MAX 5,170 MIN 444 AC-FT 1,392,000

13011500 Pacific Creek at Moran, Wyo.

LOCATION.--Lat 43°51'04", long 110°30'59", in SW¼NW¼ sec.23, T.45 N., R.114 W., Teton County, Grand Teton National Park, on right bank 6 ft upstream from bridge on U.S. Highway 287, at Moran, and at mile 0.5.

DRAINAGE AREA.--160 sq mi. Mean altitude, 8,160 ft.

PERIOD OF RECORD.--July to November 1906 (gage heights only), July 1917 to September 1918 (no winter records), September 1944 to current year. Published as "near Moran" prior to October 1968.

GAGE.--Water-stage recorder. Altitude of gage is 6,720 ft (from topographic map). July 31 to Nov. 11, 1906, nonrecording gage at site 0.4 mile downstream at different datum. July 20, 1917, to Sept. 30, 1918, nonrecording gage at site 0.1 mile downstream at different datum. Sept. 23, 1944, to Nov. 13, 1959, at site 100 ft upstream at same datum.

AVERAGE DISCHARGE.--28 years (1944-72), 269 cfs (22.83 inches per year, 194,900 acre-ft per year); 15-year base period (1952-67), 258 cfs.

EXTREMES.--Current year: Maximum discharge, 3,190 cfs June 2 (gage height, 6.28 ft); minimum daily, 40 cfs Jan. 30 to Feb. 6.
Period of record: Maximum discharge, 3,470 cfs May 21, 1954; maximum gage height, 6.35 ft June 23, 1971; minimum daily discharge, 22 cfs Nov. 18, 1969.

REMARKS.--Records good except those for December to April, which are fair. No diversion or regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	65	70	50	40	62	76	260	2,200	790	222	108
2	106	68	70	47	40	62	77	268	2,860	738	213	106
3	106	70	70	45	40	62	98	304	2,630	636	200	101
4	100	65	70	41	40	62	76	391	2,510	575	184	98
5	102	64	70	45	40	63	78	454	2,460	566	174	97
6	104	61	66	47	40	67	94	567	2,470	562	158	137
7	102	60	58	50	42	72	100	640	2,530	546	149	133
8	98	65	52	50	43	75	93	655	2,230	513	143	113
9	93	68	54	50	44	82	93	601	2,040	483	139	124
10	87	65	56	50	46	100	96	600	2,100	464	132	183
11	84	62	56	50	46	108	100	602	2,060	444	130	180
12	84	62	56	50	46	108	102	606	1,960	424	129	141
13	78	62	56	49	46	108	100	667	1,790	404	128	131
14	84	62	56	47	46	108	94	893	1,600	387	135	128
15	84	65	56	45	46	108	102	1,190	1,570	367	137	121
16	78	60	56	43	48	110	106	1,470	1,510	347	146	117
17	82	57	56	40	50	110	108	1,540	1,850	332	132	111
18	87	54	56	45	54	108	110	1,490	1,580	309	126	108
19	85	57	56	49	59	108	106	1,460	1,360	297	125	114
20	85	60	56	50	66	108	106	1,510	1,150	331	132	119
21	84	61	56	50	66	106	110	1,630	1,080	420	123	111
22	80	62	56	50	68	104	108	1,390	1,060	345	119	111
23	78	64	57	50	62	112	114	1,130	1,160	303	126	109
24	78	61	60	50	60	110	131	1,150	1,170	283	127	110
25	78	62	63	48	59	106	156	1,200	969	263	123	112
26	75	60	59	47	58	104	159	1,370	900	252	117	112
27	75	64	53	46	58	102	184	1,600	811	243	111	151
28	65	70	48	45	58	104	225	1,790	758	248	105	210
29	58	70	51	42	60	102	260	1,890	799	224	104	158
30	60	70	52	40	------	100	264	2,050	800	207	109	144
31	62	------	53	40	------	87	------	2,070	------	204	108	------
TOTAL	2,626	1,896	1,804	1,451	1,471	2,928	3,626	33,438	49,967	12,507	4,306	3,798
MEAN	84.7	63.2	58.2	46.8	50.7	94.5	121	1,079	1,666	403	139	127
MAX	106	70	70	50	68	112	264	2,070	2,860	790	222	210
MIN	58	54	48	40	40	62	76	260	758	204	104	97
CFSM	.53	.40	.36	.29	.32	.59	.76	6.74	10.4	2.52	.87	.79
IN.	.61	.44	.42	.34	.34	.68	.84	7.77	11.62	2.91	1.00	.88
AC-FT	5,210	3,760	3,580	2,880	2,920	5,810	7,190	66,320	99,110	24,810	8,540	7,530

CAL YR 1971 TOTAL 147,734 MEAN 405 MAX 2,880 MIN 35 CFSM 2.53 IN 34.35 AC-FT 293,000
WTR YR 1972 TOTAL 119,818 MEAN 327 MAX 2,860 MIN 40 CFSM 2.04 IN 27.86 AC-FT 237,700

PEAK DISCHARGE (BASE, 1,300 CFS).--May 16 (2400) 1,830 cfs (5.28 ft); June 2 (0400) 3,190 cfs (6.28 ft).

13011900 Buffalo Fork above Lava Creek, near Moran, Wyo.

LOCATION.--Lat 43°50'14", long 110°26'21", in SE¼NE¼ sec.29, T.45 N., R.113 W., Teton County, in Grand Teton National Park, on right bank, underneath bridge on U.S. Highway 26, 287, about 2 miles upstream from Lava Creek, 3.5 miles east of Moran, and 4 miles upstream from mouth.

DRAINAGE AREA.--355 sq mi.

PERIOD OF RECORD.--September 1965 to current year. July to November 1906, July 1917 to September 1918, and September 1944 to September 1960 at sites about 4 miles downstream.

GAGE.--Water-stage recorder. Datum of gage is 6,772.78 ft above mean sea level (U.S. Bureau of Public Roads bench mark).

AVERAGE DISCHARGE.--7 years (1965-72), 593 cfs (429,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,160 cfs June 8 (gage height, 7.65 ft); minimum daily, 100 cfs Jan. 31 to Feb. 10.
Period of record: Maximum discharge, 5,160 cfs June 8, 1972; maximum gage height, 7.66 ft June 23, 1971; minimum daily, 82 cfs Jan. 28-31, 1969.

REMARKS.--Records good except those for winter period, which are fair. No regulation or significant diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	328	220	140	140	100	125	155	354	3,820	2,820	890	378
2	315	220	140	130	100	125	159	340	4,260	2,620	850	381
3	312	225	140	120	100	130	155	372	4,590	1,990	795	360
4	315	210	140	115	100	130	157	446	4,640	1,700	745	345
5	328	200	135	120	100	135	165	530	4,830	1,830	703	345
6	342	185	130	130	100	145	188	658	4,680	2,000	680	414
7	340	180	120	140	100	160	202	685	4,810	2,200	662	420
8	348	190	110	140	100	175	193	690	5,010	2,210	658	372
9	310	190	115	140	100	185	190	618	4,830	2,030	622	387
10	302	185	120	140	100	195	197	595	4,700	1,940	600	644
11	298	180	120	140	105	195	199	559	4,620	1,880	577	590
12	290	175	120	140	110	195	197	554	4,590	1,880	546	486
13	280	175	120	140	115	190	188	582	4,260	1,880	546	449
14	290	172	120	140	115	190	177	740	3,670	1,910	644	420
15	285	170	120	135	115	190	190	945	3,660	1,730	649	393
16	278	155	125	135	115	185	204	1,170	3,550	1,490	559	390
17	285	145	125	130	120	185	211	1,420	4,080	1,420	518	354
18	290	135	125	140	125	180	206	1,390	3,940	1,300	490	330
19	272	145	125	150	135	180	193	1,400	3,340	1,260	506	335
20	280	150	125	155	140	180	193	1,480	2,810	1,160	506	340
21	278	150	125	155	140	180	197	1,670	2,660	1,290	460	320
22	258	150	125	150	135	175	195	1,540	2,730	1,120	446	318
23	262	150	125	150	125	199	193	1,260	2,950	1,050	502	315
24	262	150	130	150	120	184	218	1,190	2,920	1,040	486	305
25	262	150	140	140	120	179	255	1,200	2,430	1,000	432	310
26	255	135	135	135	120	171	255	1,290	2,160	955	411	300
27	250	135	130	130	120	165	262	1,560	1,840	980	402	357
28	225	140	130	125	120	157	305	1,900	1,680	960	390	381
29	210	140	135	115	125	163	363	2,280	2,260	900	387	338
30	212	140	140	108	------	165	390	2,740	2,590	875	381	328
31	215	------	145	100	------	157	------	3,270	------	850	384	------
TOTAL	8,777	5,047	3,975	4,178	3,320	5,270	6,352	35,428	108,910	48,270	17,427	11,405
MEAN	283	168	128	135	114	170	212	1,143	3,630	1,557	562	380
MAX	348	225	145	155	140	199	390	3,270	5,010	2,820	890	644
MIN	210	135	110	100	100	125	155	340	1,680	850	381	300
CFSM	.80	.47	.36	.38	.32	.48	.60	3.22	10.2	4.39	1.58	1.07
IN.	.92	.53	.42	.44	.35	.55	.67	3.71	11.41	5.06	1.83	1.20
AC-FT	17,410	10,010	7,880	8,290	6,590	10,450	12,600	70,270	216,000	95,740	34,570	22,620

CAL YR 1971 TOTAL 266,651 MEAN 731 MAX 4,650 MIN 90 CFSM 2.06 IN 27.94 AC-FT 528,900
WTR YR 1972 TOTAL 258,359 MEAN 706 MAX 5,010 MIN 100 CFSM 1.99 IN 27.07 AC-FT 512,500

PEAK DISCHARGE (BASE, 3,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6- 8	unknown	7.65	5,160	7- 1	0530	6.07	3,300
6-17	0830	6.94	4,270				

13022500 Snake River above reservoir, near Alpine, Wyo.

LOCATION.--Lat 43°11'47", long 110°53'18", Lincoln County, on right bank 0.3 mile downstream from Wolf Creek, 6.4 miles upstream from Greys River, 7.4 miles east of Alpine, and at mile 928.0.

DRAINAGE AREA.--3,465 sq mi.

PERIOD OF RECORD.--March 1937 to March 1939 (published as "above Greys River, near Alpine"), July 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,683.90 ft above mean sea level, unadjusted. Mar. 16, 1937, to Mar. 31, 1939, at site 6.0 miles downstream at different datum.

AVERAGE DISCHARGE.--20 years (1937-38, 1953-72), 4,592 cfs (3,327,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 24,100 cfs June 8 (gage height, 10.80 ft); minimum daily, 1,580 cfs Jan. 14, 15.
Period of record: Maximum discharge, 26,800 cfs June 28, 1954 (gage height, 11.68 ft); minimum, 740 cfs Nov. 16, 1955 (gage height, 2.19 ft).

REMARKS.--Records excellent except those for winter period, which are fair. Flow partly regulated by Jackson Lake (see sta 13010500). Some diversions from tributaries above station. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 6 to Dec. 1, Dec. 25-27, Jan. 19-29, Feb. 8, 9, Feb. 12 to Mar. 26, Sept. 4-19; stage-discharge relation affected by ice Dec. 2-24, Dec. 28 to Jan. 18, Jan. 30 to Feb. 7, Feb. 10, 11)

2.7	1,240	7.0	10,200
3.0	1,540	9.0	17,200
4.0	2,920	11.0	25,100
5.0	4,870		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,260	2,520	2,030	1,850	1,950	2,670	3,330	8,350	20,800	13,200	7,140	5,810
2	3,210	2,440	1,900	1,850	1,900	2,640	3,390	8,350	22,400	13,600	7,070	5,770
3	3,140	2,300	1,880	1,850	1,880	2,780	3,480	8,630	21,900	12,800	6,870	5,700
4	3,120	2,320	1,880	1,780	1,880	2,570	3,540	9,270	20,900	11,100	6,580	5,600
5	3,100	2,360	1,890	1,780	1,900	2,520	3,590	9,890	21,400	10,600	6,400	5,630
6	3,100	2,220	1,900	1,800	2,000	2,640	3,980	10,800	22,000	11,200	6,230	5,820
7	3,080	2,160	1,900	1,800	2,020	2,600	4,390	11,900	23,100	11,300	6,130	5,900
8	3,030	2,190	1,720	1,800	2,020	2,660	4,160	11,900	23,800	11,000	6,150	5,710
9	2,970	2,200	1,750	1,800	2,000	2,880	4,120	11,300	23,200	11,200	6,080	5,680
10	2,920	2,190	1,760	1,800	1,850	3,100	4,220	10,500	22,300	10,800	5,940	6,120
11	2,880	2,200	1,760	1,780	1,900	3,240	4,370	10,500	21,500	10,500	5,810	6,340
12	2,870	2,250	1,750	1,720	2,020	3,300	4,680	10,400	20,900	10,400	5,800	6,040
13	2,810	2,340	1,750	1,680	1,980	3,390	4,410	10,500	19,700	10,300	5,810	5,830
14	2,880	2,300	1,740	1,580	1,970	3,590	4,140	11,100	18,100	10,200	5,940	5,640
15	2,960	2,260	1,740	1,580	1,950	3,560	4,080	12,500	17,100	9,990	6,050	5,490
16	2,960	2,190	1,720	1,590	1,970	3,590	4,200	13,900	16,800	9,500	6,300	5,380
17	3,230	2,130	1,710	1,700	1,970	3,760	4,410	14,800	18,400	9,160	6,230	5,290
18	3,240	2,080	1,710	1,950	1,980	3,940	4,510	16,000	19,400	8,850	6,150	5,220
19	3,100	2,080	1,750	2,200	1,980	4,100	4,850	16,400	18,100	8,520	6,000	4,940
20	2,990	2,110	1,800	2,130	1,970	4,080	4,870	17,000	16,600	8,450	6,070	4,660
21	2,990	2,120	1,860	2,180	1,980	4,080	4,940	17,000	15,600	9,090	5,970	4,510
22	2,920	2,130	1,900	2,150	1,980	4,080	5,520	16,800	15,400	8,750	6,010	4,430
23	2,880	2,130	1,960	2,130	1,970	4,220	6,070	15,800	15,700	8,160	6,140	4,390
24	2,870	2,120	2,000	2,040	1,990	4,000	6,340	15,000	16,600	7,870	6,200	4,340
25	2,870	2,130	2,030	2,020	2,070	3,980	7,070	14,900	15,600	7,700	6,030	4,320
26	2,830	2,110	2,110	2,070	2,220	3,780	7,120	14,800	14,800	7,620	5,890	4,320
27	2,870	2,180	2,000	2,090	2,340	3,590	7,170	15,500	13,700	7,570	5,760	4,560
28	2,810	2,130	1,900	2,130	2,660	3,480	7,890	16,800	12,600	7,600	5,690	4,550
29	2,520	2,150	1,880	2,090	2,920	3,410	8,580	18,300	12,100	7,270	5,730	4,120
30	2,430	2,090	1,900	2,000	------	3,370	8,550	19,700	12,600	7,070	5,790	3,840
31	2,490	------	1,880	1,900	------	3,320	------	20,500	------	6,990	5,710	------
TOTAL	91,330	66,130	57,460	58,820	59,220	104,920	151,970	419,090	553,100	298,360	189,670	155,950
MEAN	2,946	2,204	1,854	1,897	2,042	3,385	5,066	13,520	18,440	9,625	6,118	5,198
MAX	3,260	2,520	2,110	2,200	2,920	4,220	8,580	20,500	23,800	13,600	7,140	6,340
MIN	2,430	2,080	1,710	1,580	1,850	2,520	3,330	8,350	12,100	6,990	5,690	3,840
AC-FT	181,200	131,200	114,000	116,700	117,500	208,100	301,400	831,300	1,097M	591,800	376,200	309,300

CAL YR 1971 TOTAL 2,422,100 MEAN 6,636 MAX 24,700 MIN 1,300 AC-FT 4,804,000
WTR YR 1972 TOTAL 2,206,020 MEAN 6,027 MAX 23,800 MIN 1,580 AC-FT 4,376,000

M Expressed in thousands.

13023000 Greys River above reservoir, near Alpine, Wyo.

LOCATION.--Lat 43°08'35", long 110°58'34", in SW¼SE¼ sec.34, T.37 N., R.118 W. (unsurveyed), Lincoln County, on right bank at Bridge Campground, 3 miles upstream from mouth, and 3.6 miles southeast of Alpine.

DRAINAGE AREA.--448 sq mi. Mean altitude, 8,080 ft.

PERIOD OF RECORD.--July to September 1917, June to September 1918, March 1937 to March 1939, October 1953 to current year. Published as Greys River near Alpine, Idaho, 1917-18 and as Greys River near Alpine, Wyo., 1937-39.

GAGE.--Water-stage recorder. Altitude of gage is 5,720 ft (from topographic map). July 6 to Sept. 30, 1917, and June 4 to Sept. 30, 1918, nonrecording gage and Mar. 17, 1937, to Mar. 31, 1939, water-stage recorder, at site 1.8 miles downstream, and October 1953 to Sept. 22, 1965, water-stage recorder at site 1 mile downstream at different datums.

AVERAGE DISCHARGE.--20 years (1937-38, 1953-72), 657 cfs (19.91 inches per year, 476,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,170 cfs June 7 (gage height, 5.89 ft); minimum daily, 180 cfs Feb. 25-28.
Period of record: Maximum discharge observed, 7,230 cfs June 19, 1971 (gage height, 6.33 ft); maximum gage height observed, 19.1 ft (former site and datum) about Dec. 18, 1965 (ice jam); minimum discharge, 111 cfs Dec. 7, 1960 (gage height, 2.45 ft, former site and datum).

REMARKS.--Records good except those for winter periods, which are fair. Less than 500 acres irrigated by diversions from Greys River and tributaries above station.

REVISIONS (WATER YEAR).--WRD Idaho 1967: 1966.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 11 to Nov. 26, Feb. 23 to Apr. 2, May 1-7, June 4-7;
stage-discharge relation affected by ice at times Nov. 27 to Feb. 22)

1.4	165	3.0	950	5.0	3,150
2.0	390	3.5	1,310	6.1	6,280
2.5	640	4.0	1,750		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	495	345	230	245	235	210	358	1,330	3,990	2,180	832	550
2	475	337	220	240	235	224	386	1,370	4,330	2,090	820	560
3	465	321	220	240	235	228	420	1,440	4,070	1,960	784	555
4	460	329	225	220	235	204	460	1,770	4,020	1,840	772	560
5	450	337	230	225	235	196	500	2,060	4,140	1,760	750	600
6	440	294	235	230	235	207	778	2,350	4,640	1,730	750	658
7	430	300	230	230	235	207	820	2,750	4,820	1,700	730	560
8	420	305	200	230	235	193	784	2,750	4,580	1,670	720	520
9	420	310	215	230	235	196	826	2,420	4,220	1,600	700	515
10	415	313	230	225	240	214	908	2,160	4,270	1,540	680	540
11	405	313	230	225	240	238	1,010	2,200	4,070	1,490	660	515
12	395	321	235	220	250	256	1,080	2,110	3,900	1,450	650	490
13	390	329	240	215	240	280	929	2,220	3,640	1,410	635	475
14	425	317	240	215	230	321	838	2,500	3,290	1,380	610	465
15	445	309	240	215	225	329	820	2,830	3,020	1,330	600	465
16	420	294	235	220	225	341	874	3,190	2,970	1,270	595	455
17	445	302	235	240	220	381	943	3,330	3,190	1,220	595	445
18	440	284	230	270	220	455	922	3,250	3,040	1,180	595	440
19	425	295	230	295	220	515	850	3,210	2,740	1,150	600	475
20	395	302	235	305	215	510	802	3,230	2,500	1,140	605	465
21	381	288	235	305	210	485	808	3,150	2,390	1,130	595	445
22	372	298	240	305	215	525	790	2,920	2,430	1,060	585	430
23	363	284	250	305	186	615	887	2,560	2,460	1,000	580	430
24	363	284	255	305	182	550	1,060	2,410	2,520	978	590	425
25	372	284	265	305	180	515	1,230	2,380	2,430	957	570	420
26	363	274	275	300	180	470	1,130	2,430	2,250	964	560	420
27	368	270	265	290	180	430	1,240	2,520	2,010	922	550	440
28	354	265	260	280	180	400	1,410	2,720	1,960	887	540	415
29	329	260	255	275	190	386	1,550	2,970	2,060	850	535	420
30	337	245	250	260	------	372	1,560	3,270	2,140	838	535	405
31	350	------	245	240	------	350	------	3,640	------	826	540	------
TOTAL	12,607	9,009	7,380	7,905	6,343	10,803	26,973	79,440	98,090	41,502	19,863	14,558
MEAN	407	300	238	255	219	348	899	2,563	3,270	1,339	641	485
MAX	495	345	275	305	250	615	1,560	3,640	4,820	2,180	832	658
MIN	329	245	200	215	180	193	358	1,330	1,960	826	535	405
CFSM	.91	.67	.53	.57	.49	.78	2.01	5.72	7.30	2.99	1.43	1.08
IN.	1.05	.75	.61	.66	.53	.90	2.24	6.60	8.14	3.45	1.65	1.21
AC-FT	25,010	17,870	14,640	15,680	12,580	21,430	53,500	157,600	194,600	82,320	39,400	28,880

CAL YR 1971 TOTAL 371,654 MEAN 1,018 MAX 6,170 MIN 165 CFSM 2.27 IN 30.86 AC-FT 737,200
WTR YR 1972 TOTAL 334,473 MEAN 914 MAX 4,820 MIN 180 CFSM 2.04 IN 27.77 AC-FT 663,400

PEAK DISCHARGE (BASE, 2,000 CFS).--May 17 (0330) 3,680 cfs (5.22 ft); June 7 (0600) 5,170 cfs (5.89 ft).

13027500 Salt River above reservoir, near Etna, Wyo.

LOCATION.--Lat 43°04'47", long 111°02'12", in SW¼NE¼ sec.28, T.36 N., R.119 W., Lincoln County, on right bank, 3.4 miles northwest of Etna, and at mile 8.0.

DRAINAGE AREA.--829 sq mi.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,675.78 ft above mean sea level.

AVERAGE DISCHARGE.--19 years, 757 cfs (548,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,560 cfs May 20 (gage height, 5.20 ft); minimum, 376 cfs Jan. 13 (gage height, 1.95 ft).
Period of record: Maximum discharge, 3,870 cfs June 1, 1971 (gage height, 5.30 ft); minimum, 160 cfs Jan. 7, 8, 1971 (gage height, 1.53 ft).

REMARKS.--Records excellent. Diversions above station for power developments, industry, municipal supply, and irrigation of about 60,500 acres of which about 1,000 acres are below station (1966 determination). For details on adjudication of diversions, see Remarks for this station in WSP 1347. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Jan. 14-16)

1.5	140	4.0	2,160
2.0	435	5.0	3,300
2.5	795	5.3	3,850
3.0	1,230		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	962	824	750	633	519	574	846	1,810	2,890	1,660	856	792
2	965	817	711	637	486	568	874	1,820	2,990	1,660	875	801
3	959	807	715	615	477	612	982	1,860	3,050	1,650	853	786
4	932	824	725	570	485	589	1,030	2,090	3,080	1,580	847	779
5	907	832	726	587	471	572	1,050	2,280	3,050	1,500	850	795
6	894	808	728	576	489	568	1,260	2,500	3,000	1,420	835	893
7	888	791	718	587	490	591	1,570	2,760	3,030	1,400	817	894
8	877	798	682	579	494	610	1,490	3,080	3,050	1,340	803	878
9	869	797	686	583	485	621	1,520	3,030	3,130	1,270	790	861
10	861	796	685	535	466	624	1,580	2,890	3,160	1,230	773	876
11	854	804	682	518	474	629	1,600	2,840	2,970	1,190	762	862
12	836	817	680	458	493	649	1,630	2,760	2,860	1,150	751	831
13	830	862	681	416	479	683	1,670	2,720	2,740	1,100	741	818
14	848	854	672	410	480	749	1,590	2,810	2,630	1,060	737	806
15	880	830	671	415	486	794	1,510	2,950	2,500	1,050	737	800
16	864	807	655	435	485	809	1,490	3,140	2,410	1,030	743	793
17	915	798	655	482	486	852	1,520	3,320	2,390	1,010	746	792
18	938	786	655	524	493	923	1,530	3,420	2,420	987	742	777
19	902	783	645	574	487	1,030	1,530	3,480	2,360	955	766	795
20	896	794	652	570	487	1,020	1,480	3,530	2,230	967	781	807
21	881	795	649	567	486	1,020	1,460	3,430	2,070	1,010	771	786
22	872	787	652	569	484	1,030	1,440	3,280	1,910	1,020	758	776
23	855	782	672	582	488	1,120	1,440	3,140	1,890	1,000	770	765
24	846	779	668	550	497	1,110	1,470	3,000	2,010	989	782	756
25	846	774	679	549	492	1,060	1,520	2,900	2,130	931	778	759
26	846	771	712	539	491	1,030	1,550	2,800	2,130	898	765	771
27	854	790	698	545	496	971	1,570	2,750	1,990	924	762	773
28	848	774	642	548	521	927	1,580	2,730	1,840	893	756	785
29	833	778	644	538	596	908	1,690	2,740	1,760	852	763	785
30	818	768	647	517	------	884	1,780	2,760	1,700	841	775	770
31	824	------	622	504	------	855	------	2,820	------	849	774	------
TOTAL	27,200	24,027	21,059	16,712	14,263	24,982	43,252	87,440	75,370	35,416	24,259	24,162
MEAN	877	801	679	539	492	806	1,442	2,821	2,512	1,142	783	805
MAX	965	862	750	637	596	1,120	1,780	3,530	3,160	1,660	875	894
MIN	818	768	622	410	466	568	846	1,810	1,700	841	737	756
AC-FT	53,950	47,660	41,770	33,150	28,290	49,550	85,790	173,400	149,500	70,250	48,120	47,930

CAL YR 1971 TOTAL 468,765 MEAN 1,284 MAX 3,790 MIN 180 AC-FT 929,800
WTR YR 1972 TOTAL 418,142 MEAN 1,142 MAX 3,530 MIN 410 AC-FT 829,400

13032450 Palisades Reservoir near Irwin, Idaho

LOCATION.--Lat 43°19'49", long 111°12'20", in NW¼SE¼ sec.17, T.1 S., R.45 E., Bonneville County, Caribou National Forest, on Snake River 3.5 miles upstream from Palisades Creek, 7 miles southeast of Irwin, and at mile 902.0.

DRAINAGE AREA.--5,208 sq mi.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Outside staff gages attached to concrete headwalls upstream from power and outlet tunnels. Datum of gage is at mean sea level (Bureau of Reclamation datum). Datum of Geological Survey is 0.10 ft lower.

EXTREMES.--Current year: Maximum contents, 1,402,000 acre-ft July 22; maximum elevation, 5,620.04 ft July 22; minimum, 375,000 acre-ft May 5 (elevation, 5,526.91 ft).
Period of record: Maximum contents, 1,421,000 acre-ft June 17, 18, 1963 (elevation, 5,621.17 ft); minimum observed, 565 acre-ft Jan. 31, 1956 (prior to filling of reservoir); minimum after first filling of reservoir in June 1958, 224,000 acre-ft Sept. 24, 25, 1960 (elevation, 5,502.3 ft).

REMARKS.--Reservoir is formed by earth-fill, rock-faced dam; partial storage began in October 1955; full storage began in November 1956. Capacity, 1,400,000 acre-ft between elevations 5,372 (river level at original outlet tunnels) and 5,620 ft. Dead storage 44,100 acre-ft at elevation 5,452.43 ft, elevation of completed outlet tunnels. Inactive storage for minimum power head, 199,600 acre-ft at elevation 5,497.5 ft. Water is used for irrigation in Snake River valley. Figures given herein represent total storage.

COOPERATION.--Reservoir elevations and capacity table furnished by Bureau of Reclamation.

Capacity table (elevation, in feet, and contents, in thousands of acre-feet)

5,510	266.7	5,580	854.3
5,520	328.5	5,600	1,100
5,540	473.5	5,620	1,401
5,560	648.5		

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,263.00	1,079.00	1,102.00	1,115.00	1,114.00	1,077.00	826.80	392.70	744.70	1,284.00	1,391.00	1,349.00
2	1,259.00	1,071.00	1,102.00	1,115.00	1,113.00	1,078.00	813.10	385.40	772.40	1,298.00	1,390.00	1,347.00
3	1,254.00	1,063.00	1,102.00	1,115.00	1,112.00	1,078.00	795.70	379.20	798.20	1,311.00	1,389.00	1,344.00
4	1,248.00	1,063.00	1,103.00	1,115.00	1,111.00	1,076.00	774.80	375.60	821.60	1,322.00	1,388.00	1,341.00
5	1,243.00	1,064.00	1,103.00	1,115.00	1,109.00	1,074.00	754.40	375.00	845.70	1,331.00	1,387.00	1,339.00
6	1,237.00	1,066.00	1,104.00	1,114.00	1,107.00	1,071.00	736.80	377.50	871.90	1,339.00	1,386.00	1,337.00
7	1,231.00	1,067.00	1,105.00	1,114.00	1,106.00	1,070.00	720.20	385.10	900.60	1,349.00	1,385.00	1,335.00
8	1,226.00	1,068.00	1,104.00	1,114.00	1,104.00	1,067.00	702.90	393.60	930.00	1,357.00	1,384.00	1,333.00
9	1,220.00	1,070.00	1,104.00	1,114.00	1,103.00	1,062.00	685.80	399.70	958.10	1,365.00	1,382.00	1,331.00
10	1,214.00	1,074.00	1,104.00	1,113.00	1,101.00	1,057.00	669.50	403.10	983.90	1,372.00	1,378.00	1,330.00
11	1,208.00	1,076.00	1,104.00	1,113.00	1,100.00	1,050.00	654.10	406.60	1,007.00	1,377.00	1,374.00	1,329.00
12	1,201.00	1,078.00	1,104.00	1,114.00	1,098.00	1,046.00	639.50	409.20	1,029.00	1,382.00	1,370.00	1,326.00
13	1,195.00	1,080.00	1,104.00	1,113.00	1,096.00	1,042.00	623.20	412.50	1,048.00	1,386.00	1,367.00	1,325.00
14	1,189.00	1,081.00	1,104.00	1,113.00	1,094.00	1,037.00	605.90	418.20	1,062.00	1,390.00	1,364.00	1,322.00
15	1,183.00	1,083.00	1,104.00	1,112.00	1,092.00	1,031.00	588.30	428.10	1,074.00	1,393.00	1,364.00	1,319.00
16	1,177.00	1,084.00	1,104.00	1,112.00	1,091.00	1,025.00	571.30	443.30	1,086.00	1,396.00	1,364.00	1,316.00
17	1,171.00	1,086.00	1,105.00	1,111.00	1,089.00	1,017.00	554.70	461.90	1,101.00	1,397.00	1,364.00	1,312.00
18	1,167.00	1,086.00	1,105.00	1,111.00	1,086.00	1,009.00	538.70	481.70	1,118.00	1,398.00	1,364.00	1,309.00
19	1,161.00	1,087.00	1,105.00	1,111.00	1,084.00	1,003.00	522.80	502.00	1,130.00	1,398.00	1,364.00	1,306.00
20	1,157.00	1,089.00	1,106.00	1,113.00	1,082.00	994.30	506.70	523.80	1,140.00	1,398.00	1,364.00	1,301.00
21	1,152.00	1,089.00	1,106.00	1,114.00	1,081.00	985.00	490.90	544.80	1,150.00	1,400.00	1,364.00	1,296.00
22	1,147.00	1,091.00	1,107.00	1,115.00	1,079.00	975.80	476.00	564.50	1,160.00	1,402.00	1,363.00	1,291.00
23	1,141.00	1,092.00	1,108.00	1,116.00	1,077.00	968.00	462.40	580.20	1,174.00	1,400.00	1,363.00	1,286.00
24	1,134.00	1,093.00	1,109.00	1,117.00	1,076.00	955.50	450.00	592.70	1,192.00	1,400.00	1,363.00	1,281.00
25	1,127.00	1,094.00	1,109.00	1,117.00	1,075.00	938.50	439.90	605.00	1,208.00	1,400.00	1,362.00	1,276.00
26	1,121.00	1,095.00	1,110.00	1,117.00	1,074.00	922.40	429.80	617.70	1,223.00	1,399.00	1,361.00	1,270.00
27	1,114.00	1,097.00	1,112.00	1,117.00	1,073.00	910.10	419.20	631.10	1,237.00	1,398.00	1,359.00	1,266.00
28	1,110.00	1,099.00	1,113.00	1,116.00	1,075.00	892.10	410.80	648.20	1,249.00	1,397.00	1,356.00	1,262.00
29	1,101.00	1,100.00	1,114.00	1,115.00	1,076.00	875.60	405.30	668.40	1,260.00	1,396.00	1,355.00	1,256.00
30	1,094.00	1,101.00	1,114.00	1,115.00	------	862.30	400.00	691.60	1,271.00	1,394.00	1,352.00	1,249.00
31	1,086.00	------	1,115.00	1,114.00	------	844.00	------	718.30	------	1,392.00	1,351.00	------
MAX	1,263.00	1,101.00	1,115.00	1,117.00	1,114.00	1,078.00	826.80	718.30	1,271.00	1,402.00	1,391.00	1,349.00
MIN	1,086.00	1,063.00	1,102.00	1,111.00	1,073.00	844.00	400.00	375.00	744.70	1,284.00	1,351.00	1,249.00
(†)	5,598.95	5,600.07	5,601.07	5,600.99	5,598.24	5,579.07	5,530.40	5,567.13	5,611.77	5,619.44	5,616.88	5,610.32
(‡)	-181	+15	+14	-1	-38	-232.0	-444.0	+318.3	+552.7	+121	-42	-102

CAL YR 1971.....‡ -58
WTR YR 1972.....‡ -18

† Elevation, in feet, at end of month.
‡ Change in contents, in thousands of acre-feet.

13032500 Snake River near Irwin, Idaho

LOCATION.--Lat 43°21'03", long 111°13'06", in NE¼NE¼ sec.7, T.1 S., R.45 E., Bonneville County, on right bank at Bureau of Reclamation headquarters, 1.5 miles downstream from Palisades Dam, 2 miles upstream from Palisades Creek, 5 miles southeast of Irwin, and at mile 900.2.

DRAINAGE AREA.--5,225 sq mi.

PERIOD OF RECORD.--March to October 1935, April to October 1936, May 1949 to current year. Records for station "at Calamity Point, near Irwin" April to August 1934, April to October 1935, April to October 1936, March 1939 to September 1941 are equivalent to those for this station.

GAGE.--Water-stage recorder. Datum of gage is 5,353.00 ft above mean sea level. Mar. 30, 1935, to Oct. 31, 1936, water-stage recorder at site 3.5 miles downstream at different datum. May 1, 1949, to Mar. 22, 1950, non-recording gage at site 1,100 ft downstream at datum 1.9 ft higher.

AVERAGE DISCHARGE.--23 years (1949-72), 6,580 cfs (4,767,000 acre-ft per year); 15-year base period (1952-67), 6,075 cfs.

EXTREMES.--Current year: Maximum discharge, 18,900 cfs June 8 (gage height, 10.95 ft); minimum, 1,350 cfs Nov. 9 (gage height, 4.86 ft).
Period of record: Maximum discharge, 31,800 cfs June 4-6, 1956; maximum gage height, 13.31 ft June 4, 1956; minimum discharge, 19 cfs Nov. 8, 1956 (gage height, 2.43 ft).
Flood in early June 1894 probably was much higher than that of June 4-6, 1956.

REMARKS.--Records excellent. Flow partly regulated by Jackson Lake (see sta 13010500) and Palisades Reservoir (see sta 13032450). Diversions from tributaries above station for irrigation in Wyoming and Idaho of about 95,300 acres (1966 determination).

COOPERATION.--Gage-height record furnished by Bureau of Reclamation.

REVISIONS.--WSP 1217: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 28 to July 21)

5.0	1,520	8.0	8,740
6.0	3,280	10.0	15,800
7.0	5,770	12.0	24,100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,700	8,120	2,910	3,090	3,080	3,460	13,600	15,900	17,000	11,600	9,960	8,740
2	7,720	8,140	2,940	3,100	3,090	3,890	11,700	15,900	18,000	11,600	9,960	8,740
3	7,740	8,160	2,930	3,100	3,110	3,920	14,000	15,900	18,000	10,900	9,960	8,740
4	7,720	3,910	3,170	3,100	3,130	4,760	15,600	15,900	18,000	10,100	9,540	8,740
5	7,720	2,920	3,210	3,090	3,960	4,800	15,600	15,900	18,000	10,100	9,160	8,800
6	7,710	2,890	3,210	3,090	3,950	4,810	15,600	15,900	18,000	10,400	9,160	8,770
7	7,710	2,890	3,210	3,090	3,970	5,020	15,600	15,900	18,000	9,950	8,960	8,740
8	7,710	2,880	3,210	3,080	3,910	5,030	15,600	15,900	18,100	10,500	9,000	8,770
9	7,710	2,630	3,210	3,080	3,950	6,140	15,600	15,800	18,000	10,500	9,570	8,770
10	7,710	1,670	3,220	3,080	3,950	7,080	15,600	15,800	18,000	10,700	10,300	8,770
11	7,730	2,520	3,240	3,080	3,960	7,150	15,500	15,800	18,000	11,000	10,500	8,770
12	7,740	2,890	3,230	3,070	3,960	7,000	15,600	15,800	18,000	11,000	10,200	8,840
13	7,750	2,880	3,260	3,080	3,960	6,940	15,600	15,800	18,000	11,100	9,920	8,800
14	7,770	2,890	3,240	3,070	3,940	6,990	15,600	15,800	18,000	11,000	9,510	8,770
15	7,770	2,900	3,230	3,090	3,940	8,150	15,600	15,800	18,000	11,000	8,640	8,770
16	7,810	2,900	3,030	3,070	3,940	8,950	15,600	15,800	18,000	11,000	8,420	8,800
17	7,850	2,890	2,990	3,070	3,940	9,580	15,600	15,800	18,000	11,100	8,450	8,800
18	7,850	2,900	3,050	3,120	3,950	9,950	15,600	15,600	18,000	11,100	8,420	8,800
19	7,840	2,910	3,040	3,100	3,940	9,950	15,600	15,800	18,000	11,200	8,420	8,800
20	6,960	2,920	3,060	3,090	3,940	10,500	15,600	15,800	17,800	11,400	8,420	8,800
21	7,060	2,910	3,080	3,260	3,940	10,900	15,600	15,700	16,400	10,700	8,420	8,800
22	7,130	2,920	3,080	3,100	3,920	10,900	15,600	15,700	16,000	10,800	8,420	8,800
23	7,890	2,900	3,080	3,100	3,920	10,800	15,600	15,700	14,700	11,100	8,420	8,800
24	7,940	2,920	3,100	3,100	3,920	12,600	15,600	15,700	13,500	10,800	8,420	8,800
25	7,950	2,910	3,080	3,090	3,470	15,000	15,600	15,700	13,500	10,400	8,610	8,800
26	7,980	2,920	3,100	3,100	3,450	13,700	15,600	15,400	12,700	10,400	8,740	8,800
27	7,970	2,920	3,090	3,210	3,440	11,900	16,000	15,700	11,600	10,400	8,740	8,800
28	6,860	2,920	3,110	3,950	3,470	14,100	16,000	15,700	11,600	10,400	8,740	8,800
29	8,050	2,910	3,100	3,120	3,460	13,500	16,000	15,900	11,600	10,400	8,740	8,900
30	8,080	2,910	3,100	3,070	------	11,800	15,900	16,000	11,600	10,500	8,740	8,840
31	8,070	------	3,100	3,070	------	14,000	------	16,000	------	10,200	8,710	------
TOTAL	239,200	101,950	96,610	96,910	108,560	273,270	461,900	489,800	492,100	333,350	281,170	263,670
MEAN	7,716	3,398	3,116	3,126	3,743	8,815	15,400	15,800	16,400	10,750	9,070	8,789
MAX	8,080	8,160	3,260	3,950	3,970	15,000	16,000	16,000	18,100	11,600	10,500	8,900
MIN	6,860	1,670	2,910	3,070	3,080	3,460	11,700	15,400	11,600	9,950	8,420	8,740
AC-FT	474,500	202,200	191,600	192,200	215,300	542,000	916,200	971,500	976,100	661,200	557,700	523,000

CAL YR 1971 TOTAL 3,530,510 MEAN 9,673 MAX 22,900 MIN 1,670 AC-FT 7,003,000
WTR YR 1972 TOTAL 3,238,490 MEAN 8,848 MAX 18,100 MIN 1,670 AC-FT 6,424,000

13037500 Snake River near Heise, Idaho

LOCATION.--Lat 43°36'45", long 111°39'33", in SE¼SW¼ sec.5, T.3 N., R.41 E., Bonneville County, on left bank 850 ft upstream from Anderson canal headgate, 2.4 miles upstream from Heise, 6 miles east of Ririe, 24 miles upstream from Henrys Fork, and at mile 861.6.

DRAINAGE AREA.--5,752 sq mi. Mean altitude, 7,770 ft.

PERIOD OF RECORD.--September 1910 to current year. Monthly discharge only for some periods, published in WSP 1317. Prior to 1911, published as South Fork of Snake River near Heise.

GAGE.--Water-stage recorder. Datum of gage is 5,015.3 ft above mean sea level. Prior to July 9, 1913, nonrecording gage and July 9, 1913, to Sept. 29, 1922, water-stage recorder, at datum 2.65 ft higher. Sept. 30, 1922, to Oct. 5, 1933, water-stage recorder at datum 2.0 ft higher.

AVERAGE DISCHARGE.--62 years, 6,901 cfs (5,000,000 acre-ft per year); 15-year base period (1952-67), 6,596 cfs.

EXTREMES.--Current year: Maximum discharge, 20,500 cfs June 7 (gage height, 7.45 ft); minimum, 1,870 cfs Nov. 11 (gage height, 1.48 ft).
Period of record: Maximum discharge, about 60,000 cfs May 19, 1927, result of washing out of landslide on Gros Ventre River (gage height, about 16.0 ft, present datum); minimum, 460 cfs Nov. 10, 12, 1956 (gage height, -0.18 ft).
Flood in early June 1894 was estimated as 65,000 cfs by Corps of Engineers.

REMARKS.--Records excellent. Flow partly regulated by Jackson Lake (see sta 13010500) and Palisades Reservoir (see sta 13032450). Some diurnal fluctuations during winter from powerplant operations at Palisades. Station is above all irrigation diversions from main river except Riley ditch (6,500 acre-ft diverted during year) which diverts 1.5 miles upstream from station. Diversions from tributaries above station for irrigation in Wyoming and Idaho of about 104,000 acres (1966 determination). Records of chemical analysis and water temperatures for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1217: Drainage area. WSP 1347: 1912.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Nov. 4, Mar. 4 to Sept. 30;
stage-discharge relation affected by ice Jan. 3-5, Feb. 2-4)

2.0	2,900	6.0	15,700
3.0	5,370	8.0	25,610
4.0	8,470		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,240	8,610	3,430	3,520	3,460	3,880	15,100	17,000	18,100	12,200	10,300	9,290
2	8,210	8,640	3,410	3,520	3,450	4,180	12,500	17,000	20,000	12,200	10,300	9,290
3	8,170	8,640	3,460	3,520	3,450	4,380	13,800	17,100	19,800	11,900	10,300	9,290
4	8,070	6,140	3,590	3,520	3,600	4,850	16,200	17,300	19,800	10,600	9,920	9,290
5	8,110	3,640	3,710	3,520	4,040	5,260	16,300	17,400	19,800	10,600	9,320	9,360
6	8,070	3,500	3,740	3,500	4,380	5,290	16,400	17,600	19,800	10,900	9,360	9,360
7	8,070	3,500	3,710	3,520	4,380	5,450	16,500	17,600	19,900	10,500	9,220	9,360
8	8,110	3,460	3,710	3,550	4,340	5,540	16,400	17,700	19,900	10,700	8,910	9,360
9	8,110	3,480	3,710	3,460	4,380	5,950	16,400	17,600	19,800	10,900	9,500	9,360
10	8,170	2,350	3,710	3,430	4,360	7,380	16,500	17,400	19,900	10,900	10,200	9,430
11	8,210	2,490	3,710	3,410	4,380	7,840	16,500	17,300	19,800	11,400	10,600	9,400
12	8,240	3,460	3,740	3,460	4,410	7,580	16,500	17,200	19,700	11,400	10,400	9,430
13	8,270	3,460	3,740	3,430	4,380	7,550	16,400	17,200	19,600	11,400	10,200	9,360
14	8,300	3,460	3,790	3,410	4,380	7,640	16,400	17,400	19,300	11,400	9,850	9,290
15	8,340	3,460	3,760	3,410	4,380	8,140	16,400	17,600	19,200	11,400	9,050	9,260
16	8,340	3,410	3,500	3,480	4,340	9,460	16,300	17,800	19,200	11,400	8,610	9,360
17	8,340	3,410	3,480	3,480	4,360	9,850	16,300	17,900	19,300	11,400	8,570	9,320
18	8,400	3,410	3,550	3,500	4,340	10,700	16,300	17,700	19,200	11,400	8,610	9,320
19	8,300	3,410	3,520	3,620	4,310	10,800	16,300	17,800	19,200	11,400	8,610	9,360
20	7,420	3,430	3,520	3,520	4,360	11,000	16,300	17,900	19,000	11,900	8,570	9,360
21	7,480	3,460	3,500	3,640	4,360	11,600	16,300	17,800	17,500	11,300	8,570	9,320
22	7,580	3,460	3,520	3,500	4,340	11,600	16,300	17,600	16,700	10,900	8,610	9,360
23	8,300	3,430	3,570	3,590	4,340	11,800	16,300	17,400	16,100	11,400	8,640	9,320
24	8,400	3,430	3,550	3,550	4,340	12,600	16,400	17,400	14,400	11,300	8,670	9,290
25	8,440	3,410	3,500	3,500	4,060	15,100	16,400	17,400	14,300	10,800	8,810	9,320
26	8,470	3,390	3,590	3,500	3,790	15,400	16,400	17,000	14,200	10,800	9,010	9,290
27	8,470	3,500	3,520	3,480	3,880	12,600	16,800	17,300	12,400	10,800	9,080	9,390
28	7,280	3,480	3,520	4,180	3,910	13,800	17,000	17,400	12,300	10,600	9,220	9,370
29	8,470	3,500	3,520	4,140	3,880	15,100	17,200	17,400	12,200	10,700	9,150	9,390
30	8,570	3,430	3,520	3,460	------	12,600	17,200	17,600	12,200	10,700	9,150	9,340
31	8,610	------	3,550	3,500	------	13,700	------	17,600	------	10,500	9,180	------
TOTAL	253,560	119,850	111,350	109,820	120,380	288,620	486,100	541,400	532,600	345,700	288,490	280,240
MEAN	8,179	3,995	3,592	3,543	4,151	9,310	16,200	17,460	17,750	11,150	9,306	9,341
MAX	8,610	8,640	3,790	4,180	4,410	15,400	17,200	17,900	20,000	12,200	10,600	9,430
MIN	7,280	2,350	3,410	3,410	3,450	3,880	12,500	17,000	12,200	10,500	8,570	9,260
AC-FT	502,900	237,700	220,900	217,800	238,800	572,500	964,200	1,074M	1,056M	685,700	572,200	555,900
MEAN†	5,260	4,340	4,080	3,680	3,480	4,850	7,370	21,900	33,300	12,800	6,740	5,760
AC-FT†	323,600	258,200	250,900	226,400	200,100	298,200	438,700	1,346M	1,980M	787,200	414,600	342,900

CAL YR 1971 TOTAL 3,836,070 MEAN 10,510 MAX 24,000 MIN 2,350 AC-FT 7,609,000 MEAN† 10,500 AC-FT† 7,593M
WTR YR 1972 TOTAL 3,478,110 MEAN 9,503 MAX 20,000 MIN 2,350 AC-FT 6,899,000 MEAN† 9,460 AC-FT† 6,868M

† Adjusted for storage in Jackson Lake and Palisades Reservoir; no account taken for time of travel between reservoirs and Heise gaging station.
M Expressed in thousands.

13039500 Henrys Fork near Lake, Idaho

LOCATION.--Lat 44°35'42", long 111°20'57", in NE¼SW¼ sec.26, T.15 N., R.43 E., Fremont County, on left bank 0.2 mile downstream from Henrys Lake Dam, 5.4 miles south of former Lake Post Office, and at mile 123.7.

DRAINAGE AREA.--99.3 sq mi including 6.2 sq mi of Dry Creek basin.

PERIOD OF RECORD.--May 1920 to current year (prior to October 1929, irrigation seasons only). Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 6,450.62 ft above mean sea level, levels by Bureau of Reclamation (Corps of Engineers bench mark). Prior to September 1922, nonrecording gage at site 3 miles downstream and below mouth of Dry Creek at different datum.

AVERAGE DISCHARGE.--43 years (1929-72), 51.7 cfs (37,460 acre-ft per year); 15-year base period (1952-67), 52.8 cfs.

EXTREMES.--Current year: Maximum discharge, 262 cfs June 16 (gage height, 2.00 ft); minimum daily, 35 cfs May 12.

Period of record: Maximum discharge, 907 cfs June 13, 1926 (gage height, 5.40 ft); no flow for part of each day Sept. 17, 18, 1952, Sept. 5, 7-30, Oct. 1, 2, 1966. Outflow from Henrys Lake was reported to have ceased entirely late in summer of 1889.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated by Henrys Lake (see sta 13039000). Since 1923, floodwaters of Dry (Tyghee) Creek have been diverted at times into Henrys Lake (some diverted during 1972).

REVISIONS.--WSP 1217: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Nov. 7, June 12-16, July 8 to Sept. 30;
stage-discharge relation affected by ice Oct. 29)

0.8	38	1.9	217
1.2	87	2.5	357

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	84	65	65	69	72	72	56	107	91	38	97
2	100	66	65	65	69	72	72	51	153	87	38	97
3	98	66	65	65	69	73	68	45	159	83	48	98
4	98	66	65	65	69	74	54	47	169	79	80	98
5	97	65	65	65	69	75	55	48	171	72	80	98
6	97	66	65	65	68	76	60	49	173	61	79	100
7	95	66	65	67	68	77	62	48	177	60	79	98
8	95	66	65	67	68	77	57	46	202	59	80	98
9	95	66	65	67	68	77	56	45	239	57	80	97
10	95	65	65	67	68	77	55	42	239	56	80	98
11	95	66	65	67	68	77	55	38	237	55	81	98
12	94	66	65	68	67	76	57	38	239	53	83	97
13	94	67	66	69	67	76	56	38	237	50	81	95
14	95	68	66	69	67	76	55	39	235	49	84	95
15	95	67	66	69	66	77	55	38	232	48	86	94
16	95	67	66	69	66	77	56	40	232	48	84	94
17	95	66	66	72	67	77	57	42	202	47	86	93
18	95	65	66	71	67	77	56	42	187	47	87	93
19	95	65	65	69	66	76	55	45	185	45	89	93
20	97	65	65	68	67	76	54	48	173	44	91	93
21	97	65	65	68	67	74	54	53	171	45	93	90
22	98	63	65	68	67	76	54	66	163	44	94	90
23	100	63	65	68	67	76	55	80	165	42	94	88
24	100	63	65	68	68	74	59	83	175	41	93	90
25	101	63	65	68	67	74	61	87	173	41	93	74
26	101	62	65	71	67	73	57	87	171	40	93	66
27	103	63	65	71	69	73	57	87	167	40	95	66
28	103	63	65	69	70	73	60	86	165	39	95	68
29	100	63	65	69	71	73	61	87	121	38	97	68
30	100	63	65	69	------	73	59	91	87	38	97	68
31	97	------	63	69	------	73	------	94	------	39	98	------
TOTAL	3,020	1,969	2,019	2,107	1,966	2,327	1,744	1,786	5,506	1,638	2,576	2,692
MEAN	97.4	65.6	65.1	68.0	67.8	75.1	58.1	57.6	184	52.8	83.1	89.7
MAX	103	84	66	72	71	77	72	94	239	91	98	100
MIN	94	62	63	65	66	72	54	38	87	38	38	66
AC-FT	5,990	3,910	4,000	4,180	3,900	4,620	3,460	3,540	10,920	3,250	5,110	5,340

CAL YR 1971 TOTAL 33,763 MEAN 92.5 MAX 262 MIN 19 AC-FT 66,970
WTR YR 1972 TOTAL 29,350 MEAN 80.2 MAX 239 MIN 38 AC-FT 58,220

13042000 Island Park Reservoir near Island Park, Idaho

LOCATION.--Lat 44°25'11", long 111°23'50", in NE¼SE¼ sec.29, T.13 N., R.43 E., Fremont County, Targhee National Forest, in gatehouse shaft at dam on Henrys Fork, 0.5 mile upstream from Buffalo River, 1.3 miles west of Island Park Post Office, and at mile 93.0.

DRAINAGE AREA.--481 sq mi.

PERIOD OF RECORD.--November 1938 to current year.

GAGE.--Electric tape gage read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 140,200 acre-ft May 9 (elevation, 6,303.61 ft); minimum, 72,600 acre-ft Dec. 3 (elevation, 6,293.74 ft).
Period of record: Maximum contents, 143,500 acre-ft May 16, 1971 (elevation, 6,304.01 ft); minimum after first filling of reservoir in May 1939, 5,280 acre-ft Sept. 29, 1966 (elevation, 6,260.77 ft).

REMARKS.--Reservoir is formed by earth-fill rock-faced dam. Storage began Nov. 15, 1938. Capacity, 127,300 acre-ft between elevations 6,239 ft (normal low-water level with outlet gates open) and 6,302 ft (crest of spillway). Natural flow passing through reservoir when outlet gates are open limits withdrawal of storage to elevation 6,230 ft (sill of lower outlet). Dead storage negligible. Water is used for irrigation of lands in Fremont-Madison irrigation district between Ashton and Rexburg. Figures given herein represent usable contents.

COOPERATION.--Reservoir elevations and capacity table furnished by Bureau of Reclamation.

REVISIONS.--WSP 1217: Drainage area.

Capacity table (elevation, in feet, and contents, in acre-feet)

6,293	68,700
6,298	98,300
6,304	143,400

CONTENTS, IN ACRE-FEET, AT 0700, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93,900	90,500	73,200	83,200	94,800	105,400	120,800	136,500	138,400	135,700	124,700	97,300
2	93,400	90,000	72,800	83,600	95,100	106,100	121,200	136,700	138,600	135,300	124,100	96,200
3	92,900	89,200	72,600	84,000	95,400	106,800	121,500	136,900	138,600	135,100	123,800	95,200
4	92,400	88,400	72,700	84,300	95,600	107,100	121,700	137,200	138,900	134,900	123,500	94,100
5	92,100	87,700	73,100	84,700	95,800	107,400	122,030	137,600	138,700	134,900	123,200	93,200
6	91,700	86,800	73,300	85,100	96,200	107,900	122,500	138,400	138,600	134,900	122,800	93,500
7	91,300	86,000	73,300	85,500	96,600	108,300	123,000	139,000	138,500	134,900	122,400	93,500
8	92,300	85,200	73,400	85,900	96,900	108,700	123,600	140,000	138,300	134,600	122,000	93,300
9	93,600	86,300	73,500	86,300	97,300	109,100	124,000	140,200	138,400	134,500	121,600	93,000
10	94,700	87,500	73,500	86,700	97,700	109,600	124,600	140,000	138,300	134,200	121,200	92,800
11	95,800	88,700	73,700	87,000	97,900	110,100	125,000	139,900	138,200	134,200	120,100	92,800
12	97,000	88,500	74,000	87,500	98,200	110,500	125,800	139,400	137,900	134,000	118,900	92,700
13	96,400	87,800	74,400	87,700	98,400	110,900	126,600	139,000	137,700	134,000	117,700	92,500
14	95,900	87,000	74,700	88,000	98,600	111,400	127,000	138,800	137,400	134,100	116,600	92,100
15	95,300	86,200	75,100	88,400	98,900	112,000	127,500	138,600	137,200	134,000	115,500	91,800
16	94,600	85,400	75,400	88,800	99,400	112,500	127,900	138,700	137,200	133,800	114,400	91,500
17	94,400	84,400	75,700	89,200	99,800	113,000	128,400	138,500	137,200	133,600	113,300	91,200
18	94,000	83,400	76,100	89,500	100,200	113,600	128,800	138,400	137,200	133,800	112,200	90,900
19	93,400	82,500	76,600	90,100	100,700	114,200	129,100	138,100	136,800	133,700	111,000	90,700
20	93,000	81,600	77,100	90,400	101,000	114,900	129,400	139,700	136,700	133,400	109,800	90,200
21	92,400	80,700	77,600	91,000	101,400	115,400	129,700	139,900	136,600	133,100	108,900	89,700
22	91,900	79,800	78,100	91,400	101,800	115,900	130,500	139,800	136,300	132,200	107,900	89,200
23	91,500	79,000	78,900	91,800	102,200	116,500	131,000	139,600	136,500	131,400	106,100	88,800
24	91,000	78,100	79,400	92,300	102,600	117,100	131,400	139,400	136,700	130,300	105,600	88,300
25	91,800	77,300	80,000	92,600	103,000	117,800	132,600	139,200	136,700	129,400	104,600	87,900
26	92,600	76,400	80,500	92,800	103,400	118,600	133,500	138,800	136,600	128,400	103,600	87,500
27	93,700	75,900	81,100	93,200	103,700	119,100	134,200	138,400	136,700	127,300	102,500	87,500
28	93,500	75,100	81,500	93,400	104,100	119,600	135,000	138,100	136,500	126,500	101,400	87,400
29	93,000	74,200	81,900	93,700	104,900	119,900	135,400	137,700	136,300	125,500	100,300	87,000
30	91,800	73,400	82,400	94,000	------	120,200	136,400	138,100	136,000	125,200	99,300	86,700
31	91,400	------	82,800	94,500	------	120,500	------	138,100	------	124,600	98,400	------
MAX	97,000	90,500	82,800	94,500	104,900	120,500	136,400	140,200	138,900	135,700	124,700	97,300
MIN	91,000	73,400	72,600	83,200	94,800	105,400	120,800	136,500	136,000	124,600	98,400	86,700
(†)	6,296.94	6,293.89	6,295.55	6,297.41	6,298.97	6,201.12	6,303.15	6,303.36	6,303.10	6,301.66	6,298.01	6,396.19
(‡)	-2,300	-18,000	+9,400	+11,700	+10,400	+15,600	+15,900	+1,700	-2,100	-11,400	-26,200	-11,700

CAL YR 1971 ‡ -26,600
WTR YR 1972 ‡ -7,000

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

13042500 Henrys Fork near Island Park, Idaho

LOCATION.--Lat 44°24'59", long 111°23'41", in SW¼SW¼ sec.28, T.13 N., R.43 E., Fremont County, Targhee National Forest, on left bank 0.2 mile downstream from Island Park Dam, 0.2 mile upstream from Buffalo River, 1 mile southwest of Island Park Post Office, and at mile 92.9.

DRAINAGE AREA.--481 sq mi. Mean altitude, 7,080 ft.

PERIOD OF RECORD.--January 1933 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,225 ft (from river-profile map). Prior to May 15, 1935, non-recording gage at site about 0.8 mile upstream at different datum. May 15 to Nov. 30, 1935, water-stage recorder at site 1,000 ft downstream at different datum.

AVERAGE DISCHARGE.--39 years, 582 cfs (421,700 acre-ft per year); 15-year base period (1952-67), 590 cfs.

EXTREMES.--Current year: Maximum discharge, 1,840 cfs May 21 (gage height, 4.94 ft); minimum discharge, 22 cfs Nov. 8-11 (gage height, 1.98 ft).
Period of record: Maximum discharge, 2,770 cfs Apr. 26, 1946 (gage height, 6.15 ft); minimum daily, 1 cfs Nov. 16 to Dec. 7, 1938.

REMARKS.--Records good. Flow regulated by Henrys Lake (see sta 13039000) and Island Park Reservoir (see sta 13042000). Diversions above station for irrigation of about 15,500 acres (1966 determination); a considerable portion of which consists of partly subirrigated meadows.

COOPERATION.--Gage-height record furnished by Bureau of Reclamation.

REVISIONS.--WSP 1217: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	824	884	642	437	447	405	511	1,070	1,390	935	836	1,280
2	830	884	648	437	447	405	511	1,090	1,430	867	835	1,280
3	824	878	570	436	447	406	511	1,120	1,470	835	831	1,270
4	830	878	516	437	447	409	512	1,180	1,490	821	832	1,270
5	842	878	521	434	452	409	514	1,280	1,450	809	835	1,100
6	836	872	521	435	452	414	516	1,430	1,430	778	837	904
7	375	866	526	439	451	414	516	1,580	1,420	764	834	896
8	89	309	531	440	452	414	516	1,720	1,410	752	837	894
9	89	22	531	439	452	414	516	1,750	1,410	734	843	890
10	92	22	491	439	452	416	517	1,700	1,390	707	1,160	891
11	92	363	467	440	457	418	520	1,660	1,350	701	1,240	886
12	592	926	471	440	457	419	521	1,580	1,310	684	1,250	884
13	848	920	471	444	457	421	521	1,500	1,260	683	1,250	877
14	848	920	476	444	458	423	519	1,450	1,220	675	1,260	875
15	848	914	476	443	430	424	520	1,450	1,180	663	1,260	867
16	842	908	440	443	386	426	531	1,450	1,180	656	1,260	866
17	842	908	419	443	393	464	550	1,480	1,160	636	1,270	859
18	842	902	419	443	391	486	573	1,500	1,160	644	1,270	889
19	842	896	419	447	391	486	592	1,490	1,130	617	1,280	921
20	836	896	423	448	392	487	612	1,610	1,090	922	1,280	924
21	830	902	423	448	391	489	568	1,680	1,050	1,120	1,280	914
22	830	902	423	447	391	490	566	1,670	1,020	1,090	1,290	910
23	824	902	423	448	399	493	613	1,670	1,050	1,090	1,300	901
24	438	902	428	448	399	495	508	1,630	1,110	1,120	1,290	899
25	180	902	428	451	399	496	531	1,530	1,110	1,110	1,300	890
26	180	908	428	449	399	502	635	1,450	1,090	1,090	1,290	887
27	474	914	428	447	399	504	718	1,380	1,080	1,080	1,290	891
28	840	920	433	447	401	506	819	1,330	1,040	1,080	1,290	894
29	896	926	433	446	408	506	950	1,320	1,010	925	1,290	896
30	890	748	433	444	------	506	1,040	1,340	974	828	1,290	899
31	890	------	433	447	------	509	------	1,350	------	843	1,290	------
TOTAL	20,335	23,972	14,691	13,730	12,297	14,056	17,547	45,440	36,864	26,259	35,500	28,504
MEAN	656	799	474	443	424	453	585	1,466	1,229	847	1,145	950
MAX	896	926	648	451	458	509	1,040	1,750	1,490	1,120	1,300	1,280
MIN	89	22	419	434	386	405	508	1,070	974	617	831	859
AC-FT	40,330	47,550	29,140	27,230	24,390	27,880	34,800	90,130	73,120	52,080	70,410	56,540

CAL YR 1971 TOTAL 303,543 MEAN 832 MAX 2,410 MIN 22 AC-FT 602,100
WTR YR 1972 TOTAL 289,195 MEAN 790 MAX 1,750 MIN 22 AC-FT 573,600

13046000 Henrys Fork near Ashton, Idaho

LOCATION.--Lat 44°04'30", long 111°29'58", in SE¼SE¼ sec.28, T.9 N., R.42 E., Fremont County, on right bank 0.3 mile downstream from powerplant, 2.6 miles west of Ashton, and at mile 43.8.

DRAINAGE AREA.--1,040 sq mi. Mean altitude, 6,710 ft.

PERIOD OF RECORD.--April 1890 to June 1891, August 1902 to June 1909, April 1920 to current year (seasonal records only 1920-26). Monthly discharge only for some periods, published in WSP 1317. Published as Henrys Fork in canyon, above Fall River 1890-91, and as North Fork of Snake River near Ora 1902-9.

GAGE.--Water-stage recorder. Altitude of gage is 5,095 ft (from river-profile map). April 1890 to June 1891, nonrecording gage at site 6 miles downstream at different datum. August 1902 to Apr. 15, 1921, nonrecording gage and Apr. 16, 1921, to May 3, 1930, water-stage recorder at site 1.5 miles downstream at different datum.

AVERAGE DISCHARGE.--52 years (1902-88, 1926-72), 1,415 cfs (1,025,000 acre-ft per year); 15-year base period (1952-67), 1,442 cfs.

EXTREMES.--Current year: Maximum discharge, 4,740 cfs May 8 (gage height, 7.34 ft); minimum discharge, 215 cfs Nov. 10 (gage height, 5.39 ft);
Period of record: Maximum discharge, 6,220 cfs May 7, 1925 (gage height, 3.11 ft, site and datum then in use); minimum, 53 cfs Sept. 20, 1960 (gage height, 5.45 ft); minimum daily, 171 cfs Oct. 18, 1961.

REMARKS.--Records good. Diurnal fluctuation caused by powerplant above station. Flow regulated by Henrys Lake (see sta 13039000) and Island Park Reservoir (see sta 13042000). Diversions above station for irrigation of about 24,500 acres (1966 determination).

REVISIONS (WATER YEARS).--WSP 1217: Drainage area. WSP 1347: 1890-91.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,780	2,160	1,780	1,350	1,320	1,310	1,480	2,980	3,050	2,040	1,790	2,180
2	2,010	2,150	1,760	1,440	1,060	1,340	1,510	2,920	3,070	1,990	1,770	2,180
3	1,950	2,150	1,820	1,150	1,240	1,330	1,560	3,040	3,120	1,890	1,740	2,140
4	1,930	2,150	1,650	1,150	1,240	1,330	1,580	3,280	3,040	1,810	1,740	2,160
5	1,940	2,140	1,690	1,260	1,460	1,330	1,550	3,570	2,950	1,800	1,740	2,230
6	1,930	2,130	1,730	1,460	1,390	1,330	1,820	3,830	2,920	1,780	1,700	2,130
7	1,920	2,110	1,560	1,490	1,350	1,300	2,030	4,190	2,900	1,900	1,700	1,880
8	1,070	2,170	1,390	1,470	1,250	1,310	1,810	4,600	2,880	1,970	1,710	1,780
9	923	1,900	1,590	1,300	1,290	1,300	1,980	4,430	2,830	1,960	1,710	1,740
10	894	794	1,720	1,280	1,270	1,310	1,770	4,260	2,790	1,420	1,860	1,810
11	908	619	1,650	1,320	1,290	1,310	1,890	4,060	2,730	1,480	2,000	1,840
12	945	1,550	1,610	1,320	1,310	1,310	2,060	3,920	2,660	1,620	2,160	1,790
13	1,890	2,320	1,590	1,210	1,270	1,310	1,860	3,830	2,580	1,670	2,200	1,750
14	2,020	2,250	1,630	1,290	1,290	1,340	1,770	3,860	2,530	1,620	2,220	1,750
15	2,030	2,320	1,610	1,440	1,310	1,380	1,790	3,960	2,450	1,630	2,260	1,730
16	2,020	2,240	1,510	1,340	1,330	1,440	1,790	3,960	2,440	1,610	2,190	1,750
17	2,020	2,220	1,480	1,310	1,160	1,620	1,850	3,920	2,450	1,600	2,180	1,740
18	2,040	2,210	1,450	1,380	1,230	1,470	2,010	3,830	2,470	1,570	2,180	1,730
19	2,090	2,230	1,420	1,440	1,240	1,740	2,010	3,790	2,420	1,590	2,180	1,860
20	2,050	2,210	1,390	1,390	1,240	1,820	2,060	3,960	2,330	1,770	2,200	1,830
21	2,040	2,210	1,380	1,400	1,280	1,710	2,110	3,920	2,180	2,040	2,170	1,820
22	2,030	2,160	1,450	1,390	1,260	1,610	2,110	3,900	2,220	2,100	2,190	1,810
23	2,040	2,190	1,470	1,400	1,280	1,760	2,110	3,920	2,310	2,110	2,200	1,860
24	2,000	2,200	1,410	1,340	1,250	1,670	2,420	3,730	2,430	2,100	2,260	1,810
25	1,170	2,260	1,400	1,370	1,250	1,640	2,580	3,610	2,320	2,140	2,210	1,820
26	1,110	2,210	1,460	1,350	1,280	1,550	2,450	3,360	2,310	2,080	2,180	1,820
27	1,370	2,240	1,410	1,210	1,240	1,540	2,630	3,220	2,300	2,080	2,180	1,920
28	1,600	2,190	1,310	1,390	1,330	1,490	2,980	3,170	2,190	2,060	2,180	1,920
29	2,100	2,200	1,430	1,340	1,340	1,470	3,320	3,090	2,130	2,050	2,160	1,850
30	2,160	2,140	1,450	1,300	------	1,480	3,190	3,090	2,060	1,820	2,180	1,810
31	2,160	------	1,380	1,270	------	1,440	------	3,070	------	1,760	2,190	------
TOTAL	54,140	62,023	47,580	41,550	37,050	45,290	62,080	114,270	77,060	57,060	63,330	56,440
MEAN	1,746	2,067	1,535	1,340	1,278	1,461	2,069	3,686	2,569	1,841	2,043	1,881
MAX	2,160	2,320	1,820	1,490	1,460	1,820	3,320	4,600	3,120	2,140	2,260	2,230
MIN	894	619	1,310	1,150	1,060	1,300	1,480	2,920	2,060	1,420	1,700	1,730
AC-FT	107,400	123,000	94,370	82,410	73,490	89,830	123,100	226,700	152,800	113,200	125,600	111,900

CAL YR 1971 TOTAL 747,760 MEAN 2,049 MAX 5,450 MIN 619 AC-FT 1,483,000
WTR YR 1972 TOTAL 717,873 MEAN 1,961 MAX 4,600 MIN 619 AC-FT 1,424,000

13047000 Diversions from Falls River above gaging station near Squirrel, Idaho

Above Squirrel gaging station, two canals divert water from Falls River for irrigation. Records available for part of each irrigation season from 1919 to current year. Discharge of canals computed from daily or twice-weekly staff-gage readings, or interpolated, and combined to show total diverted flow. Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	64	203	199	103
2								0	64	203	197	98
3								0	89	203	193	99
4								0	89	203	191	97
5								0	89	203	187	86
6								0	118	205	169	95
7								0	118	207	176	92
8								0	118	205	176	89
9								0	131	205	176	87
10								0	131	206	189	87
11								0	131	210	188	88
12								0	131	224	188	78
13								0	141	226	188	68
14								0	141	228	188	68
15								0	141	220	172	67
16								0	141	220	155	67
17								0	141	212	152	68
18								0	150	214	138	68
19								0	150	220	134	71
20								0	150	220	134	76
21								0	150	223	135	76
22								0	150	205	135	67
23								0	150	198	136	67
24								0	150	198	135	67
25								50	150	198	126	69
26								91	150	198	119	69
27								91	150	211	118	70
28								91	150	211	118	71
29								91	150	209	118	71
30					------			64	150	198	109	71
31		------			------		------	64	------	198	106	------
TOTAL								542	3,928	6,484	4,845	2,350
MEAN								17.5	131	209	156	78.3
MAX								91	150	228	199	103
MIN								0	64	198	106	67
AC-FT								1,080	7,790	12,860	9,610	4,660

THE PERIOD: AC-FT 36,000

13047500 Falls River near Squirrel, Idaho

LOCATION.--Lat 44°04'07", long 111°14'25", in NW¼NE¼ sec.34, T.9 N., R.44 E., Fremont County, on right bank 0.2 mile upstream from road bridge, 0.5 mile downstream from headgates of Marysville Canal, 4 miles northeast of Squirrel, 10.8 miles upstream from Conant Creek, and at mile 19.8.

DRAINAGE AREA.--351 sq mi. Mean altitude, 7,520 ft.

PERIOD OF RECORD.--August 1902 to June 1909 (gage heights only prior to October 1904), May 1918 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as Fall River at Wilson's Mill, near Marysville 1902, as Fall River near Marysville 1903, as Fall River at Fremont 1904-9, and as Fall River near Squirrel 1918-59.

GAGE.--Water-stage recorder. Datum of gage is 5,589 ft above mean sea level. Prior to Jan. 1, 1904, nonrecording gages at site 3 miles upstream at different datum, Jan. 1, 1904 to Nov. 6, 1937, nonrecording gage at site 200 ft upstream at different datum, and Nov. 7, 1937, to Oct. 7, 1948, nonrecording gage at site 100 ft downstream at datum 0.29 ft lower.

AVERAGE DISCHARGE.--58 years (1904-8, 1918-72), 768 cfs (556,400 acre-ft per year); 15-year base period (1952-67), 762 cfs.

EXTREMES.--Current year: Maximum discharge, 3,820 cfs June 4 (gage height, 4.14 ft); minimum discharge, 427 cfs Mar. 4, 5 (gage height, 1.22 ft); minimum gage height, 1.21 ft Feb. 25, 27.
Period of record: Maximum discharge observed, 6,440 cfs June 27, 1927; minimum observed, 72 cfs Feb. 9, 1930.

REMARKS.--Records excellent. Flow since October 1939 partly regulated by Grassy Lake (see sta 13046500). Diversions above station for irrigation of about 17,000 acres below station and in adjacent basins, and diversions from tributary upstream from station for irrigation of about 500 acres (1966 determination).

REVISIONS (WATER YEARS).--WSP 1217: Drainage area. WSP 1317: 1908. WSP 1347: 1905.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Oct. 29 to Nov. 4, Feb. 1-6)

1.2	408	3.0	2,210
1.5	610	4.5	4,240
2.0	1,030		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	785	660	617	558	500	479	520	1,120	3,350	2,330	899	810
2	761	680	606	556	500	489	526	1,080	3,400	2,310	871	820
3	730	670	627	559	490	485	539	1,250	3,510	2,150	848	790
4	746	660	620	563	490	435	547	1,590	3,640	1,940	832	790
5	766	670	626	561	490	446	556	1,940	3,510	1,820	849	800
6	753	641	632	561	495	454	696	2,220	3,320	1,780	857	1,040
7	730	647	590	571	515	453	762	2,560	3,200	1,800	829	935
8	702	661	558	583	509	451	716	2,760	3,330	1,810	821	812
9	690	653	582	568	509	458	704	2,510	3,230	1,720	819	772
10	676	648	604	567	496	467	693	2,480	3,250	1,730	803	830
11	663	648	612	566	513	486	710	2,250	3,370	1,760	796	861
12	654	657	608	560	491	490	737	2,260	3,360	1,810	793	782
13	647	697	626	564	496	493	709	2,420	3,190	1,770	809	765
14	693	672	635	556	493	500	648	2,810	3,020	1,760	835	742
15	696	667	636	563	495	493	662	3,080	2,980	1,540	865	711
16	677	640	633	573	493	508	662	3,150	2,920	1,340	830	700
17	678	649	637	581	478	539	693	3,200	3,050	1,280	840	688
18	729	636	626	596	470	601	709	3,080	3,340	1,180	827	688
19	696	646	602	588	475	618	678	3,240	3,070	1,100	811	802
20	692	642	598	565	479	603	693	3,210	2,750	1,070	798	801
21	715	634	589	592	475	583	749	3,200	2,530	1,120	780	722
22	715	637	601	566	476	585	733	2,890	2,390	1,040	780	702
23	702	628	594	557	472	639	757	2,560	2,730	965	780	690
24	694	634	584	543	475	614	868	2,330	3,420	932	780	677
25	674	676	596	542	458	610	976	2,240	3,000	927	740	672
26	668	632	614	546	449	566	913	2,100	2,570	902	760	675
27	681	648	599	537	450	553	958	2,220	2,170	894	755	813
28	682	640	571	536	477	533	1,120	2,460	1,930	871	750	822
29	655	638	560	535	497	532	1,380	2,700	2,000	859	750	730
30	650	633	565	518	------	524	1,340	2,930	2,170	851	770	701
31	650	------	560	532	------	519	------	3,170	------	858	790	------
TOTAL	21,650	19,544	18,708	17,363	14,106	16,206	22,954	77,010	89,700	44,219	25,067	23,143
MEAN	698	651	603	560	486	523	765	2,484	2,990	1,426	809	771
MAX	785	697	637	596	515	639	1,380	3,240	3,640	2,330	899	1,040
MIN	647	628	558	518	449	435	520	1,080	1,930	851	740	672
AC-FT	42,940	38,770	37,110	34,440	27,980	32,140	45,530	152,700	177,900	87,710	49,720	45,900

CAL YR 1971 TOTAL 393,948 MEAN 1,079 MAX 3,920 MIN 390 AC-FT 781,400
WTR YR 1972 TOTAL 389,670 MEAN 1,065 MAX 3,640 MIN 435 AC-FT 772,900

13049000 Diversions from Falls River between Squirrel and Chester gaging stations, Idaho

Between Squirrel and Chester gaging stations, nine canals divert water from Falls River for irrigation. Records available for part of each irrigation season from 1919 to current year. Discharge of canals computed from daily or twice-weekly staff-gage readings, or interpolated, and combined to show total diverted flow. Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								144	633	535	597	493
2								158	681	545	583	468
3								256	702	541	573	422
4								284	692	616	559	418
5								343	679	628	559	431
6								367	757	625	568	431
7								385	749	630	562	465
8								394	741	642	560	465
9								324	731	638	551	464
10								300	710	645	557	464
11								299	686	669	566	343
12								299	675	674	579	343
13								316	662	673	581	322
14								322	649	693	590	321
15								355	643	565	587	332
16								400	662	642	551	332
17								412	666	633	550	285
18								495	646	620	545	285
19								573	655	618	514	280
20								597	634	623	515	277
21								558	623	626	506	268
22								513	632	629	451	268
23								497	635	600	513	231
24								482	558	598	516	231
25								475	522	585	518	228
26								445	510	578	519	228
27								486	502	592	510	228
28								506	483	580	498	243
29								521	483	576	494	223
30					------			564	529	582	468	223
31		------			------		------	614	------	580	483	------
TOTAL								12,684	19,130	18,981	16,723	10,012
MEAN								409	638	612	539	334
MAX								614	757	693	597	493
MIN								144	483	535	451	223
AC-FT								25,160	37,940	37,650	33,170	19,860

THE PERIOD: AC-FT 153,800

13049500 Falls River near Chester, Idaho

LOCATION.--Lat 44°01'06", long 111°33'57", in NW¼SE¼ sec.13, T.8 N., R.41 E., Fremont County, on right bank 0.2 mile upstream from highway bridge, at mile 0.8, and 1.5 miles north of Chester.

DRAINAGE AREA.--520 sq mi, approximately. Mean altitude, 6,970 ft.

PERIOD OF RECORD.--April 1920 to current year (irrigation seasons only prior to 1962). Prior to October 1959, published as Fall River near Chester.

GAGE.--Water-stage recorder. Datum of gage is 5,051.9 ft above mean sea level. Prior to Aug. 9, 1920, nonrecording gage at site 200 ft downstream at same datum. Aug. 9, 1920, to Apr. 28, 1921, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--11 years (1961-72), 745 cfs (539,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,730 cfs June 4 (gage height, 5.12 ft); maximum gage height, 6.90 ft Dec. 7; minimum discharge, 341 cfs Aug. 12 (gage height, 2.22 ft).
Period of record: Maximum discharge recorded, 6,380 cfs June 27, 1927 (gage height, 6.60 ft); maximum gage height recorded, 7.93 ft Jan. 18, 1966 (backwater from ice); minimum discharge recorded, 7 cfs June 27, 1961 (gage height, 0.74 ft).

REMARKS.--Records excellent except those for winter period, which are fair. Flow since October 1939 partly regulated by Grassy Lake (see sta 13046500). Diversions above station for irrigation of about 4,600 acres above station and about 36,000 acres in adjacent basins (1966 determination). Station is below all diversions from Falls River.

REVISIONS.--WSP 1217: Drainage area.

Rating tables (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 7 to Feb. 29)

2.0	260	4.0	1,930
2.5	520	5.0	3,420
3.0	880	6.0	5,290

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	643	706	657	560	480	580	636	1,280	3,090	1,940	460	478
2	629	685	601	530	470	587	622	1,140	3,190	1,940	395	484
3	594	692	678	510	480	574	664	1,230	3,270	1,790	430	478
4	615	685	671	530	490	538	678	1,610	3,520	1,500	424	454
5	643	678	685	570	500	538	699	1,910	3,350	1,350	436	484
6	643	657	679	590	505	568	816	2,300	3,120	1,280	454	706
7	622	664	550	600	515	568	997	2,530	2,980	1,300	424	692
8	601	685	470	600	520	556	943	3,040	3,070	1,310	406	594
9	587	671	500	600	520	574	916	2,820	3,030	1,250	395	580
10	574	671	540	590	505	587	898	2,700	3,030	1,240	380	622
11	568	664	570	590	490	622	907	2,370	3,140	1,240	360	678
12	568	671	610	590	475	629	952	2,320	3,140	1,260	350	608
13	574	720	650	590	470	629	916	2,430	2,960	1,250	375	580
14	629	699	660	580	460	650	848	2,800	2,760	1,220	406	562
15	650	699	670	590	450	643	840	3,140	2,640	1,110	466	544
16	629	657	665	590	450	657	832	3,230	2,580	880	454	544
17	622	664	665	610	455	678	864	3,230	2,640	800	436	538
18	671	643	660	625	500	760	889	3,090	2,990	706	436	532
19	657	664	655	660	550	800	848	3,150	2,790	650	436	636
20	636	664	640	700	590	776	848	3,150	2,430	608	460	720
21	636	657	630	720	540	744	898	3,140	2,150	692	436	650
22	650	657	630	630	530	744	864	2,850	2,020	636	466	608
23	629	650	640	600	520	800	872	2,480	2,250	556	454	587
24	622	657	650	580	520	776	1,020	2,190	3,200	526	454	574
25	601	699	670	580	520	760	1,230	2,100	2,850	514	385	574
26	587	664	680	575	520	706	1,100	1,910	2,360	478	430	574
27	608	685	640	560	520	685	1,110	1,970	1,920	472	430	692
28	615	664	610	550	530	650	1,300	2,270	1,630	442	424	784
29	650	671	600	540	540	643	1,580	2,390	1,650	436	424	671
30	685	650	590	535	------	636	1,420	2,650	1,800	424	448	622
31	699	------	570	500	------	629	------	2,870	------	430	478	------
TOTAL	19,337	20,193	19,386	18,175	14,615	20,287	28,007	76,290	81,550	30,230	13,212	17,850
MEAN	624	673	625	586	504	654	934	2,461	2,718	975	426	595
MAX	699	720	685	720	590	800	1,580	3,230	3,520	1,940	478	784
MIN	568	643	470	500	450	538	622	1,140	1,630	424	350	454
AC-FT	38,350	40,050	38,450	36,050	28,990	40,240	55,550	151,300	161,800	59,960	26,210	35,410

CAL YR 1971 TOTAL 374,489 MEAN 1,026 MAX 4,050 MIN 296 AC-FT 742,800
WTR YR 1972 TOTAL 359,132 MEAN 981 MAX 3,520 MIN 350 AC-FT 712,300

13050000 Diversions from Henrys Fork between Ashton and St. Anthony gaging stations, Idaho

Between Ashton and St. Anthony gaging stations, seven canals divert water from Henrys Fork for irrigation. Records available each irrigation season from 1919 to current year. Discharge of canals computed from daily or twice-weekly staff-gage readings, or interpolated, and combined to show total diverted flow. Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								796	1,680	1,010	1,050	886
2								832	1,660	1,100	1,060	703
3								902	1,650	1,280	1,080	550
4								1,020	1,460	1,300	1,120	541
5								990	1,330	1,400	1,130	549
6								1,160	1,320	1,430	1,150	549
7								1,250	1,300	1,420	1,150	533
8								1,330	1,320	1,460	1,270	533
9								1,250	1,120	1,480	1,280	510
10								1,250	1,100	1,460	1,260	509
11								1,270	1,020	1,480	1,270	517
12								1,300	1,020	1,330	1,290	517
13								1,290	1,090	1,310	1,270	480
14								1,300	1,300	1,280	1,240	480
15								1,320	1,370	1,400	1,080	464
16								1,380	1,440	1,370	935	464
17								1,420	1,410	1,400	893	459
18								1,440	1,250	1,320	905	459
19								1,470	1,130	1,400	904	486
20								1,460	1,080	1,390	913	486
21								1,400	1,100	1,360	898	467
22								1,300	1,050	1,220	892	467
23								1,250	880	1,140	846	466
24								1,260	757	1,180	840	466
25								1,260	673	1,180	820	476
26								1,260	693	1,200	789	476
27								1,320	745	1,270	794	468
28								1,430	864	1,210	806	468
29								1,460	927	1,030	835	461
30					------			1,570	966	1,020	847	427
31		------			------		------	1,650	------	1,020	889	------
TOTAL								39,590	34,705	39,850	31,506	15,317
MEAN								1,277	1,157	1,285	1,016	511
MAX								1,650	1,680	1,480	1,290	886
MIN								796	673	1,010	789	427
AC-FT								78,530	68,840	79,040	62,490	30,380

THE PERIOD: AC-FT 319,300

13050500 Henrys Fork at St. Anthony, Idaho

LOCATION.--Lat 43°58'00", long 111°40'20", in NW¼ sec.6, T.7 N., R.41 E., Fremont County, on right bank 0.5 mile upstream from bridge on main street of St. Anthony, 6.4 miles downstream from Falls River, and at mile 33.6.

DRAINAGE AREA.--1,770 sq mi, approximately. Mean altitude, 6,670 ft.

PERIOD OF RECORD.--March 1919 to current year (irrigation seasons only prior to 1962).

GAGE.--Water-stage recorder. Datum of gage is 4,950.7 ft above mean sea level. March 1919 to May 7, 1922, non-recording gages and May 8, 1922, to Aug. 14, 1931, water-stage recorder, at site 150 ft downstream at datum 0.08 ft lower.

AVERAGE DISCHARGE.--11 years (1961-72), 1,867 cfs (1,353,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,570 cfs May 8 (gage height, 6.15 ft); minimum, 780 cfs July 11 (gage height, 3.06 ft).
Period of record: Maximum discharge recorded, 9,670 cfs May 28, 1970 (gage height, 7.32 ft, present datum); maximum gage height recorded, 7.62 ft Dec. 14, 1967; minimum discharge recorded, 118 cfs Oct. 21, 1965 (gage height, 2.27 ft).

REMARKS.--Records good. Diversions above station for irrigation of about 21,000 acres below and about 58,000 acres above station of which about 1,100 acres are by withdrawals from ground water (1966 determination). Flow regulated by powerplant 17 miles above station and by Henrys Lake (see sta 13039000), Island Park Reservoir (see sta 13042000), and Grassy Lake (see sta 13046500).

REVISIONS (WATER YEARS).--WSP 1217: Drainage area. WSP 1317: 1923(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used June 28 to July 19; stage-discharge relation affected by ice Dec. 1-5, 8-22, Dec. 27 to Jan. 15)

3.5	1,130	6.0	6,040
4.0	1,800	7.0	8,900
5.0	3,710		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,310	2,770	2,200	1,780	1,850	1,900	1,880	3,540	4,450	3,230	1,510	2,210
2	2,420	2,730	2,100	1,800	1,650	1,930	1,920	3,250	4,520	3,210	1,470	2,300
3	2,310	2,710	2,120	1,520	1,750	1,930	1,930	3,360	4,720	2,930	1,430	2,250
4	2,330	2,710	2,000	1,520	1,850	1,860	1,980	3,820	5,060	2,390	1,420	2,200
5	2,390	2,710	2,100	1,750	2,000	1,840	1,910	4,260	4,930	2,170	1,370	2,270
6	2,420	2,630	2,180	2,000	1,950	1,880	2,230	4,890	4,700	2,040	1,370	2,450
7	2,350	2,630	1,910	2,100	1,850	1,870	2,670	5,270	4,540	2,050	1,340	2,280
8	1,720	2,690	1,600	2,100	1,800	1,840	2,430	6,270	4,670	2,130	1,220	2,060
9	1,480	2,520	1,850	1,900	1,800	1,860	2,510	6,080	4,780	2,090	1,170	1,980
10	1,420	1,430	2,100	1,830	1,800	1,870	2,300	5,780	4,810	1,650	1,240	2,070
11	1,410	1,390	2,100	1,900	1,830	1,910	2,390	5,200	4,860	1,710	1,350	2,200
12	1,430	1,890	2,050	1,870	1,860	1,940	2,590	5,080	4,840	1,830	1,490	2,070
13	2,040	2,710	2,000	1,850	1,800	1,950	2,450	5,050	4,510	1,880	1,550	2,010
14	2,400	2,670	2,050	1,900	1,870	1,990	2,240	5,410	4,110	1,840	1,670	1,990
15	2,460	2,670	2,150	1,920	1,900	2,030	2,200	5,780	3,840	1,690	1,930	1,940
16	2,460	2,580	2,100	1,880	1,950	2,070	2,180	5,800	3,780	1,460	1,980	1,940
17	2,420	2,580	2,050	1,800	1,780	2,260	2,240	5,770	3,890	1,390	1,940	1,920
18	2,480	2,540	2,000	1,900	1,860	2,210	2,420	5,500	4,390	1,280	1,920	1,900
19	2,560	2,580	2,000	2,000	1,890	2,490	2,380	5,500	4,340	1,170	1,920	2,080
20	2,480	2,580	1,900	1,900	1,870	2,430	2,350	5,580	3,920	1,190	1,960	2,220
21	2,440	2,560	1,950	1,900	1,890	2,370	2,450	5,540	3,550	1,620	1,930	2,120
22	2,580	2,520	2,000	1,900	1,860	2,170	2,430	5,340	3,410	1,760	1,960	2,050
23	2,610	2,560	2,030	1,900	1,840	2,350	2,420	5,070	3,820	1,710	1,990	2,060
24	2,580	2,580	1,930	1,900	1,800	2,290	2,820	4,670	5,040	1,680	2,050	2,020
25	1,930	2,690	1,990	1,900	1,780	2,140	3,270	4,470	4,680	1,680	2,030	2,020
26	1,760	2,610	2,040	1,900	1,810	2,140	3,000	4,000	4,260	1,600	1,990	2,030
27	1,930	2,670	1,880	1,800	1,790	2,020	3,370	3,870	3,760	1,600	1,990	2,230
28	2,170	2,630	1,800	1,900	1,900	1,950	3,920	3,960	3,290	1,640	1,950	2,390
29	2,580	2,650	1,850	1,900	1,970	1,920	4,210	4,030	3,170	1,720	1,930	2,220
30	2,730	2,600	1,850	1,850	------	1,930	3,980	4,170	3,190	1,540	1,940	2,140
31	2,750	------	1,830	1,800	------	1,880	------	4,310	------	1,480	2,020	------
TOTAL	69,350	75,780	61,710	57,870	53,550	63,220	77,070	150,620	127,830	57,360	53,030	63,620
MEAN	2,237	2,526	1,991	1,867	1,847	2,039	2,569	4,859	4,261	1,850	1,711	2,121
MAX	2,750	2,770	2,200	2,100	2,000	2,490	4,210	6,270	5,060	3,230	2,050	2,450
MIN	1,410	1,390	1,600	1,520	1,650	1,840	1,880	3,250	3,170	1,170	1,170	1,900
AC-FT	137,600	150,300	122,400	114,800	106,200	125,400	152,900	298,800	253,600	113,800	105,200	126,200

CAL YR 1971 TOTAL 954,240 MEAN 2,614 MAX 8,470 MIN 1,290 AC-FT 1,893,000
WTR YR 1972 TOTAL 911,010 MEAN 2,489 MAX 6,270 MIN 1,170 AC-FT 1,807,000

13052200 Teton River above South Leigh Creek, near Driggs, Idaho

LOCATION.--Lat 43°46'54", long 111°12'30", in NW¼NE¼ sec.12, T.5 N., R.44 E., Teton County, on right bank 75 ft upstream from county road bridge, 3.5 miles southwest of Tetonia, 6.5 miles northwest of Driggs, and at mile 56.3.

DRAINAGE AREA.--335 sq mi, approximately.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,952.9 ft above mean sea level.

AVERAGE DISCHARGE.--11 years, 403 cfs (292,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,650 cfs June 9 (gage height, 3.65 ft); minimum daily discharge, 195 cfs Feb. 14.
Period of record: Maximum discharge, 2,050 cfs June 18, 1964 (gage height, 4.36 ft); maximum gage height, 6.37 ft Feb. 1, 1963; minimum daily discharge, 75 cfs Jan. 11, 1963.

REMARKS.--Records good except those for winter periods, which are fair. Diversions above station for irrigation of about 42,000 acres of which about 1,000 acres are by withdrawals from ground water (1966 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	572	440	390	310	218	571	356	415	1,100	1,150	610	450
2	588	440	328	280	215	464	368	406	1,220	1,140	585	435
3	599	425	330	262	215	590	374	408	1,280	1,080	572	430
4	582	430	330	268	222	515	364	424	1,240	950	566	420
5	500	440	345	275	230	476	389	444	1,260	900	554	430
6	460	410	340	285	232	600	481	470	1,350	895	541	440
7	450	405	340	290	232	664	490	504	1,430	895	528	445
8	435	400	330	285	225	557	428	574	1,590	867	515	448
9	435	345	315	275	222	535	405	588	1,630	840	505	471
10	435	410	315	265	212	588	390	540	1,590	808	494	514
11	430	430	312	250	210	630	403	521	1,560	800	490	511
12	430	460	312	240	198	624	521	511	1,550	776	487	483
13	430	522	312	235	198	660	484	508	1,520	768	496	474
14	440	450	312	230	195	685	438	518	1,390	745	526	457
15	465	440	315	230	210	563	411	536	1,250	728	518	448
16	460	415	315	230	218	546	390	583	1,240	711	503	437
17	495	410	315	235	225	566	375	613	1,300	682	484	427
18	516	395	318	240	250	580	367	655	1,460	670	488	419
19	538	390	320	250	250	634	366	718	1,400	656	492	440
20	528	390	325	262	240	522	360	863	1,300	712	493	450
21	511	390	335	260	245	502	365	827	1,120	870	488	438
22	495	395	350	258	255	504	365	784	1,110	797	479	429
23	475	390	350	258	250	541	359	729	1,180	705	475	425
24	460	390	345	260	235	443	365	628	1,370	664	474	412
25	465	415	330	272	244	434	375	576	1,440	644	473	409
26	460	390	315	280	255	410	374	562	1,270	639	463	407
27	465	395	310	280	303	375	377	566	1,090	665	453	453
28	460	385	312	280	513	356	388	642	925	642	445	487
29	455	390	318	255	717	353	406	781	957	611	450	457
30	440	385	320	240	------	351	414	916	1,070	590	450	430
31	430	------	325	222	------	349	------	1,010	------	585	450	------
TOTAL	14,904	12,372	10,129	8,062	7,434	16,188	11,948	18,820	39,192	24,185	15,547	13,376
MEAN	481	412	327	260	256	522	398	607	1,306	780	502	446
MAX	599	522	390	310	717	685	521	1,010	1,630	1,150	610	514
MIN	430	345	310	222	195	349	356	406	925	585	445	407
AC-FT	29,560	24,540	20,090	15,990	14,750	32,110	23,700	37,330	77,740	47,970	30,840	26,530

CAL YR 1971 TOTAL 199,675 MEAN 547 MAX 1,950 MIN 125 AC-FT 396,100
WTR YR 1972 TOTAL 192,157 MEAN 525 MAX 1,630 MIN 195 AC-FT 381,100

13055000 Teton River near St. Anthony, Idaho

LOCATION.--Lat 43°55'38", long 111°36'55", in SW¼SW¼ sec.15, T.7 N., R.41 E., Fremont County, on right bank 0.5 mile upstream from railroad bridge, 4 miles southeast of St. Anthony, and at mile 22.

DRAINAGE AREA.--890 sq mi, approximately.

PERIOD OF RECORD.--January 1890 to September 1893, April 1903 to June 1909, April 1920 to current year (irrigation seasons only, 1920-21, 1923-33). Monthly discharge only for some periods, published in WSP 1317. Published as "near Wilford" or "at Chases Ranch" 1890-93.

GAGE.--Water-stage recorder. Datum of gage is 4,971.8 ft above mean sea level. Apr. 5, 1890, to Sept. 30, 1893, nonrecording gage at site 1 mile downstream at different datum. Apr. 23, 1903, to June 30, 1909, nonrecording gage at site 0.8 mile upstream at different datum. Apr. 19, 1920, to May 1, 1921, nonrecording gage and May 2, 1921, to Nov. 5, 1933, water-stage recorder, at site 400 ft downstream at different datum.

AVERAGE DISCHARGE.--39 years (1933-72), 794 cfs (575,300 acre-ft per year); 15-year base period (1952-67), 768 cfs.

EXTREMES.--Current year: Maximum discharge, 4,110 cfs June 10, 11 (gage height, 6.84 ft); minimum daily discharge, 305 cfs Feb. 10-11.
Period of record: Maximum discharge, 11,000 cfs Feb. 12, 1962 (gage height, 9.36 ft), on basis of contracted-opening measurement of peak flow; minimum, 214 cfs Dec. 15, 1955 (gage height, 1.62 ft).

REMARKS.--Records excellent except those for winter periods, which are good. Diversions above station for irrigation of about 58,000 acres of which about 4,400 acres are by withdrawals from ground water (1966 determination). Water is diverted at times (since 1939) during irrigation season from Henrys Fork through Cross Cut Canal to Teton River 0.8 mile upstream from station (26,070 acre-ft diverted into river during 1972 irrigation season). Records of chemical analyses for water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1217: Drainage area. WSP 1347: 1903-6, 1908-9.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 13 to June 23; stage-discharge relation affected by ice Dec. 2, 4-22, Jan. 2-22, Jan. 27 to Feb. 22)

2.5	310	5.0	2,430
3.0	630	6.0	3,400
4.0	1,530	7.2	4,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	879	702	416	456	320	702	590	1,140	3,830	2,270	1,020	819
2	966	696	400	405	330	614	606	1,090	3,910	2,310	989	783
3	986	683	401	350	345	614	614	1,080	3,900	2,200	964	747
4	992	693	410	345	365	684	639	1,120	3,880	2,080	923	729
5	905	696	420	380	370	630	639	1,330	3,910	1,910	904	747
6	930	681	426	400	370	684	684	1,540	3,900	1,860	877	783
7	792	624	427	410	360	819	891	1,790	3,890	1,820	866	792
8	776	620	405	400	350	747	927	1,920	3,960	1,730	955	801
9	763	630	385	395	318	657	855	2,030	4,060	1,640	919	801
10	753	630	390	380	305	729	819	1,810	4,110	1,550	878	801
11	753	640	400	370	305	900	819	1,630	4,090	1,490	841	796
12	745	653	400	365	310	918	882	1,480	4,070	1,440	836	792
13	737	695	404	362	312	918	981	1,440	3,930	1,400	872	778
14	741	752	410	365	330	972	909	1,650	3,620	1,400	942	765
15	777	699	410	370	355	873	846	2,030	3,260	1,470	953	738
16	795	660	410	375	390	801	810	2,470	3,120	1,420	876	711
17	807	629	410	390	415	801	783	2,910	3,140	1,380	850	695
18	840	613	410	415	440	846	774	3,140	3,190	1,220	844	679
19	870	584	410	465	440	891	756	3,110	3,230	1,240	861	681
20	882	584	415	505	420	864	756	3,330	3,030	1,240	890	710
21	858	598	445	538	385	783	756	3,380	2,650	1,440	859	701
22	832	598	470	522	362	783	765	3,110	2,410	1,430	837	686
23	803	598	494	487	394	882	774	2,730	2,410	1,300	827	680
24	776	520	490	506	388	828	783	2,370	2,840	1,220	824	665
25	757	448	483	516	388	756	828	2,210	3,080	1,190	809	656
26	744	461	455	523	355	720	891	2,120	2,850	1,160	784	658
27	738	452	443	514	410	657	909	2,130	2,460	1,180	791	691
28	735	451	445	460	475	621	918	2,380	2,130	1,160	801	779
29	731	446	450	385	657	598	980	2,750	1,980	1,010	783	739
30	687	425	456	330	------	606	1,100	3,180	2,110	987	801	685
31	686	------	456	320	------	590	------	3,560	------	974	801	------
TOTAL	24,936	18,161	13,246	13,004	10,964	23,488	24,284	67,960	98,950	46,121	26,977	22,088
MEAN	804	605	427	419	378	758	809	2,192	3,298	1,488	870	736
MAX	992	752	494	538	657	972	1,100	3,560	4,110	2,310	1,020	819
MIN	686	425	385	320	305	590	590	1,080	1,980	974	783	656
AC-FT	49,460	36,020	26,270	25,790	21,750	46,590	48,170	134,800	196,300	91,480	53,510	43,810

CAL YR 1971 TOTAL 456,187 MEAN 1,250 MAX 4,540 MIN 380 AC-FT 904,800
WTR YR 1972 TOTAL 390,179 MEAN 1,066 MAX 4,110 MIN 305 AC-FT 773,900

PEAK DISCHARGE (BASE, 2,100 CFS).--May 20 (2100) 3,440 cfs (6.16 ft); June 10 (unknown) 4,110 cfs (6.84 ft).

13055500 Diversions from Teton River between St. Anthony gaging station and mouth, Idaho

Between St. Anthony gaging station and mouth, 20 canals divert water from Teton River for irrigation of 30,000 acres of land. Records available for part of each irrigation season from 1919 to current year. Discharge of canals computed from daily or twice-weekly staff-gage readings, or interpolated, and combined to show total diverted flow. Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								492	1,510	1,000	967	721
2								543	1,500	1,100	963	695
3								653	1,500	1,120	981	670
4								826	1,450	1,220	951	660
5								890	1,430	1,260	909	634
6								1,080	1,470	1,250	938	639
7								1,230	1,450	1,340	901	639
8								1,240	1,440	1,360	995	618
9								1,250	1,240	1,310	952	619
10								1,240	1,140	1,160	1,000	619
11								1,180	1,080	1,110	938	618
12								976	1,080	1,210	940	604
13								1,110	1,210	1,340	986	602
14								1,210	1,210	1,300	1,020	588
15								1,300	1,370	1,360	845	588
16								1,360	1,360	1,320	753	570
17								1,340	1,340	1,340	710	570
18								1,280	1,300	1,220	695	537
19								1,320	1,310	1,060	678	537
20								1,260	1,260	1,180	709	533
21								1,220	1,190	1,220	695	530
22								1,160	1,160	1,240	679	561
23								1,080	1,080	979	696	561
24								1,070	1,130	946	671	546
25								1,110	930	1,010	679	547
26								1,080	870	1,070	685	532
27								1,090	725	1,090	690	540
28								1,170	716	1,090	685	538
29								1,280	877	1,090	682	537
30					------			1,350	883	964	730	524
31		------			------		------	1,350	------	978	716	------
TOTAL								34,740	36,211	36,237	25,439	17,677
MEAN								1,121	1,207	1,169	821	589
MAX								1,360	1,510	1,360	1,020	721
MIN								492	716	946	671	524
AC-FT								68,910	71,820	71,880	50,460	35,060

THE PERIOD: AC-FT 298,100

13056000 Diversions from Henrys Fork between St. Anthony and Rexburg gaging stations, Idaho

Between St. Anthony and Rexburg gaging stations, four canals divert water from Henrys Fork for irrigation. Records available for part of each irrigation season from 1919 to current year. Discharge of canals computed from daily or twice-weekly staff-gage readings, or interpolated, and combined to show total diverted flow. Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								936	1,170	750	791	393
2								969	1,070	779	796	445
3								991	989	789	706	437
4								1,040	983	775	728	454
5								1,090	977	846	776	455
6								1,150	943	881	776	455
7								1,190	943	890	763	439
8								1,160	922	874	797	439
9								1,090	913	859	807	438
10								1,080	905	840	828	438
11								1,070	903	738	824	414
12								1,090	698	728	840	414
13								1,100	751	922	787	408
14								1,120	855	934	691	408
15								1,130	858	910	699	402
16								1,130	890	870	632	402
17								1,110	897	876	668	406
18								1,110	804	901	675	406
19								1,100	798	883	672	424
20								1,100	765	817	627	424
21								1,070	761	703	622	424
22								1,060	776	671	624	424
23								1,060	777	696	624	418
24								1,060	752	700	619	416
25								925	731	716	622	403
26								1,020	586	800	620	401
27								1,030	603	788	616	367
28								1,030	657	770	596	367
29								1,110	676	792	611	330
30					------			1,100	746	803	660	330
31		------			------		------	1,170	------	791	611	------
TOTAL								33,391	25,099	25,092	21,708	12,381
MEAN								1,077	837	809	700	413
MAX								1,190	1,170	934	840	455
MIN								925	586	671	596	330
AC-FT								66,230	49,780	49,770	43,060	24,560

THE PERIOD: AC-FT 233,400

13056500 Henrys Fork near Rexburg, Idaho

LOCATION.--Lat 43°49'34", long 111°54'15", in NW¼NE¼ sec.30, T.6 N., R.39 E., Madison County, on right bank 200 ft downstream from highway bridge, 6 miles west of Rexburg, and at mile 9.3.

DRAINAGE AREA.--2,920 sq mi, approximately.

PERIOD OF RECORD.--April 1909 to current year. Monthly discharge only for some periods, published in WSP 1317. Prior to 1911, published as North Fork of Snake River near Rexburg.

GAGE.--Water-stage recorder. Datum of gage is 4,807.03 ft above mean sea level. Apr. 13, 1909, to Sept. 28, 1912, nonrecording gage at datum 0.67 ft higher. Sept. 29, 1912, to Apr. 4, 1913, nonrecording gage at present datum.

AVERAGE DISCHARGE.--63 years, 1,960 cfs (1,420,000 acre-ft per year); 15-year base period (1952-67), 1,848 cfs.

EXTREMES.--Current year: Maximum discharge, 7,770 cfs June 11 (gage height, 9.38 ft); minimum discharge, 1,040 cfs Aug. 10 (gage height, 3.98 ft).
Period of record: Maximum discharge, 11,200 cfs May 29, 1970 (gage height, 10.30 ft); minimum, 183 cfs Mar. 24-28, 1934 (gage height, 1.45 ft).

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by operation of powerplant near Ashton, and by Henrys Lake (see sta 13039000), Island Park Reservoir (see sta 13042000), and Grassy Lake (see sta 13046500). Diversions above station for irrigation of about 5,000 acres below and about 204,000 acres above station of which about 21,000 acres are by withdrawals from ground water (1966 determination). Considerable water leaks above gage into the Snake Plain aquifer. Station is downstream from all tributaries except inflow from ground water and irrigation waste. Part of ground-water flow escapes westward beneath the Snake River plains above gaging station. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

REVISIONS.--WSP 1217: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,910	3,570	3,000	2,450	2,400	2,680	2,410	3,930	5,220	4,380	1,740	2,580
2	3,180	3,580	2,800	2,400	2,500	2,610	2,400	3,420	5,590	4,310	1,750	2,760
3	3,280	3,560	2,700	2,200	2,200	2,570	2,410	3,030	6,010	4,170	1,730	2,800
4	3,240	3,570	2,800	2,000	2,350	2,570	2,440	3,040	6,580	3,660	1,650	2,730
5	3,270	3,560	2,850	2,400	2,500	2,530	2,450	3,300	7,110	3,030	1,530	2,690
6	3,220	3,500	3,000	2,600	2,600	2,590	2,520	3,740	7,100	2,670	1,450	2,890
7	3,140	3,440	2,750	2,700	2,550	2,680	2,870	4,280	6,770	2,460	1,380	3,040
8	2,960	3,460	2,200	2,800	2,500	2,680	3,180	4,900	6,690	2,470	1,240	2,900
9	2,440	3,470	2,400	2,600	2,400	2,600	2,980	6,100	7,230	2,490	1,160	2,710
10	2,300	3,000	2,600	2,500	2,450	2,590	2,960	6,610	7,670	2,470	1,070	2,670
11	2,240	2,450	2,800	2,500	2,500	2,710	2,810	6,230	7,710	2,100	1,150	2,840
12	2,230	2,280	2,750	2,600	2,600	2,830	2,920	5,580	7,680	2,210	1,300	2,890
13	2,380	3,050	2,700	2,500	2,550	2,820	3,170	5,310	7,480	2,130	1,470	2,770
14	2,880	3,440	2,700	2,500	2,500	2,860	2,940	5,190	6,740	2,030	1,710	2,700
15	3,090	3,390	2,700	2,550	2,500	2,890	2,760	5,530	5,900	1,970	2,020	2,660
16	3,190	3,360	2,750	2,600	2,500	2,820	2,670	6,140	5,430	1,830	2,320	2,580
17	3,360	3,280	2,800	2,550	2,600	2,830	2,630	6,590	5,250	1,680	2,320	2,520
18	3,320	3,270	2,700	2,400	2,700	2,990	2,650	6,720	5,390	1,590	2,290	2,470
19	3,460	3,250	2,600	2,500	2,600	3,020	2,710	6,600	5,960	1,440	2,260	2,420
20	3,460	3,270	2,600	2,600	2,600	3,200	2,620	6,690	6,110	1,430	2,330	2,610
21	3,420	3,280	2,600	2,550	2,550	3,170	2,630	7,020	5,580	1,920	2,350	2,610
22	3,390	3,260	2,650	2,500	2,500	2,940	2,690	7,450	5,090	2,520	2,280	2,540
23	3,470	3,220	2,700	2,500	2,450	2,920	2,600	7,440	4,950	2,590	2,310	2,500
24	3,470	3,220	2,600	2,500	2,400	3,110	2,590	6,880	5,590	2,430	2,340	2,480
25	3,340	3,310	2,550	2,500	2,400	2,950	2,900	6,110	6,990	2,230	2,400	2,440
26	2,860	3,350	2,550	2,500	2,550	2,860	3,200	5,530	7,020	1,970	2,320	2,480
27	2,750	3,310	2,550	2,500	2,700	2,700	3,060	4,950	6,370	1,920	2,280	2,580
28	2,910	3,280	2,500	2,350	2,640	2,600	3,360	4,660	5,530	2,020	2,250	2,830
29	3,110	3,260	2,400	2,500	2,690	2,530	3,730	4,740	4,850	2,050	2,180	2,910
30	3,410	3,230	2,500	2,450	------	2,500	4,010	4,870	4,480	2,000	2,170	2,790
31	3,510	------	2,500	2,400	------	2,470	------	5,040	------	1,820	2,260	------
TOTAL	95,190	98,470	82,300	77,200	72,980	85,820	85,270	167,620	186,070	73,990	59,010	80,390
MEAN	3,071	3,282	2,655	2,490	2,517	2,768	2,842	5,407	6,202	2,387	1,904	2,680
MAX	3,510	3,580	3,000	2,800	2,700	3,200	4,010	7,450	7,710	4,380	2,400	3,040
MIN	2,230	2,280	2,200	2,000	2,200	2,470	2,400	3,030	4,480	1,430	1,070	2,420
AC-FT	188,800	195,300	163,200	153,100	144,800	170,200	169,100	332,500	369,100	146,800	117,000	159,500

CAL YR 1971 TOTAL 1,209,360 MEAN 3,313 MAX 9,750 MIN 1,300 AC-FT 2,399,000
WTR YR 1972 TOTAL 1,164,310 MEAN 3,181 MAX 7,710 MIN 1,070 AC-FT 2,309,000

Smaller reservoirs in Henrys Fork Basin

13039000 HENRYS LAKE.--Lat 44°35'51", long 111°21'10", in SW¼NW¼ sec.26, T.15 N., R.43 E., Fremont County, at dam on Henrys Fork, 5.2 miles south of former Lake, Idaho, Post Office. Drainage area, 99.0 sq mi, including 6.2 sq mi of Dry Creek basin. Period of record, June 1923 to current year (fragmentary). Nonrecording gage. Datum of gage is 6,457.16 ft above mean sea level (levels by Bureau of Reclamation). Current year: Maximum contents observed, 89,700 acre-ft June 13 (gage height, 16.60 ft); minimum observed, 80,600 acre-ft Nov. 18 (gage height, 15.20 ft). Period of record: Maximum contents observed, 92,100 acre-ft June 26, 1969; minimum observed, 140 acre-ft Nov. 8, 1934 (gage height, 0.03 ft).

Reservoir is formed on natural lake by concrete dam supported by downstream earth-fill dam; storage began Sept. 21, 1922; dam completed July 1923. Capacity, 90,420 acre-ft between gage heights 0.0 (low-water level of Henrys Lake prior to construction of dam) and 16.7 ft (top of 4.7-ft flashboards on spillway). Floodwaters of Dry Creek are diverted into Henrys Lake at times (some diverted during water year 1972). Water used for irrigation near St. Anthony. Gage read occasionally. Records given herein represent usable contents. Capacity table furnished by North Fork Reservoir Co.

13046500 GRASSY LAKE.--Lat 44°07'45", long 110°49'05", in NE¼ sec.18, T.48 N., R.116 W., Teton County, in gatehouse at dam 0.4 mile upstream from mouth on Grassy Creek, which is tributary to headwaters of Falls River, and 25.4 miles northwest of Moran, Wyo. Drainage area, 10.4 sq mi, including basin of Cascade Creek, from which water is diverted into Grassy Lake. Period of record, October 1939 to current year. Mercury pressure gage. Datum of gage is mean sea level (levels by Bureau of Reclamation). Current year: Maximum contents observed, 15,400 acre-ft June 9, 15 (maximum elevation, 7,210.65 ft June 9, 15); minimum contents observed, 9,490 acre-ft Sept. 25 (elevation, 7,190.10 ft). Period of record: Maximum contents observed, 15,446 acre-ft July 2, 1943 (elevation, 7,210.85 ft); no contents Oct. 2-5, 1940.

Reservoir is formed by earth-fill, rock-faced dam; storage began Oct. 18, 1939. Capacity, 15,200 acre-ft between elevations 7,135.0 ft (sill of trashrack) and 7,210.0 ft (crest of spillway). Water is used for irrigation of lands in Fremont-Madison irrigation district, Idaho. Gage read about twice monthly. Records given herein represent usable contents. Gage-height record and capacity table furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	GAGE HEIGHT (FEET)	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)	ELEVATION (FEET)	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
	HENRYS LAKE			GRASSY LAKE		
SEPT. 30	-	a83,500	-	-	a12,800	-
OCT. 31	-	a81,400	-2,100	-	a12,900	+100
NOV. 30	-	a81,400	0	-	a13,200	+300
DEC. 31	-	a83,300	+1,900	-	a13,500	+300
CALENDAR YEAR 1971	-	-	+1,700	-	-	+1,600
JAN. 31	-	a82,500	-800	-	a14,000	+500
FEB. 29	-	a81,800	-700	7,206.90	14,200	+200
MAR. 31	-	a81,900	+100	-	a14,500	+300
APR. 30	-	a83,900	+2,000	-	a14,700	+200
MAY 31	-	a87,800	+3,900	-	a15,400	+700
JUNE 30	-	a89,100	+1,300	7,210.35	15,300	-100
JULY 31	-	a88,000	-1,100	-	a14,900	-400
AUG. 31	-	a84,900	-3,100	7,195.90	11,000	-3,900
SEPT. 30	-	a82,700	-2,200	-	a9,500	-1,500
WATER YEAR 1972			-800			-3,300

a No gage-height record.

13057400 Grays Lake near Wayan, Idaho

LOCATION.--Lat 42°59'53", long 111°26'33", in NE¼SW¼ sec.8, T.5 S., R.43 E., Caribou County, at Beavertail Point, 3.5 miles west of Wayan.

DRAINAGE AREA.--137 sq mi.

RECORDS AVAILABLE.--June 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,380 ft above mean sea level.

EXTREMES.--Current year: Maximum gage height observed, 8.19 ft Apr. 11; minimum observed, 4.57 ft Sept. 28. Period of record: Maximum gage height, 8.40 ft May 5, 1971; water below gage height 4.5 ft for long periods each year prior to 1969.

REMARKS.--Since 1924 lake level has been regulated by means of a dam across the outlet to Willow Creek (see sta 13058000), and by a cut, controlled by headgates, diverting water to the Blackfoot Reservoir (see sta 1306500).

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		5.04	-		5.89			-	7.35	5.95	5.97	
2	5.14	5.00	-					-	7.32	5.89	5.97	
3	5.09	5.01	-					7.99	7.31	5.89	5.97	
4	-	5.01	-					7.98	7.27	5.95	5.96	
5	-	5.04	-					7.96	7.23	5.99	5.96	
6	5.09	5.04	-					-	7.18	6.03	5.95	
7	-	5.03	-			6.30		-	7.18	6.04	5.93	
8	-	5.02	-					8.05	7.16	6.02	5.90	
9	-	5.03	-					-	7.10	6.02	5.88	
10	-	5.18	-					8.06	7.05	6.02	5.82	
11	-	5.21	-				8.19	-	7.02	6.02	5.80	
12	-	5.25	-					-	6.94	6.02	5.74	
13	4.95	5.26	-					-	6.89	5.99	5.55	
14	-	5.26	-					-	6.83	6.01	5.44	
15	-	5.27	-					-	6.80	-	5.28	
16	-	5.27	-					-	6.75	-	5.11	
17	4.98	5.33	-					7.82	6.70	-	-	
18	5.03	-	-					7.78	6.64	5.99	-	
19	4.96	-	-					7.80	6.58	5.99	-	
20	4.96	-	-					7.72	6.48	6.00	-	
21	4.98	-	5.49					7.73	6.38	6.02	-	
22	4.96	-	5.42					7.72	6.31	6.02	-	
23	4.95	-	5.38					7.70	6.28	6.02	5.01	
24	4.97	-	5.41					7.68	6.27	6.00	5.01	
25	4.96	-	5.43					7.66	6.24	5.98	5.01	
26	-	-	5.52					7.63	6.18	6.00	4.90	
27	4.97	-	5.50					7.58	6.14	5.99	-	
28	5.02	-	-					7.54	6.09	5.99	-	4.57
29	5.03	-	-					7.47	6.05	5.98	-	
30	5.04	-	-		------			7.44	6.02	5.96	-	
31	5.04	------	-		------		------	7.40	------	5.96	-	------
MEAN	-	-	-					-	6.72	-	-	
MAX	-	-	-					-	7.35	-	-	
MIN	-	-	-					-	6.02	-	-	

13058000 Willow Creek near Ririe, Idaho

LOCATION.--Lat 43°35'35", long 111°46'30", in SE¼NW¼ sec.17, T.3 N., R.40 E., Bonneville County, on left bank, about 1 mile upstream from mouth of canyon, 1.5 miles upstream from Eagle Rock Canal, and 2.6 miles south of Ririe.

DRAINAGE AREA.--627 sq mi.

PERIOD OF RECORD.--April 1903 to September 1904, October 1916 to September 1925, May to August 1928, October 1962 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft (from topographic map). Prior to September 1904, non-recording gage at site about 1.5 miles downstream at different datum. October 1916 to June 1921, nonrecording gage, and after June 1921 water-stage recorder at sites about 2 and 2.2 miles upstream at different datums.

AVERAGE DISCHARGE.--20 years (1903-4, 1916-25, 1962-72), 184 cfs (133,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,600 cfs May 9 (gage height, 13.05 ft); minimum daily, 44 cfs Jan. 4.
Period of record: Maximum discharge observed, 4,200 cfs May 15, 1917 (gage height, 16.3 ft); minimum, 5.8 cfs Aug. 30, 1963, and Mar. 7, 1967.
Maximum discharge known, 5,080 cfs Feb. 11, 1962, from estimate based on field survey (gage height, 15.0 ft, from floodmarks); stream reported practically dry during summers of 1899 and 1934.

REMARKS.--Records excellent except those for winter period, which are fair. Diversions above station for irrigation of about 7,300 acres of which about 100 acres are by withdrawals from ground water (1966 determination). Since the spring of 1924, water has sometimes been diverted from Grays Lake (see sta 130574000) 40 miles upstream to Blackfoot Reservoir. Records of chemical analyses, water temperatures, and suspended sediment loads for the water year 1972 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	82	60	60	47	253	263	1,120	555	213	89	66
2	103	76	58	64	47	188	274	937	540	202	87	67
3	101	77	58	59	48	269	317	934	535	196	84	66
4	99	78	58	44	51	194	361	1,010	566	191	82	64
5	100	78	60	50	56	137	391	1,150	535	187	83	61
6	97	62	64	54	59	160	480	1,270	556	182	81	64
7	91	64	61	56	62	169	704	1,290	526	172	80	69
8	86	82	53	55	62	143	735	1,350	523	163	78	68
9	80	73	59	52	62	139	735	1,510	547	149	74	66
10	77	74	61	52	59	153	794	1,410	517	139	73	70
11	74	75	60	53	58	173	840	1,190	454	135	71	78
12	71	75	57	56	62	180	874	1,070	416	120	68	76
13	70	83	56	54	68	196	841	995	392	129	69	73
14	70	93	53	50	65	218	743	971	374	122	72	71
15	70	89	54	48	67	233	656	974	360	120	76	68
16	71	76	54	47	73	233	678	976	342	118	75	69
17	75	64	54	47	88	261	741	974	330	115	73	65
18	92	62	55	49	110	306	773	977	327	110	69	63
19	101	65	57	54	145	385	752	959	315	110	69	67
20	88	78	60	59	158	405	673	919	301	112	72	73
21	89	74	62	60	160	382	697	884	289	120	72	81
22	87	71	65	60	150	428	750	830	270	112	70	72
23	85	68	70	55	135	497	769	812	266	105	67	70
24	83	68	75	56	116	495	824	781	289	102	68	69
25	80	68	85	55	109	429	965	743	316	100	71	70
26	78	66	97	53	103	379	1,190	685	296	105	70	69
27	78	65	96	51	124	329	1,010	643	284	115	67	74
28	79	72	78	50	280	311	984	619	261	102	65	87
29	67	69	69	49	394	295	1,170	606	240	98	63	95
30	62	61	62	48	------	277	1,280	585	225	92	65	84
31	69	------	58	47	------	266	------	570	------	89	65	------
TOTAL	2,556	2,188	1,969	1,647	3,017	8,483	22,264	29,744	11,747	4,125	2,268	2,135
MEAN	82.5	72.9	63.5	53.1	104	274	742	959	392	133	73.2	71.2
MAX	103	93	97	64	394	497	1,280	1,510	566	213	89	95
MIN	62	61	53	44	47	137	263	570	225	89	63	61
AC-FT	5,070	4,340	3,910	3,270	5,980	16,830	44,160	59,000	23,300	8,180	4,500	4,230

CAL YR 1971 TOTAL 103,061 MEAN 282 MAX 2,660 MIN 24 AC-FT 204,400
WTR YR 1972 TOTAL 93,143 MEAN 252 MAX 1,510 MIN 44 AC-FT 182,800

PEAK DISCHARGE (BASE, 850 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-12	1800	9.84	910	5- 9	2130	13.05	1,600
4-30	0400	12.33	1,330				

13059500 Diversions from Snake River between Heise and Shelley gaging stations, Idaho

Between Heise and Shelley gaging stations, 47 canals divert water from Snake River for irrigation; of these, 36 divert above mouth of Henrys Fork. Records available during each irrigation season from 1919 to current year. Three of the canals are equipped with water-stage recorders, the others with nonrecording gages, which are read once daily. Discharge combined to show total diverted flow. Records include Riley ditch which diverts 1.5 miles above Heise gaging station. Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								3,760	11,100	9,130	9,790	7,830
2								3,230	11,200	9,220	9,950	7,780
3								3,780	11,000	9,690	9,760	7,620
4								4,730	10,500	9,940	9,440	7,640
5								5,220	10,700	10,200	9,080	7,650
6								5,260	10,400	10,400	8,830	7,610
7								6,710	10,400	10,900	8,890	7,430
8								6,790	10,000	10,700	9,050	7,430
9								6,880	9,480	10,800	9,150	7,380
10								7,330	8,820	11,000	9,610	7,310
11								7,460	8,670	10,900	9,500	7,230
12								7,750	8,880	11,100	8,820	7,270
13								7,460	8,930	11,100	8,240	7,260
14								8,120	9,140	11,200	8,380	7,280
15								8,330	9,400	10,900	7,760	7,240
16								8,390	9,500	10,700	7,330	7,260
17								8,830	9,880	10,900	7,220	7,210
18								8,890	9,690	10,900	6,990	7,220
19								8,940	10,000	11,000	6,960	7,160
20								8,890	10,100	11,000	6,800	7,230
21								8,790	9,950	10,100	6,890	7,200
22								8,680	9,650	9,640	7,110	7,050
23								8,630	8,580	9,230	7,280	6,990
24								8,700	7,750	9,070	7,300	6,850
25								8,870	7,370	9,240	7,340	6,570
26								9,200	7,350	9,720	7,250	6,470
27								9,160	7,150	9,740	7,070	6,340
28								9,230	7,460	9,910	7,340	6,140
29								9,680	7,830	9,900	7,720	5,840
30					------			10,500	8,720	9,670	7,850	5,440
31		------			------		------	10,900	------	9,750	7,940	------
TOTAL								239,090	279,600	317,650	252,640	212,930
MEAN								7,713	9,320	10,250	8,150	7,098
MAX								10,900	11,200	11,200	9,950	7,830
MIN								3,230	7,150	9,070	6,800	5,440
AC-FT								474,200	554,600	630,100	501,100	422,300

13060000 Snake River near Shelley, Idaho

LOCATION.--Lat 43°24'47", long 112°08'02", in SE¼SW¼ sec.17, T.1 N., R.37 E., Bingham County, on right bank 0.3 mile southeast of Woodville, 2.5 miles north of Shelley, at mile 791.7.

DRAINAGE AREA.--9,790 sq mi, approximately, excluding indeterminate nontributary area on Snake River Plain.

PERIOD OF RECORD.--March 1915 to current year (prior to October 1931, irrigation seasons only).

GAGE.--Water-stage recorder. Datum of gage is 4,599.0 ft above mean sea level.

AVERAGE DISCHARGE.--41 years (1931-72), 5,484 cfs (3,973,000 acre-ft per year); 15-year base period (1952-67), 5,232 cfs.

EXTREMES.--Current year: Maximum discharge, 21,800 cfs June 12 (gage height, 11.34 ft); minimum, 2,680 cfs Aug. 9 (gage height, 5.68 ft).
Period of record: Maximum discharge, 47,200 cfs June 17, 1918 (gage height, 16.97 ft); minimum, 288 cfs Nov. 5, 1934 (gage height, 2.22 ft).
Maximum discharge known, 75,000 cfs (estimated) June 6, 1894, at former station at Eagle Rock (now Idaho Falls), 7 miles upstream from present site.

REMARKS.--Records excellent except those for winter periods, which are good. Some regulation by Jackson Lake (see sta 13010500), Palisades Reservoir (see sta 13032450), Island Park Reservoir (see sta 13042000), Henrys Lake (see sta 13039000), and Grassy Lake (see sta 13046500). Diversions above station for irrigation of about 39,000 acres below and about 637,000 acres above station of which about 100,000 acres are by withdrawals from ground water (1966 determination). Considerable water leaks above station into Snake Plain aquifer.

REVISIONS (WATER YEARS).--WSP 1317: 1916.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

5.0	1,810	10.0	17,000
6.0	3,540	12.0	24,800
8.0	9,680		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,050	10,500	6,230	5,000	4,400	6,250	15,900	19,500	13,400	10,300	4,740	5,920
2	9,210	10,600	5,900	5,000	4,300	6,210	16,400	18,700	14,500	9,850	4,210	6,400
3	9,830	10,600	5,840	4,600	4,400	6,510	14,400	17,600	16,400	9,440	4,420	6,730
4	9,930	10,600	5,970	3,300	4,600	6,500	16,100	16,700	17,400	8,320	4,630	6,730
5	9,750	7,950	6,190	4,150	4,800	7,100	18,300	15,900	18,000	6,770	4,490	6,500
6	9,670	6,430	6,280	3,900	5,000	7,260	18,400	15,600	18,300	5,600	4,140	6,670
7	9,540	6,170	6,060	4,550	5,500	7,490	18,700	15,800	18,400	4,880	4,090	6,960
8	9,430	6,020	5,400	4,700	6,000	7,690	19,100	16,400	18,700	4,160	3,540	7,060
9	9,150	5,970	4,700	5,200	6,500	7,680	19,200	17,100	19,600	4,440	2,990	6,870
10	8,730	5,890	4,100	5,200	5,400	8,310	19,100	17,600	20,500	4,660	3,190	6,870
11	8,630	4,610	4,200	5,100	6,000	9,310	19,100	17,700	21,400	4,420	3,680	6,930
12	8,590	4,230	5,150	5,000	6,000	9,690	18,900	17,600	21,400	4,340	4,340	6,930
13	8,510	4,570	5,350	4,800	6,000	9,690	19,200	16,500	21,000	4,390	4,940	7,000
14	8,860	5,350	5,600	4,750	6,000	9,550	19,100	16,100	20,600	4,390	5,350	6,900
15	9,370	5,770	5,600	4,700	6,000	9,720	18,800	16,400	19,600	4,160	5,730	6,670
16	9,570	5,860	5,300	4,750	6,000	10,000	18,600	16,500	18,600	4,340	5,890	6,570
17	9,740	5,760	4,800	4,750	6,090	10,200	18,500	16,800	17,800	4,290	6,110	6,470
18	9,890	5,700	5,400	5,110	6,160	10,600	18,500	17,100	17,700	3,870	6,210	6,310
19	9,980	5,710	5,500	5,300	6,050	11,400	18,500	17,100	17,900	3,770	6,240	6,210
20	10,000	5,730	5,400	5,550	6,100	11,600	18,400	17,300	18,000	3,840	6,400	6,340
21	9,390	5,820	5,400	5,710	6,250	12,300	18,200	17,800	17,900	4,940	6,370	6,570
22	9,380	5,950	5,900	6,070	6,200	12,700	18,300	18,300	16,200	5,600	6,050	6,630
23	9,400	6,030	5,900	6,080	6,300	12,600	18,300	18,600	15,700	6,630	5,790	6,770
24	10,100	5,920	5,700	5,400	6,430	12,900	18,100	18,300	15,500	7,130	5,830	7,000
25	10,200	6,040	5,750	5,400	6,370	14,700	18,300	17,500	15,800	6,370	5,920	7,200
26	9,970	6,180	5,800	5,400	6,030	17,400	18,600	16,500	17,300	5,310	5,920	7,360
27	9,650	6,390	5,600	5,500	5,780	16,800	18,600	15,700	16,800	4,850	6,180	7,560
28	9,640	6,320	5,250	5,350	5,920	14,700	18,800	15,300	14,900	4,790	6,020	8,020
29	8,900	6,350	5,450	5,200	6,100	16,100	19,100	14,900	13,100	4,910	5,540	8,420
30	9,960	6,310	5,150	5,250	------	16,400	19,500	14,100	11,500	5,090	5,410	8,750
31	10,400	------	5,150	4,800	------	14,400	------	13,600	------	5,090	5,600	------
TOTAL	293,420	195,330	169,920	155,570	166,680	333,760	549,000	520,600	523,900	170,940	159,960	207,320
MEAN	9,465	6,511	5,481	5,018	5,748	10,770	18,300	16,790	17,460	5,514	5,160	6,911
MAX	10,400	10,600	6,280	6,080	6,500	17,400	19,500	19,500	21,400	10,300	6,400	8,750
MIN	8,050	4,230	4,100	3,300	4,300	6,210	14,400	13,600	11,500	3,770	2,990	5,920
AC-FT	582,000	387,400	337,000	308,600	330,600	662,000	1,089M	1,033M	1,039M	339,100	317,300	411,200

CAL YR 1971 TOTAL 3,916,240 MEAN 10,730 MAX 25,200 MIN 3,050 AC-FT 7,768,000
WTR YR 1972 TOTAL 3,446,400 MEAN 9,416 MAX 21,400 MIN 2,990 AC-FT 6,836,000

13063000 Blackfoot River above reservoir, near Henry, Idaho

LOCATION.--Lat 42°49'00", long 111°30'35", in SE¼NE¼ sec.14, T.7 S., R.42 E., Caribou County, on right bank 70 ft upstream from railroad bridge immediately upstream from the Monsanto Chemical Company "Haul Road", 5 miles upstream from Blackfoot Reservoir flow line, 6 miles south of Henry, and 11 miles north of Soda Springs.

DRAINAGE AREA.--350 sq mi, approximately.

PERIOD OF RECORD.--April 1914 to September 1925 (no winter records except water year 1915), August 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,260 ft (from topographic map). Mar. 25, 1914, to Sept. 30, 1914, nonrecording gage at site 3.3 miles downstream at different datum. Oct. 1, 1915, to Sept. 30, 1925, nonrecording gage at site 4 miles downstream at different datum.

AVERAGE DISCHARGE.--6 years (1914-15, 1967-72), 179 cfs (6.95 inches per year, 129,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,770 cfs May 8 (gage height, 7.95 ft); minimum daily, 64 cfs Jan. 4. Period of record: Maximum discharge, 2,060 cfs May 16, 1917 (gage height, 6.85 ft, from floodmark), from rating curve extended above 1,000 cfs; minimum daily, 23 cfs Jan. 7, 1971.

REMARKS.--Records excellent except those for winter periods, which are fair. Diversions above station for irrigation of about 4,500 acres (1966 determination). Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	138	109	93	75	140	206	920	655	289	172	140
2	151	124	105	94	75	150	223	749	658	283	169	140
3	146	153	105	75	75	160	286	763	665	276	165	132
4	156	156	108	64	77	160	314	911	686	257	163	130
5	155	123	112	72	84	140	364	1,080	719	246	163	133
6	146	111	115	76	90	155	548	1,090	732	241	159	167
7	137	129	112	78	94	160	610	1,230	734	241	156	158
8	131	127	98	78	94	145	630	1,570	730	233	152	140
9	127	130	102	76	94	145	630	1,420	717	226	149	135
10	123	135	104	76	87	150	650	1,130	691	222	142	145
11	121	129	102	78	83	165	695	993	638	217	143	140
12	119	122	97	80	96	175	743	932	580	197	141	131
13	117	154	91	75	89	185	742	884	541	203	140	127
14	120	160	85	70	98	199	626	855	512	198	146	126
15	140	142	86	67	84	208	563	843	488	197	152	127
16	140	126	85	67	87	212	554	850	467	194	151	124
17	158	143	87	70	98	220	602	857	455	189	145	122
18	164	132	90	75	104	235	634	875	459	184	142	120
19	155	130	91	83	110	260	582	890	436	180	148	132
20	150	134	94	86	112	258	524	890	401	190	155	145
21	161	127	96	87	112	257	501	892	377	203	149	133
22	165	118	98	86	110	274	518	868	365	199	145	128
23	148	114	101	82	102	309	529	836	370	187	145	127
24	139	113	105	81	99	302	595	828	416	180	148	127
25	147	116	108	82	97	291	727	773	478	176	148	124
26	145	102	110	80	97	255	782	741	479	199	147	124
27	140	119	110	79	105	242	705	702	449	188	140	128
28	135	125	104	77	120	228	750	675	386	182	135	134
29	123	115	95	76	145	222	919	659	347	175	136	132
30	115	112	89	75	------	214	1,040	655	321	170	138	127
31	121	------	89	74	------	204	------	650	------	174	140	------
TOTAL	4,343	3,859	3,083	2,412	2,773	6,419	17,792	28,111	15,952	6,496	4,624	3,998
MEAN	140	129	99.5	77.8	95.6	207	593	907	532	210	149	133
MAX	165	160	115	94	145	309	1,040	1,670	734	289	172	167
MIN	115	102	85	64	75	140	206	650	321	170	135	120
CFSM	.40	.37	.28	.22	.27	.59	1.69	2.59	1.52	.60	.43	.38
IN.	.46	.41	.33	.26	.29	.68	1.89	2.99	1.70	.69	.49	.42
AC-FT	8,610	7,650	6,120	4,780	5,500	12,730	35,290	55,760	31,640	12,880	9,170	7,930

CAL YR 1971 TOTAL 94,236 MEAN 258 MAX 1,800 MIN 23 CFSM .74 IN 10.02 AC-FT 186,900
WTR YR 1972 TOTAL 99,862 MEAN 273 MAX 1,670 MIN 64 CFSM .78 IN 10.61 AC-FT 198,100

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-13	0730	5.51	763	5- 8	1300	7.95	1,770
4-30	1930	6.31	1,060				

13065000 Blackfoot Reservoir near Henry, Idaho

LOCATION.--Lat 43°00'20", long 111°43'00", in sec.12, T.5 S., R.40 E., Caribou County, Bureau of Land Management lands, near spillway at right end of dam on Blackfoot River, 12 miles northwest of Henry, and at mile 78.0.

DRAINAGE AREA.--581 sq mi.

PERIOD OF RECORD.--January 1912 to September 1925, January 1929 to current year (no winter records (1949-59). Monthend contents only for January 1929 to September 1960, published in WSP 1317, 1737. Prior to October 1950 and October 1960 to September 1961, published as Blackfoot-Marsh Reservoir near Henry.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Indian Field Service).

EXTREMES.--Current year: Maximum contents observed during year, 342,100 acre-ft June 28 (elevation, 6,120.03 ft); minimum observed, 221,200 acre-ft Sept. 13-15 (elevation, 6,113.00 ft).
Period of record: Maximum contents observed, 349,800 acre-ft Apr. 22, 23, 1951 (elevation, 6,120.56 ft); minimum observed, 610 acre-ft Sept. 12-15, 19, 21, 22, 1934; minimum elevation observed, 6,088.59 ft Sept. 22, 1934.

REMARKS.--Water diverted from reservoir for irrigation of about 50,000 acres near Pocatello and on Fort Hall Indian Reservation. Capacity is 313,000 acre-ft between elevations 6,086 ft (bottom of outlet tunnel) and 6,118.5 ft (crest of spillway) with provision for additional storage of 100,000 acre-ft to elevation 6,124 ft by means of flashboards. Storage supplemented by water from Grays Lake beginning May 1924. Storage began in spring of 1910.

COOPERATION.--Capacity table, gage readings and daily contents furnished by Bureau of Indian Affairs.

Capacity table (elevation, in feet, and contents, in acre-feet)

6,113	221,200	6,118	304,700
6,114	237,500	6,120.2	343,400
6,116	270,600		

CONTENTS, IN ACRE-FEET, FOR STATISTIC 00011, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221,900	-	-	-	252,000	239,100	-	290,100	329,200	338,500	269,300	239,800
2	221,700	-	-	-	-	-	227,700	293,200	-	338,200	267,500	-
3	221,600	-	-	-	-	-	228,500	296,300	328,800	337,300	266,100	238,400
4	221,700	233,400	-	-	-	-	226,400	298,200	328,800	336,400	264,800	237,600
5	222,200	-	-	-	-	-	226,800	301,600	329,000	335,000	264,000	236,800
6	222,400	-	-	-	-	-	227,400	304,200	329,900	333,600	263,100	236,000
7	222,200	-	-	258,600	-	-	-	-	331,000	332,200	262,300	235,000
8	222,100	-	-	-	-	-	-	310,800	-	330,400	261,500	234,200
9	221,900	-	-	-	-	-	-	314,300	334,500	-	260,600	233,600
10	221,900	-	-	-	-	-	238,000	317,300	336,200	326,900	259,800	232,900
11	221,700	-	-	-	-	-	241,200	319,000	338,000	325,100	259,000	232,300
12	221,700	-	-	-	-	-	244,900	319,900	339,800	322,800	258,100	231,600
13	221,200	-	-	-	-	-	246,500	-	340,100	320,200	257,300	231,000
14	221,200	-	-	-	-	-	249,500	321,600	340,500	317,600	257,300	230,300
15	221,200	-	-	-	-	-	249,800	322,500	340,700	316,700	254,600	229,700
16	222,900	-	-	-	-	-	251,500	323,400	340,900	314,100	253,300	228,900
17	223,800	-	-	-	-	-	255,100	324,300	340,900	313,300	252,000	228,200
18	224,500	-	-	259,000	-	-	257,300	324,800	-	310,800	251,100	227,400
19	224,800	-	-	-	-	-	260,300	325,100	341,000	307,400	250,300	226,800
20	225,100	-	-	-	-	-	259,500	325,500	340,900	305,600	249,500	226,100
21	225,500	-	253,600	-	-	-	263,600	325,800	340,700	303,900	248,700	225,300
22	225,800	-	-	-	-	-	-	325,800	340,500	-	247,800	224,700
23	226,100	-	-	-	-	-	-	326,600	340,300	-	-	224,000
24	226,400	-	-	-	-	-	272,800	326,900	340,300	-	-	223,400
25	226,800	-	-	-	-	-	274,900	327,300	340,500	-	245,400	222,900
26	227,100	-	-	-	-	-	-	328,000	340,500	285,000	-	222,500
27	-	-	-	-	-	-	278,600	328,300	340,500	-	-	222,200
28	-	-	-	-	-	-	284,200	328,700	342,100	283,300	242,900	222,100
29	-	-	-	-	a239,500	-	282,500	329,000	341,900	276,600	242,100	221,900
30	-	a244,600	-	-	------	-	287,100	329,400	339,600	273,200	241,200	221,900
31	a230,600	------	a256,500	a252,500	------	a228,400	------	329,400	------	272,300	240,600	------
MAX	230,600	-	-	-	-	-	287,100	329,400	342,100	338,500	269,300	239,800
MIN	221,600	-	-	-	-	-	-	290,100	328,800	272,300	240,600	221,900
(†)	-	-	-	-	-	-	6,116.97	6,119.41	6,119.99	6,116.10	6,114.19	6,113.04
(‡)	+8,200	+14,000	+11,900	-4,000	-13,000	-11,100	+58,700	+42,300	+10,200	-67,300	-31,700	-18,700

CAL YR 1971..... ‡ +500
WTR YR 1972..... ‡ -500

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.
a No gage-height record.

13068500 Blackfoot River near Blackfoot, Idaho

LOCATION.--Lat 43°07'50", long 112°28'35", near E¼ cor. sec.28, T.3 S., R.34 E., Bingham County, Fort Hall Indian Reservation, on left bank 11 ft upstream from highway bridge, at mile 2.3, and 8 miles southwest of Blackfoot.

DRAINAGE AREA.--1,295 sq mi, including that of Sand Creek whose flow is diverted to Blackfoot River through the Idaho Canal.

PERIOD OF RECORD.--July 1913 to current year (prior to October 1931, summer months only). Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 4,420 ft (from river-profile survey). Prior to May 8, 1926, nonrecording gage and May 8, 1926, to June 25, 1937, water-stage recorder at site 0.5 mile upstream at different datum. June 26, 1937, to Aug. 16, 1963, water-stage recorder at site 175 ft downstream at same datum.

AVERAGE DISCHARGE.--41 years (1931-72), 176 cfs (127,500 acre-ft per year); 15-year base period (1952-67), 153 cfs.

EXTREMES.--Current year: Maximum discharge, 483 cfs Apr. 12, 13 (gage height, 4.53 ft); maximum gage height, 6.41 ft Jan. 21; minimum discharge, 10 cfs Jan. 11 (gage height, 2.07 ft).
Maximum combined daily discharge during year (Blackfoot River and Blackfoot River bypass), 1,220 cfs Apr. 13.
Period of record: Maximum discharge, 1,710 cfs Feb. 11, 1962 (gage height, 7.68 ft); no flow on many days. Maximum combined discharge (Blackfoot River and Blackfoot River bypass), 1,840 cfs May 12, 1972.

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated by Blackfoot Reservoir (see sta 13065000). Diversions above station for irrigation of about 28,000 acres below and about 32,000 acres above station of which about 900 acres are by withdrawals from ground water (1966 determination). Part of flow is supplied by waste from Snake River canals.
Figures of daily discharge do not include discharge in bypass channel which diverts 5.5 miles upstream from station. Average discharge is for combined flow of river and bypass. Diversions to bypass channel started in April 1964. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

REVISIONS.--WSP 1217: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	360	253	181	185	260	335	354	374	186	196	218	221
2	411	247	194	180	270	337	340	386	184	261	205	230
3	370	251	168	160	280	342	246	374	188	261	220	236
4	321	249	187	155	300	342	243	325	222	264	218	240
5	306	253	180	155	315	340	260	310	227	240	208	235
6	321	238	182	170	310	333	295	299	250	230	193	242
7	332	238	183	205	310	335	366	263	214	205	205	257
8	336	258	149	170	310	338	420	248	236	204	208	275
9	330	256	126	103	310	327	435	304	294	212	198	275
10	326	258	161	52	300	325	436	322	343	232	195	242
11	319	254	170	88	310	328	447	329	366	247	211	224
12	309	249	180	250	325	332	470	344	378	236	242	201
13	304	251	180	190	330	336	474	313	360	226	266	195
14	275	249	180	210	330	340	461	291	344	213	323	167
15	323	247	180	220	326	346	441	271	317	200	373	143
16	332	240	175	230	331	355	421	271	300	198	361	127
17	334	226	175	240	332	362	413	273	259	215	327	130
18	338	221	175	225	322	368	409	286	259	188	295	112
19	336	208	175	220	321	376	429	320	284	169	257	103
20	334	214	175	215	317	405	420	333	273	168	296	160
21	311	217	185	220	316	439	377	343	248	236	323	226
22	302	220	195	220	315	418	372	366	242	312	296	246
23	296	216	221	200	313	408	391	386	266	362	261	241
24	288	205	245	190	313	419	392	380	310	375	255	237
25	281	202	217	200	310	431	390	358	351	318	277	241
26	277	196	201	210	309	428	395	321	355	244	287	245
27	273	195	185	225	311	422	398	281	355	238	290	235
28	273	182	180	230	315	414	371	262	300	256	262	223
29	253	197	175	235	321	405	333	250	234	244	208	215
30	247	194	170	240	------	376	341	239	190	244	187	203
31	251	------	175	250	------	375	------	210	------	254	204	------
TOTAL	9,669	6,884	5,625	6,043	9,032	11,437	11,540	9,632	8,335	7,448	7,869	6,327
MEAN	312	229	181	195	311	369	385	311	278	240	254	211
MAX	411	258	245	250	332	439	474	386	378	375	373	275
MIN	247	182	126	52	260	325	243	210	184	168	187	103
AC-FT	19,180	13,650	11,160	11,990	17,910	22,690	22,890	19,110	16,530	14,770	15,610	12,550
MEAN†	512	314	200	376	609	812	910	714	579	464	518	337
AC-FT†	31,500	18,670	12,270	23,130	35,000	49,960	54,160	43,920	34,450	28,550	31,850	20,070

CAL YR 1971 TOTAL 98,924 MEAN 271 MAX 590 MIN 71 AC-FT 196,200
WTR YR 1972 TOTAL 99,841 MEAN 273 MAX 474 MIN 52 AC-FT 198,000

CAL YR 1971† TOTAL 179,956.8 MEAN 493 MAX 1,840 MIN 71 AC-FT 356,900
WTR YR 1972† TOTAL 193,362.2 MEAN 528 MAX 1,220 MIN 126 AC-FT 383,500

† Adjusted for flow in flood bypass.

13069000 Diversions from Snake River between Shelley and Blackfoot gaging stations, Idaho

Between Shelley and Blackfoot gaging stations, 13 canals divert water from Snake River for irrigation of 158,000 acres of land. Records available during each irrigation season from 1919 to current year. The two largest canals are equipped with recorders, the others with nonrecording gages which are read once daily. Discharge combined to show total diverted flow. Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								1,900	4,160	2,920	3,170	2,520
2								2,010	4,260	3,180	3,300	2,510
3								2,150	4,350	2,730	3,410	2,490
4								2,500	4,250	3,310	3,410	2,500
5								2,800	4,220	3,360	3,350	2,470
6								2,750	4,090	3,350	3,220	2,380
7								2,800	4,060	3,550	3,110	2,250
8								2,880	3,870	3,370	3,020	2,160
9								2,910	3,630	3,680	3,020	2,070
10								2,980	3,410	3,860	2,950	2,080
11								3,160	3,250	3,840	3,170	2,070
12								3,160	2,890	3,870	3,090	2,050
13								3,320	2,970	3,860	3,050	2,020
14								3,310	3,070	3,850	2,960	1,950
15								3,340	3,010	3,800	2,480	1,890
16								3,480	3,220	3,790	2,210	1,890
17								3,780	3,280	3,830	2,070	2,040
18								3,840	3,250	3,670	2,120	2,030
19								3,830	3,260	3,660	1,920	2,080
20								3,780	3,260	3,610	1,980	2,100
21								3,680	3,220	3,540	1,870	2,080
22								3,570	3,190	3,240	1,980	1,970
23								3,510	3,030	3,010	2,010	1,900
24								3,480	2,690	3,020	2,070	1,840
25								3,460	2,580	3,110	2,080	1,790
26								3,410	2,490	3,190	2,120	1,670
27								3,350	2,330	3,270	2,200	1,520
28								3,510	2,340	3,240	2,330	1,520
29								3,630	2,440	3,220	2,480	1,520
30					------			3,760	2,760	3,180	2,500	1,500
31		------			------		------	3,980	------	3,110	2,520	------
TOTAL								100,020	98,830	106,220	81,170	60,860
MEAN								3,226	3,294	3,426	2,618	2,029
MAX								3,980	4,350	3,870	3,410	2,520
MIN								1,900	2,330	2,730	1,870	1,500
AC-FT								198,400	196,000	210,700	161,000	120,700

THE PERIOD: AC-FT 886,800

13069500 Snake River near Blackfoot, Idaho

LOCATION.--Lat 43°07'31", long 112°31'06", in SE¼SE¼ sec.30, T.3 S., R.34 E., Bingham County, on right bank 0.3 mile downstream from highway bridge, 0.7 mile downstream from Blackfoot River, 10 miles southwest of Blackfoot, and at mile 750.8.

DRAINAGE AREA.--11,310 sq mi, approximately, excluding indeterminate nontributary area on Snake River Plain.

PERIOD OF RECORD.--June 1910 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as "at Clough ranch, near Blackfoot" 1924-45.

GAGE.--Water-stage recorder. Datum of gage is 4,399.83 ft above mean sea level. Prior to July 6, 1913, nonrecording gages about 0.1 mile upstream at datum about 1.00 ft higher. July 6, 1913, to Aug. 19, 1962, water-stage recorder at site 0.1 mile upstream at datum 1.00 ft higher.

AVERAGE DISCHARGE.--62 years, 4,718 cfs (3,418,000 acre-ft per year); 15-year base period (1952-67) 3,977 cfs.

EXTREMES.--Current year: Maximum discharge, 20,600 cfs June 12 (gage height, 10.31 ft); minimum, 856 cfs July 20 (gage height, 1.99 ft).
Period of record: Maximum discharge, 46,200 cfs June 18, 1918 (gage height, 14.80 ft, site and datum then in use); minimum, 111 cfs Nov. 10, 1934 (gage height, 0.80 ft, site and datum then in use).
Late in summer of 1905 there was no flow in Snake River for a distance of 10 miles in vicinity of Blackfoot. Aug. 9, 1905, discharge of Snake River just below mouth of Blackfoot River was 39 cfs, supplied by ground-water inflow a short distance upstream.

REMARKS.--Records excellent. Flow regulated by Jackson Lake (see sta 13010500), Palisades Reservoir (see sta 13032450), Henrys Lake (see sta 13039000), Grassy Lake (see sta 13046500), Island Park Reservoir (see sta 13042000), and Blackfoot Reservoir (see sta 13065000), having a combined capacity of 2,883,000 acre-ft. Diversions above station for irrigation of about 93,000 acres below and about 832,000 acres above station of which about 155,000 acres are by withdrawals from ground water (1966 determination). Considerable water leaks above the station into the Snake Plain aquifer.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Dec. 20, Apr. 17 to May 19)

Oct. 1 to June 29				June 30 to Sept. 30			
3.0	1,660	8.0	12,600	2.0	840	5.0	4,920
4.0	3,000	10.0	19,600	3.0	1,840	7.0	9,700
6.0	7,100	11.6	25,900	4.0	3,220		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,460	11,000	6,290	5,030	4,860	6,700	14,900	18,600	9,850	8,360	2,820	4,100
2	9,130	11,100	6,110	5,080	4,460	6,740	17,400	18,100	9,980	7,680	2,000	4,430
3	9,840	11,100	5,840	4,640	4,900	6,840	14,400	16,700	12,000	7,520	1,860	4,910
4	9,970	11,100	5,880	3,410	4,970	7,030	14,500	15,100	13,700	6,690	2,130	5,130
5	9,820	9,880	6,090	4,280	5,200	7,230	17,500	14,000	14,600	5,020	2,320	4,930
6	9,760	7,120	6,260	4,000	5,890	7,630	18,300	13,400	15,000	3,640	2,100	5,070
7	9,690	6,680	6,240	4,640	6,550	7,760	18,700	13,300	15,200	2,620	2,100	5,450
8	9,600	6,520	5,160	5,230	6,920	7,960	19,300	13,800	15,600	1,800	1,820	5,710
9	9,470	6,430	4,860	5,490	7,010	8,060	19,700	14,500	17,000	1,530	1,270	5,690
10	8,950	6,440	4,100	5,350	6,980	8,130	19,700	15,300	18,400	1,760	936	5,430
11	8,690	5,680	4,400	5,200	6,610	9,330	19,600	15,700	19,900	1,770	1,210	5,520
12	8,600	4,680	5,240	5,260	6,460	9,960	19,700	15,600	20,500	1,410	1,840	5,410
13	8,500	4,820	5,440	4,870	6,470	10,100	19,800	14,600	20,200	1,400	2,740	5,470
14	8,570	5,450	5,720	4,760	6,530	10,000	19,900	13,700	19,700	1,360	3,580	5,540
15	9,230	5,980	5,720	4,730	6,600	10,100	19,500	13,700	18,700	1,250	4,420	5,250
16	9,710	6,150	5,440	4,760	6,620	10,300	19,000	13,700	17,100	1,260	5,050	5,010
17	9,940	6,040	4,950	4,920	6,630	11,500	18,800	13,700	15,800	1,610	5,210	4,880
18	10,100	5,940	5,580	5,310	6,650	11,900	18,700	13,900	15,300	1,280	5,290	4,800
19	10,200	5,930	5,640	5,620	6,570	12,900	18,800	14,300	15,900	952	5,190	4,620
20	10,400	5,950	5,560	5,970	6,590	13,200	18,700	14,600	15,800	904	5,410	4,620
21	10,300	5,950	5,560	6,090	6,650	13,700	18,300	15,100	16,100	1,890	5,590	5,080
22	9,970	6,110	5,940	6,420	6,690	14,200	18,200	15,900	15,000	3,480	5,210	5,370
23	9,940	6,220	5,860	6,490	6,670	14,100	18,300	16,500	14,000	4,370	4,770	5,540
24	10,300	6,120	5,810	5,830	6,800	14,300	18,000	16,400	14,700	5,350	4,570	5,730
25	10,700	6,110	5,830	5,590	6,780	14,800	17,600	15,600	14,600	4,750	4,690	6,070
26	10,600	6,200	5,810	5,960	6,690	17,000	18,000	14,600	15,900	3,550	4,750	6,260
27	10,200	6,430	5,690	5,860	6,280	18,400	18,100	13,500	16,600	2,860	4,810	6,570
28	10,100	6,380	5,330	5,880	6,350	15,500	17,900	12,900	14,600	2,840	4,660	6,870
29	9,660	6,410	5,540	5,300	6,470	15,300	17,800	12,300	12,400	2,840	4,040	7,270
30	9,940	6,370	5,210	5,860	------	17,700	18,100	11,300	10,200	2,980	3,660	7,680
31	10,800	------	4,900	5,070	------	15,000	------	10,300	------	3,200	3,740	------
TOTAL	300,140	206,290	172,000	162,900	182,850	353,370	547,200	450,700	464,330	97,926	109,786	164,410
MEAN	9,682	6,876	5,548	5,255	6,305	11,400	18,240	14,540	15,480	3,159	3,541	5,480
MAX	10,800	11,100	6,290	6,490	7,010	18,400	19,900	18,600	20,500	8,360	5,590	7,680
MIN	7,460	4,680	4,100	3,410	4,460	6,700	14,400	10,300	9,850	904	936	4,100
AC-FT	595,300	409,200	341,200	323,100	362,700	700,900	1,085M	894,000	921,000	194,200	217,800	326,100

CAL YR 1971 TOTAL 3,717,960 MEAN 10,190 MAX 25,800 MIN 2,500 AC-FT 7,375,000
WTR YR 1972 TOTAL 3,211,902 MEAN 8,776 MAX 20,500 MIN 904 AC-FT 6,371,000

M Expressed in thousands.

13072000 Portneuf River near Pebble, Idaho

LOCATION.--Lat 42°47'12", long 111°58'47", in SE¼NW¼ sec.26, T.7 S., R.38 E., Caribou County, on right bank, 90 ft downstream from county bridge, 4.8 miles upstream from Pebble Creek, and 3.5 miles north of Pebble.

DRAINAGE AREA.--260 sq mi, approximately.

PERIOD OF RECORD.--October 1910 to July 1913, October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,301.27 ft above mean sea level. October 1910 to July 1913 nonrecording gage 0.5 mile downstream at different datum.

AVERAGE DISCHARGE.--6 years (1911-12, 1969-72), 107 cfs (77,520 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 541 cfs May 19 (gage height, 3.97 ft); minimum discharge, 12 cfs Jan. 11 (gage height, 1.27 ft).
Period of record: Maximum discharge observed, 624 cfs Jan. 31, 1911 (gage height, 6.00 ft, site and datum then in use); minimum discharge, 12 cfs Jan. 11, 1972 (gage height, 1.27 ft).

REMARKS.--Records good. Flow regulated by Portneuf Reservoir (capacity, 23,695 acre-ft) and Chesterfield Reservoir on Twenty-Four Mile Creek (capacity, 685 acre-ft). Diversions above station for irrigation of about 14,000 acres of which about 4,800 acres are by withdrawals from ground water (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Dec. 12, Feb. 15 to Apr. 19, Aug. 10 to Sept. 30)

1.5	31	3.0	322
2.0	122	4.0	530

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	62	57	101	66	156	199	312	223	92	135	103
2	75	60	53	74	65	164	198	308	224	89	132	103
3	69	61	52	87	64	221	201	307	222	87	129	104
4	65	61	52	84	61	246	204	314	214	87	128	104
5	62	63	48	82	59	276	211	328	205	99	124	111
6	63	58	48	82	60	366	231	346	200	95	124	109
7	62	55	44	83	60	389	252	378	200	95	123	112
8	62	56	42	85	61	378	247	402	207	110	125	113
9	60	58	43	80	62	340	246	409	224	133	120	119
10	60	58	42	48	61	329	246	387	209	131	116	125
11	62	60	43	44	61	322	267	369	194	131	114	125
12	64	65	43	51	62	301	345	359	183	130	116	122
13	64	70	44	47	63	311	333	350	167	127	123	122
14	65	70	45	47	64	304	291	346	159	129	123	101
15	65	67	46	48	66	274	273	351	157	130	113	76
16	70	62	45	49	66	255	261	353	151	128	113	76
17	82	60	47	49	67	249	258	348	154	128	103	72
18	80	59	49	52	72	252	252	356	153	135	104	72
19	79	61	49	54	80	271	247	360	142	135	101	73
20	73	62	52	55	84	256	239	354	115	134	101	75
21	71	60	52	61	86	242	241	343	111	140	102	75
22	69	60	56	66	90	233	242	339	110	137	104	75
23	69	70	59	66	95	243	239	332	101	135	105	75
24	69	76	66	76	98	226	184	283	118	138	106	75
25	71	77	104	64	94	219	280	272	121	120	108	73
26	71	71	105	66	94	209	290	260	120	141	108	75
27	76	71	102	66	97	199	291	243	115	139	104	74
28	70	68	100	69	110	200	292	239	102	136	108	76
29	61	70	102	66	134	197	299	238	97	133	113	77
30	60	63	101	65	------	192	310	228	94	134	119	74
31	61	------	100	67	------	191	------	223	------	133	116	------
TOTAL	2,100	1,932	1,891	2,034	2,202	8,011	7,669	10,037	4,792	3,811	3,560	2,766
MEAN	67.7	64.4	61.0	65.6	75.9	258	256	324	160	123	115	92.2
MAX	82	77	105	101	134	389	345	409	224	141	135	125
MIN	60	55	42	44	59	156	184	223	94	87	101	72
AC-FT	4,170	3,830	3,750	4,030	4,370	15,890	15,210	19,910	9,500	7,560	7,060	5,490

CAL YR 1971 TOTAL 49,909 MEAN 137 MAX 528 MIN 31 AC-FT 98,990
WTR YR 1972 TOTAL 50,805 MEAN 139 MAX 409 MIN 42 AC-FT 100,800

13073000 Portneuf River at Topaz, Idaho

LOCATION.--Lat 42°37'30", long 112°05'20", in SE¼ sec.23, T.9 S., R.37 E., Bannock County, on right bank 200 ft upstream from Bob Smith Creek, 800 ft downstream from Topaz siding, 1.5 miles upstream from diversion dam of Portneuf-Marsh Valley Canal Co., 4 miles west of Lava Hot Springs, and at mile 47.3.

DRAINAGE AREA.--570 sq mi, approximately (includes that of Bob Smith Creek). Mean altitude, 6,080 ft.

PERIOD OF RECORD.--January 1913 to September 1915, July 1919 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 4,918.00 ft above mean sea level, preliminary, unadjusted. Prior to July 20, 1919, nonrecording gage at site 0.3 mile downstream at datum 3.0 ft lower. July 20, 1919, to June 22, 1954, nonrecording gage at site 0.3 mile downstream at datum 2.00 ft lower than present datum.

AVERAGE DISCHARGE.--55 years, 194 cfs (140,600 acre-ft per year); 15-year base period (1952-67), 169 cfs.

EXTREMES.--Current year: Maximum discharge, 769 cfs May 8 (gage height, 4.86 ft); minimum, 142 cfs Jan. 24 (gage height, 2.37 ft).
Period of record: Maximum discharge, 7,120 cfs Feb. 1, 1963 (gage height, 8.22 ft), result of highway fill failure 2 miles upstream; minimum, 64 cfs Sept. 23, 1966 (gage height, 2.27 ft).

REMARKS.--Records good. Flow regulated by Portneuf Reservoir (capacity, 23,695 acre-ft) and Chesterfield Reservoir on Twenty-Four Mile Creek (capacity, 685 acre-ft). Diversions above station for irrigation of about 29,000 acres of which about 7,400 acres are by withdrawals from ground water (1966 determination). Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1347: 1920-22, 1924-25(M). WSP 1567: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	201	189	229	201	322	412	552	498	279	235	230
2	224	198	182	224	193	353	423	546	513	273	235	228
3	221	198	190	193	191	408	427	549	526	267	232	227
4	215	200	189	195	190	424	431	569	519	262	227	227
5	212	202	193	203	188	438	440	600	500	263	224	236
6	211	194	198	205	186	521	488	638	488	260	222	249
7	210	194	183	205	186	560	521	690	479	248	221	237
8	209	197	171	204	185	587	515	754	492	231	233	232
9	203	195	181	203	186	546	513	753	510	254	232	237
10	197	197	182	178	183	531	514	733	493	255	231	247
11	196	199	181	169	183	528	522	693	463	252	227	243
12	197	203	181	173	185	510	621	679	442	250	226	239
13	196	214	181	169	188	519	629	663	418	245	232	237
14	202	214	180	167	190	528	561	659	400	242	240	236
15	203	209	182	167	192	500	525	673	384	242	226	214
16	211	198	179	165	198	479	511	690	380	237	223	199
17	226	197	178	170	205	481	510	695	383	236	219	191
18	230	195	179	179	209	489	498	704	379	240	217	189
19	225	192	180	193	220	518	486	706	367	242	216	207
20	225	195	182	192	225	506	472	692	347	246	216	202
21	221	198	181	217	228	486	470	663	352	256	217	200
22	216	199	183	226	232	484	474	643	352	249	218	202
23	214	196	198	231	233	504	469	622	342	246	225	200
24	213	201	198	189	235	491	453	580	361	244	223	198
25	210	205	227	218	234	466	482	524	357	263	221	197
26	209	199	259	206	233	452	520	519	349	249	221	198
27	215	209	236	205	245	432	520	493	327	251	220	202
28	212	199	231	205	277	428	527	483	310	240	220	203
29	199	201	234	199	309	421	551	488	295	237	228	204
30	202	198	233	200	------	414	558	488	284	235	231	200
31	204	------	229	200	------	408	------	489	------	236	238	------
TOTAL	6,552	5,997	6,070	6,079	6,110	14,734	15,043	19,230	12,310	7,730	6,996	6,511
MEAN	211	200	196	196	211	475	501	620	410	249	226	217
MAX	230	214	259	231	309	587	629	754	526	279	240	249
MIN	196	192	171	165	183	322	412	483	284	231	216	189
AC-FT	13,000	11,900	12,040	12,060	12,120	29,220	29,840	38,140	24,420	15,330	13,880	12,910

CAL YR 1971 TOTAL 110,486 MEAN 303 MAX 964 MIN 114 AC-FT 219,100
WTR YR 1972 TOTAL 113,362 MEAN 310 MAX 754 MIN 165 AC-FT 224,900

13075000 Marsh Creek near McCammon, Idaho

LOCATION.--Lat 42°37'50", long 112°13'30", in NE¼ sec.22, T.9 S., R.36 E., Bannock County, on left bank 10 ft downstream from abandoned highway bridge, 70 ft upstream from county road crossing, 2 miles southwest of McCammon, and at mile 11.0.

DRAINAGE AREA.--355 sq mi. Mean altitude, 5,630 ft.

PERIOD OF RECORD.--September 1954 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,610 ft (by barometer). Prior to July 14, 1965, nonrecording gage 10 ft upstream at datum.

AVERAGE DISCHARGE.--18 years, 81.0 cfs (58,680 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 286 cfs Feb. 17 (gage height, 5.67 ft); minimum recorded, 53 cfs Aug. 2 (gage height, 2.79 ft).
Period of record: Maximum discharge observed, 1,120 cfs Feb. 12, 1962 (gage height, 13.25 ft); minimum observed, 20 cfs Aug. 5, 1961.

REMARKS.--Records good. Diversions above station for irrigation of about 19,000 acres of which about 5,500 acres are by withdrawals from ground water and about 5,000 acres are by diversions into Marsh Creek basin from Portneuf River through the Marsh Valley Canal (1966 determination). Part of Birch Creek (tributary to Marsh Creek) diverted into Devil Creek in Bear River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	104	101	95	70	121	182	152	91	67	63	80
2	122	106	91	84	70	131	175	151	93	65	54	80
3	110	110	90	80	70	246	162	134	117	64	57	73
4	104	115	89	81	70	205	155	127	156	64	66	75
5	101	118	91	85	73	185	153	137	132	62	72	81
6	99	107	91	88	74	189	177	143	132	64	67	95
7	97	101	82	89	76	164	180	154	114	64	64	83
8	96	102	81	87	79	150	175	182	109	63	70	87
9	96	105	82	86	81	145	170	188	105	63	73	83
10	96	106	93	71	78	139	170	163	100	62	69	89
11	96	106	91	99	76	138	175	133	96	62	68	86
12	95	107	82	105	79	139	210	148	94	59	67	83
13	94	118	95	81	80	148	211	144	88	58	73	82
14	95	109	92	79	82	154	200	143	87	58	84	83
15	99	110	85	80	81	157	194	149	86	59	82	83
16	104	104	85	82	110	159	196	171	83	60	80	77
17	137	98	96	84	258	165	199	164	79	59	86	76
18	156	96	87	87	224	171	197	165	84	57	86	79
19	161	94	85	158	213	189	193	165	89	60	90	90
20	130	96	86	218	176	192	190	179	86	63	89	91
21	117	98	85	218	164	195	188	170	99	65	84	87
22	109	99	88	248	152	200	189	170	86	65	68	87
23	104	97	115	224	124	205	188	154	86	68	80	87
24	103	99	148	220	116	205	182	143	86	67	93	87
25	104	98	179	167	99	208	181	125	81	67	80	84
26	114	96	223	101	96	207	174	125	78	63	77	88
27	112	105	185	91	102	201	169	122	76	67	78	89
28	106	109	132	90	156	203	159	115	73	70	76	87
29	97	102	107	82	174	198	156	108	69	66	73	87
30	98	104	100	77	------	192	152	84	70	68	79	86
31	101	------	98	73	------	188	------	88	------	71	81	------
TOTAL	3,381	3,119	3,235	3,510	3,303	5,489	5,402	4,496	2,825	1,970	2,329	2,525
MEAN	109	104	104	113	114	177	180	145	94.2	63.5	75.1	84.2
MAX	161	118	223	248	258	246	211	188	156	71	93	95
MIN	94	94	81	71	70	121	152	84	69	57	54	73
AC-FT	6,710	6,190	6,420	6,960	6,550	10,890	10,710	8,920	5,600	3,910	4,620	5,010

CAL YR 1971 TOTAL 43,438 MEAN 119 MAX 444 MIN 51 AC-FT 86,160
WTR YR 1972 TOTAL 41,584 MEAN 114 MAX 258 MIN 54 AC-FT 82,480

13075500 Portneuf River at Pocatello, Idaho

LOCATION.--Lat 42°52'20", long 112°28'05", in SE¼NW¼ sec.27, T.6 S., R.34 E., Bannock County, on left bank 1,400 ft downstream from Carson Street Bridge, at Pocatello, 1.2 miles upstream from Pocatello Creek and at mile 15.8.

DRAINAGE AREA.--1,250 sq mi, approximately. Mean altitude 5,850 ft.

PERIOD OF RECORD.--May to September 1897, March 1898 to October 1899, August 1911 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,418.41 ft above mean sea level (U.S. Corps of Engineers datum). May 18, 1897, to Oct. 14, 1899, nonrecording gage at site 1.6 miles upstream at different datum. Aug. 31, 1911, to May 13, 1927, and Oct. 13, 1927, to June 13, 1928, nonrecording gage 0.3 mile upstream at different datum. May 14 to Oct. 12, 1927, water-stage recorder near present site at different datum. June 14, 1928, to Sept. 28, 1950, water-stage recorder near Carson Street Bridge, 0.3 mile upstream at same datum as former nonrecording gages at this site. Sept. 29, 1950, to May 20, 1968, water-stage recorder at Fremont Street site, 1.0 mile upstream at datum 18.57 ft higher.

AVERAGE DISCHARGE.--59 years (1912-16, 1917-72), 259 cfs (187,600 acre-ft per year); 15-year base period (1952-67), 228 cfs.

EXTREMES.--Current year: Maximum discharge, 1,260 cfs May 9 (gage height, 8.19 ft); maximum gage height, 9.40 ft Feb. 4 (backwater from ice jam); minimum discharge, 56 cfs Aug. 10 (gage height, 2.30 ft).
Period of record: Maximum discharge, 2,990 cfs Feb. 14, 1962 (gage height, 11.35 ft); minimum, 0.4 cfs July 3, 1961 (gage height, 2.90 ft).

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Portneuf Reservoir formed by earth dam completed in 1912 and raised 7 ft in 1950 (capacity, 23,695 acre-ft; 16,410 acre-ft prior to 1950) and Chesterfield Reservoir (capacity, 685 acre-ft). Diversions above station for irrigation of about 55,000 acres of which about 13,000 acres are by withdrawals from ground water (1966 determination). Records of chemical analysis for the water year 1972 are published in Part 2 of this report.

REVISIONS.--WSP 1567: Drainage area.

Rating tables (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Dec. 23 to Jan. 2, Jan. 12, 13; stage-discharge relation affected by ice Dec. 8-22, Jan. 3-11, 14-17, Jan. 31 to Feb. 7)

2.3	60	7.0	980
3.0	167	9.0	1,440
5.0	540		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	345	361	374	402	360	626	840	1,060	678	277	120	193
2	370	370	354	403	350	609	844	1,060	666	254	109	186
3	369	370	345	260	360	696	854	1,050	695	244	134	170
4	355	365	350	310	360	774	860	1,060	725	227	141	165
5	337	365	356	340	360	792	871	1,070	729	212	135	178
6	328	370	365	365	355	812	932	1,100	710	203	118	199
7	324	365	339	375	350	856	987	1,130	685	185	107	229
8	323	355	310	380	344	872	1,010	1,180	675	175	103	217
9	313	355	340	370	356	885	1,010	1,240	681	154	103	218
10	314	355	345	370	352	895	1,010	1,250	668	147	73	231
11	312	355	345	375	345	907	1,040	1,230	621	162	82	236
12	314	360	345	370	347	911	1,070	1,200	592	135	84	231
13	302	380	345	366	353	920	1,080	1,170	554	129	105	234
14	301	385	345	380	358	940	1,090	1,150	504	116	200	243
15	302	370	345	380	363	955	1,080	1,140	472	110	205	248
16	331	360	345	375	373	957	1,050	1,140	428	106	177	229
17	358	350	345	375	430	964	1,040	1,140	434	103	170	214
18	406	345	345	356	506	991	1,030	1,130	437	103	170	205
19	399	340	345	392	526	1,020	1,020	1,130	422	105	181	223
20	400	345	340	459	525	1,020	1,010	1,110	405	124	185	241
21	393	360	345	515	506	1,020	1,010	1,080	382	137	176	239
22	397	360	365	573	503	1,020	1,000	1,050	407	178	174	231
23	384	355	359	635	495	1,060	994	1,030	376	157	162	228
24	378	370	388	586	482	1,040	996	974	461	138	173	228
25	378	374	414	482	465	1,030	994	908	517	132	186	234
26	362	372	492	497	445	998	1,010	844	509	147	174	230
27	374	390	517	447	444	959	1,020	805	432	138	187	240
28	382	398	449	429	512	924	1,030	760	353	140	184	243
29	384	400	437	414	618	898	1,050	732	371	134	179	247
30	343	398	418	394	------	873	1,060	706	341	124	186	250
31	357	------	407	380	------	857	------	676	------	126	182	------
TOTAL	10,935	10,998	11,514	12,755	12,143	28,081	29,892	32,305	15,930	4,822	4,665	6,660
MEAN	353	367	371	411	419	906	996	1,042	531	156	150	222
MAX	406	400	517	635	618	1,060	1,090	1,250	729	277	205	250
MIN	301	340	310	260	344	609	840	676	341	103	73	165
AC-FT	21,690	21,810	22,840	25,300	24,090	55,700	59,290	64,080	31,600	9,560	9,250	13,210

CAL YR 1971 TOTAL 172,098 MEAN 472 MAX 1,570 MIN 60 AC-FT 341,400
WTR YR 1972 TOTAL 180,700 MEAN 494 MAX 1,250 MIN 73 AC-FT 358,400

PORTNEUF RIVER BASIN

13075900 Fort Hall Michaud Canal near Pocatello, Idaho

LOCATION.--Lat 42°56'10", long 112°32'45", in SE¼SW¼ sec.36, T.5 S., R.33 E., Power County, Fort Hall Indian Reservation, 5 miles downstream from Pocatello Creek and 6 miles northwest of Pocatello.

RECORDS AVAILABLE.--April 1964 to current year.

GAGE.--Sparling meters at pumping plant.

AVERAGE DISCHARGE.--9 years, 37.8 cfs (27,390 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 224 cfs July 14, 1969; no flow for many days.

REMARKS.--Records good. First diversion to this project started April 1964. Flow controlled by pumping plant which lifts water 90 ft for irrigation of 8,690 acres of land in Bureau of Indian Affairs project. Sparling meters rated by current-meter measurements.

COOPERATION.--Sparling-meter readings furnished by Bureau of Indian Affairs.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	97	138	123	71
2								0	110	140	120	75
3								0	141	141	118	75
4								0	136	142	101	75
5								0	146	142	98	72
6								0	146	165	88	72
7								0	146	164	88	72
8								0	118	156	88	79
9								0	56	156	88	82
10								0	10	156	87	82
11								0	0	162	87	82
12								40	50	162	87	69
13								0	74	155	87	66
14								0	78	151	72	66
15								0	99	121	46	68
16								29	99	125	50	67
17								25	99	146	60	65
18								36	102	146	58	82
19								85	153	123	58	82
20								49	167	116	65	66
21								49	157	111	78	66
22								61	149	66	76	66
23								61	139	67	75	66
24								61	98	77	84	66
25								61	98	111	81	66
26								61	97	110	62	66
27								61	98	132	62	66
28								61	112	130	64	66
29								61	127	125	62	62
30					------			65	139	124	71	23
31		------			------		------	86	------	124	71	------
TOTAL	0	0	0	0	0	0	0	952	3,241	4,084	2,455	2,081
MEAN	0	0	0	0	0	0	0	30.7	108	132	79.2	69.4
MAX	0	0	0	0	0	0	0	86	167	165	123	82
MIN	0	0	0	0	0	0	0	0	0	66	46	23
AC-FT	0	0	0	0	0	0	0	1,890	6,430	8,100	4,870	4,130

CAL YR 1971 TOTAL 13,138.00 MEAN 36.0 MAX 196 MIN 0 AC-FT 26,060
WTR YR 1972 TOTAL 12,813.00 MEAN 35.0 MAX 167 MIN 0 AC-FT 25,410

13076400 Michaud Canal at American Falls, Idaho

LOCATION.--Lat 42°46'45", long 112°52'20", in SE¼SE¼ sec.30, T.7 S., R.31 E., Power County, 800 ft downstream from dam at American Falls.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Sparling meter in pipeline at pumping plant.

AVERAGE DISCHARGE.--15 years, 30.9 cfs (20,580 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 142 cfs July 18-23, 1971; no flow for many days each year.

REMARKS.--Records good. Flow controlled by pumping plant which lifts water from American Falls Reservoir to point in NE¼ sec.32. Project irrigated 8,000 acres from this canal and 3,810 acres by pumping from ground water in 1972.

COOPERATION.--Record of pump operation furnished by Falls Irrigation District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0						0	18	104	105	90	69
2	0						0	18	108	102	73	56
3	0						0	18	108	116	69	51
4	0						0	18	108	120	79	51
5	0						0	18	108	120	71	51
6	0						0	33	108	120	68	51
7	0						0	37	108	120	83	51
8	0						0	37	108	120	88	51
9	0						0	37	94	120	88	43
10	0						0	37	60	120	88	40
11	0						0	37	52	120	88	40
12	0						0	37	68	120	72	40
13	0						0	37	71	120	67	40
14	0						0	37	71	120	83	40
15	0						0	37	87	113	59	40
16	0						0	52	90	111	50	40
17	0						0	55	90	111	50	40
18	0						0	68	90	111	50	40
19	0						0	70	104	111	50	40
20	0						0	70	108	111	50	40
21	0						0	70	108	98	64	40
22	0						0	70	108	77	69	40
23	0						0	70	108	72	69	40
24	0						0	70	108	87	69	40
25	0						0	80	108	92	69	40
26	0						0	82	108	92	69	40
27	0						0	82	108	92	69	40
28	0						15	82	108	75	69	40
29	0						18	82	108	70	69	24
30	0				------		18	88	116	70	69	18
31	0	------			------		------	90	------	85	69	------
TOTAL	6.0	0	0	0	0	0	51	1,637	2,933	3,221	2,170	1,276
MEAN	.19	0	0	0	0	0	1.70	52.8	97.8	104	70.0	42.5
MAX	6.0	0	0	0	0	0	18	90	116	120	90	69
MIN	0	0	0	0	0	0	0	18	52	70	50	18
AC-FT	12	0	0	0	0	0	101	3,250	5,820	6,390	4,300	2,530

CAL YR 1971 TOTAL 11,620.00 MEAN 31.8 MAX 142 MIN 0 AC-FT 23,050
WTR YR 1972 TOTAL 11,294.00 MEAN 30.9 MAX 120 MIN 0 AC-FT 22,400

13076500 American Falls Reservoir at American Falls, Idaho

LOCATION.--Lat 42°46'45", long 112°52'45", in SE¼SW¼ sec.30, T.7 S., R.31 E., Power County, near right end of dam at outlet gates of reservoir on Snake River at American Falls and at mile 714.0.

DRAINAGE AREA.--13,580 sq mi, excluding indeterminate nontributary area on Snake River Plain.

PERIOD OF RECORD.--March 1926 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 1,712,000 acre-ft June 26 (elevation, 4,354.71 ft); maximum gage height, 4,354.99 ft June 18 (wind effect); minimum contents, 906,200 acre-ft Sept. 8 (elevation, 4,338.12 ft); minimum gage height, 4,337.80 ft Sept. 11 (wind effect).
Period of record: Maximum contents, 1,748,000 acre-ft June 21, 1963 (elevation, 4,355.34 ft); minimum since full capacity was attained July 13, 1927, 2,000 acre-ft Sept. 9, 1961 (elevation, 4,296.26 ft).

REMARKS.--Reservoir is formed by concrete gravity dam with earth dikes at each end; partial storage began in 1926, full storage in 1927. Capacity, 1,700,000 acre-ft between elevations 4,295.66 ft (bottom of outlet gate) and 4,354.50 ft (top of spillway radial gates). Small amount of dead storage. Water is used for irrigation by canals diverting from Snake River at Minidoka and Milner Dams.

COOPERATION.--Reservoir elevations and capacity table furnished by Bureau of Reclamation.

Capacity table (elevation, in feet, and contents, in thousands of acre-feet)

4,330.0	616.2
4,340.0	983.5
4,350.0	1,457
4,355.0	1,728

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,292.00	1,338.00	1,283.00	1,271.00	1,271.00	1,276.00	1,541.00	1,653.00	1,689.00	1,692.00	1,262.00	937.00
2	1,296.00	1,343.00	1,281.00	1,271.00	1,269.00	1,274.00	1,548.00	1,661.00	1,690.00	1,689.00	1,248.00	929.30
3	1,302.00	1,345.00	1,279.00	1,267.00	1,269.00	1,275.00	1,546.00	1,665.00	1,694.00	1,681.00	1,232.00	925.60
4	1,308.00	1,342.00	1,274.00	1,263.00	1,269.00	1,277.00	1,549.00	1,666.00	1,697.00	1,672.00	1,219.00	921.60
5	1,311.00	1,347.00	1,271.00	1,263.00	1,274.00	1,277.00	1,551.00	1,663.00	1,699.00	1,660.00	1,206.00	916.70
6	1,313.00	1,345.00	1,279.00	1,264.00	1,278.00	1,279.00	1,563.00	1,659.00	1,700.00	1,647.00	1,195.00	911.50
7	1,314.00	1,335.00	1,277.00	1,267.00	1,280.00	1,281.00	1,573.00	1,660.00	1,700.00	1,633.00	1,182.00	909.00
8	1,314.00	1,337.00	1,274.00	1,271.00	1,279.00	1,284.00	1,579.00	1,657.00	1,701.00	1,617.00	1,168.00	907.40
9	1,315.00	1,336.00	1,269.00	1,275.00	1,282.00	1,287.00	1,588.00	1,655.00	1,702.00	1,597.00	1,152.00	907.40
10	1,315.00	1,336.00	1,266.00	1,277.00	1,281.00	1,289.00	1,596.00	1,661.00	1,694.00	1,581.00	1,135.00	911.10
11	1,313.00	1,337.00	1,264.00	1,275.00	1,280.00	1,301.00	1,601.00	1,677.00	1,696.00	1,561.00	1,118.00	910.70
12	1,314.00	1,345.00	1,262.00	1,274.00	1,279.00	1,317.00	1,606.00	1,681.00	1,694.00	1,545.00	1,104.00	911.10
13	1,312.00	1,343.00	1,263.00	1,271.00	1,276.00	1,330.00	1,611.00	1,682.00	1,698.00	1,525.00	1,089.00	915.10
14	1,310.00	1,335.00	1,264.00	1,269.00	1,274.00	1,347.00	1,613.00	1,679.00	1,702.00	1,508.00	1,081.00	917.90
15	1,317.00	1,335.00	1,265.00	1,267.00	1,273.00	1,363.00	1,615.00	1,682.00	1,704.00	1,491.00	1,070.00	920.00
16	1,318.00	1,331.00	1,266.00	1,265.00	1,274.00	1,382.00	1,610.00	1,683.00	1,706.00	1,472.00	1,062.00	923.20
17	1,316.00	1,327.00	1,266.00	1,265.00	1,278.00	1,401.00	1,609.00	1,683.00	1,703.00	1,455.00	1,052.00	925.60
18	1,320.00	1,318.00	1,266.00	1,268.00	1,279.00	1,416.00	1,618.00	1,691.00	1,704.00	1,437.00	1,048.00	924.80
19	1,325.00	1,318.00	1,266.00	1,270.00	1,281.00	1,431.00	1,614.00	1,696.00	1,707.00	1,419.00	1,042.00	925.60
20	1,328.00	1,315.00	1,268.00	1,272.00	1,281.00	1,449.00	1,618.00	1,689.00	1,706.00	1,402.00	1,036.00	928.90
21	1,331.00	1,310.00	1,269.00	1,274.00	1,282.00	1,462.00	1,619.00	1,685.00	1,703.00	1,384.00	1,028.00	928.90
22	1,334.00	1,305.00	1,270.00	1,276.00	1,283.00	1,473.00	1,624.00	1,689.00	1,704.00	1,373.00	1,020.00	933.70
23	1,330.00	1,303.00	1,271.00	1,275.00	1,282.00	1,483.00	1,630.00	1,694.00	1,703.00	1,365.00	1,014.00	934.50
24	1,333.00	1,298.00	1,275.00	1,277.00	1,282.00	1,496.00	1,628.00	1,692.00	1,706.00	1,356.00	1,006.00	934.50
25	1,337.00	1,296.00	1,275.00	1,274.00	1,281.00	1,503.00	1,632.00	1,692.00	1,708.00	1,348.00	996.80	941.80
26	1,330.00	1,292.00	1,278.00	1,274.00	1,279.00	1,510.00	1,636.00	1,691.00	1,711.00	1,338.00	988.70	946.80
27	1,339.00	1,291.00	1,278.00	1,273.00	1,276.00	1,523.00	1,642.00	1,689.00	1,709.00	1,324.00	981.40	951.80
28	1,345.00	1,287.00	1,276.00	1,274.00	1,276.00	1,531.00	1,638.00	1,684.00	1,706.00	1,311.00	973.50	962.70
29	1,336.00	1,287.00	1,275.00	1,274.00	1,276.00	1,531.00	1,642.00	1,686.00	1,702.00	1,300.00	965.60	972.70
30	1,338.00	1,285.00	1,274.00	1,273.00	------	1,539.00	1,650.00	1,687.00	1,694.00	1,286.00	957.70	983.50
31	1,334.00	------	1,274.00	1,271.00	------	1,544.00	------	1,688.00	------	1,277.00	948.50	------
MAX	1,345.00	1,347.00	1,283.00	1,277.00	1,283.00	1,544.00	1,650.00	1,696.00	1,711.00	1,692.00	1,262.00	983.50
MIN	1,292.00	1,285.00	1,262.00	1,263.00	1,269.00	1,274.00	1,541.00	1,653.00	1,689.00	1,277.00	948.50	907.40
(†)	4,347.58	4,346.58	4,346.35	4,346.30	4,346.39	4,351.65	4,353.60	4,354.29	4,354.40	4,346.41	4,339.16	4,340.00
(‡)	+49	-49	-11	-3	+5	+268	+106	+38	+6	-417	-328.5	+35

CAL YR 1971.....‡ +43
WTR YR 1972..... ‡ -301.5

† Elevation, in feet, at end of month.
‡ Change in contents, in thousands of acre-feet.

13077000 Snake River at Neeley, Idaho

LOCATION.--Lat 42°46'06", long 112°52'42", in NE¼SW¼ sec.31, T.7 S., R.31 E., Power County, on right bank 400 ft upstream from fish hatchery buildings, 0.9 mile downstream from American Falls Dam, at mile 713.0. Records computed to show flow at former site in sec.11, T.8 S., R.30 E., 0.5 mile north of Neeley and 2.5 miles downstream from present site, by adding inflow between sites.
DRAINAGE AREA.--13,600 sq mi, approximately, excluding indeterminate nontributary area on Snake River Plain.
PERIOD OF RECORD.--March 1906 to current year. Monthly discharge only for some periods, published in WSP 1317.
GAGE.--Water-stage recorder. Datum of gage is 4,241.6 ft above mean sea level (levels by Bureau of Reclamation). Prior to Aug. 8, 1910, nonrecording gages and Aug. 8, 1910, to June 6, 1930, water-stage recorder at site 2.5 miles downstream at different datum. June 7, 1930, to Mar. 19, 1945, water-stage recorder at site 0.4 mile upstream at datum 0.4 ft higher.
AVERAGE DISCHARGE.--46 years (1926-72), 6,995 cfs (5,068,000 acre-ft per year); 15-year base period (1952-67), 6,704 cfs.
EXTREMES.--Current year: Maximum discharge, 22,800 cfs June 11 (gage height, 8.54 ft); minimum discharge, 106 cfs Nov. 12 (gage height, 1.32 ft).
Period of record: Maximum daily discharge, 48,400 cfs June 20, 1918 (gage height, 13.5 ft, site and datum then in use); minimum, 50 cfs Oct. 22, 23, Nov. 14-16, 1941, Oct. 29, 1961, Nov. 6, 1970.
REMARKS.--Records excellent. Flow regulated by American Falls Reservoir (see sta 13076500) and other reservoirs, having a combined usable capacity of 4,600,000 acre-ft. Diversions above station for irrigation of about 1,080,000 acres of which about 228,000 acres are by withdrawals from ground water (1966 determination). Considerable water leaks into the Snake Plain aquifer above the station some of which returns above American Falls Reservoir. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.
COOPERATION.--Gage-height record furnished by Bureau of Reclamation.
REVISIONS (WATER YEARS).--WSP 1317: 1910.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Mar. 21 to Sept. 7)

3.0	840	5.0	5,240
3.5	1,370	6.0	9,600
4.0	2,220	7.0	14,600
4.5	3,500	8.4	23,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,240	12,700	10,500	8,460	8,310	10,100	17,100	18,200	12,000	12,900	11,600	10,700
2	9,870	12,700	10,200	8,510	7,770	10,100	17,200	18,300	12,500	12,400	11,600	10,600
3	10,000	12,700	9,840	8,330	7,210	10,100	17,200	18,300	12,500	12,900	11,400	10,500
4	10,700	12,700	9,620	8,120	6,970	10,100	15,900	18,300	14,600	13,000	11,400	10,400
5	11,700	12,800	9,610	7,030	7,000	10,100	15,200	18,300	16,400	12,700	11,400	10,400
6	12,100	12,700	9,340	6,230	7,000	10,100	15,300	18,300	17,100	12,500	11,300	9,850
7	12,100	12,700	9,110	6,230	8,280	9,370	15,700	16,800	18,500	12,200	11,400	9,330
8	12,700	10,800	9,110	6,270	9,030	9,600	17,200	16,000	19,500	12,000	11,400	8,830
9	12,500	9,730	9,110	6,310	9,770	10,600	17,300	15,600	20,300	12,200	11,800	8,240
10	12,100	9,390	8,850	7,160	10,200	10,500	17,800	14,100	21,500	12,200	12,100	8,000
11	12,100	8,330	8,710	8,660	10,200	6,380	19,300	13,500	22,400	12,000	12,200	7,490
12	12,100	1,250	8,750	9,230	10,200	4,730	19,700	15,200	22,700	12,000	12,400	7,130
13	12,000	11,400	7,870	9,200	10,200	4,590	20,100	17,100	21,500	12,000	12,600	6,920
14	11,900	11,400	7,940	8,830	10,200	4,500	20,700	17,500	20,400	12,100	12,600	6,650
15	11,900	11,400	8,650	8,590	9,540	4,560	20,900	15,900	19,800	12,200	12,500	6,620
16	11,900	11,300	8,280	8,570	9,140	4,590	21,000	15,000	19,800	12,100	12,200	6,680
17	11,900	11,200	8,040	7,950	9,090	5,270	21,000	14,400	19,700	12,000	12,000	6,700
18	12,000	11,200	8,050	7,560	9,070	6,670	20,200	14,100	17,500	12,200	11,800	6,870
19	12,000	11,200	8,050	7,560	9,080	6,730	19,800	16,100	16,200	12,200	11,600	6,860
20	12,000	11,100	8,000	8,450	9,090	7,940	19,200	19,100	17,700	12,200	11,300	6,750
21	12,100	11,100	8,020	9,850	9,100	9,700	18,700	19,200	18,600	12,100	11,200	6,720
22	12,200	11,000	8,040	10,300	9,750	10,500	18,700	16,400	17,900	11,700	11,200	6,990
23	12,200	11,000	8,010	10,300	10,100	10,600	18,900	16,900	16,700	11,500	11,300	7,220
24	12,200	11,000	8,020	9,620	10,500	11,400	19,000	18,800	15,400	11,700	11,300	7,210
25	12,200	11,000	8,030	9,170	10,600	13,300	19,000	18,900	15,000	11,700	11,300	6,860
26	12,500	11,000	8,000	9,150	10,600	13,300	19,000	18,700	16,800	11,700	11,200	6,350
27	12,700	10,900	8,550	9,170	10,600	13,900	18,400	18,600	19,300	11,600	10,900	5,950
28	12,700	10,900	8,940	8,940	10,200	15,200	18,200	16,600	19,400	11,500	10,900	5,300
29	12,700	10,900	8,940	8,760	10,100	16,200	18,100	14,000	17,500	11,400	11,100	4,940
30	12,700	10,900	8,670	8,810	------	15,600	18,100	13,700	15,100	11,500	11,200	5,410
31	12,700	------	8,450	8,670	------	16,400	------	12,300	------	11,600	11,100	------
TOTAL	369,710	328,400	269,300	259,990	268,900	302,730	553,900	514,200	534,300	374,000	359,300	228,470
MEAN	11,930	10,950	8,687	8,387	9,272	9,765	18,460	16,590	17,810	12,060	11,590	7,616
MAX	12,700	12,800	10,500	10,300	10,600	16,400	21,000	19,200	22,700	13,000	12,600	10,700
MIN	9,240	1,250	7,870	6,230	6,970	4,500	15,200	12,300	12,000	11,400	10,900	4,940
AC-FT	733,300	651,400	534,200	515,700	533,400	600,500	1,099M	1,020M	1,060M	741,800	712,700	453,200

CAL YR 1971 TOTAL 4,801,610 MEAN 13,160 MAX 29,900 MIN 1,250 AC-FT 9,524,000
WTR YR 1972 TOTAL 4,363,200 MEAN 11,920 MAX 22,700 MIN 1,250 AC-FT 8,654,000

M Expressed in thousands.

13077700 George Creek near Yost, Utah

LOCATION.--Lat 41°55'07", long 113°28'51", in SE¼SW¼SW¼ sec.20, T.14 N., R.14 W., Box Elder County, on right bank 1,000 ft upstream from section corner and boundary of Sawtooth National Forest, 4.5 miles southeast of Yost, 5 miles south of Utah-Idaho State line, and 16 miles southwest of Strevell, Idaho.

DRAINAGE AREA.--7.84 sq mi.

PERIOD OF RECORD.--July 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,000 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 7.38 cfs (5,350 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 62 cfs June 3 (gage height, 1.40 ft); maximum gage height, 1.77 ft June 8 (backwater from debris); minimum, 1.6 cfs Aug. 21.
Period of record: Maximum discharge, 146 cfs June 10, 1963 (gage height, 1.96 ft); minimum daily, 1.1 cfs several days in January and February 1962.

REMARKS.--Records good. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	3.4	2.7	2.8	2.8	2.6	3.1	5.7	44	12	3.0	3.4
2	3.5	3.4	2.7	2.8	3.0	2.8	3.3	5.7	47	11	2.9	3.3
3	3.7	3.0	2.8	2.7	3.0	3.1	3.2	6.7	52	10	2.8	2.9
4	3.7	3.1	2.8	2.5	3.0	2.8	3.3	8.6	51	9.7	2.7	2.5
5	3.8	3.0	2.6	2.5	3.0	2.8	3.7	11	46	9.1	2.6	3.1
6	3.7	2.9	2.6	2.5	3.0	3.0	4.2	11	44	8.5	2.5	2.9
7	3.6	3.0	2.5	2.5	3.0	2.8	4.4	13	47	8.0	2.5	2.7
8	3.4	3.0	2.4	2.5	2.9	2.8	4.4	13	49	7.4	2.4	2.5
9	3.4	3.0	2.4	2.7	2.8	3.0	4.4	12	43	7.4	2.4	2.5
10	3.4	3.0	2.4	2.8	2.8	3.6	4.4	11	35	6.4	2.6	2.5
11	3.5	3.1	2.4	2.8	2.8	3.8	4.4	10	25	5.9	2.5	2.5
12	3.7	3.1	2.7	2.8	2.8	3.7	4.5	11	22	5.5	2.6	2.4
13	3.7	3.0	2.4	2.8	2.8	4.0	4.1	11	23	5.5	2.7	2.4
14	3.7	3.0	2.2	2.8	2.8	4.4	4.0	13	24	5.1	3.5	2.4
15	3.7	3.0	2.2	2.8	2.8	4.1	3.8	15	23	5.1	2.9	2.3
16	3.8	3.0	2.2	2.8	2.8	4.2	3.8	16	23	4.7	2.7	2.3
17	3.7	3.0	2.2	2.8	2.5	4.5	3.8	16	23	4.4	2.4	2.3
18	3.7	3.0	2.2	2.8	2.5	4.9	3.8	15	23	4.3	2.5	2.4
19	3.6	2.9	2.2	2.5	2.5	4.9	3.8	15	22	3.9	2.5	3.3
20	3.7	3.0	2.5	2.5	2.5	4.5	3.9	15	20	5.4	2.4	2.5
21	3.8	3.0	2.5	2.7	2.5	4.4	3.8	14	19	4.7	2.4	2.5
22	3.7	3.0	2.5	2.8	2.5	4.7	3.8	16	18	3.9	2.4	2.4
23	3.7	2.8	2.5	2.8	2.5	5.5	4.0	16	18	3.5	2.6	2.3
24	3.7	2.8	2.5	2.8	2.5	4.9	4.5	14	18	3.6	2.7	2.4
25	3.7	2.8	2.5	2.8	2.5	4.4	4.7	16	16	3.5	2.6	2.5
26	3.7	2.8	2.4	2.8	2.5	3.8	4.4	18	14	3.4	2.5	2.5
27	3.6	3.0	2.4	2.8	2.5	3.6	4.5	20	14	3.2	2.4	2.7
28	3.2	2.8	2.7	2.8	2.6	3.4	5.3	21	13	3.0	2.4	2.7
29	3.3	2.8	2.8	2.8	2.7	3.2	6.4	28	12	2.8	2.6	2.5
30	3.4	2.8	2.8	2.8	------	3.2	6.0	37	12	2.9	2.8	2.5
31	3.4	------	2.8	2.8	------	3.1	------	44	------	2.9	2.9	------
TOTAL	112.0	89.5	77.5	84.4	78.9	116.5	125.7	478.7	840	176.7	81.4	78.1
MEAN	3.61	2.98	2.50	2.72	2.72	3.76	4.19	15.4	28.0	5.70	2.63	2.60
MAX	3.8	3.4	2.8	2.8	3.0	5.5	6.4	44	52	12	3.5	3.4
MIN	3.2	2.8	2.2	2.5	2.5	2.6	3.1	5.7	12	2.8	2.4	2.3
AC-FT	222	178	154	167	156	231	249	950	1,670	350	161	155

CAL YR 1971 TOTAL 4,147.6 MEAN 11.4 MAX 96 MIN 2.2 AC-FT 8,230
WTR YR 1972 TOTAL 2,339.4 MEAN 6.39 MAX 52 MIN 2.2 AC-FT 4,640

PEAK DISCHARGE (BASE, 40 CFS).--June 3 (1900) 62 cfs (1.40 ft).

13079100 Cassia Creek above Stinson Creek, near Elba, Idaho

LOCATION.--Lat 42°15'10", long 113°39'15", in lot 2 NE¼ sec.33, T.13 S., R.24 E., Cassia County, Sawtooth National Forest, on right bank 300 ft upstream from Stinson Creek, and 5 miles west of Elba.

DRAINAGE AREA.--7.2 sq mi, approximately.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,900 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 3.84 cfs (7.24 inches per year, 2,780 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 42 cfs Mar. 13 (gage height, 2.25 ft); minimum, 1.2 cfs Sept. 16-18 (gage height, 1.22 ft).
Period of record: Maximum discharge, 49 cfs May 9, 1971 (gage height, 2.43 ft);minimum, 0.19 cfs July 23, 1968 (gage height, 1.17 ft).

REMARKS.--Records good except those for April and May, which are fair.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Nov. 12-18, Nov. 25 to Dec. 11, Dec. 16, 17, 22, 26-28, Jan. 2-5, 12-14, Feb. 2, 3, 9-11)

1.3	1.3	1.8	14
1.4	3.0	2.0	22
1.6	7.4	2.4	47

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.5	2.0	1.7	2.6	7.4	12	15	7.7	3.0	1.6	1.6
2	2.8	2.2	2.0	1.6	2.4	8.8	12	16	7.4	3.0	1.7	1.5
3	2.8	3.6	2.1	1.5	2.3	18	13	17	7.7	3.0	1.7	1.5
4	2.6	2.7	2.1	1.5	2.2	14	13	21	7.2	2.8	1.7	1.5
5	2.3	2.9	2.1	1.5	2.1	17	15	24	6.6	2.8	1.6	2.2
6	2.1	4.1	2.0	1.6	1.9	24	16	26	6.5	2.6	1.6	1.7
7	2.0	2.7	2.0	1.6	1.7	25	15	26	7.0	2.6	1.6	1.6
8	2.0	2.1	2.0	1.6	1.7	20	15	25	7.7	2.6	1.6	1.6
9	1.8	1.9	2.0	1.6	1.7	21	14	24	6.8	2.6	1.6	1.6
10	1.9	1.8	2.0	1.6	1.7	27	13	23	6.0	2.4	1.6	1.6
11	1.9	1.9	1.9	1.6	1.6	31	12	22	5.7	2.4	1.6	1.6
12	1.8	2.0	1.9	1.5	1.6	29	13	21	5.5	2.4	1.6	1.6
13	1.9	2.0	1.9	1.5	1.6	33	16	20	5.1	2.2	1.6	1.6
14	2.0	2.0	1.9	1.5	1.6	31	21	19	5.1	2.2	2.1	1.5
15	2.0	2.0	1.9	1.6	1.6	28	22	18	4.9	2.2	1.6	1.5
16	2.1	1.9	1.9	1.5	1.6	29	19	17	4.8	2.2	1.6	1.4
17	2.1	2.0	1.8	1.5	1.6	29	17	16	4.8	2.1	1.6	1.4
18	2.1	2.0	1.7	3.0	1.7	30	16	15	4.4	2.1	1.6	1.5
19	2.0	2.1	1.7	9.6	1.7	27	15	14	4.2	1.9	1.5	2.1
20	2.1	2.1	1.6	7.7	1.9	23	14	13	4.2	2.1	1.6	1.6
21	2.1	2.1	1.6	8.0	2.2	22	13	13	4.0	2.2	1.5	1.4
22	2.0	2.0	1.6	8.2	2.6	26	13	12	4.0	2.2	1.5	1.5
23	2.1	2.0	1.7	7.4	2.6	26	14	11	4.2	2.1	1.5	1.5
24	2.1	2.0	1.7	5.7	2.6	20	14	10	4.2	2.1	1.6	1.5
25	2.1	2.0	1.8	5.0	2.4	15	14	9.8	4.0	1.9	1.6	1.5
26	2.6	2.0	1.8	4.4	2.4	12	17	9.4	3.8	1.9	1.5	1.6
27	2.7	2.0	1.8	4.0	2.6	10	15	9.1	3.6	1.7	1.5	2.0
28	2.3	2.0	1.8	3.6	6.0	11	18	8.6	3.4	1.7	1.5	1.8
29	2.4	2.0	1.8	3.4	8.0	11	16	8.4	3.4	1.6	1.6	1.6
30	2.9	2.0	1.7	3.0	------	12	15	8.2	3.2	1.7	1.6	1.5
31	2.8	------	1.8	3.0	------	12	------	8.0	------	1.7	1.6	------
TOTAL	68.6	66.6	57.6	102.5	68.2	649.2	452	499.5	157.1	70.0	49.7	48.1
MEAN	2.21	2.22	1.86	3.31	2.35	20.9	15.1	16.1	5.24	2.26	1.60	1.60
MAX	2.9	4.1	2.1	9.6	8.0	33	22	26	7.7	3.0	2.1	2.2
MIN	1.8	1.8	1.6	1.5	1.6	7.4	12	8.0	3.2	1.6	1.5	1.4
CFSM	.31	.31	.26	.46	.33	2.90	2.10	2.24	.73	.31	.22	.22
IN.	.35	.34	.30	.53	.35	3.35	2.34	2.58	.81	.36	.26	.25
AC-FT	136	132	114	203	135	1,290	897	991	312	139	99	95

CAL YR 1971 TOTAL 2,537.2 MEAN 6.95 MAX 41 MIN 1.1 CFSM .97 IN 13.11 AC-FT 5,030
WTR YR 1972 TOTAL 2,289.1 MEAN 6.25 MAX 33 MIN 1.4 CFSM .87 IN 11.83 AC-FT 4,540

13080000 North Side Minidoka Canal near Minidoka, Idaho

LOCATION.--Lat 42°40'15", long 113°29'00", in SE¼NW¼ sec.1, T.9 S., R.25 E., Minidoka County, on left bank 600 ft downstream from headgates at Minidoka Dam and 6 miles south of Minidoka.

PERIOD OF RECORD.--April 1908 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 4,180.33 ft above mean sea level (Bureau of Reclamation bench mark). April to November 1910 at datum 0.08 ft higher.

AVERAGE DISCHARGE.--31 years (1941-72), 617 cfs (447,000 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,920 cfs July 14-18, 1969, June 26, 27, July 14-23, 1971; no flow in winters.

REMARKS.--Records excellent. Flow controlled by headgates. Canal diverts water from Lake Walcott at right end of Minidoka Dam for irrigation of 64,000 acres under North Side Minidoka project. Diversion began in June 1907.

COOPERATION.--Gage-height record furnished by Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	618						0	1,480	1,800	1,850	1,360	1,160
2	537						0	1,510	1,770	1,850	1,360	1,140
3	492						0	1,570	1,750	1,850	1,370	1,100
4	463						0	1,610	1,640	1,860	1,370	1,170
5	463						0	1,720	1,580	1,860	1,410	1,150
6	465						0	1,760	1,600	1,860	1,420	1,090
7	461						0	1,750	1,530	1,870	1,510	784
8	456						0	1,660	1,200	1,870	1,560	733
9	460						0	1,580	856	1,870	1,660	716
10	461						16	1,580	779	1,870	1,650	662
11	515						143	1,580	724	1,870	1,580	608
12	582						190	1,580	700	1,870	1,580	570
13	626						270	1,640	819	1,870	1,580	570
14	654						302	1,790	860	1,860	1,540	568
15	654						302	1,780	904	1,860	1,460	568
16	582						302	1,830	1,020	1,860	1,450	566
17	514						395	1,840	1,120	1,840	1,450	566
18	508						506	1,840	1,120	1,820	1,460	606
19	512						566	1,840	1,140	1,850	1,450	622
20	307						674	1,810	1,180	1,850	1,280	624
21	0						777	1,620	1,340	1,730	1,310	626
22	0						885	1,430	1,450	1,530	1,410	608
23	0						932	1,280	1,460	1,520	1,430	650
24	0						1,020	1,270	1,430	1,520	1,430	692
25	0						1,160	1,250	1,420	1,520	1,430	670
26	0						1,180	1,190	1,460	1,520	1,410	620
27	0						1,240	1,240	1,340	1,580	1,350	594
28	0						1,480	1,290	1,680	1,580	1,360	537
29	0						1,590	1,440	1,760	1,470	1,340	535
30	0				------		1,550	1,600	1,850	1,400	1,340	535
31	0	------			------		------	1,720	------	1,400	1,290	------
TOTAL	10,330	0	0	0	0	0	15,480	49,080	39,282	53,930	44,600	21,640
MEAN	333	0	0	0	0	0	516	1,583	1,309	1,740	1,439	721
MAX	654	0	0	0	0	0	1,590	1,840	1,850	1,870	1,660	1,170
MIN	0	0	0	0	0	0	0	1,190	700	1,400	1,280	535
AC-FT	20,490	0	0	0	0	0	30,700	97,350	77,920	107,000	88,460	42,920

CAL YR 1971 TOTAL 226,555.00 MEAN 621 MAX 1,920 MIN 0 AC-FT 449,400
WTR YR 1972 TOTAL 234,342.00 MEAN 640 MAX 1,870 MIN 0 AC-FT 464,800

13080500 South Side Minidoka Canal near Minidoka, Idaho

LOCATION.--Lat 42°39'45", long 113°29'20", in NW¼NW¼ sec.12, T.9 S., R.25 E., Cassia County, on right bank 900 ft downstream from headgates at Minidoka Dam and 6 miles south of Minidoka.

PERIOD OF RECORD.--April 1908 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 4,184 ft above mean sea level (Bureau of Reclamation bench mark). Prior to 1910 at site 600 ft upstream at same datum.

AVERAGE DISCHARGE.--31 years (1941-72), 489 cfs (354,300 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,490 cfs July 12-16, 1967, July 11-20, 1969; no flow for long periods during nonirrigation seasons.

REMARKS.--Records good. Flow controlled by headgates. Canal diverts water from Lake Walcott at left end of Minidoka Dam for irrigation of 56,000 acres under South Side Minidoka project. Diversion began in April 1908.

COOPERATION.--Gage-height record furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1347: 1910.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	633						0	1,140	1,310	1,390	1,290	1,050
2	489						0	1,150	1,390	1,380	1,230	976
3	420						0	1,180	1,420	1,380	1,190	928
4	418						0	1,230	1,400	1,390	1,130	928
5	415						0	1,260	1,390	1,390	1,140	886
6	420						0	1,310	1,330	1,380	1,170	802
7	554						0	1,330	1,300	1,390	1,220	784
8	696						0	1,310	1,170	1,390	1,250	746
9	704						0	1,280	937	1,380	1,260	704
10	704						0	1,260	766	1,380	1,340	687
11	704						21	1,240	665	1,380	1,390	684
12	701						100	1,240	636	1,380	1,350	596
13	707						195	1,280	636	1,370	1,330	516
14	710						257	1,310	630	1,370	1,320	524
15	704						255	1,330	668	1,370	1,250	544
16	707						253	1,330	740	1,360	1,180	544
17	712						255	1,340	796	1,360	1,130	539
18	562						288	1,350	829	1,360	1,070	539
19	392						496	1,350	835	1,360	1,070	536
20	160						578	1,330	973	1,370	1,070	534
21	0						567	1,320	1,120	1,370	1,080	534
22	0						575	1,250	1,160	1,310	1,150	532
23	0						562	1,110	1,300	1,230	1,210	542
24	0						612	1,040	1,340	1,220	1,220	547
25	0						763	943	1,280	1,290	1,200	544
26	0						841	949	1,240	1,320	1,180	542
27	0						955	964	1,270	1,290	1,150	547
28	0						1,040	988	1,380	1,270	1,130	554
29	0						1,120	1,060	1,400	1,270	1,120	552
30	0				------		1,160	1,140	1,390	1,260	1,120	549
31	0	------			------		------	1,240	------	1,300	1,100	------
TOTAL	11,512	0	0	0	0	0	10,893	37,554	32,701	41,660	37,040	19,490
MEAN	371	0	0	0	0	0	363	1,211	1,090	1,344	1,195	650
MAX	712	0	0	0	0	0	1,160	1,350	1,420	1,390	1,390	1,050
MIN	0	0	0	0	0	0	0	943	630	1,220	1,070	516
AC-FT	22,830	0	0	0	0	0	21,610	74,490	64,860	82,630	73,470	38,660

CAL YR 1971 TOTAL 180,366.00 MEAN 494 MAX 1,460 MIN 0 AC-FT 357,800
WTR YR 1972 TOTAL 190,850.00 MEAN 521 MAX 1,420 MIN 0 AC-FT 378,600

SNAKE RIVER MAIN STEM

13081000 Lake Walcott near Minidoka, Idaho

LOCATION.--Lat 42°40'15", long 113°29'00", near center of sec.1, J.9 S., R.25 E., Minidoka County, on south wall in powerhouse at Minidoka Dam on Snake River, 6 miles southeast of Minidoka, and at mile 675.0.

DRAINAGE AREA.--15,700 sq mi, approximately, excluding indeterminate nontributary area on Snake River Plain.

PERIOD OF RECORD.--April 1909 to current year.

GAGE.--Nonrecording gage. Datum of gage is datum of Bureau of Reclamation, which is 49.52 ft below mean sea level.

EXTREMES.--Current year: Maximum contents observed, 98,800 acre-ft Sept. 27, 28 (elevation, 4,245.30 ft); minimum observed, 48,200 acre-ft Jan. 10 (elevation, 4,240.78 ft).
Period of record: Maximum contents, 110,740 acre-ft Aug. 8, 1922 (elevation, 4,246.28 ft); minimum, -101,410 acre-ft Nov. 17, 1941 (elevation, 4,215.19 ft).

REMARKS.--Reservoir is formed by rock-fill dam with concrete core; storage began in 1906. Capacity, 107,240 acre-ft between elevations 4,236.00 ft (sill of powerhouse penstock) and 4,246.00 ft (top of flashboards). Dead storage below elevation 4,236.00 ft about 115,000 acre-ft. Water used for power development and irrigation on Minidoka project of Bureau of Reclamation. Contents given herein are above elevation 4,236.00 ft. Figures of daily contents computed from daily readings.

COOPERATION.--Daily elevations and capacity table furnished by Bureau of Reclamation.

Capacity table (elevation, in feet, and contents, in acre-feet)

4,240.0	40,000
4,244.0	83,500
4,246.0	107,200

CONTENTS, IN ACRE-FEET, FOR STATISTIC 00011, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93,300	86,100	59,100	55,300	59,000	72,500	95,900	94,500	92,700	94,600	96,300	96,400
2	94,600	85,600	59,000	54,700	59,000	78,400	95,000	94,400	93,000	94,400	95,900	96,800
3	94,600	83,800	57,400	55,200	58,700	81,300	96,600	94,700	93,600	94,200	97,000	96,800
4	94,600	82,000	57,000	54,700	56,600	85,600	95,900	94,200	94,500	95,300	97,000	96,900
5	93,900	81,400	56,800	54,300	55,700	87,300	95,900	94,700	96,200	96,600	97,000	96,900
6	93,900	79,700	54,600	53,600	55,500	87,600	96,200	94,700	97,100	96,600	96,900	97,100
7	93,900	78,500	56,600	51,000	55,500	88,700	97,000	94,500	97,700	96,900	97,100	96,900
8	94,200	77,600	56,300	49,300	57,300	88,900	97,000	94,500	98,100	97,400	97,000	97,400
9	94,000	72,500	55,900	48,600	57,800	88,900	96,400	95,200	98,100	95,900	96,300	97,700
10	94,000	70,100	55,800	48,200	60,100	89,400	97,000	94,500	96,800	97,000	95,800	97,800
11	94,000	68,500	55,000	51,800	60,500	88,000	96,900	94,500	95,800	97,400	95,100	98,200
12	94,500	65,400	54,100	55,900	60,600	83,100	96,900	95,000	95,200	97,000	94,600	97,400
13	94,700	69,400	53,600	57,500	61,100	79,000	95,200	95,200	94,700	97,000	94,600	97,000
14	93,100	65,000	53,000	58,000	61,200	79,100	95,200	95,600	95,400	95,400	94,500	96,500
15	93,700	72,100	53,000	57,600	61,100	82,000	96,600	95,200	95,300	95,700	94,800	96,300
16	93,100	67,900	54,300	57,300	60,000	83,800	96,400	94,800	95,700	96,400	95,200	95,800
17	93,900	66,300	54,300	57,100	60,000	84,700	95,700	94,600	95,700	95,700	95,900	95,700
18	92,600	64,800	54,300	56,100	59,700	87,400	95,700	95,000	95,700	95,300	96,600	95,300
19	93,900	62,500	54,300	56,100	59,700	89,600	96,000	95,200	95,700	95,200	97,400	93,900
20	92,000	60,500	54,300	55,800	59,100	91,200	96,000	95,200	95,400	95,000	97,800	95,200
21	91,500	59,600	54,200	57,000	59,000	93,800	94,800	95,800	93,400	96,200	97,800	95,200
22	91,900	59,100	54,000	59,100	59,000	95,900	94,200	96,400	95,800	96,200	97,800	94,000
23	91,200	58,900	54,000	60,200	60,500	92,600	95,600	96,200	95,800	96,200	96,600	95,000
24	90,200	59,100	54,000	60,200	61,900	94,700	95,000	95,000	96,200	96,200	96,900	97,400
25	90,200	59,600	54,000	60,200	63,000	92,900	95,000	93,300	96,200	96,200	97,100	97,800
26	90,600	59,600	54,000	59,800	63,900	93,900	95,600	93,300	96,600	97,000	97,600	98,600
27	89,100	57,200	54,000	59,600	64,400	94,700	94,800	93,300	96,200	97,000	97,600	98,800
28	89,100	59,900	55,500	60,100	65,000	93,700	95,100	92,700	95,900	96,500	97,600	98,800
29	86,800	58,900	55,700	60,100	67,000	92,400	93,400	92,300	96,200	96,500	96,900	98,200
30	86,300	59,100	55,700	59,800	------	93,200	94,700	92,300	95,600	96,000	96,900	96,400
31	86,100	------	55,500	59,000	------	94,700	------	93,000	------	96,000	96,900	------
MAX	94,700	86,100	59,100	60,200	67,000	95,900	97,000	96,400	98,100	97,400	97,800	98,800
MIN	86,100	57,200	53,000	48,200	55,500	72,500	93,400	92,300	92,700	94,200	94,500	93,900
(†)	4,244.22	4,241.80	4,241.46	4,241.79	4,242.52	4,244.96	4,244.96	4,244.81	4,245.03	4,245.07	4,245.14	4,245.10
(‡)	-7,600	-27,000	-3,600	+3,500	+8,000	+27,700	0	-1,700	+2,600	+400	+900	-500

CAL YR 1971 ‡ +6,700
WTR YR 1972 ‡ +2,700

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

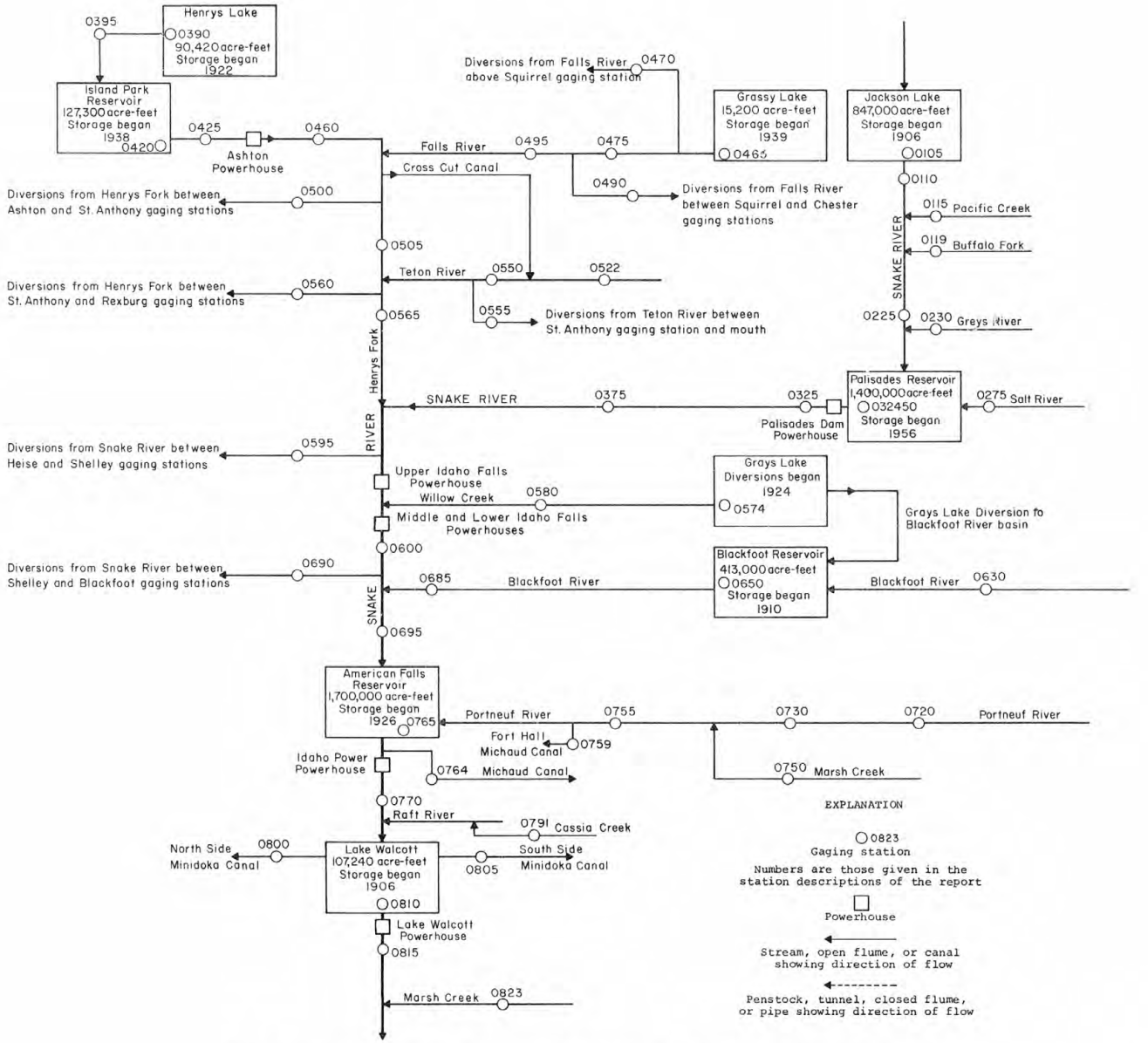


FIGURE 5. Schematic diagram showing gaging stations on streams, diversions, storage, and return flows in upper Snake River basin between Jackson Lake and Minidoka.

13081500 Snake River near Minidoka, Idaho

LOCATION.--Lat 42°40'23", long 113°29'58", in SW¼NE¼ sec.2, T.9 S., R.25 E., Minidoka County, on right bank 1 mile downstream from Minidoka Dam, 6 miles south of Minidoka, at mile 673.7.

DRAINAGE AREA.--15,700 sq mi, approximately, excluding indeterminate nontributary area on Snake River Plain.

PERIOD OF RECORD.--August 1895 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as "below Minidoka dam, at Howell's Ferry" 1911. Records for August 1895 to Apr. 20, 1910, at site 6 miles downstream "at Montgomery Ferry."

GAGE.--Water-stage recorder. Datum of gage is 4,132.2 ft above mean sea level (river-profile survey). Prior to Apr. 21, 1910, nonrecording gage at site 6 miles downstream at different datum. Apr. 21, 1910, to Aug. 28, 1911, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--46 years (1926-72), 5,967 cfs (4,323,000 acre-ft per year); 15-year base period (1952-67), 5,655 cfs.

EXTREMES.--Current year: Maximum discharge, 21,900 cfs Apr. 15 (gage height, 11.17 ft); minimum, 3,670 cfs Mar. 14 (gage height, 5.22 ft).
Period of record: Maximum discharge, 47,500 cfs May 29, 30, 1897 (gage height, 12.6 ft, former site and datum); minimum, 37 cfs Jan. 28, Feb. 4, 11, 18, 1962.

REMARKS.--Records good. Flow regulated by American Falls Reservoir (see sta 13076500), Lake Walcott (see sta 13081000) and other reservoirs, having a combined usable capacity of about 4,700,000 acre-ft. Diversions above station for irrigation of about 128,000 acres below and about 1,200,000 acres above station of which about 304,000 acres are by withdrawals from ground water (1966 determination). Considerable water leaks into the Snake Plain aquifer above station.

COOPERATION.--Gage-height record furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 1347: 1911.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

5.0	3,000	9.0	14,400
6.0	5,140	11.2	22,300
7.0	7,880		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,090	13,100	10,700	9,200	8,610	7,660	17,600	17,000	9,070	11,300	9,160	8,860
2	9,030	13,700	10,300	9,120	8,290	8,590	17,600	16,900	9,370	9,910	9,050	8,780
3	9,320	13,700	10,000	8,880	8,020	8,930	18,100	16,700	9,380	9,820	8,910	8,650
4	9,850	13,400	9,860	8,780	7,770	9,650	17,200	16,300	10,600	9,790	8,850	8,630
5	11,000	13,800	9,860	8,520	7,480	10,200	15,800	16,400	13,200	9,680	8,900	8,710
6	11,300	13,700	9,720	7,750	7,320	10,100	16,000	16,400	14,100	9,550	8,900	8,530
7	11,300	13,000	9,700	7,540	7,470	10,100	16,300	15,300	15,800	9,480	8,860	8,070
8	11,700	13,200	9,560	7,130	8,610	10,200	17,800	14,000	17,700	9,330	8,940	7,680
9	11,700	11,700	9,490	7,010	9,030	10,700	18,100	14,300	19,400	9,310	9,070	7,320
10	11,100	10,400	9,530	6,530	9,810	11,300	18,400	13,100	20,500	9,330	9,400	7,060
11	11,100	9,600	9,380	7,050	10,200	10,400	19,800	12,100	21,200	9,430	9,370	6,960
12	10,700	7,530	9,140	8,630	10,300	8,110	20,300	13,100	21,500	9,410	9,420	6,690
13	10,900	6,690	8,530	9,460	10,500	5,650	20,400	14,700	20,700	9,420	9,510	6,410
14	11,000	9,100	8,260	9,610	10,600	3,980	21,300	15,500	19,600	9,670	9,540	6,030
15	11,000	11,600	8,630	9,140	10,500	4,060	21,700	14,400	18,900	9,610	9,440	5,910
16	10,700	12,300	9,310	8,970	10,100	4,520	21,400	12,900	18,600	9,580	9,340	6,080
17	10,900	12,000	8,900	8,820	9,940	4,910	21,100	12,300	18,400	9,430	9,250	6,150
18	11,300	12,100	8,900	8,400	9,770	5,790	20,600	11,900	16,800	9,340	9,120	6,180
19	12,100	12,100	8,730	8,270	9,610	6,900	20,200	13,400	15,700	9,540	9,170	6,170
20	12,200	11,700	8,740	8,210	9,530	7,750	19,400	16,000	16,200	9,450	9,180	5,920
21	12,300	11,100	8,620	9,030	9,560	9,410	18,600	16,800	16,700	9,350	9,110	5,750
22	12,600	11,000	8,570	10,000	9,550	11,600	18,500	15,300	16,100	9,340	9,160	5,690
23	12,600	10,900	8,520	10,500	9,930	12,000	18,600	15,500	14,900	9,280	9,220	5,780
24	12,400	10,800	8,520	10,100	10,300	12,500	18,000	17,500	13,700	9,220	9,090	5,750
25	12,400	10,700	8,520	9,690	10,800	14,000	18,200	17,600	13,300	9,170	9,090	5,720
26	13,300	10,900	8,680	9,440	10,900	14,100	18,700	17,200	14,700	9,180	8,960	5,540
27	13,600	10,800	8,660	9,340	11,000	14,800	17,600	17,100	16,900	9,130	8,860	5,010
28	13,600	11,200	9,220	9,350	10,000	16,200	16,700	15,600	17,500	9,110	8,850	5,250
29	13,000	10,900	9,450	9,180	8,460	16,800	16,300	12,800	15,700	9,090	8,890	5,060
30	13,100	10,800	9,610	8,990	------	15,900	17,100	11,100	13,500	9,130	8,950	5,130
31	12,800	------	9,180	8,900	------	16,100	------	10,000	------	9,180	8,960	------
TOTAL	357,990	343,520	284,790	271,540	273,960	312,910	557,400	459,200	479,720	293,560	282,520	199,470
MEAN	11,550	11,450	9,187	8,759	9,447	10,090	18,580	14,810	15,990	9,470	9,114	6,649
MAX	13,600	13,800	10,700	10,500	11,000	16,800	21,700	17,600	21,500	11,300	9,540	8,860
MIN	8,090	6,690	8,260	6,530	7,320	3,980	15,800	10,000	9,070	9,090	8,850	5,010
AC-FT	710,100	681,400	564,900	538,600	543,400	620,700	1,106M	910,800	951,500	582,300	560,400	395,600

CAL YR 1971 TOTAL 4,453,240 MEAN 12,200 MAX 27,900 MIN 4,230 AC-FT 8,833,000
WTR YR 1972 TOTAL 4,116,580 MEAN 11,250 MAX 21,700 MIN 3,980 AC-FT 8,165,000

M Expressed in thousands.

13082300 Marsh Creek near Albion, Idaho

LOCATION.--Lat 42°27'20", long 113°31'10", in NE¼ sec.22, T.11 S., R.25 E., Cassia County, on left bank 750 ft upstream from concrete diversion dam and 5 miles northeast of Albion.

DRAINAGE AREA.--86 sq mi, approximately.

PERIOD OF RECORD.--September 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,500 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 21.7 cfs (15,720 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 454 cfs Mar. 3 (gage height, 6.16 ft); minimum, 5.9 cfs Jan. 3 (gage height, 3.12 ft); minimum gage height, 3.08 ft Sept. 4, 5, 8, 9, 14, 15, 19, 23-25.
Period of record: Maximum discharge, 828 cfs Jan. 17, 1971 (gage height, 7.26 ft) by slope-area measurement; minimum, 1.0 cfs Dec. 14, 1967 (gage height, 2.00 ft).

REMARKS.--Records good except those for October and January, which are fair. Diversions above station for irrigation of about 5,000 acres (1966 determination).

REVISIONS (WATER YEARS).--WRD Idaho 1969: 1968(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Dec. 31 to Feb. 15, Mar. 24 to June 6, June 9-21; stage-discharge relation affected by ice Jan. 4, 5, Feb. 3)

3.0	5.6	4.0	64
3.2	12	4.5	121
3.4	21	5.0	200
3.6	32	5.5	300

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	11	7.6	37	61	56	31	52	44	11	8.7
2	11	12	9.8	7.8	35	85	57	31	52	42	11	8.7
3	11	13	11	6.7	35	285	57	31	58	40	10	8.4
4	12	13	9.8	17	35	110	58	29	60	34	10	8.1
5	12	13	11	16	35	104	58	29	60	33	10	8.1
6	12	13	23	19	34	110	61	29	60	29	10	9.8
7	12	13	11	20	34	93	60	32	81	25	10	8.4
8	11	13	10	22	33	84	59	35	141	19	10	8.1
9	11	13	10	25	32	85	53	33	200	15	10	8.1
10	11	13	10	27	32	93	51	31	153	16	9.8	8.4
11	11	13	10	33	32	93	52	28	127	15	9.4	8.7
12	12	13	9.4	33	31	87	60	27	108	16	9.8	8.4
13	12	13	9.4	32	31	86	52	26	91	15	9.8	8.4
14	12	12	9.4	31	31	86	52	27	83	15	10	8.4
15	12	11	8.7	30	32	82	49	30	81	15	10	8.7
16	13	11	7.8	30	104	81	47	31	80	13	8.7	10
17	13	11	8.7	33	68	84	45	41	81	14	8.1	10
18	13	11	8.4	42	60	89	44	46	79	13	8.4	10
19	12	11	8.4	52	56	98	44	47	78	13	10	9.8
20	13	12	8.4	58	55	83	42	48	70	13	8.4	8.7
21	13	12	8.1	62	56	76	45	51	66	15	9.1	8.7
22	13	11	9.1	62	54	74	44	52	63	14	9.4	8.4
23	13	11	10	60	52	77	41	48	64	13	9.1	8.4
24	13	11	9.8	56	52	69	41	46	65	12	8.7	8.1
25	13	12	10	54	49	68	44	42	65	12	9.1	8.4
26	14	12	9.1	54	53	65	39	42	62	12	9.1	8.7
27	13	20	7.3	48	64	63	38	43	58	12	9.8	10
28	13	13	7.8	43	107	62	36	44	54	11	9.4	11
29	13	13	8.1	38	95	61	33	47	51	11	9.8	10
30	14	12	7.3	37	------	58	32	50	47	11	9.4	9.4
31	13	------	7.6	37	------	57	------	52	------	11	8.7	------
TOTAL	382	374	299.4	1,093.1	1,424	2,709	1,450	1,179	2,390	573	296.0	267.0
MEAN	12.3	12.5	9.66	35.3	49.1	87.4	48.3	38.0	79.7	18.5	9.55	8.90
MAX	14	20	23	62	107	285	61	52	200	44	11	11
MIN	11	11	7.3	6.7	31	57	32	26	47	11	8.1	8.1
AC-FT	758	742	594	2,170	2,820	5,370	2,880	2,340	4,740	1,140	587	530

CAL YR 1971 TOTAL 16,304.4 MEAN 44.7 MAX 618 MIN 7.3 AC-FT 32,340
WTR YR 1972 TOTAL 12,436.5 MEAN 34.0 MAX 285 MIN 6.7 AC-FT 24,670

13082500 Goose Creek above Trapper Creek, near Oakley, Idaho

LOCATION.--Lat 42°07'30", long 113°56'20", in sec.13, T.15 S., R.21 E., Cassia County, on right bank 0.2 mile upstream from maximum flow line of Oakley Reservoir, 5 miles upstream from Trapper Creek, 5 miles south of Oakley Dam, and 9 miles southwest of Oakley.

DRAINAGE AREA.--633 sq mi. Mean altitude, 6,030 ft.

PERIOD OF RECORD.--April 1911 to September 1916, March 1919 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 4,770 ft (by barometer). Prior to Aug. 29, 1912, at site 200 ft downstream at different datum.

AVERAGE DISCHARGE.--58 years, 45.2 cfs (32,750 acre-ft per year); 15-year base period (1952-67), 38.0 cfs.

EXTREMES.--Current year: Maximum discharge, 354 cfs May 19 (gage height, 3.88 ft) caused by breakup of ice jam upstream; minimum, 3.9 cfs Oct. 29 (gage height, 1.17 ft).
Period of record: Maximum discharge, 3,240 cfs Feb. 11, 1962 (gage height, 9.3 ft), from rating curve extended above 200 cfs on basis of slope-area measurement of peak flow; no flow July 22 to Aug. 10, Aug. 22-30, 1934, Aug. 15 to Oct. 3, 1935, July 22 to Sept. 25, 1940, Sept. 14, 1947.

REMARKS.--Records good except those for December and January, which are fair. Decreed water rights are reported to apply to about 2,700 acres above station. Diversions for irrigation are made as flow permits to a major part of this acreage. Flow of artesian well, completed in 1935, enters below station. Pumps on four wells above and one below gage discharged into the channel during 1961-64. Pumps were not operated during the current year. Practically entire flow passing station is stored in Oakley Reservoir (sta. 13083500). Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

REVISIONS.--WSP 1567: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Oct. 30, Nov. 1-3, 6-9, Dec. 20 to Jan. 3, Jan. 6-15, Feb. 16-20)

1.3	6.3	2.5	94
1.5	12	3.0	164
1.7	20	3.5	265
2.0	40	4.0	395

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	29	39	29	39	70	115	185	185	29	20	12
2	21	30	27	33	43	77	115	191	194	27	19	12
3	24	30	30	29	48	125	123	187	194	28	19	13
4	25	32	27	22	38	119	136	185	187	29	18	14
5	25	29	33	24	29	102	147	194	179	28	19	13
6	24	24	37	29	32	100	154	210	173	26	17	15
7	24	24	30	33	38	100	162	231	151	21	16	16
8	23	27	40	33	45	98	171	251	154	17	15	18
9	23	29	23	33	46	99	176	265	192	18	14	18
10	23	32	33	31	55	104	179	287	176	18	13	18
11	23	29	34	34	54	111	185	297	153	19	13	19
12	22	30	32	36	40	116	198	289	136	17	13	19
13	22	32	30	34	50	123	198	282	129	9.7	13	20
14	23	35	27	33	59	133	183	275	118	7.1	15	20
15	23	35	26	32	51	139	171	282	111	12	15	19
16	23	32	28	28	69	144	158	294	101	12	16	18
17	24	32	32	33	73	148	153	312	100	10	15	18
18	25	30	32	53	77	159	151	317	98	8.1	15	18
19	25	28	26	69	79	167	148	335	89	7.3	15	20
20	24	30	27	70	81	173	147	340	86	7.5	14	20
21	24	35	29	70	86	167	145	348	80	8.5	13	20
22	24	33	34	69	84	167	144	330	75	11	13	19
23	24	31	37	68	77	174	145	309	74	17	13	20
24	24	31	39	69	73	179	148	287	74	19	13	19
25	24	31	40	70	67	191	159	251	74	21	12	20
26	24	32	39	72	63	178	171	222	73	23	11	20
27	25	37	31	72	69	153	173	210	68	25	11	21
28	25	38	33	59	84	142	169	206	60	22	10	24
29	21	39	32	47	79	139	167	198	52	20	10	25
30	27	38	36	44	------	129	173	200	43	19	10	25
31	26	------	30	54	------	119	------	192	------	19	11	------
TOTAL	732	944	992	1,412	1,728	4,145	4,764	7,962	3,579	555.2	441	553
MEAN	23.6	31.5	32.0	45.5	59.6	134	159	257	119	17.9	14.2	18.4
MAX	27	39	40	72	86	191	198	348	194	29	20	25
MIN	18	24	23	22	29	70	115	185	43	7.1	10	12
AC-FT	1,450	1,870	1,970	2,800	3,430	8,220	9,450	15,790	7,100	1,100	875	1,100

CAL YR 1971 TOTAL 31,709.0 MEAN 86.9 MAX 1,410 MIN 11 AC-FT 62,890
WTR YR 1972 TOTAL 27,807.2 MEAN 76.0 MAX 348 MIN 7.1 AC-FT 55,160

13083000 Trapper Creek near Oakley, Idaho

LOCATION.--Lat 42°10'10", long 113°58'20", in sec.34, T.14 S., R.21 E., Cassia County, on left bank 4 miles upstream from Oakley Dam and 7 miles southwest of Oakley.

DRAINAGE AREA.--53.7 sq mi. Mean altitude, 6,360 ft.

PERIOD OF RECORD.--May 1911 to September 1916, March 1919 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,820 ft (by barometer). Prior to Sept. 1, 1912, water-stage recorder at approximately present site at different datum, Apr. 8, 1913, to Sept. 30, 1916, and Mar. 28, 1919, to Aug. 15, 1931, at site 1 mile upstream at different datum. Sept. 1, 1912, to Apr. 7, 1913, nonrecording gage at site 0.8 mile downstream at different datum.

AVERAGE DISCHARGE.--58 years, 14.6 cfs (10,580 acre-ft per year); 15-year base period (1952-67), 13.1 cfs.

EXTREMES.--Current year: Maximum discharge, 96 cfs June 9 (gage height, 5.64 ft); minimum, 7.6 cfs Dec. 31, Jan. 3, 15 (gage height, 4.80 ft).
Period of record: Maximum discharge recorded, 270 cfs Aug. 17, 1941 (gage height, 6.99 ft) during cloudburst, from rating curve extended above 100 cfs on basis of velocity-area studies and peak flow over weir (a higher flow may have occurred during cloudburst Aug. 15, 1931); minimum discharge, 1.3 cfs Jan. 1, 1970 (gage height, 4.53 ft).

REMARKS.--Records good. A few small diversions above station. Flow of artesian well, completed in 1936, enters above. Practically entire flow passing station is stored in Oakley Reservoir (see sta 13083500). Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1063: 1941, 1943. WSP 1567: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 17-22)

4.8	8.3
5.0	20
5.2	38
5.6	96

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	12	11	14	18	25	36	68	18	17	13
2	12	12	11	11	11	22	25	36	68	18	17	12
3	12	12	12	8.4	11	50	27	38	69	17	16	12
4	12	12	11	9.4	13	30	27	40	65	16	16	12
5	11	12	12	12	15	25	28	43	60	15	16	13
6	11	12	15	13	13	28	28	53	58	15	16	13
7	11	12	9.8	12	13	29	30	55	59	16	15	12
8	11	12	10	11	13	26	30	50	62	19	14	12
9	11	12	13	10	13	27	30	53	60	19	13	12
10	11	12	12	11	12	32	30	48	48	22	14	12
11	11	11	12	11	12	34	32	48	43	22	14	13
12	11	11	12	12	13	34	32	49	39	21	14	13
13	11	12	12	10	13	36	32	50	37	20	13	13
14	11	12	12	11	13	38	30	52	34	19	14	12
15	12	12	12	11	13	36	30	56	32	18	14	12
16	12	11	12	13	14	38	28	58	30	19	13	12
17	13	11	12	12	15	38	32	71	29	19	13	12
18	13	11	12	17	15	38	32	75	28	19	13	12
19	12	11	12	19	15	38	32	75	30	19	13	12
20	13	12	11	17	15	34	30	74	28	18	13	12
21	12	12	10	21	16	32	30	69	25	18	13	12
22	12	11	11	28	16	30	30	62	23	18	13	12
23	12	11	11	23	15	36	30	59	22	17	12	12
24	12	11	11	17	15	34	32	56	24	16	12	13
25	12	11	11	16	15	32	34	52	29	16	12	13
26	12	12	11	15	15	30	36	52	27	17	12	13
27	13	14	10	14	15	28	34	52	25	17	12	14
28	13	12	11	14	17	28	36	54	23	16	12	14
29	12	12	11	13	20	28	38	57	21	16	12	14
30	12	12	11	12	------	27	36	60	20	17	13	13
31	12	------	11	13	------	26	------	63	------	17	12	------
TOTAL	367	352	355.8	427.8	410	982	926	1,696	1,186	554	423	376
MEAN	11.8	11.7	11.5	13.8	14.1	31.7	30.9	54.7	39.5	17.9	13.6	12.5
MAX	13	14	15	28	20	50	38	75	69	22	17	14
MIN	11	11	9.8	8.4	11	18	25	36	20	15	12	12
AC-FT	728	698	706	849	813	1,950	1,840	3,360	2,350	1,100	839	746

CAL YR 1971 TOTAL 7,693.8 MEAN 21.1 MAX 83 MIN 8.3 AC-FT 15,260
WTR YR 1972 TOTAL 8,055.6 MEAN 22.0 MAX 75 MIN 8.4 AC-FT 15,980

13083500 Oakley Reservoir near Oakley, Idaho

LOCATION.--Lat 42°11'50", long 113°54'50", in sec.19, T.14 S., R.22 E., Cassia County, just upstream from right abutment of dam on Goose Creek, 4 miles southwest of Oakley, and at mile 26.0.

DRAINAGE AREA.--729 sq mi.

PERIOD OF RECORD.--October 1912 to current year.

GAGE.--Nonrecording gage. Altitude of gage is 4,630 ft (by barometer).

EXTREMES.--Current year: Maximum contents observed, 58,400 acre-ft June 19 (gage height, 121.2 ft); minimum observed, 33,600 acre-ft Oct. 4 (gage height, 92.0 ft).
Period of record: Maximum contents observed, 74,600 acre-ft June 15, 1921 (gage height, 136.2 ft); reservoir drained at close of irrigation season in 1915, 1919-20, 1926, 1933, 1950, 1959.

REMARKS.--Reservoir is formed by earth dam constructed in 1911-13; storage began in 1911. Capacity, 74,350 acre-ft between gage heights 0.0 (bottom of diversion tunnel) and 136.0 ft (crest of spillway). Dead storage negligible. Water is used for irrigation of lands along Goose Creek in Oakley Canal Co. project. Figures given herein represent usable contents.

COOPERATION.--Gage readings and capacity table furnished by Oakley Canal Co.

REVISIONS.--WSP 1567: Drainage area.

Capacity table (gage height, in feet, and contents, in acre-feet)

90.0	32,100	120.0	57,200
100.0	39,800	122.0	59,200
110.0	48,200		

CONTENTS, IN ACRE-FEET, FOR STATISTIC 00011, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	34,900	36,000	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	57,200	-	-	-
3	-	-	-	37,900	-	-	49,400	-	-	56,500	-	-
4	33,600	-	-	-	-	-	-	-	-	-	-	39,800
5	-	-	-	-	-	-	-	-	57,400	-	-	-
6	-	-	36,400	-	-	46,200	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	45,300	-
8	-	35,100	-	-	42,000	-	-	50,800	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-
10	33,900	-	-	38,400	-	-	49,400	-	-	53,400	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	58,100	-	-	38,800
13	-	-	36,800	-	-	48,000	-	-	-	-	-	38,800
14	33,900	-	-	-	42,500	-	-	-	-	-	43,900	-
15	-	35,200	-	-	-	-	-	51,500	-	-	43,800	38,800
16	-	-	-	-	42,600	-	-	-	-	-	-	-
17	-	-	-	38,600	-	-	49,900	-	-	50,700	-	-
18	34,100	-	-	-	-	-	-	52,800	-	-	-	38,200
19	34,300	-	-	-	-	-	49,900	-	58,400	-	-	-
20	-	-	-	-	-	49,100	-	-	-	49,500	-	-
21	-	-	37,300	-	43,900	-	-	-	-	-	42,500	-
22	-	35,600	-	-	-	-	-	54,500	-	-	-	-
23	-	-	-	-	-	49,400	-	-	-	-	-	-
24	-	-	-	40,700	-	-	49,900	-	-	48,200	-	-
25	34,300	-	-	-	-	-	-	-	-	-	-	37,300
26	-	-	-	41,200	-	-	-	-	57,800	-	-	-
27	-	-	37,600	-	-	49,700	-	-	-	-	-	-
28	-	-	-	-	44,800	-	-	-	-	-	41,200	-
29	-	-	-	-	45,000	-	-	56,500	-	-	-	-
30	-	35,900	-	-	------	-	50,000	-	57,100	-	-	36,500
31	34,800	------	37,700	41,600	------	49,600	------	56,900	------	46,500	40,200	------
MAX	34,800	35,900	37,700	41,600	45,000	-	50,000	56,900	-	-	-	-
MIN	-	34,900	36,000	-	-	-	-	-	57,100	46,500	40,200	36,500
(†)	-	-	-	102.3	-	-	112.1	-	-	108.0	-	95.9
(‡)	+1,400	+1,100	+1,800	+3,900	+3,400	+4,600	+400	+6,900	+200	-10,600	-6,300	-3,700

CAL YR 1971..... ‡ +14,900
WTR YR 1972..... ‡ +3,100

† Gage height, in feet, at end of month.
‡ Change in contents, in acre-feet.

13085500 Minidoka North Side Pump Canal near Burley, Idaho

LOCATION.--Lat 42°32'01", long 113°56'49", in SW¼SW¼ sec.24, T.10 S., R.21 E., Jerome County, at head of canal, 4 miles east of Milner, and 8 miles west of Burley.

PERIOD OF RECORD.--October 1956 to current year.

GAGE.--Sparling meter at pumping plant.

AVERAGE DISCHARGE.--16 years, 72.4 cfs (52,450 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 267 cfs June 26 to July 25, 1958; no flow for many days each year.

REMARKS. -Records good. Flow controlled by pumping plant which lifts water from Snake River for irrigation of 14,500 acres of land in Minidoka North Side project.

COOPERATION.--Record of pump operation and 7 discharge measurements furnished by A and B Irrigation District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52						0	74	184	228	215	123
2	40						0	82	194	228	215	101
3	40						0	88	197	237	206	101
4	37						0	98	198	231	198	101
5	33						0	108	193	231	182	104
6	33						0	126	188	231	182	104
7	39						0	126	184	236	184	98
8	38						0	141	172	238	196	98
9	38						0	141	158	238	204	92
10	38						0	141	130	240	204	92
11	38						0	141	130	244	209	94
12	40						33	141	112	244	214	80
13	12						44	158	112	244	214	75
14	0						30	159	125	235	217	64
15	0						0	173	141	236	210	68
16	0						0	192	154	236	206	72
17	0						30	203	150	237	197	72
18	0						30	213	150	237	190	67
19	0						21	213	146	237	172	67
20	0						21	213	141	237	172	67
21	0						21	213	153	237	178	70
22	0						21	213	168	222	178	70
23	0						21	198	176	222	174	75
24	0						21	186	163	229	165	75
25	0						30	171	163	229	153	75
26	0						42	161	173	224	148	73
27	0						47	153	173	215	148	63
28	0						52	152	176	209	135	63
29	0						64	151	184	197	135	53
30	0				------		64	160	207	197	135	53
31	0	------			------		------	180	------	208	130	------
TOTAL	478	0	0	0	0	0	592	4,869	4,895	7,114	5,666	2,410
MEAN	15.4	0	0	0	0	0	19.7	157	163	229	183	80.3
MAX	52	0	0	0	0	0	64	213	207	244	217	123
MIN	0	0	0	0	0	0	0	74	112	197	130	53
AC-FT	948	0	0	0	0	0	1,170	9,660	9,710	14,110	11,240	4,780

CAL YR 1971 TOTAL 24,870.00 MEAN 68.1 MAX 255 MIN 0 AC-FT 49,330
WTR YR 1972 TOTAL 26,024.00 MEAN 71.1 MAX 244 MIN 0 AC-FT 51,620

DIVERSIONS FROM SNAKE RIVER BETWEEN GOOSE CREEK AND SNAKE RIVER AT MILNER

13085800 P. A. lateral near Milner, Idaho

LOCATION.--Lat 42°32'10", long 113°58'20", in SE¼SE¼ sec.22, T.10 S., R.21 E., Jerome County, on left bank 600 ft downstream from pumping station and 2.8 miles northeast of Milner, and 9 miles west of Burley.

PERIOD OF RECORD.--October 1915 to current year. Monthly discharges only for some periods, published in WSP 1317.

GAGE.--Nonrecording gage read daily. Altitude of gage is 4,196 ft (river survey).

AVERAGE DISCHARGE.--24 years (1948-72), 25.6 cfs (18,550 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge observed, 81 cfs July 24-26, 1971; no flow for many days each year.

REMARKS.--Records excellent. Flow regulated by pumping plant which lifts water 65.3 ft from Snake River for irrigation on North Side Twin Falls tract.

COOPERATION.--Gage-height record furnished by North Side Canal Co.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33						0	24	62	67	67	62
2	22						0	38	62	67	67	62
3	0						0	38	61	67	67	62
4	0						0	53	61	67	67	58
5	0						0	52	61	67	67	55
6	0						0	52	61	67	63	55
7	0						0	52	61	67	64	55
8	0						0	52	61	69	66	53
9	0						0	52	61	73	66	53
10	0						0	52	60	72	67	53
11	0						0	63	60	72	67	51
12	0						0	61	60	72	67	51
13	0						0	68	58	72	67	51
14	0						0	68	58	72	67	42
15	0						0	66	55	72	67	42
16	0						0	70	53	72	67	42
17	0						0	70	52	72	67	42
18	0						0	70	52	72	67	42
19	0						0	70	52	72	67	42
20	0						0	70	52	72	67	42
21	0						0	72	47	72	67	42
22	0						0	72	47	72	67	42
23	0						0	72	51	72	65	42
24	0						0	68	51	72	62	42
25	0						4.0	62	51	68	62	42
26	0						14	61	54	68	62	0
27	0						14	61	54	66	62	0
28	0						14	61	54	66	62	0
29	0						24	59	59	66	62	0
30	0				------		24	59	67	67	62	0
31	0	------			------		------	62	------	67	62	------
TOTAL	55	0	0	0	0	0	94.0	1,850	1,698	2,159	2,026	1,225
MEAN	1.77	0	0	0	0	0	3.13	59.7	56.6	69.6	65.4	40.8
MAX	33	0	0	0	0	0	24	72	67	73	67	62
MIN	0	0	0	0	0	0	0	24	47	66	62	0
AC-FT	109	0	0	0	0	0	186	3,670	3,370	4,280	4,020	2,430

CAL YR 1971 TOTAL 9,800.00 MEAN 26.8 MAX 81 MIN 0 AC-FT 19,440
WTR YR 1972 TOTAL 9,107.00 MEAN 24.9 MAX 73 MIN 0 AC-FT 18,060

13086000 Milner low-lift canal near Milner, Idaho

LOCATION.--Lat 42°31'10", long 114°00'36", in SE¼SE¼ sec.29, T.10 S., R.21 E., Twin Falls County, at head of canal, 0.6 mile east of Milner.

PERIOD OF RECORD.--October 1919 to current year. Monthly discharge only for some periods, published in WSP 1317. Prior to October 1922, published as Murtaugh canal near Milner.

GAGE.--Rated pumps. Prior to May 1, 1945, water-stage recorder at site 600 ft downstream.

AVERAGE DISCHARGE.--28 years (1944-72), 81.8 cfs (59,260 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 301 cfs July 16-18, 1964; no flow for many days each year.

REMARKS.--Records excellent. Flow controlled by pumping plant which lifts water from Snake River above Milner Dam for irrigation of 13,400 acres of land in Milner low-lift irrigation district. Pumps rated by current-meter measurements.

COOPERATION.--Record of pump operation furnished by Milner low-lift irrigation district.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82						0	165	232	237	238	246
2	71						0	174	232	248	236	220
3	71						0	193	232	262	236	207
4	71						0	213	232	265	236	188
5	59						0	218	232	265	236	180
6	53						0	224	232	271	236	180
7	53						0	226	224	271	240	174
8	53						0	222	216	271	254	160
9	47						0	218	164	271	260	151
10	47						0	218	127	271	274	138
11	47						0	205	120	271	280	134
12	47						0	200	103	271	278	127
13	47						0	206	96	271	265	97
14	47						0	208	96	271	262	97
15	35						0	212	96	271	262	84
16	0						0	224	102	271	257	76
17	0						16	226	104	271	255	76
18	0						24	226	104	273	255	76
19	0						24	226	125	277	255	82
20	0						24	236	146	277	255	84
21	0						24	240	161	277	261	84
22	0						24	240	178	277	270	84
23	0						24	240	183	264	273	84
24	0						24	240	183	260	273	84
25	0						36	236	183	260	273	84
26	0						57	232	183	254	267	84
27	0						84	232	183	253	264	84
28	0						115	240	187	253	264	84
29	0						148	234	189	253	259	77
30	0				------		158	232	212	253	256	74
31	0	------			------		------	232	------	246	253	------
TOTAL	830	0	0	0	0	0	782	6,838	5,057	8,206	7,983	3,600
MEAN	26.8	0	0	0	0	0	26.1	221	169	265	258	120
MAX	82	0	0	0	0	0	158	240	232	277	280	246
MIN	0	0	0	0	0	0	0	165	96	237	236	74
AC-FT	1,650	0	0	0	0	0	1,550	13,560	10,030	16,280	15,830	7,140

CAL YR 1971 TOTAL 30,337.00 MEAN 83.1 MAX 300 MIN 0 AC-FT 60,170
WTR YR 1972 TOTAL 33,296.00 MEAN 91.0 MAX 280 MIN 0 AC-FT 66,040

13086500 Gooding Canal at Milner, Idaho

LOCATION.--Headgates of canal, lat 42°31'36", long 114°00'34", in SW¼NW¼ sec.28, T.10 S., R.21 E., Jerome County, at Milner Dam.

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder on Milner-Gooding Canal at site 3.4 miles downstream, nonrecording gage on A lateral 1.9 miles downstream, and differential recorder on control gates of North Side diversion 3.4 miles downstream, all referred to Milner Lake.

AVERAGE DISCHARGE.--37 years (1935-72), total 1,041 cfs (754,200 acre-ft per year); Milner-Gooding project, 600 cfs; North Side Canal Co. project, 441 cfs.

EXTREMES.--Period of record: Maximum daily discharge, 2,770 cfs July 22, 1964, and July 18, 1967; no flow for many days.

REMARKS.--Records excellent. Gooding Canal divides into the three canals described in Gage paragraph. Milner-Gooding Canal delivers water to the Milner-Gooding project of the Bureau of Reclamation. The North Side diversion and A lateral carry water to part of the North Side Canal Co. project, which also receives water through the North Side Twin Falls Canal and P. A. lateral (stas 13087000 and 13085800). Discharge is computed by combining the discharge at the three measuring sites and adding 35 cfs for losses between Milner Lake and division points.

COOPERATION.--Gage-height record furnished by North Side Canal Co. and American Falls Reservoir District No. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,140	1,030					0	1,690	2,430	2,510	2,530	2,500
2	2,060	1,110					0	1,700	2,440	2,520	2,540	2,500
3	2,020	1,050					0	1,830	2,430	2,530	2,540	2,510
4	2,020	940					0	2,170	2,430	2,510	2,540	2,510
5	2,020	920					0	2,380	2,430	2,500	2,540	2,520
6	2,020	910					0	2,460	2,440	2,480	2,530	2,440
7	2,030	910					0	2,480	2,440	2,480	2,540	2,370
8	1,490	910					250	2,450	2,440	2,480	2,530	2,370
9	910	910					370	2,450	2,430	2,480	2,540	2,280
10	980	900					370	2,460	2,420	2,480	2,540	2,220
11	1,130	900					380	2,460	2,430	2,470	2,530	2,230
12	1,230	890					380	2,450	2,420	2,470	2,530	2,240
13	1,230	870					370	2,450	2,420	2,470	2,530	2,160
14	1,230	890					370	2,460	2,420	2,500	2,520	2,120
15	1,230	880					380	2,450	2,420	2,510	2,530	2,120
16	1,230	880					410	2,450	2,440	2,520	2,510	2,120
17	1,230	880					690	2,450	2,440	2,520	2,490	2,120
18	1,230	870					870	2,460	2,440	2,520	2,490	2,120
19	1,230	860					690	2,450	2,430	2,520	2,500	2,110
20	1,180	860					950	2,450	2,440	2,520	2,500	2,110
21	1,150	860					1,090	2,450	2,450	2,520	2,500	2,110
22	1,150	720					1,280	2,380	2,440	2,530	2,500	2,110
23	1,140	620					1,390	2,330	2,450	2,520	2,500	2,110
24	1,150	600					1,390	2,330	2,470	2,510	2,500	2,100
25	1,150	600					1,390	2,330	2,470	2,520	2,500	2,100
26	1,150	600					1,600	2,330	2,460	2,530	2,500	2,090
27	1,130	600					1,690	2,330	2,420	2,530	2,500	2,100
28	1,100	600					1,680	2,320	2,460	2,530	2,510	2,100
29	1,090	600					1,680	2,320	2,440	2,520	2,510	2,100
30	1,030	200			------		1,690	2,400	2,480	2,540	2,500	2,100
31	1,000	------			------		------	2,430	------	2,540	2,500	------
TOTAL	42,080	24,370	0	0	0	0	21,360	72,550	73,170	77,790	78,020	66,690
MEAN	1,357	812	0	0	0	0	712	2,340	2,439	2,509	2,517	2,223
MAX	2,140	1,110	0	0	0	0	1,690	2,480	2,480	2,540	2,540	2,520
MIN	910	200	0	0	0	0	0	1,690	2,420	2,470	2,490	2,090
AC-FT	83,470	48,340	0	0	0	0	42,370	143,900	145,100	154,300	154,800	132,300
(†)	27,330	9,380	0	0	0	0	31,320	89,040	90,960	97,590	97,850	78,550
(‡)	56,130	38,960	0	0	0	0	11,050	54,860	54,170	56,710	56,910	53,730

CAL YR 1971 TOTAL 439,320.00 MEAN 1,204 MAX 2,620 MIN 0 AC-FT 871,400
WTR YR 1972 TOTAL 456,030.00 MEAN 1,246 MAX 2,540 MIN 0 AC-FT 904,500

† To Milner-Gooding project, in acre-feet; total for water year, 522,000.
‡ To North Side Canal Co. project, in acre-feet; total for water year, 382,500.

13087000 North Side Twin Falls Canal at Milner, Idaho

LOCATION.--Lat 42°31'47", long 114°01'11", in NE¼NW¼ sec.29, T.10 S., R.21 E., Jerome County, on right bank 0.6 mile downstream from headgates at Milner Dam and 0.8 mile north of Milner.

PERIOD OF RECORD.--May 1909 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 4,123.4 ft above mean sea level. Prior to Apr. 1, 1916, non-recording gages at two sites within 0.5 mile of present site at slightly different datum.

AVERAGE DISCHARGE.--37 years (1935-72), 1,229 cfs (890,400 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 3,240 cfs July 22, 1964; no flow at times when headgates were closed.

REMARKS.--Records excellent. Flow controlled by headgates. Water diverted by this canal and by P. A. lateral and part of that diverted by Gooding Canal, all at Milner, is used for irrigation of 160,000 acres of land under the North Side Canal Co. system. Diversions began in April 1908.

COOPERATION.--Water-stage recorder inspected by North Side Canal Co.

REVISIONS (WATER YEARS).--WSP 1347: 1912, 1917.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,130					0	347	2,090	2,780	2,880	2,930	2,840
2	1,050					0	352	2,110	2,860	2,940	2,860	2,800
3	932					0	361	2,240	2,920	2,980	2,860	2,760
4	892					0	361	2,320	2,830	3,000	2,820	2,760
5	796					0	358	2,360	2,790	2,980	2,810	2,720
6	761					0	564	2,340	2,780	3,000	2,800	2,650
7	775					0	750	2,330	2,770	2,980	2,800	2,600
8	764					0	800	2,340	2,660	3,000	2,800	2,470
9	410					0	845	2,360	2,470	3,000	2,780	2,310
10	0					0	928	2,440	2,420	3,000	2,800	2,230
11	0					0	1,050	2,470	2,410	2,990	2,820	2,100
12	0					0	1,120	2,470	2,410	3,020	2,830	2,020
13	0					0	1,130	2,470	2,410	3,000	2,840	1,850
14	0					0	1,130	2,460	2,500	2,910	2,900	1,670
15	0					0	1,160	2,560	2,500	3,020	2,920	1,570
16	0					0	1,330	2,630	2,510	3,000	2,890	1,620
17	0					0	1,320	2,620	2,580	3,040	2,880	1,640
18	0					0	1,490	2,630	2,600	3,020	2,900	1,630
19	0					0	1,400	2,630	2,640	2,950	2,840	1,520
20	0					0	1,590	2,640	2,620	3,000	2,820	1,500
21	0					0	1,570	2,640	2,700	3,040	2,840	1,430
22	0					0	1,550	2,620	2,720	3,060	2,820	1,360
23	0					0	1,640	2,620	2,720	3,030	2,800	1,360
24	0					0	1,600	2,640	2,720	3,000	2,860	1,360
25	0					0	1,510	2,580	2,720	2,960	2,860	1,380
26	0					0	1,640	2,530	2,720	2,940	2,860	1,290
27	0					241	1,690	2,540	2,690	2,920	2,820	1,120
28	0					344	1,820	2,550	2,700	2,920	2,800	1,060
29	0					344	1,890	2,530	2,750	2,920	2,780	936
30	0				------	344	2,050	2,610	2,800	2,890	2,790	824
31	0	------			------	334	------	2,720	------	2,900	2,810	------
TOTAL	7,510	0	0	0	0	1,607	35,346	77,090	79,700	92,290	87,940	55,380
MEAN	242	0	0	0	0	51.8	1,178	2,487	2,657	2,977	2,837	1,846
MAX	1,130	0	0	0	0	344	2,050	2,720	2,920	3,060	2,930	2,840
MIN	0	0	0	0	0	0	347	2,090	2,410	2,880	2,780	824
AC-FT	14,900	0	0	0	0	3,190	70,110	152,900	158,100	183,100	174,400	109,800

CAL YR 1971 TOTAL 430,289.00 MEAN 1,179 MAX 3,100 MIN 0 AC-FT 853,500
WTR YR 1972 TOTAL 436,863.00 MEAN 1,194 MAX 3,060 MIN 0 AC-FT 866,500

13087500 South Side Twin Falls Canal at Milner, Idaho

LOCATION.--Lat 42°31'19", long 114°00'59", in SW¼SE¼ sec.29, T.10 S., R.21 E., Twin Falls County, on right bank 30 ft upstream from highway bridge and 900 ft downstream from headgates at Milner Dam.

PERIOD OF RECORD.--May 1909 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 4,121.5 ft above mean sea level. Prior to May 13, 1913, non-recording gage and May 13, 1913, to Apr. 24, 1914, water-stage recorder near present site, and Apr. 25, 1914, to May 13, 1960, water-stage recorder at site 50 ft upstream, all at same datum.

AVERAGE DISCHARGE.--46 years (1926-72), 1,740 cfs (1,261,000 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 4,600 cfs Aug. 12, 1918, including about 1,200 cfs wasted through spillway below station and returned to river; maximum daily discharge for irrigation use, 4,000 cfs July 16, 1971; no flow during nonirrigation season several years.

REMARKS.--Records excellent except those below 20 cfs, which are fair. Flow controlled by headgates. Diversions began in March 1905 when 30,000 acres was reported as irrigated. By 1912 this had increased to 147,000 acres, and in 1965 the irrigated area was reported to be 203,000 acres.

COOPERATION.--Water-stage recorder inspected by Twin Falls Canal Co.

REVISIONS (WATER YEARS).--WSP 1347: 1910-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,890	493	338			0	157	3,080	3,620	3,780	3,760	3,440
2	1,520	496	332			0	203	3,000	3,600	3,900	3,730	3,360
3	1,380	481	348			0	295	3,050	3,600	3,850	3,750	3,300
4	1,350	462	422			0	523	3,230	3,580	3,690	3,690	3,310
5	1,450	460	452			0	643	3,320	3,580	3,710	3,670	3,330
6	1,530	487	460			0	721	3,310	3,550	3,800	3,670	3,220
7	1,470	502	460			0	757	3,290	3,580	3,830	3,650	3,040
8	1,420	490	309			0	760	3,270	3,180	3,830	3,660	2,880
9	1,350	487	15			0	772	3,270	2,720	3,850	3,690	2,760
10	1,360	458	0			0	772	3,200	2,830	3,900	3,720	2,700
11	1,330	438	0			0	936	3,320	2,940	3,910	3,720	2,700
12	1,160	425	0			0	978	3,390	3,000	3,910	3,690	2,710
13	1,090	385	0			0	985	3,480	3,000	3,910	3,690	2,690
14	1,090	395	0			0	1,050	3,550	2,990	3,940	3,730	2,620
15	1,090	470	0			0	1,260	3,550	2,950	3,950	3,740	2,550
16	1,110	571	0			0	1,400	3,580	2,990	3,950	3,700	2,500
17	1,110	565	0			0	1,550	3,610	3,070	3,960	3,710	2,480
18	1,100	544	0			73	1,700	3,670	3,110	3,930	3,720	2,410
19	1,060	505	0			98	1,740	3,660	3,210	3,940	3,670	2,310
20	1,020	430	0			98	1,790	3,690	3,230	3,900	3,690	2,300
21	940	385	0			63	1,800	3,630	3,260	3,820	3,620	2,260
22	890	380	0			51	1,890	3,430	3,360	3,810	3,560	2,140
23	862	372	0			55	2,020	3,400	3,400	3,830	3,550	2,100
24	845	370	0			52	2,000	3,460	3,400	3,810	3,550	2,100
25	838	370	0			53	2,080	3,510	3,460	3,790	3,510	2,040
26	800	362	0			51	2,500	3,530	3,550	3,810	3,490	1,830
27	748	380	0			50	2,800	3,540	3,520	3,780	3,480	1,760
28	694	370	0			48	2,950	3,530	3,550	3,780	3,420	1,680
29	655	362	0			48	2,970	3,480	3,560	3,770	3,410	1,590
30	580	348	0		------	46	3,120	3,440	3,670	3,740	3,400	1,570
31	526	------	0		------	73	------	3,610	------	3,750	3,420	------
TOTAL	34,258	13,243	3,136	0	0	859	43,122	106,080	99,060	119,130	112,460	75,680
MEAN	1,105	441	101	0	0	27.7	1,437	3,422	3,302	3,843	3,628	2,523
MAX	1,890	571	460	0	0	98	3,120	3,690	3,670	3,960	3,760	3,440
MIN	526	348	0	0	0	0	157	3,000	2,720	3,690	3,400	1,570
AC-FT	67,950	26,270	6,220	0	0	1,700	85,530	210,400	196,500	236,300	223,100	150,100

CAL YR 1971 TOTAL 598,791.40 MEAN 1,641 MAX 4,000 MIN 0 AC-FT 1,188,000
WTR YR 1972 TOTAL 607,028.00 MEAN 1,659 MAX 3,960 MIN 0 AC-FT 1,204,000

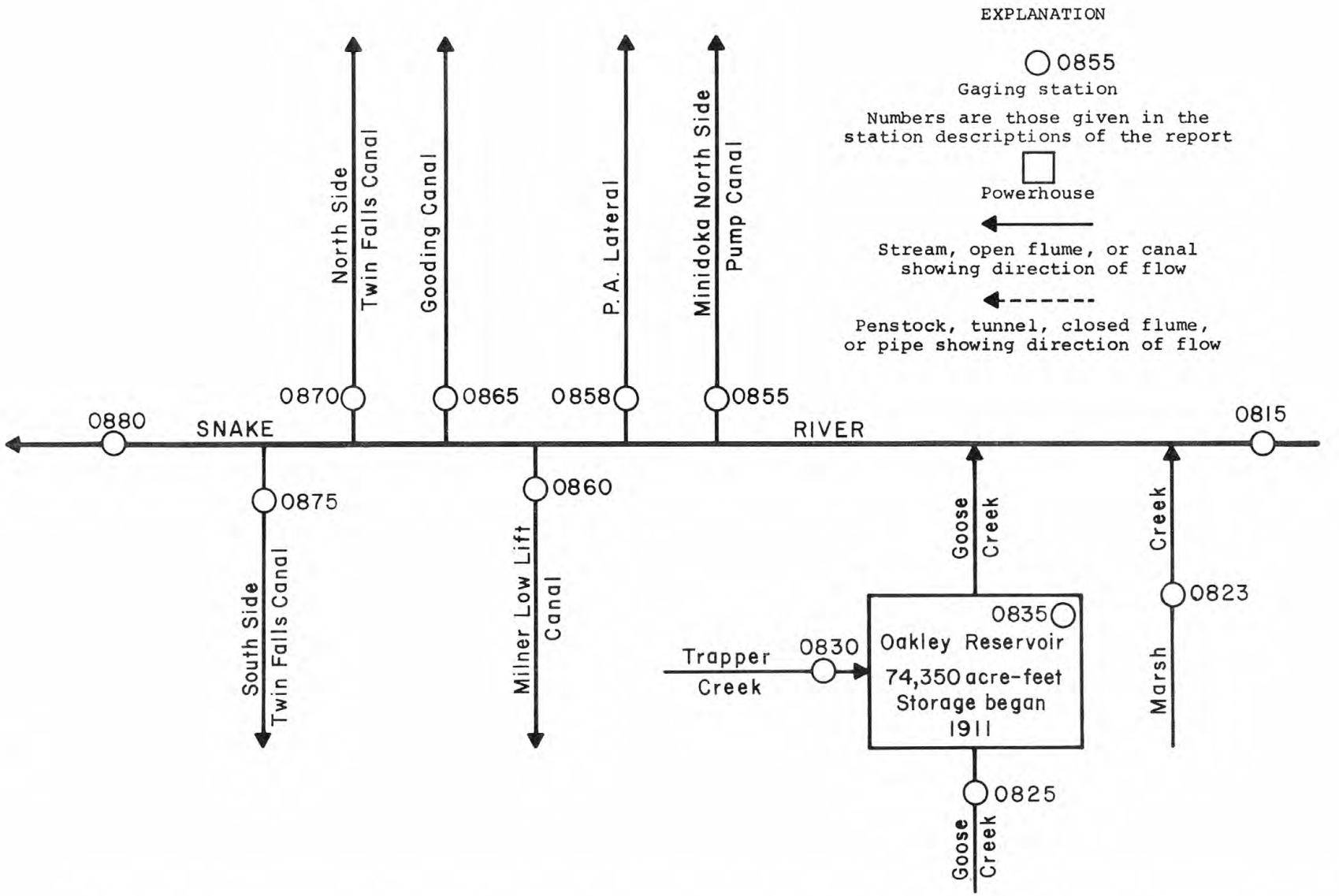


FIGURE 6. Schematic diagram showing gaging stations, diversions, and storage in Snake River basin between Minidoka and Milner.

SNAKE RIVER MAIN STEM

13088000 Snake River at Milner, Idaho

LOCATION.--Lat 42°31'41", long 114°01'04", in SW¼NE¼ sec.29, T.10 S., R.21 E., Twin Falls County, on left bank 200 ft downstream from highway bridge at Milner, 0.4 mile downstream from Milner Dam, at mile 639.70.

DRAINAGE AREA.--17,180 sq mi, approximately, excluding indeterminate nontributary area on Snake River Plain.

PERIOD OF RECORD.--May 1909 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 4,062.9 ft above mean sea level. Prior to May 28, 1919, nonrecording gages at slightly different sites and datums.

AVERAGE DISCHARGE.--46 years (1926-72), 2,235 cfs (1,619,000 acre-ft per year); 15-year base period (1952-67), 1,750 cfs.

EXTREMES.--Current year: Maximum discharge, 20,100 cfs Apr. 15 (gage height, 19.02 ft); minimum, 22 cfs July 27, Aug. 9 (gage height, 1.84 ft).
Period of record: Maximum discharge, 40,000 cfs June 21, 1918 (gage height, 19.9 ft, site and datum then in use); minimum, 2 cfs Mar. 17-28, 1936, Aug. 9 to Sept. 7, 1961.

REMARKS.--Records good. Flow regulated by American Falls Reservoir (see sta 13076500), Lake Walcott (see sta 13081000), and other reservoirs having a combined usable capacity of about 4,700,000 acre-ft. Considerable water leaks into the Snake Plain aquifer above station. Diversions above station for irrigation of about 1,990,000 acres of which about 504,000 acres are by withdrawals from ground water and about 436,000 acres are irrigated below station. Return flow in large part enters Snake River between Milner and King Hill station. At times practically entire flow is diverted during irrigation season.

COOPERATION.--Gage-height record furnished by Twin Falls Canal Co. and North Side Canal Co.

REVISIONS (WATER YEARS).--WSP 1347: 1909-12, 1915-16, 1942-44, 1946-48.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.7	15	4.4.0	366	11.0	6,600
2.0	30	5.0	740	14.0	10,700
2.5	67	6.0	1,400	17.0	16,200
3.0	131	8.0	3,300	20.0	22,500
3.5	226				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,200	12,200	11,500	10,300	8,950	8,200	17,500	10,400	323	2,350	27	454
2	5,690	12,300	11,200	10,100	8,790	7,710	17,500	10,500	324	651	25	454
3	6,490	13,100	10,500	9,050	8,280	8,430	18,300	10,200	485	179	27	452
4	6,400	12,800	10,200	7,680	6,940	8,790	17,900	8,520	1,210	307	24	451
5	6,730	12,600	9,950	8,350	7,970	9,740	16,400	7,790	4,200	341	23	448
6	7,230	13,300	9,080	8,750	8,950	10,300	15,700	8,390	5,550	111	23	451
7	7,430	13,000	9,960	8,660	9,120	10,300	15,600	7,940	6,530	87	23	462
8	7,900	12,500	9,570	8,260	8,760	10,400	16,200	6,180	9,250	78	23	466
9	8,490	12,200	9,630	7,490	9,310	10,600	17,200	6,250	12,600	57	22	464
10	9,050	10,600	9,290	6,990	9,780	11,000	16,900	5,720	13,800	42	308	460
11	9,290	9,400	9,740	6,630	10,400	11,400	17,500	3,900	14,200	40	455	456
12	9,490	8,000	9,500	7,840	10,800	10,300	18,600	4,510	14,700	41	447	458
13	9,090	6,360	8,760	8,070	10,700	7,650	18,400	6,290	14,200	40	449	453
14	8,790	6,410	8,740	7,850	11,100	5,520	19,300	7,050	13,000	40	457	449
15	9,000	8,480	7,490	10,300	11,000	4,240	20,000	6,740	11,800	43	465	444
16	9,180	10,600	7,820	9,680	10,600	4,220	19,700	4,640	11,200	43	457	438
17	9,180	11,000	9,220	9,940	10,600	4,670	19,600	3,640	10,500	46	450	436
18	9,320	13,300	9,400	10,200	10,500	4,890	17,700	3,090	9,170	44	449	442
19	9,740	12,600	8,780	9,840	10,200	5,340	17,100	4,170	7,600	42	446	466
20	10,700	12,100	8,870	9,240	9,960	6,270	16,500	6,660	7,390	34	447	471
21	11,000	11,100	9,090	9,240	9,980	7,600	15,700	8,210	7,970	29	448	469
22	10,800	10,600	9,470	10,300	9,800	9,520	14,700	7,960	7,800	34	446	467
23	10,700	10,800	9,660	11,100	10,100	11,000	14,900	6,870	6,610	37	443	465
24	10,600	10,700	9,400	11,100	10,300	13,200	14,700	8,700	5,780	37	448	468
25	10,600	10,400	9,130	10,900	11,000	14,700	13,600	9,860	4,460	29	449	470
26	10,900	10,600	8,970	10,300	11,300	14,700	13,800	9,160	5,380	24	452	478
27	11,600	10,100	8,410	10,100	11,400	15,100	12,700	9,200	7,610	23	452	483
28	12,200	11,000	7,350	9,740	11,500	17,400	11,100	8,290	8,950	23	450	711
29	12,600	11,300	8,390	9,320	9,700	17,600	9,580	5,900	7,540	24	449	1,270
30	12,800	11,300	10,200	9,730	------	17,300	9,390	3,260	4,960	23	448	1,380
31	12,600	------	9,880	9,730	------	16,500	------	1,170	------	23	450	------
TOTAL	288,790	330,750	289,150	286,780	287,790	314,590	483,770	211,160	235,092	4,922	9,982	15,736
MEAN	9,316	11,030	9,327	9,251	9,924	10,150	16,130	6,812	7,836	159	322	525
MAX	12,800	13,300	11,500	11,100	11,500	17,600	20,000	10,500	14,700	2,350	465	1,380
MIN	3,200	6,360	7,350	6,630	6,940	4,220	9,390	1,170	323	23	22	436
AC-FT	572,800	656,000	573,500	568,800	570,800	624,000	959,600	418,800	466,300	9,760	19,800	31,210

CAL YR 1971 TOTAL 3,062,753 MEAN 8,391 MAX 21,400 MIN 19 AC-FT 6,075,000
WTR YR 1972 TOTAL 2,758,512 MEAN 7,537 MAX 20,000 MIN 22 AC-FT 5,472,000

13090000 Snake River near Kimberly, Idaho

LOCATION.--Lat 42°35'28", long 114°21'34", in NE¼NW¼ sec.4, T.10 S., R.18 E., Twin Falls County, on left bank 1,200 ft downstream from Twin Falls powerplant, 2.2 miles upstream from Shoshone Falls, 4 miles north of Kimberly, and at mile 617.5.

PERIOD OF RECORD.--July 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,362.67 ft above mean sea level (levels by Idaho Power Co.). Prior to Aug. 31, 1938, at site 2,000 ft downstream at different datum.

AVERAGE DISCHARGE.--49 years, 2,676 cfs (1,939,000 acre-ft per year); 15-year base period (1952-67), 2,121 cfs.

EXTREMES.--Current year: Maximum discharge, 19,900 cfs Apr. 16 (gage height, 18.93 ft); minimum, 256 cfs Aug. 9 (gage height, 3.60 ft); minimum daily, 379 cfs July 15.
Period of record: Maximum discharge, 27,200 cfs June 4, 1927 (gage height, 14.76 ft, site and datum then in use), from rating curve extended above 20,000 cfs; minimum recorded, 10 cfs May 17, 1944 (gage height, 1.15 ft); minimum daily recorded, 110 cfs Apr. 6, 1959.

REMARKS.--Records good. Flow regulated by American Falls Reservoir 96.5 miles upstream (see sta 13076500) and other reservoirs having a combined usable capacity of 4,700,000 acre-ft. Diurnal fluctuation caused by hydroelectric powerplant 1,200 ft upstream. At times practically entire flow is diverted at Milner during irrigation season; no diversions between Milner and Kimberly. Diversion above station for irrigation of about 2,020,000 acres of which about 537,000 acres are by withdrawals from ground water and about 364,000 acres are irrigated below the station. Considerable water leaks into the Snake Plain aquifer upstream, a small part of which returns through springs a few miles above station. Records of chemical analysis for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1347: 1924-26, 1928-30, 1942-44, 1946-48.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

4.0	332	12.0	5,750
5.0	580	14.0	8,800
6.0	925	17.0	15,000
8.0	1,840	20.0	22,800
10.0	3,400		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,280	12,100	11,400	10,600	9,800	8,650	16,800	10,500	906	3,360	463	892
2	5,660	11,900	11,200	10,400	9,650	8,010	17,100	10,500	684	1,690	465	890
3	7,010	12,600	10,800	9,640	9,600	8,600	17,900	10,300	702	931	466	909
4	6,800	12,600	10,500	7,910	9,370	9,090	17,600	9,020	921	530	473	903
5	7,060	12,200	10,200	8,410	9,400	9,690	15,900	8,020	3,550	742	485	915
6	7,610	12,800	9,550	9,000	9,370	10,400	15,100	8,660	5,630	685	472	925
7	7,900	12,700	10,100	8,950	9,090	10,300	15,000	8,440	6,450	486	481	913
8	8,250	12,200	9,770	8,710	8,930	10,500	15,600	6,600	9,110	410	470	940
9	8,830	12,100	9,930	7,970	9,320	10,600	16,600	6,430	12,000	431	457	925
10	9,480	10,900	9,730	7,380	9,800	10,900	16,400	6,290	13,100	451	472	925
11	9,610	9,800	9,980	7,110	10,500	11,200	17,000	4,420	13,500	448	737	938
12	9,900	8,810	10,100	7,910	11,000	10,500	18,300	4,320	14,100	594	890	938
13	9,550	7,150	9,130	8,630	11,000	8,200	18,000	6,360	13,800	416	885	935
14	9,220	6,570	9,280	7,750	11,200	5,970	18,800	7,130	12,600	383	890	921
15	9,360	8,360	7,890	10,500	11,100	4,600	19,500	7,420	11,700	379	885	927
16	9,580	10,400	8,180	10,100	10,900	4,310	19,400	5,160	11,200	398	893	911
17	9,580	11,100	9,480	10,200	10,800	4,740	18,400	4,160	10,700	449	877	927
18	9,650	11,700	9,910	10,700	10,600	5,030	17,300	3,470	9,770	453	892	918
19	10,000	12,300	9,240	10,800	10,400	5,270	16,800	3,800	7,930	454	884	920
20	10,800	12,000	9,190	9,580	10,200	6,300	16,100	6,570	7,800	456	883	928
21	11,200	11,300	9,410	9,550	10,100	7,450	15,100	8,410	8,120	462	890	938
22	11,000	10,800	9,740	10,500	10,000	9,380	14,100	8,540	8,350	451	868	940
23	11,000	10,900	9,980	11,200	10,200	10,800	14,100	7,040	7,100	452	878	957
24	10,800	10,800	9,780	11,100	10,400	12,200	14,000	8,640	6,250	463	897	936
25	10,800	10,600	9,470	11,200	10,800	14,100	13,100	10,000	4,890	454	887	949
26	11,000	10,700	9,300	10,600	11,200	13,900	13,100	9,520	5,220	457	894	954
27	11,600	10,300	8,860	10,400	11,300	14,200	12,400	9,440	7,600	450	892	968
28	12,000	11,000	7,830	10,100	11,400	16,200	11,200	8,930	9,250	454	893	966
29	12,300	11,300	8,210	9,540	10,100	17,600	9,910	6,740	8,280	459	886	1,490
30	12,500	11,300	10,500	10,100	------	17,000	9,450	4,020	5,750	464	892	1,840
31	12,400	------	9,940	9,710	------	15,900	------	2,510	------	461	894	------
TOTAL	295,730	329,290	298,580	296,250	297,530	311,590	470,060	221,360	236,963	19,173	23,191	29,338
MEAN	9,540	10,980	9,632	9,556	10,260	10,050	15,670	7,141	7,899	618	748	978
MAX	12,500	12,800	11,400	11,200	11,400	17,600	19,500	10,500	14,100	3,360	897	1,840
MIN	3,280	6,570	7,830	7,110	8,930	4,310	9,450	2,510	684	379	457	890
AC-FT	586,600	653,100	592,200	587,600	590,200	618,000	932,400	439,100	470,000	38,030	46,000	58,190

CAL YR 1971 TOTAL 3,085,577 MEAN 8,454 MAX 21,000 MIN 478 AC-FT 6,120,000
WTR YR 1972 TOTAL 2,829,055 MEAN 7,730 MAX 19,500 MIN 379 AC-FT 5,611,000

13091000 Blue Lakes Spring near Twin Falls, Idaho

LOCATION.--Lat 42°36'53", long 114°28'06", in NE¼NW¼SE¼ sec.28, T.9 S., R.17 E., Jerome County, on left bank at outlet of upper Blue Lake, 0.6 mile upstream from mouth, 1.2 miles northwest of Perrine Memorial Bridge, 3.5 miles north of Twin Falls, and 610.8 miles upstream from mouth of Snake River.

PERIOD OF RECORD.--April 1950 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,300 ft (from topographic map).

AVERAGE DISCHARGE.--22 years, 216 cfs (156,500 acre-ft per year); 15-year base period (1952-67), 216 cfs.

EXTREMES.--Period of record: Maximum daily discharge, 256 cfs Nov. 10, 11, 1951, Oct. 24 to Nov. 13, 1952, Sept. 29, 30, 1953, Oct. 23, 24, 1957; minimum daily, 178 cfs May 30 to June 6, 1965.

REMARKS.--Records good. No regulation or diversion above station. Records of chemical analysis for the water year 1972 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202	202	205	202	196	191	190	188	196	196	208	224
2	202	205	205	202	196	190	190	188	198	196	208	224
3	202	202	205	202	196	191	188	189	199	196	208	220
4	203	202	205	202	196	190	188	189	199	196	208	220
5	205	202	205	202	196	190	188	190	199	196	209	221
6	205	202	205	202	196	193	188	190	199	198	209	222
7	205	205	205	202	196	193	187	190	199	199	211	223
8	205	205	205	202	196	193	187	190	199	199	212	224
9	205	205	205	202	196	193	190	190	199	199	212	224
10	205	205	205	201	194	193	190	190	199	199	212	224
11	205	205	205	199	193	192	190	191	199	199	212	224
12	202	208	205	199	193	190	190	190	195	199	212	220
13	202	208	205	199	193	190	190	191	195	200	212	220
14	202	208	205	199	193	190	190	191	196	201	213	220
15	202	205	205	199	193	190	190	193	196	202	214	220
16	202	205	202	199	193	190	189	193	196	202	214	222
17	202	202	202	199	192	190	189	193	196	202	216	224
18	202	205	202	200	190	193	189	193	196	202	216	225
19	203	205	202	202	189	191	189	193	193	203	216	225
20	205	202	202	200	190	191	189	194	192	203	216	225
21	205	205	202	199	189	191	189	194	193	204	216	227
22	205	205	202	199	187	191	189	193	193	205	217	228
23	205	208	202	199	191	190	189	193	193	205	218	224
24	205	208	202	199	191	190	188	193	193	205	218	224
25	205	205	202	196	190	190	189	193	193	205	220	225
26	205	205	202	196	190	190	188	193	193	206	220	224
27	205	205	202	196	190	190	189	194	193	206	220	224
28	205	205	202	196	190	190	189	194	194	206	220	227
29	205	205	202	196	191	190	189	195	195	207	220	228
30	202	205	202	196	------	190	188	196	196	208	221	228
31	202	------	202	196	------	190	------	196	------	208	224	------
TOTAL	6,315	6,144	6,307	6,182	5,586	5,916	5,668	5,950	5,876	6,252	6,652	6,710
MEAN	204	205	203	199	193	191	189	192	196	202	215	224
MAX	205	208	205	202	196	193	190	196	199	208	224	228
MIN	202	202	202	196	187	190	187	188	192	196	208	220
AC-FT	12,530	12,190	12,510	12,260	11,080	11,730	11,240	11,800	11,660	12,400	13,190	13,310

CAL YR 1971 TOTAL 77,851 MEAN 213 MAX 228 MIN 202 AC-FT 154,400
WTR YR 1972 TOTAL 73,558 MEAN 201 MAX 228 MIN 187 AC-FT 145,900

NOTE.--No gage-height record Dec. 1 to Jan. 5.

13092000 Rock Creek near Rock Creek, Idaho

LOCATION.--Lat 42°21'23", long 114°18'12", NW¼NW¼ sec.25, T.12 S., R.18 E., Twin Falls County, on right bank 0.1 mile downstream from road bridge, 0.8 mile downstream from Fifth Fork Rock Creek, 5 miles south of Rock Creek settlement, and 12 miles south of Hansen.

DRAINAGE AREA.--80 sq mi, approximately. Mean altitude, 6,330 ft.

PERIOD OF RECORD.--November 1909 to August 1913, November 1938 to July 1939, November 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,347.0 ft (levels by Topographic Division). Nov. 20, 1943, to Sept. 30, 1963, at datum 1.00 ft higher. Nonrecording gage Nov. 28, 1909, to Aug. 16, 1913, at site 2 miles downstream at different datum and Nov. 23, 1938, to July 21, 1939, at present site at datum 2.25 ft higher.

AVERAGE DISCHARGE.--30 years (1910-12, 1944-72), 33.8 cfs (24,490 acre-ft per year); 15-year base period (1952-67), 27.5 cfs.

EXTREMES.--Current year: Maximum discharge, 360 cfs May 8 (gage height, 2.78 ft); minimum daily, 9.3 cfs Nov. 24; minimum gage height, 0.22 ft Aug. 27, Sept. 4, 5.
Period of record: Maximum discharge, 461 cfs May 19, 1970 (gage height, 3.81 ft), but may have been more May 21, 1912; minimum, 2.7 cfs July 23, 1961 (gage height, 0.76 ft, present datum); minimum gage height, 0.43 ft Sept. 3, 4, 5, 1970.

REMARKS.--Records good except March and May, which are fair. Small ranch diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	12	16	16	35	72	75	192	180	50	17	12
2	13	12	16	16	30	76	85	185	175	50	17	12
3	13	12	15	13	27	80	95	185	168	49	16	11
4	13	11	16	14	30	72	103	212	159	47	16	11
5	13	11	18	17	29	64	113	257	144	45	16	13
6	13	11	20	16	26	60	128	298	130	43	15	14
7	12	11	18	15	26	62	146	328	130	41	15	13
8	12	11	17	15	24	64	154	348	126	39	14	12
9	12	11	17	14	23	69	157	335	117	37	14	12
10	12	11	18	14	22	74	158	321	108	37	14	13
11	12	10	18	15	21	80	157	306	101	35	14	14
12	12	10	17	17	21	88	155	316	97	33	13	15
13	12	11	16	15	22	94	148	318	92	31	14	14
14	12	11	16	14	22	100	135	320	88	29	15	13
15	12	11	16	14	22	110	124	340	85	27	14	13
16	12	11	16	14	22	115	120	340	82	27	14	12
17	12	10	16	16	24	110	116	337	80	26	13	11
18	12	10	16	37	26	115	116	326	73	25	13	11
19	12	10	16	102	28	120	115	309	70	23	13	13
20	13	10	16	94	31	130	113	296	67	24	12	13
21	13	9.6	16	110	35	125	115	284	64	26	12	13
22	13	9.6	16	122	42	120	117	249	62	25	12	12
23	12	9.6	16	123	47	120	123	212	61	23	12	13
24	12	9.3	16	104	51	130	146	177	59	20	13	13
25	12	9.6	18	91	53	125	164	165	58	19	12	13
26	12	11	20	76	56	110	164	162	57	18	12	13
27	12	21	17	64	60	100	163	157	54	18	11	15
28	13	17	16	54	64	96	171	156	53	17	11	15
29	12	17	15	46	68	93	196	163	51	17	12	14
30	12	16	16	40	------	83	198	174	51	17	12	14
31	12	------	17	38	------	77	------	172	------	17	13	------
TOTAL	382	346.7	517	1,356	987	2,934	4,070	7,940	2,842	935	421	387
MEAN	12.3	11.6	16.7	43.7	34.0	94.6	136	256	94.7	30.2	13.6	12.9
MAX	13	21	20	123	68	130	198	348	180	50	17	15
MIN	12	9.3	15	13	21	60	75	156	51	17	11	11
AC-FT	758	688	1,030	2,690	1,960	5,820	8,070	15,750	5,640	1,850	835	768

CAL YR 1971 TOTAL 21,783.9 MEAN 59.7 MAX 380 MIN 9.3 AC-FT 43,210
WTR YR 1972 TOTAL 23,117.7 MEAN 63.2 MAX 348 MIN 9.3 AC-FT 45,850

13093700 Niagara Springs near Buhl, Idaho

LOCATION.--Lat 42°39'46", long 114°40'24", in NW¼SW¼NW¼ sec.11, T.9 S., R.15 E., Gooding County, in spring outlet channel 120 ft upstream from mouth, 880 ft downstream from source, 6 miles northeast of Buhl, and 599.1 miles upstream from mouth of Snake River.

PERIOD OF RECORD.--October 1958 to September 1972 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 3,000 ft (from topographic map). Prior to July 26, 1966, at site 180 ft upstream at datum 3.19 ft higher.

AVERAGE DISCHARGE.--14 years, 258 cfs (186,900 acre-ft per year); adjusted for diversions, 314 cfs (227,500 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 355 cfs (estimated) Oct. 1-10, 1958; minimum daily, 187 cfs May 28-30, 1971, Apr. 29 to May 2, 1972.

REMARKS.--Records fair. Figures of daily discharge do not include discharge in the diversions between springs and gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	257	248	225	218	213	196	198	187	198	207	227	250
2	257	244	225	216	213	196	198	187	198	207	229	248
3	257	244	225	216	213	196	198	189	199	209	229	248
4	257	244	225	216	213	195	196	189	199	209	229	248
5	257	242	223	216	213	195	196	190	199	209	231	250
6	253	242	223	216	213	195	196	190	201	209	231	255
7	253	242	223	216	213	196	196	190	201	209	231	257
8	253	242	222	216	211	196	198	190	203	211	231	257
9	253	240	222	214	211	196	203	190	203	213	235	257
10	255	240	222	214	211	196	204	190	203	213	235	257
11	253	240	223	216	211	197	203	190	204	214	235	255
12	253	236	222	220	211	197	203	190	204	214	237	255
13	253	236	222	220	211	197	203	190	204	214	238	257
14	253	236	222	220	209	198	203	192	203	216	238	257
15	255	235	220	220	209	198	203	192	203	214	240	257
16	253	233	220	218	209	198	201	192	204	216	240	255
17	253	233	220	218	207	198	203	192	204	214	242	255
18	253	233	220	218	204	199	203	192	204	209	248	253
19	253	233	220	218	204	199	203	193	204	211	250	250
20	253	233	220	218	206	199	193	193	204	211	253	250
21	250	233	218	218	206	200	192	193	204	213	253	246
22	250	233	216	218	204	200	192	193	204	214	257	244
23	250	229	216	218	204	200	192	196	204	214	255	246
24	250	229	214	216	204	200	192	196	204	216	257	246
25	250	229	214	216	203	201	190	196	204	216	253	250
26	250	229	214	216	203	201	189	196	204	216	250	253
27	248	227	216	216	203	201	189	196	204	218	250	253
28	248	227	220	216	204	203	189	196	204	220	250	253
29	248	227	220	214	199	203	187	196	204	222	250	253
30	248	225	218	214	------	203	187	198	206	225	248	253
31	248	------	218	214	------	199	------	198	------	227	250	------
TOTAL	7,824	7,064	6,828	6,720	6,035	6,148	5,900	5,962	6,084	6,630	7,502	7,568
MEAN	252	235	220	217	208	198	197	192	203	214	242	252
MAX	257	248	225	220	213	203	204	198	206	227	257	257
MIN	248	225	214	214	199	195	187	187	198	207	227	244
AC-FT	15,520	14,010	13,540	13,330	11,970	12,190	11,700	11,830	12,070	13,150	14,880	15,010
MEAN†	364	343	324	308	295	294	299	299	317	331	358	371
AC-FT†	22,360	20,430	19,900	18,970	16,980	18,090	17,800	18,390	18,880	20,380	22,000	22,100

CAL YR 1971 TOTAL 83,042 MEAN 228 MAX 259 MIN 187 AC-FT 164,700 MEAN† 320 AC-FT† 231,900
WTR YR 1972 TOTAL 80,265 MEAN 219 MAX 257 MIN 187 AC-FT 159,200 MEAN† 325 AC-FT† 236,300

† Adjusted for diversions between springs and gage.

13094000 Snake River near Buhl, Idaho

LOCATION.--Lat 42°39'58", long 114° 42'41", in NW¼NW¼ sec.9, T.9 S., R.15 E., Twin Falls County, on left bank, 2 miles downstream from Niagara Springs, 3.8 miles upstream from outlet of Clear Lakes, 6 miles northeast of Buhl, and at mile 597.2.

PERIOD OF RECORD.--December 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,951.9 ft above mean sea level (stadia levels). Jan. 17, 1947, to July 12, 1965, at datum 1.00 ft higher. Prior to Jan. 17, 1947, nonrecording gage at datum 1.0 ft higher.

AVERAGE DISCHARGE.--25 years, 4,796 cfs (3,475,000 acre-ft per year); 15-year base period (1952-67), 3,866 cfs.

EXTREMES.--Current year: Maximum discharge, 22,700 cfs Apr. 16 (gage height, 10.88 ft); minimum, 2,260 cfs July 15 (gage height, 1.86 ft).
Period of record: Maximum discharge, 23,700 cfs June 24, 1964 (gage height, 11.54 ft, present datum); minimum, 1,580 cfs Mar. 28, 1963 (gage height, 0.83 ft, present datum).

REMARKS.--Records excellent. Flow regulated by American Falls Reservoir 116.8 miles upstream (see sta 13076500). Diurnal fluctuation caused by hydroelectric plants upstream. No diversion except by small ranch ditches between this station and station at Milner, where at times practically entire flow is diverted during irrigation seasons. Diversions above station for irrigation of about 2,030,000 acres of which about 542,000 acres are by withdrawals from ground water and about 230,000 acres are irrigated below station. In addition, about 26,000 acres are irrigated above station by diversions from Salmon Falls Creek. Considerable water leaks into the Snake Plain aquifer upstream, some of which returns above the station.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.5	1,980	6.0	8,500
2.0	2,380	8.0	13,400
4.0	4,760	10.0	19,000
		12.0	25,200

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,550	14,400	13,400	12,200	11,400	10,600	18,800	12,200	3,480	5,820	2,430	2,950
2	7,320	13,900	13,200	12,000	10,900	9,760	19,700	12,500	2,740	4,100	2,430	2,980
3	9,400	14,500	12,800	11,400	10,900	10,200	20,200	12,300	2,610	3,210	2,420	2,990
4	9,130	14,800	12,400	9,770	10,800	10,800	20,400	11,400	2,700	2,680	2,440	3,010
5	9,290	14,300	12,100	9,860	10,800	11,100	18,500	9,810	3,880	2,470	2,450	3,070
6	9,770	14,800	11,700	10,700	10,800	12,000	17,400	10,400	7,260	2,640	2,420	3,180
7	10,200	14,800	11,600	10,600	10,800	12,000	17,300	10,500	8,230	2,510	2,420	3,160
8	10,300	14,400	11,600	10,400	10,600	12,200	17,800	8,970	10,600	2,340	2,400	3,150
9	11,000	14,300	11,800	9,720	10,800	12,300	18,900	8,210	13,900	2,300	2,370	3,150
10	11,700	13,300	11,800	9,010	11,400	12,500	19,100	8,350	15,400	2,350	2,350	3,180
11	11,800	12,000	11,900	8,720	11,900	12,900	19,200	6,810	15,800	2,350	2,380	3,290
12	12,200	11,100	12,000	9,110	12,400	12,600	21,000	5,830	16,400	2,340	2,650	3,370
13	11,900	9,550	11,000	10,300	12,500	10,700	20,800	7,700	16,300	2,440	2,760	3,350
14	11,500	8,290	11,100	9,050	12,500	8,080	21,700	8,700	15,100	2,300	2,820	3,360
15	11,600	9,770	9,700	11,700	12,700	6,470	22,400	9,410	14,100	2,280	2,820	3,390
16	11,900	11,900	10,000	11,700	12,500	5,770	22,500	7,600	13,500	2,280	2,850	3,430
17	11,900	13,000	11,400	11,700	12,300	6,150	21,600	6,240	13,000	2,320	2,850	3,410
18	11,900	13,300	11,700	12,700	12,200	6,580	20,300	5,460	12,400	2,340	2,860	3,390
19	12,300	14,300	11,200	14,100	12,000	6,640	19,800	5,450	10,100	2,340	2,900	3,360
20	12,800	14,200	11,000	11,800	11,800	7,600	19,000	7,700	9,900	2,400	2,920	3,310
21	13,400	13,400	11,200	11,500	11,700	8,590	17,800	10,200	9,820	2,430	2,940	3,250
22	13,200	12,800	11,400	12,400	11,600	10,600	16,900	11,000	10,600	2,430	2,900	3,250
23	13,100	12,800	11,700	13,100	11,700	12,200	16,400	9,410	9,400	2,430	2,890	3,250
24	13,100	12,800	11,400	12,900	12,000	13,500	16,800	10,300	8,390	2,430	2,910	3,280
25	13,000	12,600	11,200	13,000	12,300	16,000	15,700	11,900	7,220	2,380	2,930	3,270
26	13,100	12,600	10,600	12,400	12,800	16,100	15,200	11,800	6,910	2,380	2,930	3,200
27	13,700	12,500	10,500	12,100	12,800	16,300	14,800	11,600	8,970	2,380	2,940	3,220
28	14,100	12,800	9,800	11,800	13,100	17,900	13,300	11,400	10,900	2,380	2,950	3,220
29	14,400	13,200	10,100	11,100	12,100	20,100	12,100	9,460	10,700	2,410	2,940	3,270
30	14,600	13,200	12,200	11,800	------	19,600	11,500	6,660	8,250	2,430	2,920	3,850
31	14,600	------	11,800	11,400	------	18,500	------	4,960	------	2,450	2,930	------
TOTAL	363,760	389,610	355,300	350,040	342,100	366,340	546,900	284,230	298,560	80,340	84,120	97,540
MEAN	11,730	12,990	11,460	11,290	11,800	11,820	18,230	9,169	9,952	2,592	2,714	3,251
MAX	14,600	14,800	13,400	14,100	13,100	20,100	22,500	12,500	16,400	5,820	2,950	3,850
MIN	5,550	8,290	9,700	8,720	10,600	5,770	11,500	4,960	2,610	2,280	2,350	2,950
AC-FT	721,500	772,800	704,700	694,300	678,600	726,600	1,085M	563,800	592,200	159,400	166,900	193,500

CAL YR 1971 TOTAL 3,758,130 MEAN 10,300 MAX 23,100 MIN 2,270 AC-FT 7,454,000
WTR YR 1972 TOTAL 3,558,840 MEAN 9,724 MAX 22,500 MIN 2,280 AC-FT 7,059,000

M Expressed in thousands.

13095500 Box Canyon Springs near Wendell, Idaho

LOCATION.--Lat 42°42'29", long 114°48'35", in SW¼NW¼NW¼ sec.28, T.8 S., R.14 E., Gooding County, on left bank 150 ft downstream from waterfall, at mile 0.5, 0.8 mile downstream from source, 7.5 miles southwest of Wendell, and 588.8 miles upstream from mouth of Snake River.

PERIOD OF RECORD.--April 1950 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,950 ft (from topographic map).

AVERAGE DISCHARGE.--22 years, 408 cfs (295,600 acre-ft per year); 15-year base period (1952-67), 407 cfs.

EXTREMES.--Period of record: Maximum daily discharge, 483 cfs Oct. 9, 14, 15, 18, 19, 1965; minimum daily, 346 cfs Jan. 10, 1962.

REMARKS.--Records excellent. No regulation or surface diversion above station. Discharge affected by variable surface waste from irrigation, which flows over rimrocks into springs above station. Waste flow estimated Dec. 2 (1.0 cfs); Feb. 16 (2.0 cfs); Apr. 26 (5.0 cfs); May 30 (2.0 cfs); June 27 (1.0 cfs); July 20 (1.4 cfs); no waste flow Oct. 19, Jan. 3, Mar. 24, Aug. 29, Sept. 28. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	458	443	422	404	394	384	374	378	408	412	417	443
2	453	440	422	404	394	384	374	379	407	410	417	443
3	453	437	422	404	394	387	374	380	408	410	420	443
4	453	437	420	404	392	384	374	381	409	410	420	440
5	450	435	420	404	392	384	374	381	409	407	420	443
6	450	435	420	402	392	384	374	382	408	410	420	443
7	450	435	417	402	392	382	374	382	410	410	420	443
8	448	435	414	402	392	382	374	382	412	410	422	445
9	448	435	414	402	390	382	374	383	413	410	425	445
10	450	435	417	402	390	382	377	384	412	407	425	448
11	450	435	417	402	390	384	377	384	413	410	425	448
12	450	437	417	402	390	384	377	384	414	407	425	448
13	450	435	417	400	390	384	377	385	415	407	425	448
14	450	435	417	400	387	384	377	388	413	407	425	445
15	450	432	414	400	387	382	374	391	414	407	427	445
16	450	432	412	400	387	382	374	392	414	407	427	448
17	450	430	410	400	387	382	374	393	416	407	430	448
18	450	430	410	400	387	384	374	394	415	410	430	448
19	448	427	410	400	384	384	374	394	415	407	432	448
20	448	427	410	397	384	384	374	395	416	407	432	448
21	445	430	410	400	387	384	374	397	418	410	432	448
22	443	430	410	402	387	384	374	397	417	407	432	448
23	445	430	410	400	387	384	374	398	418	407	437	450
24	445	430	410	394	387	384	377	400	417	410	437	448
25	445	427	410	400	384	382	380	402	417	410	437	445
26	445	427	410	397	384	380	377	402	415	410	437	445
27	445	427	410	394	384	380	378	402	415	415	437	445
28	443	427	410	394	384	377	380	402	415	415	440	445
29	440	427	407	392	384	377	380	403	412	417	440	443
30	443	424	407	392	------	377	379	404	412	417	440	448
31	443	------	404	394	------	374	------	407	------	417	440	------
TOTAL	13,891	12,966	12,820	12,390	11,263	11,852	11,268	12,126	12,397	12,707	13,293	13,375
MEAN	448	432	414	400	388	382	376	391	413	410	429	446
MAX	458	443	422	404	394	387	380	407	418	417	440	450
MIN	440	424	404	392	384	374	374	378	407	407	417	440
AC-FT	27,550	25,720	25,430	24,580	22,340	23,510	22,350	24,050	24,590	25,200	26,370	26,530

CAL YR 1971 TOTAL 150,535 MEAN 412 MAX 458 MIN 370 AC-FT 298,600
WTR YR 1972 TOTAL 150,348 MEAN 411 MAX 458 MIN 374 AC-FT 298,200

13105000 Salmon Falls Creek near San Jacinto, Nev.

LOCATION.--Lat 41°56'40", long 114°41'15", in NE¼SW¼ sec.23, T.47 N., R.64 E., Elko County, on right bank in canyon, 630 ft downstream from bridge on U.S. Highway 93, 550 ft downstream from Shoshone Creek, and 5 miles north of San Jacinto.

DRAINAGE AREA.--1,450 sq mi, approximately. Mean altitude, 6,350 ft.

PERIOD OF RECORD.--September 1909 to June 1910 (gage heights only), June 1910 to September 1916, October 1918 to current year. Monthly discharge only for some periods published in WSP 1317. Prior to October 1910, published as Salmon Falls "River."

GAGE.--Water-stage recorder. Altitude of gage is 5,120 ft (by barometer). Prior to June 6, 1910, nonrecording gage at nearby site at different datum. June 6, 1910, to Sept. 30, 1916, Oct. 1, 1918, to Aug. 28, 1964, water-stage recorder at site 35 ft upstream at same datum.

AVERAGE DISCHARGE.--60 years (1910-16, 1918-72), 137 cfs (99,260 acre-ft per year); 15-year base period (1952-67), 123 cfs.

EXTREMES.--Current year: Maximum discharge, 1,130 cfs Mar. 24 (gage height, 8.12 ft); minimum, 11 cfs Aug. 29 (gage height, 3.85 ft).
Period of record: Maximum discharge, 1,970 cfs Feb. 12, 1962 (gage height, 12.65 ft, from floodmark), from rating extended above 900 cfs on basis of contracted-opening measurement of peak flow, but may have been exceeded by peak of Feb. 24, 1943; minimum, 2.6 cfs Sept. 4, 1961 (gage height, 3.37 ft).

REMARKS.--Records good except those for August, which are fair. Diversions above station for irrigation of about 18,200 acres (1966 determination). Salmon Dam of Salmon River Canal Co. is 15 miles downstream (see sta 13106500).

REVISIONS (WATER YEARS).--WSP 1934: 1943(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	67	81	61	93	182	396	515	566	120	49	31
2	77	66	74	68	81	161	419	472	613	112	44	35
3	75	67	70	61	75	241	560	446	626	109	38	40
4	74	67	73	46	79	292	596	467	626	104	32	47
5	73	67	76	50	91	256	609	539	600	101	33	48
6	73	65	76	64	93	295	656	643	558	97	31	49
7	71	62	90	68	94	319	697	790	532	90	28	51
8	70	64	44	68	94	337	795	858	596	85	25	46
9	69	66	59	68	93	370	750	852	660	82	26	45
10	69	67	55	66	86	477	730	820	584	80	27	48
11	68	67	65	69	83	571	735	755	502	78	24	54
12	68	72	64	72	94	636	735	692	454	72	22	65
13	66	78	57	67	95	742	702	656	405	67	23	63
14	66	80	60	61	95	798	617	669	365	62	26	57
15	66	73	67	58	95	831	565	692	351	58	24	53
16	69	70	68	56	110	828	510	706	347	53	24	52
17	75	69	66	58	127	839	500	711	331	53	23	48
18	75	67	58	89	135	917	489	745	336	50	21	49
19	74	65	54	241	136	990	481	750	320	47	20	51
20	72	66	58	255	139	909	471	660	286	52	20	52
21	69	70	66	207	151	816	449	626	263	54	19	54
22	68	71	73	197	148	780	465	588	243	53	19	51
23	67	72	77	162	134	840	465	519	228	47	18	53
24	67	70	80	126	125	982	488	463	229	45	16	53
25	67	72	83	123	117	820	565	419	221	44	17	55
26	68	74	82	122	110	665	565	403	210	43	13	56
27	69	80	65	116	117	545	520	407	194	40	12	61
28	69	83	67	100	180	499	473	425	167	41	12	62
29	63	83	65	77	215	461	468	448	144	41	12	58
30	61	82	75	82	------	416	528	485	132	42	14	60
31	65	------	62	83	------	398	------	538	------	45	22	------
TOTAL	2,159	2,122	2,110	3,041	3,285	18,213	16,999	18,759	11,689	2,067	734	1,547
MEAN	69.6	70.7	68.1	98.1	113	588	567	605	390	66.7	23.7	51.6
MAX	77	83	90	255	215	990	795	858	660	120	49	65
MIN	61	62	44	46	75	161	396	403	132	40	12	31
AC-FT	4,280	4,210	4,190	6,030	6,520	36,130	33,720	37,210	23,190	4,100	1,460	3,070

CAL YR 1971 TOTAL 98,671 MEAN 270 MAX 1,330 MIN 32 AC-FT 195,700
WTR YR 1972 TOTAL 82,725 MEAN 226 MAX 990 MIN 12 AC-FT 164,100

13106000 Salmon River Canal Co. canal near Rogerson, Idaho

LOCATION.--Lat 42°13'10", long 114°44'20", in sec.7, T.14 S., R.15 E., Twin Falls County, Bureau of Land Management lands, on left bank 0.5 mile downstream from Salmon River Canal Co. reservoir and 7 miles west of Rogerson.

PERIOD OF RECORD.--April 1937 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft (by barometer). Oct. 1, 1953, to Sept. 30, 1954, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--35 years, 104 cfs (75,300 acre-ft per year); 15-year base period (1952-67), 94.0 cfs.

EXTREMES.--Period of record: Maximum daily discharge, 660 cfs July 21-24, 1944; no flow for long periods in each year.

REMARKS.--Records excellent. Canal diverts from Salmon River Canal Co. reservoir (see sta 13106500) for irrigation of land in Salmon River Canal Co. project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171							158	429	420	426	238
2	140							195	435	428	413	240
3	0							186	442	454	400	244
4	0							217	448	460	383	250
5	0							243	448	492	377	243
6	0							288	439	493	382	139
7	0							293	431	498	398	0
8	0							306	372	513	406	0
9	0							322	377	530	414	0
10	0							355	372	533	413	0
11	0							361	295	532	390	0
12	0							368	286	532	385	0
13	0							375	270	531	371	0
14	0							386	225	538	352	0
15	0							401	262	541	351	0
16	0							419	262	536	351	0
17	0							432	261	517	351	0
18	0							444	261	516	351	0
19	0							449	262	508	353	0
20	0							448	270	495	371	0
21	0							438	296	474	376	0
22	0							431	303	472	372	0
23	0							427	319	470	364	0
24	0							417	314	475	352	0
25	0							427	310	468	335	0
26	0							410	310	458	313	0
27	0							409	327	476	307	0
28	0							415	338	472	293	0
29	0							408	345	456	286	0
30	0				------			409	374	450	269	0
31	0	------			------		------	420	------	424	254	------
TOTAL	311	0	0	0	0	0	0	11,257	10,083	15,162	11,159	1,354
MEAN	10.0	0	0	0	0	0	0	363	336	489	360	45.1
MAX	171	0	0	0	0	0	0	449	448	541	426	250
MIN	0	0	0	0	0	0	0	158	225	420	254	0
AC-FT	617	0	0	0	0	0	0	22,330	20,000	30,070	22,130	2,690

CAL YR 1971 TOTAL 49,005.00 MEAN 134 MAX 575 MIN 0 AC-FT 97,200
WTR YR 1972 TOTAL 49,326.00 MEAN 135 MAX 541 MIN 0 AC-FT 97,840

13106500 Salmon River Canal Co. reservoir near Rogerson, Idaho

LOCATION.--Lat 42°12'40", long 114°44'00", in NE¼ sec.18, T.14 S., R.15 E., Twin Falls County, Bureau of Land Management lands, at dam on Salmon Falls Creek, 7.5 miles west of Rogerson, and at mile 46.0.

DRAINAGE AREA.--1,610 sq mi, approximately.

PERIOD OF RECORD.--January 1922 to current year.

GAGE.--Nonrecording gage. Datum of gage is 4,945.8 ft above mean sea level.

EXTREMES.--Current year: Maximum contents observed, 158,000 acre-ft June 15 (gage height, 72.52 ft); minimum observed, 76,400 acre-ft Oct. 3 (gage height, 42.85 ft).
Period of record: Maximum contents observed, 158,000 acre-ft June 15 1972 (gage height, 72.52 ft); minimum observed, 125 acre-ft Sept. 21 to Oct. 5, 1934 (gage height, 0.1 ft).

REMARKS.--Reservoir is formed by gravity-section concrete-arch dam completed in 1911; storage began in 1910. Usable capacity, 182,650 acre-ft between gage heights 0.0 (bottom of outlet tunnel) and 80.0 ft (maximum operating level). Dead storage, 48,000 acre-ft. Water is used for irrigation of lands in Salmon River Canal Co. project. Figures given herein represent usable contents.

COOPERATION.--Gage readings and capacity table furnished by Salmon River Canal Co.

Capacity table (gage height, in feet, and contents, in acre-feet)

18.3	27,100	50.0	93,800
20.0	30,000	60.0	120,600
30.0	48,800	70.0	150,000
40.0	69,800	72.0	156,300

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76,600	76,900	78,500	79,500	85,000	89,500	121,500	148,900	157,100	151,600	118,300	92,700
2	76,500	76,900	-	-	85,200	89,900	122,000	149,400	157,100	150,800	117,300	92,000
3	76,400	76,900	78,600	79,800	85,300	90,400	122,900	149,800	157,100	149,800	116,300	91,500
4	76,500	77,000	-	-	85,300	90,800	123,900	150,200	157,200	148,900	115,300	91,100
5	76,500	77,000	78,800	-	85,400	91,200	124,800	150,500	157,300	148,000	114,400	90,600
6	-	77,000	-	79,900	85,400	91,900	125,700	150,900	157,300	146,900	113,500	90,100
7	-	77,000	-	-	85,500	92,300	126,800	151,600	157,200	145,800	112,700	89,900
8	-	77,000	-	80,000	85,600	92,900	126,800	152,000	157,200	144,900	111,800	89,800
9	76,600	77,000	-	-	85,800	93,400	129,200	152,800	157,400	143,600	110,900	89,800
10	-	77,100	78,900	-	85,900	94,100	130,500	153,600	157,600	142,400	110,000	
11	-	77,100	-	80,100	86,000	94,800	131,800	154,100	157,700	141,300	109,100	89,900
12	-	77,200	-	-	86,000	96,000	132,900	154,600	157,800	140,100	108,200	-
13	-	77,200	-	80,200	86,100	97,100	134,100	155,000	157,800	138,900	107,300	-
14	-	77,400	-	80,400	86,200	98,300	135,100	155,500	157,900	137,800	106,300	-
15	76,600	77,400	-	-	86,400	99,700	136,100	155,800	158,000	136,700	105,500	-
16	-	77,400	-	-	86,400	101,000	137,200	156,300	157,800	135,400	104,600	-
17	-	77,400	-	80,500	86,600	102,300	137,900	156,600	157,700	134,100	103,800	-
18	76,800	77,600	79,000	80,600	86,900	104,000	138,800	156,800	157,500	133,100	103,000	-
19	-	77,700	-	81,000	87,000	105,400	139,400	157,100	157,400	131,800	102,200	-
20	76,700	77,700	-	81,700	87,200	106,800	140,300	157,400	157,300	130,600	101,400	-
21	-	77,800	-	82,800	87,400	108,600	141,000	157,700	156,900	129,600	100,500	89,800
22	76,900	77,800	-	83,100	87,600	110,100	141,600	157,900	156,600	128,600	99,700	89,800
23	-	77,900	79,200	83,700	87,900	111,200	142,400	157,900	156,200	127,400	99,000	-
24	-	77,900	-	84,100	88,100	112,800	143,200	157,900	155,700	126,200	98,200	89,700
25	-	77,900	79,300	84,400	88,400	114,400	144,000	157,900	155,200	125,100	97,400	89,600
26	-	77,900	79,400	-	88,500	115,800	144,800	157,900	154,800	124,300	96,600	-
27	-	78,100	-	84,700	88,600	117,200	145,800	157,700	154,300	123,300	95,800	-
28	-	78,400	-	84,700	88,900	118,300	146,900	157,600	153,900	122,300	95,100	-
29	-	78,400	-	84,800	89,100	119,100	147,700	157,400	153,300	121,400	94,400	-
30	-	78,500	79,500	84,900	------	120,000	148,400	157,300	152,500	120,200	93,800	89,600
31	76,900	------	79,500	85,000	------	120,800	------	157,100	------	119,200	93,200	------
MAX	76,900	78,500	79,500	85,000	89,100	120,800	148,400	157,900	158,000	151,600	118,300	92,700
MIN	76,400	76,900	78,500	79,500	85,000	89,500	121,500	148,900	152,500	119,200	93,200	89,600
(†)	43.05	43.75	44.20	46.50	48.15	60.05	69.50	72.25	70.80	59.50	49.75	48.35
(‡)	-200	+1,600	+1,000	+5,500	+4,100	+31,700	+27,600	+8,700	-4,600	-33,300	-26,000	-3,600

CAL YR 1971..... ‡ +45,200
WTR YR 1972..... ‡ +12,500

† Gage height, in feet, at end of month.
‡ Change in contents, in acre-feet.

13108150 Salmon Falls Creek near Hagerman, Idaho

LOCATION.--Lat 42°41'47", long 114°51'15", in SW¼SE¼SE¼ sec.30, T.8 S., R.14 E., Twin Falls County, on left bank 25 ft upstream from U.S. Highway 30, at mile 1.9, and 8.5 miles south of Hagerman.

DRAINAGE AREA.--2,120 sq mi, approximately.

PERIOD OF RECORD.--April 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,900 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 1,360 cfs Jan. 19 (gage height, 9.04 ft); minimum, 44 cfs July 9 (gage height, 3.19 ft).
Period of record: Maximum discharge, 1,360 cfs Jan. 19, 1972 (gage height, 9.04 ft); minimum, 32 cfs July 15, 1970 (gage height, 3.07 ft).

REMARKS.--Records excellent. Flow completely regulated by Salmon River Canal Co. reservoir 44 miles upstream (see sta 13106500). Entire available supply is diverted above the dam for irrigation. Flow below the dam is derived from leakage past the dam and return flow from adjacent land. Several diversions by pumping from the left bank below the dam are used for irrigation of land most of which lies outside the basin.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

3.2	44	6.0	478
3.5	70	7.0	723
4.0	124	8.0	1,000
5.0	278	8.5	1,170

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	261	254	215	176	158	325	161	218	86	60	119	179
2	267	247	204	176	159	292	161	210	78	50	116	179
3	272	241	209	175	161	421	157	202	82	50	118	178
4	272	242	207	173	161	390	144	194	87	54	108	178
5	263	237	212	167	156	294	144	186	90	63	102	197
6	245	231	211	164	161	303	144	178	114	62	101	201
7	229	234	188	173	172	291	148	172	144	50	102	199
8	231	236	179	181	165	269	153	170	190	49	102	207
9	233	235	183	180	162	264	159	170	222	48	100	207
10	227	230	185	177	159	271	190	170	176	61	107	216
11	224	225	195	179	161	267	210	169	191	59	107	233
12	226	224	195	256	161	258	210	169	182	54	108	233
13	237	225	190	191	168	262	226	169	173	63	104	219
14	236	227	188	178	173	267	226	168	170	53	116	226
15	245	220	186	170	173	265	216	167	169	55	122	216
16	262	218	182	169	219	264	209	166	162	61	123	226
17	264	220	181	172	229	265	207	164	150	63	120	240
18	265	221	181	360	238	253	214	164	136	62	126	251
19	262	217	179	1,160	228	224	221	163	137	63	129	257
20	261	224	175	517	231	221	229	162	112	61	129	263
21	259	222	173	260	240	217	231	162	100	63	132	270
22	255	221	184	249	249	182	232	160	98	66	130	277
23	251	219	187	233	242	166	234	148	100	75	136	283
24	248	217	184	207	244	165	236	144	94	81	130	290
25	251	219	183	182	242	168	234	144	92	72	126	297
26	256	225	184	181	247	163	232	146	97	76	140	304
27	256	228	179	178	247	163	231	146	92	84	149	311
28	262	219	174	172	265	161	230	144	87	92	157	319
29	256	217	171	165	327	163	228	142	72	82	157	327
30	248	216	172	159	------	162	228	122	71	86	161	335
31	259	------	177	158	------	161	------	98	------	104	173	------
TOTAL	7,783	6,811	5,813	7,238	5,898	7,537	6,045	5,087	3,754	2,022	3,850	7,318
MEAN	251	227	188	233	203	243	202	164	125	65.2	124	244
MAX	272	254	215	1,160	327	421	236	218	222	104	173	335
MIN	224	216	171	158	156	161	144	98	71	48	100	178
AC-FT	15,440	13,510	11,530	14,360	11,700	14,950	11,990	10,090	7,450	4,010	7,640	14,520

CAL YR 1971 TOTAL 68,663 MEAN 188 MAX 673 MIN 45 AC-FT 136,200
WTR YR 1972 TOTAL 69,156 MEAN 189 MAX 1,160 MIN 48 AC-FT 137,200

13108500 Camas Creek at Eighteenmile Shearing Corral, near Kilgore, Idaho

LOCATION.--Lat 44°17'50", long 111°54'20", in NW¼ sec.7, T.11 N., R.39 E., Clark County, on right bank at old bridge immediately downstream from Eighteenmile Shearing Corral, 7 miles south of Kilgore, and 18.5 miles northeast of Dubois.

DRAINAGE AREA.--210 sq mi, approximately.

PERIOD OF RECORD.--May 1937 to October 1953 (no winter records prior to 1947), April 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,260 ft (from topographic map). Prior to Sept. 23, 1938, at datum 1.21 ft higher.

AVERAGE DISCHARGE.--10 years (1946-53, 1969-72), 86.6 cfs (62,740 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 558 cfs May 21 (gage height, 3.94 ft); minimum daily, 25 cfs Feb. 2. Period of record: Maximum discharge, 2,590 cfs May 8, 1969 (gage height, 7.04 ft); no flow for short periods in February 1949.

REMARKS.--Records good except those for winter periods, which are fair. Diversions above station for irrigation of about 7,500 acres (1966 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	50	54	37	26	34	92	265	359	111	51	42
2	64	49	51	39	25	34	100	235	384	102	49	41
3	64	49	50	38	28	35	115	220	404	82	50	39
4	64	50	49	36	30	36	140	230	398	75	48	36
5	63	51	50	35	32	36	166	260	354	95	42	36
6	64	52	50	36	34	37	195	300	314	98	40	46
7	63	53	50	37	36	38	205	330	312	89	37	48
8	60	55	48	37	37	38	189	378	345	83	37	44
9	58	57	46	37	37	39	183	445	324	77	35	41
10	57	58	44	38	36	40	181	337	332	74	33	42
11	56	59	42	38	35	42	197	289	317	72	34	55
12	55	59	41	38	34	43	188	267	242	63	33	53
13	56	58	40	36	35	46	180	254	210	59	33	46
14	57	56	39	34	35	48	177	251	193	57	46	46
15	59	53	39	34	35	51	210	275	175	55	48	43
16	61	49	38	34	36	54	230	306	162	53	48	41
17	63	49	38	35	36	58	245	330	155	50	43	41
18	66	49	38	35	37	64	255	389	158	48	38	39
19	64	49	38	36	37	72	210	421	152	48	36	40
20	62	52	38	37	37	83	210	463	153	51	37	46
21	65	54	39	37	37	110	270	545	140	60	37	47
22	72	56	41	37	36	130	310	542	129	63	36	44
23	69	58	43	35	36	150	355	494	132	57	36	43
24	65	59	43	32	35	110	390	442	187	54	42	42
25	64	60	44	30	34	90	420	375	218	51	41	45
26	66	60	40	28	35	80	390	330	181	49	37	48
27	64	60	37	27	37	74	280	299	173	48	37	59
28	60	60	35	26	37	75	300	289	155	48	34	73
29	56	58	35	26	37	78	310	304	138	46	33	59
30	53	57	36	26	------	80	315	319	120	41	40	51
31	51	------	37	26	------	85	------	337	------	41	41	------
TOTAL	1,909	1,639	1,313	1,057	1,002	1,990	7,008	10,521	7,016	2,000	1,232	1,376
MEAN	61.6	54.6	42.4	34.1	34.6	64.2	234	339	234	64.5	39.7	45.9
MAX	72	60	54	39	37	150	420	545	404	111	51	73
MIN	51	49	35	26	25	34	92	220	120	41	33	36
AC-FT	3,790	3,250	2,600	2,100	1,990	3,950	13,900	20,870	13,920	3,970	2,440	2,730

CAL YR 1971 TOTAL 57,622 MEAN 158 MAX 1,340 MIN 20 AC-FT 114,300
WTR YR 1972 TOTAL 38,063 MEAN 104 MAX 545 MIN 25 AC-FT 75,500

13112000 Camas Creek at Camas, Idaho

LOCATION.--Lat 44°00'10", long 112°13'12", in SE¼SE¼ sec.21, T.8 N., R.36 E., Jefferson County, on left bank 150 ft upstream from county road bridge, 250 ft upstream from Union Pacific Railroad bridge at Camas, and about 1.1 miles upstream from Beaver Creek.

DRAINAGE AREA.--400 sq mi, approximately. Mean altitude, 6,450 ft.

PERIOD OF RECORD.--April 1925 to October 1970, April 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,806.84 ft above mean sea level (unadjusted). Prior to Aug. 21, 1925, nonrecording gage at site 0.1 mile downstream at different datum. Aug. 21, 1925, to Mar. 25, 1927, nonrecording gage and Mar. 26, 1927, to Sept. 14, 1938, water-stage recorder at site 250 ft upstream at datum 2.01 ft higher.

AVERAGE DISCHARGE.--45 years (1926-70, 1971-72), 32.9 cfs (23,840 acre-ft per year); 15-year base period (1952-67), 37.5 cfs.

EXTREMES.--Current year: Maximum discharge, 385 cfs May 23 (gage height, 4.88 ft); minimum discharge, 2.2 cfs Sept. 7 (gage height, 1.62 ft).
Period of record: Maximum discharge, 1,220 cfs May 2 or 3, 1952 (gage height, 6.53 ft); from rating curve extended above 510 cfs; no flow at times in many years.

REMARKS.--Records good. Diversions above station for irrigation of about 8,100 acres (1966 determination) and 9,190 acre-ft diverted into flood channel about 25 miles upstream Apr. 10 to May 17. Records of chemical analyses for the 1972 water year are published in Part 2 of this report.

COOPERATION.--Water-stage recorder inspected by employees of Water District 31.

REVISIONS (WATER YEARS).--WSP 813: 1935. WSP 1123: 1947. WSP 1567: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	17	15	20	14	18	54	114	196	49	10	9.6
2	46	17	14	21	14	18	56	82	214	43	12	10
3	42	16	14	19	15	19	60	62	252	36	13	9.2
4	40	17	14	18	17	19	65	61	252	31	13	9.2
5	38	18	15	19	17	19	70	67	233	39	13	8.9
6	39	17	15	19	18	20	60	77	194	40	12	8.9
7	38	17	14	20	18	20	90	91	176	37	10	5.9
8	36	18	12	20	18	20	110	110	185	29	8.9	9.2
9	35	19	13	21	18	21	145	152	203	24	7.0	8.9
10	33	22	14	21	16	21	164	162	190	23	6.6	9.2
11	31	23	15	21	16	22	110	110	197	22	5.6	9.6
12	31	22	15	22	17	23	66	93	173	18	5.6	12
13	28	21	15	20	17	24	80	80	132	18	7.0	15
14	29	21	15	19	17	24	67	56	118	17	7.3	13
15	29	20	15	19	17	25	47	33	104	16	7.7	13
16	31	20	15	20	17	26	57	34	90	16	9.2	13
17	31	19	15	20	18	28	73	55	77	15	9.6	12
18	33	18	15	21	19	30	103	203	63	14	9.2	12
19	34	17	15	21	19	34	100	271	69	13	7.3	13
20	33	17	15	22	19	40	78	283	58	16	6.6	13
21	30	17	16	22	19	45	84	333	61	16	6.6	14
22	32	17	18	21	18	60	99	375	54	19	6.6	17
23	37	17	19	20	18	110	117	375	54	19	6.6	16
24	34	17	21	19	18	92	139	323	57	18	6.6	15
25	34	18	21	17	17	80	168	283	108	16	7.7	16
26	34	18	23	15	18	64	186	232	122	14	9.2	16
27	34	17	20	14	19	50	114	198	100	14	8.1	20
28	20	17	17	14	19	49	131	176	91	13	7.7	24
29	17	17	18	14	20	50	145	184	72	13	7.3	35
30	16	16	19	14	------	50	152	185	60	12	7.3	29
31	17	------	18	14	------	52	------	192	------	11	7.7	------
TOTAL	1,006	547	500	587	507	1,173	2,990	5,052	3,955	681	262.0	416.6
MEAN	32.5	18.2	16.1	18.9	17.5	37.8	99.7	163	132	22.0	8.45	13.9
MAX	46	23	23	22	20	110	186	375	252	49	13	35
MIN	16	16	12	14	14	18	47	33	54	11	5.6	5.9
AC-FT	2,000	1,080	992	1,160	1,010	2,330	5,930	10,020	7,840	1,350	520	826

WTR YR 1972 TOTAL 17,676.6 MEAN 48.3 MAX 375 MIN 5.6 AC-FT 35,060

13113000 Beaver Creek at Spencer, Idaho

LOCATION.--Lat 44°21'20", long 112°10'45", in NW¼SE¼ sec.23, T.12 N., R.36 E., Clark County, on left bank 62 ft upstream from State Highway 22, 0.4 mile southeast of Spencer Post Office, and 2.5 miles upstream from Rattlesnake Creek.

DRAINAGE AREA.--120 sq mi, approximately.

PERIOD OF RECORD.--December 1938 to September 1940 (published as "near Spencer"), October 1940 to November 1952, October 1968 to current year (no winter records 1942-52).

GAGE.--Water-stage recorder. Altitude of gage is 5,850 ft (by barometer). December 1938 to November 1952 non-recording gage. Prior to October 1940, at site 1.6 miles upstream at different datum.

AVERAGE DISCHARGE.--6 years (1939-41, 1968-72), 49.9 cfs (36,150 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 272 cfs June 9 (gage height, 4.72 ft); minimum discharge, 19 cfs Sept. 18; minimum gage height, 2.53 ft Oct. 29.
Period of record: Maximum discharge, 642 cfs Apr. 24, 1969 (gage height, 7.63 ft); minimum observed, 0.5 cfs Jan. 26, 1942, Feb. 22, 1944.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 850 acres (1966 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	35	37	27	24	30	72	100	115	70	56	26
2	47	36	35	26	23	30	79	99	121	64	53	25
3	56	36	34	26	23	30	86	100	110	61	56	23
4	65	36	34	25	24	30	85	103	102	60	50	21
5	71	37	34	26	24	30	98	105	91	57	46	23
6	61	37	36	28	24	30	170	120	88	64	42	28
7	52	38	35	27	24	31	227	180	177	59	37	28
8	47	39	33	27	24	31	190	228	158	54	35	26
9	45	40	32	27	24	32	165	154	219	49	34	25
10	43	42	31	27	24	34	143	119	185	49	33	29
11	43	42	30	28	23	36	128	112	124	47	37	39
12	42	42	29	28	23	37	150	107	106	47	28	30
13	41	41	28	28	23	38	140	108	98	45	29	29
14	42	39	27	26	23	40	120	108	94	42	34	29
15	43	36	27	26	24	45	130	111	94	43	32	27
16	43	35	27	26	25	71	140	112	98	46	30	27
17	47	34	27	27	26	79	130	115	95	45	33	24
18	53	35	27	27	27	91	110	116	105	45	29	21
19	50	36	27	28	27	115	97	122	173	45	29	27
20	49	38	27	28	28	121	103	155	126	58	27	27
21	61	39	27	29	28	118	103	157	100	69	28	27
22	55	40	28	28	28	135	103	156	86	60	28	24
23	48	41	28	27	28	150	105	154	125	53	39	24
24	46	42	29	26	27	129	110	138	194	48	37	23
25	44	43	30	25	27	100	125	136	173	45	33	26
26	44	43	30	25	28	90	118	117	165	45	28	29
27	42	43	29	24	29	80	110	107	121	45	27	41
28	40	42	28	24	30	70	108	103	98	47	26	32
29	38	41	27	24	30	70	120	101	84	42	26	28
30	36	39	27	24	------	70	110	100	77	40	26	27
31	35	------	27	24	------	71	------	101	------	46	28	------
TOTAL	1,481	1,167	927	818	742	2,064	3,675	3,844	3,702	1,590	1,076	815
MEAN	47.8	38.9	29.9	26.4	25.6	66.6	123	124	123	51.3	34.7	27.2
MAX	71	43	37	29	30	150	227	228	219	70	56	41
MIN	35	34	27	24	23	30	72	99	77	40	26	21
AC-FT	2,940	2,310	1,840	1,620	1,470	4,090	7,290	7,620	7,340	3,150	2,130	1,620

CAL YR 1971 TOTAL 29,180 MEAN 79.9 MAX 461 MIN 12 AC-FT 57,880
WTR YR 1972 TOTAL 21,901 MEAN 59.8 MAX 228 MIN 21 AC-FT 43,440

13113500 Beaver Creek at Dubois, Idaho

LOCATION.--Lat 44°11'10", long 112°14'08", in NW¼NW¼ sec.21, T.10 N., R.36 E., Clark County, on left bank 0.7 mile north of Dubois.

DRAINAGE AREA.--220 sq mi, approximately. Mean altitude, 6,760 ft.

PERIOD OF RECORD.--April 1921 to current year (no winter records 1925-28, 1930).

GAGE.--Water-stage recorder. Datum of gage is 5,158.87 ft above mean sea level. Prior to May 8, 1927, non-recording gage at site 175 ft downstream at datum 1.16 ft lower. May 8, 1927, to Sept. 15, 1957, at same site at datum 0.92 ft higher.

AVERAGE DISCHARGE.--46 years (1921-24, 1928-29, 1930-72), 21.6 cfs (15,650 acre-ft per year); 15-year base period (1952-67), 18.5 cfs.

EXTREMES.--Current year: Maximum discharge, 264 cfs June 10 (gage height, 3.32 ft); minimum discharge, 15 cfs Sept. 10 (gage height, 1.07 ft).
Period of record: Maximum discharge, 858 cfs Apr. 7, 1930; maximum gage height, 6.39 ft Apr. 24, 1969; no flow for long periods in most years.

REMARKS.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 850 acres (1966 determination).

COOPERATION.--Water-stage recorder inspected occasionally by Watermaster of Water District 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	26	28	20	20	27	62	96	126	47	39	21
2	44	26	27	20	20	26	63	96	134	43	37	18
3	52	26	27	20	20	26	64	98	129	42	39	18
4	56	26	27	19	20	26	70	100	122	41	33	17
5	59	26	27	19	20	27	85	104	111	41	35	16
6	56	26	28	20	21	27	130	107	104	48	31	20
7	49	27	26	21	21	28	160	125	147	45	30	22
8	39	27	25	21	21	28	170	204	154	42	29	20
9	34	27	24	21	21	29	140	172	177	40	28	18
10	30	28	23	21	21	30	121	140	205	39	28	18
11	34	29	23	21	21	31	116	128	128	39	27	30
12	34	30	22	21	21	32	138	125	105	38	29	28
13	35	28	21	21	21	33	116	124	98	37	27	22
14	34	29	20	21	22	35	87	126	92	36	28	20
15	36	29	20	21	22	37	105	129	85	35	32	19
16	36	27	20	21	22	40	127	135	88	35	30	19
17	36	27	20	21	23	56	123	140	82	34	25	18
18	43	28	19	21	23	70	106	148	86	34	21	18
19	41	28	19	21	24	83	78	145	135	34	20	18
20	38	28	19	21	25	96	94	177	114	35	20	22
21	44	29	19	22	25	97	100	184	83	48	22	21
22	44	30	19	22	25	110	100	187	76	43	22	20
23	38	30	20	21	25	120	97	175	92	37	24	18
24	36	30	21	21	24	100	101	158	148	33	34	18
25	35	30	21	21	23	87	117	148	149	32	32	20
26	33	30	22	20	24	70	111	134	138	32	25	22
27	33	29	21	20	25	60	100	121	108	31	20	33
28	28	29	21	20	26	61	103	117	82	32	20	31
29	28	29	21	20	28	63	113	115	61	31	18	29
30	27	28	21	20	------	65	101	114	54	30	18	26
31	26	------	21	20	------	64	------	116	------	32	20	------
TOTAL	1,210	842	692	639	654	1,684	3,198	4,188	3,413	1,166	843	640
MEAN	39.0	28.1	22.3	20.6	22.6	54.3	107	135	114	37.6	27.2	21.3
MAX	59	30	28	22	28	120	170	204	205	48	39	33
MIN	26	26	19	19	20	26	62	96	54	30	18	16
AC-FT	2,400	1,670	1,370	1,270	1,300	3,340	6,340	8,310	6,770	2,310	1,670	1,270

CAL YR 1971 TOTAL 28,116.0 MEAN 77.0 MAX 524 MIN 7.0 AC-FT 55,770
WTR YR 1972 TOTAL 19,169.0 MEAN 52.4 MAX 205 MIN 16 AC-FT 38,020

13114000 Beaver Creek at Camas, Idaho

LOCATION.--Lat 44°00'27", long 112°13'25", in NW¼SW¼ sec.21, T.8 N., R.36 E., Jefferson County, on right bank 0.1 mile west of railroad crossing at Camas and about 1.4 miles upstream from mouth.

DRAINAGE AREA.--510 sq mi, approximately. Mean altitude, 6,190 ft.

PERIOD OF RECORD.--April 1921 to current year (flood season only 1971-72).

GAGE.--Water-stage recorder. Altitude of gage is 4,790 ft (by barometer). Prior to Dec. 22, 1949, nonrecording gages at nearby sites at present datum.

AVERAGE DISCHARGE.--49 years (1921-70), 6.00 cfs (4,350 acre-ft per year); 15-year base period (1952-67), 7.02 cfs.

EXTREMES.--Current year: Maximum discharge, 177 cfs June 10 (gage height, 3.46 ft); no flow for long periods. Period of record: Maximum discharge, 230 cfs June 2, 1971; maximum gage height, 4.03 ft May 11, 1969; no flow for long periods in each year; no flow for entire water years 1929, 1931-37, 1940, 1963.

REMARKS.--Records excellent. Flow affected by irrigation diversions above Dubois, 14 miles above station, and by heavy channel losses below Dubois. Diversions above station for irrigation of about 5,800 acres (1966 determination).

COOPERATION.--Occasional inspections of recorder by Watermaster of Water District 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						-	41	61	84	37		
2						-	40	59	93	34		
3						-	39	58	96	30		
4						-	50	51	91	22		
5						-	50	54	80	31		
6						-	69	55	71	18		
7						-	132	44	93	20		
8						-	144	92	125	17		
9						0	118	107	125	14		
10						0	104	77	158	12		
11						0	84	67	102	11		
12						0	95	62	78	10		
13						0	90	57	70	9.8		
14						0	62	62	63	-		
15						0	70	64	55	-		
16						4.6	85	71	59	-		
17						10	91	78	52	-		
18						28	80	88	54	-		
19						47	56	91	83	-		
20						72	63	109	96	-		
21						72	64	124	67	-		
22						76	68	132	52	-		
23						102	68	121	50	-		
24						82	66	114	105	-		
25						73	71	102	133	-		
26						35	75	102	125	-		
27						31	65	89	99	-		
28						30	63	83	70	-		
29						30	67	81	54	-		
30					------	30	67	79	42	-		
31		------			------	31	------	80	------	-		------
TOTAL						-	2,237	2,514	2,525	-		
MEAN						-	74.6	81.1	84.2	-		
MAX						-	144	132	158	-		
MIN						-	39	44	42	-		
AC-FT						-	4,440	4,990	5,010	-		

13115000 Mud Lake near Terreton, Idaho

LOCATION.--Lat 43°53'30", long 112°21'30", in NE¼SE¼ sec.32, T.7 N., R.35 E., Jefferson County, 670 ft north of mouth of Camas Creek, 4.4 miles northeast of First Owsley pumphouse, and 5.5 miles northeast of Terreton.

DRAINAGE AREA.--1,130 sq mi, approximately, not including Medicine Lodge Creek.

PERIOD OF RECORD.--April 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,774.99 ft above mean sea level, unadjusted. Prior to Oct. 31, 1931, nonrecording gages at or near pumphouse (now used as a supplementary gage) at same datum. Oct. 31, 1931, to Sept. 30, 1954, water-stage recorder at site 2.7 miles southwest and 2 miles north of First Owsley pumphouse at same datum.

EXTREMES.--Current year: Maximum contents, 39,500 acre-ft Apr. 24; maximum gage height, 8.37 ft Apr. 21 (affected by wind); minimum contents, 10,000 acre-ft Aug. 13, 17, 18 (gage height, 2.56 ft).
Period of record: Maximum contents observed, 61,660 acre-ft May 5, 1923 (gage height, 9.20 ft); practically no contents Oct. 1 to Nov. 15, 1937, due to bypassing Camas Creek (see Remarks).

REMARKS.--Mud Lake is a perched body of water confined by earth dikes and fed by ground water and surface tributaries augmented by well flows and surface inflow from North Lake. Water for irrigation is diverted from lake by pumping. During low-lake stages, inflow from Camas Creek may be bypassed through Camas Creek diversion canal directly to lake outlet channel leading to First Owsley pumping plant. Bypass was not used during 1972. Other irrigation diversions are made by various means from adjacent lakes and wells and Camas Creek above lake. Area of Mud Lake is varied from time to time by changes in dikes. Figures given herein represent contents above gage height -4.0 ft. Capacity table prepared from surveys made by Geological Survey and adjusted for changes in dikes. High winds are frequent, and stage at recorder during wind does not usually represent the mean for the lake. For complete description of Mud Lake region, see WSP 818. Records of chemical analyses for the 1972 water year are published in Part 2 of this report.

COOPERATION.--Water-stage recorder inspected by employees of Water District 31 .

REVISIONS.--WSP 1567: Drainage area.

Capacity table (elevation, in feet, and contents, in acre-feet)

2.4	9,450	4.0	15,800	8.0	37,900
3.0	11,600	6.0	25,700	9.0	44,700

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12,800	15,500	19,900	24,400	27,800	29,500	34,100	38,300	30,100	22,700	12,700	14,100
2	12,900	15,700	20,100	24,600	27,800	29,600	34,100	38,300	29,500	22,900	12,400	14,300
3	13,100	15,900	20,300	24,800	27,900	29,800	34,400	38,100	28,800	23,100	12,100	14,300
4	13,300	16,200	20,400	25,100	27,900	29,900	34,600	37,600	28,200	23,200	11,800	14,500
5	13,600	16,300	20,600	25,200	27,900	29,900	34,800	37,300	27,800	23,200	11,500	14,900
6	13,700	16,400	20,900	25,400	28,100	30,100	34,800	37,100	27,400	23,400	11,300	14,800
7	13,800	16,700	21,000	25,500	28,100	30,200	34,900	37,300	27,000	23,400	11,000	14,600
8	13,800	16,800	21,200	25,600	28,200	30,400	35,300	37,000	26,700	23,200	10,800	15,200
9	13,700	16,800	21,300	25,700	28,300	30,400	35,800	36,900	26,600	22,800	10,700	15,300
10	13,800	16,900	21,400	25,700	28,400	30,500	36,300	37,000	26,200	22,700	10,500	15,200
11	13,900	17,000	21,600	25,900	28,400	30,700	36,600	37,000	26,100	22,600	10,300	14,800
12	13,900	17,000	21,800	25,900	28,400	31,000	37,000	36,800	25,900	22,000	10,300	14,500
13	13,900	17,200	22,000	26,100	28,600	31,100	37,500	36,600	25,600	21,800	10,000	14,300
14	14,100	17,400	22,200	26,100	28,700	31,200	37,400	36,300	25,300	21,000	10,100	14,200
15	14,000	17,600	22,300	26,200	28,800	31,200	37,900	35,700	24,900	20,500	10,100	13,900
16	14,100	17,700	22,400	26,200	28,800	31,300	38,000	35,000	24,200	20,000	10,100	13,700
17	14,300	17,900	22,500	26,200	28,900	31,400	38,200	34,400	23,600	19,400	10,000	13,500
18	14,300	18,000	22,700	26,500	28,900	31,600	38,600	33,800	23,200	18,800	10,000	13,300
19	14,400	18,100	22,900	26,700	28,800	31,800	39,000	33,200	22,600	17,700	10,100	13,100
20	14,500	18,200	23,000	26,700	28,900	32,000	39,300	32,800	22,300	17,400	10,400	12,900
21	14,500	18,300	23,100	26,600	29,000	32,100	39,300	32,700	22,100	16,900	10,700	12,700
22	14,600	18,500	23,400	26,600	29,000	32,300	39,300	32,600	21,800	16,500	11,000	12,500
23	14,700	18,600	23,500	26,600	29,000	32,700	39,300	32,400	21,900	16,100	11,100	12,300
24	14,800	18,800	23,700	26,600	29,000	32,900	39,400	32,300	21,600	15,800	11,400	12,000
25	14,900	19,000	23,800	26,800	29,000	33,300	39,400	32,300	21,900	15,500	11,900	11,700
26	15,100	19,000	24,000	26,900	29,200	33,600	39,300	31,900	22,000	15,100	12,300	11,600
27	15,000	19,300	24,000	27,000	29,200	33,800	39,100	31,700	22,000	14,600	12,600	11,600
28	14,800	19,500	24,100	27,300	29,300	33,400	38,900	31,500	22,100	14,100	12,800	11,000
29	15,100	19,700	24,200	27,400	29,400	33,400	38,700	31,300	22,400	13,600	13,600	10,500
30	15,200	19,800	24,300	27,600	------	33,600	38,500	31,200	22,500	13,300	13,700	10,200
31	15,400	------	24,400	27,600	------	33,900	------	30,700	------	12,900	13,900	------
MAX	15,400	19,800	24,400	27,600	29,400	33,900	39,400	38,300	30,100	23,400	13,900	15,300
MIN	12,800	15,500	19,900	24,400	27,800	29,500	34,100	30,700	21,600	12,900	10,000	10,200
(†)	3.91	4.85	5.75	6.33	6.63	7.37	8.08	6.85	5.40	3.33	3.57	2.61
(‡)	+3,100	+4,400	+4,600	+3,200	+1,800	+4,500	+4,600	-7,800	-8,200	-9,600	+1,000	-3,700

CAL YR 1971..... ‡ +3,000
WTR YR 1972..... ‡ -2,100

† Gage height, in feet, at end of month.
‡ Change in contents, in acre-feet.

13117020 Birch Creek at Blue Dome Inn, near Reno, Idaho

LOCATION.--Lat 44°09'14", long 112°54'24", in NE¼SW¼ sec.32, T.10 N., R.30 E., Clark County, on left bank 40 ft upstream from bridge on Highway 28, 0.2 mile downstream from Blue Dome Inn, 9 miles southeast of former Reno Post Office, and 34 miles west of Dubois.

DRAINAGE AREA.--380 sq mi, approximately.

PERIOD OF RECORD.--June 1967 to current year (no winter records). Prior to June 1972 at site 40 ft downstream at same datum.

GAGE.--Water-stage recorder. Altitude of gage is 6,050 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 92 cfs May 8; maximum gage height, 2.68 ft Aug. 16 (backwater from bridge construction); minimum recorded, 65 cfs June 15 (gage height, 1.02 ft).
Period of record: Maximum discharge, 149 cfs July 30, 1969 (gage height, 1.56 ft); minimum, 53 cfs June 29, 30, July 1-5, 1968 (gage height, 0.88 ft).

REMARKS.--Records excellent. Diversions above station for irrigation of about 280 acres (1966 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88							-	76	72	72	70
2	79							-	76	72	74	70
3	86							-	75	73	77	70
4	84							-	76	74	74	70
5	-							-	75	72	73	69
6	-							-	75	72	72	70
7	-							-	75	71	72	69
8	-							88	78	71	72	70
9	-							88	78	69	72	69
10	-							84	76	71	74	71
11	-							86	75	72	73	72
12	-							86	75	71	72	72
13	-							88	73	70	73	73
14	-							86	71	70	78	72
15	-							86	68	71	78	72
16	-							84	68	72	72	72
17	-							86	66	72	69	72
18	-							83	69	72	69	72
19	-							86	72	72	71	73
20	-							83	73	76	73	72
21	-							83	73	74	73	72
22	-							82	70	74	72	71
23	-							82	72	73	73	-
24	-							82	73	72	73	-
25	-							82	76	71	73	-
26	-							79	76	71	72	-
27	-							79	74	71	70	-
28	-							79	73	74	69	-
29	-							79	72	72	67	-
30	-				------			78	71	72	70	-
31	-	------			------		------	76	------	73	70	------
TOTAL	-							-	2,200	2,232	2,242	-
MEAN	-							-	73.3	72.0	72.3	-
MAX	-							-	78	76	78	-
MIN	-							-	66	69	67	-
AC-FT	-							-	4,360	4,430	4,450	-

13117030 Birch Creek at Eight-Mile Canyon Road near Reno, Idaho

LOCATION.--Lat 44°04'49", long 112°52'30", in sec.28, T.9 N., R.30 E., Clark County, Bureau of Land Management lands, 300 ft downstream from Eight-Mile Canyon road crossing, 5.5 miles downstream from Blue Dome Inn, 14 miles southeast of Reno.

DRAINAGE AREA.--400 sq mi, approximately.

PERIOD OF RECORD.--June 1967 to current year (no winter records).

GAGE.--Water-stage recorder. Altitude of gage is 5,770 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 79 cfs Aug. 15 (gage height, 1.56 ft); minimum, 44 cfs June 17, 18, 22 (gage height, 1.30 ft).
Period of record: Maximum discharge, 108 cfs July 31, 1969 (gage height, 1.62 ft); minimum, 11 cfs July 5, 1967 (gage height, 0.97 ft).

REMARKS.--Records good. Diversions above station for irrigation of about 350 acres (1972 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.3	38
1.4	50
1.5	70

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64							-	48	52	50	50
2	64							-	48	54	52	50
3	64							-	49	52	54	50
4	64							-	49	54	50	50
5	-							-	48	50	49	50
6	-							-	48	49	49	52
7	-							-	49	48	48	50
8	-							70	49	48	49	52
9	-							66	49	48	47	50
10	-							68	50	49	48	52
11	-							66	50	49	47	54
12	-							68	48	50	46	50
13	-							68	49	50	46	54
14	-							64	48	49	50	54
15	-							64	49	50	56	54
16	-							62	48	50	56	54
17	-							58	46	50	54	52
18	-							58	46	52	54	54
19	-							60	49	52	56	52
20	-							60	50	58	56	52
21	-							60	50	58	56	52
22	-							58	47	58	56	50
23	-							58	54	56	58	-
24	-							56	56	52	56	-
25	-							56	58	50	54	-
26	-							52	60	52	54	-
27	-							49	58	52	54	-
28	-							50	50	54	52	-
29	-							50	50	52	50	-
30	-				------			49	50	50	50	-
31	-	------			------		------	48	------	52	50	------
TOTAL	-							-	1,503	1,600	1,607	-
MEAN	-							-	50.1	51.6	51.8	-
MAX	-							-	60	58	58	-
MIN	-							-	46	48	46	-
AC-FT	-							-	2,980	3,170	3,190	-

13117300 Sawmill Creek near Goldburg, Idaho

LOCATION.--Lat 44°18'40", long 113°20'20", in NE¼SE¼ sec.3, T.11 N., R.26 E., Lemhi County, Bureau of Land Management lands, on left bank 25 ft downstream from bridge, 0.4 mile upstream from Warm Creek, 2 miles southeast of Fairview guard station, and 16 miles east of Goldburg.

DRAINAGE AREA.--74.3 sq mi.

PERIOD OF RECORD.--July 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 51.4 cfs (9.39 inches per year, 37,240 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 535 cfs June 8 (gage height, 3.70 ft); minimum daily discharge, 15 cfs Feb. 1-3.
Period of record: Maximum discharge, 651 cfs June 12, 1965 (gage height, 4.45 ft); minimum, 3.9 cfs Apr. 2, 1967 (gage height, 1.68 ft).

REMARKS.--Records good except those for winter periods, which are poor. No regulation or diversion above station.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 21 to Nov. 29, May 26 to June 7; stage-discharge relation affected by ice Oct. 28 to Nov. 10, Nov. 16-20, 23, Nov. 26 to Mar. 9)

Oct. 1 to June 7				June 8 to Sept. 30			
1.8	16	3.0	268	1.4	16	2.4	155
2.0	33	3.4	403	1.7	40	3.0	310
2.3	80	3.8	550	2.0	76	4.0	640
2.6	153						

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	23	24	22	15	17	25	56	468	87	41	29
2	27	24	23	21	15	17	26	55	490	84	40	28
3	28	25	23	20	15	17	22	61	471	83	39	28
4	29	25	23	19	16	17	25	80	421	79	38	28
5	30	25	22	19	18	17	28	100	410	76	36	29
6	29	24	22	20	19	18	32	120	414	76	35	33
7	28	23	22	21	19	18	31	127	453	73	33	30
8	28	23	21	22	19	19	31	100	501	71	30	29
9	27	23	20	23	19	21	30	117	465	69	30	29
10	27	23	20	23	19	24	30	114	414	67	29	31
11	27	25	19	23	19	23	29	112	353	65	28	35
12	27	25	19	24	20	23	29	110	302	62	27	33
13	27	26	18	23	20	22	27	114	261	61	28	31
14	29	25	18	23	19	23	28	143	231	59	36	30
15	28	24	18	23	20	22	29	181	209	57	34	29
16	28	23	19	23	20	23	29	206	195	55	33	29
17	28	23	19	23	21	26	29	235	184	54	29	29
18	28	22	19	24	23	27	28	229	165	53	28	28
19	27	23	20	27	23	28	28	215	151	57	28	33
20	26	23	21	26	22	27	28	226	138	55	30	32
21	27	23	22	26	21	28	28	218	126	60	30	30
22	27	23	25	27	20	31	30	192	117	54	32	30
23	27	23	24	20	19	36	33	173	149	51	33	29
24	27	23	24	17	18	37	40	173	130	50	33	29
25	26	24	24	19	17	31	43	167	128	47	32	30
26	27	23	26	21	17	34	42	170	116	48	30	30
27	25	23	25	20	16	41	47	201	106	47	29	34
28	24	24	24	19	18	47	63	247	98	46	29	31
29	23	24	24	18	17	49	69	337	92	43	30	30
30	23	24	23	17	------	30	59	435	88	43	32	30
31	23	------	22	16	------	33	------	479	------	42	30	------
TOTAL	834	711	673	669	544	826	1,018	5,493	7,846	1,874	992	906
MEAN	26.9	23.7	21.7	21.6	18.8	26.6	33.9	177	262	60.5	32.0	30.2
MAX	30	26	26	27	23	49	69	479	501	87	41	35
MIN	23	22	18	16	15	17	22	55	88	42	27	28
AC-FT	1,650	1,410	1,330	1,330	1,080	1,640	2,020	10,900	15,560	3,720	1,970	1,800

CAL YR 1971 TOTAL 26,002 MEAN 71.2 MAX 489 MIN 13 AC-FT 51,570
WTR YR 1972 TOTAL 22,386 MEAN 61.2 MAX 501 MIN 15 AC-FT 44,400

PEAK DISCHARGE (BASE, 130 CFS).--May 17 (0300) 244 cfs (2.84 ft); June 8 (0300) 535 cfs (3.70 ft).

13118700 Little Lost River below Wet Creek, near Howe, Idaho

LOCATION.--Lat 44°08'19", long 113°14'39", in NW¼SE¼ sec.4, T.9 N., R.27 E., Butte County, Bureau of Land Management lands, on right bank at Clyde School, 0.6 mile downstream from Wet Creek, and 27 miles northwest of Howe.

DRAINAGE AREA.--440 sq mi, approximately.

PERIOD OF RECORD.--January 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,880 ft (from topographic map).

AVERAGE DISCHARGE.--14 years, 66.0 cfs (47,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 412 cfs June 9 (gage height, 3.47 ft); maximum gage height, 3.91 ft Jan. 11 (ice jam); minimum daily, 21 cfs Feb. 2.
Period of record: Maximum daily discharge, 475 cfs June 12, 1965, but may have been more during period of doubtful gage-height record in 1958; maximum gage height recorded, 4.75 ft Jan. 12, 1968 (ice jam); minimum discharge recorded, 2.8 cfs Dec. 13, 1962.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 3,800 acres of which about 2,000 acres are by withdrawals from ground water (1966 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	41	31	28	25	26	68	91	317	153	86	67
2	82	38	32	28	21	27	70	95	318	151	85	66
3	82	34	33	28	23	28	69	95	318	148	84	65
4	82	33	33	25	24	26	67	104	311	146	82	64
5	80	33	32	27	26	27	69	115	298	140	81	65
6	80	32	31	29	28	28	74	127	316	138	79	71
7	80	31	30	30	30	27	74	137	324	135	78	68
8	79	30	28	30	30	27	73	150	362	131	76	66
9	79	30	26	30	29	28	71	141	402	125	75	64
10	77	29	25	30	29	30	70	137	387	122	74	67
11	77	29	24	31	29	32	69	137	358	119	72	76
12	75	29	23	32	29	31	69	145	324	113	72	69
13	75	29	23	32	31	34	67	144	291	112	71	68
14	75	30	22	31	32	35	61	153	262	110	71	73
15	75	31	24	31	30	38	65	172	245	108	71	65
16	74	30	25	31	31	52	67	195	235	106	71	71
17	74	30	26	33	32	62	63	209	232	104	72	63
18	75	30	27	37	34	76	62	207	222	102	71	61
19	75	30	28	46	36	78	57	202	210	100	71	64
20	75	30	29	43	36	75	61	213	200	98	73	68
21	75	30	31	41	35	72	64	216	187	97	72	66
22	75	30	33	45	32	79	65	210	177	96	73	62
23	75	30	32	41	29	96	65	198	178	96	77	54
24	75	31	31	34	28	78	70	198	208	95	75	54
25	75	31	33	35	29	81	75	191	203	93	72	55
26	75	32	34	37	30	59	73	189	198	92	70	56
27	75	32	33	35	33	60	76	198	185	90	68	58
28	62	32	31	34	29	61	83	218	172	90	66	56
29	46	32	30	32	29	60	98	252	164	89	67	55
30	46	31	29	32	------	63	95	277	159	87	71	54
31	43	------	28	30	------	63	------	297	------	87	69	------
TOTAL	2,275	940	897	1,028	859	1,559	2,110	5,413	7,763	3,473	2,295	1,911
MEAN	73.4	31.3	28.9	33.2	29.6	50.3	70.3	175	259	112	74.0	63.7
MAX	82	41	34	46	36	96	98	297	402	153	86	76
MIN	43	29	22	25	21	26	57	91	159	87	66	54
AC-FT	4,510	1,860	1,780	2,040	1,700	3,090	4,190	10,740	15,400	6,890	4,550	3,790

CAL YR 1971 TOTAL 32,757 MEAN 89.7 MAX 407 MIN 16 AC-FT 64,970
WTR YR 1972 TOTAL 30,523 MEAN 83.4 MAX 402 MIN 21 AC-FT 60,540

13119000 Little Lost River near Howe, Idaho

LOCATION.--Lat 43°53'10", long 113°06'00", in SW¼SE¼ sec.34, T.7 N., R.28 E., Butte County, Bureau of Land Management lands, on left bank 0.2 mile upstream from diversion dam of Blaine County Investment Co. and 7 miles northwest of Howe.

DRAINAGE AREA.--703 sq mi. Mean altitude, 7,370 ft.

PERIOD OF RECORD.--April 1921 to current year (no winter records prior to October 1940). Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 5,020 ft (by barometer). Prior to Sept. 2, 1938, nonrecording gage at site 120 ft downstream at datum 1.39 ft higher.

AVERAGE DISCHARGE.--32 years (1940-72), 74.3 cfs (53,830 acre-ft per year); 15-year base period (1952-67), 69.0 cfs.

EXTREMES.--Current year: Maximum discharge, 240 cfs June 13,,15, 16 (gage height, 3.77 ft); maximum recorded gage height, 4.77 ft (ice jam) Jan. 9; minimum daily discharge, 34 cfs Jan. 4; minimum gage height, 2.16 ft Jan. 24, 25.
Period of record: Maximum discharge, about 450 cfs Aug. 11, 1936, during cloudburst (gage height, 5.4 ft, present site and datum from rating curve extended above 220 cfs; maximum gage height observed, 6.63 ft Jan. 23, 1957 (backwater from ice); minimum discharge observed, 4.1 cfs Dec. 12, 1940.

REMARKS.--Records good except those for periods of ice effect, which are fair. Records of chemical analysis for the water year 1972 are published in Part 2 of this report. Diversions above station for irrigation of about 11,500 acres of which about 7,600 acres are by withdrawals from ground water (1966 determination).

REVISIONS.--WSP 1637: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 26, 27, Feb. 3 to May 19, July 11 to Sept. 30; stage-discharge relation affected by ice Dec. 7-20, Dec. 27 to Jan. 25, Jan. 28 to Feb. 2)

2.1	24	3.0	134
2.5	68	3.8	246

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	77	56	37	40	55	122	136	232	183	108	88
2	113	74	57	37	3E	56	122	135	233	178	107	87
3	112	71	50	36	38	57	118	136	23E	174	106	85
4	111	75	53	34	42	57	114	144	236	171	103	85
5	108	72	49	36	44	59	119	149	23E	166	99	86
6	105	62	46	37	48	61	121	159	235	163	96	91
7	101	54	44	37	50	68	123	169	236	160	94	92
8	96	54	42	38	48	72	120	180	238	156	92	91
9	96	56	41	39	48	75	117	177	23E	151	90	88
10	96	59	39	40	49	83	116	177	239	147	90	90
11	94	62	38	40	49	103	117	176	239	142	91	101
12	94	63	36	41	49	112	118	180	239	136	91	96
13	94	66	36	40	54	130	118	183	240	128	90	95
14	97	66	35	40	53	143	113	181	239	124	93	93
15	100	65	3E	38	51	155	113	189	240	122	104	91
16	105	64	37	39	53	111	112	199	24C	120	105	90
17	107	60	37	43	56	110	111	210	238	118	101	89
18	104	63	38	51	60	121	109	219	237	117	100	87
19	102	62	39	64	63	126	105	222	235	116	99	88
20	102	64	40	62	64	123	108	226	228	116	99	92
21	103	65	47	59	62	123	113	227	221	117	90	90
22	99	66	48	63	58	122	120	226	212	123	97	88
23	98	66	51	59	56	126	120	222	207	126	101	79
24	98	66	49	48	52	126	122	216	227	122	102	80
25	98	67	50	51	5C	127	124	217	228	118	99	81
26	101	65	45	52	51	116	126	211	226	113	94	84
27	103	67	44	53	58	112	120	210	218	113	93	86
28	94	65	41	52	58	114	123	217	205	114	89	88
29	73	65	39	52	54	118	131	224	193	110	87	83
30	64	62	38	51	------	126	138	229	186	106	9C	78
31	69	------	37	45	------	122	------	231	------	106	91	------
TOTAL	3,052	1,943	1,338	1,414	1,494	3,209	3,553	5,977	6,855	4,156	2,991	2,642
MEAN	98.5	64.8	43.2	45.6	51.5	104	118	193	229	134	96.5	88.1
MAX	115	77	57	64	64	155	138	231	24C	183	108	101
MIN	64	54	35	34	36	55	105	135	186	106	87	78
AC-FT	6,050	3,850	2,650	2,800	2,960	6,370	7,050	11,860	13,600	8,240	5,930	5,240

CAL YR 1971 TOTAL 38,103 MEAN 104 MAX 233 MIN 29 AC-FT 75,580
WTR YR 1972 TOTAL 38,624 MEAN 106 MAX 240 MIN 34 AC-FT 76,610

13119500 Blaine County Investment Co.'s canal near Howe, Idaho

LOCATION.--Lat 43°52'50", long 113°05'40", in NE¼NE¼ sec.3, T.6 N., R.28 E., Butte County, Bureau of Land Management lands, on left end of weir, 900 ft downstream from headgates, and 7 miles northwest of Howe.

PERIOD OF RECORD.--April 1924 to current year (prior to 1938, irrigation seasons only).

GAGE.--Nonrecording gage and sharp-crested weir. Altitude of gage is 5,020 ft (from nearby barometric determination). Prior to June 26, 1927, at site 700 ft upstream at different datum. June 26, 1927, to May 6, 1945, at site 180 ft upstream at present datum.

EXTREMES.--Period of record: Maximum daily discharge, 146 cfs Apr. 26, 1966; no flow for long periods in each year.

REMARKS.--Records good. Canal diverts from Little Lost River in NE¼NE¼ sec.3, T.6 N., R.28 E., for irrigation of lands in project of Blaine County Investment Co.

COOPERATION.--Gage readings furnished by Water District 33.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0						47	38	120	87	13	4.6
2	0						72	33	122	85	13	4.1
3	0						72	33	126	83	13	4.1
4	0						72	33	122	78	12	4.1
5	0						72	38	122	78	12	4.1
6	0						72	49	124	74	12	4.1
7	0						72	54	126	65	11	8.9
8	0						72	59	126	54	11	8.9
9	0						72	79	126	51	11	8.9
10	0						72	67	126	47	11	8.9
11	0						76	68	126	42	11	12
12	0						76	69	126	38	11	12
13	0						76	76	126	38	11	12
14	0						76	76	126	35	11	12
15	0						76	81	110	33	11	12
16	0						76	87	110	30	15	12
17	9.9						76	97	110	30	15	12
18	18						76	101	108	25	15	12
19	18						65	103	108	25	15	8.4
20	18						19	106	108	24	15	8.4
21	18						18	106	96	24	15	8.4
22	18						22	112	96	24	15	8.4
23	18						20	112	96	24	15	4.6
24	30						20	110	103	24	15	5.4
25	30						11	101	101	18	15	5.4
26	30						11	97	106	10	11	5.4
27	30						13	97	101	11	11	6.1
28	24						13	97	97	11	6.1	6.9
29	0						20	106	92	13	4.6	6.9
30	0				------		38	110	92	12	4.6	6.9
31	0	------			------		------	110	------	12	4.6	------
TOTAL	261.9	0	0	0	0	0	1,573	2,505	3,378	1,205	365.9	237.9
MEAN	8.45	0	0	0	0	0	52.4	80.8	113	38.9	11.8	7.93
MAX	30	0	0	0	0	0	76	112	126	87	15	12
MIN	0	0	0	0	0	0	11	33	92	10	4.6	4.1
AC-FT	519	0	0	0	0	0	3,120	4,970	6,700	2,390	726	472

CAL YR 1971 TOTAL 9,126.20 MEAN 25.0 MAX 120 MIN 0 AC-FT 18,100
WTR YR 1972 TOTAL 9,526.70 MEAN 26.0 MAX 126 MIN 0 AC-FT 18,900

13120000 North Fork Big Lost River at Wild Horse, near Chilly, Idaho

LOCATION.--Lat 43°55'59", long 114°06'47", in NE¼SE¼ sec.17, T.7 N., R.20 E., Custer County, in Challis National Forest, on right bank 0.2 mile upstream from East Fork, 2 miles downstream from Wild Horse damsite, and 16 miles southwest of Chilly.

DRAINAGE AREA.--114 sq mi. Mean altitude, 8,540 ft.

PERIOD OF RECORD.--March 1944 to current year. Prior to October 1967, published as Big Lost River at Wild Horse, near Chilly.

GAGE.--Water-stage recorder. Altitude of gage is 6,820 ft (from topographic map).

AVERAGE DISCHARGE.--28 years, 106 cfs (12.62 inches per year, 76,800 acre-ft per year); 15-year base period (1952-67), 102 cfs.

EXTREMES.--Current year: Maximum discharge, 966 cfs June 8 (gage height, 5.14 ft); minimum, 16 cfs Dec. 2, Feb. 11.
Period of record: Maximum discharge, 1,420 cfs June 12, 1965 (gage height, 6.39 ft); minimum, 6.5 cfs Mar. 15, 1962 (gage height, 1.05 ft).

REMARKS.--Records good except those for periods of no gage-height record, which are fair. No regulation or diversion above station.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 27, Mar. 2-4; stage-discharge relation affected by ice Feb. 9-12, 14)

1.3	18	3.0	232
1.6	35	4.0	537
2.0	68	5.0	917
2.5	132		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	43	28	31	25	18	37	68	782	288	85	50
2	54	39	23	32	21	20	39	72	809	270	80	48
3	54	41	28	25	24	20	39	82	740	254	77	47
4	54	42	28	26	26	19	42	117	649	237	72	45
5	54	37	25	32	28	20	46	168	622	236	71	47
6	54	34	29	32	26	20	53	201	673	227	68	51
7	53	38	30	31	26	19	49	212	842	224	66	48
8	53	41	27	31	25	20	46	199	903	209	63	46
9	52	38	29	31	24	22	45	172	858	192	63	44
10	52	37	27	30	22	23	44	161	850	172	62	46
11	51	37	28	30	23	23	43	151	768	168	62	55
12	50	37	28	30	23	24	43	161	596	170	61	64
13	49	37	29	28	24	26	41	178	509	171	62	55
14	51	37	28	28	21	27	38	241	487	168	78	52
15	48	37	28	29	23	27	41	309	474	158	87	50
16	49	34	28	29	24	30	42	364	472	148	96	48
17	50	36	30	30	23	33	39	395	503	139	76	46
18	49	33	31	31	22	36	39	344	463	133	69	45
19	47	36	30	31	22	37	37	310	391	130	65	45
20	47	36	30	32	21	35	38	306	336	121	63	50
21	47	36	30	35	20	36	38	275	323	114	61	49
22	45	35	31	32	21	41	40	238	313	105	60	48
23	45	30	32	30	20	44	41	216	420	94	58	46
24	45	36	28	29	19	42	45	215	376	90	58	44
25	43	35	31	30	18	41	48	218	327	91	56	44
26	42	30	30	28	19	34	45	240	287	90	53	43
27	41	36	27	26	20	35	47	293	253	93	51	47
28	36	32	21	27	19	36	57	386	256	88	50	45
29	32	32	28	26	18	34	79	507	276	84	50	43
30	41	32	31	24	------	37	74	613	297	83	54	43
31	44	------	30	25	------	36	------	702	------	85	53	------
TOTAL	1,486	1,084	883	911	647	915	1,355	8,114	15,855	4,832	2,030	1,434
MEAN	47.9	36.1	28.5	29.4	22.3	29.5	45.2	262	529	156	65.5	47.8
MAX	54	43	32	35	28	44	79	702	903	288	96	64
MIN	32	30	21	24	18	18	37	68	253	83	50	43
CFSM	.42	.32	.25	.26	.20	.26	.40	2.30	4.64	1.37	.57	.42
IN.	.48	.35	.29	.30	.21	.30	.44	2.65	5.17	1.58	.66	.47
AC-FT	2,950	2,150	1,750	1,810	1,280	1,810	2,690	16,090	31,450	9,580	4,030	2,840

CAL YR 1971 TOTAL 50,350 MEAN 138 MAX 863 MIN 20 CFSM 1.21 IN 16.43 AC-FT 99,870
WTR YR 1972 TOTAL 39,546 MEAN 108 MAX 903 MIN 18 CFSM .95 IN 12.90 AC-FT 78,440

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-17	0200	3.63	415	6-23	1800	3.82	463
6- 8	0100	5.14	966				

NOTE.--No gage-height record Oct. 3 to Nov. 10, Dec. 16 to Feb. 4.

13120500 Big Lost River at Howell Ranch, near Chilly, Idaho

LOCATION.--Lat 43°59'54", long 114°01'12", in NE¼NW¼ sec.30, T.8 N., R.21 E., Custer County, on left bank at Howell Ranch, 2.1 miles downstream from Burnt Creek, 7.7 miles downstream from East Fork, 9 miles southwest of Chilly, and 21 miles northwest of Mackay.

DRAINAGE AREA.--450 sq mi. Mean altitude, 8,590 ft.

PERIOD OF RECORD.--April 1904 to November 1914, May 1920 to current year (no winter records 1904, 1906-14, 1920-48).

GAGE.--Water-stage recorder. Datum of gage is 6,621.95 ft above mean sea level. See WSP 1737 for history of changes prior to June 11, 1920.

AVERAGE DISCHARGE.--25 years (1904-5, 1948-72), 323 cfs (9.75 inches per year, 234,000 acre-ft per year); 15-year base period (1952-67), 311 cfs.

EXTREMES.--Current year: Maximum discharge, 3,230 cfs June 8 (gage height, 5.01 ft); minimum daily, 57 cfs Mar. 1.
Period of record: Maximum discharge, 4,420 cfs May 25, 1967 (gage height, 6.02 ft); minimum observed, 19 cfs Dec. 12, 1939 (discharge measurement).

REMARKS.--Records good except those for winter periods, which are poor. No regulation. Diversions above station for irrigation of about 3,000 acres (1966 determination). Hammerly ditch (capacity, about 20 cfs) diverts 0.2 mile downstream.

REVISIONS (WATER YEARS).--WSP 1287: Drainage area. WSP 1317: 1905.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.0	49	3.0	934
1.5	158	4.0	1,900
2.0	326	5.0	3,200
2.5	583		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	164	96	108	87	57	130	214	2,270	826	247	164
2	169	148	81	108	77	65	135	211	2,410	782	237	155
3	175	172	97	90	86	65	141	230	2,170	705	227	145
4	189	183	97	92	94	60	149	306	1,920	659	211	140
5	198	153	89	111	92	65	156	411	1,860	659	198	140
6	202	190	102	110	90	65	182	473	1,980	633	192	153
7	198	200	104	109	90	64	170	517	2,670	633	186	145
8	195	211	93	106	86	64	159	506	2,990	583	180	140
9	192	217	100	107	86	66	157	452	2,630	535	178	135
10	192	211	93	105	79	73	153	447	2,490	462	175	135
11	189	172	96	103	83	84	152	426	2,250	462	175	175
12	183	145	96	103	83	86	147	442	1,780	467	169	208
13	178	145	101	97	83	95	140	467	1,510	473	169	186
14	183	137	97	97	77	104	133	602	1,460	467	240	172
15	175	133	98	102	79	101	144	797	1,460	436	282	164
16	178	122	99	103	79	106	150	966	1,470	407	369	153
17	183	129	101	105	76	115	140	1,100	1,590	383	282	148
18	178	120	104	107	73	130	139	1,010	1,410	360	234	140
19	172	129	106	110	72	132	132	887	1,180	356	208	142
20	172	125	110	114	72	130	127	872	990	322	198	153
21	172	125	110	121	68	128	122	797	958	306	195	150
22	164	120	114	110	68	132	130	686	918	286	183	145
23	164	117	116	105	66	152	135	627	1,320	261	178	140
24	164	122	103	102	66	153	153	602	1,180	257	175	137
25	158	120	105	103	63	150	175	596	958	257	169	137
26	155	104	119	93	66	135	161	633	849	254	161	135
27	150	126	90	90	66	135	164	768	733	264	155	145
28	135	122	77	92	64	137	195	1,050	726	257	150	142
29	127	120	102	91	62	134	268	1,440	804	243	150	135
30	161	120	104	82	------	130	234	1,780	864	237	183	132
31	175	------	106	86	------	127	------	2,050	------	243	178	------
TOTAL	5,401	4,402	3,106	3,162	2,233	3,240	4,673	22,365	47,800	13,475	6,234	4,491
MEAN	174	147	100	102	77.0	105	156	721	1,593	435	201	150
MAX	202	217	119	121	94	153	268	2,050	2,990	826	369	208
MIN	127	104	77	82	62	57	122	211	726	237	150	132
AC-FT	10,710	8,730	6,160	6,270	4,430	6,430	9,270	44,360	94,810	26,730	12,370	8,910

CAL YR 1971 TOTAL 154,662 MEAN 424 MAX 2,640 MIN 74 AC-FT 306,800
WTR YR 1972 TOTAL 120,582 MEAN 329 MAX 2,990 MIN 57 AC-FT 239,200

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-17	0600	3.25	1,150	6-23	1900	3.65	1,540
6- 8	0300	5.01	3,230				

NOTE.--No gage-height record Nov. 15 to Apr. 21.

13126000 Mackay Reservoir near Mackay, Idaho

LOCATION.--Lat 43°57'05", long 113°40'28", in NW¼NE¼SW¼ sec.12, T.7 N., R.23 E., Custer County, on gate-control tower of dam on Big Lost River, 4 miles northwest of Mackay.

DRAINAGE AREA.--788 sq mi.

PERIOD OF RECORD.--January 1919 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,000 ft above mean sea level, Utah Construction Co. datum, or 6,000.4 ft above mean sea level. Prior to Oct. 15, 1959, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 45,340 acre-ft June 14 (gage height, 67.21 ft); minimum, 8,620 acre-ft Sept. 8 (gage height, 29.83 ft).
Period of record: Maximum contents, 45,910 acre-ft June 24, 25, 1971 (gage height, 67.62 ft); no available contents during periods in 1919-20, 1924, 1926, 1929, 1931-35; minimum gage height observed, 6.3 ft Aug. 5, 1934.

REMARKS.--Reservoir is formed by earth- and rock-fill dam, which was reconstructed in 1917-18; storage impounded by original dam not recorded. Crest of spillway was raised 5 ft in September 1956. Capacity is 44,370 acre-ft between gage heights 7.0 and 66.5 ft (crest of spillway). Dead storage reported to be about 125 acre-ft. Water is used for irrigation of about 33,000 acres in Big Lost River irrigation district. About 12,700 acres irrigated from Big Lost River and tributaries above reservoir by surface diversions, and about 10,200 acres irrigated by subirrigation. Considerable seepage around dam because of its porous foundation, but the greater part of this water returns to Big Lost River between reservoir and station below reservoir, near Mackay. Prior to Oct. 1, 1959, contents below 1,000 acre-ft may be in error at times as readings at gage were too low because of fall in outlet channel. Figures given herein represent usable contents.

COOPERATION.--Capacity table furnished by Water District 34.

Capacity table (gage height, in feet, and contents, in acre-feet)

36.0	12,740
40.0	15,800
50.0	24,680
60.0	35,900
68.0	46,440

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17,930	20,300	23,660	26,530	27,600	28,030	30,350	31,480	23,700	42,930	25,330	10,060
2	17,980	20,290	23,800	26,570	27,610	28,050	30,420	31,450	25,300	42,710	24,820	9,820
3	18,030	20,300	23,910	26,600	27,620	28,070	30,490	31,440	26,850	42,500	24,290	9,540
4	18,080	20,330	24,040	26,650	27,660	28,080	30,580	31,180	28,110	42,240	23,710	9,290
5	18,120	20,310	24,190	26,700	27,680	28,090	30,700	30,800	29,180	41,980	23,170	9,040
6	18,180	20,310	24,300	26,750	27,700	28,110	30,770	30,530	30,390	41,650	22,570	8,830
7	18,230	20,320	24,390	26,810	27,730	28,120	30,870	30,160	32,520	41,330	21,890	8,680
8	18,260	20,320	24,500	26,860	27,750	28,120	30,980	29,650	35,580	41,020	20,930	8,620
9	18,300	20,400	24,610	26,900	27,760	28,140	31,060	29,120	38,390	40,730	19,930	8,640
10	18,330	20,580	24,710	26,940	27,770	28,190	31,150	28,490	40,950	40,400	19,050	8,700
11	18,400	20,750	24,800	26,990	27,780	28,210	31,250	27,820	43,110	39,980	18,220	8,750
12	18,410	20,950	24,920	27,050	27,800	28,240	31,360	27,070	44,530	39,490	17,360	8,790
13	18,470	21,100	25,000	27,090	27,830	28,280	31,440	26,350	45,190	38,940	16,570	8,850
14	18,520	21,290	25,100	27,100	27,830	28,310	31,500	25,620	45,260	38,350	15,910	8,910
15	18,590	21,440	25,190	27,130	27,860	28,320	31,560	25,010	45,110	37,720	15,430	8,950
16	18,680	21,590	25,310	27,180	27,860	28,340	31,610	24,510	45,000	37,020	14,970	8,980
17	18,800	21,730	25,400	27,220	27,860	28,370	31,640	24,220	45,070	36,220	14,570	9,010
18	18,920	21,840	25,470	27,240	27,870	28,480	31,660	23,870	44,900	35,420	14,220	9,010
19	19,040	22,000	25,550	27,260	27,880	28,610	31,670	23,320	44,820	34,590	13,900	9,060
20	19,160	-	25,630	27,290	27,890	28,760	31,670	22,960	44,680	33,770	13,600	9,090
21	19,320	-	25,720	27,320	27,900	28,920	31,710	22,650	44,480	33,000	13,280	9,120
22	19,440	-	25,850	27,380	27,920	-	31,690	22,310	44,260	32,160	12,910	9,180
23	19,580	22,540	25,920	27,420	27,940	-	31,680	21,900	44,310	31,360	12,570	9,210
24	19,700	22,640	26,000	27,430	27,950	29,400	31,670	21,550	44,490	30,630	12,210	9,260
25	19,810	22,660	26,100	27,490	27,950	29,600	31,640	21,150	44,490	29,850	11,910	9,290
26	19,960	-	26,170	27,500	27,970	29,690	31,600	20,740	44,350	29,100	11,650	9,330
27	20,090	23,110	26,200	27,520	27,980	29,800	31,580	20,470	44,070	28,440	11,390	9,380
28	20,180	-	26,290	27,530	28,010	29,920	31,560	20,390	43,700	27,760	11,120	9,420
29	20,210	23,420	26,340	27,550	28,040	30,080	31,530	20,700	43,350	27,110	10,860	9,440
30	20,220	23,540	26,390	27,560	------	30,150	31,500	21,430	43,160	26,470	10,580	9,480
31	20,270	------	26,460	27,590	------	30,240	------	22,350	------	25,850	10,330	------
MAX	20,270	23,540	26,460	27,590	28,040	30,240	31,710	31,480	45,260	42,930	25,330	10,060
MIN	17,930	20,290	23,660	26,530	27,600	28,030	30,350	20,390	23,700	25,850	10,330	8,620
(†)	45.37	48.85	51.72	52.79	53.21	55.20	56.29	47.62	65.61	51.14	32.52	31.21
(‡)	+2,410	+3,270	+2,920	+1,130	+450	+2,200	+1,260	-9,150	+20,810	-17,310	-15,520	-850

CAL YR 1971..... ‡ -6,360
WTR YR 1972..... ‡ -8,380

† Gage height, in feet, at end of month.
‡ Change in contents, in acre-feet.

13127000 Big Lost River below Mackay Reservoir, near Mackay, Idaho

LOCATION.--Lat 43°56'20", long 113°38'50", in SW¼NE¼ sec.18, T.7 N., R.24 E., Custer County, on left bank 1 mile downstream from head of Sharp ditch, 1.5 miles downstream from Mackay Reservoir, and 2.5 miles northwest of Mackay.

DRAINAGE AREA.--813 sq mi.

PERIOD OF RECORD.--December 1903 to August 1906 and May 1912 to March 1915 (published as "near Mackay"), January 1919 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,946.39 ft above mean sea level. Nonrecording gage prior to May 12, 1912, and June 5, 1912, to Apr. 28, 1913, at sites within 1 mile upstream at different datums, May 12 to June 4, 1912, at site 1.5 miles upstream (above Sharp ditch) at different datum, Apr. 29, 1913, to Mar. 15, 1915, at site 1 mile downstream (below Streeter ditch) at different datum.

AVERAGE DISCHARGE.--56 years (1904-5, 1912-14, 1919-72), 298 cfs (215,900 acre-ft per year); 15-year base period (1952-67), 317 cfs.

EXTREMES.--Current year: Maximum discharge, 1,480 cfs June 18 (gage height, 4.25 ft); minimum daily, 159 cfs Nov. 10-17.
Period of record: Maximum discharge, 2,990 cfs June 10, 1921 (gage height, 5.79 ft); minimum, 16 cfs Oct. 27, 1967 (gage height, 1.11 ft).

REMARKS.--Records good. Flow completely regulated by Mackay Reservoir (see sta 13126000). Sharp ditch is only diversion between station and reservoir; about 12,700 acres of land are irrigated by diversions from river and tributaries above reservoir by surface diversions, and 10,200 acres irrigated by subirrigation. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1347: 1904-6.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.9	135	3.5	957
2.0	162	4.0	1,300
2.5	356	4.5	1,670
3.0	633		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	236	259	163	178	188	193	178	194	864	716	553	360
2	236	259	163	178	188	193	178	194	910	664	552	357
3	232	259	163	178	188	193	179	194	984	654	542	355
4	232	259	163	179	189	193	180	282	1,000	652	536	350
5	236	255	163	179	189	193	181	371	998	651	531	359
6	240	255	164	180	189	193	181	371	998	647	544	355
7	240	255	164	180	190	194	182	438	977	638	599	332
8	240	255	164	181	190	194	183	521	930	632	712	271
9	240	205	164	181	190	194	184	532	890	637	724	244
10	240	159	164	182	190	194	185	579	864	634	684	244
11	240	159	165	182	190	194	186	603	877	641	661	244
12	240	159	165	183	190	195	187	621	950	676	655	244
13	240	159	165	183	191	195	187	621	1,070	693	638	243
14	244	159	165	183	191	195	191	639	1,260	692	604	242
15	244	159	165	184	191	195	195	652	1,370	710	531	240
16	244	159	166	184	191	196	195	708	1,340	750	487	240
17	244	159	166	184	191	192	195	733	1,370	773	468	240
18	244	162	167	184	191	161	196	824	1,400	776	467	240
19	244	162	168	185	191	162	196	910	1,210	770	433	233
20	244	162	169	185	192	163	196	897	1,110	774	406	228
21	244	162	170	185	192	165	196	811	1,030	772	420	228
22	248	162	171	186	192	166	196	753	944	762	428	228
23	248	162	172	186	192	168	196	727	900	748	424	228
24	248	162	173	187	192	169	196	695	904	716	419	229
25	248	162	174	187	192	171	195	683	917	695	404	231
26	248	162	174	187	192	172	195	670	910	686	369	232
27	248	162	175	187	192	173	195	639	887	668	362	232
28	248	162	175	187	193	174	195	633	878	638	361	233
29	255	162	176	188	193	175	195	633	845	617	364	234
30	259	162	176	188	------	[illegible]	194	676	783	611	366	234
31	259	------	177	188	------		------	798	------	598	363	------
TOTAL	7,553	5,639	5,209	5,689	5,530	5,668	5,688	18,602	30,370	21,291	15,607	7,930
MEAN	244	188	168	184	191	183	190	600	1,012	687	503	264
MAX	259	259	177	188	193	196	196	910	1,400	776	724	360
MIN	232	159	163	178	188	161	178	194	783	598	361	228
AC-FT	14,980	11,180	10,330	11,280	10,970	11,240	11,280	36,900	60,240	42,230	30,960	15,730

CAL YR 1971 TOTAL 163,734 MEAN 449 MAX 2,180 MIN 120 AC-FT 324,800
WTR YR 1972 TOTAL 134,776 MEAN 368 MAX 1,400 MIN 159 AC-FT 267,300

NOTE.--No gage-height record Nov. 21 to Jan. 25.

13128900 Lower Cedar Creek above diversions, near Mackay, Idaho

LOCATION.--Lat 43°57'57", long 113°34'40", in NW¼SW¼ sec.2, T.7 N., R.24 E., Custer County, Challis National Forest, on right bank at abandoned powerplant site, approximately 1,000 ft upstream from the heading of Nielson diversion, and 3.9 miles northeast of Mackay.

DRAINAGE AREA.--8.26 sq mi.

PERIOD OF RECORD.--Water years 1963, 1964-66 (annual maximums only, published as Cedar Creek near Mackay and Cedar Creek above diversions, near Mackay, respectively), August 1966 to current year. Combination of discharge records for Clark ditch near Mackay and Cedar Creek (below powerplant) near Mackay for May 1920 to September 1922 (seasonal records only) is equivalent to this record.

GAGE.--Water-stage recorder. Altitude of gage is 6,800 ft (from topographic map). May 1, 1920, to Oct. 21, 1922, nonrecording gage at present site at different datums. Sept. 26, 1963, to Aug. 13, 1966, crest-stage gage at site 20 ft upstream at datum 9.32 ft higher.

AVERAGE DISCHARGE.--6 years, 19.8 cfs (32.55 inches per year, 14,350 acre-feet per year).

EXTREMES.--Current year: Maximum discharge, 256 cfs June 8 (gage height, 3.10 ft); minimum daily, 3.0 cfs Apr. 12-16, 22, 23.
Period of record: Maximum discharge, 297 cfs June 7, 1921 (gage height, 2.8 ft, datum then in use, Clark ditch reported dry). Minimum discharge observed, 0.4 cfs Nov. 21 to Dec. 1, 1921 (gage height, 0.18 ft), site and datum then in use).

REMARKS.--Records good. No regulation or diversion above station.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-9, May 26 to June 6; stage-discharge relation affected by ice Dec. 5, Jan. 1-3)

Oct. 1 to May 25				May 26 to Sept. 30			
1.3	1.6	1.8	26	1.3	10	2.0	70
1.4	3.2	2.0	42	1.5	23	2.4	124
1.5	7.0	2.4	84	1.7	39	2.9	211
1.6	12	3.0	172				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	10	6.6	6.6	5.6	7.0	3.9	3.9	121	72	24	14
2	12	10	7.0	6.2	5.6	7.0	3.9	3.5	132	69	23	13
3	12	9.7	7.0	6.4	5.6	7.0	3.5	4.7	114	61	21	13
4	14	9.7	6.6	6.4	5.9	6.6	3.5	9.2	96	61	21	13
5	15	9.2	6.6	6.6	6.2	6.6	3.9	14	99	61	21	12
6	16	9.7	7.0	6.6	6.6	6.2	3.5	16	105	60	20	12
7	16	9.7	7.0	6.6	7.0	5.8	3.5	14	154	61	20	11
8	16	9.7	7.0	6.5	7.0	5.8	3.5	11	198	57	20	11
9	16	9.7	7.0	6.5	7.0	5.5	3.2	11	187	55	19	11
10	17	9.2	7.5	6.4	7.0	5.5	3.2	10	160	47	19	11
11	17	9.2	7.5	6.2	7.0	5.1	3.2	10	120	49	19	11
12	16	9.2	7.0	6.0	6.6	4.3	3.0	10	90	51	19	11
13	16	9.2	7.5	6.0	6.6	4.3	3.0	14	77	53	19	11
14	14	9.2	7.5	6.0	6.6	4.3	3.0	24	72	52	22	11
15	14	9.2	7.0	6.0	6.6	4.3	3.0	32	85	46	28	11
16	14	9.2	7.0	6.0	6.6	4.7	3.0	35	83	43	27	11
17	14	8.6	6.6	6.0	6.6	5.8	3.2	38	87	43	24	10
18	14	8.6	7.0	6.2	6.6	6.2	3.2	26	78	41	23	10
19	14	9.2	7.0	6.4	6.6	5.1	3.2	22	62	40	21	11
20	13	9.2	7.0	6.4	6.6	4.7	3.2	20	53	34	19	11
21	13	9.2	7.0	6.4	6.6	4.7	3.2	17	55	28	17	11
22	12	8.6	7.0	6.4	6.6	5.1	3.0	14	58	27	16	11
23	12	8.6	7.5	6.4	6.6	6.6	3.0	12	92	26	16	11
24	12	8.6	7.5	6.2	6.6	6.2	3.5	12	94	26	14	11
25	12	8.1	7.0	6.2	6.6	5.8	3.5	12	69	27	14	11
26	11	8.1	7.0	6.2	6.6	5.5	3.2	14	58	27	14	10
27	11	7.5	7.0	6.0	6.6	5.1	3.2	31	54	25	14	10
28	12	7.0	7.0	5.8	7.5	5.1	5.1	57	61	24	14	10
29	11	7.0	7.0	5.6	7.0	4.7	7.0	85	70	26	14	10
30	11	7.0	7.0	5.6	------	4.3	4.7	95	72	25	14	10
31	11	------	7.0	5.6	------	3.9	------	115	------	24	14	------
TOTAL	421	267.1	218.4	192.4	190.6	168.8	106.0	792.3	2,856	1,341	590	334
MEAN	13.6	8.90	7.05	6.21	6.57	5.45	3.53	25.6	95.2	43.3	19.0	11.1
MAX	17	10	7.5	6.6	7.5	7.0	7.0	115	198	72	28	14
MIN	11	7.0	6.6	5.6	5.6	3.9	3.0	3.5	53	24	14	10
CFSM	1.65	1.08	.85	.75	.80	.66	.43	3.10	11.5	5.24	2.30	1.34
IN.	1.90	1.20	.98	.87	.86	.76	.48	3.57	12.86	6.04	2.66	1.50
AC-FT	835	530	433	382	378	335	210	1,570	5,660	2,660	1,170	662

CAL YR 1971 TOTAL 7,240.5 MEAN 19.8 MAX 140 MIN 2.0 CFSM 2.40 IN 32.61 AC-FT 14,360
WTR YR 1972 TOTAL 7,477.6 MEAN 20.4 MAX 198 MIN 3.0 CFSM 2.47 IN 33.68 AC-FT 14,830

13130900 Antelope Creek above Willow Creek, near Darlington, Idaho

LOCATION.--Lat 43°40'43", long 113°37'45", in NE¼SW¼NW¼ sec.17, T.4 N., R.24 E., Custer County, at Marcroft Ranch, 0.2 mile upstream from Willow Creek, and 14 miles southwest of Darlington.

DRAINAGE AREA.--93.4 sq mi. Mean altitude, 7,960 ft.

PERIOD OF RECORD.--May 1966 to current year. May 1913 to September 1916, May 1920 to September 1922 at site 4 miles downstream, published as "near Darlington;" records not equivalent owing to diversions and inflow.

GAGE.--Water-stage recorder. Altitude of gage is 6,240 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 81.7 cfs (11.88 inches per year, 59,190 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 384 cfs June 8 (gage height, 4.19 ft); minimum, 20 cfs Sept. 4, 5 (gage height, 1.67 ft).
Period of record: Maximum discharge, 829 cfs May 24, 1967 (gage height, 6.86 ft); minimum, 13 cfs Feb. 19, 20, Mar. 7, 1967 (gage height, 1.88 ft).

REMARKS.--Records good except those for period of no gage-height record, which are fair. Diversions above station for irrigation of about 800 acres.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.7	22	3.0	177
2.0	44	3.5	262
2.5	100	4.0	350

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	39	26	32	26	43	40	56	330	92	33	26
2	42	34	30	34	25	42	41	56	348	85	32	25
3	41	37	33	28	28	44	42	61	319	74	31	23
4	41	38	32	29	29	46	43	76	294	67	29	22
5	42	36	31	32	28	43	50	94	274	64	29	22
6	43	31	34	34	31	45	59	106	267	63	28	25
7	42	34	27	32	30	46	58	110	332	61	27	25
8	40	33	37	31	29	45	54	110	341	57	27	25
9	40	32	45	30	28	44	52	103	305	55	26	24
10	40	32	43	29	27	45	51	99	277	53	25	26
11	40	32	41	30	28	46	49	92	267	53	25	34
12	40	34	39	29	30	47	48	97	226	52	25	34
13	39	37	40	28	30	47	46	101	204	52	26	31
14	40	36	40	27	29	49	44	129	196	50	32	29
15	40	35	40	28	31	48	44	162	201	48	37	27
16	46	33	39	27	34	45	44	184	202	45	35	26
17	54	33	40	28	36	48	43	206	206	44	33	25
18	49	32	39	28	36	53	41	201	194	44	29	25
19	49	33	37	29	36	50	39	177	160	45	28	26
20	49	32	35	30	37	48	40	184	138	45	29	27
21	47	32	34	31	37	47	41	168	132	46	28	27
22	45	33	33	30	38	52	41	147	129	44	27	25
23	44	32	32	29	38	58	43	132	174	41	27	25
24	42	33	30	24	37	54	47	124	147	39	27	24
25	41	34	36	26	35	49	50	124	134	35	27	24
26	40	32	32	29	37	45	44	129	122	33	25	27
27	38	34	29	28	39	43	46	147	104	34	24	32
28	35	32	26	27	40	42	57	182	100	33	23	29
29	31	32	30	26	41	41	68	226	106	32	24	28
30	36	32	33	25	------	40	62	255	106	30	25	27
31	39	------	31	24	------	39	------	289	------	32	26	------
TOTAL	1,301	1,009	1,074	894	950	1,434	1,427	4,327	6,335	1,548	869	795
MEAN	42.0	33.6	34.6	28.8	32.8	46.3	47.6	140	211	49.9	28.0	26.5
MAX	54	39	45	34	41	58	68	289	348	92	37	34
MIN	31	31	26	24	25	39	39	56	100	30	23	22
CFSM	.45	.36	.37	.31	.35	.50	.51	1.50	2.26	.53	.30	.28
IN.	.52	.40	.43	.36	.38	.57	.57	1.72	2.52	.62	.35	.32
AC-FT	2,580	2,000	2,130	1,770	1,880	2,840	2,830	8,580	12,570	3,070	1,720	1,580

CAL YR 1971 TOTAL 36,895 MEAN 101 MAX 544 MIN 22 CFSM 1.08 IN 14.69 AC-FT 73,180
WTR YR 1972 TOTAL 21,963 MEAN 60.0 MAX 348 MIN 22 CFSM .64 IN 8.75 AC-FT 43,560

PEAK DISCHARGE (BASE, 220 CFS).--May 18 (0200) 220 cfs (3.25 ft); June 8 (0215) 384 cfs (4.19 ft).

NOTE.--No gage-height record Oct. 1 to Apr. 4.

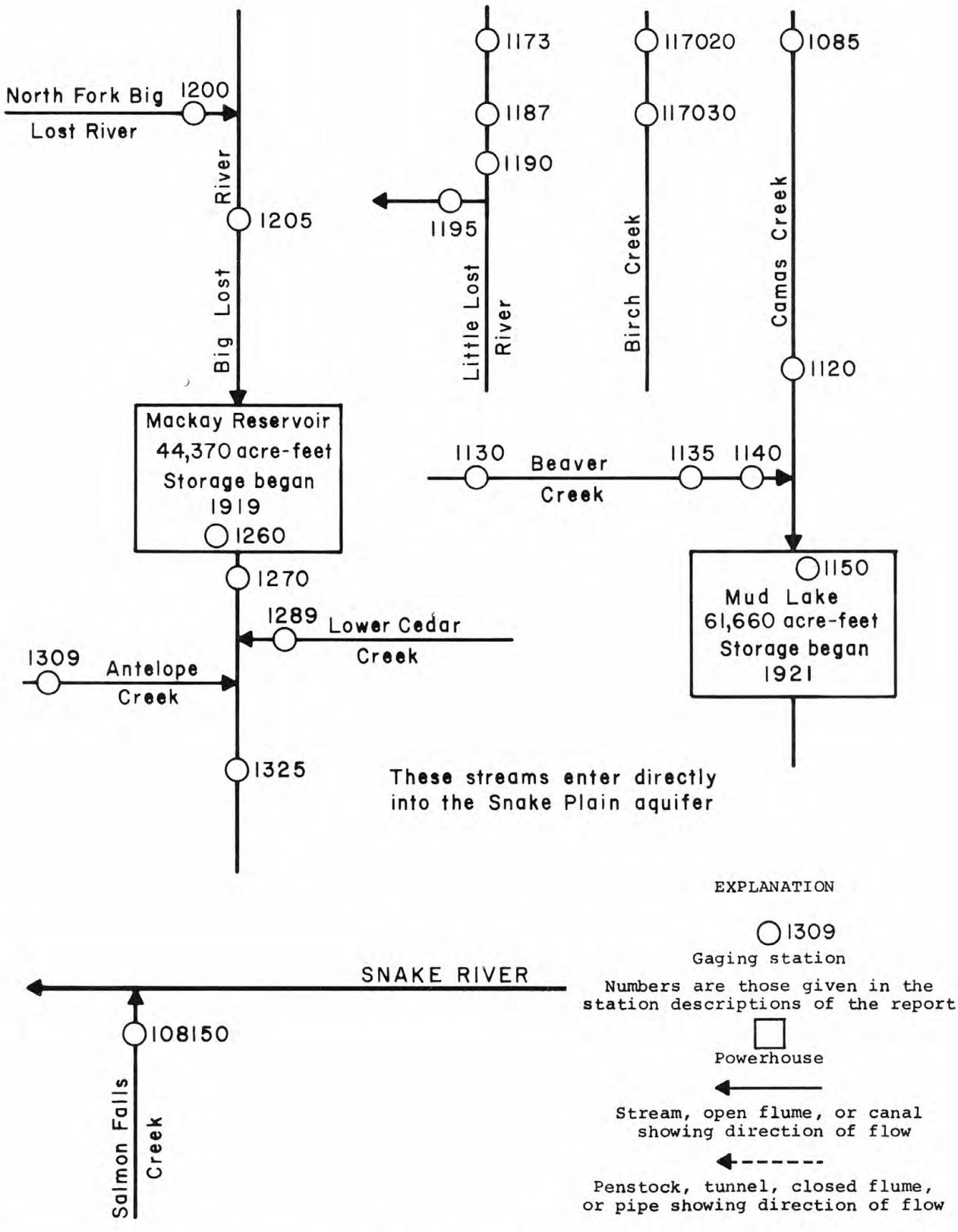


FIGURE 7. Schematic diagram showing gaging stations, diversions, and storage in Mud Lake-Lost River basins.

13132500 Big Lost River near Arco, Idaho

LOCATION.--Lat 43°35'00", long 113°16'10", in SW¼ sec.17, T.3 N., R.27 E., Butte County, on right bank 0.4 mile downstream from slough entering from left bank, and 4 miles southeast of Arco.

DRAINAGE AREA.--1,410 sq mi, approximately.

PERIOD OF RECORD.--August 1946 to September 1961, May 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,240 ft (by barometer). Prior to Oct. 14, 1952, at site 800 ft upstream at datum 3.08 ft higher.

AVERAGE DISCHARGE.--21 years, 99.3 cfs (71,940 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 311 cfs Nov. 2, 9 (gage height, 4.54 ft); maximum gage height, 6.97 ft Dec. 24 (backwater from ice); minimum discharge, 7.3 cfs May 19 (gage height, 2.38 ft).
Period of record: Maximum discharge, 1,890 cfs July 5, 1967 (gage height, 7.68 ft); no flow on many days. Flood of June 29, 1965, reached a stage of 8.03 ft, from floodmarks (discharge, 2,500 cfs).

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Mackay Reservoir (see sta 13126000). Station is below all large diversions for irrigation in Big Lost River valley. About 57,500 acres of land irrigated by diversions from river and tributaries and by ground-water withdrawals above station. About 10,200 acres irrigated by subirrigation above Mackay Reservoir. Records of chemical analysis for the water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 2-7, Dec. 9 to Feb. 15)

2.3	5.8	3.5	80
2.5	10.2	4.0	158
2.7	17.7	4.5	293
3.0	34	5.0	478

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	294	302	231	130	100	182	146	69	22	98	43	69
2	311	308	230	122	100	177	141	62	20	86	40	66
3	303	303	230	114	100	174	139	58	21	80	39	65
4	298	306	230	105	103	169	141	56	24	64	37	82
5	291	308	230	105	106	170	143	46	25	64	34	90
6	292	305	230	105	116	180	146	38	24	65	30	103
7	292	304	220	105	130	186	141	34	29	63	33	125
8	286	307	201	105	142	177	141	36	33	54	57	136
9	281	308	190	108	134	168	143	40	41	51	53	134
10	274	289	175	110	130	163	143	34	64	54	32	128
11	268	274	160	107	132	172	143	27	64	53	27	142
12	264	269	145	105	135	177	143	24	64	48	26	137
13	260	262	135	100	160	172	146	19	73	43	26	142
14	264	257	135	103	175	172	143	13	79	36	28	144
15	274	255	135	105	202	168	137	11	78	26	30	149
16	293	250	135	107	204	170	129	8.7	111	25	32	152
17	306	245	135	109	204	165	127	8.2	123	23	33	144
18	304	246	135	111	201	172	126	9.4	119	21	34	138
19	297	247	135	115	199	174	122	8.4	139	23	35	132
20	292	246	135	120	199	170	116	9.7	137	41	35	124
21	291	246	140	120	196	168	113	12	91	48	35	119
22	284	243	145	112	192	165	106	15	62	40	30	107
23	280	241	145	112	189	163	99	25	53	36	29	104
24	275	241	140	105	186	163	93	29	50	34	37	102
25	270	240	150	105	184	168	84	30	49	34	40	108
26	268	238	145	104	184	154	80	23	70	35	37	99
27	267	239	130	103	182	150	80	20	102	38	37	99
28	264	237	120	102	182	150	78	21	97	40	39	83
29	258	237	120	100	194	150	72	22	92	38	38	79
30	272	235	125	100	------	150	70	23	89	38	41	81
31	297	------	130	100	------	150	------	23	------	40	54	------
TOTAL	8,770	7,988	5,042	3,354	4,661	5,189	3,631	854.4	2,045	1,439	1,121	3,383
MEAN	283	266	163	108	161	167	121	27.6	68.2	46.4	36.2	113
MAX	311	308	231	130	204	186	146	69	139	98	57	152
MIN	258	235	120	100	100	150	70	8.2	20	21	26	65
AC-FT	17,400	15,840	10,000	6,650	9,250	10,290	7,200	1,690	4,060	2,850	2,220	6,710

CAL YR 1971 TOTAL 93,469.0 MEAN 256 MAX 1,190 MIN 44 AC-FT 185,400
WTR YR 1972 TOTAL 47,477.4 MEAN 130 MAX 311 MIN 8.2 AC-FT 94,170

13135000 Snake River below Lower Salmon Falls, near Hagerman, Idaho

LOCATION.--Lat 42°50'55", long 114°54'02", in NW¼ sec.2, T.7 S., R.13 E., Gooding County, on right bank 0.5 mile downstream from Lower Salmon Falls powerplant, 1 mile upstream from Big Wood River, 2.2 miles north of Hagerman, and at mile 572.4.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for October 1937, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 2,727.7 ft above mean sea level (stadia levels). Prior to Jan. 3, 1950, at site 340 ft upstream.

AVERAGE DISCHARGE.--35 years, 8,836 cfs (6,402,000 acre-ft per year); 15-year base period (1952-67), 8,092 cfs.

EXTREMES.--Current year: Maximum discharge, 29,900 cfs Apr. 16 (gage height, 15.42 ft); minimum, 1,740 cfs Aug. 14 (gage height, 3.82 ft); minimum daily, 5,450 cfs July 18.
Period of record: Maximum discharge, 31,200 cfs June 24, 1964 (gage height, 15.73 ft); minimum, probably less than 100 cfs Jan. 10, 11, 1950, when river was below intake pipes; minimum daily, 3,970 cfs July 8, 1951.

REMARKS.--Records excellent. Flow regulated by American Falls Reservoir 141.6 miles upstream (see sta 13076500). Diurnal fluctuation caused by hydroelectric plants upstream. At times, practically entire flow is diverted at Milner during irrigation seasons; only minor diversions below Milner. Most of the percolation upstream into the Snake Plain aquifer returns above station, including some water diverted from Big Wood River. Diversions above station for irrigation of about 2,330,000 acres of which about 665,000 acres are by withdrawals from ground water and about 83,000 acres are irrigated below station.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

6.3	5,370	10.0	13,800
7.0	6,760	12.0	19,300
8.0	8,930	15.0	28,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,100	19,400	18,000	16,000	15,400	14,900	22,200	16,100	6,710	10,300	6,310	7,160
2	12,200	19,100	17,800	16,100	14,400	14,400	22,700	16,400	5,820	7,510	6,300	7,180
3	14,300	19,100	17,500	15,900	15,000	13,900	23,100	16,200	6,190	6,910	6,270	7,220
4	14,100	19,800	16,900	14,900	13,300	14,900	24,000	15,600	6,370	6,170	6,350	7,260
5	14,200	19,400	16,800	13,100	12,600	14,900	22,500	14,400	7,020	6,190	6,330	7,360
6	14,600	18,900	16,100	14,500	14,300	16,100	21,300	13,200	10,900	6,190	6,360	7,880
7	14,900	19,500	15,600	14,600	14,700	16,200	20,800	14,900	12,100	6,200	6,300	7,670
8	14,900	19,300	16,100	14,700	14,900	16,300	21,500	12,800	14,100	5,880	6,310	7,820
9	15,900	19,100	16,000	13,800	14,400	16,400	22,600	11,600	17,800	5,860	6,190	7,770
10	16,400	18,300	16,100	13,200	15,200	16,600	23,100	12,300	19,700	5,980	6,210	7,820
11	16,500	16,900	15,800	12,800	15,900	17,000	22,800	11,100	20,300	5,920	6,180	8,050
12	16,800	16,000	16,700	12,900	16,400	16,900	24,600	9,530	20,900	6,010	6,390	8,310
13	16,800	14,500	15,400	14,800	16,400	15,700	24,700	10,900	21,100	5,990	6,680	8,330
14	16,000	13,600	15,600	13,200	16,300	12,400	25,100	12,100	19,400	5,820	6,790	8,610
15	16,200	13,600	14,700	14,900	16,800	10,400	25,900	13,400	18,600	5,910	6,710	8,060
16	16,500	15,800	13,300	16,000	16,500	9,620	26,200	11,500	17,800	6,810	6,820	8,490
17	16,900	17,600	15,000	15,300	16,100	9,880	25,700	10,100	17,200	5,650	6,750	8,400
18	16,500	17,800	15,700	17,100	16,400	10,400	24,100	9,190	16,500	5,450	6,850	8,280
19	17,000	19,000	15,400	21,000	16,100	10,500	23,400	9,090	14,700	5,920	6,950	8,130
20	17,600	19,100	15,000	17,500	15,900	12,200	22,700	10,000	13,800	6,060	6,900	8,130
21	18,600	18,200	15,100	15,400	15,700	11,700	21,800	13,700	13,500	6,120	7,060	8,240
22	18,000	17,400	15,400	16,800	16,000	14,700	20,600	15,900	14,500	6,150	7,000	7,880
23	18,000	17,300	15,700	17,500	15,200	15,100	20,300	14,000	13,600	6,210	7,040	8,030
24	18,100	17,400	15,800	17,300	16,100	17,200	20,600	13,300	12,300	6,220	6,930	7,950
25	17,800	17,400	15,400	17,100	16,100	19,600	19,700	15,200	11,500	6,140	6,990	8,080
26	17,800	17,100	15,300	16,900	16,800	19,800	18,800	16,200	10,300	6,080	7,020	8,360
27	18,300	17,600	14,700	15,500	16,700	19,900	18,900	15,300	12,700	6,140	7,020	8,050
28	18,800	17,100	14,100	15,900	17,300	21,100	17,400	15,500	14,400	6,130	7,060	9,040
29	19,300	17,800	13,300	15,500	17,100	23,500	16,100	14,700	14,500	6,160	7,090	7,880
30	19,400	17,900	15,500	15,300	------	23,300	15,300	10,800	12,000	6,210	7,030	8,890
31	19,800	------	15,700	15,500	------	22,200	------	8,600	------	6,360	7,040	------
TOTAL	512,300	531,000	485,500	481,000	454,000	487,700	658,500	403,610	416,310	194,650	207,230	240,330
MEAN	16,530	17,700	15,660	15,520	15,660	15,730	21,950	13,020	13,880	6,279	6,685	8,011
MAX	19,800	19,800	18,000	21,000	17,300	23,500	26,200	16,400	21,100	10,300	7,090	9,040
MIN	10,100	13,600	13,300	12,800	12,600	9,620	15,300	8,600	5,820	5,450	6,180	7,160
AC-FT	1,016M	1,053M	963,000	954,100	900,500	967,400	1,306M	800,600	825,800	386,100	411,000	476,700

CAL YR 1971 TOTAL 5,347,240 MEAN 14,650 MAX 28,500 MIN 5,930 AC-FT 10,610,000
WTR YR 1972 TOTAL 5,072,130 MEAN 13,860 MAX 26,200 MIN 5,450 AC-FT 10,060,000

M Expressed in thousands.

13139510 Big Wood River and Big Wood Slough combined discharge at Hailey, Idaho

LOCATION.--Lat 43°31'05", long 114°19'10", in NE¼SW¼ sec.9, T.2 N., R.18 E., Blaine County, is the location of two gaging stations at Hailey, used for this combined record.

DRAINAGE AREA.--640 sq mi, approximately. Mean altitude, 7,620 ft.

PERIOD OF RECORD.--July to December 1889, June 1915 to current year. Published as Wood River at Hailey in 1889.

GAGE.--Big Wood Slough: Water-stage recorder. Prior to Apr. 12, 1936, nonrecording gages at or near highway bridge at same datum.
Big Wood River: Water-stage recorder. Datum of gage is 5,295.42 ft above mean sea level, unadjusted. Nov. 16, 1934, to Oct. 15, 1970, at datum 2.00 ft higher. July to December 1889 nonrecording gage at nearby site at different datum. June 11, 1915, to Nov. 15, 1934, nonrecording gages at bridge 35 ft upstream at different datum. Nov. 10, 1971, to Sept. 30, 1972, nonrecording gages at different sites at same datum.

AVERAGE DISCHARGE.--57 years, 445 cfs (322,400 acre-ft per year); 15-year base period (1952-67), 462 cfs.

EXTREMES (Combined flow).--Current year: Maximum daily discharge, 4,400 cfs June 10; minimum daily, 136 cfs Dec. 8.
Period of record: Maximum daily discharge, 4,520 cfs May 25, 1958; minimum daily, 15 cfs Dec. 27, 1931.
(River only).--Current year: Maximum daily discharge, 4,390 cfs June 10; minimum daily, 134 cfs Dec. 8.
Period of record: Maximum discharge, 4,790 cfs May 25, 1967; maximum gage height, 10.66 ft, present datum, June 12, 1921; no flow Sept. 15-23, Nov. 20, 22, 23, 1931, Oct. 25, 1937.

REMARKS.--Diversions above stations for irrigation of about 10,000 acres (1966 determination) of which about 1,200 acres are below stations. Storage above stations is negligible.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	363	291	211	222	206	228	330	596	3,390	1,160	378	253
2	354	265	215	194	203	250	339	596	3,780	1,160	376	253
3	349	273	250	197	206	247	349	621	3,710	1,040	363	251
4	349	286	206	194	212	234	376	750	3,300	1,010	348	250
5	345	277	232	212	215	250	417	930	3,250	922	362	241
6	354	242	250	225	211	267	486	1,020	3,240	888	356	276
7	359	251	228	225	207	231	495	1,040	3,520	885	352	260
8	359	277	136	218	203	228	486	1,090	4,330	864	384	257
9	354	265	157	223	200	244	475	1,030	4,070	824	363	251
10	345	265	162	229	189	280	464	975	4,400	784	331	267
11	340	272	170	234	194	284	443	939	3,860	739	327	286
12	336	286	176	222	202	291	438	945	3,440	704	337	321
13	336	282	186	218	204	298	430	999	2,680	684	358	301
14	334	290	189	200	204	316	388	1,170	2,450	689	381	283
15	340	272	192	212	206	323	396	1,340	2,440	654	386	279
16	334	248	197	215	206	337	406	1,580	2,430	630	398	266
17	357	245	209	219	202	380	401	1,690	2,580	606	373	262
18	343	242	209	222	206	409	388	1,580	2,460	583	378	259
19	326	252	199	225	202	425	388	1,350	2,160	553	323	241
20	322	252	189	218	206	421	384	1,400	1,940	527	315	239
21	316	260	209	225	211	417	388	1,420	1,560	519	308	244
22	308	258	215	228	215	433	405	1,240	1,540	518	307	247
23	307	245	206	232	215	495	428	1,160	1,550	512	289	265
24	309	255	215	212	212	499	451	1,070	1,470	508	277	265
25	305	262	222	200	192	464	495	1,060	1,340	457	283	265
26	296	266	201	215	206	411	486	1,070	1,200	416	280	266
27	301	262	180	194	222	357	499	1,170	1,090	437	257	287
28	293	259	194	197	262	361	577	1,440	1,060	428	263	302
29	253	256	212	197	270	345	606	2,050	1,120	395	253	288
30	278	243	209	200	------	330	601	2,750	1,230	387	269	285
31	291	------	209	203	------	330	------	3,100	------	386	263	------
TOTAL	10,156	7,899	6,235	6,627	6,089	10,385	13,215	39,171	76,590	20,869	10,238	8,010
MEAN	328	263	201	214	210	335	441	1,264	2,553	673	330	267
MAX	363	291	250	234	270	499	606	3,100	4,400	1,160	398	321
MIN	253	242	136	194	189	228	330	596	1,060	386	253	239
AC-FT	20,140	15,670	12,370	13,140	12,080	20,600	26,210	77,700	151,900	41,390	20,310	15,890

CAL YR 1971 TOTAL 263,795 MEAN 723 MAX 3,230 MIN 136 AC-FT 523,200
WTR YR 1972 TOTAL 215,484 MEAN 589 MAX 4,400 MIN 136 AC-FT 427,400

13141000 Big Wood River near Bellevue, Idaho

LOCATION.--Lat 43°19'40", long 114°20'25", in NW¼NE¼ sec.20, T.1 S., R.18 E., Blaine County, on right bank at downstream end of Mahoney Flat, 1.5 miles upstream from maximum flow line of Magic Reservoir, 2.8 miles upstream from Camas Creek, 10.5 miles southwest of Bellevue, and at mile 65.7.

DRAINAGE AREA.--824 sq mi.

PERIOD OF RECORD.--July 1911 to current year (no winter records prior to October 1943 except water years 1916, 1921-22, 1940-41).

GAGE.--Water-stage recorder. Altitude of gage is 4,800 ft (from topographic map). Prior to July 8, 1921, at site 0.1 mile downstream at different datum. July 8, 1921, to Oct. 5, 1954, at site 0.2 mile upstream at different datum. Oct. 6, 1954, to Oct. 25, 1965, at site 1 mile upstream at different datum.

AVERAGE DISCHARGE.--34 years (1915-16, 1921-22, 1939-41, 1942-72), 305 cfs (221,000 acre-ft per year); 15-year base period (1952-67), 280 cfs.

EXTREMES.--Current year: Maximum discharge, 3,090 cfs June 7, 9 (gage height, 5.63 ft); minimum, 46 cfs Feb. 14. Period of record: Maximum discharge, 4,130 cfs May 25, 1956; maximum gage height, 6.43 ft May 12, 1958, site and datum then in use; minimum discharge recorded, 7 cfs Apr. 14, 1932 (gage height, 1.10 ft, site and datum then in use).

REMARKS.--Records fair. Diversions above station for irrigation of about 21,800 acres of which about 400 acres are by withdrawals from ground water (1966 determination). Storage above station is negligible. Records of chemical analysis for the water year 1972 are published in Part 2 of this report.

COOPERATION.--Three discharge measurements furnished by Water District 37 .

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	245	248	186	151	108	241	303	506	1,990	682	114	102
2	227	239	161	167	111	260	305	488	1,990	645	113	103
3	226	241	168	156	170	329	307	471	1,840	624	111	101
4	219	249	162	149	130	295	327	494	1,820	569	118	100
5	214	249	164	119	66	287	332	575	2,050	531	118	107
6	211	236	177	133	65	303	372	603	2,000	512	119	116
7	217	231	158	139	65	351	393	660	2,160	488	113	106
8	213	228	145	139	63	307	392	682	2,340	453	112	102
9	208	231	137	126	65	325	385	626	2,630	388	109	99
10	203	230	140	122	79	376	390	610	2,590	351	110	98
11	205	228	138	108	82	426	392	582	2,730	278	110	112
12	211	241	135	105	65	477	405	575	2,180	234	110	113
13	216	253	119	127	61	603	389	550	1,960	222	113	108
14	212	250	114	140	65	569	362	603	1,760	200	122	107
15	218	236	101	103	63	494	359	650	1,480	197	130	105
16	219	231	115	106	61	494	361	696	1,430	197	184	103
17	228	225	98	91	61	482	366	792	1,510	207	147	100
18	232	219	97	96	67	537	358	904	1,400	219	135	98
19	246	214	94	110	108	459	354	868	1,250	224	130	100
20	242	217	87	113	146	426	351	860	1,190	220	130	98
21	233	219	90	133	149	385	347	851	1,100	225	131	96
22	232	217	100	158	146	371	351	826	1,040	214	118	96
23	231	209	117	156	146	389	356	792	1,040	185	113	96
24	225	210	122	149	151	388	376	776	1,030	176	113	97
25	221	209	147	139	154	365	426	768	932	154	113	99
26	222	207	180	147	144	359	442	752	834	142	113	107
27	220	209	179	142	149	344	477	752	792	139	110	129
28	245	209	151	137	197	337	500	784	752	133	108	121
29	225	207	162	198	256	324	550	942	728	130	111	122
30	235	198	155	123	------	311	525	1,450	712	127	110	131
31	247	------	147	156	------	303	------	1,740	------	125	102	------
TOTAL	6,948	6,790	4,246	4,138	3,193	11,917	11,553	23,228	47,260	9,191	3,690	3,172
MEAN	224	226	137	133	110	384	385	749	1,575	296	119	106
MAX	247	253	186	198	256	603	550	1,740	2,730	682	184	131
MIN	203	198	87	91	61	241	303	471	712	125	102	96
AC-FT	13,780	13,470	8,420	8,210	6,330	23,640	22,920	46,070	93,740	18,230	7,320	6,290

CAL YR 1971 TOTAL 209,896 MEAN 575 MAX 2,820 MIN 63 AC-FT 416,300
WTR YR 1972 TOTAL 135,326 MEAN 370 MAX 2,730 MIN 61 AC-FT 268,400

13141500 Camas Creek near Blaine, Idaho

LOCATION.--Lat 43°19'59", long 114°32'27", in NW¼SE¼ sec.15, T.1 S., R.16 E., Camas County, on left bank 0.2 mile north of Macon siding on Hill City branch of Union Pacific Railroad, 0.2 mile downstream from Willow Creek, 2.6 miles upstream from maximum flow line of Magic Reservoir, 4 miles southeast of Blaine, and at mile 7.1.

DRAINAGE AREA.--648 sq mi. Mean altitude, 5,600 ft.

PERIOD OF RECORD.--May 1912 to September 1921 and April 1923 to October 1925 (fragmentary), March 1926 to September 1944 (no winter records), October 1944 to current year. Published as Malad River near Blaine 1912-14.

GAGE.--Water-stage recorder. Altitude of gage is 4,870 ft (by barometer). Prior to June 22, 1966, at site 600 ft downstream at datum 0.66 ft lower.

AVERAGE DISCHARGE.--28 years, 190 cfs (137,700 acre-ft per year); 15-year base period (1952-67), 165 cfs.

EXTREMES.--Current year: Maximum discharge, 3,680 cfs Mar. 23 (gage height, 11.92 ft); minimum, 7.6 cfs July 31 (gage height, 3.18 ft).
Period of record: Maximum discharge recorded, 9,780 cfs Apr. 8, 1943; maximum gage height, 16.2 ft (site and datum then in use) Feb. 3, 1963, from floodmark; minimum discharge recorded, 1.2 cfs Aug. 11, 12, 1959; minimum gage height, 1.04 ft (site and datum then in use) Aug. 23, 25, 1963.

REMARKS.--Records good except those for April, which are fair. Flow regulated by Mormon Reservoir on McKinney Creek (capacity, 31,240 acre-ft) and three minor reservoirs (combined capacity, 580 acre-ft). Diversions above station for irrigation of about 9,400 acres of which about 1,500 acres are by withdrawals from ground water (1966 determination). Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

REVISIONS.--WSP 1217: Drainage area.

COOPERATION.--One discharge measurement furnished by Water District 37.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

3.2	8.2	4.5	182	8.0	1,580
3.5	24	5.0	341	10.0	2,620
3.7	41	6.0	710	12.0	3,760
4.0	77				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	38	37	39	37	82	810	593	391	77	14	9.4
2	11	36	39	40	37	88	840	542	391	71	17	9.4
3	11	38	43	34	38	106	910	530	388	67	14	9.0
4	11	38	37	32	38	106	940	542	384	71	11	9.0
5	11	43	41	35	39	134	1,020	575	366	71	10	9.4
6	12	42	45	37	40	179	1,220	601	359	69	10	10
7	13	40	37	39	40	210	1,330	616	366	66	10	9.4
8	14	39	35	39	40	266	1,210	627	399	60	10	9.2
9	16	41	40	37	38	316	1,120	619	388	53	10	9.0
10	18	45	40	34	36	359	1,050	608	399	49	10	9.0
11	20	47	38	36	37	442	990	571	391	47	10	10
12	22	49	39	37	39	616	1,030	545	370	44	10	10
13	23	53	37	35	40	869	890	527	348	39	10	9.8
14	32	56	37	34	37	1,330	800	516	320	34	10	9.7
15	31	54	37	35	37	2,360	770	512	282	28	11	9.5
16	35	49	37	36	39	2,640	790	512	256	24	13	9.3
17	37	45	39	37	38	2,920	750	519	253	18	12	9.2
18	36	42	38	38	39	3,020	700	519	219	15	12	8.9
19	37	40	36	40	38	3,080	668	505	196	12	11	8.6
20	37	42	39	41	39	3,000	630	493	179	12	11	8.6
21	39	47	40	48	40	3,090	630	512	169	12	11	9.1
22	39	49	41	48	42	3,290	616	527	159	12	10	9.1
23	37	44	43	41	43	3,490	638	508	144	12	10	9.1
24	37	44	44	34	43	2,950	642	453	128	11	10	9.1
25	37	46	46	37	43	2,250	597	406	137	9.5	10	10
26	37	46	45	41	49	1,620	657	377	126	9.9	10	11
27	37	44	37	37	57	1,130	627	359	111	8.6	10	14
28	37	40	37	37	78	927	597	352	102	9.9	10	14
29	35	44	41	33	90	880	590	355	93	12	10	13
30	36	47	40	33	------	830	604	370	90	12	9.6	13
31	36	------	38	36	------	790	------	377	------	9.5	9.4	------
TOTAL	846	1,328	1,223	1,160	1,251	43,370	24,666	15,668	7,904	1,045.4	336.0	297.8
MEAN	27.3	44.3	39.5	37.4	43.1	1,399	822	505	263	33.7	10.8	9.93
MAX	39	56	46	48	90	3,490	1,330	627	399	77	17	14
MIN	11	36	35	32	36	82	590	352	90	8.6	9.4	8.6
AC-FT	1,680	2,630	2,430	2,300	2,480	86,020	48,930	31,080	15,680	2,070	666	591

CAL YR 1971 TOTAL 157,814.9 MEAN 432 MAX 5,800 MIN 8.0 AC-FT 313,000
WTR YR 1972 TOTAL 99,095.2 MEAN 271 MAX 3,490 MIN 8.6 AC-FT 196,600

PEAK DISCHARGES (BASE, 500 CFS).--Mar. 23 (1800) 3,680 cfs (11.92 ft); Apr. 7 (unknown) 1,560 cfs (8.00 ft).

13142000 Magic Reservoir near Richfield, Idaho

LOCATION.--Lat 43°15'19", long 114°21'25", in SE¼NE¼NE¼ sec.18, T.2 S., R.18 E., Blaine County, at dam on Big Wood River, 18 miles northwest of Richfield, and at mile 60.0.

DRAINAGE AREA.--1,600 sq mi, approximately.

PERIOD OF RECORD.--February 1909 to current year. Monthend contents only for some periods, published in WSP 1317.

GAGE.--Nonrecording gage. Datum of gage is 4,800 ft above datum of Idaho Irrigation Co., which is reported to be about 137 ft below mean sea level. Datum of gages prior to Oct. 1, 1942, was 4,800 ft lower.

EXTREMES.--Current year: Maximum contents observed, 193,100 acre-ft June 4, 9, 10, 11 (gage height, 135.4 ft); minimum observed, 79,200 acre-ft Sept. 30 (gage height, 96.1 ft).
Period of record: Maximum contents observed, 195,400 acre-ft May 11-13, 1969 (gage height, 136.0 ft); no storage for several days in 1909, 1919-20, 1924, 1928, 1935.

REMARKS.--Reservoir is formed by earth- and rock-fill dam, completed in 1909, and raised 5 ft in 1917. Capacity is 191,500 acre-ft between gage heights 21.4 ft (2.9 ft above bottom of outlet pipe) and 135.0 ft (top of 5-ft flashboards). Dead storage unknown. Water is used for irrigation of about 68,000 acres of land in Carey Act project of Big Wood Canal Co. Diversions above station for irrigation of about 32,600 acres of which about 1,900 acres are by withdrawals from ground water (1966 determination). Figures given herein represent usable contents including bank storage. Gage read in the morning.

COOPERATION.--Gage readings and capacity table furnished by Water District 37.

REVISIONS.--WSP 1217: Drainage area.

Capacity table (gage height, in feet, and contents, in acre-feet)

96.0	79,000
100.0	87,700
120.0	139,500
136.0	195,400

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107,000	121,100	135,400	147,800	158,600	155,600	158,600	192,300	192,300	191,100	153,600	109,300
2	106,500	121,900	135,700	148,100	158,600	153,600	161,000	192,300	192,300	190,700	152,000	108,000
3	106,000	122,500	136,200	148,500	158,900	151,700	164,100	191,900	192,700	190,300	150,400	106,800
4	105,300	123,300	136,800	148,800	159,300	150,100	166,900	191,500	193,100	189,900	148,500	105,500
5	105,800	123,800	137,400	149,100	159,300	148,100	169,400	191,900	192,700	189,500	146,900	104,000
6	106,500	124,400	137,700	149,400	159,600	146,200	171,500	192,300	192,300	189,200	145,300	103,000
7	107,000	124,900	138,300	149,700	160,000	144,400	174,100	192,300	192,300	188,400	143,800	101,800
8	107,800	125,500	138,600	150,100	160,000	142,800	176,600	192,300	192,300	187,600	141,900	100,600
9	108,300	126,000	139,200	150,400	160,300	140,100	179,200	192,300	193,100	186,400	140,400	99,400
10	108,800	126,600	139,800	150,700	160,600	137,400	181,500	192,300	193,100	185,300	138,900	98,200
11	109,300	127,200	140,100	151,000	160,600	135,400	183,800	191,900	193,100	184,500	137,100	97,000
12	109,800	127,700	140,700	151,300	161,000	133,300	185,700	191,900	192,700	183,400	135,700	95,800
13	110,300	128,300	141,000	151,700	161,300	131,600	188,000	191,500	191,900	181,900	133,900	94,900
14	111,100	128,500	141,300	152,000	161,300	131,400	189,900	191,500	191,100	180,400	132,500	93,700
15	111,600	128,500	141,600	152,300	161,700	131,600	191,500	191,900	191,100	179,200	130,800	92,800
16	112,100	128,300	141,900	152,600	161,700	133,300	191,900	192,300	192,300	177,700	129,400	91,800
17	112,600	128,000	142,200	152,600	162,000	135,700	191,900	192,300	192,700	176,300	128,300	90,500
18	113,200	128,000	142,500	153,000	162,400	138,300	191,900	192,300	192,700	174,400	126,900	89,800
19	113,700	128,500	142,800	153,300	162,700	141,600	191,500	192,300	192,700	173,000	125,500	88,900
20	114,200	129,100	143,100	153,600	162,700	144,400	191,500	192,300	192,300	171,500	125,500	88,000
21	115,000	129,700	143,500	154,300	163,000	147,200	191,500	192,300	191,900	170,400	123,000	87,100
22	115,500	130,200	144,100	154,600	162,400	150,400	191,500	192,300	192,300	169,000	121,700	86,000
23	116,000	130,800	144,400	154,900	162,000	154,300	191,500	191,900	192,700	167,600	120,600	85,100
24	116,600	131,400	144,700	155,600	161,300	157,900	191,500	191,500	192,700	165,800	119,200	84,200
25	117,100	131,900	145,000	155,900	161,000	160,600	191,500	191,100	192,700	164,400	117,900	83,300
26	117,600	132,500	145,300	156,600	160,300	161,000	191,500	191,100	192,700	163,000	116,600	82,500
27	118,200	133,100	145,900	156,900	160,000	160,600	191,500	191,100	192,300	161,300	115,000	81,600
28	118,700	133,600	146,200	157,300	159,600	159,600	191,900	191,100	191,900	160,000	114,200	80,700
29	119,200	134,200	146,600	157,600	157,600	157,900	191,900	191,500	191,500	158,300	112,900	80,100
30	120,000	134,800	147,200	157,900	------	156,600	192,300	192,700	191,500	156,600	111,900	79,200
31	120,600	------	147,500	158,300	------	157,300	------	192,700	------	154,900	110,600	------
MAX	120,600	134,800	147,500	158,300	163,000	161,000	192,300	192,700	193,100	191,100	153,600	109,300
MIN	105,300	121,100	135,400	147,800	157,600	131,400	158,600	191,100	191,100	154,900	110,600	79,200
(†)	113.3	118.4	122.6	125.9	125.7	125.6	135.2	135.3	135.0	124.9	109.5	96.1
(‡)	+13,100	+14,200	+12,700	+10,800	-700	-300	+35,000	+400	-1,200	-36,600	-44,300	-31,400

CAL YR 1971..... ‡ +31,500
WTR YR 1972..... ‡ -28,300

† Gage-height, in feet, at end of month.
‡ Change in contents, in acre-feet.

13142500 Big Wood River below Magic Dam, near Richfield, Idaho

LOCATION.--Lat 43°15'00", long 114°21'30", in NE¼SE¼ sec.18, T.2 S., R.18 E., Blaine County, Bureau of Land Management lands, on right bank 0.5 mile downstream from Magic Dam, 18 miles northwest of Richfield, and at mile 59.5.

DRAINAGE AREA.--1,600 sq mi, approximately.

PERIOD OF RECORD.--April 1911 to current year (no winter records 1912).

GAGE.--Water-stage recorder. Altitude of gage is 4,665 ft (by barometer).

AVERAGE DISCHARGE.--60 years (1912-72), 459 cfs (332,500 acre-ft per year); 15-year base period (1952-67), 480 cfs.

EXTREMES.--Current year: Maximum discharge, 3,580 cfs June 8 (gage height, 7.75 ft); minimum, 6.1 cfs Sept. 30. Period of record: Maximum discharge, 10,000 cfs Apr. 26, 1952 (gage height, 15.68 ft, from floodmark); no flow Feb. 3, 1915.

REMARKS.--Records good. Flow regulated by Magic Reservoir 0.5 mile upstream (see sta 13142000), Twin Lakes Reservoir on tributary of Camas Creek (capacity, 31,240 acre-ft), and smaller reservoirs having combined capacity of about 680 acre-ft. Diversions above station for irrigation of about 32,600 acres of which about 1,900 acres are by withdrawals from ground water (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.8	4.8	3.0	187	6.0	2,040
2.0	15	3.5	359	7.0	2,950
2.2	33	4.0	607	8.0	3,920
2.5	74	5.0	1,260		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	573	7.9	7.8	8.5	10	1,370	485	1,110	2,460	961	918	717
2	569	7.7	8.0	8.0	9.6	1,360	339	1,150	2,500	950	913	740
3	569	7.7	8.0	8.4	9.6	1,360	343	1,120	2,580	968	909	750
4	368	7.4	7.8	8.4	9.8	1,360	343	960	2,590	975	919	748
5	8.2	7.7	8.1	8.6	10	1,350	347	971	2,510	971	938	741
6	8.2	7.9	7.6	8.6	10	1,350	347	1,240	2,420	966	934	736
7	8.2	7.8	7.9	8.7	10	1,340	347	1,260	2,410	966	928	733
8	8.2	7.9	7.9	8.6	11	1,690	351	1,350	2,790	980	931	711
9	8.2	7.9	8.4	8.4	11	2,010	351	1,350	3,450	986	928	702
10	8.6	8.0	8.5	8.1	11	2,000	355	1,310	3,400	977	925	701
11	8.6	8.1	8.3	8.5	11	1,990	359	1,250	3,350	968	923	699
12	8.6	8.0	8.4	8.1	12	1,980	363	1,210	3,090	971	920	665
13	8.6	72	8.3	8.6	11	1,980	363	1,040	2,500	972	920	653
14	9.0	351	8.5	8.7	11	1,980	363	976	1,980	966	919	642
15	9.0	408	8.2	8.5	11	1,980	846	1,020	1,360	979	916	618
16	9.0	407	8.1	8.5	12	1,990	1,170	1,230	1,310	988	866	598
17	9.0	407	8.3	8.7	12	1,990	1,160	1,400	1,610	984	835	605
18	9.0	205	7.9	8.6	12	2,000	1,110	1,430	1,710	980	801	576
19	9.0	7.3	8.0	9.7	12	2,010	1,020	1,420	1,570	976	781	568
20	8.6	7.3	8.1	9.9	13	2,020	985	1,390	1,360	971	779	567
21	8.6	7.3	8.0	9.9	187	2,030	1,010	1,410	1,180	965	777	565
22	8.6	7.3	8.5	10	485	2,040	999	1,490	1,070	962	776	563
23	8.4	7.3	8.0	9.6	485	2,050	958	1,450	1,130	956	778	561
24	8.4	7.4	8.1	9.4	485	2,070	999	1,350	1,170	952	776	560
25	8.4	7.4	8.2	9.7	485	2,070	1,030	1,090	1,180	954	744	558
26	8.0	7.7	7.9	10	485	2,080	977	998	1,140	951	727	558
27	7.8	7.2	7.8	10	485	2,080	977	979	1,060	947	725	557
28	8.0	8.0	8.0	9.9	965	2,070	987	981	988	943	724	535
29	7.9	8.1	8.7	9.9	1,370	2,070	1,060	1,050	937	937	722	522
30	8.0	8.2	8.5	9.6	------	1,490	1,050	1,640	935	932	720	300
31	8.0	------	8.6	9.7	------	688	------	2,320	------	926	719	------
TOTAL	2,307.1	2,034.5	252.4	279.8	5,651.0	55,848	21,394	38,945	57,740	29,880	26,091	18,749
MEAN	74.4	67.8	8.14	9.03	195	1,802	713	1,256	1,925	964	842	625
MAX	573	408	8.7	10	1,370	2,080	1,170	2,320	3,450	988	938	750
MIN	7.8	7.2	7.6	8.0	9.6	688	339	960	935	926	719	300
AC-FT	4,580	4,040	501	555	11,210	110,800	42,440	77,250	114,500	59,270	51,750	37,190

CAL YR 1971 TOTAL 363,210.1 MEAN 995 MAX 4,590 MIN 7.2 AC-FT 720,400
WTR YR 1972 TOTAL 259,171.8 MEAN 708 MAX 3,450 MIN 7.2 AC-FT 514,100

13147900 Little Wood River above High Five Creek, near Carey, Idaho

LOCATION.--Lat 43°29'30", long 114°03'30", about center of sec.22, T.2 N., R.20 E., Blaine County, on left bank above maximum flow line of Little Wood Reservoir, 0.4 mile downstream from Copper Creek, 0.6 mile upstream from High Five Creek, 13.5 miles northwest of Carey, and at mile 73.0.

DRAINAGE AREA.--248 sq mi. Mean altitude, 7,220 ft.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,320 ft (by barometer).

AVERAGE DISCHARGE.--14 years, 159 cfs (115,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 679 cfs May 8 (gage height, 3.96 ft); minimum, 34 cfs Feb. 25 (gage height, 1.30 ft).
Period of record: Maximum discharge, 2,480 cfs Apr. 22, 1969 (gage height, 7.01 ft); minimum, 16 cfs Aug. 20, 1961 (gage height, 1.38 ft); minimum gage height, 1.19 ft Jan. 28, 1970.

REMARKS.--Records good except those for December and January, which are fair. Diversions above station for irrigation of about 1,300 acres (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 8-23, Dec. 25 to Jan. 7, Jan. 13-18, Jan. 29 to Feb. 5, Feb. 9-16)

1.4	45	2.5	219
1.7	80	3.0	340
2.0	124	4.0	695

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	90	55	60	58	77	160	195	569	186	61	49
2	91	80	67	61	54	81	170	196	578	178	60	47
3	88	86	72	58	61	86	174	199	538	162	58	46
4	88	90	69	56	64	76	182	222	483	153	57	45
5	90	86	68	66	62	79	198	268	454	149	56	47
6	92	75	72	72	63	92	235	296	447	144	53	52
7	90	84	54	69	61	92	222	303	610	138	53	49
8	87	82	70	65	59	89	203	296	601	131	52	47
9	87	79	66	63	56	100	194	285	555	124	50	46
10	87	79	68	62	54	133	188	271	510	113	49	54
11	87	80	68	64	57	168	183	245	477	111	48	64
12	86	85	68	63	59	190	193	238	395	110	48	63
13	84	90	68	60	59	237	189	244	338	109	50	54
14	86	86	65	58	57	248	177	282	322	109	60	51
15	87	83	64	62	58	235	178	330	317	104	71	50
16	99	75	62	60	58	258	183	372	310	102	95	49
17	118	74	64	62	57	308	171	391	325	93	75	48
18	108	72	64	63	57	346	166	373	289	88	66	47
19	107	78	62	63	57	336	159	343	257	88	62	51
20	107	76	60	64	59	309	158	347	228	87	58	51
21	104	76	62	67	59	301	162	355	216	94	56	51
22	101	77	62	65	61	330	162	334	215	88	54	51
23	98	73	62	63	61	382	165	300	288	82	52	52
24	96	75	61	53	60	305	178	273	246	78	54	52
25	95	76	60	65	52	274	178	257	216	75	55	53
26	92	70	58	68	58	222	172	256	200	71	53	58
27	91	76	56	66	64	201	172	270	181	71	50	68
28	84	73	56	60	84	185	201	316	179	66	49	66
29	73	71	58	58	94	169	226	409	188	64	49	63
30	82	69	57	56	------	160	210	480	193	62	51	62
31	90	------	57	58	------	155	------	529	------	62	52	------
TOTAL	2,874	2,366	1,955	1,930	1,763	6,224	5,509	9,475	10,725	3,292	1,757	1,586
MEAN	92.7	78.9	63.1	62.3	60.8	201	184	306	358	106	56.7	52.9
MAX	118	90	72	72	94	382	235	529	610	186	95	68
MIN	73	69	54	53	52	76	158	195	179	62	48	45
AC-FT	5,700	4,690	3,880	3,830	3,500	12,350	10,930	18,790	21,270	6,530	3,490	3,150

CAL YR 1971 TOTAL 93,145 MEAN 255 MAX 1,290 MIN 54 AC-FT 184,800
WTR YR 1972 TOTAL 49,456 MEAN 135 MAX 610 MIN 45 AC-FT 98,100

13148200 Little Wood Reservoir near Carey, Idaho

LOCATION.--Lat 43°25'30", long 114°01'30", in SW¼ sec.12, T.1 N., R.20 E., Blaine County, at gate-control structure near right end of dam on Little Wood River, 8.5 miles northwest of Carey, and at mile 71.0.

DRAINAGE AREA.--279 sq mi.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Nonrecording gage. Datum of gage is 5,100 ft above mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents observed, 30,200 acre-ft June 3, 8 (gage height, 137.66 ft); minimum contents observed, 5,260 acre-ft Sept. 30 (gage height, 75.33 ft).
Period of record: Maximum contents observed, 30,940 acre-ft June 10, 1963 (gage height, 138.99 ft); minimum observed, 66 acre-ft Aug. 17, 1959 (gage height, 30.22 ft), but may have been less during period Aug. 14 to Sept. 13, 1959.

REMARKS.--Reservoir is formed by earth- and rock-fill dam constructed in 1939 and raised 39.9 ft in 1959. Storage began Feb. 12, 1941. Capacity of reservoir is 29,960 acre-ft between gage heights 27.4 (0.4 ft below bottom of outlet gates) and 137.3 ft (spillway crest). Water is used for irrigation of land near Carey. Contents shown for days when readings were furnished and at monthend. Readings are made at various times of the day.

COOPERATION.--Gage readings furnished by Water District 37N. Capacity table furnished by Bureau of Reclamation.

Capacity table (gage height, in feet, and contents, in acre-feet)

70.0	4,150	100.0	12,500
80.0	6,370	120.0	20,900
90.0	9,160	138.0	30,400

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,400	13,700	-	20,500	20,600	-	22,500	30,000	30,100	28,800	14,700	6,490
2	11,400	-	-	20,500	-	-	22,700	30,000	30,100	28,600	-	-
3	11,500	-	-	-	-	-	23,000	30,000	30,200	28,400	-	-
4	-	-	-	-	20,500	-	23,200	30,000	30,100	-	-	-
5	-	14,100	-	-	-	-	23,500	30,000	30,100	27,700	12,100	6,190
6	-	-	17,900	20,400	-	-	24,000	30,000	30,100	27,400	11,500	-
7	12,000	-	-	20,400	-	20,700	24,500	30,100	30,100	27,000	-	-
8	-	-	17,900	-	-	20,600	24,900	30,000	30,200	-	-	-
9	-	-	18,200	-	-	-	25,200	30,000	30,100	-	-	6,170
10	-	14,700	-	-	-	-	25,600	30,000	30,000	-	-	-
11	12,100	14,700	-	-	-	-	26,000	29,800	30,000	25,600	9,620	-
12	-	-	-	-	-	-	26,400	29,600	30,000	24,900	-	-
13	-	-	-	-	-	21,600	26,700	29,500	30,000	24,400	7,980	-
14	-	-	-	-	-	21,600	27,100	29,500	29,800	23,900	-	6,250
15	-	15,600	-	-	20,200	21,600	27,400	29,400	29,700	23,400	7,780	-
16	-	-	18,900	-	-	21,900	27,800	29,300	29,500	23,000	-	-
17	12,300	-	-	-	-	22,100	28,100	29,400	29,300	-	-	-
18	12,300	-	-	-	20,300	22,300	28,900	29,400	29,200	-	7,450	-
19	-	-	-	-	-	22,300	29,300	29,400	29,000	-	-	-
20	-	-	-	20,600	-	22,200	29,500	29,300	28,900	-	-	5,770
21	12,700	-	-	-	-	22,200	29,500	29,200	28,800	20,700	-	5,740
22	12,800	-	-	-	-	22,300	29,400	29,400	28,500	-	7,250	-
23	-	-	-	-	-	22,400	29,500	29,500	28,500	-	-	-
24	-	-	19,700	-	-	22,300	29,400	29,700	28,700	18,800	-	-
25	-	16,600	-	-	-	21,800	29,500	29,800	28,800	18,500	-	-
26	-	-	-	-	-	-	29,600	29,900	28,900	-	-	-
27	-	-	-	-	-	21,800	29,600	29,900	29,000	-	6,630	-
28	-	-	-	-	20,600	21,900	29,700	30,000	28,900	16,600	-	-
29	-	-	-	-	20,600	22,200	29,800	30,000	28,800	-	-	-
30	-	17,200	-	-	------	22,100	29,900	30,000	28,600	15,400	-	5,260
31	13,700	------	20,300	20,600	------	22,400	------	30,100	------	14,700	6,500	------
MAX	-	-	-	-	-	-	29,900	30,100	30,200	-	-	-
MIN	-	-	-	-	-	-	22,500	29,200	28,500	-	-	-
(†)	103.23	111.93	118.70	119.45	-	123.07	137.23	137.57	134.98	105.92	80.50	75.33
(‡)	+2,300	+3,500	+3,100	+300	0	+1,800	+7,500	+200	-1,500	-13,900	-8,200	-1,240

CAL YR 1971..... ‡ +4,000
WTR YR 1972..... ‡ -6,140

† Gage height, in feet, at end of month.
‡ Change in contents, in acre-feet.

13148500 Little Wood River near Carey, Idaho

LOCATION.--Lat 43°23'20", long 114°00'00", in E½ sec.30, T.1 N., R.21 E., Blaine County, on right bank, 0.3 mile upstream from West Canal, 1.3 miles upstream from East Canal, 2 miles downstream from Little Fish Creek, 3 miles downstream from Little Wood Reservoir, 6 miles northwest of Carey, and at mile 68.0.

DRAINAGE AREA.--312 sq mi.

PERIOD OF RECORD.--April 1904 to May 1905 (gage heights and discharge measurements only), September 1926 to November 1942, April 1943 to current year. Monthly discharge only for some periods, published in WSP 1317. Records for February 1920 to September 1926 at site 6 miles upstream not equivalent owing to diversion and inflow.

GAGE.--Water-stage recorder. Datum of gage is 4,990.59 ft above mean sea level, unadjusted (levels by Bureau of Reclamation). Apr. 28, 1904, to May 31, 1905, nonrecording gage, Sept. 20, 1926, to Apr. 22, 1938, water-stage recorder, and Apr. 23 to Aug. 17, 1938, nonrecording gage, all at datum 0.74 ft higher.

AVERAGE DISCHARGE.--45 years (1926-42, 1943-72), 149 cfs (108,000 acre-ft per year); 15-year base period (1952-67), 156 cfs.

EXTREMES.--Current year: Maximum discharge, 733 cfs June 8 (gage height, 5.08 ft); minimum, 15 cfs for several days in November, December, and January; minimum gage height, 1.96 ft Nov. 23, 26, 28, Dec. 1.
Period of record: Maximum discharge, 6,000 cfs (due to failure of reservoirs on Little Fish Creek) Apr. 20, 1938 (gage height, 12.81 ft, present datum, from floodmark), from rating curve extended above 1,800 cfs; minimum, 1 cfs Jan. 26, 1945, Jan. 20, 1948.

REMARKS.--Records good. Flow regulated by Little Wood Reservoir 3 miles upstream (see sta 13148200) and Campbell, Cameron, and Howard Reservoirs on South Fork Muldoon and Little Fish Creeks (combined capacity, 690 acre-ft). Diversions above station for irrigation of about 1,500 acres (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 19 to June 25; stage-discharge relation affected by ice Dec. 2, 4, 8-20, Dec. 27 to Jan. 5, Jan. 14-15, 29-31, Feb. 2-4, 10-13)

2.0	15	3.5	249
2.3	34	4.0	391
2.6	65	5.0	741
3.0	127		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	38	16	16	76	86	100	217	556	243	345	77
2	65	28	16	28	74	87	111	219	608	243	348	94
3	65	30	16	72	74	100	116	222	583	268	345	94
4	64	31	16	60	75	87	81	238	513	287	342	94
5	65	30	16	60	76	87	55	293	478	296	342	74
6	65	26	17	61	76	101	62	335	442	318	339	57
7	53	30	17	61	75	103	61	347	548	317	324	58
8	41	30	17	61	75	95	50	358	668	315	310	58
9	53	28	17	61	75	100	46	373	612	314	313	57
10	65	28	16	61	74	116	43	364	524	313	310	59
11	65	28	16	62	74	120	42	364	501	311	308	59
12	65	28	16	61	74	114	45	347	452	352	306	59
13	65	28	16	61	74	118	50	335	412	390	289	57
14	66	29	16	61	74	129	54	338	408	389	282	77
15	68	28	16	61	74	194	55	364	407	387	231	93
16	68	27	16	61	74	238	47	385	405	388	197	91
17	68	26	16	61	74	304	42	394	386	409	175	91
18	62	16	16	61	74	335	42	394	368	407	153	90
19	48	16	16	61	74	352	42	397	354	404	151	90
20	47	16	16	64	74	413	46	397	310	403	145	89
21	47	16	16	75	76	436	142	373	288	372	110	88
22	47	16	16	75	77	436	222	273	271	336	108	87
23	47	16	16	75	77	436	222	233	246	333	108	87
24	47	16	15	74	77	433	189	217	187	331	108	86
25	47	16	16	74	77	433	164	194	139	332	107	86
26	47	16	16	74	77	429	160	214	141	408	107	85
27	48	16	16	76	78	391	160	265	151	406	92	85
28	48	16	16	77	89	341	160	285	185	394	80	84
29	48	16	16	76	93	263	160	348	217	383	81	84
30	48	16	16	74	------	146	189	424	217	373	78	83
31	48	------	16	74	------	95	------	511	------	349	73	------
TOTAL	1,745	701	499	1,979	2,211	7,118	2,958	10,018	11,577	10,771	6,607	2,373
MEAN	56.3	23.4	16.1	63.8	76.2	230	98.6	323	386	347	213	79.1
MAX	68	38	17	77	93	436	222	511	668	409	348	94
MIN	41	16	15	16	74	86	42	194	139	243	73	57
AC-FT	3,460	1,390	990	3,930	4,390	14,120	5,870	19,870	22,960	21,360	13,100	4,710

CAL YR 1971 TOTAL 103,592 MEAN 284 MAX 1,320 MIN 15 AC-FT 205,500
WTR YR 1972 TOTAL 58,557 MEAN 160 MAX 668 MIN 15 AC-FT 116,100

13151000 Little Wood River near Richfield, Idaho

LOCATION.--Lat 43°03'00", long 114°07'30", in sec.30, T.4 S., R.20 E., Lincoln County, on right bank 0.5 mile upstream from Byrns Slough and heading of Dietrich Canal, 1 mile east of railroad station at Richfield, 14 miles downstream from Silver Creek, and at mile 40.1.

DRAINAGE AREA.--570 sq mi, approximately.

PERIOD OF RECORD.--January 1911 to September 1972 (discontinued). Prior to 1955 except 1913, 1921 irrigation seasons only.

GAGE.--Water-stage recorder. Altitude of gage is 4,270 ft (by barometer). Prior to Sept. 5, 1918, nonrecording gage at site 500 ft downstream at datum 0.92 ft lower. Sept. 5, 1918, to Apr. 13, 1920, nonrecording gage and Apr. 14, 1920, to May 20, 1954, water-stage recorder, at site 500 ft downstream at datum 0.08 ft higher.

AVERAGE DISCHARGE.--20 years (1912-13, 1920-21, 1954-72), 163 cfs (118,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 374 cfs Mar. 22, 25; maximum gage height, 6.54 ft Feb. 1 (backwater from ice); minimum discharge, 43 cfs Jan. 25, result of freezeup (gage height, 1.90 ft).
Period of record: Maximum discharge recorded, 868 cfs May 3, 1938 (gage height, 3.97 ft, site and datum then in use); maximum gage height recorded, 8.60 ft Feb. 21, 1956 (ice jam); minimum discharge recorded, 7.6 cfs June 24, 25, 1920 (gage height, 0.52 ft, site and datum then in use).

REMARKS.--Records good except those for December and January, which are fair. Flow regulated by Little Wood Reservoir 30.9 miles upstream (see sta 13148200), Fish Creek Reservoir (capacity, 14,400 acre-ft), and three small reservoirs on tributaries (combined capacity, 690 acre-ft). River above Silver Creek is dry a large part of the time because of channel losses and irrigation diversions above Carey. Diversions above station for irrigation of about 22,700 acres of which about 1,000 acres are by withdrawals from ground water (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Nov. 1, Apr. 5 to May 21, Sept. 20-22; stage-discharge relation affected by ice Dec. 7 to Feb. 27)

2.0	45	3.5	283
2.5	92	4.0	424
3.0	169		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223	210	184	170	151	214	202	188	95	149	109	128
2	218	207	183	170	151	211	201	180	96	140	110	136
3	233	201	181	160	151	219	201	166	94	143	114	134
4	231	199	183	150	153	232	203	143	93	135	112	137
5	224	199	180	175	153	224	192	123	95	122	112	126
6	228	200	183	185	155	222	182	107	96	119	112	126
7	225	197	172	175	155	236	184	95	97	121	110	136
8	224	192	182	165	155	247	180	95	109	121	107	147
9	217	195	180	160	155	233	174	93	111	121	106	151
10	212	195	185	156	155	232	167	89	130	128	105	151
11	216	194	185	164	155	241	169	88	124	124	105	153
12	217	197	185	162	155	254	170	80	119	124	107	158
13	218	199	185	154	155	279	175	81	117	121	105	165
14	216	207	180	149	155	283	182	81	119	119	104	175
15	220	205	175	160	155	297	179	80	120	116	106	181
16	231	205	170	154	158	305	177	82	125	117	109	180
17	234	201	178	162	161	309	174	80	140	120	116	179
18	234	197	176	164	161	321	170	82	144	121	123	177
19	233	194	170	171	161	345	171	80	140	120	124	170
20	223	191	165	180	160	352	171	85	145	119	122	170
21	220	188	170	174	157	365	170	93	143	114	129	169
22	219	189	170	168	156	370	167	102	139	114	135	169
23	219	190	167	159	156	365	187	106	144	114	135	170
24	219	190	167	158	156	359	207	95	147	112	136	168
25	216	191	160	157	156	368	201	88	156	112	139	175
26	217	193	160	156	166	356	197	78	164	114	146	183
27	219	192	160	156	200	345	188	72	164	114	148	189
28	216	189	160	154	218	323	180	76	160	111	147	197
29	214	187	165	154	206	299	177	83	156	106	139	204
30	209	186	160	153	------	267	175	90	150	108	136	199
31	211	------	160	152	------	223	------	92	------	110	132	------
TOTAL	6,856	5,880	5,381	5,027	4,681	8,896	5,473	3,073	3,832	3,729	3,740	4,903
MEAN	221	196	174	162	161	287	182	99.1	128	120	121	163
MAX	234	210	185	185	218	370	207	188	164	149	148	204
MIN	209	186	160	149	151	211	167	72	93	106	104	126
AC-FT	13,600	11,660	10,670	9,970	9,280	17,650	10,860	6,100	7,600	7,400	7,420	9,730

CAL YR 1971 TOTAL 94,279 MEAN 258 MAX 680 MIN 120 AC-FT 187,000
WTR YR 1972 TOTAL 61,471 MEAN 168 MAX 370 MIN 72 AC-FT 121,900

13152500 Big Wood River near Gooding, Idaho

LOCATION.--Lat 42°53'12", long 114°48'08", in NE¼NE¼SW¼ sec.21, T.6 S., R.14 E., Gooding County, on right bank at Hudson Ranch, 3.1 miles downstream from bridge on Bliss-Gooding highway, 4.2 miles downstream from Little Wood River, 5.5 miles upstream from diversion dam for King Hill project, 6 miles southwest of Gooding, and at mile 7.8.

DRAINAGE AREA.--2,990 sq mi, approximately.

PERIOD OF RECORD.--March 1916 to current year (fragmentary October 1923 to September 1926; no winter records for water years 1923, 1936-37, 1942; irrigation seasons only for water years 1927-35). October 1950 to September 1959, published as Malad River near Gooding.

GAGE.--Water-stage recorder. Altitude of gage is 3,345 ft (from topographic map). Prior to Apr. 13, 1921, non-recording gage at present site and datum.

AVERAGE DISCHARGE.--40 years (1916-22, 1937-41, 1942-72), 269 cfs (194,900 acre-ft per year); 15-year base period (1952-67), 250 cfs.

EXTREMES.--Current year: Maximum discharge, 4,770 cfs Mar. 3 (gage height, 9.48 ft); minimum, 11 cfs July 15 (gage height, 0.93 ft).
Period of record: Maximum discharge, 8,860 cfs Dec. 22, 1964 (gage height, 12.15 ft, from floodmarks); no flow at times in many years.

REMARKS.--Records good except those for December to January, which are fair. Flow regulated by Magic Reservoir (see sta 13142000) and by several smaller reservoirs on tributaries and affected by deliveries from canals diverting from Snake River at Milner. Diversions above station for irrigation of about 144,000 acres of which about 4,000 acres are by withdrawals from ground water (1966 determination). Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1347: 1934.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 2, 5-21, Dec. 26 to Jan. 21, Jan. 28 to Feb. 11)

1.1	20	3.0	250	7.0	1,830
1.3	33	4.0	450	8.0	2,800
1.6	60	5.0	752	9.0	4,060
2.0	109	6.0	1,170		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	744	296	173	82	110	1,230	635	806	1,110	128	86	144
2	853	311	110	68	130	1,270	465	804	1,220	133	101	176
3	901	322	89	56	120	3,360	305	702	1,280	163	102	191
4	850	301	43	45	135	1,500	297	546	1,370	158	113	205
5	835	288	58	50	150	1,300	293	458	1,380	149	106	247
6	810	285	110	58	145	1,400	293	409	1,270	132	110	318
7	696	279	95	35	152	1,450	478	680	1,240	114	99	341
8	693	295	60	20	170	1,310	420	712	1,280	98	90	327
9	686	302	68	38	160	1,590	376	762	1,680	85	99	356
10	683	290	88	80	140	1,890	487	749	2,130	80	87	344
11	307	294	86	49	168	1,910	586	668	2,160	76	74	333
12	143	295	82	80	165	1,820	656	582	2,160	65	68	440
13	112	303	78	40	159	1,800	694	481	2,000	49	76	476
14	84	313	88	26	157	1,780	706	377	1,560	29	105	492
15	155	317	96	25	156	1,720	665	266	1,160	22	121	462
16	205	353	100	29	156	1,720	978	210	742	27	138	446
17	237	450	80	26	413	1,730	1,320	252	575	53	133	459
18	244	425	75	44	842	1,770	1,320	454	871	69	117	464
19	253	441	51	100	864	1,780	1,540	537	972	82	128	456
20	262	386	45	180	672	1,770	1,440	564	847	76	136	423
21	265	334	105	1,020	478	1,790	1,260	701	640	99	145	423
22	255	313	83	1,330	339	1,800	1,250	947	509	117	135	451
23	257	332	92	1,250	248	1,820	1,290	975	347	114	99	461
24	258	287	103	534	202	1,820	1,460	877	331	114	79	481
25	258	222	117	332	270	1,900	1,370	752	357	93	88	517
26	260	194	109	235	308	1,870	1,270	534	408	79	113	589
27	262	201	90	131	351	1,870	1,130	371	395	74	129	686
28	273	185	76	150	1,370	1,860	901	315	333	80	117	771
29	283	186	72	165	1,500	1,850	695	278	265	79	110	768
30	289	180	68	158	------	1,810	774	219	190	80	127	836
31	296	------	74	140	------	1,210	------	336	------	84	123	------
TOTAL	12,709	8,980	2,664	6,576	10,230	53,700	25,354	17,324	30,782	2,801	3,354	13,083
MEAN	410	299	85.9	212	353	1,732	845	559	1,026	90.4	108	436
MAX	901	450	173	1,330	1,500	3,360	1,540	975	2,160	163	145	836
MIN	84	180	43	20	110	1,210	293	210	190	22	68	144
AC-FT	25,210	17,810	5,280	13,040	20,290	106,500	50,290	34,360	61,060	5,560	6,650	25,950

CAL YR 1971 TOTAL 278,099.3 MEAN 762 MAX 3,180 MIN 5.9 AC-FT 551,600
WTR YR 1972 TOTAL 187,557.0 MEAN 512 MAX 3,360 MIN 20 AC-FT 372,000

13153000 King Hill Canal near Hagerman, Idaho

LOCATION.--Lat 42°52'05", long 114°54'40", in SE¼SE¼ sec.28, T.6 S., R.13 E., Twin Falls County, on left bank 600 ft below outlet of inverted siphon crossing Snake River, 0.8 mile west of highway bridge over Big Wood River, and 3.6 miles north of Hagerman.

PERIOD OF RECORD.--March 1930 to current year (irrigation seasons only 1930-37, 1940-46).

GAGE.--Water-stage recorder. Altitude of gage is 2,850 ft (from topographic map). Prior to June 1, 1949, nonrecording gages at several sites within 0.6 mile of present site at various datums. June 1, 1949, to May 22, 1951, nonrecording gage at present site and datum. May 23, 1951, to Sept. 30, 1961, water-stage recorder 0.5 mile upstream at different datum. Oct. 1, 1961, to Mar. 24, 1971, water-stage recorder 125 ft downstream at different datum.

EXTREMES.--Period of record: Maximum daily discharge, 365 cfs Aug. 26, 1972; no flow or minor leakage at headgate during nonirrigation seasons and other periods when gates are closed.

REMARKS.--Records excellent. This canal, which is operated by King Hill Irrigation District to provide water for irrigation of about 10,000 acres, diverts from Idaho Power Co.'s canal, which diverts from Big Wood River (Malad Springs water).

REVISIONS (WATER YEARS).--WSP 723: 1930.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	338						0	318	339	332	344	355
2	335						0	317	339	332	344	357
3	330						155	318	340	332	344	357
4	330						221	319	341	333	345	357
5	330						246	317	348	333	346	358
6	330						260	318	344	333	346	358
7	330						260	317	345	333	347	356
8	330						260	319	345	334	348	352
9	325						260	319	347	336	349	353
10	325						279	319	11	337	350	353
11	325						291	319	0	338	351	353
12	320						291	319	21	340	351	354
13	320						293	319	338	341	353	353
14	320						293	321	337	342	353	353
15	160						291	323	336	342	354	353
16	0						292	325	333	342	355	353
17	0						292	328	333	0	356	353
18	0						291	328	333	0	357	354
19	0						292	329	332	71	357	355
20	0						292	329	331	344	358	354
21	0						293	330	332	345	359	355
22	0						294	332	330	344	361	356
23	0						291	332	331	345	363	356
24	0						309	333	330	346	363	356
25	0						319	333	331	345	364	357
26	0						316	333	330	345	365	352
27	0						317	333	331	345	335	347
28	0						322	335	330	344	0	331
29	0						319	334	331	345	0	329
30	0				------		319	335	331	344	73	329
31	0	------			------		------	336	------	344	354	------
TOTAL	4,748	0	0	0	0	0	7,958	10,087	9,100	9,587	9,945	10,559
MEAN	153	0	0	0	0	0	265	325	303	309	321	352
MAX	338	0	0	0	0	0	322	336	348	346	365	358
MIN	0	0	0	0	0	0	0	317	0	0	0	329
AC-FT	9,420	0	0	0	0	0	15,780	20,010	18,050	19,020	19,730	20,940

CAL YR 1971 TOTAL 57,328.20 MEAN 157 MAX 350 MIN 0 AC-FT 113,700
WTR YR 1972 TOTAL 61,984.00 MEAN 169 MAX 365 MIN 0 AC-FT 122,900

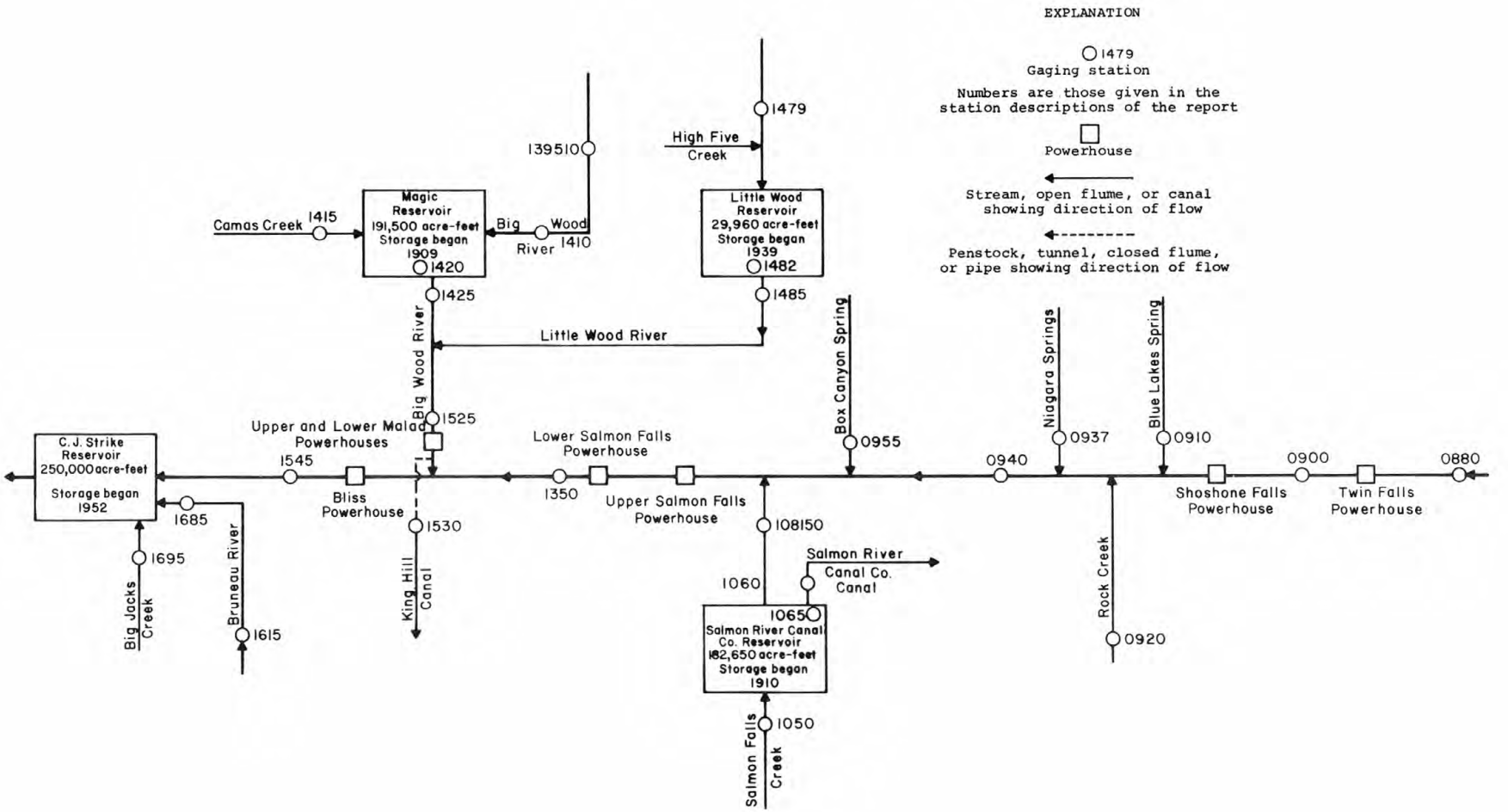


FIGURE 8. Schematic diagram showing gaging stations, diversions, and storage in Snake River basin between Milner and C. J. Strike Reservoir.

13154500 Snake River at King Hill, Idaho

LOCATION.--Lat 43°00'08", long 115°12'06", in NW¼NW¼SW¼ sec.7, T.5 S., R.11 E., Elmore County, on right bank 300 ft east of railroad station at King Hill, 20 miles downstream from Big Wood River, and at mile 545.6.

DRAINAGE AREA.--35,800 sq mi, approximately. Mean altitude, 6,040 ft.

PERIOD OF RECORD.--May 1909 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,492.3 ft above mean sea level, by stadia levels. Nonrecording gage May 13, 1909, to Mar. 1, 1910, on left bank at present site at datum 2.20 ft higher, Mar. 7 to Aug. 16, 1910, 0.8 mile upstream at different datum, and Aug. 17, 1910, to Oct. 7, 1928, at present site and datum.

AVERAGE DISCHARGE.--63 years, 10,650 cfs (7,716,000 acre-ft per year); 15-year base period (1952-67), 9,723 cfs.

EXTREMES.--Current year: Maximum discharge, 29,100 cfs Apr. 17 (gage height, 12.39 ft); minimum, 4,640 cfs May 13 (gage height, 4.53 ft); minimum daily, 7,100 cfs July 18.
Period of record: Maximum discharge observed, 47,200 cfs June 22, 1918 (gage height, 16.3 ft), from rating curve extended above 30,000 cfs; minimum observed, 1,250 cfs Jan. 10, 1950 (gage height, 1.75 ft); minimum daily, 4,760 cfs June 7-9, Aug. 15, 16, 1910.

REMARKS.--Records excellent.except those for June, which are good. Flow regulated by American Falls Reservoir 168.4 miles upstream (see sta 13076500). Diurnal fluctuation caused by hydroelectric plants upstream. At times, practically entire flow is diverted at Milner during irrigation seasons; only minor diversions below Milner; flow at King Hill is then derived largely from springs and seepage entering below Milner. Diversions above station for irrigation of about 2,450,000 acres of which about 675,000 acres are by withdrawals from ground water (1966 determination). Records of chemical analysis and water temperatures for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1317: 1935(M).

Rating tables (gage height, in feet, and discharge, in cubic feet per second)

5.7	6,970	10.0	19,800
6.0	7,630	12.0	27,600
8.0	13,000	13.0	31,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12,200	21,200	19,500	17,400	16,800	18,600	23,900	17,800	8,800	11,700	7,750	8,620
2	14,000	20,700	19,400	17,800	16,200	17,800	24,800	18,600	8,000	9,260	7,770	8,790
3	16,300	20,800	19,100	17,400	16,300	22,100	24,600	18,000	8,430	8,400	7,700	8,790
4	16,400	21,600	18,500	16,300	15,100	19,000	25,600	17,400	8,700	7,750	7,750	8,890
5	16,400	21,100	18,400	14,900	14,200	18,000	24,400	16,100	9,350	7,560	7,770	9,010
6	16,700	21,000	18,100	16,000	15,400	19,600	23,200	14,800	13,100	7,500	7,810	9,570
7	17,000	21,600	17,200	16,000	16,100	19,900	22,600	16,400	14,300	7,560	7,790	9,410
8	17,000	21,300	17,800	16,000	16,400	19,500	23,100	15,300	16,300	7,340	7,770	9,600
9	17,800	21,000	17,500	15,500	15,900	19,800	24,200	13,200	20,400	7,210	7,610	9,570
10	18,300	20,400	17,700	14,900	16,600	20,700	24,900	14,300	23,100	7,280	7,700	9,600
11	18,300	19,200	17,300	14,300	17,200	21,000	24,400	13,300	23,800	7,260	7,630	9,780
12	18,100	18,000	18,100	14,600	17,900	20,900	26,100	11,600	24,300	7,370	7,720	10,200
13	18,300	16,800	17,300	16,000	17,900	20,300	26,800	11,800	24,000	7,280	8,070	10,300
14	17,700	15,600	17,000	15,100	17,800	16,700	26,900	13,600	21,900	7,280	8,160	10,400
15	17,700	15,500	16,500	15,600	18,300	14,400	27,600	14,700	20,700	7,230	8,110	10,200
16	18,400	17,200	14,900	17,600	18,200	13,500	28,100	13,200	19,500	7,540	8,330	10,300
17	18,800	19,400	16,300	16,700	18,300	13,300	28,100	12,000	18,700	7,860	8,280	10,300
18	18,500	19,800	17,100	18,300	19,000	14,200	26,700	10,600	18,300	7,100	8,310	10,200
19	18,800	20,700	17,100	22,700	18,900	14,000	26,000	10,700	16,600	7,680	8,350	10,300
20	19,300	20,900	16,300	20,100	18,500	15,100	25,400	11,200	15,600	7,450	8,400	10,000
21	20,300	20,300	16,600	19,400	18,100	15,000	24,400	14,900	15,100	7,480	8,550	10,200
22	19,900	19,400	16,700	21,800	18,300	17,800	23,500	17,500	16,000	7,520	8,550	9,880
23	19,800	19,100	17,400	21,900	17,400	18,600	22,400	16,600	14,900	7,590	8,570	10,100
24	20,000	19,200	17,400	19,900	17,900	20,100	23,100	14,800	13,600	7,630	8,400	9,970
25	19,600	19,300	17,100	19,100	17,900	22,800	22,600	16,800	12,800	7,540	8,450	10,100
26	19,700	18,800	17,000	18,800	18,500	23,000	21,100	17,900	11,700	7,520	8,520	10,400
27	20,000	19,500	16,400	17,300	18,800	23,100	21,200	16,800	13,700	7,500	8,570	10,400
28	20,700	18,700	15,900	17,700	21,300	23,800	19,800	16,800	15,500	7,500	8,890	11,000
29	21,000	19,300	14,900	17,200	22,000	26,200	18,400	16,000	16,100	7,520	8,890	10,200
30	21,300	19,400	16,500	16,700	------	26,400	17,400	12,000	14,000	7,630	8,890	11,500
31	21,700	------	17,400	17,100	------	25,200	------	9,900	------	7,720	8,590	------
TOTAL	570,000	586,800	534,400	540,100	511,200	600,400	721,300	454,600	477,280	238,760	253,650	297,580
MEAN	18,390	19,560	17,240	17,420	17,630	19,370	24,040	14,660	15,910	7,702	8,182	9,919
MAX	21,700	21,600	19,500	22,700	22,000	26,400	28,100	18,600	24,300	11,700	8,890	11,500
MIN	12,200	15,500	14,900	14,300	14,200	13,300	17,400	9,900	8,000	7,100	7,610	8,620
AC-FT	1,131M	1,164M	1,060M	1,071M	1,014M	1,191M	1,431M	901,700	946,700	473,600	503,100	590,200

CAL YR 1971 TOTAL 6,111,340 MEAN 16,740 MAX 32,300 MIN 7,050 AC-FT 12,120,000
WTR YR 1972 TOTAL 5,786,070 MEAN 15,810 MAX 28,100 MIN 7,100 AC-FT 11,480,000

M Expressed in thousands.

13161500 Bruneau River at Rowland, Nev.

LOCATION.--Lat 41°56'00", long 115°40'25", in NW¼SE¼ sec.29, T.47 N., R.56 E., Elko County, on left bank 2 miles upstream from McDonald Creek and 0.5 mile south of Rowland.

DRAINAGE AREA.--382 sq mi. Area at crest-stage site, 380 sq mi.

PERIOD OF RECORD.--June 1913 to September 1918, water years 1962-66 (annual maximum), October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,500 ft (from topographic map). June 1913 to September 1918, nonrecording gage at different site and datum. October 1961 to September 1966, crest-stage gage at site 3 miles upstream at different datum.

AVERAGE DISCHARGE.--11 years, 122 cfs (88,390 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 905 cfs Mar. 14 (gage height, 6.70 ft); minimum daily, about 12 cfs Aug. 26.
Period of record: Maximum discharge, 2,120 cfs Feb. 11, 1962 (gage height, 13.0 ft, site and datum then in use); minimum, 5 cfs Aug. 12, 13, 1918.

REMARKS.--Records good except those for winter months or no gage-height record, which are poor. Minor diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	35	40	36	58	149	337	378	436	87	25	16
2	41	33	32	38	55	217	400	390	436	78	24	18
3	40	34	45	33	53	480	419	433	419	77	23	19
4	40	36	44	27	55	448	438	505	402	71	23	20
5	40	37	40	28	60	675	485	582	373	66	22	25
6	40	32	50	30	65	608	562	610	468	65	21	24
7	38	36	32	32	65	690	550	630	482	59	19	23
8	38	38	30	34	63	632	505	628	498	52	18	20
9	37	39	33	35	62	650	492	585	443	50	20	17
10	37	40	33	37	52	720	488	545	397	50	22	20
11	37	40	34	40	54	790	455	512	352	49	22	25
12	36	41	35	42	56	740	448	502	311	48	17	32
13	36	44	32	40	56	768	433	512	276	43	16	28
14	36	44	31	38	55	862	400	525	252	40	16	28
15	36	44	32	36	56	800	390	542	241	39	17	26
16	38	40	33	35	57	778	381	558	230	37	16	24
17	40	34	31	36	59	815	357	562	217	37	16	23
18	39	33	30	40	57	855	335	535	206	36	15	22
19	39	32	29	45	60	755	321	492	192	34	15	22
20	40	35	30	65	67	672	304	453	175	34	15	24
21	43	40	37	111	75	668	309	448	164	34	14	24
22	44	40	50	164	89	712	325	412	153	34	14	24
23	41	40	55	203	89	742	342	376	149	33	13	25
24	41	41	54	147	92	622	383	347	143	29	13	24
25	40	43	50	135	87	592	385	333	135	27	13	24
26	40	44	49	117	81	488	357	330	129	26	12	24
27	40	56	28	101	95	443	352	337	117	25	13	26
28	38	49	30	90	121	419	393	354	108	25	15	30
29	30	49	35	75	157	383	448	381	99	24	17	30
30	32	48	37	64	------	345	400	405	91	24	18	29
31	36	------	35	60	------	330	------	417	------	24	17	------
TOTAL	1,193	1,197	1,156	2,014	2,051	18,848	12,194	14,619	8,094	1,357	541	716
MEAN	38.5	39.9	37.3	65.0	70.7	608	406	472	270	43.8	17.5	23.9
MAX	44	56	55	203	157	862	562	630	498	87	25	32
MIN	30	32	28	27	52	149	304	330	91	24	12	16
AC-FT	2,370	2,370	2,290	3,990	4,070	37,390	24,190	29,000	16,050	2,690	1,070	1,420

CAL YR 1971 TOTAL 69,884 MEAN 191 MAX 1,200 MIN 26 AC-FT 138,600
WTR YR 1972 TOTAL 63,980 MEAN 175 MAX 862 MIN 12 AC-FT 126,900

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-23	0600	3.93	223	5- 8	0100	5.70	655
3-14	0900	6.70	905	6- 8	0400	5.39	578
4- 6	2100	unknown	a620				

a About

NOTE.--No gage-height record July 27 to Sept. 11.

13168500 Bruneau River near Hot Spring, Idaho

LOCATION.--Lat 42°46'16", long 115°43'10", in NE¼NE¼SE¼ sec.34, T.7 S., R.6 E., Owyhee County, on right bank at Dunham Ranch, 1 mile downstream from Hot Creek, 1.5 miles south of Hot Spring, 9 miles southeast of Bruneau, 16 miles downstream from East Fork, and at mile 22.0.

DRAINAGE AREA.--2,630 sq mi, approximately. Mean altitude, 5,600 ft.

PERIOD OF RECORD.--July 1909 to March 1915, October 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,598.5 ft above mean sea level. Prior to Mar. 12, 1910, non-recording gage at site 0.2 mile upstream at different datum. Mar. 12, 1910, to Mar. 15, 1915, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--34 years (1909-14, 1943-72), 394 cfs (285,500 acre-ft per year); 15-year base period (1952-67), 318 cfs.

EXTREMES.--Current year: Maximum discharge, 2,680 cfs Feb. 29 (gage height, 8.38 ft); minimum, 70 cfs Dec. 9 (gage height, 3.37 ft).
Period of record: Maximum discharge, 6,500 cfs Mar. 1, 1910 (gage height, 13.0 ft, from floodmark, present site and datum), from rating curve extended above 1,200 cfs; minimum daily, 25 cfs Dec. 18, 1964.

REMARKS.--Records good. Several small reservoirs on tributaries above station. Diversions above station for irrigation of about 12,900 acres (1966 determination). Records of chemical analyses for the water year 1972 are published in Part 2 of this report..

REVISIONS (WATER YEARS).--WSP 1063: 1913. WSP 1517: 1910(M). WSP 1567: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

3.4	74	6.0	1,080
3.7	134	7.0	1,690
4.0	217	8.0	2,390
5.0	588		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	172	212	157	181	1,370	830	1,000	1,830	502	123	84
2	166	164	195	161	189	907	820	962	1,910	475	121	86
3	163	166	148	139	140	1,740	861	989	1,870	441	117	86
4	166	160	155	97	146	2,300	952	1,100	1,810	406	116	87
5	163	160	182	107	235	1,740	988	1,290	1,740	379	113	194
6	160	150	195	128	298	1,980	1,040	1,490	1,600	365	110	120
7	157	127	178	168	277	1,990	1,140	1,610	1,630	343	108	96
8	152	148	92	191	271	1,900	1,240	1,700	1,920	331	101	98
9	147	179	94	179	253	1,730	1,170	1,680	2,110	305	97	91
10	142	161	133	167	229	1,750	1,140	1,580	1,960	288	94	87
11	139	158	140	177	191	1,960	1,110	1,510	1,760	277	91	88
12	137	160	152	183	185	2,050	1,100	1,460	1,540	265	91	97
13	134	169	167	175	232	1,940	1,080	1,480	1,360	255	89	110
14	134	196	141	138	226	1,970	1,010	1,560	1,250	239	89	109
15	134	190	152	115	216	2,050	967	1,680	1,220	224	96	103
16	147	174	151	98	235	1,890	943	1,750	1,160	217	95	101
17	166	166	160	124	252	1,790	928	1,820	1,130	208	96	95
18	163	159	149	209	353	1,840	868	1,810	1,100	200	91	89
19	163	148	126	407	490	1,890	831	1,710	1,020	189	89	88
20	163	147	134	580	423	1,750	796	1,590	946	183	88	86
21	168	163	185	733	439	1,550	779	1,520	860	185	88	88
22	174	166	192	775	504	1,460	798	1,480	815	186	87	88
23	174	170	209	1,390	498	1,450	823	1,410	788	178	85	86
24	165	170	207	869	421	1,490	866	1,300	756	167	83	86
25	157	168	199	575	359	1,410	962	1,220	706	157	83	88
26	157	177	200	511	301	1,360	953	1,220	656	149	83	91
27	156	177	168	429	320	1,220	894	1,270	608	145	83	101
28	157	250	106	307	670	1,060	879	1,360	575	138	83	107
29	136	262	84	247	2,220	1,020	967	1,480	554	131	81	113
30	106	232	154	175	------	963	1,080	1,640	527	127	83	127
31	159	------	146	145	------	881	------	1,750	------	121	84	------
TOTAL	4,762	5,189	4,906	9,856	10,754	50,401	28,815	45,421	37,711	7,776	2,938	2,970
MEAN	154	173	158	318	371	1,626	961	1,465	1,257	251	94.8	99.0
MAX	174	262	212	1,390	2,220	2,300	1,240	1,820	2,110	502	123	194
MIN	106	127	84	97	140	881	779	962	527	121	81	84
AC-FT	9,450	10,290	9,730	19,550	21,330	99,970	57,150	90,090	74,800	15,420	5,830	5,890

CAL YR 1971 TOTAL 289,580 MEAN 793 MAX 3,930 MIN 57 AC-FT 574,400
WTR YR 1972 TOTAL 211,499 MEAN 578 MAX 2,300 MIN 81 AC-FT 419,500

13169500 Big Jacks Creek near Bruneau, Idaho
(Hydrologic bench-mark station)

LOCATION.--Lat 42°47'06", long 115°59'00", in NW¼SE¼ sec.28, T.7 S., R.4 E., Owyhee County, Bureau of Land Management lands, on left bank 0.2 mile upstream from confluence with Little Jacks Creek and 11.5 miles southwest of Bruneau.

DRAINAGE AREA.--253 sq mi.

PERIOD OF RECORD.--December 1938 to October 1949, July 1965 to current year. Prior to October 1968, published as Wickahoney Creek near Bruneau.

GAGE.--Water-stage recorder and a self-cleaning broad-crested concrete weir. Altitude of gage is 2,810 ft (by barometer). December 1938 to October 1949 at site 145 ft upstream at different datum.

AVERAGE DISCHARGE.--17 years (1939-49, 1965-72), 3.02 cfs (2,190 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 472 cfs Jan. 22 (gage height, 3.82 ft); no flow for many days. Period of record: Maximum discharge, 2,100 cfs Jan. 22, 1943 (gage height, 12.4 ft, from high-water mark, site and datum then in use), by slope-area measurement of peak flow; no flow for long periods each year.

REMARKS.--Records good. No diversion or regulation. Records of chemical analyses and suspended sediment loads for the water year 1972 are published in Part 2 of this report.

REVISIONS.--WRD Idaho 1967: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.8	0.52	2.4	33
1.9	1.4	2.7	94
2.0	3.0	3.0	174
2.2	8.6	3.3	270

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.4	1.1	.89	0	145	48	7.0	9.0	6.1	4.5	4.3
2	1.7	1.5	.98	.89	0	96	46	6.7	9.0	5.8	4.3	4.1
3	1.3	1.3	.98	.03	0	233	42	6.7	9.0	6.1	4.3	4.1
4	1.1	1.2	1.1	0	0	204	42	6.1	9.5	5.8	4.3	4.1
5	.98	1.1	1.4	0	0	168	39	6.7	9.0	5.6	4.1	5.6
6	.89	.65	1.2	0	1.8	142	37	7.7	9.0	5.8	3.8	7.4
7	.81	.52	.12	0	3.2	201	33	9.5	12	5.3	3.8	5.6
8	.73	1.8	0	.10	2.6	171	32	11	16	5.0	3.6	5.0
9	.73	1.4	0	.98	2.3	142	29	12	26	5.0	3.8	4.5
10	.73	.81	0	1.7	.47	186	27	12	20	5.3	4.1	4.8
11	.65	.65	0	.89	0	174	27	11	16	5.3	4.1	10
12	.73	.73	0	.20	.01	145	26	11	12	5.0	3.8	11
13	.81	.98	0	0	.73	126	23	12	11	5.0	4.1	7.4
14	.81	.98	0	0	.52	123	20	12	9.5	4.8	4.5	6.1
15	.98	.73	.06	0	.98	111	20	11	23	4.8	4.8	5.8
16	1.5	.73	.03	0	2.0	99	21	11	18	4.5	4.5	5.3
17	1.8	.73	0	0	7.4	92	21	13	11	4.5	4.1	5.0
18	1.5	.81	0	1.1	81	85	18	13	9.0	4.5	4.5	4.8
19	1.4	.81	0	20	37	78	16	16	9.0	4.3	4.3	4.5
20	1.3	.73	0	4.8	46	74	13	18	8.6	4.8	4.3	4.8
21	1.2	.65	0	2.8	90	68	12	29	8.1	5.3	4.3	4.8
22	1.1	.65	.26	78	108	66	12	37	7.7	5.3	4.3	4.5
23	.98	.65	.30	233	70	62	11	29	7.7	5.3	4.3	4.8
24	.98	.65	.30	132	48	60	9.5	24	8.6	4.5	4.5	4.8
25	1.1	.73	.03	76	27	56	8.6	21	8.6	4.5	4.5	5.0
26	1.1	.81	0	56	21	54	8.1	18	8.1	4.3	4.3	5.3
27	1.2	.89	0	23	23	52	7.7	14	7.4	4.3	4.1	6.7
28	.98	1.7	0	4.5	171	52	7.7	12	7.0	4.3	4.1	7.0
29	.14	1.3	0	.02	246	50	7.4	11	6.7	4.1	4.1	5.8
30	.58	1.3	0	0	------	50	7.4	10	6.1	3.8	4.3	5.6
31	1.7	------	.38	0	------	50	------	9.5	------	4.5	4.3	------
TOTAL	33.51	28.89	8.24	636.90	990.01	3,415	671.4	427.9	331.6	153.5	130.7	168.5
MEAN	1.08	.96	.27	20.5	34.1	110	22.4	13.8	11.1	4.95	4.22	5.62
MAX	2.0	1.8	1.4	233	246	233	48	37	26	6.1	4.8	11
MIN	.14	.52	0	0	0	50	7.4	6.1	6.1	3.8	3.6	4.1
AC-FT	66	57	16	1,260	1,960	6,770	1,330	849	658	304	259	334

CAL YR 1971 TOTAL 2,857.58 MEAN 7.83 MAX 189 MIN 0 AC-FT 5,670
WTR YR 1972 TOTAL 6,996.15 MEAN 19.1 MAX 246 MIN 0 AC-FT 13,880

SNAKE RIVER MAIN STEM

13172500 Snake River near Murphy, Idaho

LOCATION.--Lat 43°17'31", long 116°25'12", in NW¼NE¼SE¼ sec.35, T.1 S., R.1 W., Ada County, on right bank 4.2 miles downstream from Swan Falls powerplant, 7.5 miles northeast of Murphy, and at mile 453.5.

DRAINAGE AREA.--41,900 sq mi, approximately.

PERIOD OF RECORD.--August to October 1912, August 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,271.17 ft above mean sea level. Prior to Sept. 7, 1914, non-recording gage and Sept. 7, 1914, to Sept. 30, 1935, water-stage recorder at site 3.5 miles upstream at datum 9.79 ft higher.

AVERAGE DISCHARGE.--59 years, 10,910 cfs (7,904,000 acre-ft per year); 15-year base period (1952-67), 10,070 cfs.

EXTREMES.--Current year: Maximum discharge, 31,700 cfs Mar. 3 (gage height, 11.15 ft); minimum, 6,890 cfs Aug. 20 (gage height, 3.26 ft); minimum daily, 7,050 cfs July 19, 20.
Period of record: Maximum discharge, 47,300 cfs June 22, 1918 (gage height, 13.95 ft, site and datum then in use); minimum recorded, 3,900 cfs July 9, 1949 (gage height, 2.53 ft); minimum daily, 5,440 cfs Aug. 4, 1914.

REMARKS.--Records excellent. Major regulation by American Falls Reservoir 260.5 miles upstream (see sta 13076500). Diurnal fluctuation caused by hydroelectric plants upstream. Diversions above station for irrigation of about 2,590,000 acres of which about 701,000 acres are by withdrawals from ground water (1966 determination).

REVISIONS (WATER YEARS).--WSP 1737: 1933(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,200	19,800	20,100	17,600	17,700	25,700	26,100	18,900	11,000	13,300	7,600	8,270
2	13,000	21,800	20,100	17,700	17,500	20,600	25,300	18,400	10,900	11,300	7,400	8,340
3	14,500	21,200	20,000	18,000	17,000	22,700	26,000	19,500	10,400	9,830	7,360	8,010
4	17,400	20,800	18,800	18,100	15,900	28,400	27,100	19,400	9,940	8,640	7,620	8,540
5	17,200	21,900	19,600	16,500	16,000	22,800	26,100	18,100	11,500	7,330	7,620	8,840
6	15,600	21,900	17,900	15,000	15,000	21,100	25,600	16,900	11,300	7,440	7,580	8,540
7	17,500	21,400	18,500	15,600	16,100	23,500	24,600	16,600	13,800	7,530	7,400	9,780
8	17,200	21,700	17,700	16,500	17,000	23,800	24,500	17,900	16,700	7,420	7,600	8,760
9	17,500	22,100	17,900	16,600	17,500	22,700	25,100	17,100	19,200	7,330	7,600	9,890
10	17,700	20,800	17,400	15,400	16,700	22,900	25,600	15,800	23,100	7,440	7,550	8,510
11	19,300	21,000	18,000	16,000	17,400	24,500	26,800	13,900	25,700	7,420	7,510	9,730
12	18,400	19,400	17,700	14,100	18,000	25,100	26,100	15,100	25,700	7,420	7,440	10,500
13	18,500	18,100	18,400	14,900	19,100	24,700	27,600	13,100	25,600	7,330	7,600	10,300
14	18,100	17,100	18,300	16,800	18,600	22,700	27,900	13,400	25,300	7,250	7,580	10,200
15	18,300	15,500	16,700	15,200	18,400	18,800	27,900	15,500	24,600	7,200	8,030	10,100
16	17,600	15,800	16,200	16,300	19,600	18,100	28,700	17,200	21,300	7,220	7,580	10,300
17	19,000	18,500	15,300	18,000	19,200	16,700	29,200	15,700	20,700	7,160	8,180	10,300
18	19,500	20,800	16,400	16,900	19,200	17,200	28,800	13,400	20,100	7,100	7,550	10,700
19	19,300	20,300	17,600	20,300	20,500	18,200	27,400	11,600	19,800	7,050	8,340	10,300
20	20,000	21,400	18,000	25,800	20,000	17,700	26,400	12,100	17,600	7,050	7,800	10,200
21	20,300	21,300	16,700	20,400	19,100	18,400	25,900	13,800	15,500	7,080	8,420	10,300
22	20,400	20,300	16,900	22,700	19,200	18,600	25,400	16,900	16,200	7,100	8,320	9,730
23	20,400	19,500	17,100	25,200	19,600	20,700	24,100	20,300	16,300	7,330	8,220	9,910
24	19,400	19,100	17,900	24,700	18,300	21,300	23,400	18,100	16,100	7,270	7,780	9,780
25	20,000	19,400	18,300	20,800	19,500	23,400	23,200	15,800	13,600	7,290	8,420	9,730
26	20,600	20,100	17,300	19,600	19,200	25,000	23,600	18,700	13,200	7,440	7,970	10,500
27	21,200	19,300	17,200	20,200	19,600	25,300	22,000	19,900	13,200	7,400	8,320	10,600
28	21,100	19,500	16,700	18,600	20,400	25,100	21,800	18,200	13,600	7,290	8,370	10,700
29	22,400	19,600	16,200	17,300	25,700	26,000	19,600	18,100	15,800	7,290	8,440	11,100
30	22,800	19,500	14,100	18,000	------	27,900	19,500	17,900	15,800	7,270	8,760	10,900
31	19,200	------	17,900	17,200	------	27,800	------	13,700	------	7,380	8,440	------
TOTAL	573,600	598,900	546,900	566,000	537,000	697,400	761,300	511,000	513,540	239,900	244,400	293,360
MEAN	18,500	19,960	17,640	18,260	18,520	22,500	25,380	16,480	17,120	7,739	7,884	9,779
MAX	22,800	22,100	20,100	25,800	25,700	28,400	29,200	20,300	25,700	13,300	8,760	11,100
MIN	10,200	15,500	14,100	14,100	15,000	16,700	19,500	11,600	9,940	7,050	7,360	8,010
AC-FT	1,138M	1,188M	1,085M	1,123M	1,065M	1,383M	1,510M	1,014M	1,019M	475,800	484,800	581,900

CAL YR 1971 TOTAL 6,335,770 MEAN 17,360 MAX 33,600 MIN 7,030 AC-FT 12,570,000
WTR YR 1972 TOTAL 6,083,300 MEAN 16,620 MAX 29,200 MIN 7,050 AC-FT 12,070,000

M Expressed in thousands.

13176000 Owyhee River above China diversion dam, near Owyhee, Nev.

LOCATION.--Lat 41°55'20", long 116°04'10", in NW¼ sec.6, T.46 N., R.53 E., Elko County, on right bank 1,000 ft downstream from Skull Creek, 1 mile upstream from China diversion dam, and 2 miles southeast of Owyhee, and at mile 262.0.

DRAINAGE AREA.--458 sq mi.

PERIOD OF RECORD.--March 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,425 ft above mean sea level, unadjusted. Prior to Oct. 1, 1939, at datum 1.48 ft higher.

AVERAGE DISCHARGE.--33 years, 141 cfs (102,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,770 cfs Mar. 3 (gage height, 9.72 ft); minimum, 19 cfs Nov. 6.
Period of record: Maximum discharge, 2,710 cfs May 3 or 4, 1952 (gage height, 10.07 ft); minimum, 1.8 cfs Nov. 16, 1961.

REMARKS.--Records good except those for winter months, which are fair. Numerous diversions above station for irrigation. Flow partly regulated by Wild Horse Reservoir.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	35	41	33	120	498	448	490	449	207	69	146
2	41	35	39	32	110	671	537	495	445	206	67	147
3	39	34	37	30	115	1,350	572	520	435	203	66	148
4	38	37	40	28	125	1,010	594	570	417	200	98	148
5	38	31	43	30	145	718	658	530	403	196	109	151
6	37	29	45	32	140	771	768	690	383	173	101	154
7	37	32	41	34	135	720	817	720	427	158	98	154
8	37	32	36	35	133	613	787	730	514	152	100	153
9	37	32	37	33	132	621	756	710	570	152	104	102
10	36	30	41	32	130	698	729	560	465	148	105	85
11	36	31	42	34	150	680	694	640	410	112	103	91
12	36	33	43	70	180	636	578	630	365	97	103	93
13	35	35	40	110	180	642	655	640	327	98	106	86
14	35	38	41	135	178	696	621	670	301	93	111	84
15	36	35	43	130	178	621	597	680	286	92	110	83
16	39	32	43	140	178	600	575	590	276	92	110	52
17	41	32	40	150	198	612	539	570	262	90	110	41
18	40	31	37	210	211	626	507	650	251	95	114	39
19	40	32	34	375	279	581	480	630	235	93	111	39
20	41	30	35	369	305	505	455	610	214	92	112	39
21	43	30	39	438	325	488	453	660	197	91	113	39
22	39	32	42	646	338	487	460	590	186	90	112	38
23	30	31	45	1,030	323	515	473	540	231	87	111	37
24	29	33	47	402	329	483	514	505	229	83	108	38
25	27	34	45	280	324	536	511	475	218	80	110	39
26	28	52	40	220	330	537	484	460	206	76	138	41
27	29	82	37	140	390	544	474	445	192	74	144	45
28	30	59	39	150	602	528	497	441	179	72	143	47
29	30	53	35	130	665	504	543	446	174	70	144	44
30	28	48	35	120	------	474	510	449	204	67	143	42
31	32	------	31	115	------	445	------	453	------	71	144	------
TOTAL	1,109	1,110	1,233	5,713	6,948	19,410	17,386	18,189	9,451	3,610	3,417	2,445
MEAN	35.8	37.0	39.8	184	240	626	580	587	315	116	110	81.5
MAX	45	82	47	1,030	665	1,350	817	730	570	207	144	154
MIN	27	29	31	28	110	445	448	441	174	67	66	37
AC-FT	2,200	2,200	2,450	11,330	13,780	38,500	34,490	36,080	18,750	7,160	6,780	4,850

CAL YR 1971 TOTAL 90,212 MEAN 247 MAX 1,810 MIN 27 AC-FT 178,900
WTR YR 1972 TOTAL 90,021 MEAN 246 MAX 1,350 MIN 27 AC-FT 178,600

13177800 South Fork Owyhee River near Whiterock, Nev.

LOCATION.--Lat 41°48'00", long 116°29'00", in NE¼ sec.16, T.45 N., R.49 E., Elko County, on left bank 500 ft downstream from Rye Grass Creek, 1.8 miles upstream from Chimney Creek, and 17 miles northwest of Whiterock, and at mile 54.0.

DRAINAGE AREA.--1,080 sq mi, approximately.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,900 ft (from topographic map).

AVERAGE DISCHARGE.--17 years, 162 cfs (117,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,710 cfs Jan. 19 (gage height, 6.46 ft); minimum, 8.2 cfs Aug. 26, 27.
Period of record: Maximum discharge, 3,830 cfs June 5, 1963 (gage height, 7.55 ft); no flow Oct. 1-12, 1955, part of Sept. 17, 28, 1960, Aug. 27, 31, 1961.

REMARKS.--Records good except those for winter months or period of no gage-height record,,which are fair. Many diversions for irrigation of hay meadows above station. Flow partly regulated by four small reservoirs (total capacity, about 16,100 acre-ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	64	104	80	180	300	570	238	261	71	34	15
2	64	75	79	83	175	500	700	224	305	64	30	18
3	58	69	83	75	177	1,450	660	179	351	58	29	19
4	58	75	95	65	180	900	610	188	383	56	29	20
5	54	78	94	70	150	700	600	232	390	65	28	19
6	52	65	109	80	120	750	620	246	375	78	24	19
7	52	64	100	81	125	710	620	269	371	73	19	21
8	52	68	85	83	120	740	610	275	674	60	18	21
9	51	69	75	85	117	900	570	283	850	62	24	22
10	52	71	80	92	112	950	570	303	758	62	24	28
11	52	72	83	110	110	1,000	600	302	594	56	20	41
12	52	77	90	120	110	980	700	287	492	51	16	49
13	52	84	85	125	115	1,020	730	279	340	48	15	48
14	52	84	80	115	110	1,070	840	280	253	38	16	44
15	49	86	83	110	110	1,020	800	285	227	38	16	42
16	58	80	90	120	140	1,020	600	289	232	40	15	41
17	65	71	80	170	170	1,060	450	309	209	41	14	40
18	67	75	75	400	150	1,100	370	355	173	38	14	39
19	62	73	68	1,720	180	1,050	390	368	161	35	14	40
20	60	84	70	807	213	1,000	360	389	141	34	12	39
21	65	81	75	789	268	950	330	574	134	38	12	37
22	69	79	85	981	329	910	310	688	122	43	9.2	36
23	64	80	100	874	270	905	300	568	110	48	9.2	37
24	62	81	120	527	220	920	290	446	109	46	9.2	37
25	62	87	125	466	180	1,000	275	355	102	38	9.2	39
26	56	91	110	431	200	900	265	297	92	37	9.1	42
27	60	117	90	337	320	800	230	262	73	35	10	45
28	60	125	93	262	400	770	204	258	70	34	14	51
29	52	114	95	225	450	740	184	230	69	35	18	50
30	51	112	87	200	------	670	235	219	78	33	19	41
31	67	------	80	190	------	610	------	232	------	33	16	------
TOTAL	1,790	2,451	2,768	9,873	5,501	27,395	14,593	9,709	8,499	1,488	545.9	1,040
MEAN	57.7	81.7	89.3	318	190	884	486	313	283	48.0	17.6	34.7
MAX	69	125	125	1,720	450	1,450	840	688	850	78	34	51
MIN	49	64	68	65	110	300	184	179	69	33	9.1	15
AC-FT	3,550	4,860	5,490	19,580	10,910	54,340	28,950	19,260	16,860	2,950	1,080	2,060

CAL YR 1971 TOTAL 113,691.0 MEAN 311 MAX 1,790 MIN 35 AC-FT 225,500
WTR YR 1972 TOTAL 85,652.9 MEAN 234 MAX 1,720 MIN 9.1 AC-FT 169,900

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-19	1900	6.46	2,710	5-22	1100	3.92	745
3- 3	unknown	5.98	2,250	6- 9	1100	4.25	935
4-14	unknown	unknown	1,300				

13181000 Owyhee River near Rome, Oreg.

LOCATION.--Lat 42°52'00", long 117°39'00", in SE¼NE¼ sec.14, T.31 S., R.41 E., Malheur County, on right bank 0.5 mile downstream from Jordan Creek, 2.6 miles north of Rome, and at mile 117.0.

DRAINAGE AREA.--About 8,000 sq mi.

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,344.20 ft above mean sea level. Prior to Feb. 10, 1960, at datum 0.24 ft lower.

AVERAGE DISCHARGE.--23 years, 897 cfs (649,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 25,300 cfs Mar. 3 (gage height, 15.48 ft); minimum, 109 cfs Aug. 31. Period of record: Maximum discharge, 33,500 cfs Dec. 24, 1964 (gage height, 16.7 ft, from floodmark); minimum, 42 cfs Aug. 12, 1954, July 28, Aug. 5, 1961, July 31, 1968.

REMARKS.--Records good. Flow regulated by Antelope Reservoir (capacity, 70,000 acre-ft, increased in 1970), Wild Horse Reservoir (capacity, 32,690 acre-ft), and numerous small reservoirs. Diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	308	230	600	422	900	14,000	2,970	1,900	1,070	262	160	113
2	318	221	498	422	850	9,850	3,080	1,840	1,080	248	158	115
3	326	233	450	414	800	20,400	3,700	1,790	1,030	241	158	127
4	315	259	434	308	750	21,900	4,050	1,790	992	238	166	153
5	312	262	386	304	720	14,600	3,850	1,830	974	230	158	155
6	304	266	366	301	700	13,100	3,970	1,940	944	220	150	160
7	284	259	458	336	700	13,300	3,960	2,090	932	214	153	166
8	270	266	362	358	700	11,500	3,790	2,150	974	205	155	163
9	262	273	280	340	700	10,400	3,530	2,150	1,120	208	153	171
10	252	259	343	336	700	11,500	3,310	2,050	1,530	227	155	174
11	242	256	358	336	700	12,400	3,170	1,900	1,820	227	150	179
12	239	273	382	346	720	11,500	3,040	1,810	1,710	220	145	208
13	236	280	386	354	720	10,500	2,950	1,760	1,390	224	145	220
14	236	298	362	346	760	10,400	2,800	1,760	1,180	227	142	227
15	227	315	362	329	845	9,400	2,660	1,730	992	238	140	244
16	230	322	362	308	885	8,720	2,640	1,740	857	230	145	262
17	245	318	350	298	1,380	8,680	2,680	1,750	765	214	145	258
18	252	304	336	318	3,240	8,960	2,500	1,690	730	190	140	248
19	259	301	322	430	2,840	9,080	2,260	1,630	695	182	135	241
20	266	287	312	3,070	2,430	7,740	1,880	1,590	675	174	132	234
21	276	276	312	5,900	2,530	6,540	1,930	1,700	608	176	145	224
22	273	284	329	7,910	3,430	6,320	1,890	2,310	562	185	140	205
23	270	294	386	14,600	3,420	6,040	1,900	2,830	513	190	132	193
24	262	304	438	9,700	2,760	5,910	1,860	2,760	477	187	132	185
25	259	298	474	4,910	2,200	5,110	1,860	2,180	446	185	127	179
26	259	322	466	3,520	1,920	4,970	1,880	1,800	414	185	123	182
27	252	418	422	2,550	3,100	4,540	1,860	1,530	366	187	120	185
28	245	570	420	1,860	7,900	3,900	1,830	1,350	326	196	118	190
29	236	555	418	1,430	19,200	3,630	1,850	1,220	306	190	118	190
30	221	685	414	1,120	------	3,430	1,910	1,150	283	179	115	193
31	205	------	442	956	------	3,210	------	1,110	------	168	115	------
TOTAL	8,141	9,488	12,230	64,132	68,500	291,530	81,560	56,830	25,761	6,447	4,370	5,744
MEAN	263	316	395	2,069	2,362	9,404	2,719	1,833	859	208	141	191
MAX	326	685	600	14,600	19,200	21,900	4,050	2,830	1,820	262	166	262
MIN	205	221	280	298	700	3,210	1,830	1,110	283	168	115	113
AC-FT	16,150	18,820	24,260	127,200	135,900	578,200	161,800	112,700	51,100	12,790	8,670	11,390

CAL YR 1971 TOTAL 634,733 MEAN 1,739 MAX 26,700 MIN 180 AC-FT 1,259,000
WTR YR 1972 TOTAL 634,733 MEAN 1,734 MAX 21,900 MIN 113 AC-FT 1,259,000

PEAK DISCHARGE (BASE, 5,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-23	1200	12.63	16,500	3- 7	1600	12.04	15,000
2-29	1800	15.35	24,900	3-11	1700	11.63	14,000
3-11	1700	11.63	14,000				

13185000 Boise River near Twin Springs, Idaho

LOCATION.--Lat 43°39'22", long 115°43'34", in NW¼NE¼ sec.27, T.4 N., R.6 E., Boise County, Boise National Forest, on right bank 0.7 mile upstream from Birch Creek, 1.8 miles upstream from maximum flow line of Arrowrock Reservoir, 3.2 miles downstream from Twin Springs, 13 miles upstream from Arrowrock Dam, and at mile 98.1.

DRAINAGE AREA.--830 sq mi, approximately. Mean altitude, 6,350 ft.

PERIOD OF RECORD.--March 1911 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,256.34 ft (U.S.C.& G.S., preliminary, unadjusted). March 1911 to Apr. 3, 1915, nonrecording gage, and Apr. 4, 1915, to Sept. 30, 1965, water-stage recorder at site 0.3 mile downstream at datum 5.26 ft lower.

AVERAGE DISCHARGE.--61 years, 1,203 cfs (19.68 inches per year, 871,600 acre-ft per year); 15-year base period (1952-67), 1,252 cfs.

EXTREMES.--Current year: Maximum discharge, 10,100 cfs June 2 (gage height, 9.85 ft); minimum daily, 260 cfs Dec. 28; minimum gage height, 3.72 ft Sept. 18, 19.
Period of record: Maximum discharge, 18,800 cfs Dec. 23, 1964 (gage height, 12.20 ft, from floodmark, site and datum then in use); minimum, 109 cfs Dec. 10, 1944; minimum gage height, 1.48 ft Dec. 6, 7, 1960 (site and datum then in use).

REMARKS.--Records good except those for winter period, which are fair..

Rating tables (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 28 to May 30; stage-discharge relation affected by ice Dec. 3, 8-20, Dec. 26 to Jan. 21, Jan. 26 to Feb. 5, Feb. 11)

Oct. 1 to May 30				May 31 to Sept. 30			
4.0	226	6.0	2,100	3.7	418	6.0	2,480
4.5	505	8.0	5,400	4.0	584	7.0	3,980
5.0	930	10.0	9,740	4.5	935	8.0	5,770
				5.0	1,360	10.0	10,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	540	489	404	450	440	1,680	1,540	2,810	9,550	3,290	830	476
2	524	466	309	440	380	1,410	1,700	2,940	9,450	3,010	808	465
3	515	446	455	330	375	1,990	2,100	3,380	8,720	2,730	785	460
4	513	464	429	280	440	1,640	2,190	4,200	7,730	2,530	764	449
5	508	452	477	440	580	1,360	2,340	5,100	7,350	2,460	735	449
6	499	370	528	505	558	1,270	3,110	5,540	7,350	2,440	714	543
7	486	415	398	490	520	1,350	3,250	5,890	7,950	2,460	694	492
8	475	470	285	420	463	1,290	2,840	6,120	8,620	2,270	681	465
9	466	465	445	400	429	1,400	2,570	5,470	8,450	2,070	667	449
10	460	475	480	395	404	1,900	2,460	4,980	8,470	1,850	660	444
11	456	482	485	400	395	2,570	2,290	4,780	7,780	1,770	647	481
12	451	505	470	365	435	2,550	2,270	4,930	6,230	1,760	634	560
13	449	531	460	340	442	2,570	2,060	5,270	5,350	1,770	628	509
14	464	499	460	330	429	2,740	1,900	5,870	5,070	1,750	641	476
15	463	472	465	455	429	2,570	1,860	6,630	5,180	1,630	654	460
16	464	443	455	460	435	2,660	1,970	6,870	5,450	1,500	634	449
17	478	404	450	520	449	3,000	1,900	7,340	5,560	1,420	603	439
18	465	423	430	535	470	3,380	1,800	6,870	5,470	1,350	584	434
19	470	429	425	535	491	3,210	1,700	6,060	4,660	1,280	566	439
20	501	463	445	600	528	2,720	1,710	5,900	4,070	1,220	572	476
21	507	442	449	950	614	2,550	1,880	5,650	3,960	1,160	555	449
22	483	435	456	894	655	2,580	1,900	5,070	3,900	1,150	543	444
23	473	410	528	831	663	3,350	1,990	4,630	4,010	1,060	531	444
24	470	435	463	689	622	2,890	2,340	4,560	3,690	1,020	531	439
25	462	449	470	597	581	2,460	2,340	4,590	3,340	991	525	454
26	466	442	430	545	551	2,070	2,190	4,630	2,910	967	525	454
27	486	470	370	500	589	1,820	2,270	4,920	2,640	935	514	525
28	457	470	260	480	1,250	1,650	2,830	5,590	2,770	913	498	520
29	378	477	330	440	2,230	1,500	3,550	6,630	3,050	890	514	476
30	410	449	452	390	------	1,400	3,100	7,710	3,420	868	514	465
31	502	------	460	390	------	1,390	------	8,700	------	860	492	------
TOTAL	14,741	13,642	13,423	15,396	16,847	66,920	67,950	169,630	172,150	51,374	19,243	14,085
MEAN	476	455	433	497	581	2,159	2,265	5,472	5,738	1,657	621	470
MAX	540	531	528	950	2,230	3,380	3,550	8,700	9,550	3,290	830	560
MIN	378	370	260	280	375	1,270	1,540	2,810	2,640	860	492	434
CFSM	.57	.55	.52	.60	.70	2.60	2.73	6.59	6.91	2.00	.75	.57
IN.	.66	.61	.60	.69	.76	3.00	3.05	7.60	7.72	2.30	.86	.63
AC-FT	29,240	27,060	26,620	30,540	33,420	132,700	134,800	336,500	341,500	101,900	38,170	27,940

CAL YR 1971 TOTAL 685,196 MEAN 1,877 MAX 8,430 MIN 260 CFSM 2.26 IN 30.71 AC-FT 1,359,000
WTR YR 1972 TOTAL 635,401 MEAN 1,736 MAX 9,550 MIN 260 CFSM 2.09 IN 28.48 AC-FT 1,260,000

PEAK DISCHARGE (BASE, 3,700 CFS).--May 17 (0330) 7,560 cfs (8.87 ft); June 2 (0400) 10,100 cfs (9.85 ft).

13186000 South Fork Boise River near Featherville, Idaho

LOCATION.--Lat 43°29'40", long 115°18'20", in lot 6, NE¼ sec.19, T.2 N., R.10 E., Elmore County, on right bank 2.5 miles upstream from Deer Creek, 8 miles southwest of Featherville, and at mile 59.0.

DRAINAGE AREA.--635 sq mi. Mean altitude, 6,840 ft.

PERIOD OF RECORD.--April 1945 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,220 ft (from topographic map of Bureau of Reclamation).

AVERAGE DISCHARGE.--27 years, 809 cfs (17.30 inches per year, 586,100 acre-ft per year); 15-year base period (1952-67), 765 cfs.

EXTREMES.--Current year: Maximum discharge, 6,560 cfs June 10 (gage height, 7.52 ft); minimum, 188 cfs Dec. 2 (gage height, 1.44 ft).
Period of record: Maximum discharge, 7,580 cfs May 24, 1956 (gage height, 8.62 ft); minimum, 30 cfs Feb. 10, 1949 (gage height, 0.60 ft), result of snowslide upstream.

REMARKS.--Records excellent except those for winter period, which are fair. No regulation. Diversions above station for irrigation of about 450 acres (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used July 4-16; stage-discharge relation affected by ice Dec. 3, 5, 8, 9)

1.4	176	4.0	1,780
1.6	237	6.0	4,160
2.0	398	7.3	6,190
3.0	962		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	347	319	253	294	245	455	691	1,650	6,000	1,920	490	276
2	344	305	211	286	215	398	787	1,700	6,090	1,780	480	269
3	330	288	286	230	210	504	955	1,930	5,830	1,650	470	262
4	328	305	273	200	255	445	1,030	2,380	5,230	1,550	460	258
5	325	305	278	265	330	403	1,110	2,840	5,010	1,490	450	265
6	319	259	305	295	320	417	1,410	2,940	5,020	1,460	440	295
7	312	260	256	290	302	422	1,460	3,110	5,660	1,430	430	284
8	308	301	215	250	285	403	1,320	3,220	5,990	1,340	425	272
9	302	304	280	242	255	436	1,230	2,950	5,940	1,260	420	269
10	298	311	297	240	233	524	1,180	2,770	6,090	1,180	412	262
11	294	309	302	245	225	613	1,120	2,690	5,340	1,120	402	295
12	292	322	290	225	245	646	1,100	2,770	4,270	1,090	390	332
13	290	332	280	210	248	714	997	2,970	3,610	1,070	390	311
14	302	308	280	205	240	799	922	3,310	3,390	1,030	400	288
15	298	298	288	260	237	811	949	3,780	3,430	990	415	280
16	305	273	280	265	233	895	1,030	4,050	3,550	922	400	272
17	315	258	278	300	235	1,050	997	4,330	3,590	869	385	265
18	308	266	266	310	237	1,170	955	4,020	3,460	824	358	258
19	314	272	262	310	245	1,120	922	3,540	3,000	780	345	269
20	324	304	275	350	260	1,010	955	3,440	2,640	738	345	284
21	330	293	280	470	272	990	1,050	3,310	2,520	714	336	272
22	317	282	285	445	280	1,050	1,080	2,940	2,420	697	328	269
23	311	260	320	410	276	1,330	1,150	2,640	2,490	657	307	262
24	310	286	290	360	269	1,240	1,320	2,520	2,350	629	303	265
25	305	286	295	315	262	1,080	1,380	2,510	2,140	602	303	272
26	308	273	270	295	255	908	1,340	2,580	1,930	580	303	280
27	325	285	240	280	276	805	1,410	2,830	1,810	565	292	328
28	294	300	195	270	426	732	1,710	3,380	1,850	550	284	319
29	241	294	215	245	549	668	2,060	4,240	1,890	535	280	295
30	282	271	290	225	------	635	1,820	5,010	1,990	520	284	288
31	328	------	300	225	------	635	------	5,450	------	505	280	------
TOTAL	9,606	8,729	8,435	8,812	7,920	23,308	35,440	97,800	114,530	31,047	11,607	8,416
MEAN	310	291	272	284	273	752	1,181	3,155	3,818	1,002	374	281
MAX	347	332	320	470	549	1,330	2,060	5,450	6,090	1,920	490	332
MIN	241	258	195	200	210	398	691	1,650	1,810	505	280	258
CFSM	.49	.46	.43	.45	.43	1.18	1.86	4.97	6.01	1.58	.59	.44
IN.	.56	.51	.49	.52	.46	1.37	2.08	5.73	6.71	1.82	.68	.49
AC-FT	19,050	17,310	16,730	17,480	15,710	46,230	70,300	194,000	227,200	61,580	23,020	16,690

CAL YR 1971 TOTAL 448,127 MEAN 1,228 MAX 6,390 MIN 140 CFSM 1.93 IN 26.25 AC-FT 888,900
WTR YR 1972 TOTAL 365,650 MEAN 999 MAX 6,090 MIN 195 CFSM 1.57 IN 21.42 AC-FT 725,300

PEAK DISCHARGE (BASE, 2,000 CFS).--May 17 (0600) 4,450 cfs (6.20 ft); June 10 (0500) 6,560 cfs (7.52 ft).

13189000 Little Camas Canal at heading, near Bennett, Idaho

LOCATION.--Lat 43°21'10", long 115°23'20", in sec.9, T.1 S., R.9 E., Elmore County, Boise National Forest, on right bank 400 ft downstream from Little Camas Reservoir, 4 miles northeast of Bennett, and 22 miles northeast of Mountain Home.

PERIOD OF RECORD.--June to November 1917, October 1923 to current year.

GAGE.--Nonrecording gage read during periods of flow. Datum of gage is 4,926 ft above mean sea level (datum of Mountain Home Irrigation District). June 1 to Nov. 29, 1917, water-stage recorder and Apr. 16 to May 11, 1924, nonrecording gage, at datum 6.00 ft lower. May 12, 1924, to Sept. 30, 1929, water-stage recorder at present datum.

EXTREMES.--Period of record: Maximum daily discharge, 77 cfs Apr. 27-30, May 1, 3, 9, 1924; no flow during nonirrigation seasons and at times during irrigation seasons.

REMARKS.--Records fair. Flow regulated by Little Camas Reservoir 400 ft upstream (capacity, 22,300 acre-ft). No diversion above station. Canal is an interbasin diversion and diverts from Little Camas Reservoir (South Fork Boise River drainage) in sec.9, T.1 S., R.9 E., and discharges into Long Tom Creek basin, where water is stored in Long Tom Reservoir for irrigation of 5,000 acres of land near Mountain Home.

COOPERATION.--Gage readings furnished by Mountain Home Irrigation District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	45	54	53	59	44
2							0	17	54	54	59	44
3							0	0	54	54	58	44
4							0	0	54	54	58	43
5							0	0	54	55	58	43
6							0	34	54	56	58	43
7							0	45	56	57	58	42
8							0	45	56	50	58	42
9							0	45	56	44	58	42
10							0	47	56	44	57	42
11							0	49	55	45	57	42
12							0	49	55	45	57	42
13							0	49	55	47	57	16
14							0	49	55	48	57	0
15							0	52	55	22	57	0
16							0	54	55	0	57	0
17							0	54	55	0	56	0
18							0	54	54	0	56	0
19							0	54	54	36	48	0
20							0	54	54	57	44	0
21							0	54	54	57	44	0
22							0	54	54	57	43	0
23							0	54	54	57	43	0
24							0	54	54	58	47	0
25							0	54	54	58	50	0
26							0	54	54	58	50	0
27							23	54	54	59	50	0
28							41	54	54	59	50	0
29							45	54	54	59	50	0
30					------		45	54	53	59	50	0
31		------			------		------	54	------	59	47	------
TOTAL	0	0	0	0	0	0	154	1,390	1,634	1,461	1,651	529
MEAN	0	0	0	0	0	0	5.13	44.8	54.5	47.1	53.3	17.6
MAX	0	0	0	0	0	0	45	54	56	59	59	44
MIN	0	0	0	0	0	0	0	0	53	0	43	0
AC-FT	0	0	0	0	0	0	305	2,760	3,240	2,900	3,270	1,050

CAL YR 1971	TOTAL	6,597.00	MEAN 18.1	MAX 58	MIN 0	AC-FT	13,090
WTR YR 1972	TOTAL	6,819.00	MEAN 18.6	MAX 59	MIN 0	AC-FT	13,530

13190000 Anderson Ranch Reservoir at Anderson Ranch Dam, Idaho

LOCATION.--Lat 43°21'30", long 115°26'40", in SE¼ sec.1, T.1 S., R.8 E., Elmore County, Boise National Forest, at inlet structure of outlet works of dam on South Fork Boise River, 1.5 miles downstream from Camas Creek, 3 miles northwest of Bennett (Dixie Store), and at mile 43.5.

DRAINAGE AREA.--980 sq mi, approximately.

PERIOD OF RECORD.--December 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to June 8, 1962, nonrecording gage or supplementary gage in powerhouse read once daily.

EXTREMES.--Current year: Maximum contents observed, 464,800 acre-ft July 1 (elevation, 4,196.13 ft); minimum observed, 259,100 acre-ft Mar. 7 (elevation, 4,144.03 ft).
Period of record: Maximum contents observed, 472,900 acre-ft June 26, 1972 (elevation, 4,197.82 ft); no usable contents prior to Jan. 27, 1946; minimum since full capacity was attained June 21, 1951, 63,830 acre-ft Jan. 6, 1962 (elevation, 4,058.35 ft).

REMARKS.--Reservoir is formed by earth-fill dam. Storage began Dec. 15, 1945. Usable contents, 464,200 acre-ft between elevations 3,992 and 4,196 ft (top of spillway gates). Elevation of spillway crest, 4,174 ft, and of top of dam, 4,206 ft. Dead storage below 3,992 ft is 28,980 acre-ft. Figures given herein represent usable contents. Water is used for irrigation in Boise valley and for power production.

COOPERATION.--Capacity table furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WRD Idaho 1969: 1968(m).

Capacity table (elevation, in feet, and contents, in acre-feet)

4,140.0	246,100	4,180.0	392,400
4,150.0	279,100	4,190.0	436,300
4,160.0	314,400	4,200.0	483,400
4,170.0	352,000		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	461,500	448,700	420,300	387,400	331,100	264,300	325,400	292,200	357,700	464,600	457,800	438,400
2	461,300	447,800	419,300	386,300	328,600	262,900	328,200	289,900	366,400	464,600	457,300	437,500
3	461,100	446,700	418,700	385,100	326,000	261,900	330,400	288,300	374,400	464,400	456,900	437,200
4	461,000	445,700	417,600	383,700	323,700	261,300	331,200	287,900	380,800	464,100	456,400	436,900
5	460,800	444,600	416,900	382,400	321,400	260,500	332,200	288,800	387,400	463,700	455,800	436,600
6	460,600	443,500	416,000	381,200	319,100	259,100	334,300	290,500	395,800	463,800	455,700	436,300
7	460,300	442,200	414,900	379,900	316,800	259,400	336,500	292,700	405,000	463,800	455,100	436,100
8	460,100	441,200	413,500	378,700	314,500	260,500	338,100	295,100	414,800	464,000	454,500	435,700
9	459,800	439,900	412,400	377,900	312,000	261,500	339,800	296,600	424,400	463,800	453,700	435,400
10	459,500	438,500	411,400	376,900	309,500	262,300	340,900	297,600	434,100	463,500	453,200	435,100
11	459,200	437,500	410,500	375,400	306,900	264,000	340,000	298,500	441,400	463,200	452,500	435,000
12	458,800	436,500	409,600	374,300	304,500	266,100	340,100	299,900	446,900	462,700	451,900	434,900
13	458,400	435,600	408,500	372,700	302,100	267,800	336,200	301,700	450,300	462,000	451,500	434,800
14	458,100	434,600	407,700	370,500	299,700	269,600	333,600	304,000	453,600	461,500	451,000	434,500
15	457,600	433,600	406,500	368,200	297,200	271,300	331,400	307,600	457,000	460,700	450,600	434,300
16	457,100	432,400	405,500	365,800	294,800	274,300	329,200	311,700	460,100	459,800	449,800	434,000
17	456,600	431,300	404,400	363,500	292,500	277,900	326,900	316,800	462,600	458,800	449,100	433,800
18	456,000	430,100	403,300	361,700	290,000	281,900	324,400	321,000	463,000	458,800	448,500	433,600
19	455,800	429,000	402,000	359,600	287,700	285,900	321,700	324,000	463,900	458,700	447,800	433,200
20	455,400	428,000	400,800	357,800	285,300	289,400	319,200	326,500	463,600	458,500	447,500	432,900
21	455,100	426,900	399,800	356,100	282,900	292,800	317,000	328,700	463,700	458,500	446,700	432,500
22	454,700	425,800	398,900	354,300	280,600	296,500	314,000	329,900	464,400	458,700	445,900	432,300
23	454,200	425,100	397,800	352,600	278,300	301,100	311,400	330,400	464,700	459,200	445,000	431,900
24	453,600	424,400	396,700	350,300	276,000	305,400	308,700	330,400	464,700	459,300	444,300	431,400
25	453,000	423,800	395,800	347,900	273,500	309,100	305,800	330,300	464,300	459,200	443,500	431,200
26	452,700	423,400	394,900	345,700	271,100	312,000	302,700	330,400	464,400	459,100	442,800	430,900
27	452,000	422,800	393,600	343,400	268,900	314,500	299,900	331,100	464,700	458,800	442,400	430,800
28	451,300	422,500	392,200	341,100	267,200	316,800	297,700	333,000	464,700	458,600	441,600	430,500
29	450,600	421,900	391,000	338,600	265,900	318,700	296,500	336,900	464,700	458,300	440,800	430,400
30	450,000	421,100	389,800	336,100	------	321,000	294,600	342,500	464,700	458,300	440,000	430,200
31	449,500	------	388,700	333,500	------	323,100	------	349,400	------	458,200	439,200	------
MAX	461,500	448,700	420,300	387,400	331,100	323,100	340,900	349,400	464,700	464,600	457,800	438,400
MIN	449,500	421,100	388,700	333,500	265,900	259,100	294,600	287,900	357,700	458,200	439,200	430,200
(†)	4,192.88	4,186.63	4,179.11	4,165.17	4,146.11	4,162.38	4,154.47	4,169.33	4,196.12	4,194.73	4,190.64	4,188.67
(‡)	-12,300	-28,400	-32,400	-55,200	-67,600	+57,200	-28,500	+54,800	+115,300	-6,500	-19,000	-9,000

CAL YR 1971..... ‡ +1,700
WTR YR 1972..... ‡ -31,600

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

13190500 South Fork Boise River at Anderson Ranch Dam, Idaho

LOCATION.--Lat 43°20'30", long 115°28'40", in NW¼ sec.14, T.1 S., R.8 E., Elmore County, Boise National Forest, on right bank 600 ft upstream from Dixie Creek, 1.8 miles downstream from Anderson Ranch Reservoir, 2.2 miles northwest of Bennett (Dixie Store), and at mile 41.5.

DRAINAGE AREA.--982 sq mi.

PERIOD OF RECORD.--April 1943 to current year (includes flow of Dixie Creek prior to October 1946).

GAGE.--Water-stage recorder. Altitude of gage is 3,850 ft (from topographic map of Bureau of Reclamation).

AVERAGE DISCHARGE.--29 years, 1,012 cfs (733,200 acre-ft per year); 15-year base period (1952-67), 977 cfs.

EXTREMES.--Current year: Maximum discharge, 4,740 cfs June 18 (gage height, 7.47 ft); minimum, 117 cfs Mar. 11 (gage height, 2.28 ft).
Period of record: Maximum discharge, 9,850 cfs May 25, 1956 (gage height, 10.56 ft); minimum, 0.1 cfs Nov. 13, 1959; minimum gage height, 0.99 ft Feb. 16, 1950.

REMARKS.--Records excellent except those for April and May, which are good. Flow regulated by Anderson Ranch Reservoir 1.8 miles upstream (see sta 13190000) beginning Dec. 15, 1945. Flow of Little Camas Creek is stored in Little Camas Reservoir (capacity, 22,300 acre-ft, no spill most years) and diverted out of basin through Little Camas Canal (see sta 13189000) for irrigation of about 5,000 acres of land in vicinity of Mountain Home. Diversions above station for irrigation of about 600 acres (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 9 to June 5)

2.5	188	5.0	1,780
3.0	367	6.0	2,840
3.5	593	7.0	4,070
4.0	900	8.0	5,550

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	516	845	731	952	1,620	1,710	210	3,880	3,600	2,480	749	775
2	516	908	726	956	1,630	1,720	214	3,880	3,540	2,270	744	777
3	515	904	737	996	1,630	1,730	798	3,880	3,490	2,150	740	489
4	512	907	919	998	1,630	1,240	1,750	3,880	3,500	2,090	745	493
5	510	908	932	999	1,630	1,240	1,760	3,880	2,940	2,020	747	502
6	510	909	934	1,030	1,640	1,510	1,760	3,880	2,440	1,690	519	491
7	510	907	933	1,020	1,640	636	1,760	3,880	2,570	1,700	779	491
8	506	908	959	1,020	1,650	301	1,750	3,880	2,730	1,520	754	498
9	500	1,060	971	756	1,650	301	1,740	3,880	2,900	1,590	752	491
10	504	1,080	980	960	1,650	344	1,730	3,880	3,240	1,520	750	496
11	507	940	878	1,180	1,660	329	2,760	3,730	3,350	1,520	747	496
12	506	923	879	1,180	1,670	208	3,070	3,620	3,320	1,510	748	499
13	507	924	972	1,180	1,660	529	3,030	3,650	3,190	1,510	526	506
14	511	925	916	1,350	1,670	669	3,060	3,670	2,970	1,510	760	494
15	595	923	942	1,590	1,680	677	3,060	3,650	2,990	1,510	758	494
16	626	923	938	1,590	1,680	234	3,060	3,600	3,130	1,520	757	495
17	631	923	940	1,590	1,680	221	3,050	3,560	3,500	1,510	757	493
18	630	920	944	1,600	1,680	226	3,050	3,560	4,430	941	755	489
19	635	927	946	1,600	1,690	225	3,050	3,590	3,530	875	758	492
20	626	925	946	1,610	1,700	218	3,070	3,550	3,700	917	527	491
21	628	927	943	1,610	1,700	217	3,060	3,590	3,080	736	770	491
22	634	927	944	1,620	1,710	219	3,600	3,590	2,890	718	764	492
23	633	730	945	1,620	1,720	217	3,410	3,590	3,030	465	766	498
24	637	726	945	1,620	1,710	219	3,710	3,590	3,140	733	766	492
25	637	729	948	1,610	1,720	217	3,810	3,590	2,890	746	767	527
26	639	728	946	1,620	1,720	216	3,780	3,590	2,380	754	767	557
27	643	732	945	1,620	1,720	213	3,780	3,590	2,190	749	542	560
28	639	727	951	1,630	1,700	213	3,820	3,590	2,390	754	780	520
29	640	728	952	1,630	1,710	213	3,880	3,590	2,420	749	775	487
30	640	726	953	1,630	------	210	3,820	3,600	2,450	518	777	478
31	632	------	947	1,630	------	214	------	3,600	------	713	760	------
TOTAL	17,875	26,269	28,542	41,997	48,550	16,636	80,402	114,490	91,920	39,988	22,606	15,554
MEAN	577	876	921	1,355	1,674	537	2,680	3,693	3,064	1,290	729	518
MAX	643	1,080	980	1,630	1,720	1,730	3,880	3,880	4,430	2,480	780	777
MIN	500	726	726	756	1,620	208	210	3,550	2,190	465	519	478
AC-FT	35,460	52,100	56,610	83,300	96,300	33,000	159,500	227,100	182,300	79,320	44,840	30,850

CAL YR 1971 TOTAL 613,732 MEAN 1,681 MAX 4,890 MIN 166 AC-FT 1,217,000
WTR YR 1972 TOTAL 544,829 MEAN 1,489 MAX 4,430 MIN 208 AC-FT 1,081,000

13194000 Arrowrock Reservoir at Arrowrock Dam, Idaho

LOCATION.--Lat 43°35'40", long 115°55'19", in E½ sec.13, T.3 N., R.4 E., Elmore County, Boise National Forest, at Arrowrock Dam on Boise River, 14 miles east of Boise, and at mile 74.0.

DRAINAGE AREA.--2,210 sq mi, approximately.

PERIOD OF RECORD.--October 1917 to current year. Published as "at Arrowrock" October 1917 to September 1962.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents observed, 287,800 acre-ft June 29 (elevation, 3,216.40 ft); minimum observed, 6,600 acre-ft Sept. 18 (elevation, 3,033.41 ft).
Period of record: Maximum contents observed, 301,200 acre-ft May 29, 1948 (elevation, 3,219.1 ft); no usable contents during period in each of several years when sluice gates were open and natural flow was passing through reservoir.

REMARKS.--Reservoir is formed by gravity-section concrete-arch dam completed in 1915 and raised 5 ft in 1937; storage began in 1915. Capacity, 286,600 acre-ft between elevations 2,974 ft (9.5 ft above sluice gate sill) and 3,216 ft (highest position of movable crest of spillway). Silt deposition at dam has raised the lower storage level and decreased the capacity of the reservoir. Prior to Oct. 1, 1952, contents in publications of the Geological Survey applied from original capacity table and no silt corrections were made. Beginning Oct. 1, 1952, contents applied from revised table, which is the original table reduced by amounts varying from 347 acre-ft at elevation 2,974 to 5,000 acre-ft at elevation 3,085 ft and above. Water is used for irrigation in Boise valley.

COOPERATION.--Gage readings and capacity table furnished by Bureau of Reclamation.

Capacity table (elevation, in feet, and contents, in acre-feet)

3,030.0	5,870	3,130.0	90,500
3,040.0	8,270	3,160.0	146,000
3,060.0	16,800	3,190.0	214,000
3,080.0	30,000	3,218.0	292,800
3,100.0	49,000		

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62,600	134,500	217,600	275,700	276,300	197,300	221,400	143,200	239,700	287,100	185,300	16,600
2	65,000	137,500	219,900	276,000	276,400	196,100	219,100	143,600	248,800	286,600	180,500	15,300
3	67,200	140,400	222,200	276,200	276,200	196,200	216,800	144,200	256,900	285,200	175,900	14,400
4	69,400	143,100	224,800	276,100	276,100	199,300	215,600	146,500	262,400	285,000	171,300	13,100
5	71,700	145,900	227,600	275,900	276,200	199,100	214,000	150,500	267,400	284,500	165,500	12,400
6	74,000	148,700	231,000	276,200	276,400	198,900	210,200	155,900	274,600	283,600	159,500	11,800
7	76,200	151,400	234,100	276,400	276,500	198,900	208,000	161,300	279,900	282,400	153,400	11,200
8	78,900	154,100	236,500	276,400	276,400	197,300	205,200	167,800	283,000	281,000	147,600	10,600
9	81,000	157,000	239,000	276,300	276,300	194,900	202,500	173,900	284,800	278,900	142,100	10,000
10	82,700	160,100	241,900	276,200	276,200	193,200	199,100	177,800	285,600	276,600	136,600	9,500
11	85,100	163,200	244,800	276,200	276,200	194,000	195,400	180,800	285,600	273,600	130,400	9,000
12	87,200	165,900	247,600	276,900	276,200	195,900	190,600	183,000	284,100	270,600	124,000	8,500
13	89,400	168,700	250,600	276,800	276,300	197,900	185,900	185,300	282,000	268,500	118,000	8,200
14	91,400	171,500	253,600	276,800	276,300	201,200	181,000	188,100	282,400	266,500	111,900	7,900
15	93,700	174,700	256,500	277,100	272,900	205,000	175,400	193,000	285,000	264,200	106,700	7,500
16	96,100	177,500	259,500	277,500	265,800	208,800	172,000	198,700	287,200	261,900	101,100	7,200
17	98,500	180,400	262,400	277,800	258,700	211,800	166,500	204,600	286,500	259,100	95,400	6,900
18	100,900	183,000	263,200	278,200	251,700	215,200	162,000	210,900	286,400	256,300	89,300	6,600
19	103,200	185,600	263,900	278,800	244,800	219,800	157,400	215,100	286,900	252,300	83,600	9,100
20	105,700	188,200	264,900	279,100	238,900	223,900	153,000	218,000	284,200	247,500	78,400	11,900
21	108,100	190,900	266,000	280,300	233,300	225,900	148,800	220,400	285,700	242,500	73,100	14,600
22	110,600	193,900	266,800	276,600	227,500	227,400	145,200	222,100	287,600	237,400	67,600	17,000
23	113,000	196,700	267,900	275,800	222,400	229,400	143,200	222,100	287,400	232,700	60,900	19,500
24	115,400	199,000	269,100	275,100	217,400	232,200	141,000	221,200	287,400	226,600	54,500	21,600
25	117,800	201,500	270,300	276,500	212,100	234,300	140,600	220,200	286,900	221,200	48,600	24,100
26	120,200	204,000	271,600	277,000	207,200	234,300	140,100	219,500	285,400	216,000	42,900	24,900
27	122,600	206,800	272,800	277,100	202,600	232,800	139,300	219,000	285,200	210,800	37,400	27,300
28	125,000	209,600	274,500	276,900	197,600	231,000	139,000	219,300	287,300	205,900	31,300	29,800
29	127,300	212,300	274,500	276,800	196,800	229,100	140,300	221,700	287,800	200,800	26,800	32,200
30	129,700	215,100	275,200	276,600	------	226,500	142,300	226,000	287,200	195,800	21,900	34,200
31	132,100	------	275,500	276,400	------	223,600	------	232,200	------	190,300	18,600	------
MAX	132,100	215,100	275,500	280,300	276,500	234,300	221,400	232,200	287,800	287,100	185,300	34,200
MIN	62,600	134,500	217,600	275,100	196,800	193,200	139,000	143,200	239,700	190,300	18,600	6,600
(†)	3,153.05	3,190.41	3,212.33	3,212.64	3,183.04	3,193.70	3,158.15	3,197.00	3,216.20	3,180.34	3,063.37	3,085.22
(‡)	+71,800	+83,000	+60,400	+900	-79,600	+26,800	-81,300	+89,900	+55,000	-96,900	-171,700	+15,600

CAL YR 1971..... ‡ +7,600
WTR YR 1972..... ‡ -26,100

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

13200000 Mores Creek above Robie Creek, near Arrowrock Dam, Idaho

LOCATION.--Lat 43°38'53", long 115°59'20", in SE¼ sec.28, T.4 N., R.4 E., Boise County, on left bank at State roadside park, 1.7 miles upstream from Robie Creek, 5 miles northwest of Arrowrock Dam, and at mile 5.8.

DRAINAGE AREA.--399 sq mi.

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1958, published as Moore Creek above Robie Creek, near Arrowrock, and October 1958 to September 1962, published as "near Arrowrock."

GAGE.--Water-stage recorder. Altitude of gage is 3,120 ft (from topographic map).

AVERAGE DISCHARGE.--22 years, 306 cfs (10.41 inches per year, 221,700 acre-ft per year); 15-year base period (1952-67), 277 cfs.

EXTREMES.--Current year: Maximum discharge, 2,580 cfs Mar. 18 (gage height, 7.03 ft); minimum, 39 cfs Sept. 4, (gage height, 2.12 ft).
Period of record: Maximum discharge, 5,440 cfs Dec. 23, 1955 (gage height, 9.55 ft); minimum, 8.9 cfs Aug. 9, 1968 (gage height, 2.00 ft).

REMARKS.--Records good except those for winter period, which are fair. Diversions above station and from Robie Creek for irrigation of about 900 acres. Records of water temperatures for the water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 7-10, 18, Jan. 5, 12, 13, Feb. 1)

2.0	34	3.5	348
2.3	61	4.0	568
2.6	100	5.0	1,110
3.0	185	7.0	2,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	88	93	123	150	868	879	981	1,150	287	77	42
2	80	80	69	125	137	830	929	981	1,150	269	76	41
3	78	82	93	93	131	1,370	1,060	1,040	1,100	253	72	40
4	77	85	87	85	144	1,070	1,080	1,160	1,040	240	70	40
5	76	78	90	140	173	890	1,260	1,300	992	228	67	41
6	75	62	183	149	170	813	1,580	1,400	969	216	64	63
7	73	71	98	137	160	868	1,700	1,470	1,030	202	60	62
8	71	90	76	123	149	830	1,540	1,480	1,130	190	57	57
9	70	88	107	115	139	874	1,440	1,310	1,170	181	56	54
10	69	88	116	109	129	1,040	1,360	1,220	1,180	172	55	52
11	69	88	119	109	125	1,490	1,270	1,160	1,090	165	52	55
12	69	99	117	104	137	1,550	1,330	1,160	946	155	51	66
13	69	109	112	101	139	1,610	1,180	1,180	879	149	50	66
14	67	105	115	105	133	1,750	1,070	1,230	802	139	50	64
15	70	96	115	121	139	1,640	1,020	1,300	754	133	52	62
16	71	87	115	144	142	1,760	1,060	1,300	734	125	62	60
17	73	78	115	173	158	1,930	1,010	1,350	708	121	58	57
18	72	84	112	188	170	2,260	946	1,300	662	115	55	55
19	75	84	109	256	180	2,390	913	1,200	622	110	51	54
20	84	84	109	315	207	2,010	913	1,180	573	110	50	56
21	81	85	119	863	256	1,830	975	1,130	530	110	49	60
22	77	85	121	819	290	1,770	986	1,090	492	112	48	60
23	75	80	155	682	283	2,050	975	1,010	465	109	46	60
24	75	84	139	465	260	1,680	1,040	969	448	103	45	60
25	76	90	131	364	240	1,410	998	958	417	97	45	64
26	76	87	129	301	231	1,200	935	946	396	91	46	66
27	81	96	107	270	266	1,020	964	952	364	87	45	77
28	75	107	75	265	672	918	1,070	964	341	84	45	80
29	61	103	94	210	1,140	885	1,190	1,020	322	80	44	75
30	80	99	114	153	------	857	1,070	1,090	301	78	44	72
31	88	------	117	146	------	857	------	1,120	------	77	44	------
TOTAL	2,317	2,642	3,451	7,353	6,650	42,320	33,743	35,951	22,757	4,588	1,686	1,761
MEAN	74.7	88.1	111	237	229	1,365	1,125	1,160	759	148	54.4	58.7
MAX	88	109	183	863	1,140	2,390	1,700	1,480	1,180	287	77	80
MIN	61	62	69	85	125	813	879	946	301	77	44	40
CFSM	.19	.22	.28	.59	.57	3.42	2.82	2.91	1.90	.37	.14	.15
IN.	.22	.25	.32	.69	.62	3.95	3.15	3.35	2.12	.43	.16	.16
AC-FT	4,600	5,240	6,850	14,580	13,190	83,940	66,930	71,310	45,140	9,100	3,340	3,490

CAL YR 1971 TOTAL 185,698 MEAN 509 MAX 2,280 MIN 45 CFSM 1.28 IN 17.31 AC-FT 368,300
WTR YR 1972 TOTAL 165,219 MEAN 451 MAX 2,390 MIN 40 CFSM 1.13 IN 15.40 AC-FT 327,700

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	1030	5.15	1,200	4- 7	0230	6.05	1,780
3- 3	1000	5.61	1,510	5- 8	0300	5.59	1,510
3-18	2400	7.03	2,580				

13201500 Lucky Peak Lake near Boise, Idaho

LOCATION.--Lat 43°31'31", long 116°03'15", in SW¼NW¼ sec.12, T.2 N., R.3 E., Ada County, at outlet control tower at dam on Boise River, 2 miles upstream from diversion dam for New York Canal, 7 miles downstream from Mores Creek, 9 miles southeast of Boise, and at mile 63.8.

DRAINAGE AREA.--2,680 sq mi, approximately.

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to May 13, 1955, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 295,800 acre-ft July 28 (elevation, 3,055.96 ft); minimum, 57,700 acre-ft May 15 (elevation, 2,934.30 ft).
Period of record: Maximum contents, 305,130 acre-ft June 25, 1955 (elevation, 3,059.32 ft); minimum since near-full capacity was attained on June 25, 1955, 28,630 acre-ft Dec. 21, 1961 (elevation, 2,904.83 ft).

REMARKS.--Reservoir is formed by earth-fill dam. Storage began Oct. 16, 1954. Dam completed in February 1955. Capacity, 307,040 acre-ft between elevations 2,827.0 ft (sill of outlet gates) and 3,060.0 ft (spillway crest). Minimum proposed operating level, 2,905.0 ft (28,770 acre-ft), but all storage can be released. Water is stored for flood control and irrigation of lands in Boise valley.

COOPERATION.--Gage-height record and capacity table furnished by Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)

2,930.0	52,700	3,000.0	162,800
2,940.0	64,600	3,020.0	205,600
2,960.0	92,400	3,040.0	253,600
2,980.0	125,100	3,060.0	307,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142,200	83,200	86,600	121,700	145,500	88,800	68,200	79,000	127,100	280,200	294,300	285,100
2	137,200	83,200	86,500	124,600	142,600	89,700	65,300	75,700	135,100	283,300	293,700	281,100
3	132,100	83,100	86,500	127,600	137,900	91,000	63,800	72,600	142,700	285,200	292,900	276,900
4	127,000	83,000	86,500	130,300	132,600	90,800	63,400	69,900	150,800	286,500	293,100	272,400
5	121,900	83,000	86,600	133,100	127,900	90,100	65,200	67,700	155,900	287,800	293,600	268,000
6	116,800	82,900	87,000	135,900	123,400	89,200	69,200	66,100	160,500	288,800	293,800	263,800
7	111,900	82,800	87,000	138,700	118,500	88,500	72,900	64,900	170,200	290,000	293,900	260,000
8	107,500	82,800	87,000	141,700	113,700	87,600	76,100	64,100	182,700	291,000	293,700	256,200
9	103,000	82,800	87,100	144,600	109,100	86,700	78,700	63,300	197,300	292,000	293,400	252,700
10	98,600	82,800	87,300	147,600	104,100	86,300	80,400	62,500	212,600	292,900	293,600	249,300
11	94,100	82,900	87,700	150,000	99,100	87,000	83,600	61,700	227,200	293,700	293,900	246,000
12	89,600	83,100	88,000	151,000	94,200	87,900	87,900	60,900	239,600	294,000	294,100	243,000
13	85,000	83,300	88,300	149,700	89,400	89,000	91,400	60,400	247,500	293,900	293,900	240,100
14	82,100	83,600	88,500	147,300	86,200	89,200	95,100	60,100	251,200	293,900	293,400	237,200
15	82,100	83,900	88,600	145,100	86,000	88,700	98,100	60,100	253,800	293,800	293,200	234,200
16	82,100	84,100	88,800	143,300	86,700	88,300	101,000	60,500	258,200	293,600	293,200	231,300
17	82,100	84,300	90,000	141,600	87,200	88,300	103,000	61,200	263,200	293,400	293,400	228,400
18	82,100	84,500	92,100	140,600	87,500	89,200	104,300	62,100	268,300	293,100	293,400	224,200
19	82,200	84,800	94,100	139,900	87,300	90,400	104,900	62,900	272,900	293,400	293,400	219,400
20	82,100	84,900	96,100	140,000	87,100	90,900	105,000	63,800	273,500	293,800	292,800	214,700
21	82,200	85,400	98,300	147,100	87,000	90,900	104,200	64,700	271,400	294,200	292,500	209,900
22	82,100	85,400	100,400	153,100	87,300	90,800	103,200	65,600	271,400	294,500	293,400	205,100
23	82,100	85,500	102,500	156,900	87,200	91,400	101,900	68,200	273,300	294,800	294,100	205,500
24	82,000	85,500	104,500	157,600	87,100	90,600	100,200	73,700	275,100	295,100	294,300	195,400
25	82,000	85,500	106,500	157,500	86,700	88,900	97,800	80,200	276,500	295,400	294,600	191,300
26	82,100	85,700	108,600	157,600	86,300	86,900	94,900	86,600	276,000	295,600	294,900	186,900
27	82,300	86,000	110,600	157,400	85,900	84,300	91,600	92,600	273,200	295,700	295,100	182,700
28	82,500	86,300	112,000	156,000	86,300	81,400	88,200	99,100	272,000	295,700	294,300	178,500
29	82,600	86,400	114,000	153,500	87,900	78,400	85,300	105,600	274,000	295,400	293,500	174,400
30	82,800	86,500	116,400	151,100	------	75,000	82,200	112,600	277,100	295,200	291,800	170,200
31	83,100	------	118,900	148,300	------	71,500	------	121,400	------	294,800	288,800	------
MAX	142,200	86,500	118,900	157,600	145,500	91,400	105,000	121,400	277,100	295,700	295,100	285,100
MIN	82,000	82,800	86,500	121,700	85,900	71,500	63,400	60,100	127,100	280,200	288,800	170,200
(†)	2,953.71	2,956.03	2,976.44	2,992.61	2,956.98	2,945.33	2,953.12	2,977.89	3,049.08	3,055.61	3,053.43	3,003.65
(‡)	-64,400	+3,400	+32,400	+29,400	-60,400	-16,400	+10,700	+39,200	+155,700	+17,700	-6,000	-118,600

CAL YR 1971..... ‡ -11,700
WTR YR 1972..... ‡ +22,700

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

13202000 Boise River near Boise, Idaho

LOCATION.--Lat 43°31'40", long 116°03'31", in NE¼ sec.11, T.2 N., R.3 E., Ada County, at gate-control house at outlet works of Lucky Peak Lake, 1.8 miles upstream from diversion dam for New York Canal, 7.5 miles downstream from mouth of Mores Creek, 9 miles southeast of Boise, and at mile 63.6.

DRAINAGE AREA.--2,680 sq mi, approximately. Mean altitude, 5,910 ft.

PERIOD OF RECORD.--January 1895 to September 1916 (no winter records 1904-5, 1907), November 1950 to September 1954 (discharge measurements only), October 1954 to current year. Published as "near Highland" 1905-15 and as "below Moore Creek, near Arrowrock" 1916.

GAGE.--Remote gate-opening recorder and nonrecording gage on each of six slide gates, remote recorder and nonrecording gage on hollow-jet valve, and remote water-stage recorder on Lucky Peak Lake. Elevation of sills of six slide gates, 2,827.0 ft (levels by Corps of Engineers). Prior to Mar. 18, 1905, nonrecording gages at sites about 1 mile downstream at different datums. Mar. 18, 1905, to Mar. 20, 1915, nonrecording gages, and Mar. 21, 1915, to Sept. 30, 1916, water-stage recorders at sites 5 to 7 miles upstream at different datums.

AVERAGE DISCHARGE.--35 years (1895-96, 1897-1903, 1905-6, 1907-16, 1954-72), 3,005 cfs (2,177,000 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 10,200 cfs Apr. 29 to May 22; minimum daily, 2.2 cfs Nov. 18-22.
Period of record: Maximum discharge observed, 35,500 cfs June 14, 1896; no flow on several days in 1954, 1955, 1957-59, 1961, 1969, when gates were closed.

REMARKS.--Records excellent except those below 500 cfs, which are good. Daily discharge computed from relations between discharge, head, and gate openings and adjusted on the basis of current-meter measurements. Unadjusted discharges furnished by U.S. Corps of Engineers. Flow regulated by Lucky Peak Lake (see sta 13201500), Arrowrock Reservoir (see sta 13194000), and Anderson Ranch Reservoir (see sta 13190000). Diversions above station for irrigation of about 2,300 acres in the basin and about 5,000 acres outside the basin near Mountain Home (1966 determination). Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

COOPERATION.--Records of gate operation, discharge, stage in Lucky Peak Lake, and gate rating curves furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1347: 1895-1901, 1904.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,840	81	120	120	4,140	6,200	6,720	10,200	7,240	5,100	4,640	4,020
2	2,770	120	120	120	4,140	6,200	6,720	10,200	7,240	5,070	4,640	3,950
3	2,770	120	120	120	4,830	6,200	6,720	10,200	7,240	4,930	4,640	3,870
4	2,770	120	120	120	5,170	6,200	7,070	10,200	7,240	4,910	4,640	3,840
5	2,770	120	120	120	5,170	6,200	7,380	10,200	6,720	4,940	4,640	3,820
6	2,770	120	120	120	5,170	6,200	7,450	10,200	6,200	4,940	4,640	3,680
7	2,640	120	120	120	5,170	6,200	7,450	10,200	6,200	4,940	4,640	3,490
8	2,460	120	120	120	5,170	6,200	7,450	10,200	6,200	4,940	4,610	3,310
9	2,460	120	120	120	5,170	6,200	7,580	10,200	6,200	4,940	4,600	3,150
10	2,460	87	42	120	5,140	6,200	7,860	10,200	6,200	4,940	4,600	3,100
11	2,460	54	2.4	449	5,140	6,200	8,040	10,200	6,200	4,940	4,600	3,040
12	2,460	54	2.3	1,310	5,170	6,200	8,080	10,200	6,200	4,940	4,600	2,920
13	2,460	29	41	2,580	5,170	6,200	8,150	10,200	6,200	4,910	4,600	2,880
14	1,290	2.8	120	3,100	5,520	6,200	7,850	10,200	6,850	4,890	4,580	2,860
15	120	2.4	120	3,100	6,030	6,200	7,960	10,200	7,240	4,890	4,540	2,850
16	120	2.3	120	3,100	6,200	6,200	7,960	10,200	7,740	4,890	4,460	2,750
17	120	2.3	120	3,100	6,200	6,200	8,170	10,200	8,160	4,890	4,400	2,700
18	120	2.2	120	3,100	6,200	6,200	8,350	10,200	8,160	4,890	4,320	2,630
19	120	2.2	120	3,100	6,200	6,200	8,450	10,200	8,240	4,840	4,280	2,580
20	120	2.2	120	3,100	6,200	6,200	8,650	10,200	8,350	4,890	4,280	2,570
21	120	2.2	120	3,100	6,200	6,200	8,970	10,200	8,380	4,890	4,250	2,590
22	120	2.2	120	3,100	6,200	6,200	9,090	10,200	7,760	4,850	4,230	2,600
23	120	52	120	3,100	6,200	6,200	9,090	9,210	7,240	4,800	4,200	2,600
24	120	120	120	3,100	6,200	6,490	9,330	7,720	7,240	4,750	4,190	2,600
25	120	120	120	3,100	6,200	6,720	9,650	7,240	7,240	4,700	4,190	2,520
26	58	87	120	3,100	6,200	6,720	9,870	7,240	7,240	4,680	4,160	2,420
27	15	54	120	3,100	6,200	6,720	10,000	7,240	6,570	4,650	4,110	2,320
28	3.6	54	120	3,790	6,200	6,720	10,100	7,240	6,200	4,650	4,100	2,280
29	3.4	98	120	4,140	6,200	6,720	10,200	7,240	5,510	4,680	4,100	2,280
30	3.2	120	120	4,140	------	6,720	10,200	7,240	5,170	4,680	4,080	2,260
31	3.0	------	120	4,140	------	6,720	------	7,240	------	4,650	4,050	------
TOTAL	36,786.2	1,990.8	3,327.7	65,149	163,100	196,130	250,560	292,010	208,570	150,600	136,610	88,480
MEAN	1,187	66.4	107	2,102	5,624	6,327	8,352	9,420	6,952	4,858	4,407	2,949
MAX	2,840	120	120	4,140	6,200	6,720	10,200	10,200	8,380	5,100	4,640	4,020
MIN	3.0	2.2	2.3	120	4,140	6,200	6,720	7,240	5,170	4,650	4,050	2,260
AC-FT	72,970	3,950	6,600	129,200	323,500	389,000	497,000	579,200	413,700	298,700	271,000	175,500

CAL YR 1971 TOTAL 1,699,394.7 MEAN 4,656 MAX 10,800 MIN 2.2 AC-FT 3,371,000
WTR YR 1972 TOTAL 1,593,313.7 MEAN 4,353 MAX 10,200 MIN 2.2 AC-FT 3,160,000

13203500 Lake Lowell near Caldwell, Idaho

LOCATION.--Lat 43°34'42", long 116°44'28", in NW¼SE¼ sec.19, T.3 N., R.3 W., Canyon County, on outlet structure at lower embankment, 5.5 miles southwest of Caldwell; and lat 43°33'30", long 116°38'55", in NW¼NW¼ sec.36, T.3 N., R.3 W., Canyon County, on outlet structure at upper embankment 5 miles west of Nampa.

PERIOD OF RECORD.--October 1917 to current year. Prior to October 1945, published as Deer Flat Reservoir near Caldwell.

GAGE.--Nonrecording gage. Datum of gages is 2,500.5 ft above mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents observed, 154,300 acre-ft Apr. 28 (gage height, 27.57 ft); minimum observed, 45,800 acre-ft Sept. 5 (gage height, 12.51 ft).
Period of record: Maximum contents observed, 178,900 acre-ft Apr. 27, 28, 1922, Apr. 24, 1932 (gage height, 30.18 ft); minimum observed, 5,390 acre-ft Oct. 22, 1924 (gage height, 3.27 ft, upper pool; 0.85 ft, lower pool).

REMARKS.--Lake is formed by two earth embankments; dams were completed and storage began in 1908. Capacity, 177,150 acre-ft, between gage heights 0.0 ft (sill of outlet gates) and 30.0 ft (maximum operating level). Dead storage, about 13,000 acre-ft. Below gage height 12.0 ft, lake divides into two pools. Lake receives water from Boise River through New York Canal of Boise project and small amounts from local drainage. Water is used for irrigation of lower project lands, some of which are outside the Boise River basin. Figures given herein represent usable contents.

COOPERATION.--Gage readings and capacity table furnished by Water District 63 .

Capacity table (gage height, in feet, and contents, in acre-feet)

12.5	45,700	20.0	93,000
15.0	60,000	30.0	177,200

CONTENTS, IN ACRE-FEET, FOR STATISTIC 00011, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96,800	126,700	128,200	129,100	130,500	130,900	133,500	153,100	136,500	128,100	81,100	48,000
2	99,400	126,600	128,100	129,100	130,500	131,100	133,500	152,200	136,400	125,600	80,100	47,200
3	101,700	126,500	128,100	129,000	130,500	131,400	133,500	151,600	135,000	123,500	78,700	47,000
4	103,600	126,500	128,200	129,000	130,500	131,600	133,400	150,700	134,100	123,200	77,200	46,700
5	105,900	126,400	128,400	129,000	130,500	131,900	133,400	149,400	133,100	120,200	75,800	45,800
6	108,100	126,400	128,500	129,000	130,500	132,100	134,100	147,700	132,700	118,800	74,900	46,500
7	110,100	126,500	128,600	129,000	130,500	132,400	135,400	146,700	132,200	116,700	73,500	46,500
8	112,200	126,500	128,700	129,000	130,500	132,700	136,900	145,400	132,000	115,500	72,200	46,900
9	114,300	126,500	128,800	129,000	130,500	133,000	137,900	143,200	133,900	113,300	70,300	47,000
10	116,300	126,500	128,800	129,100	130,500	133,200	139,400	141,800	134,800	111,600	68,300	46,500
11	118,400	126,500	128,800	129,100	130,600	133,200	140,800	141,100	136,600	109,400	66,900	46,700
12	120,100	126,500	128,800	129,300	130,600	133,300	142,000	140,000	138,300	107,700	65,200	47,300
13	122,200	126,500	128,800	129,300	130,600	133,400	143,300	139,100	140,700	105,300	63,900	47,500
14	123,200	126,600	128,800	129,300	130,600	133,500	144,600	138,400	142,500	103,600	62,800	48,700
15	125,500	126,700	128,800	129,300	130,600	133,600	145,400	137,800	144,300	102,000	62,000	49,900
16	126,500	126,700	128,800	129,500	130,600	133,700	145,500	137,700	145,700	101,100	60,600	50,700
17	126,500	126,800	128,800	129,600	130,600	133,700	146,200	137,400	146,900	99,800	59,700	51,600
18	126,500	126,900	128,800	129,600	130,700	133,800	145,600	136,000	148,100	98,600	58,800	52,200
19	126,300	126,900	128,800	129,800	130,700	133,900	146,700	135,300	149,000	96,500	58,900	52,600
20	126,200	126,900	128,800	130,000	130,700	134,000	147,900	135,100	148,200	93,800	58,000	52,600
21	126,000	126,900	128,800	130,100	130,700	134,100	149,200	135,500	146,400	92,700	56,900	53,500
22	126,000	126,900	128,800	130,100	130,700	134,200	149,900	135,200	145,000	92,100	55,500	52,900
23	126,000	126,900	128,900	130,200	130,700	134,300	151,100	135,400	142,700	91,500	54,200	53,100
24	126,000	126,900	128,900	130,300	130,700	134,300	151,900	136,000	141,600	90,500	53,700	53,400
25	126,000	127,300	128,900	130,300	130,700	134,300	152,200	136,400	140,500	89,600	52,700	53,700
26	126,000	127,800	129,000	130,400	130,700	134,100	152,400	136,700	139,200	88,300	51,900	53,900
27	126,000	127,800	129,000	130,400	130,700	134,000	153,200	137,800	138,200	87,100	51,300	54,200
28	126,000	128,000	129,100	130,500	130,700	133,800	154,300	138,400	136,600	86,200	50,500	54,800
29	126,000	128,100	129,100	130,500	130,700	133,700	153,900	138,800	133,900	85,000	50,100	55,000
30	126,100	128,200	129,100	130,500	------	133,600	153,100	139,000	130,600	83,700	49,400	55,400
31	126,500	------	129,100	130,500	------	133,500	------	137,400	------	82,300	48,700	------
MAX	126,500	128,200	129,100	130,500	130,700	134,300	154,300	153,100	149,000	128,100	81,100	55,400
MIN	96,800	126,400	128,100	129,000	130,500	130,900	133,400	135,100	130,600	82,300	48,700	45,800
(†)	2,524.84	2,525.05	2,525.16	2,525.32	2,525.35	2,525.68	2,527.94	2,526.14	2,525.34	2,518.97	2,513.55	2,514.73
(‡)	+31,800	+1,700	+900	+1,400	+200	+2,800	+19,600	-15,700	-6,800	-48,300	-33,600	+6,700

CAL YR 1971..... ‡ +5,100
WTR YR 1972..... ‡ -39,300

† Gage height, in feet, at end of month.
‡ Change in contents, in acre-feet.

13204500 Diversions from Boise River between near Boise and at Boise gaging stations, Idaho

Between near Boise and at Boise gaging stations (prior to 1955 water year, published as between Dowling Ranch and Boise gaging stations), six principal canals and several small farm laterals divert water from Boise River for irrigation.

Records of total diversion during April to September for each canal for years 1919-46, combined daily diversion covering period April to September for years 1947-67, combined daily diversions covering periods October and April to September for water years 1968-72 and daily flow of New York Canal February 1939 to October 1948 are published in reports of Geological Survey. Records of daily diversion for each canal from 1916-72 are on file in office of Idaho Department of Water Administration. Prior to October 1967, there was no record of October to March diversions except for New York Canal. Watermaster reported insignificant or no flow in diversions during period Oct. 16 to Apr. 4. Miscellaneous diversions or pumping from Boise River between "near Boise" and "at Notus" was reported by watermaster to be approximately as follows (in acre-ft): October, 30; April, 34; May, 241; June, 204; July, 229; August, 227; and September, 136.

Records show summation of discharge for the recorded diversions. Staff gages on canals are read daily or several times weekly and discharge measurements are made frequently. Records furnished by watermaster for Boise River.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,310						0	3,260	3,420	3,370	3,300	2,970
2	2,260						0	3,250	3,440	3,370	3,300	2,930
3	2,210						0	3,270	3,430	3,380	3,300	2,900
4	2,220						0	3,290	3,440	3,390	3,300	2,830
5	2,210						500	3,140	3,460	3,380	3,250	2,830
6	2,210						800	3,220	3,430	3,380	3,250	2,760
7	2,210						800	3,200	3,440	3,380	3,250	2,640
8	1,890						800	3,220	3,350	3,390	3,260	2,510
9	1,850						800	3,260	3,200	3,380	3,250	2,370
10	1,850						1,000	3,260	2,990	3,400	3,250	2,260
11	1,850						1,310	3,260	2,860	3,390	3,260	2,260
12	1,850						1,460	3,220	2,870	3,390	3,260	2,140
13	1,840						1,460	3,220	2,840	3,390	3,250	2,140
14	1,850						1,580	3,240	2,840	3,400	3,260	2,140
15	600						1,080	3,260	2,820	3,400	3,250	2,140
16	0						1,290	3,270	2,800	3,400	3,250	2,140
17	0						1,350	3,270	2,840	3,400	3,130	2,070
18	0						1,710	3,320	3,020	3,410	3,120	2,040
19	0						1,800	3,470	3,110	3,400	3,010	1,950
20	0						1,970	3,490	3,310	3,400	3,010	1,940
21	0						2,250	3,470	3,350	3,390	3,010	1,940
22	0						2,420	3,490	3,360	3,460	3,010	1,940
23	0						2,410	3,470	3,300	3,410	3,080	1,920
24	0						2,450	3,470	3,320	3,420	3,060	1,910
25	0						2,750	3,450	3,320	3,370	3,130	1,920
26	0						3,060	3,400	3,320	3,360	3,120	1,830
27	0						3,230	3,400	3,380	3,350	3,070	1,740
28	0						3,220	3,390	3,350	3,280	3,080	1,660
29	0						3,250	3,410	3,370	3,280	3,070	1,690
30	0				------		3,260	3,400	3,360	3,290	3,080	1,690
31	0	------			------		------	3,410	------	3,310	3,080	------
TOTAL	29,210	0	0	0	0	0	48,010	103,150	96,340	104,720	98,300	66,200
MEAN	942	0	0	0	0	0	1,600	3,327	3,211	3,378	3,171	2,207
MAX	2,310	0	0	0	0	0	3,260	3,490	3,460	3,460	3,300	2,970
MIN	0	0	0	0	0	0	0	3,140	2,800	3,280	3,010	1,660
AC-FT	57,940	0	0	0	0	0	95,230	204,600	191,100	207,700	195,000	131,300

CAL YR 1971 TOTAL 573,900.00 MEAN 1,572 MAX 3,510 MIN 0 AC-FT 1,138,000
WTR YR 1972 TOTAL 545,930.00 MEAN 1,492 MAX 3,490 MIN 0 AC-FT 1,083,000

13205500 Boise River at Boise, Idaho

LOCATION.--Lat 43°36'33", long 116°12'27", in NE¼SW¼ sec.10, T.3 N., R.2 E., Ada County, on right bank at Capitol Boulevard Bridge at Boise and at mile 52.8.

DRAINAGE AREA.--2,760 sq mi, approximately.

PERIOD OF RECORD.--March 1938 to September 1939 (gage heights only), February 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,675.46 ft above mean sea level (datum of Corps of Engineers, Boise River Surveys). Prior to Apr. 30, 1943, at site 1 mile upstream at datum 13.69 ft higher. Apr. 30 to July 10, 1943, at site 400 ft downstream at present datum.

AVERAGE DISCHARGE.--18 years (1954-72), 1,335 cfs (967,200 acre-ft per year), since completion of Lucky Peak Dam.

EXTREMES.--Current year: Maximum discharge, 6,810 cfs Apr. 14 (gage height, 7.54 ft); minimum, 7.1 cfs Nov. 19-23 (gage height, 2.30 ft).
Period of record: Maximum discharge, 21,000 cfs Apr. 20, 1943 (gage height, 10.00 ft, site and datum then in use); minimum, 1.3 cfs Feb. 3, 1955 (gage height, 2.21 ft); minimum daily, 3.5 cfs Jan. 19-23, 1961.

REMARKS.--Records good. Flow regulated by Anderson Ranch Reservoir (see sta 13190000). Arrowrock Reservoir (see sta 13194000), and Lucky Peak Lake (see sta 13201500). New York, Ridenbaugh, and four small canals (see sta 13204500) divert between station near Boise and this station. Diversions above station for irrigation of about 203,000 acres of which about 5,000 acres are outside the basin near Mountain Home, about 130,000 acres are inside the basin below station, and about 50,000 acres are outside the basin near Lake Lowell.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

2.3	4.7	3.2	159	5.0	2,400
2.4	8.7	3.5	334	6.0	4,130
2.6	23	4.0	816	7.0	5,810
2.8	49	4.5	1,520	7.7	7,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	610	32	143	169	3,990	6,050	6,350	6,510	3,340	1,600	1,260	978
2	580	110	143	164	3,990	6,080	6,270	6,520	3,340	1,570	1,240	964
3	600	143	147	162	4,500	6,080	6,240	6,540	3,340	1,460	1,240	938
4	590	140	147	161	4,960	6,060	6,320	6,580	3,350	1,410	1,240	914
5	590	136	164	163	5,010	6,060	6,300	6,610	3,010	1,440	1,260	951
6	578	136	184	164	5,030	6,050	6,290	6,660	2,510	1,410	1,270	938
7	651	136	151	169	5,010	6,040	6,300	6,710	2,510	1,390	1,270	914
8	600	140	151	169	5,080	6,080	6,290	6,660	2,630	1,380	1,220	893
9	621	136	155	169	5,080	6,080	6,300	6,590	2,800	1,380	1,240	870
10	631	136	140	159	5,010	6,100	6,290	6,590	2,960	1,380	1,220	848
11	610	83	47	74	5,020	6,120	6,320	6,580	3,000	1,380	1,220	870
12	621	71	33	1,420	5,100	6,080	6,250	6,560	3,000	1,380	1,240	828
13	621	76	29	2,320	5,060	6,070	6,220	6,490	3,030	1,360	1,220	782
14	561	46	93	2,940	5,500	6,060	6,270	6,490	3,510	1,370	1,220	782
15	237	25	136	2,940	6,000	5,980	6,220	6,470	3,970	1,360	1,180	782
16	174	17	140	2,940	6,050	6,070	6,290	6,470	4,270	1,370	1,150	760
17	159	16	143	2,940	6,050	6,070	6,200	6,440	4,670	1,380	1,180	726
18	136	15	143	3,030	6,050	6,130	6,200	6,420	4,640	1,400	1,200	738
19	93	10	140	3,050	6,200	6,080	6,200	6,440	4,620	1,380	1,200	694
20	85	7.9	143	3,070	6,200	6,060	6,200	6,390	4,670	1,410	1,200	642
21	102	7.9	155	3,100	6,200	6,050	6,270	6,440	4,690	1,410	1,170	652
22	143	8.3	179	3,160	6,100	6,030	6,320	6,460	4,230	1,410	1,110	673
23	140	9.3	188	3,100	6,050	6,050	6,320	5,590	3,520	1,390	1,070	683
24	128	69	174	3,090	6,050	6,150	6,340	4,190	3,470	1,340	1,070	704
25	143	132	184	3,050	6,050	6,340	6,390	3,510	3,470	1,320	1,070	683
26	132	159	179	3,010	6,050	6,270	6,390	3,460	3,440	1,300	1,080	662
27	61	111	174	3,010	6,050	6,280	6,420	3,460	2,960	1,300	1,060	652
28	43	80	164	3,580	6,050	6,320	6,440	3,410	2,530	1,300	1,030	610
29	33	96	164	3,950	6,050	6,300	6,440	3,390	2,070	1,340	1,030	610
30	29	143	164	3,920	------	6,300	6,490	3,350	1,660	1,340	1,020	604
31	29	------	164	3,930	------	6,320	------	3,350	------	1,320	991	------
TOTAL	10,331	2,427.4	4,461	63,273	159,540	189,810	189,140	177,330	101,210	42,980	36,171	23,345
MEAN	333	80.9	144	2,041	5,501	6,123	6,305	5,720	3,374	1,386	1,167	778
MAX	651	159	188	3,950	6,200	6,340	6,490	6,710	4,690	1,600	1,270	978
MIN	29	7.9	29	74	3,990	5,980	6,200	3,350	1,660	1,300	991	604
AC-FT	20,490	4,810	8,850	125,500	316,400	376,500	375,200	351,700	200,800	85,250	71,750	46,300

CAL YR 1971 TOTAL 1,091,094.4 MEAN 2,989 MAX 6,850 MIN 7.9 AC-FT 2,164,000
WTR YR 1972 TOTAL 1,000,018.4 MEAN 2,732 MAX 6,710 MIN 7.9 AC-FT 1,984,000

13212000 Diversions from Boise River between at Boise and Notus gaging stations, Idaho

Between at Boise and at Notus gaging stations, 29 canals and several small farm laterals divert water from Boise River for irrigation.

Records of total diversions during period April to September for each canal for years 1919-46 and combined daily diversions covering period April to September for years 1947-67, and periods October and April to September for water years 1968-72 are published in reports of Geological Survey. Records of daily diversions for each canal 1916-72 are on file in office of Idaho Department of Water Administration. Prior to October 1967, no record available of diversions that are usually made during October and March. No record of diversions during 1972 water year from Oct. 16 to Apr. 4, but watermaster reported flow was practically nil. Miscellaneous diversions or pumping from Boise River below "at Boise" was reported by watermaster to be approximately as follows (in acre-ft): October, 30; April, 34; May, 241; June, 204; July, 229; August, 227; September, 136.

Records show summation of discharge for the recorded diversions. Staff gages on diversions are read daily or several times weekly, and discharge measurements are made frequently. Records furnished by watermaster for Boise River.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,010						0	2,050	2,230	2,240	2,220	1,910
2	951						0	2,090	2,220	2,160	2,240	1,880
3	922						0	2,140	2,220	2,280	2,240	1,870
4	944						0	2,160	2,230	2,300	2,240	1,870
5	973						148	2,240	2,220	2,340	2,230	1,870
6	966						151	2,240	2,140	2,390	2,230	1,820
7	957						154	2,230	2,210	2,390	2,240	1,750
8	965						157	2,250	2,160	2,370	2,190	1,660
9	961						160	2,240	1,980	2,410	2,240	1,560
10	970						158	2,250	1,760	2,380	2,210	1,560
11	965						317	2,220	1,640	2,350	2,210	1,510
12	979						455	2,230	1,550	2,260	2,190	1,500
13	987						530	2,230	1,560	2,320	2,220	1,460
14	771						526	2,220	1,610	2,320	2,230	1,420
15	620						569	2,240	1,640	2,340	2,190	1,360
16	0						630	2,200	1,690	2,330	2,120	1,300
17	0						640	2,200	1,820	2,350	2,160	1,280
18	0						831	2,220	1,840	2,340	2,160	1,280
19	0						946	2,210	1,910	2,090	2,160	1,270
20	0						1,070	2,190	2,030	2,390	2,150	1,280
21	0						1,140	2,190	2,100	2,370	2,120	1,310
22	0						1,230	2,110	2,180	2,340	2,060	1,310
23	0						1,320	2,090	2,180	2,300	2,040	1,330
24	0						1,390	2,090	2,260	2,300	2,030	1,330
25	0						1,600	2,090	2,250	2,220	2,020	1,330
26	0						1,750	2,070	2,240	2,220	2,000	1,360
27	0						1,850	2,110	2,220	2,210	2,000	1,350
28	0						1,910	2,120	2,210	2,240	2,010	1,340
29	0						1,950	2,130	2,200	2,230	1,960	1,300
30	0				------		1,990	2,170	2,140	2,240	1,940	1,270
31	0	------			------		------	2,200	------	2,240	1,930	------
TOTAL	13,941	0	0	0	0	0	23,572	67,420	60,640	71,260	66,180	44,640
MEAN	450	0	0	0	0	0	786	2,175	2,021	2,299	2,135	1,488
MAX	1,010	0	0	0	0	0	1,990	2,250	2,260	2,410	2,240	1,910
MIN	0	0	0	0	0	0	0	2,050	1,550	2,090	1,930	1,270
AC-FT	27,650	0	0	0	0	0	46,760	133,700	120,300	141,300	131,300	88,540

CAL YR 1971 TOTAL 339,182.00 MEAN 929 MAX 2,390 MIN 0 AC-FT 672,800
WTR YR 1972 TOTAL 347,653.00 MEAN 950 MAX 2,410 MIN 0 AC-FT 689,600

13212500 Boise River at Notus, Idaho

LOCATION.--Lat 43°43'21", long 116°47'34", in SE¼SE¼ sec.34, T.5 N., R.4 W., Canyon County, on right bank 1,100 ft upstream from county road bridge, 0.4 mile southeast of Notus, 7 miles northwest of Caldwell, and at mile 14.0.

DRAINAGE AREA.--3,820 sq mi, approximately.

PERIOD OF RECORD.--April 1920 to current year (irrigation seasons only 1923-24 water years).

GAGE.--Water-stage recorder. Datum of gage is 2,288.55 ft above mean sea level (levels by Corps of Engineers, Boise River Surveys). Prior to Aug. 26, 1936, nonrecording gage at site 1,100 ft downstream at same datum.

AVERAGE DISCHARGE.--50 years (1920-22, 1924-72), 1,239 cfs (unadjusted for storage) (897,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,850 cfs Mar. 3 (gage height, 8.62 ft); minimum, 286 cfs July 16, 18 (gage height, 1.82 ft).
Period of record: Maximum discharge, 20,500 cfs Apr. 20, 1943 (gage height, 10.43 ft); minimum observed, 10 cfs Aug. 18, 21, 1920.

REMARKS.--Records good. Flow regulated by Anderson Ranch Reservoir beginning December 1945 (see sta 13190000), Arrowrock Reservoir beginning April 1920 (see sta 13194000), and Lucky Peak Lake 49.8 miles upstream beginning October 1954 (see sta 13201500). Diversions above station for irrigation of about 347,000 acres of which about 4,100 acres are by withdrawals from ground water; an undetermined acreage is below station, and about 5,000 acres near Mountain Home, about 50,000 acres near Lake Lowell, and sizable areas near the mouth of Boise River are outside the basin. About 19,000 acres are irrigated above the station with water diverted from Payette River. Records of chemical analysis and water temperatures for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1347: 1930.

Rating tables (gage height, in feet, and discharge, in cubic feet per second)

2.0	345	5.0	2,570
3.0	885	7.0	5,100
4.0	1,625	9.0	8,460

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,370	834	907	787	4,970	7,230	7,350	5,910	2,380	670	483	531
2	1,310	837	898	790	4,960	7,410	7,350	5,910	2,430	564	440	600
3	1,230	913	899	774	4,980	7,740	7,180	5,800	2,470	543	419	613
4	1,200	928	898	759	5,890	7,500	7,130	5,770	2,520	412	450	630
5	1,160	918	927	771	6,090	7,350	7,200	5,720	2,600	376	465	647
6	1,100	897	1,060	772	6,130	7,260	7,160	5,700	1,940	385	452	853
7	1,060	906	993	778	6,070	7,200	7,140	5,780	1,920	345	454	857
8	1,070	902	916	778	6,100	7,190	7,110	5,860	2,290	341	438	869
9	992	904	919	763	6,090	7,160	7,070	5,880	2,570	328	410	851
10	965	889	911	761	6,070	7,150	6,940	5,880	3,290	398	400	802
11	942	883	872	759	6,010	7,150	6,890	5,880	3,580	385	392	858
12	901	859	809	865	6,050	7,160	6,920	5,830	3,500	403	386	1,020
13	968	857	774	2,060	6,100	7,150	6,890	5,800	3,420	430	391	982
14	1,100	856	764	3,500	6,030	7,130	6,860	5,740	3,360	435	460	990
15	1,090	808	801	3,610	6,460	7,090	6,820	5,750	4,070	319	487	959
16	1,080	773	817	3,630	6,900	7,050	6,750	5,700	3,970	311	468	964
17	959	756	814	3,670	7,050	7,050	6,740	5,660	4,550	332	462	860
18	951	754	818	3,840	7,110	7,150	6,570	5,670	4,460	319	523	807
19	1,080	739	802	4,100	7,200	7,380	6,520	5,750	4,320	330	561	748
20	1,100	738	797	4,090	7,290	7,120	6,350	5,850	4,240	428	600	688
21	1,060	732	798	4,570	7,280	7,050	6,240	6,010	4,030	437	634	682
22	1,040	728	822	4,640	7,270	7,030	6,310	6,230	3,990	529	588	664
23	1,020	724	903	4,600	7,130	6,980	6,210	6,190	2,970	577	505	670
24	1,010	724	878	4,270	7,100	6,980	6,110	4,690	2,640	558	498	706
25	983	774	858	4,200	7,070	7,290	6,010	3,080	2,680	499	519	736
26	987	852	863	4,140	7,090	7,410	5,900	2,900	2,770	446	506	772
27	992	1,050	832	4,030	7,120	7,340	5,830	2,780	2,610	423	522	802
28	891	903	820	4,020	7,210	7,360	5,820	2,670	1,850	375	532	802
29	855	915	810	4,880	7,310	7,350	5,780	2,610	1,640	346	524	772
30	844	936	808	4,930	------	7,340	5,860	2,480	911	373	516	802
31	852	------	797	4,900	------	7,330	------	2,440	------	491	512	------
TOTAL	32,162	25,289	26,585	87,037	188,130	224,080	199,010	157,920	89,971	13,108	14,997	23,537
MEAN	1,037	843	858	2,808	6,487	7,228	6,634	5,094	2,999	423	484	785
MAX	1,370	1,050	1,060	4,930	7,310	7,740	7,350	6,230	4,550	670	634	1,020
MIN	844	724	764	759	4,960	6,980	5,780	2,440	911	311	386	531
AC-FT	63,790	50,160	52,730	172,600	373,200	444,500	394,700	313,200	178,500	26,000	29,750	46,690

CAL YR 1971 TOTAL 1,208,528 MEAN 3,311 MAX 8,100 MIN 345 AC-FT 2,397,000
WTR YR 1972 TOTAL 1,081,826 MEAN 2,956 MAX 7,740 MIN 311 AC-FT 2,146,000

13213000 BOISE RIVER NEAR PARMA, IDAHO

LOCATION.--Lat 43°46'54", long 116°58'17", in NE¼SE¼SE¼ sec.7, T.5 N., R.5 W., Canyon County, on left bank at county road crossing, 1.2 miles west of Parma, and at mile 3.8.
DRAINAGE AREA.--3,970 sq mi, approximately.
PERIOD OF RECORD.--March 1938 to June 1939 (gage heights only), September 1971 to current year.
GAGE.--Water-stage recorder. Altitude of gage is 2,196 ft (from topographic map). March 1938 to June 1939, nonrecording gage 1.4 miles upstream at different datum.
EXTREMES.--September 1971: Maximum discharge during period, 1,870 cfs Sept. 30 (gage height, 9.28 ft); minimum, 911 cfs Sept. 1 (gage height, 8.18 ft).
Water year 1972: Maximum discharge, 7,840 cfs Mar. 3 (gage height, 13.01 ft); minimum, 588 cfs July 19 (gage height, 7.42 ft).
Flood of Apr. 20, 1943, reached a discharge of about 20,000 cfs.
REMARKS.--Records good. Records for water temperature and chemical analysis for the water year 1972 are published in Part 2 of this report.

Discharge measurements made prior to beginning of continuous discharge record

Date	Discharge (cfs)	Date	Discharge (cfs)	Date	Discharge (cfs)
July 31, 1969....	604	Feb. 19, 1970.....	3,870	Jan. 20, 1971.....	4,490
Aug. 1.....	558	Mar. 16.....	2,840	Feb. 24.....	6,880
26.....	588	Apr. 22.....	2,390	Mar. 24.....	7,580
Sept. 17.....	847	June 10.....	2,790	May 19.....	6,870
Oct. 28.....	1,140	Aug. 19.....	659	June 23.....	5,610
Nov. 28.....	915	Nov. 18.....	965	Aug. 25.....	860
Dec. 29.....	860				

DISCHARGE, IN CUBIC FEET PER SECOND, 1971

DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP
1	962	5	1,210	9	1,160	13	1,050	17	1,120	21	1,180	25	1,110	28	1,380
2	1,030	6	1,210	10	1,100	14	1,030	18	1,130	22	1,160	26	1,160	29	1,500
3	1,070	7	1,210	11	1,070	15	1,050	19	1,160	23	1,120	27	1,320	30	1,710
4	1,200	8	1,210	12	1,020	16	1,120	20	1,210	24	1,060				

TOTAL	35,022
MEAN	1,167
MAX	1,710
MIN	962
AC-FT	69,470

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,980	1,050	1,090	899	4,930	7,220	7,340	6,080	3,050	1,010	874	843
2	1,960	1,040	1,050	905	4,910	7,380	7,380	6,080	3,070	937	801	951
3	1,830	1,120	1,060	880	4,930	7,740	7,240	5,990	3,130	958	778	971
4	1,780	1,150	1,050	849	5,800	7,560	7,220	5,970	3,160	849	790	1,010
5	1,720	1,150	1,080	874	6,020	7,440	7,280	5,940	3,220	767	819	1,050
6	1,650	1,130	1,230	886	6,050	7,380	7,240	5,960	2,690	755	825	1,190
7	1,570	1,130	1,190	895	6,020	7,300	7,200	6,030	2,590	728	861	1,240
8	1,580	1,130	1,070	880	6,040	7,220	7,150	6,100	2,930	728	807	1,240
9	1,460	1,130	1,090	881	6,030	7,220	7,110	6,120	3,270	706	744	1,230
10	1,390	1,100	1,080	877	6,020	7,220	7,030	6,090	3,900	819	712	1,190
11	1,370	1,090	1,040	895	6,000	7,170	6,940	6,120	4,230	843	685	1,240
12	1,300	1,060	959	898	6,020	7,180	6,960	6,080	4,120	784	701	1,450
13	1,350	1,060	912	2,080	6,060	7,170	6,960	6,050	3,980	773	685	1,420
14	1,550	1,050	890	3,400	6,060	7,130	6,940	6,020	3,880	773	778	1,410
15	1,500	999	924	3,650	6,410	7,090	6,960	6,070	4,380	685	813	1,360
16	1,460	938	950	3,750	6,840	7,050	6,840	5,980	4,350	659	795	1,360
17	1,310	918	940	3,850	6,940	7,030	6,880	5,940	4,730	659	778	1,250
18	1,230	911	937	3,960	7,030	7,070	6,750	5,980	4,820	628	843	1,160
19	1,370	893	931	4,150	7,090	7,340	6,690	6,060	4,680	623	911	1,050
20	1,420	887	924	4,180	7,240	7,090	6,560	6,220	4,500	778	951	1,010
21	1,340	874	905	4,540	7,220	7,010	6,400	6,310	4,280	778	1,030	980
22	1,330	867	956	4,630	7,240	6,980	6,450	6,590	4,200	867	944	980
23	1,310	856	1,030	4,600	7,130	6,920	6,370	6,560	3,510	991	849	993
24	1,280	869	1,050	4,220	7,050	6,900	6,280	5,510	3,060	1,010	813	1,040
25	1,240	915	1,010	4,160	7,030	7,090	6,130	3,990	3,090	905	825	1,100
26	1,260	1,020	1,010	4,140	7,070	7,300	6,010	3,620	3,190	831	819	1,130
27	1,260	1,290	964	4,010	7,130	7,260	5,960	3,520	3,070	801	843	1,170
28	1,140	1,140	944	4,010	7,180	7,280	5,920	3,440	2,400	722	874	1,190
29	1,080	1,110	924	4,800	7,300	7,300	5,910	3,390	2,150	728	843	1,160
30	1,060	1,130	918	4,920	------	7,300	6,000	3,220	1,400	755	837	1,190
31	1,080	------	905	4,910	------	7,300	------	3,130	------	855	819	------
TOTAL	44,160	31,007	31,013	88,579	186,790	223,640	202,100	170,160	105,030	24,705	25,447	34,558
MEAN	1,425	1,034	1,000	2,857	6,441	7,214	6,737	5,489	3,501	797	821	1,152
MAX	1,980	1,290	1,230	4,920	7,300	7,740	7,380	6,590	4,820	1,010	1,030	1,450
MIN	1,060	856	890	849	4,910	6,900	5,910	3,130	1,400	623	685	843
AC-FT	87,590	61,500	61,510	175,700	370,500	443,600	400,900	337,500	208,300	49,000	50,470	68,550

WTR YR 1972 TOTAL 1,167,189 MEAN 3,189 MAX 7,740 MIN 623 AC-FT 2,315,000

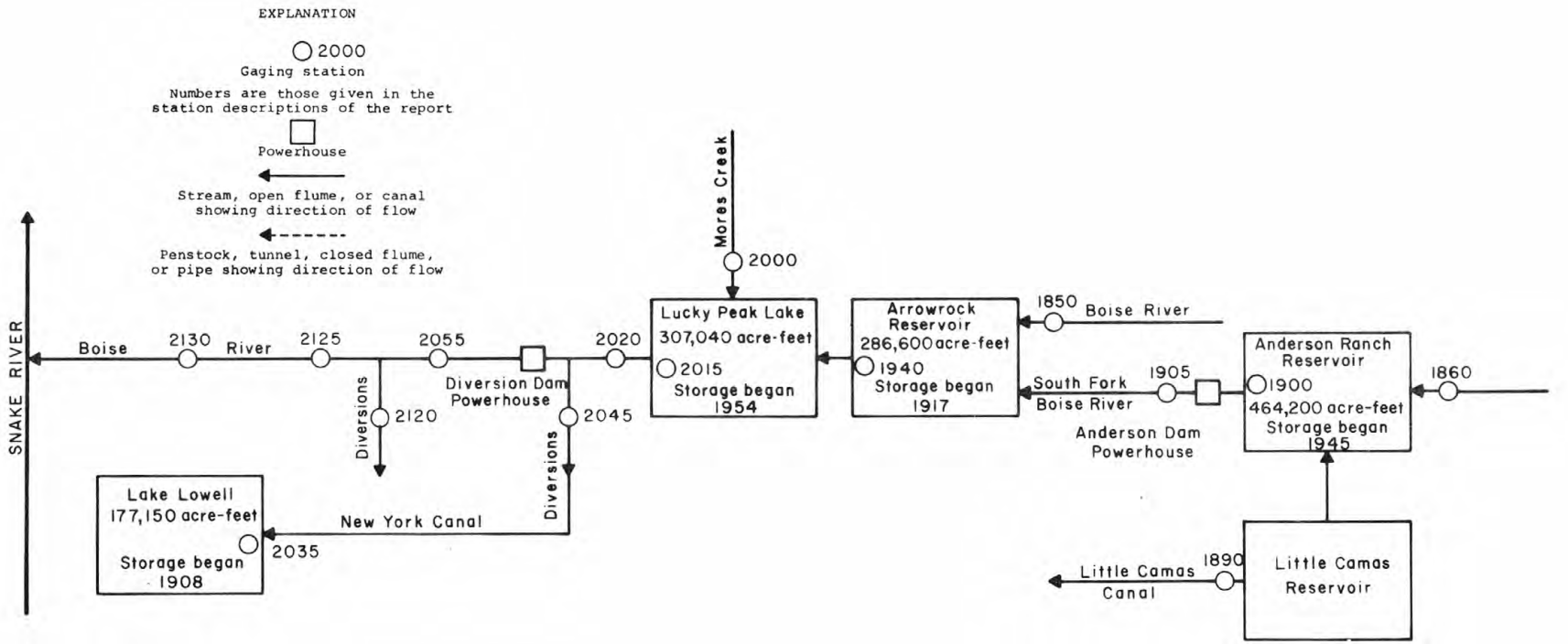


FIGURE 9. Schematic diagram showing gaging stations, diversions, and storage in Boise River basin.

13235000 South Fork Payette River at Lowman, Idaho

LOCATION.--Lat 44°05'05", long 115°37'10", in SW¼ sec.27, T.9 N., R.7 E., Boise County, Boise National Forest, on right bank 1,200 ft upstream from Rock Creek, 0.5 mile northwest of Lowman, 4,100 ft downstream from Clear Creek, and at mile 28.2.

DRAINAGE AREA.--456 sq mi. Mean altitude, 6,780 ft.

PERIOD OF RECORD.--May 1941 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,790 ft (from river-profile map). Prior to Dec. 18, 1941, nonrecording gage at site 900 ft upstream at different datum.

AVERAGE DISCHARGE.--31 years, 889 cfs (26.48 inches per year, 644,100 acre-ft per year); 15-year base period (1952-67), 852 cfs.

EXTREMES.--Current year: Maximum discharge, 7,190 cfs June 11 (gage height, 7.49 ft); minimum, 169 cfs Feb. 2 (gage height, 2.45 ft).
Period of record: Maximum discharge, 7,190 cfs June 11, 1972 (gage height, 7.49 ft); minimum, 135 cfs Sept. 10, 1966 (gage height, 2.22 ft).

REMARKS.--Records good. No regulation. Several small diversions for irrigation and placer mining, the return flow from which enters river above station.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Jan. 31, Feb. 1)

2.6	216	5.0	2,320
2.7	247	6.0	3,940
3.0	378	7.0	5,930
3.5	705	7.5	7,090
4.0	1,120		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	445	400	281	318	235	554	706	1,160	6,660	3,200	830	502
2	441	416	263	327	230	504	742	1,230	6,920	2,960	798	483
3	441	369	349	259	240	585	848	1,410	6,520	2,680	767	471
4	439	365	327	231	304	500	876	1,780	6,060	2,520	751	452
5	430	343	338	312	375	457	885	2,110	5,820	2,440	720	446
6	420	303	354	347	366	461	1,120	2,370	5,950	2,400	705	515
7	410	345	265	339	340	472	1,140	2,510	6,240	2,460	698	471
8	400	368	250	320	317	459	1,040	2,540	6,590	2,210	705	465
9	390	351	326	318	305	500	970	2,240	6,590	2,050	720	448
10	385	354	350	314	284	685	939	2,120	6,920	1,870	668	444
11	385	354	346	330	282	889	897	2,090	6,800	1,760	653	480
12	380	382	340	320	311	855	892	2,190	5,800	1,740	631	517
13	375	373	345	326	312	882	826	2,390	5,040	1,760	624	482
14	380	362	336	289	297	948	777	2,820	5,000	1,770	661	459
15	390	351	340	328	305	935	766	3,360	5,120	1,670	675	444
16	380	332	342	318	305	1,000	797	3,600	5,320	1,540	638	434
17	375	334	350	345	308	1,110	763	3,870	5,030	1,400	596	424
18	380	330	339	366	308	1,240	734	3,720	4,910	1,340	568	418
19	390	333	334	358	310	1,180	719	3,500	4,400	1,300	554	440
20	415	334	329	366	311	1,040	750	3,430	3,890	1,230	548	457
21	410	328	330	469	321	999	799	3,230	3,800	1,190	548	437
22	390	327	335	430	321	1,050	789	2,930	3,700	1,120	535	440
23	400	317	359	405	317	1,340	824	2,680	3,930	1,040	515	432
24	400	336	324	367	310	1,130	952	2,630	3,680	988	515	429
25	390	335	340	357	300	1,010	944	2,750	3,300	954	521	442
26	385	335	333	349	299	877	893	2,880	3,000	954	521	436
27	380	351	310	321	345	801	955	3,130	2,730	937	521	478
28	350	345	231	329	645	746	1,200	3,610	2,610	895	502	455
29	310	349	302	306	748	691	1,430	4,410	2,900	879	495	435
30	340	334	325	256	------	659	1,230	5,210	3,500	854	502	428
31	410	------	306	245	------	656	------	5,860	------	854	502	------
TOTAL	12,216	10,456	9,999	10,265	9,651	25,215	27,203	89,760	148,730	50,965	19,187	13,664
MEAN	394	349	323	331	333	813	907	2,895	4,958	1,644	619	455
MAX	445	416	359	469	748	1,340	1,430	5,860	6,920	3,200	830	517
MIN	310	303	231	231	230	457	706	1,160	2,610	854	495	418
CFSM	.86	.77	.71	.73	.73	1.78	1.99	6.35	10.9	3.61	1.36	1.00
IN.	1.00	.85	.82	.84	.79	2.06	2.22	7.32	12.13	4.16	1.57	1.11
AC-FT	24,230	20,740	19,830	20,360	19,140	50,010	53,960	178,000	295,000	101,100	38,060	27,100

CAL YR 1971 TOTAL 459,251 MEAN 1,258 MAX 5,800 MIN 231 CFSM 2.76 IN 37.47 AC-FT 910,900
WTR YR 1972 TOTAL 427,311 MEAN 1,168 MAX 6,920 MIN 230 CFSM 2.56 IN 34.86 AC-FT 847,600

NOTE.--No gage-height record Oct. 5 to Nov. 2.

13236000 Deadwood Reservoir near Lowman, Idaho

LOCATION.--Lat 44°17'38", long 115°38'41", in SW¼SE¼ sec.8, T.11 N., R.7 E., Valley County, Boise National Forest, at dam on Deadwood River, 15 miles north of Lowman, and at mile 24.4.

DRAINAGE AREA.--112 sq mi.

PERIOD OF RECORD.--October 1935 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Datum of Geological Survey levels (1952, preliminary) is 22.8 ft higher. Prior to July 1, 1964, nonrecording gage.

EXTREMES.--Current year: Maximum elevation, 5,334.75 ft July 20; minimum, 5,294.89 ft Oct. 7.
Period of record: Maximum elevation observed, 5,337.31 ft June 27, 1971; minimum observed, 5,205.0 ft Sept. 18 to Oct. 11, 1951, when reservoir was drained for repairs.

REMARKS.--Reservoir is formed by concrete-arch dam completed in 1930; storage began Nov. 2, 1930. Reported capacity, 160,400 acre-ft between elevations 5,230.0 ft (minimum operating level because of fish protections, 27 ft above sill of emergency gate in front of needle valve) and 5,334.0 ft (crest of spillway). Storage below elevation 5,230 ft, about 1,500 acre-ft. Water is used to augment flow of Payette River at Black Canyon powerplant near Emmett and, since 1956, as supplemental irrigation supply for Emmett Irrigation District and other users. Small diversion from a tributary of Johnson Creek in Salmon River basin to Deadwood River basin for supplemental storage in Deadwood Reservoir.

COOPERATION.--Observer readings furnished by Bureau of Reclamation.

REVISIONS.--WSP 1567: Drainage area.

GAGE HEIGHT, IN FEET, FOR STATISTIC 00011, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	298.04	297.04	299.34	301.89	304.17	306.25	309.85	305.85	311.92	333.40	334.64	318.06
2	297.36	297.12	299.42	301.96	304.21	306.43	309.95	305.42	313.67	333.36	334.61	317.16
3	296.65	297.20	299.50	301.99	304.28	306.51	310.07	305.05	315.30	333.38	334.57	316.30
4	295.96	297.28	299.58	302.05	304.35	306.60	310.21	304.77	316.71	333.50	334.55	315.45
5	295.36	297.35	299.73	302.12	304.41	306.66	310.40	304.59	318.14	333.58	334.58	314.60
6	295.00	297.40	299.80	302.19	304.48	306.74	310.59	304.46	319.49	333.64	334.56	313.74
7	294.94	297.47	299.85	302.27	304.52	306.82	310.78	304.35	320.84	333.70	334.48	312.67
8	295.02	297.55	299.98	302.32	304.58	306.90	310.95	304.18	322.30	333.75	334.49	311.96
9	295.10	297.63	300.09	302.38	304.61	306.99	311.10	303.96	324.00	333.77	334.36	311.03
10	295.19	297.70	300.18	302.46	304.66	307.08	311.23	303.77	325.57	333.80	334.11	310.05
11	295.26	297.73	300.25	302.60	304.72	307.19	311.41	303.60	326.83	333.92	333.71	309.32
12	295.35	297.85	300.37	302.68	304.80	307.30	311.61	303.47	327.99	334.13	333.18	308.73
13	295.54	297.94	300.44	302.71	304.88	307.44	311.74	303.48	328.68	334.28	332.53	308.12
14	295.50	298.02	300.57	302.79	304.93	307.57	311.86	303.61	329.63	334.45	331.84	307.49
15	295.61	298.08	300.62	302.83	305.02	307.69	311.98	303.85	330.31	334.56	331.16	306.74
16	295.68	298.15	300.69	302.90	305.16	307.82	312.10	304.23	330.89	334.63	330.39	306.17
17	295.74	298.23	300.76	302.97	305.12	307.97	312.17	304.69	331.34	334.70	329.68	305.48
18	295.82	298.30	300.83	303.09	305.17	308.14	312.07	305.08	331.73	334.74	328.95	304.91
19	295.94	298.39	300.90	303.18	305.23	308.28	311.80	305.41	332.02	334.74	328.22	304.18
20	296.05	298.45	300.98	303.37	305.30	308.41	311.39	305.67	332.26	334.73	327.49	303.51
21	296.13	298.53	301.05	303.50	305.35	308.53	310.88	305.90	332.52	334.67	326.75	302.88
22	296.22	298.58	301.20	303.60	305.43	308.67	310.31	306.08	332.71	334.70	325.99	302.23
23	296.31	298.64	301.26	303.68	305.51	308.82	309.77	306.20	332.90	334.72	325.22	301.56
24	296.38	298.73	301.33	303.72	305.56	308.99	309.23	306.35	333.03	334.71	324.44	300.90
25	296.47	298.80	301.44	303.78	305.63	309.09	308.68	306.51	333.13	334.71	323.67	300.29
26	296.54	298.94	301.50	303.78	305.72	309.20	308.17	306.73	333.20	334.70	322.90	299.98
27	296.63	299.02	301.54	303.90	305.89	309.32	307.64	307.05	333.29	334.70	322.12	299.82
28	296.67	299.14	301.60	303.95	306.04	309.44	307.20	307.48	333.39	334.69	321.28	299.74
29	296.73	299.22	301.68	304.00	306.14	309.54	306.76	308.09	333.35	334.69	320.50	299.69
30	296.84	299.29	301.74	304.06	------	309.63	306.30	308.90	333.40	334.69	319.69	299.66
31	296.92	------	301.82	304.13	------	309.74	------	310.18	------	334.68	318.87	------
MEAN	296.03	298.13	300.65	303.00	305.03	307.93	310.27	305.45	327.35	334.27	329.15	307.08
MAX	298.04	299.29	301.82	304.13	306.14	309.74	312.17	310.18	333.40	334.74	334.64	318.06
MIN	294.94	297.04	299.34	301.89	304.17	306.25	306.30	303.47	311.92	333.36	318.87	299.66

NOTE.--Add 5,000 ft to obtain elevation above mean sea level.

13236500 Deadwood River below Deadwood Reservoir, near Lowman, Idaho

LOCATION.--Lat 44°17'30", long 115°38'33", in SE¼NE¼ sec.17, T.11 N., R.7 E., Valley County, Boise National Forest, on right bank 300 ft upstream from Wilson Creek, 0.2 mile downstream from Deadwood Dam, 15 miles north of Lowman, and at mile 23.4.

DRAINAGE AREA.--112 sq mi. Mean altitude, 6,630 ft.

PERIOD OF RECORD.--October 1926 to current year. Monthly discharge only prior to May 1927, published in WSP 1317. Published as "at Beaver Creek ranger station, near Lowman" prior to October 1934.

GAGE.--Water-stage recorder. Datum of gage is 5,180.52 ft above mean sea level (levels by Bureau of Reclamation). Datum of 1929, supplementary adjustment of 1947, is 29.19 ft higher. Prior to June 22, 1935, at site 600 ft upstream at datum 5.85 ft higher and Oct. 1, 1935, to Aug. 3, 1955, at present site at datum 1.00 ft higher. June 22 to Sept. 30, 1935, nonrecording gage at site 20 ft upstream at datum 2.00 ft higher.

AVERAGE DISCHARGE.--46 years, 233 cfs (168,800 acre-ft per year); 15-year base period (1952-67), 249 cfs.

EXTREMES.--Current year: Maximum discharge, 1,220 cfs Aug. 22 (gage height, 6.82 ft); minimum, 1.0 cfs Feb. 26 (gage height, 0.78 ft).
Period of record: Maximum discharge, 2,580 cfs July 14, 1953, maximum gage height, 8.93 ft June 7, 1956; no flow or small amount of leakage from reservoir for long periods in 1934-37, when gates in dam were closed.

REMARKS.--Records good except those below 5.0 cfs, which are fair. Flow regulated by Deadwood Reservoir (see sta 13236000).

REVISIONS (WATER YEARS).--WSP 1123: 1943. WSP 1517: 1956. WSP 1567: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

0.8	0.9	1.5	19	4.0	325
.9	1.3	2.0	58	5.0	574
1.0	2.0	2.5	110	6.0	903
1.1	3.3	3.0	171	7.0	1,300
1.2	5.8				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	769	3.1	3.0	3.3	3.8	3.5	3.7	825	3.8	539	143	1,180
2	766	3.0	3.0	3.4	3.6	2.9	3.9	823	4.1	539	139	1,190
3	762	3.1	3.0	3.4	3.7	1.2	4.1	823	4.1	408	132	1,180
4	759	3.1	3.0	3.3	3.8	1.1	4.1	822	4.1	288	127	1,180
5	649	3.1	3.2	3.3	3.8	1.1	4.2	822	4.1	288	123	1,190
6	397	3.1	3.2	3.3	3.9	1.1	4.6	823	4.1	291	120	1,190
7	140	3.1	3.2	3.3	3.9	1.6	4.6	822	4.1	294	142	1,200
8	2.1	3.0	3.1	3.3	3.8	3.2	4.4	820	4.1	292	163	1,190
9	2.1	3.1	3.2	3.3	3.9	3.3	4.3	819	4.1	292	302	1,190
10	2.0	3.1	3.2	3.5	3.9	3.6	4.3	818	4.1	292	509	1,190
11	2.0	3.1	3.2	3.6	3.9	4.0	4.3	816	4.1	156	699	975
12	2.1	3.2	3.3	3.4	3.9	3.7	4.5	817	4.1	3.6	932	778
13	2.3	3.2	3.3	3.4	4.0	3.8	4.3	817	12	18	1,110	808
14	2.4	3.2	3.3	3.5	3.9	3.9	4.1	818	119	47	1,200	806
15	2.4	3.2	3.3	3.4	3.9	3.9	4.1	820	236	72	1,200	803
16	2.4	3.1	3.2	3.4	3.8	3.9	4.2	823	507	96	1,200	800
17	2.5	3.1	3.3	3.6	3.8	3.9	56	826	534	113	1,190	797
18	2.5	3.2	3.3	3.7	3.8	4.1	231	827	535	127	1,190	795
19	2.7	3.1	3.3	3.6	3.8	3.8	409	828	535	139	1,190	792
20	2.7	3.1	3.3	3.8	3.8	3.8	620	829	536	147	1,180	789
21	2.7	3.1	3.3	3.9	3.8	3.8	784	830	536	154	1,190	786
22	2.7	3.1	3.4	4.1	4.0	3.9	840	831	536	160	1,210	783
23	2.8	3.1	3.3	4.0	3.8	4.1	837	832	537	164	1,200	781
24	2.9	3.1	3.3	3.9	2.6	3.9	835	831	537	166	1,200	778
25	2.8	3.1	3.3	3.9	1.0	3.7	833	832	537	164	1,190	679
26	2.9	3.1	3.3	3.9	1.0	3.6	834	833	538	162	1,190	362
27	2.9	3.1	3.3	3.9	1.3	3.6	833	834	538	160	1,190	225
28	2.9	3.1	3.3	3.9	1.5	3.5	831	837	538	156	1,180	154
29	2.9	3.1	3.3	3.8	2.4	3.6	830	840	538	153	1,180	129
30	3.0	3.1	3.3	3.8	------	3.6	828	844	539	149	1,180	105
31	3.0	------	3.3	3.8	------	3.6	------	183	------	146	1,180	------
TOTAL	4,303.7	93.3	100.3	111.7	98.1	102.3	9,668.7	24,965	8,436.9	6,175.6	26,081	24,805
MEAN	139	3.11	3.24	3.60	3.38	3.30	322	805	281	199	841	827
MAX	769	3.2	3.4	4.1	4.0	4.1	840	844	539	539	1,210	1,200
MIN	2.0	3.0	3.0	3.3	1.0	1.1	3.7	183	3.8	3.6	120	105
AC-FT	8,540	185	199	222	195	203	19,180	49,520	16,730	12,250	51,730	49,200

CAL YR 1971 TOTAL 152,199.8 MEAN 417 MAX 2,080 MIN 1.8 AC-FT 301,900
WTR YR 1972 TOTAL 104,941.6 MEAN 287 MAX 1,210 MIN 1.0 AC-FT 208,200

13238000 Payette River near Banks, Idaho

LOCATION.--Lat 44°05'08", long 116°05'56", in NE¼SE¼ sec.28, T.9 N., R.3 E., Boise County, Boise National Forest, on right bank 1 mile upstream from North Fork Payette River, 1.5 miles northeast of Banks, and at mile 73.8.

DRAINAGE AREA.--1,200 sq mi, approximately. Mean altitude, 6,020 ft.

PERIOD OF RECORD.--August 1921 to current year. Prior to October 1960, published as South Fork Payette River near Banks.

GAGE.--Water-stage recorder. Altitude of gage is 2,805 ft (from river-profile map). Prior to Sept. 12, 1922, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--51 years, 1,817 cfs (1,316,000 acre-ft per year); 15-year base period (1952-67), 1,921 cfs.

EXTREMES.--Current year: Maximum discharge, 11,700 cfs June 2 (gage height, 11.65 ft); minimum, 418 cfs Jan. 4 (gage height, 0.79 ft).
Period of record: Maximum discharge, 20,800 cfs Dec. 23, 1964 (gage height, 15.46 ft, from floodmark); minimum daily, 220 cfs Dec. 15, 1967; minimum recorded gage height, 0.09 ft Dec. 17, 1967.

REMARKS.--Records good. Flow partly regulated since November 1930 by Deadwood Reservoir 55.6 miles upstream (see sta 13236000). Diversions above station for irrigation of about 3,800 acres (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

0.9	457	6.0	3,990
1.4	655	8.0	6,240
2.0	942	10.0	9,060
4.0	2,240	12.0	12,300

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,530	729	624	648	686	2,040	1,820	3,760	10,900	4,400	1,380	1,900
2	1,510	699	485	658	642	1,730	1,930	3,870	11,200	4,200	1,340	1,900
3	1,500	688	669	573	628	2,220	2,220	4,230	10,700	3,930	1,310	1,880
4	1,500	699	679	462	684	1,850	2,320	5,020	9,770	3,510	1,270	1,870
5	1,490	666	673	581	764	1,590	2,430	5,830	9,340	3,380	1,230	1,910
6	1,270	568	773	698	772	1,500	3,130	6,290	9,190	3,320	1,190	2,050
7	1,020	585	605	681	716	1,570	3,370	6,720	9,420	3,300	1,160	1,980
8	840	729	462	639	676	1,500	3,040	6,710	10,300	3,160	1,200	1,930
9	708	692	578	621	653	1,580	2,810	6,080	10,600	2,990	1,190	1,900
10	699	699	691	623	619	1,990	2,700	5,620	11,000	2,810	1,400	1,890
11	695	702	690	631	597	2,800	2,560	5,480	10,200	2,650	1,580	1,900
12	690	740	678	648	628	2,950	2,660	5,710	8,600	2,340	1,750	1,580
13	690	772	668	646	651	3,080	2,450	6,000	7,430	2,290	1,960	1,600
14	708	736	668	600	645	3,370	2,230	6,740	6,900	2,280	2,130	1,550
15	704	695	660	632	634	3,160	2,130	7,750	6,980	2,220	2,200	1,520
16	699	663	654	641	644	3,240	2,200	8,310	7,410	2,110	2,180	1,500
17	704	641	657	678	665	3,520	2,140	8,810	7,380	2,030	2,120	1,480
18	699	654	668	755	689	4,130	2,120	8,690	7,160	1,970	2,080	1,470
19	704	647	656	801	712	4,090	2,260	7,860	6,420	1,910	2,050	1,480
20	763	658	649	941	754	3,490	2,500	7,610	5,780	1,880	2,050	1,520
21	758	653	646	1,850	848	3,220	2,880	7,350	5,540	1,810	2,050	1,480
22	720	648	658	1,630	911	3,200	2,990	6,830	5,390	1,790	2,040	1,480
23	710	630	770	1,410	920	3,870	3,030	6,400	5,420	1,700	2,020	1,470
24	705	649	699	1,100	872	3,400	3,340	6,140	5,180	1,630	2,010	1,460
25	694	676	681	956	824	3,000	3,350	6,190	4,900	1,590	1,990	1,480
26	698	663	685	881	795	2,560	3,180	6,240	4,570	1,560	1,980	1,260
27	729	677	652	784	891	2,270	3,270	6,560	4,210	1,520	1,950	1,050
28	684	701	525	758	1,730	2,070	3,820	7,270	4,130	1,490	1,930	958
29	577	710	505	723	2,740	1,890	4,590	8,350	4,240	1,450	2,010	878
30	667	686	645	637	------	1,760	4,080	9,580	4,430	1,420	1,960	824
31	742	------	660	598	------	1,720	------	10,400	------	1,410	1,920	------
TOTAL	26,807	20,355	20,013	24,484	23,990	80,360	83,550	208,400	224,690	74,050	54,630	47,150
MEAN	865	679	646	790	827	2,592	2,785	6,723	7,490	2,389	1,762	1,572
MAX	1,530	772	773	1,850	2,740	4,130	4,590	10,400	11,200	4,400	2,200	2,050
MIN	577	568	462	462	597	1,500	1,820	3,760	4,130	1,410	1,160	824
AC-FT	53,170	40,370	39,700	48,560	47,580	159,400	165,700	413,400	445,700	146,900	108,400	93,520

CAL YR 1971 TOTAL 1,077,899 MEAN 2,953 MAX 11,500 MIN 400 AC-FT 2,138,000
WTR YR 1972 TOTAL 888,479 MEAN 2,428 MAX 11,200 MIN 462 AC-FT 1,762,000

PAYETTE RIVER BASIN

13238500 Payette Lake at McCall, Idaho

LOCATION.--Lat 44°54'50", long 116°07'10", in NW¼ sec.8, T.18 N., R.3 E., Valley County, at outlet of lake on North Fork Payette River at McCall and at mile 75.4.

DRAINAGE AREA.--144 sq mi.

PERIOD OF RECORD.--August 1921 to current year (fragmentary prior to Nov. 23, 1943). Prior to October 1942, published as "at Lardo."

GAGE.--Water-stage recorder. Datum of gage is 4,982.73 ft above mean sea level, unadjusted. Prior to Aug. 26, 1931, nonrecording gage at site 25 ft downstream at datum 2.0 ft higher. Aug. 26, 1931, to Nov. 22, 1943, nonrecording gage at site 75 ft downstream at present datum.

EXTREMES.--Current year: Maximum gage height, 6.96 ft July 9; minimum, 1.37 ft Nov. 9-12.
Period of record: Maximum gage height observed, 8.75 ft July 13, 1935; minimum observed, 0.95 ft Oct. 3, 1931.

REMARKS.--Flow from Payette Lake is regulated within natural range by taintor gates and removable stoplogs of a buttress and slab-type dam completed in November 1943. During period 1923-43 lake was regulated by structure consisting of a series of concrete-filled cribs supporting removable flashboards. Some regulation is reported to have been affected by timber flashboards for several years prior to 1923. Lake area is approximately 5,000 acres. No capacity table has been developed. Water is used for irrigation in vicinity of Emmett. No diversion above station.

REVISIONS (WATER YEARS).--WSP 753: 1931. WSP 1013: Drainage area.

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.94	1.42	-	1.57	1.60	1.71	1.96	2.27	6.54	5.81	6.52	4.40
2	1.90	1.42	-	1.59	1.58	1.76	1.95	2.31	6.69	5.98	6.41	4.29
3	1.84	1.42	-	1.57	1.57	1.74	1.95	2.39	6.72	6.17	6.32	4.20
4	1.80	1.43	-	1.57	1.56	1.73	1.95	2.53	6.57	6.37	6.23	4.11
5	1.77	1.40	-	1.55	1.56	1.72	2.05	2.72	6.50	6.55	6.14	4.05
6	1.74	1.40	1.58	1.55	1.56	1.70	2.13	2.95	6.49	6.75	6.04	4.08
7	1.71	1.40	1.56	1.55	1.56	1.68	2.17	3.19	6.40	6.90	5.93	4.07
8	1.69	1.38	1.58	1.56	1.56	1.68	2.18	3.39	6.62	6.91	5.83	4.04
9	1.66	1.37	1.58	1.55	1.55	1.67	2.18	3.42	6.70	6.93	5.74	3.97
10	1.64	1.37	1.58	1.55	1.54	1.67	2.17	3.41	6.77	6.89	5.63	3.88
11	1.63	1.37	1.57	1.60	1.54	1.68	2.20	3.38	6.59	6.84	5.54	3.82
12	1.62	1.39	1.60	1.60	1.53	1.69	2.25	3.40	6.11	6.82	5.44	-
13	1.60	1.40	1.59	1.59	1.55	1.76	2.23	3.54	5.70	6.79	5.34	-
14	1.57	1.40	1.62	1.58	1.55	1.78	2.20	3.81	5.45	6.76	5.23	-
15	1.54	1.40	1.61	1.56	1.57	1.79	2.18	4.14	5.42	6.76	5.20	-
16	1.50	1.39	1.60	1.55	1.56	1.80	2.19	4.57	5.49	6.77	5.13	-
17	1.48	1.39	1.60	1.53	1.57	1.83	2.17	4.81	5.49	6.78	5.02	-
18	1.47	1.38	1.58	1.54	1.56	1.90	2.16	4.99	5.37	6.82	4.94	-
19	1.49	1.37	1.57	1.55	1.56	1.94	2.09	5.00	5.11	6.78	4.85	-
20	1.50	1.38	1.56	1.63	1.55	1.95	2.07	5.00	4.88	6.80	4.83	-
21	1.48	1.37	1.57	1.64	1.56	1.95	2.07	5.00	4.73	6.82	4.81	-
22	1.47	1.38	1.63	1.66	1.57	1.98	2.02	4.95	4.61	6.84	4.78	-
23	1.48	1.38	1.63	1.66	1.58	2.02	2.01	4.83	4.58	6.84	4.74	-
24	1.47	1.39	1.63	1.64	1.57	2.06	2.01	4.76	4.49	6.85	4.71	-
25	1.46	1.40	1.64	1.65	1.56	2.08	2.01	4.66	4.58	6.85	4.68	-
26	1.47	1.47	1.63	1.65	1.58	2.07	2.01	4.65	4.59	6.87	4.66	-
27	1.44	1.48	1.62	1.65	1.62	2.05	2.05	4.77	4.65	6.86	4.64	-
28	1.42	1.51	1.61	1.63	1.71	2.03	2.12	5.04	4.91	6.83	4.63	-
29	1.40	1.50	1.60	1.62	1.69	2.01	2.21	5.42	5.28	6.78	4.59	-
30	1.40	1.50	1.60	1.61	------	1.99	2.25	5.80	5.62	6.67	4.57	3.05
31	1.40	------	1.59	1.60	------	1.97	------	6.17	------	6.62	4.51	------
MEAN	1.58	1.41	-	1.59	1.57	1.85	2.11	4.11	5.66	6.71	5.28	-
MAX	1.94	1.51	1.64	1.66	1.71	2.08	2.25	6.17	6.77	6.93	6.52	4.40
MIN	1.40	1.37	-	1.53	1.53	1.67	1.95	2.27	4.49	5.81	4.51	-

13239000 North Fork Payette River at McCall, Idaho

LOCATION.--Lat 44°54'30", long 116°07'10", in SW¼ sec.8, T.18 N., R.3 E., Valley County, on left bank at McCall, 0.2 mile downstream from outlet of Payette Lake, and at mile 75.2.

DRAINAGE AREA.--144 sq mi. Mean altitude, 6,520 ft.

PERIOD OF RECORD.--September 1908 to June 1917, May 1919 to current year. Prior to October 1942, published as "at Lardo."

GAGE.--Water-stage recorder. Altitude of gage is 4,970 ft (by barometer). Nonrecording gage at site 1 mile downstream at different datum prior to Oct. 14, 1908, and Oct. 14, 1908, to Dec. 18, 1923, at sites near present gage at present datum.

AVERAGE DISCHARGE.--61 years (1908-16, 1919-72), 366 cfs (265,200 acre-ft per year); 15-year base period (1952-67), 377 cfs.

EXTREMES.--Current year: Maximum discharge, 3,820 cfs June 11 (gage height, 7.28 ft); minimum, 29 cfs Nov. 10 (gage height, 1.80 ft).
Period of record: Maximum discharge, 4,260 cfs June 10, 1933, June 4, 1948; maximum gage height, 7.71 ft June 4, 1948; no flow Nov. 5-8, 1931, Nov. 17-24, 1933, Nov. 14-27, 1935, Oct. 22 to Nov. 11, 1938.

REMARKS.--Records good. Flow regulated to some extent since several years prior to 1923 by gates at outlet of Payette Lake 0.2 miles upstream (see sta 13238500) and several smaller lakes upstream. Diversion for fish hatchery bypasses station and is returned below gage. Records of daily discharge of this diversion published in annual water-supply papers from October 1942 to February 1953.

REVISIONS.--WSP 963: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.7	23	4.0	740
2.0	48	5.0	1,490
2.5	129	6.0	2,460
3.0	273	7.2	3,800
3.5	475		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	37	44	56	62	84	153	241	3,310	309	244	220
2	125	38	43	56	60	92	153	254	3,580	299	238	220
3	115	38	46	55	58	95	148	272	3,610	215	236	220
4	107	37	45	56	57	92	151	316	3,530	219	233	230
5	100	36	53	55	56	91	158	383	3,390	209	239	230
6	94	34	57	54	56	88	186	472	3,380	179	257	240
7	86	33	52	55	56	85	206	572	3,330	208	254	250
8	75	33	53	56	55	83	212	682	3,370	471	251	245
9	71	32	58	55	54	80	215	741	3,540	500	247	240
10	68	32	57	55	53	79	212	743	3,720	543	244	240
11	65	32	55	58	52	81	218	721	3,730	511	241	237
12	62	34	57	61	51	83	243	713	3,340	427	237	233
13	59	36	59	60	52	91	245	756	2,900	423	241	231
14	54	36	62	58	52	97	234	874	2,550	388	240	232
15	51	35	62	57	56	101	223	1,070	2,420	280	239	240
16	46	34	61	55	57	104	224	1,380	2,440	95	237	240
17	43	33	59	54	58	108	215	1,720	2,480	93	234	101
18	42	33	59	54	58	121	200	1,990	2,430	93	232	248
19	41	32	56	54	57	136	191	2,030	2,210	95	207	240
20	44	32	55	60	56	143	196	2,020	1,970	93	63	248
21	45	32	56	71	56	146	194	1,990	1,790	96	61	267
22	44	31	61	73	59	148	192	1,980	1,670	98	60	259
23	44	31	68	74	61	158	188	1,900	1,610	95	60	133
24	44	32	68	72	61	167	183	1,810	1,500	87	60	48
25	43	33	69	71	59	183	182	1,710	1,190	86	60	47
26	42	36	68	73	59	180	181	1,650	923	86	60	47
27	42	42	65	72	66	177	183	1,700	759	86	60	47
28	41	44	64	69	72	172	196	1,880	419	85	60	47
29	35	46	61	68	84	169	214	2,200	326	181	60	47
30	35	46	61	65	------	164	230	2,590	304	259	60	47
31	35	------	60	64	------	158	------	2,950	------	253	90	------
TOTAL	1,940	1,060	1,794	1,896	1,693	3,756	5,926	40,310	71,721	7,062	5,305	5,574
MEAN	62.6	35.3	57.9	61.2	58.4	121	198	1,300	2,391	228	171	186
MAX	142	46	69	74	84	183	245	2,950	3,730	543	257	267
MIN	35	31	43	54	51	79	148	241	304	85	60	47
AC-FT	3,850	2,100	3,560	3,760	3,360	7,450	11,750	79,950	142,300	14,010	10,520	11,060

CAL YR 1971 TOTAL 191,174 MEAN 524 MAX 3,600 MIN 31 AC-FT 379,200
WTR YR 1972 TOTAL 148,037 MEAN 404 MAX 3,730 MIN 31 AC-FT 293,600

13240000 Lake Fork Payette River above Jumbo Creek, near McCall, Idaho

LOCATION.--Lat 44°54'50", long 115°59'10", in NE¼ sec.8, T.18 N., R.4 E., Valley County, on left bank 100 ft upstream from abandoned powerplant, 0.2 mile upstream from Jumbo Creek, 3.5 miles upstream from Lake Fork Reservoir dam, 5.5 miles east of McCall, and at mile 21.0.

DRAINAGE AREA.--48.9 sq mi. Mean altitude, 6,950 ft.

PERIOD OF RECORD.--October 1945 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,140 ft (from topographic map). Prior to Nov. 10, 1945, nonrecording gage at site 200 ft downstream at different datum.

AVERAGE DISCHARGE.--27 years, 149 cfs (41.38 inches per year, 108,000 acre-ft per year); 15-year base period (1952-67). 143 cfs.

EXTREMES.--Current year: Maximum discharge recorded, 1,670 cfs June 1 (gage height, 8.16 ft); minimum, 3.7 cfs Oct. 6 (gage height, 1.36 ft).
Period of record: Maximum discharge, 2,770 cfs June 26, 1971 (gage height, 9.15 ft), from rating curve extended above 1,200 cfs; minimum, 1.2 cfs Dec. 3, 1967; minimum gage height, 1.05 ft part of each day Nov. 8-9, 1969.

REMARKS.--Records good except those for period of no gage-height record, which are fair. No diversion above station. Flow regulated by Cruzen Reservoir, capacity 1,230 acre-ft.

Rating tables (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Nov. 6, Dec. 1-2, 5, 7-10, 27-29, Jan. 26 to Feb. 2, Feb. 8 to Mar. 8)

1.4	4.2	4.0	104
1.5	5.0	5.0	224
2.0	11	6.0	464
2.5	21	7.0	890
3.5	64	9.0	2,700

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	17	15	16	15	32	47	104	1,540	547	57	20
2	20	17	15	16	15	28	49	114	1,490	474	53	20
3	20	17	17	17	18	24	52	139	1,350	418	49	20
4	20	17	17	16	19	22	55	203	1,040	387	46	19
5	17	15	17	16	18	20	60	284	1,020	391	44	20
6	3.9	15	17	16	17	20	108	345	1,130	189	42	24
7	4.5	16	16	16	17	22	108	383	1,140	308	40	22
8	4.8	16	15	16	15	24	92	376	1,410	331	39	20
9	4.8	16	16	16	16	26	82	313	1,300	310	38	20
10	4.8	16	17	16	15	29	75	270	1,330	253	37	20
11	4.8	17	18	16	14	39	72	242	1,240	223	36	20
12	4.8	18	17	15	15	44	71	249	748	219	34	21
13	4.9	19	17	15	15	54	64	332	690	217	33	22
14	8.2	19	17	16	15	71	59	507	704	207	32	20
15	13	18	17	16	15	60	57	707	830	178	37	19
16	15	16	17	17	15	61	58	802	927	160	42	19
17	15	17	17	17	15	71	54	770	859	146	34	19
18	16	16	16	17	15	89	52	677	808	133	30	19
19	16	16	16	17	16	91	50	660	673	118	28	19
20	18	16	16	19	16	74	50	690	618	109	27	19
21	19	16	16	21	16	71	52	670	631	264	26	19
22	18	16	17	20	17	73	51	630	629	304	25	21
23	19	15	18	20	17	101	51	580	678	211	25	20
24	19	17	18	19	16	91	56	510	611	112	24	20
25	18	17	18	19	16	78	58	520	525	87	23	21
26	18	16	18	17	16	67	56	540	430	79	23	20
27	18	17	16	15	18	60	61	570	404	73	22	21
28	15	18	15	16	24	56	86	680	482	69	21	21
29	16	18	16	15	30	52	127	920	597	63	22	20
30	15	17	17	14	------	49	114	1,160	617	59	22	19
31	17	------	16	15	------	47	------	1,360	------	59	21	------
TOTAL	427.5	501	515	517	486	1,646	2,027	16,307	26,451	6,698	1,032	604
MEAN	13.8	16.7	16.6	16.7	16.8	53.1	67.6	526	882	216	33.3	20.1
MAX	20	19	18	21	30	101	127	1,360	1,540	547	57	24
MIN	3.9	15	15	14	14	20	47	104	404	59	21	19
CFSM	.28	.34	.34	.34	.34	1.09	1.38	10.8	18.0	4.42	.68	.41
IN.	.33	.38	.39	.39	.37	1.25	1.54	12.41	20.12	5.10	.79	.46
AC-FT	848	994	1,020	1,030	964	3,260	4,020	32,340	52,470	13,290	2,050	1,200

CAL YR 1971 TOTAL 67,969.5 MEAN 186 MAX 1,720 MIN 3.9 CFSM 3.80 IN 51.71 AC-FT 134,800
WTR YR 1972 TOTAL 57,211.5 MEAN 156 MAX 1,540 MIN 3.9 CFSM 3.19 IN 43.52 AC-FT 113,500

NOTE.--No gage-height record May 20 to June 4.

13241000 Lake Fork Reservoir near McCall, Idaho

LOCATION.--Lat 44°54'10", long 116°02'20", in NW¼NW¼ sec.13, T.18 N., R.3 E., Valley County, at outlet gate near center of dam on Lake Fork Payette River, 3 miles east of McCall, and at mile 18.0.

DRAINAGE AREA.--64 sq mi, approximately.

PERIOD OF RECORD.--April 1926 to current year (fragmentary).

GAGE.--Nonrecording gage on concrete gate-control structure of dam. Datum of gage is at mean sea level (levels by Lake Irrigation District).

EXTREMES.--Current year: Maximum contents observed, 19,800 acre-ft July 1, 2; maximum elevation observed, 5,118.80 ft July 1; minimum observed, 134 acre-ft Nov. 15 (elevation, 5,101.28 ft).
Period of record: Maximum contents observed, 21,060 acre-ft June 21, 1961 (elevation, 5,119.56 ft); no storage above elevation 5,101.0 ft for long periods during fall and winter of most years. Minimum elevation observed below 5,101.0 ft, 5,099.04 ft Dec. 9, 1936.

REMARKS.--Reservoir is formed by earth- and rock-fill dam completed in 1926. Capacity, 16,940 acre-ft between elevations 5,101.0 ft (lower limit of capacity table, 4.0 ft above gate sill of outlet) and 5,117.0 ft (top of flashboards, 5.0 ft above spillway crest). Dead storage unknown. Water is used for irrigation of about 6,800 acres of land near McCall and Norwood. Figures given herein represent contents above 5,101.0 ft. There is some usable storage below elevation 5,101.0 ft, but natural flow passing through reservoir when outlet gates are open prevents withdrawal of storage to elevation of sill of gates. No observations were reported below 5,101.0 ft during current year.

COOPERATION.--Elevation record and capacity table furnished by Lake Irrigation District.

Capacity table (elevation, in feet, and contents, in acre-feet)

5,101.0	0	5,110.0	6,770
5,102.0	480	5,112.0	9,380
5,104.0	1,500	5,116.0	15,400
5,106.0	2,810	5,119.0	20,140
5,108.0	4,550		

CONTENTS, IN ACRE-FEET, FOR STATISTIC 00011, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							-	6,210	17,700	19,800	16,100	5,250
2							-	-	18,200	19,800	15,900	4,930
3							-	6,870	18,200	19,700	15,500	4,570
4							-	-	18,000	19,600	15,200	4,270
5							-	-	17,700	19,600	14,800	4,010
6							-	-	17,600	19,700	14,500	3,710
7							-	-	17,700	19,400	14,100	3,450
8							-	-	17,900	19,500	13,800	3,210
9							-	-	18,200	19,600	13,400	3,000
10							-	-	18,200	19,600	13,100	2,760
11							-	10,100	18,400	19,500	12,700	2,600
12							-	-	17,800	19,400	12,300	2,480
13							-	-	17,100	19,400	-	2,400
14							-	-	16,400	19,300	11,600	2,290
15		134					-	11,900	16,200	19,200	11,300	-
16							-	-	17,100	19,100	10,900	-
17							-	13,700	17,700	18,900	10,600	-
18							-	-	18,100	18,700	10,200	-
19							-	14,300	18,000	18,500	9,810	-
20							-	14,500	17,800	18,200	9,460	-
21							-	14,600	17,700	18,000	9,110	-
22	1,300						-	14,700	18,100	18,100	8,780	-
23							-	14,600	18,500	18,200	-	-
24							-	14,400	18,800	18,000	-	-
25							-	14,200	19,000	17,800	7,700	-
26							-	14,100	18,900	17,600	7,450	-
27							-	14,100	18,700	17,400	-	-
28							6,070	14,300	18,800	17,200	6,630	-
29							-	14,900	19,200	16,900	6,260	-
30					------		6,160	15,800	19,700	16,600	5,930	-
31		------			------		------	16,800	------	16,300	5,570	------
MAX	-	-	-	-	-	-	-	-	19,700	19,800	-	-
MIN	-	-	-	-	-	-	-	-	16,200	16,300	-	-
(†)	-	-	-	-	-	-	-	5,116.88	5,118.70	5,116.58	5,108.96	-
(‡)	-	-	-	-	-	-	-	+10,640	+2,900	-3,400	-10,730	-

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

13242000 Lake Irrigation District Canal near McCall, Idaho

LOCATION.--Lat 44°53'50", long 116°02'20", in SW¼ sec.13, T.18 N., R.3 E., Valley County, on right bank 600 ft downstream from head of canal, 0.5 mile south of Lake Fork Reservoir, and 3 miles southeast of McCall.

PERIOD OF RECORD.--May 1926 to current year (irrigation seasons only 1927-34, 1942-46).

GAGE.--Nonrecording gage. Altitude of gage is 5,090 ft (from topographic map). Prior to May 1947, at different datum.

EXTREMES.--Period of record: Maximum daily discharge, 213 cfs June 14, 1965; no flow or small amount of leakage through headgate during nonirrigation seasons.

REMARKS.--Records good except those for October, November, and September, which are poor. No diversions between headgate and station. Canal diverts from right bank of Lake Fork Payette River in SW¼ sec.13, T.18 N., R.3 E., for irrigation of 6,800 acres near McCall and Norwood, in the Lake Irrigation District Project.

COOPERATION.--Gage readings furnished by Lake Irrigation District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	3.5						0	184	209	145	115
2	20	0						0	191	208	152	103
3	20	0						0	185	208	156	98
4	20	0						0	182	201	157	98
5	12	0						0	185	199	157	97
6	8.7	0						0	189	199	153	96
7	8.7	0						0	199	198	151	92
8	8.7	0						0	205	199	151	86
9	8.7	0						0	208	202	154	74
10	8.7	0						0	205	202	155	68
11	8.7	0						0	204	196	149	67
12	8.7	0						0	195	184	147	61
13	8.7	0						0	188	172	147	48
14	8.7	0						0	182	167	141	41
15	8.7	0						4.0	179	163	136	27
16	8.7	0						11	184	157	135	18
17	8.7	0						12	196	156	135	18
18	8.7	0						15	200	154	130	17
19	8.7	0						21	200	153	123	17
20	8.7	0						29	204	158	121	17
21	8.7	0						33	209	160	121	17
22	8.7	0						38	210	160	121	16
23	8.7	0						46	210	154	121	15
24	8.1	0						55	210	150	121	15
25	7.5	0						62	210	143	121	15
26	7.5	0						72	210	139	121	15
27	7.5	0						86	208	139	121	15
28	7.5	0						94	206	139	120	15
29	7.5	0						103	206	140	121	15
30	7.5	0			------			128	208	141	121	15
31	7.5	------			------		------	164	------	141	121	------
TOTAL	309.2	3.5	0	0	0	0	0	973.0	5,952	5,291	4,225	1,411
MEAN	9.97	.12	0	0	0	0	0	31.4	198	171	136	47.0
MAX	20	3.5	0	0	0	0	0	164	210	209	157	115
MIN	7.5	0	0	0	0	0	0	0	179	139	120	15
AC-FT	613	6.9	0	0	0	0	0	1,930	11,810	10,490	8,380	2,800

CAL YR 1971 TOTAL 15,360.70 MEAN 42.1 MAX 171 MIN 0 AC-FT 30,470
WTR YR 1972 TOTAL 18,164.70 MEAN 49.6 MAX 210 MIN 0 AC-FT 36,030

13242500 Lake Fork Payette River below Lake Irrigation District Canal, near McCall, Idaho

LOCATION.--Lat 44°53'40", long 116°02'20", in SW¼ sec.13, T.18 N., R.3 E., Valley County, on right bank 300 ft downstream from diversion dam for Lake Irrigation District Canal, 0.5 mile downstream from Lake Fork Reservoir, 3 miles southeast of McCall, and at mile 17.5.

DRAINAGE AREA.--64 sq mi, approximately.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,080 ft (from topographic map).

AVERAGE DISCHARGE.--32 years, 127 cfs (92,010 acre-ft per year); 15-year base period (1952-67), 120 cfs.

EXTREMES.--Current year: Maximum recorded discharge, 1,230 cfs June 3 (gage height, 6.26 ft), but may have been more June 8; minimum daily, 0.29 cfs Dec. 15-19 (gage height, 1.70 ft).
Period of record: Maximum discharge, 2,120 cfs June 3, 1948 (gage height, 7.09 ft), from rating curve extended above 1,200 cfs; minimum daily, 0.29 cfs Dec. 15-19, 1971; minimum gage height, 1.70 ft Dec. 15-19, 1971.

REMARKS.--Records good. Flow regulated by McDowell Reservoir (capacity about 600 acre-ft) and by Lake Fork Reservoir (see sta 13241000). Lake Irrigation District Canal (see sta 13242000) diverts above station for irrigation of about 6,800 acres of land near McCall and Norwood.

REVISIONS (WATER YEARS).--WSP 963: 1941.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Jan. 3, 4, 26. 27, 30, 31, Feb. 1-4, 9-11)

1.7	0.29	2.6	27	5.0	641
1.8	0.47	3.0	70	6.0	1,090
2.0	2.2	3.5	157	6.5	1,330
2.2	7.0	4.0	282		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	67	.32	40	33	34	56	30	1,080	307	81	55
2	39	69	.31	40	33	36	56	3.0	1,200	303	82	62
3	39	67	.31	40	34	37	57	56	1,210	271	80	66
4	38	63	.31	40	34	37	57	151	1,160	212	79	67
5	31	57	.33	40	35	37	57	153	1,110	161	82	68
6	28	54	.35	39	33	38	59	155	1,040	111	83	68
7	24	49	.35	38	32	38	60	165	920	102	78	55
8	55	24	.37	38	32	38	60	170	1,220	107	73	52
9	55	.62	.33	37	32	39	60	170	1,100	94	71	52
10	55	.47	.31	37	32	39	60	170	1,140	78	72	48
11	28	.39	.31	36	31	40	62	176	1,030	79	73	47
12	7.6	.39	.30	36	31	41	62	185	960	85	72	46
13	36	.41	.30	36	31	42	62	199	890	83	68	45
14	38	.37	.30	35	31	43	62	234	760	74	73	46
15	38	.35	.29	35	31	44	62	294	543	83	74	43
16	37	.32	.29	35	31	47	62	404	464	83	71	40
17	37	.32	.29	34	30	48	62	518	596	83	69	39
18	20	.31	.29	35	30	50	62	593	624	84	69	36
19	31	.31	44	34	30	51	60	617	642	85	68	32
20	22	.31	183	35	30	53	60	625	516	83	66	31
21	7.9	.31	95	35	30	53	62	645	315	83	64	30
22	9.5	.32	44	35	31	54	62	641	277	88	65	27
23	23	.30	42	35	31	55	62	621	294	90	65	26
24	23	.31	41	35	31	55	62	585	311	91	66	26
25	23	.32	41	34	31	55	62	549	321	85	66	25
26	50	.33	41	34	31	55	62	514	316	84	65	25
27	87	.35	41	33	31	56	63	503	227	82	67	25
28	83	.35	42	33	32	56	63	542	164	83	68	25
29	77	.33	40	33	32	56	63	625	175	84	63	26
30	73	.33	40	33	------	56	62	729	255	83	60	27
31	67	------	40	33	------	56	------	858	------	80	62	------
TOTAL	1,221.0	457.82	739.66	1,113	916	1,439	1,821	11,880.0	20,860	3,501	2,195	1,260
MEAN	39.4	15.3	23.9	35.9	31.6	46.4	60.7	383	695	113	70.8	42.0
MAX	87	69	183	40	35	56	63	858	1,220	307	83	68
MIN	7.6	.30	.29	33	30	34	56	3.0	164	74	60	25
AC-FT	2,420	908	1,470	2,210	1,820	2,850	3,610	23,560	41,380	6,940	4,350	2,500

CAL YR 1971 TOTAL 59,818.48 MEAN 164 MAX 1,320 MIN .29 AC-FT 118,600
WTR YR 1972 TOTAL 47,403.48 MEAN 130 MAX 1,220 MIN .29 AC-FT 94,020

NOTE.--No gage-height record June 5-14.

13244500 Cascade Reservoir at Cascade, Idaho

LOCATION.--Lat 44°31'30", long 116°03'00", in NE¼NE¼ sec.26, T.14 N., R.3 E., Valley County, in gate-control structure at south end of Cascade Dam on North Fork Payette River, 0.5 mile downstream from Willow Creek, 0.8 mile northwest of Cascade, and at mile 39.9.

DRAINAGE AREA.--620 sq mi. Mean altitude, 5,960 ft.

PERIOD OF RECORD.--January to December 1948 (fragmentary), January 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Datum of gage is 0.66 ft below mean sea level, datum of 1929, supplementary adjustment of 1961. Prior to Nov. 7, 1958, nonrecording gage at north end of dam at same datum.

EXTREMES.--Current year: Maximum contents, 692,900 acre-ft July 11 (elevation, 4,827.61 ft); minimum, 265,300 acre-ft Apr. 5 (elevation, 4,807.08 ft).
Period of record: Maximum contents observed, 727,000 acre-ft June 10, 11, 1957 (elevation, 4,828.89 ft); no contents at times during March and September 1948; (prior to filling of reservoir); minimum after first filling of reservoir in June 1957, 193,000 acre-ft Feb. 8, 1962 (elevation, 4,802.15 ft).

REMARKS.--Reservoir is formed by earth-fill dam completed in May 1949. Partial storage began Nov. 7, 1947. Full storage first reached in June 1957. Capacity, 703,200 acre-ft between elevations 4,766 ft (4.0 ft above sill of outlet tunnel) and 4,828 ft (top of spillway gates). Figures given herein represent contents above elevation 4,766 ft. The Bureau of Reclamation attempts to limit withdrawal to elevation 4,787.5 ft, retaining 50,000 acre-ft capacity as dead storage. Contents table computed from tables furnished by Bureau of Reclamation (revised 1950). Water is used for irrigation of lands in the Payette Division of the Boise Project and for power at Black Canyon powerplant near Emmett.

COOPERATION.--Capacity table furnished by Bureau of Reclamation.

Capacity table (elevation, in feet, and contents, in acre-feet)

4,807.0	264,100	4,820.0	508,500
4,810.0	313,500	4,828.0	703,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	538,600	499,900	494,500	439,900	383,100	340,400	274,200	268,500	455,000	690,000	630,300	530,400
2	537,200	500,200	493,200	437,700	380,600	341,300	271,500	268,300	469,000	689,500	624,800	527,500
3	536,100	500,600	492,100	435,700	378,400	340,000	269,100	268,200	484,100	689,000	621,000	524,800
4	534,900	501,300	489,700	433,300	376,500	339,000	266,700	269,000	498,000	689,000	616,800	521,800
5	533,600	500,800	491,200	431,000	374,800	337,200	266,100	271,700	511,600	689,500	612,400	519,400
6	532,000	501,000	491,000	428,600	373,500	336,000	267,900	275,200	525,400	690,800	608,000	516,500
7	529,700	501,000	489,100	427,000	371,600	333,000	268,800	279,100	540,200	690,500	603,800	514,300
8	527,200	501,300	488,000	424,300	369,900	330,000	269,100	283,500	556,100	691,100	599,400	512,000
9	524,500	501,000	486,100	422,700	367,900	326,700	269,300	287,600	572,500	692,100	594,800	510,500
10	522,100	501,500	485,000	420,300	365,300	324,000	269,400	291,200	589,500	692,600	590,200	508,300
11	519,400	501,900	483,000	420,100	362,700	322,800	269,300	295,200	605,500	692,900	587,800	505,400
12	516,300	502,300	481,800	417,700	360,000	320,900	271,400	299,100	619,500	691,800	584,600	503,700
13	516,300	503,400	479,800	414,900	358,300	319,700	271,400	302,900	631,500	691,100	582,000	501,500
14	516,000	503,700	478,500	412,000	356,500	318,300	270,900	307,800	643,100	689,200	579,800	499,300
15	515,100	503,900	476,600	408,600	355,600	316,400	270,900	313,200	653,000	687,600	577,500	496,200
16	513,600	503,900	474,100	405,700	354,900	314,700	271,800	319,500	661,500	685,300	575,600	493,800
17	512,000	504,100	471,700	402,400	354,300	312,600	272,000	326,500	667,900	682,700	573,400	491,200
18	508,900	504,100	469,200	400,400	353,400	311,600	271,500	334,900	673,900	680,100	570,800	488,400
19	508,500	504,300	466,700	397,900	352,200	309,900	270,400	342,300	678,300	677,000	568,700	486,100
20	509,200	504,300	463,900	397,700	351,500	307,800	269,600	350,700	681,900	676,400	566,100	483,300
21	508,100	503,400	461,800	398,700	350,400	306,000	271,000	358,500	683,500	670,700	563,100	481,800
22	507,400	502,600	461,200	399,800	349,800	303,900	270,700	366,800	683,500	667,900	560,700	478,800
23	506,700	501,000	459,100	400,200	347,900	302,400	270,400	374,200	686,100	664,600	557,200	477,100
24	506,300	499,900	456,900	399,400	345,700	299,900	270,200	382,500	686,900	661,500	554,500	474,900
25	505,200	498,800	455,600	397,700	342,900	297,400	270,100	390,100	687,100	657,900	551,400	472,200
26	504,800	499,500	453,400	395,900	340,600	293,900	269,400	397,100	686,600	654,300	548,700	468,400
27	505,200	498,200	451,100	393,800	340,200	290,900	269,000	404,100	686,600	650,200	545,700	465,400
28	502,800	497,800	448,900	391,900	341,100	287,300	270,400	411,600	687,600	646,200	542,700	462,000
29	501,000	497,100	446,600	389,800	341,300	284,000	269,000	420,300	688,400	641,800	539,300	458,900
30	499,900	495,800	444,400	387,500	------	282,300	268,700	430,600	689,000	637,600	537,000	455,800
31	498,200	------	441,900	385,200	------	277,300	------	442,300	------	633,300	533,400	------
MAX	538,600	504,300	494,500	439,900	383,100	341,300	274,200	442,300	689,000	692,900	630,300	530,400
MIN	498,200	495,800	441,900	385,200	340,200	277,300	266,100	268,200	455,000	633,300	533,400	455,800
(†)	4,819.53	4,819.42	4,816.86	4,813.98	4,811.59	4,807.83	4,807.29	4,816.88	4,827.46	4,825.29	4,821.11	4,817.54
(‡)	-42,900	-2,400	-53,900	-56,700	-43,900	-64,000	-8,600	+173,600	+246,700	-55,700	-99,900	-77,600

CAL YR 1972..... ‡ -52,200
WTR YR 1972..... ‡ -85,300

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

13245000 North Fork Payette River at Cascade, Idaho

LOCATION.--Lat 44°30'44", long 116°01'52", in NE¼NE¼ sec.36, T.14 N., R.3 E., Valley County, 0.5 mile upstream from Beaver Creek, 1.6 miles downstream from Cascade Dam, and at mile 38.3.

DRAINAGE AREA.--626 sq mi. Mean altitude, 5,960 ft.

PERIOD OF RECORD.--May 1941 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,730 ft (from topographic map). Prior to Jan. 28, 1947, non-recording gages at present or nearby sites at present datum. Nov. 6, 1958, to Sept. 30, 1965, water-stage recorder at site 1.5 miles upstream at datum 4,734.59 ft above mean sea level (used as supplementary gage Oct. 1, 1965, to current year). Nov. 6, 1958, to Sept. 30, 1965, present gage used as supplementary gage.

AVERAGE DISCHARGE.--31 years, 1,040 cfs (753,500 acre-ft per year); 15-year base period (1952-67), 993 cfs.

EXTREMES.--Current year: Maximum discharge, 2,640 cfs Mar. 10, 11, 13, 27 (gage height, 3.12 ft); no flow for part of Oct. 14.
Period of record: Maximum discharge, 7,320 cfs May 10, 1947 (gage height, 6.29 ft); no flow for part of Oct. 14, 1971.

REMARKS.--Records good. Flow regulated by Payette Lake (see sta 13238500), Lake Fork Reservoir (see sta 13241000), and Cascade Reservoir 1.6 miles upstream beginning November 1947 (see sta 13244500). Diversions above station for irrigation of about 39,000 acres (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

0.8	126	2.0	988
1.0	228	3.0	2,420
1.5	525	4.0	4,220

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	848	161	911	1,500	1,530	1,860	2,570	1,200	150	937	2,360	1,680
2	858	156	911	1,500	1,570	1,860	2,570	1,200	152	937	2,350	1,670
3	848	156	911	1,480	1,480	1,860	2,570	1,200	156	937	2,360	1,670
4	848	146	911	1,480	1,330	1,860	2,570	911	157	933	2,410	1,670
5	977	141	911	1,480	1,270	1,840	2,180	161	156	518	2,480	1,670
6	1,180	146	911	1,480	1,090	2,170	1,230	136	156	375	2,510	1,630
7	1,430	141	955	1,480	1,100	2,600	1,220	131	158	375	2,520	1,450
8	1,550	141	1,110	1,470	1,200	2,580	1,220	136	154	373	2,510	1,320
9	1,600	141	1,330	1,470	1,440	2,580	1,220	89	155	373	2,460	1,320
10	1,670	146	1,330	1,470	1,610	2,600	1,230	27	155	420	2,300	1,330
11	1,670	146	1,340	1,540	1,600	2,620	1,230	24	155	846	2,090	1,540
12	1,660	146	1,340	1,580	1,600	2,600	1,230	23	155	1,150	1,850	1,670
13	622	146	1,330	1,750	1,580	2,600	1,230	23	155	1,300	1,690	1,600
14	177	146	1,330	1,890	1,370	2,600	1,220	24	154	1,300	1,610	1,600
15	659	141	1,390	1,900	944	2,580	1,220	23	158	1,300	1,610	1,600
16	878	146	1,550	1,890	769	2,580	1,220	23	400	1,350	1,610	1,610
17	977	146	1,550	1,860	769	2,570	1,220	56	1,160	1,530	1,560	1,610
18	1,030	146	1,550	1,840	848	2,580	1,210	151	1,660	1,620	1,460	1,610
19	955	146	1,540	1,840	1,030	2,570	1,210	131	1,950	1,650	1,460	1,600
20	759	233	1,540	1,840	1,030	2,570	1,210	131	2,240	1,710	1,490	1,580
21	712	491	1,540	1,040	1,030	2,570	1,220	136	2,440	1,740	1,570	1,500
22	650	818	1,540	555	1,270	2,580	1,220	136	2,440	1,790	1,570	1,430
23	650	922	1,540	555	1,580	2,600	1,210	141	2,430	1,820	1,570	1,420
24	650	922	1,530	900	1,750	2,600	1,210	141	2,430	1,920	1,570	1,430
25	650	922	1,530	1,440	1,860	2,600	1,210	146	2,420	2,010	1,570	1,530
26	650	922	1,530	1,540	1,840	2,600	1,210	145	2,410	2,110	1,570	1,810
27	650	922	1,530	1,540	1,840	2,600	1,210	147	2,270	2,130	1,570	1,900
28	740	922	1,510	1,540	1,860	2,600	1,210	150	930	2,230	1,600	1,870
29	848	922	1,510	1,530	1,860	2,600	1,200	151	937	2,290	1,660	1,760
30	966	911	1,510	1,530	------	2,580	1,200	149	937	2,330	1,670	1,760
31	788	------	1,500	1,530	------	2,570	------	145	------	2,370	1,670	------
TOTAL	29,150	11,691	41,421	46,440	40,050	76,180	42,880	7,387	29,380	42,674	58,280	47,840
MEAN	940	390	1,336	1,498	1,381	2,457	1,429	238	979	1,377	1,880	1,595
MAX	1,670	922	1,550	1,900	1,860	2,620	2,570	1,200	2,440	2,370	2,520	1,900
MIN	177	141	911	555	769	1,840	1,200	23	150	373	1,460	1,320
AC-FT	57,820	23,190	82,160	92,110	79,440	151,100	85,050	14,650	58,280	84,640	115,600	94,890

CAL YR 1971 TOTAL 558,945 MEAN 1,531 MAX 6,970 MIN 141 AC-FT 1,109,000
WTR YR 1972 TOTAL 473,373 MEAN 1,293 MAX 2,620 MIN 23 AC-FT 938,900

PAYETTE RIVER BASIN

13246000 North Fork Payette River near Banks, Idaho

LOCATION.--Lat 44°06'50", long 116°06'25", in NW¼SE¼ sec.16, T.9 N., R.3 E., Boise County, Boise National Forest, on right bank 40 ft downstream from highway bridge, 2.5 miles north of Banks, and at mile 2.8.

DRAINAGE AREA.--933 sq mi. Mean altitude, 5,800 ft.

PERIOD OF RECORD.--April 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,081.13 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--25 years, 1,372 cfs (994,000 acre-ft per year); 15-year base period (1952-67), 1,299 cfs.

EXTREMES.--Current year: Maximum discharge, 4,130 cfs Mar. 14 (gage height, 9.84 ft); minimum, 164 cfs Oct. 15 (gage height, 3.74 ft).
Period of record: Maximum discharge, 8,830 cfs May 11, 1947 (gage height, about 13.5 ft), estimated on basis of records for station near Smiths Ferry; minimum recorded, 36 cfs Dec. 21, 1947 (gage height, 3.01 ft).

REMARKS.--Records good. Flow regulated by Payette Lake (see sta 13238500), Lake Fork Reservoir (see sta 13241000), and Cascade Reservoir 37.1 miles upstream, beginning November 1947 (see sta 13244500). Diversions above station for irrigation of about 50,800 acres (1966 determination). Record of water temperatures for the water year 1972 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	983	626	988	1,620	1,740	2,530	3,190	2,030	1,710	1,450	2,460	1,740
2	939	285	988	1,620	1,770	2,460	3,260	2,050	1,720	1,410	2,450	1,740
3	934	261	1,010	1,580	1,770	2,560	3,270	2,110	1,700	1,370	2,440	1,740
4	934	254	1,010	1,600	1,590	2,520	3,300	2,220	1,680	1,330	2,460	1,740
5	934	241	1,020	1,610	1,530	2,430	3,430	1,590	1,560	1,300	2,520	1,740
6	1,110	221	1,070	1,610	1,360	2,490	2,820	1,360	1,500	804	2,550	1,790
7	1,310	229	983	1,600	1,280	3,270	2,380	1,390	1,670	746	2,570	1,650
8	1,570	239	1,060	1,590	1,270	3,300	2,200	1,450	1,910	716	2,560	1,460
9	1,590	236	1,360	1,590	1,480	3,260	2,120	1,370	1,960	699	2,550	1,390
10	1,680	236	1,440	1,590	1,710	3,420	2,070	1,200	2,240	691	2,460	1,390
11	1,700	241	1,430	1,610	1,740	3,760	2,060	1,110	1,980	795	2,290	1,440
12	1,700	264	1,430	1,700	1,740	3,850	2,180	1,110	1,630	1,210	2,020	1,800
13	1,620	282	1,440	1,690	1,770	3,910	2,060	1,150	1,410	1,460	1,860	1,760
14	379	270	1,430	1,950	1,740	3,980	1,990	1,240	1,300	1,510	1,740	1,740
15	354	260	1,430	1,960	1,320	3,810	2,020	1,370	1,270	1,490	1,740	1,730
16	800	240	1,550	1,950	1,020	3,730	2,020	1,480	1,270	1,470	1,720	1,720
17	988	230	1,670	1,950	963	3,710	1,990	1,540	1,590	1,610	1,710	1,710
18	1,040	240	1,660	1,980	958	3,860	1,890	1,610	2,330	1,770	1,600	1,710
19	1,070	240	1,640	1,970	1,120	3,910	1,860	1,510	2,740	1,800	1,560	1,720
20	944	260	1,650	2,050	1,210	3,700	1,890	1,460	2,780	1,880	1,540	1,700
21	840	500	1,650	2,050	1,230	3,650	1,980	1,410	3,160	1,900	1,610	1,680
22	751	820	1,670	968	1,270	3,650	2,020	1,400	3,170	1,950	1,640	1,550
23	725	910	1,680	859	1,690	3,850	1,970	1,320	3,140	1,960	1,650	1,530
24	720	1,000	1,650	818	1,800	3,590	2,000	1,250	3,070	2,020	1,650	1,520
25	716	1,000	1,650	1,440	2,010	3,500	1,980	1,200	3,070	2,090	1,650	1,530
26	720	1,000	1,650	1,780	2,010	3,330	1,940	1,180	3,020	2,190	1,650	1,760
27	729	1,000	1,630	1,740	2,070	3,240	1,970	1,180	2,910	2,220	1,650	1,980
28	716	1,000	1,620	1,740	2,220	3,210	2,070	1,250	1,740	2,280	1,650	2,000
29	836	1,000	1,630	1,740	2,530	3,170	2,160	1,350	1,520	2,350	1,710	1,890
30	949	1,000	1,620	1,720	------	3,130	2,080	1,460	1,500	2,410	1,730	1,860
31	1,010	------	1,630	1,740	------	3,140	------	1,580	------	2,460	1,740	------
TOTAL	31,291	14,585	44,339	51,415	45,911	103,920	68,170	44,930	62,250	49,341	61,130	50,710
MEAN	1,009	486	1,430	1,659	1,583	3,352	2,272	1,449	2,075	1,592	1,972	1,690
MAX	1,700	1,000	1,680	2,050	2,530	3,980	3,430	2,220	3,170	2,460	2,570	2,000
MIN	354	221	983	818	958	2,430	1,860	1,110	1,270	691	1,540	1,390
AC-FT	62,070	28,930	87,950	102,000	91,060	206,100	135,200	89,120	123,500	97,870	121,300	100,600

CAL YR 1971 TOTAL 744,741 MEAN 2,040 MAX 7,990 MIN 221 AC-FT 1,477,000
WTR YR 1972 TOTAL 627,992 MEAN 1,716 MAX 3,980 MIN 221 AC-FT 1,246,000

13247500 Payette River near Horseshoe Bend, Idaho

LOCATION.--Lat 43°56'33", long 116°11'45", in NE¼SE¼ sec.15, T.7 N., R.2 E., Boise County, 0.5 mile downstream from Porter Creek, 0.6 mile upstream from concrete highway bridge on State Highway 55, 2 miles north of Horseshoe Bend, and at mile 60.7.

DRAINAGE AREA.--2,230 sq mi, approximately. Mean altitude, 5,850 ft.

PERIOD OF RECORD.--February 1906 to September 1916, July 1919 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 2,625.61 ft above mean sea level, unadjusted. Prior to Nov. 23, 1912, nonrecording gage at site 1.8 miles upstream at different datum. Nov. 23, 1912, to Apr. 16, 1953, water-stage recorder at site 1,000 ft downstream at datum 2.1 ft lower.

AVERAGE DISCHARGE.--63 years, 3,255 cfs (2,358,000 acre-ft per year); 15-year base period (1952-67), 3,320 cfs.

EXTREMES.--Current year: Maximum discharge, 14,300 cfs June 10 (gage height, 12.11 ft); minimum, 790 cfs Nov. 7 (gage height, 2.62 ft).
Period of record: Maximum discharge, 27,000 cfs Dec. 23, 1964 (gage height, 16.35 ft); minimum, 350 cfs Dec. 17, 1935 (gage height, 0.26 ft, site and datum then in use), from rating curve extended below 600 cfs.

REMARKS.--Records excellent. Flow regulated by Deadwood Reservoir beginning November 1930 (see sta 13236000), Cascade Reservoir 51.9 miles upstream, beginning November 1947 (see sta 13244500), and other reservoirs upstream. Diversions above station for irrigation of about 55,100 acres (1966 determination). Records of water temperatures for the water year 1972 are published in Part 2 of this report.

REVISIONS.--WSP 533: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,540	1,510	1,630	2,240	2,430	4,720	5,110	6,010	12,900	5,950	3,820	3,600
2	2,470	1,050	1,470	2,250	2,390	4,430	5,290	6,090	13,300	5,700	3,760	3,600
3	2,460	991	1,630	2,120	2,360	5,030	5,610	6,490	12,800	5,430	3,720	3,650
4	2,450	998	1,690	1,990	2,260	4,590	5,710	7,380	11,900	4,950	3,700	3,650
5	2,430	969	1,680	2,150	2,300	4,210	5,980	7,740	11,200	4,790	3,720	3,650
6	2,390	854	1,930	2,320	2,140	4,100	6,190	7,940	11,000	4,240	3,710	3,800
7	2,340	829	1,610	2,270	1,980	4,890	6,050	8,430	11,400	4,100	3,700	3,650
8	2,380	989	1,500	2,210	1,930	4,890	5,500	8,490	12,700	3,950	3,850	3,400
9	2,290	982	1,900	2,180	2,060	4,900	5,190	7,830	13,100	3,740	3,800	3,300
10	2,350	978	2,210	2,180	2,240	5,460	5,000	7,210	13,800	3,570	3,900	3,300
11	2,370	990	2,160	2,200	2,270	6,580	4,840	6,920	12,700	3,460	3,950	3,400
12	2,370	1,030	2,130	2,360	2,310	6,900	5,080	7,120	10,600	3,570	3,850	3,400
13	2,340	1,110	2,130	2,310	2,360	7,110	4,770	7,430	9,080	3,730	3,900	3,350
14	1,250	1,080	2,140	2,560	2,340	7,560	4,450	8,280	8,430	3,790	3,900	3,250
15	1,030	1,010	2,110	2,610	2,000	7,120	4,370	9,410	8,390	3,730	3,950	3,200
16	1,460	969	2,160	2,630	1,700	7,090	4,420	10,100	8,800	3,610	3,950	3,200
17	1,660	923	2,300	2,610	1,630	7,330	4,360	10,700	9,320	3,630	3,850	3,200
18	1,720	938	2,300	2,780	1,650	8,190	4,200	10,600	9,760	3,710	3,780	3,200
19	1,760	921	2,260	2,860	1,800	8,260	4,280	9,650	9,340	3,700	3,600	3,200
20	1,730	948	2,270	3,210	1,980	7,380	4,510	9,290	8,710	3,750	3,600	3,200
21	1,600	968	2,270	4,330	2,110	7,020	4,980	9,020	8,790	3,710	3,700	3,180
22	1,500	1,220	2,340	3,060	2,200	6,970	5,220	8,530	8,660	3,740	3,700	3,050
23	1,440	1,510	2,510	2,600	2,590	7,830	5,200	8,020	8,630	3,670	3,700	3,020
24	1,440	1,610	2,360	2,130	2,680	7,210	5,530	7,670	8,400	3,640	3,650	3,000
25	1,420	1,680	2,350	2,430	2,820	6,700	5,560	7,680	8,030	3,670	3,650	3,020
26	1,420	1,670	2,340	2,750	2,810	6,090	5,350	7,690	7,690	3,730	3,650	3,010
27	1,460	1,720	2,280	2,600	2,960	5,710	5,430	7,980	7,260	3,750	3,600	3,050
28	1,420	1,730	2,130	2,560	3,930	5,470	6,010	8,690	6,070	3,750	3,600	2,980
29	1,400	1,740	2,120	2,510	5,350	5,230	6,970	9,890	5,830	3,790	3,700	2,820
30	1,540	1,720	2,280	2,410	------	5,040	6,450	11,300	5,990	3,820	3,700	2,720
31	1,750	------	2,290	2,310	------	5,000	------	12,300	------	3,860	3,600	------
TOTAL	58,180	35,637	64,480	77,730	69,580	189,010	157,610	261,880	294,580	124,230	116,230	98,050
MEAN	1,877	1,188	2,080	2,507	2,399	6,097	5,254	8,448	9,819	4,007	3,749	3,268
MAX	2,540	1,740	2,510	4,330	5,350	8,260	6,970	12,300	13,800	5,950	3,950	3,800
MIN	1,030	829	1,470	1,990	1,630	4,100	4,200	6,010	5,830	3,460	3,600	2,720
AC-FT	115,400	70,690	127,900	154,200	138,000	374,900	312,600	519,400	584,300	246,400	230,500	194,500

CAL YR 1971 TOTAL 1,830,467 MEAN 5,015 MAX 19,500 MIN 829 AC-FT 3,631,000
WTR YR 1972 TOTAL 1,547,197 MEAN 4,227 MAX 13,800 MIN 829 AC-FT 3,069,000

13249500 Payette River near Emmett, Idaho

LOCATION.--Lat 43°55'50", long 116°26'30", in SW¼NE¼ sec.22, T.7 N., R.1 W., Gem County, on right bank 0.3 mile downstream from Black Canyon Dam, 5 miles northeast of Emmett, and at mile 38.4.

DRAINAGE AREA.--2,680 sq mi, approximately.

PERIOD OF RECORD.--June 1925 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,400 ft (from topographic map).

AVERAGE DISCHARGE.--47 years, 3,015 cfs (2,184,000 acre-ft per year); 15-year base period (1952-67), 2,916 cfs.

EXTREMES.--Current year: Maximum discharge, 15,100 cfs June 2 (gage height, 10.37 ft); minimum, 422 cfs Oct. 15 (gage height, 1.75 ft); minimum daily, 699 cfs Oct. 15.
Period of record: Maximum discharge, 32,700 cfs Dec. 23, 1964 (gage height, 15.88 ft); minimum daily discharge, 0.7 cfs Jan. 7, 1957 (gage height, -1.49 ft), when gates in dam were closed.

REMARKS.--Records excellent. Flow regulated by Deadwood Reservoir beginning November 1930 (see sta 13236000), Cascade Reservoir beginning November 1947 (see sta 13244500), other smaller reservoirs, and to some extent by Black Canyon Dam 0.3 mile upstream where flow is regulated by diversion and gate operation at dam. Diversions above station for irrigation of about 160,000 acres, of which about 43,700 acres are below station and about 53,000 acres are in adjacent basins (1966 determination).

REVISIONS (WATER YEARS).--WSP 1153: 1946(m), 1948 (m).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 16 to June 11)

2.00	647	6.00	6,030
2.50	1,110	7.00	7,830
3.00	1,660	8.00	9,790
4.00	2,920	10.00	14,360
5.00	4,380		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,970	1,100	1,850	2,610	2,860	6,410	5,670	5,120	12,100	4,720	2,310	2,080
2	1,900	924	1,780	2,600	2,620	6,080	5,830	5,150	12,700	4,480	2,230	2,100
3	1,910	1,020	1,680	2,260	2,490	7,490	6,170	5,490	12,200	4,180	2,170	2,090
4	1,920	1,040	1,800	1,760	2,730	6,600	6,300	6,440	11,400	3,670	2,140	2,090
5	1,950	1,040	1,860	2,130	2,710	5,690	6,690	7,040	10,600	3,440	2,170	2,140
6	1,900	1,000	2,790	2,580	2,880	5,000	7,020	7,230	10,300	2,930	2,150	2,450
7	1,830	924	2,100	2,650	2,750	6,480	6,750	7,810	10,900	2,670	2,150	2,400
8	1,840	924	1,610	2,570	2,740	6,170	6,180	7,930	12,100	2,540	2,180	2,180
9	1,740	991	1,940	2,650	2,820	6,120	5,760	7,320	12,500	2,280	2,130	2,040
10	1,740	1,010	2,620	2,610	2,920	6,640	5,470	6,510	13,700	2,120	2,280	2,060
11	1,770	1,040	2,480	2,520	2,890	8,000	5,100	6,120	12,600	1,950	2,300	2,140
12	1,780	1,060	2,540	2,800	2,950	8,550	5,120	6,230	10,500	2,040	2,240	2,350
13	1,820	1,130	2,500	2,650	3,000	8,610	4,940	6,600	8,870	2,170	2,240	2,370
14	1,130	1,190	2,450	2,560	3,000	9,310	4,490	7,450	8,060	2,310	2,320	2,320
15	699	1,150	2,450	2,740	2,520	8,730	4,240	8,650	7,960	2,220	2,390	2,390
16	1,580	1,090	2,500	2,750	2,260	8,550	4,520	9,410	8,320	2,100	2,410	2,400
17	1,620	1,040	2,800	2,910	2,170	8,770	4,560	9,900	8,710	2,060	2,310	2,320
18	1,700	1,010	2,740	3,640	1,900	10,100	4,270	10,000	9,050	2,170	2,190	2,310
19	1,770	1,000	2,610	4,130	1,520	10,900	4,210	9,090	8,670	2,170	2,090	2,340
20	1,850	991	2,630	5,620	1,620	9,330	4,360	8,710	7,910	2,190	2,070	2,400
21	1,890	1,000	2,620	8,730	2,760	8,710	4,750	8,420	7,830	2,150	2,090	2,360
22	1,820	1,100	2,800	6,080	3,090	8,420	4,970	8,000	7,720	2,220	2,150	2,210
23	1,700	1,760	3,760	4,250	3,370	9,330	4,830	7,380	7,600	2,150	2,120	2,150
24	1,700	1,740	2,980	3,620	3,560	8,730	5,080	6,890	7,470	2,090	2,120	2,120
25	1,680	1,790	2,960	3,420	3,480	8,020	5,080	6,820	7,040	2,100	2,120	2,220
26	1,660	1,830	2,820	3,760	3,490	7,270	4,720	6,820	6,770	2,170	2,090	2,190
27	1,650	2,080	2,660	3,480	3,950	6,640	4,680	7,090	6,230	2,210	2,060	2,280
28	1,620	1,970	2,390	3,370	5,450	6,440	4,990	7,790	5,120	2,190	2,040	2,280
29	1,510	2,130	2,310	3,170	7,620	6,080	6,230	8,910	4,600	2,240	2,090	2,090
30	1,510	1,960	2,490	2,880	------	5,810	5,810	10,400	4,750	2,270	2,140	2,020
31	1,610	------	2,580	2,480	------	5,710	------	11,500	------	2,320	2,100	------
TOTAL	52,769	38,034	76,100	101,980	88,120	234,690	158,790	238,220	274,280	78,520	67,590	66,890
MEAN	1,702	1,268	2,455	3,290	3,039	7,571	5,293	7,685	9,143	2,533	2,180	2,230
MAX	1,970	2,130	3,760	8,730	7,620	10,900	7,020	11,500	13,700	4,720	2,410	2,450
MIN	699	924	1,610	1,760	1,520	5,000	4,210	5,120	4,600	1,950	2,040	2,020
AC-FT	104,700	75,440	150,900	202,300	174,800	465,500	315,000	472,500	544,000	155,700	134,100	132,700

CAL YR 1971 TOTAL 1,833,293 MEAN 5,023 MAX 20,000 MIN 699 AC-FT 3,636,000
WTR YR 1972 TOTAL 1,475,983 MEAN 4,033 MAX 13,700 MIN 699 AC-FT 2,928,000

13250600 Big Willow Creek near Emmett, Idaho

LOCATION.--Lat 44°04'25", long 116°29'10", in SE¼NW¼ sec.32, T.9 N., R.1 W., Payette County, Bureau of Land Management lands, 62 ft downstream from bridge on Emmett-Council road, 500 ft upstream from mouth of Four-Mile Creek, 13.5 miles north of Emmett, and at mile 19.0.

DRAINAGE AREA.--47.4 sq mi.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,810 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 23.8 cfs (17,240 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,360 cfs Jan. 20 (gage height, 6.55 ft); minimum, 2.3 cfs July 27, 28 (gage height, 2.08 ft).
Period of record: Maximum discharge, 1,860 cfs Dec. 22, 1964 (gage height, 7.61 ft); minimum, 1.2 cfs July 16, 1968 (gage height, 2.13 ft).
Flood of Feb. 24 or 25, 1957, reached a peak of 2,100 cfs (gage height not determined).

REMARKS.--Records good.

Rating tables (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1-29; stage-discharge relation affected by ice Dec. 19, Jan. 3, 4, 14, Jan. 31 to Feb. 3)

Oct. 1 to Jan. 23				Jan. 24 to Sept. 30			
2.2	3.6	3.5	127	2.1	2.7	3.5	145
2.4	8.0	4.0	231	2.3	9.9	4.0	250
2.6	17	4.5	374	2.5	21	4.5	380
2.8	32	5.0	559	3.0	68		
3.0	54	5.8	926				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	6.7	11	19	34	164	21	9.9	5.5	3.3	3.6	3.9
2	5.7	6.4	9.4	19	30	374	20	9.9	5.5	3.9	3.9	4.3
3	5.6	6.2	9.1	18	27	241	18	9.5	5.5	4.3	4.6	3.9
4	5.7	6.3	8.7	17	25	155	17	9.1	5.2	3.9	4.6	4.3
5	5.1	6.2	26	17	25	125	17	8.7	5.2	4.3	3.9	4.3
6	5.3	6.1	281	14	20	104	18	8.7	5.2	3.9	3.6	4.6
7	5.4	6.2	34	14	19	92	16	8.7	5.8	3.9	3.3	4.3
8	5.4	6.2	31	14	19	81	15	9.5	7.4	4.3	3.0	4.6
9	5.4	6.3	21	13	19	71	14	8.7	6.6	4.3	3.5	4.9
10	5.0	6.4	19	13	17	67	13	8.7	8.3	3.9	3.9	4.3
11	5.1	6.4	16	14	16	69	13	8.7	6.6	3.6	4.3	4.9
12	5.5	6.9	16	21	16	68	22	7.0	5.5	3.9	4.6	5.8
13	5.6	7.5	15	16	31	76	23	7.4	5.5	3.6	4.6	5.2
14	5.9	7.7	15	15	25	68	19	7.4	5.2	3.0	4.9	5.2
15	5.9	6.7	14	16	34	57	16	7.0	4.3	3.0	4.9	4.9
16	5.9	6.4	13	15	80	51	17	5.5	3.9	3.3	3.9	3.9
17	6.0	6.4	13	13	84	47	16	6.2	4.3	3.3	4.3	4.3
18	5.9	6.4	13	177	92	164	14	6.6	4.3	3.3	4.9	4.6
19	6.1	6.4	12	273	85	104	14	6.2	4.3	3.3	4.9	4.9
20	6.0	6.4	12	897	106	80	14	6.6	4.3	3.9	4.3	5.2
21	5.7	6.4	12	662	103	68	16	7.9	4.6	4.3	3.9	4.9
22	5.7	6.4	87	410	160	60	14	9.5	4.9	3.9	4.3	5.5
23	5.7	6.4	172	236	113	53	13	7.9	4.6	3.3	4.6	5.5
24	5.8	6.7	67	122	100	47	12	6.6	4.3	3.3	4.3	5.2
25	5.7	6.7	102	94	78	48	13	6.6	5.2	3.6	4.3	5.8
26	5.3	9.4	61	77	80	40	12	6.2	4.9	3.6	3.6	5.5
27	5.7	35	42	59	141	35	11	5.8	4.9	2.7	3.3	5.2
28	5.6	15	31	51	269	31	11	5.8	4.6	2.7	3.3	4.9
29	5.7	30	25	46	363	28	11	5.5	4.3	3.3	3.6	5.2
30	6.1	17	23	43	------	25	10	5.2	3.9	3.6	3.9	4.3
31	6.4	------	20	40	------	23	------	5.5	------	3.9	4.3	------
TOTAL	175.7	269.2	1,231.2	3,455	2,211	2,716	460	232.5	154.6	112.4	126.9	144.3
MEAN	5.67	8.97	39.7	111	76.2	87.6	15.3	7.50	5.15	3.63	4.09	4.81
MAX	6.4	35	281	897	363	374	23	9.9	8.3	4.3	4.9	5.8
MIN	5.0	6.1	8.7	13	16	23	10	5.2	3.9	2.7	3.0	3.9
AC-FT	349	534	2,440	6,850	4,390	5,390	912	461	307	223	252	286

CAL YR 1971 TOTAL 11,173.7 MEAN 30.6 MAX 666 MIN 3.7 AC-FT 22,160
WTR YR 1972 TOTAL 11,288.8 MEAN 30.8 MAX 897 MIN 2.7 AC-FT 22,390

PEAK DISCHARGE (BASE, 170 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12- 6	0345	5.66	858	2-22	0445	3.78	207
12-22	2330	4.70	464	2-29	0100	6.20	1,060
1-20	1200	6.55	1,360	3-18	1645	4.91	521

13251000 Payette River near Payette, Idaho

LOCATION.--Lat 44°02'33", long 116°55'27", in NE¼SE¼SW¼ sec.10, T.8 N., R.5 W., Payette County, Bureau of Reclamation lands, on right bank just upstream from bridge on U.S. Highway 95, 1.8 miles south of Payette, and at mile 4.1.

DRAINAGE AREA.--3,240 sq mi, approximately.

PERIOD OF RECORD.--August 1935 to current year. Records for January 1895 to July 1897 (published as "at Payette" in 18th and 19th Annual Reports) have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 2,138.44 ft above mean sea level, unadjusted. Aug. 1, 1935, to Aug. 7, 1939, nonrecording gage at site 50 ft downstream at present datum.

AVERAGE DISCHARGE.--37 years, 3,115 cfs (2,257,000 acre-ft per year); 15-year base period (1952-67), 2,934 cfs.

EXTREMES.--Current year: Maximum discharge, 14,900 cfs June 11 (gage height, 10.51 ft); minimum, 857 cfs Oct. 16 (gage height, 4.50 ft).
Period of record: Maximum discharge, 30,900 cfs Dec. 24, 1964 (gage height, 13.80 ft); minimum, 180 cfs Oct. 13, 20, 1935 (gage height, 2.04 ft); minimum daily, 220 cfs Oct. 5, 1935.

REMARKS.--Records excellent. Flow regulated by Deadwood Reservoir (see sta 13236000), Cascade Reservoir beginning November 1947 (see sta 13244500), other smaller reservoirs, and to some extent by Black Canyon Dam 34.6 miles upstream where flow is regulated by diversion and gate operation at dam. Diversions above station for irrigation of about 196,000 acres of which about 100 acres are by withdrawals from ground water, about 5,100 acres are located below station, and about 53,000 acres are in adjacent basins (1966 determination). Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1397: 1949(m), 1952, 1953-54(m). See also PERIOD OF RECORD.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

4.6	1,100	8.0	7,410
5.0	1,670	9.0	10,000
6.0	3,260	10.0	13,100
7.0	5,130	11.0	16,700

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,240	1,850	2,180	2,850	2,990	7,410	5,740	4,740	11,300	3,950	1,820	1,780
2	2,170	1,300	2,120	2,820	2,970	6,140	5,850	4,510	12,100	3,770	1,750	1,790
3	2,140	1,320	2,110	2,650	2,750	8,300	6,070	4,640	12,000	3,560	1,690	1,840
4	2,110	1,390	2,060	2,220	2,950	7,430	6,300	5,260	11,400	3,230	1,670	1,880
5	2,120	1,380	2,040	2,180	2,970	6,440	6,600	6,250	10,400	2,900	1,670	1,930
6	2,080	1,350	2,410	2,560	3,180	5,780	7,070	6,210	9,940	2,650	1,700	2,150
7	2,050	1,300	3,400	2,780	3,070	6,210	6,830	6,830	10,100	2,200	1,690	2,320
8	1,990	1,240	2,330	2,780	3,040	6,600	6,600	7,120	11,200	2,080	1,640	2,230
9	1,930	1,280	2,000	2,770	3,040	6,410	5,980	7,070	12,500	1,900	1,630	2,030
10	1,900	1,310	2,450	2,820	3,190	6,600	5,560	6,160	13,900	1,780	1,660	1,990
11	1,880	1,350	2,870	2,750	3,230	7,780	5,280	5,540	14,000	1,570	1,750	2,060
12	1,880	1,380	2,720	2,780	3,160	8,660	4,960	5,450	11,800	1,510	1,810	2,270
13	1,940	1,450	2,750	2,950	3,260	8,690	5,210	5,740	9,520	1,520	1,760	2,380
14	1,910	1,540	2,720	2,670	3,310	9,350	4,640	6,390	8,300	1,660	1,840	2,330
15	1,100	1,520	2,700	2,750	3,120	9,140	4,320	7,510	7,900	1,670	1,910	2,350
16	1,170	1,450	2,650	2,870	2,750	8,740	4,470	8,500	8,000	1,580	1,990	2,330
17	1,630	1,390	2,780	2,970	2,730	8,820	4,570	9,030	8,280	1,460	1,940	2,300
18	1,720	1,350	2,970	3,140	2,750	9,430	4,260	9,490	8,580	1,480	1,900	2,240
19	1,820	1,320	2,850	4,280	2,140	11,700	4,150	8,950	8,560	1,510	1,760	2,210
20	2,030	1,310	2,820	6,830	2,180	10,100	4,190	8,280	7,750	1,520	1,750	2,270
21	2,090	1,310	2,820	9,770	2,780	9,080	4,300	8,100	7,240	1,610	1,720	2,320
22	2,140	1,320	2,820	7,170	3,360	8,690	4,630	7,930	7,170	1,660	1,750	2,270
23	1,910	1,760	3,740	4,900	3,680	9,030	4,610	7,290	6,950	1,700	1,730	2,180
24	1,910	2,030	3,790	4,170	3,920	9,350	4,510	6,620	6,860	1,610	1,780	2,180
25	1,880	2,050	3,240	3,830	3,840	8,430	4,640	6,410	6,410	1,580	1,760	2,150
26	1,930	2,150	3,260	4,060	3,830	7,680	4,420	6,370	6,280	1,580	1,750	2,240
27	1,940	2,450	3,090	3,900	4,020	7,030	4,130	6,460	5,670	1,670	1,750	2,330
28	2,020	2,460	2,900	3,700	5,190	6,530	4,300	6,980	4,940	1,690	1,720	2,410
29	1,940	2,330	2,610	3,470	7,800	6,300	4,880	7,980	3,970	1,730	1,660	2,330
30	1,840	2,510	2,640	3,190	------	6,000	5,430	9,220	3,920	1,790	1,790	2,240
31	1,960	------	2,770	2,950	------	5,820	------	10,400	------	1,820	1,780	------
TOTAL	59,370	48,150	84,610	111,530	97,200	243,670	154,500	217,430	266,940	61,940	54,520	65,330
MEAN	1,915	1,605	2,729	3,598	3,352	7,860	5,150	7,014	8,898	1,998	1,759	2,178
MAX	2,240	2,510	3,790	9,770	7,800	11,700	7,070	10,400	14,000	3,950	1,990	2,410
MIN	1,100	1,240	2,000	2,180	2,140	5,780	4,130	4,510	3,920	1,460	1,630	1,780
AC-FT	117,800	95,510	167,800	221,200	192,800	483,300	306,500	431,300	529,500	122,900	108,100	129,600

CAL YR 1971 TOTAL 1,816,900 MEAN 4,978 MAX 19,700 MIN 1,100 AC-FT 3,604,000
WTR YR 1972 TOTAL 1,465,190 MEAN 4,003 MAX 14,000 MIN 1,100 AC-FT 2,906,000

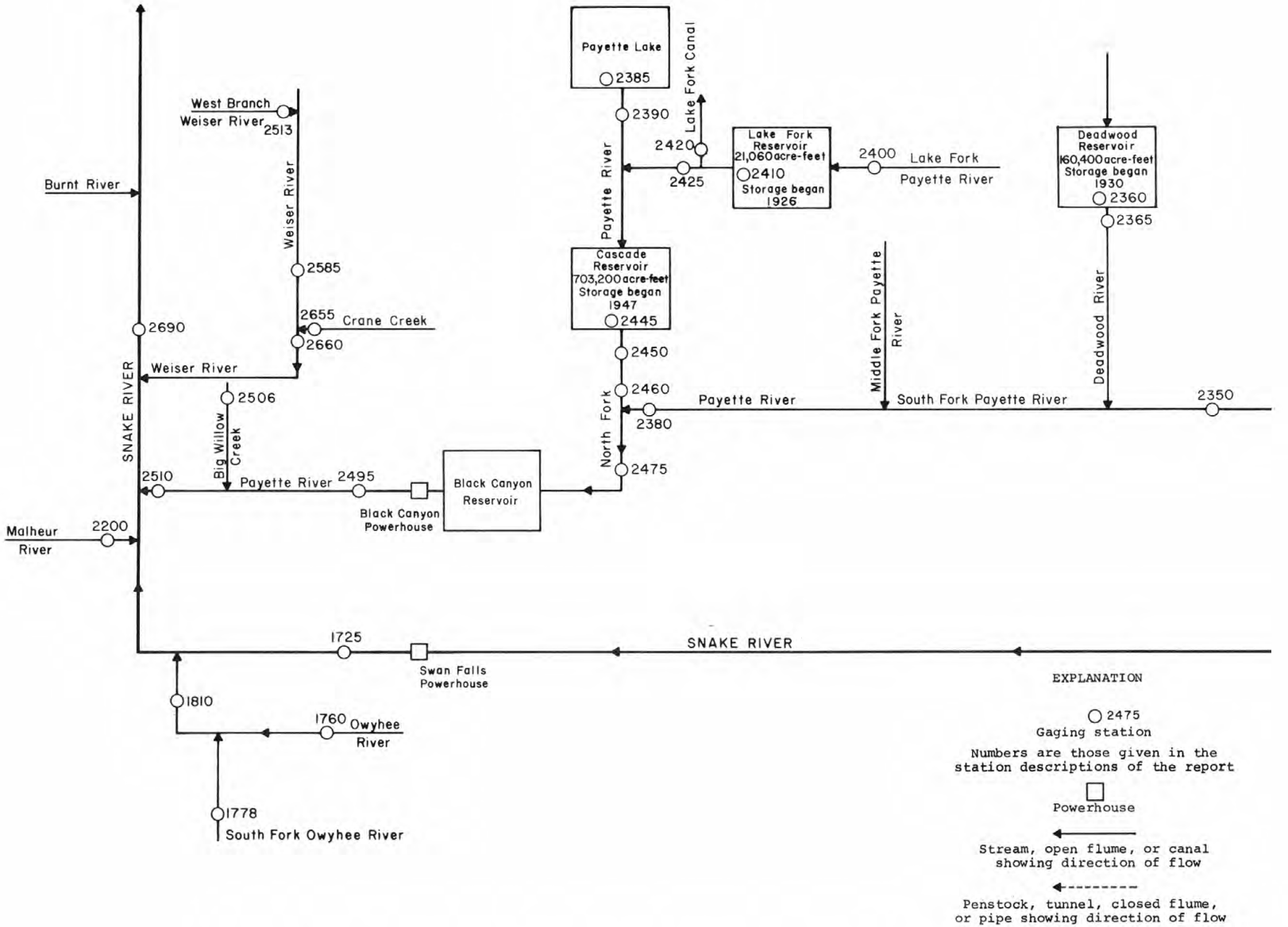


FIGURE 10. Schematic diagram showing gaging stations, diversions, and storage in Payette and Weiser River basins.

13251300 West Branch Weiser River near Tamarack, Idaho

LOCATION.--Lat 45°01'14", long 116°26'06", in SE¼SE¼ sec.34, T.20 N., R.1 W., Adams County, Payette National Forest, on left bank at Price Valley guard station, 0.1 mile upstream from East Branch Weiser River, and 5.2 miles northwest of Tamarack.

DRAINAGE AREA.--3.96 sq mi. Mean altitude, 4,900 ft.

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,200 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 5.27 cfs (18.07 inches per year, 3,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 44 cfs May 8 (gage height, 3.95 ft); minimum, 0.70 cfs Dec. 1 (gage height, 2.10 ft).
Period of record: Maximum discharge, 87 cfs May 4, 1971 (gage height, 4.56 ft); maximum gage height, 4.59 ft Apr. 21, 1965; minimum daily discharge, 0.4 cfs Nov. 22, 1964.

REMARKS.--Records good except those for winter period, which are poor. No regulation or diversion above station. Records of water temperatures for the water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 4-22; stage-discharge relation affected by ice Dec. 8, 9, 28, 29, Jan. 3-5, 14-17, Jan. 27 to Feb. 13)

2.1	0.7	2.6	9.7
2.2	1.3	3.0	22
2.3	2.3	3.5	30
2.4	4.0	4.0	47

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.5	1.2	1.2	1.3	7.3	7.9	19	15	2.7	1.6	1.0
2	1.5	1.5	1.3	1.2	1.2	6.1	9.1	19	13	2.6	1.5	1.2
3	1.4	1.4	1.3	1.2	1.2	5.8	10	22	12	2.8	1.4	1.3
4	1.4	1.4	1.3	1.2	1.2	4.7	11	25	11	2.7	1.4	1.3
5	1.4	1.3	1.3	1.2	1.3	4.2	13	29	9.4	2.7	1.4	1.3
6	1.4	1.4	1.3	1.2	1.3	4.0	16	31	9.1	2.6	1.3	1.5
7	1.5	1.4	1.3	1.2	1.3	3.6	19	33	8.8	2.6	1.3	1.4
8	1.5	1.4	1.3	1.2	1.3	3.4	19	36	9.4	2.6	1.3	1.4
9	1.4	1.3	1.3	1.1	1.4	3.4	18	33	9.1	2.7	1.3	1.6
10	1.4	1.4	1.3	1.2	1.4	4.2	16	29	10	2.6	1.3	1.6
11	1.4	1.3	1.3	1.2	1.4	7.6	15	26	9.7	2.4	1.1	1.8
12	1.4	1.5	1.3	1.2	1.5	10	15	26	8.8	2.3	1.1	2.4
13	1.4	1.6	1.3	1.1	1.5	14	13	27	8.2	2.3	1.0	2.0
14	1.4	1.5	1.3	1.1	1.5	17	12	30	7.3	2.2	1.0	1.8
15	1.4	1.5	1.3	1.1	1.5	15	12	33	6.7	2.2	1.5	1.7
16	1.4	1.4	1.3	1.1	1.6	16	12	34	6.7	2.2	1.1	1.8
17	1.4	1.3	1.3	1.2	1.6	19	11	34	6.1	2.1	1.0	1.8
18	1.4	1.4	1.3	1.2	1.6	24	10	30	5.2	2.1	1.0	1.7
19	1.6	1.4	1.3	1.3	1.6	24	10	27	5.0	2.2	1.0	1.8
20	1.8	1.4	1.2	2.1	1.7	21	11	26	4.4	2.2	1.0	1.8
21	1.7	1.4	1.3	6.4	1.8	18	11	25	4.0	2.2	1.0	1.8
22	1.7	1.4	1.4	3.6	2.0	19	13	24	3.8	2.0	.93	1.8
23	1.8	1.3	1.6	2.6	2.0	21	14	24	3.8	1.9	.93	1.8
24	1.8	1.4	1.3	2.2	2.0	19	17	22	3.6	1.9	.93	1.9
25	1.6	1.4	1.3	2.1	2.0	16	17	20	3.8	1.9	.93	1.9
26	1.6	1.5	1.3	1.9	2.0	13	17	19	3.6	1.8	1.0	1.9
27	1.6	1.4	1.3	1.8	3.0	12	19	18	3.2	1.7	1.0	1.8
28	1.3	1.4	1.3	1.7	4.7	10	22	17	3.0	1.7	1.0	1.8
29	1.6	1.5	1.3	1.5	8.8	9.1	23	17	2.8	1.6	1.0	1.7
30	1.5	1.3	1.3	1.4	------	8.2	21	17	2.7	1.6	1.0	1.7
31	1.5	------	1.2	1.3	------	7.6	------	16	------	1.6	1.0	------
TOTAL	46.8	42.3	40.4	51.0	56.7	367.2	434.0	788	209.2	68.7	35.32	50.3
MEAN	1.51	1.41	1.30	1.65	1.96	11.8	14.5	25.4	6.97	2.22	1.14	1.68
MAX	1.8	1.6	1.6	6.4	8.8	24	23	36	15	2.8	1.6	2.4
MIN	1.3	1.3	1.2	1.1	1.2	3.4	7.9	16	2.7	1.6	.93	1.0
CFSM	.38	.36	.33	.42	.49	2.98	3.66	6.41	1.76	.56	.29	.42
IN.	.44	.40	.38	.48	.53	3.45	4.08	7.40	1.97	.65	.33	.47
AC-FT	93	84	80	101	112	728	861	1,560	415	136	70	100

CAL YR 1971 TOTAL 2,863.20 MEAN 7.84 MAX 81 MIN 1.2 CFSM 1.98 IN 26.90 AC-FT 5,680
WTR YR 1972 TOTAL 2,189.92 MEAN 5.98 MAX 36 MIN .93 CFSM 1.51 IN 20.57 AC-FT 4,340

13258500 Weiser River near Cambridge, Idaho

LOCATION.--Lat 44°34'47", long 116°38'20", in SE¼NE¼ sec.1, T.14 N., R.3 W., Washington County, on left bank 100 ft upstream from road bridge, 2.2 miles northeast of Cambridge, 2.5 miles upstream from Rush Creek, and at mile 50.31.

DRAINAGE AREA.--605 sq mi. Mean altitude, 4,650 ft.

PERIOD OF RECORD.--March 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,650.00 ft above mean sea level (levels by Bureau of Reclamation). Aug. 29, 1956, to Aug. 19, 1966, at datum 2.0 ft higher. Apr. 23, 1939, to Dec. 21, 1955, at site 135 ft downstream at different datum. Nonrecording gage at different datum, prior to Apr. 23, 1939, at site 135 ft downstream and Dec. 22, 1955, to Aug. 28, 1956, at bridge 2.5 miles downstream.

AVERAGE DISCHARGE.--33 years, 664 cfs (481,100 acre-ft per year); 15-year base period (1952-67), 623 cfs.

EXTREMES.--Current year: Maximum discharge, 8,340 cfs Feb. 29 (gage height, 9.84 ft); minimum, 49 cfs Oct. 29 (gage height, 0.45 ft).
Period of record: Maximum discharge, 10,100 cfs Dec. 22, 1955 (gage height, 13.9 ft, from floodmark, site and datum then in use); minimum, 8.0 cfs Nov. 16, 1958 (gage height, 1.12 ft, ice jam upstream).

REMARKS.--Records good except those for December and January, which are fair. Flow regulated to some extent by Lost Valley Reservoir about 57 miles upstream (capacity reported to be 11,000 acre-ft) and other smaller reservoirs. Diversions above station for irrigation of about 12,200 acres (1966 determination).

Rating tables (gage height, in feet, and discharge, in cubic feet per second),
(Stage-discharge relation affected by ice Dec. 3, 5, 9-11, 14-22, Dec. 29 to Jan. 9)

Oct. 1 to Jan. 20				Jan. 21 to Sept. 30			
0.4	45	2.5	518	0.6	89	4.0	1,390
.7	72	3.0	748	1.0	139	5.0	2,150
1.0	114	4.0	1,320	1.5	227	7.0	4,220
1.5	207	5.0	2,040	2.0	362	9.0	7,000
2.0	338	6.0	2,950	3.0	785		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	150	182	260	385	2,920	868	1,430	2,410	513	138	106
2	166	136	146	250	325	2,210	901	1,430	2,350	465	129	105
3	166	134	170	180	299	2,610	973	1,550	2,270	430	124	104
4	163	136	175	155	317	1,790	1,040	1,840	2,150	395	105	105
5	160	123	175	235	372	1,630	1,190	2,120	1,980	372	120	106
6	157	94	326	250	350	1,900	1,740	2,280	1,950	350	117	117
7	155	89	230	250	328	1,850	1,770	2,430	1,930	317	120	113
8	151	127	165	225	311	1,590	1,590	2,610	2,090	286	117	112
9	147	136	200	235	294	1,570	1,450	2,420	2,140	273	120	111
10	144	142	230	234	265	2,030	1,330	2,210	2,540	273	120	107
11	141	138	225	227	253	2,860	1,260	2,150	2,030	248	119	111
12	142	145	227	375	265	2,960	1,360	2,100	1,650	229	119	125
13	142	191	222	330	278	3,660	1,260	2,150	1,490	212	117	142
14	141	201	220	264	273	3,940	1,120	2,320	1,380	198	115	128
15	143	161	212	268	265	3,070	1,060	2,500	1,430	189	138	120
16	144	146	214	236	273	2,820	1,100	2,790	1,430	180	138	113
17	145	137	218	276	337	2,940	1,080	2,840	1,360	172	129	111
18	148	134	220	343	437	3,630	1,030	2,680	1,200	165	124	110
19	164	132	204	523	525	3,620	962	2,380	1,060	157	108	108
20	219	132	200	2,400	640	2,830	934	2,210	945	170	112	110
21	215	131	240	6,470	790	2,460	978	2,160	907	177	112	115
22	182	130	310	3,130	1,160	2,260	1,040	2,170	835	173	111	113
23	178	127	892	1,870	1,190	2,390	1,070	2,060	810	168	107	113
24	180	131	599	1,250	945	2,130	1,180	2,000	755	157	106	112
25	173	142	452	995	815	1,930	1,210	1,900	735	148	106	121
26	166	150	377	825	735	1,570	1,160	1,840	670	144	100	121
27	139	169	318	670	1,610	1,340	1,220	1,750	608	138	98	128
28	122	190	219	581	3,540	1,160	1,480	1,820	581	136	98	132
29	81	232	275	489	6,380	1,020	1,730	2,000	572	136	97	129
30	115	232	280	382	------	923	1,570	2,130	550	139	100	128
31	141	------	265	359	------	857	------	2,260	------	142	104	------
TOTAL	4,804	4,418	8,388	24,537	23,957	70,470	36,656	66,530	42,808	7,252	3,568	3,476
MEAN	155	147	271	792	826	2,273	1,222	2,146	1,427	234	115	116
MAX	219	232	892	6,470	6,380	3,940	1,770	2,840	2,540	513	138	142
MIN	81	89	146	155	253	857	868	1,430	550	136	97	104
AC-FT	9,530	8,760	16,640	48,670	47,520	139,800	72,710	132,000	84,910	14,380	7,080	6,890

CAL YR 1971 TOTAL 367,067 MEAN 1,006 MAX 5,880 MIN 81 AC-FT 728,100
WTR YR 1972 TOTAL 296,864 MEAN 811 MAX 6,470 MIN 81 AC-FT 588,800

PEAK DISCHARGE (BASE, 3,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	0945	9.30	7,640	3-14	0145	7.17	4,420
2-29	0545	9.84	8,340	3-18	2230	7.03	4,260

13265500 Crane Creek at mouth, near Weiser, Idaho

LOCATION.--Lat 44°17'28", long 116°46'48", in SW¼NE¼ sec.14, T.11 N., R.4 W., Washington County, on right bank just downstream from highway bridge at Harris Ranch, at mile 0.2, and 10 miles northeast of Weiser.

DRAINAGE AREA.--288 sq mi.

PERIOD OF RECORD.--July to September 1920, February 1921 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 2,240 ft (by barometer).

AVERAGE DISCHARGE.--51 years (1921-72), 84.2 cfs (61,000 acre-ft per year); 15-year base period (1952-67), 82.5 cfs.

EXTREMES.--Current year: Maximum discharge, 1,750 cfs Feb. 28 (gage height, 5.49 ft); minimum, 2.2 cfs Oct. 10 (gage height, 1.67 ft).
Period of record: Maximum discharge, 3,170 cfs Feb. 26, 1957 (gage height, 6.23 ft); maximum gage height, 6.24 ft Jan. 21, 1970; no flow for part of May 1, 1956, Apr. 19-21, 1967, Apr. 21-22, 1968; minimum daily, 0.11 cfs Apr. 20, 1967.
A major flood occurred Dec. 3 or 4, 1910.

REMARKS.--Records good except those for flow under 30 cfs, which are fair. Flow regulated by Crane Creek Reservoir 12.3 miles upstream (see sta 13264000). Diversions above station for irrigation of about 820 acres (1966 determination).

REVISIONS.--WSP 833: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 7, 8, 11, 15, 18-20, Jan. 3-5, 12-18, Jan. 25 to Feb. 10; shifting-control method used Apr. 14 to July 1)

1.7	3.0	2.3	30	4.0	442
1.8	5.1	2.6	62	4.5	729
1.9	7.8	3.0	122	5.0	1,150
2.0	11	3.5	245	5.5	1,750

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	17	15	387	76	683	10	9.8	6.5	9.0	149	190
2	7.7	15	14	26	72	716	10	6.7	4.7	12	147	193
3	7.4	15	15	12	72	1,250	10	6.0	6.0	11	151	193
4	6.4	12	14	12	74	1,050	11	5.0	8.5	11	143	193
5	3.9	11	18	12	78	919	13	8.2	8.0	14	138	199
6	3.8	11	48	12	80	793	15	5.6	8.4	11	148	196
7	3.5	11	28	10	84	633	14	6.4	11	7.5	161	188
8	3.0	12	22	9.5	83	534	11	11	22	7.1	162	188
9	3.0	11	21	9.2	81	457	10	11	61	8.5	162	183
10	4.4	11	17	8.5	81	405	10	11	48	11	163	181
11	7.7	11	15	9.2	81	379	11	9.3	23	12	168	177
12	7.5	12	15	10	78	357	15	7.6	16	12	170	170
13	8.4	13	15	9.0	77	370	20	8.7	14	11	172	170
14	6.1	13	15	8.6	77	362	18	9.3	9.2	37	174	167
15	9.5	12	15	8.4	77	330	12	9.4	8.5	83	175	148
16	12	11	14	8.7	91	310	12	8.9	5.6	108	183	135
17	12	12	14	8.5	149	292	9.9	5.0	5.7	109	172	134
18	13	12	13	9.2	248	370	13	4.7	5.2	124	172	121
19	13	12	12	106	307	424	20	6.6	6.6	155	172	105
20	13	12	11	709	349	396	14	6.5	6.9	156	171	104
21	13	12	11	645	345	383	9.5	7.1	7.4	151	172	103
22	13	13	278	282	452	366	9.2	6.2	8.2	155	174	105
23	13	12	786	134	428	353	10	7.6	5.5	154	174	103
24	13	13	683	85	410	341	11	7.4	6.8	148	170	102
25	13	13	670	81	387	320	13	7.5	5.8	152	174	98
26	13	19	663	81	375	30	12	7.9	6.7	155	174	95
27	13	20	651	76	503	13	11	4.6	10	152	169	43
28	13	17	585	78	645	11	14	7.2	11	147	168	87
29	13	23	447	78	927	10	17	7.2	12	148	171	88
30	14	19	442	74	------	9.8	12	5.8	8.0	151	178	86
31	15	------	437	75	------	9.5	------	6.1	------	147	192	------
TOTAL	300.2	407	6,004	3,073.8	6,787	12,876.3	377.6	231.3	366.2	2,569.1	5,169	4,245
MEAN	9.68	13.6	194	99.2	234	415	12.6	7.46	12.2	82.9	167	142
MAX	15	23	786	709	927	1,250	20	11	61	156	192	199
MIN	3.0	11	11	8.4	72	9.5	9.2	4.6	4.7	7.1	138	43
AC-FT	595	807	11,910	6,100	13,460	25,540	749	459	726	5,100	10,250	8,420

CAL YR 1971 TOTAL 42,257.3 MEAN 116 MAX 1,100 MIN 2.2 AC-FT 83,820
WTR YR 1972 TOTAL 42,406.5 MEAN 116 MAX 1,250 MIN 3.0 AC-FT 84,110

13266000 Weiser River near Weiser, Idaho

LOCATION.--Lat 44°16'23", long 116°46'23", in NE¼SE¼ sec.23, T.11 N., R.4 W., Washington County, on right bank 0.4 mile upstream from county road bridge, 1.8 miles downstream from Crane Creek, 10 miles east of Weiser, and at mile 15.1.

DRAINAGE AREA.--1,460 sq mi, approximately.

PERIOD OF RECORD.--March 1890 to June 1891, December 1894 to October 1896, April to September 1897, March 1898 to November 1899, March 1900 to December 1904, October 1910 to December 1914, October 1952 to current year. Published as "at Weiser" prior to 1900.

GAGE.--Water-stage recorder. Altitude of gage is 2,220 ft (by barometer). Prior to October 1952, nonrecording gages at several sites downstream within 1.5 miles of present site at various datums.

AVERAGE DISCHARGE.--29 years (1895-96, 1898-99, 1900-4, 1911-14, 1952-72), 1,161 cfs (841,100 acre-ft per year); 15-year base period 1952-67, 1,030 cfs.

EXTREMES.--Current year: Maximum discharge, 14,500 cfs Feb. 29 (gage height, 9.59 ft); minimum, 113 cfs Nov. 8 (gage height, 1.59 ft).
Period of record: Maximum discharge observed, 19,900 cfs Dec. 23, 1955 (gage height, 11.06 ft); maximum gage height, 12.83 ft Jan. 31, 1961 (ice jam); minimum observed, 14 cfs Aug. 7, 1911 (gage height, 2.80 ft, site and datum then in use); minimum gage height, 1.45 ft Nov. 29, 1970.
Flood of Mar. 19, 1932, reached a discharge of about 17,500 cfs.

REMARKS.--Records excellent except those for winter period, which are fair. Flow slightly regulated since 1911 by Crane Creek Reservoir 14.3 miles upstream (capacity about 51,700 acre-ft) and other small reservoirs. Diversions above station for irrigation of about 30,400 acres (1966 determination). Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1347: 1895-1905, 1953(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 15, 16, 18-23, Dec. 30 to Jan. 19, Jan. 29 to Feb. 10)

1.8	163	4.0	1,530
2.0	220	6.0	4,660
2.5	420	8.0	9,490
3.0	690	10.0	15,800

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	282	243	395	790	800	6,300	1,200	1,780	3,750	762	272	274
2	259	249	283	440	680	4,460	1,230	1,720	3,760	690	264	281
3	252	222	289	310	620	6,630	1,340	1,810	3,550	624	268	279
4	250	222	313	230	660	4,600	1,460	2,100	3,490	568	259	279
5	245	219	294	280	770	4,100	1,670	2,520	3,130	507	234	291
6	239	197	507	395	720	4,240	2,400	2,770	3,010	467	255	311
7	237	165	575	390	680	4,230	2,440	3,000	3,060	438	262	316
8	226	167	292	370	640	3,410	2,110	3,230	3,390	381	263	318
9	216	213	209	360	620	3,210	1,970	3,150	3,480	340	260	315
10	218	233	385	375	605	3,780	1,820	2,780	4,280	355	270	306
11	216	229	434	370	512	4,940	1,700	2,550	3,530	319	283	307
12	207	234	418	480	551	4,970	1,800	2,420	2,720	289	273	328
13	209	282	400	640	556	5,770	1,700	2,540	2,370	259	274	377
14	204	345	381	460	572	6,490	1,500	2,870	2,200	267	277	378
15	212	303	355	380	543	5,070	1,410	3,260	2,220	286	284	344
16	221	257	375	340	566	4,510	1,400	3,620	2,260	287	347	316
17	223	236	385	340	790	4,510	1,430	3,770	2,160	263	328	307
18	226	231	395	470	1,160	5,230	1,370	3,670	1,950	260	306	293
19	242	227	365	900	1,470	6,270	1,290	3,230	1,710	285	298	268
20	299	223	360	4,630	1,720	4,690	1,240	2,990	1,510	285	267	264
21	336	220	440	12,000	2,180	4,000	1,240	2,970	1,420	303	268	269
22	307	220	640	7,620	2,910	3,580	1,350	2,920	1,310	322	276	279
23	278	216	1,900	4,270	3,340	3,570	1,350	2,780	1,240	348	274	280
24	274	213	1,770	2,580	2,430	3,310	1,450	2,630	1,180	298	270	277
25	269	227	1,550	1,910	2,080	3,050	1,520	2,540	1,110	281	272	278
26	254	266	1,490	1,570	1,850	2,260	1,480	2,440	1,050	268	268	292
27	242	282	1,310	1,280	2,420	1,770	1,470	2,400	961	259	274	237
28	215	310	993	1,140	5,780	1,520	1,680	2,510	910	252	245	288
29	180	385	884	1,020	12,700	1,350	2,040	2,800	850	253	241	291
30	176	500	860	860	------	1,240	1,980	3,140	818	261	244	287
31	207	------	840	760	------	1,180	------	3,400	------	267	263	------
TOTAL	7,421	7,536	20,087	47,960	50,925	124,240	48,040	86,310	68,379	11,044	8,439	8,930
MEAN	239	251	648	1,547	1,756	4,008	1,601	2,784	2,279	356	272	298
MAX	336	500	1,900	12,000	12,700	6,630	2,440	3,770	4,280	762	347	378
MIN	176	165	209	230	512	1,180	1,200	1,720	818	252	234	237
AC-FT	14,720	14,950	39,840	95,130	101,000	246,400	95,290	171,200	135,600	21,910	16,740	17,710

CAL YR 1971 TOTAL 589,153 MEAN 1,614 MAX 9,290 MIN 165 AC-FT 1,169,000
WTR YR 1972 TOTAL 489,311 MEAN 1,337 MAX 12,700 MIN 165 AC-FT 970,500

13269000 Snake River at Weiser, Idaho

LOCATION.--Lat 44°14'44", long 116°58'48", in NW¼SE¼ sec.31, T.11 N., R.5 W., Washington County, on right bank at upstream side of U.S. Highway 30N bridge at Weiser, 0.7 mile downstream from Weiser River, and at mile 351.3.

DRAINAGE AREA.--69,200 sq mi, approximately. Mean altitude, 5,400 ft.

PERIOD OF RECORD.--October 1910 to current year. Fragmentary gage-height record obtained by U.S. Weather Bureau since 1895. Monthly discharge only for October 1910, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 2,086.64 ft above mean sea level. Prior to Oct. 1, 1914, nonrecording gage 0.2 mile downstream at different datum. Oct. 1, 1914, to Oct. 11, 1933, nonrecording gage, and Oct. 12, 1933, to Apr. 13, 1964, water-stage recorder, at site 0.3 mile upstream at same datum.

AVERAGE DISCHARGE.--62 years, 18,010 cfs (13,050,000 acre-ft per year); 15-year base period (1952-67), 16,720 cfs.

EXTREMES.--Current year: Maximum discharge, 63,000 cfs Mar. 14 (gage height, 11.38 ft); minimum, 9,340 cfs July 19 (gage height, 2.42 ft).
Period of record: Maximum discharge, 84,500 cfs Apr. 29, 1952 (gage height, 14.67 ft, site and datum then in use); minimum observed, 5,100 cfs Aug. 5, 1924 (gage height, 1.35 ft, site and datum then in use).
Flood of Mar. 3, 1910, reached a stage of 17.1 ft at site and datum 0.3 mile upstream, from reading on old U.S. Weather Bureau gage (discharge, 120,000 cfs). Flood in June 1894 was considerably higher.

REMARKS.--Records excellent. Flow regulated by many reservoirs above station. Diurnal fluctuation caused by hydroelectric plants upstream. Diversions above station for irrigation of about 3,650,000 acres of which about 742,000 acres are by withdrawals from ground water. In addition, approximately 7,300 acres are irrigated below station by diversion from Weiser River (1966 determination). Records of water temperatures and chemical analyses for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1317: 1918. WSP 1567: 1910(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

2.4	9,260	8.0	39,000
3.0	11,700	10.0	52,400
4.0	16,400	12.0	67,200
6.0	26,900		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16,800	24,500	24,000	23,200	28,400	55,300	44,300	32,900	32,300	21,100	11,000	12,100
2	17,100	22,600	24,600	23,300	28,500	53,000	42,900	31,800	30,300	19,200	11,100	12,200
3	19,200	25,400	24,200	22,700	27,800	52,000	41,600	31,500	30,000	17,300	10,700	12,400
4	20,700	24,900	24,300	22,500	27,600	53,300	43,600	32,700	29,400	15,800	10,600	12,400
5	23,100	24,500	23,700	22,500	27,200	60,400	46,700	34,000	27,900	13,900	10,800	13,000
6	23,200	25,400	24,800	21,900	27,900	55,300	47,900	33,500	27,700	12,300	10,900	13,600
7	21,500	25,400	24,400	20,700	26,800	53,300	46,700	33,000	28,100	11,500	11,000	13,800
8	23,000	24,800	23,100	20,800	27,300	55,600	45,800	33,300	32,000	11,300	10,800	14,900
9	22,500	25,100	22,400	21,900	28,200	55,800	44,800	34,500	36,000	11,000	10,800	13,600
10	22,700	25,600	22,900	22,000	28,600	54,800	44,400	33,200	41,600	10,900	10,700	14,800
11	23,000	24,400	22,700	20,800	28,700	57,000	44,200	31,700	46,400	10,700	10,800	13,500
12	24,200	24,500	23,200	21,400	29,200	59,000	44,800	29,700	45,200	10,400	10,800	15,400
13	23,700	23,400	22,900	20,500	30,000	60,800	44,400	30,700	42,500	10,300	10,800	16,100
14	23,700	22,400	23,300	21,700	31,100	62,500	44,600	29,700	41,000	10,200	11,200	16,000
15	23,100	21,300	23,500	23,900	30,600	59,000	43,900	30,500	40,000	10,100	11,500	16,300
16	23,000	19,600	21,900	23,400	30,600	54,200	43,400	33,700	39,600	10,000	11,800	15,500
17	22,800	19,700	21,600	23,900	33,000	51,900	44,200	35,600	36,600	10,000	11,600	15,800
18	23,900	21,600	20,800	26,600	33,300	50,000	44,100	35,400	36,200	9,810	11,800	15,800
19	24,400	23,900	21,500	27,400	33,000	53,400	43,200	32,900	34,800	9,490	11,700	15,800
20	24,600	23,500	22,600	33,600	34,400	51,900	41,500	30,500	33,300	9,570	12,100	15,300
21	25,300	24,400	23,100	50,100	35,000	48,300	40,000	30,800	30,700	9,960	12,000	15,300
22	25,500	24,500	22,100	44,500	35,600	46,300	39,600	32,100	27,900	10,200	12,100	15,400
23	25,200	24,000	24,800	39,400	36,500	46,700	38,900	34,800	27,800	10,600	11,800	14,800
24	25,000	23,500	25,400	38,200	36,100	48,600	37,300	36,400	26,900	11,100	11,800	15,400
25	24,000	23,300	25,400	38,300	34,800	47,600	36,200	33,000	26,300	10,600	11,500	15,000
26	24,800	24,000	25,300	36,200	35,200	47,900	35,400	30,000	24,900	10,300	12,000	15,400
27	25,100	25,100	24,200	33,800	35,500	47,800	35,300	32,000	23,200	10,400	11,800	15,800
28	25,400	24,500	23,700	33,600	42,200	47,800	34,200	33,000	22,200	10,400	12,300	16,500
29	25,700	24,200	22,500	31,700	53,400	46,400	34,400	32,700	20,500	10,400	12,000	16,200
30	26,500	24,700	22,300	29,800	------	44,900	33,900	33,500	21,500	10,700	12,000	16,500
31	26,800	------	25,800	29,600	------	44,300	------	34,200	------	11,000	12,300	------
TOTAL	725,500	714,700	727,000	869,900	936,500	1,625.1M	1,252.2M	1,013.3M	962,800	360,530	354,100	444,600
MEAN	23,400	23,820	23,450	28,060	32,290	52,420	41,740	32,690	32,090	11,630	11,420	14,820
MAX	26,800	25,600	25,800	50,100	53,400	62,500	47,900	36,400	46,400	21,100	12,300	16,500
MIN	16,800	19,600	20,800	20,500	26,800	44,300	33,900	29,700	20,500	9,490	10,600	12,100
AC-FT	1,439M	1,418M	1,442M	1,725M	1,858M	3,223M	2,484M	2,010M	1,910M	715,100	702,400	881,900

CAL YR 1971 TOTAL 11,112,300 MEAN 30,440 MAX 62,500 MIN 10,400 AC-FT 22,040,000
WTR YR 1972 TOTAL 9,986,230 MEAN 27,280 MAX 62,500 MIN 9,490 AC-FT 19,810,000

M Expressed in thousands.

13289700 Brownlee Reservoir at Brownlee Dam, Idaho-Oregon State line

LOCATION.--Lat 44°50'08", long 116°53'58", in SE¼SE¼ sec.2, T.17 N., R.5 W., Washington County, at Brownlee Dam on Snake River near Idaho end of dam, 1.1 miles upstream from Wildhorse River, 3.5 miles downstream from Brownlee Creek, 10.5 miles east of Halfway, Oreg., and at mile 285.0.

DRAINAGE AREA.--72,590 sq mi, approximately.

PERIOD OF RECORD.--May 1958 to current year. Published as "at Idaho-Oregon State line" 1958-59.

GAGE.--Remote registering water-stage recorder. Datum of gage is mean sea level, Idaho Power Co. datum. Prior to Feb. 2, 1959, nonrecording gage or levels to water surface at present site and datum.

EXTREMES.--Current year: Maximum contents, 1,442,000 acre-ft July 13 (elevation, 2,078.08 ft); minimum, 442,900 acre-ft May 2 (elevation, 1,975.46 ft).
Period of record: Maximum contents, 1,453,500 acre-ft Aug. 6, 1962 (elevation, 2,078.91 ft); minimum since full capacity was attained June 23, 1959, 441,200 acre-ft Apr. 25, 1971 (elevation, 1,975.20 ft).

REMARKS.--Reservoir is formed by earth-fill dam. Storage began May 5, 1958. Dam was completed in fall of 1958. Normal pool elevation, 2,077 ft. Water is used for power generation.

COOPERATION.--Water-stage recorder graph and capacity table furnished by Idaho Power Co.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,975.0	439,800	2,040.0	977,100
1,980.0	473,900	2,060.0	1,198,000
2,000.0	618,700	2,080.0	1,469,000
2,020.0	786,400		

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,393.00	1,382.00	1,363.00	1,323.00	1,286.00	1,052.00	702.70	468.50	695.20	1,424.00	1,424.00	1,402.00
2	1,403.00	1,372.00	1,363.00	1,322.00	1,256.00	1,079.00	667.60	442.90	733.80	1,432.00	1,428.00	1,400.00
3	1,421.00	1,368.00	1,364.00	1,317.00	1,225.00	1,099.00	633.80	445.60	772.10	1,431.00	1,433.00	1,402.00
4	1,426.00	1,366.00	1,371.00	1,311.00	1,199.00	1,104.00	593.50	443.70	809.70	1,432.00	1,433.00	1,405.00
5	1,425.00	1,361.00	1,378.00	1,313.00	1,183.00	1,108.00	577.10	443.80	854.60	1,436.00	1,432.00	1,405.00
6	1,426.00	1,357.00	1,382.00	1,298.00	1,164.00	1,126.00	557.60	458.90	885.30	1,436.00	1,432.00	1,406.00
7	1,423.00	1,357.00	1,379.00	1,290.00	1,145.00	1,141.00	543.70	476.00	919.80	1,433.00	1,435.00	1,405.00
8	1,419.00	1,352.00	1,373.00	1,278.00	1,125.00	1,140.00	529.30	486.80	954.70	1,431.00	1,435.00	1,406.00
9	1,412.00	1,349.00	1,364.00	1,272.00	1,107.00	1,131.00	513.50	493.60	1,002.00	1,432.00	1,432.00	1,409.00
10	1,415.00	1,346.00	1,359.00	1,263.00	1,097.00	1,129.00	491.50	494.40	1,053.00	1,436.00	1,432.00	1,411.00
11	1,415.00	1,343.00	1,355.00	1,258.00	1,089.00	1,125.00	466.00	489.60	1,120.00	1,437.00	1,429.00	1,418.00
12	1,417.00	1,344.00	1,354.00	1,240.00	1,080.00	1,119.00	455.10	485.90	1,197.00	1,439.00	1,423.00	1,421.00
13	1,411.00	1,341.00	1,350.00	1,246.00	1,072.00	1,121.00	453.20	474.70	1,272.00	1,439.00	1,422.00	1,425.00
14	1,410.00	1,340.00	1,347.00	1,237.00	1,063.00	1,117.00	456.10	467.40	1,333.00	1,437.00	1,431.00	1,427.00
15	1,409.00	1,338.00	1,342.00	1,227.00	1,059.00	1,142.00	455.90	465.50	1,381.00	1,437.00	1,433.00	1,427.00
16	1,406.00	1,332.00	1,336.00	1,222.00	1,050.00	1,154.00	455.70	455.20	1,400.00	1,437.00	1,431.00	1,427.00
17	1,405.00	1,323.00	1,334.00	1,222.00	1,037.00	1,146.00	449.50	456.40	1,408.00	1,437.00	1,433.00	1,426.00
18	1,406.00	1,315.00	1,329.00	1,219.00	1,037.00	1,126.00	450.30	464.10	1,406.00	1,439.00	1,433.00	1,426.00
19	1,405.00	1,310.00	1,327.00	1,225.00	1,055.00	1,105.00	452.30	473.20	1,404.00	1,436.00	1,432.00	1,426.00
20	1,409.00	1,307.00	1,325.00	1,231.00	1,074.00	1,088.00	456.10	476.50	1,400.00	1,436.00	1,433.00	1,426.00
21	1,409.00	1,308.00	1,323.00	1,249.00	1,093.00	1,070.00	466.50	474.40	1,399.00	1,435.00	1,430.00	1,425.00
22	1,409.00	1,308.00	1,322.00	1,303.00	1,095.00	1,042.00	487.50	472.90	1,392.00	1,432.00	1,431.00	1,423.00
23	1,409.00	1,311.00	1,327.00	1,354.00	1,089.00	1,008.00	513.80	465.80	1,383.00	1,432.00	1,432.00	1,423.00
24	1,405.00	1,315.00	1,334.00	1,382.00	1,083.00	970.40	537.60	484.30	1,393.00	1,438.00	1,429.00	1,423.00
25	1,400.00	1,326.00	1,338.00	1,401.00	1,072.00	936.00	555.60	512.10	1,406.00	1,432.00	1,424.00	1,425.00
26	1,396.00	1,335.00	1,341.00	1,393.00	1,060.00	917.50	565.90	538.80	1,417.00	1,430.00	1,417.00	1,427.00
27	1,395.00	1,346.00	1,342.00	1,388.00	1,044.00	861.20	558.80	558.60	1,423.00	1,425.00	1,411.00	1,421.00
28	1,391.00	1,357.00	1,342.00	1,382.00	1,030.00	826.90	540.60	580.40	1,418.00	1,423.00	1,410.00	1,425.00
29	1,386.00	1,363.00	1,342.00	1,362.00	1,029.00	797.40	521.40	606.30	1,421.00	1,421.00	1,409.00	1,427.00
30	1,387.00	1,364.00	1,334.00	1,342.00	------	769.00	493.90	629.40	1,420.00	1,423.00	1,407.00	1,424.00
31	1,387.00	------	1,331.00	1,315.00	------	735.40	------	655.20	------	1,427.00	1,404.00	------
MAX	1,426.00	1,382.00	1,382.00	1,401.00	1,286.00	1,154.00	702.70	655.20	1,423.00	1,439.00	1,435.00	1,427.00
MIN	1,386.00	1,307.00	1,322.00	1,219.00	1,029.00	735.40	449.50	442.90	695.20	1,421.00	1,404.00	1,400.00
(†)	2,074.18	2,072.47	2,070.05	2,068.88	2,045.18	2,014.37	1,982.84	2,004.74	2,076.52	2,077.05	2,075.40	2,076.80
(‡)	-1	-23	-33	-16	-286	-293.6	-241.5	+161.3	+764.8	+7	-23	+20

CAL YR 1971..... ‡ +84
WTR YR 1972..... ‡ +36

† Elevation, in feet, at end of month.
‡ Change in contents, in thousands of acre-feet.

13290190 Pine Creek near Oxbow, Oreg.

LOCATION.--Lat 44°57'13", long 116°52'21", in NE¼SW¼ sec.17, T.7 S., R.48 E., Baker County, 1.8 miles south of Oxbow, and at mile 1.9.

DRAINAGE AREA.--230 sq mi, approximately.

PERIOD OF RECORD.--November 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,850.48 ft above mean sea level (levels by Idaho Power Co.). Prior to Aug. 24, 1967, nonrecording gage at site 1.7 miles downstream at different datum.

EXTREMES.--Current year: Maximum discharge, 3,040 cfs Mar. 13 (gage height, 7.31 ft); minimum, 35 cfs Aug. 9, 10 (gage height, 3.07 ft).
Period of record: Maximum discharge, 7,110 cfs Feb. 21, 1968 (gage height, 9.82 ft); minimum, 26 cfs Aug. 25, 1969 (gage height, 3.19 ft).

REMARKS.--Records good. Diversions above station for irrigation of about 19,000 acres (1966 determination).

Rating tables (gage height, in feet, and discharge, in cubic feet per second)

3.0	30	4.5	331
3.2	45	5.0	563
3.5	82	6.0	1,330
4.0	180	7.0	2,540

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	109	147	180	223	928	478	449	2,230	352	54	37
2	85	100	144	175	180	785	511	449	2,200	322	52	37
3	85	100	140	126	190	952	536	508	2,120	307	52	37
4	82	102	134	107	209	743	547	607	1,990	282	50	39
5	82	93	134	155	229	737	589	743	1,860	263	44	39
6	81	85	169	159	219	928	662	836	1,900	260	42	40
7	78	92	132	162	205	866	685	960	1,920	281	40	40
8	75	98	102	149	193	717	630	1,060	2,030	243	38	39
9	72	98	151	153	180	724	569	952	1,980	246	35	38
10	71	102	171	144	171	1,030	530	813	1,930	248	35	37
11	69	105	155	168	164	1,420	498	724	1,450	225	36	37
12	66	128	155	443	157	1,590	525	750	1,180	193	39	45
13	65	157	153	371	164	2,330	478	836	1,040	180	38	59
14	66	164	155	287	166	2,110	435	1,060	993	162	39	59
15	71	130	153	249	166	1,620	412	1,300	1,030	146	46	58
16	73	120	144	215	171	1,600	421	1,460	1,270	123	49	57
17	75	109	151	232	227	1,700	412	1,470	1,140	114	44	57
18	73	112	142	219	288	2,130	391	1,270	968	96	43	55
19	107	107	136	242	327	1,850	370	1,040	811	79	43	54
20	132	102	155	870	430	1,420	366	993	709	87	41	53
21	107	102	153	1,860	493	1,210	383	1,020	670	91	43	52
22	95	100	183	1,300	519	1,120	408	944	624	87	44	53
23	96	98	324	949	519	1,190	412	866	594	81	42	55
24	109	107	285	631	468	1,000	453	928	545	74	41	54
25	98	112	272	530	426	984	453	896	515	65	40	56
26	96	118	259	455	404	778	440	896	461	57	39	58
27	96	136	229	375	468	672	468	1,000	402	55	39	58
28	92	142	200	331	960	597	530	1,280	376	54	38	57
29	78	153	205	282	1,360	539	547	1,760	391	52	36	56
30	93	164	188	228	------	497	493	2,020	380	48	38	56
31	102	------	185	223	------	467	------	2,140	------	49	37	------
TOTAL	2,652	3,445	5,406	11,970	9,876	35,234	14,632	32,030	35,709	4,922	1,297	1,472
MEAN	85.5	115	174	386	341	1,137	488	1,033	1,190	159	41.8	49.1
MAX	132	164	324	1,860	1,360	2,330	685	2,140	2,230	352	54	59
MIN	65	85	102	107	157	467	366	449	376	48	35	37
AC-FT	5,260	6,830	10,720	23,740	19,590	69,890	29,020	63,530	70,830	9,760	2,570	2,920

CAL YR 1971 TOTAL 186,144 MEAN 510 MAX 2,590 MIN 40 AC-FT 369,200
WTR YR 1972 TOTAL 158,645 MEAN 433 MAX 2,330 MIN 35 AC-FT 314,700

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	0900	6.84	2,310	5- 8	1300	5.77	1,110
2-29	0200	6.20	1,530	5-17	0200	6.26	1,600
3-13	2200	7.31	3,040	6- 1	unknown		a2,600

a About.

13290450 Snake River at Hells Canyon Dam, Idaho-Oregon State line

LOCATION.--Lat 45°15'05", long 116°41'50", in SE¼SE¼ sec.33, T.3 S., R.49 E. (Willamette meridian, unsurveyed), Wallowa County, Wallowa National Forest, on left bank 0.2 mile upstream from Hells Canyon Creek, 0.4 mile downstream from Deep Creek, 0.6 mile downstream from Hells Canyon Dam, 15.5 miles northeast of Homestead, Oreg., and at mile 247.0.

DRAINAGE AREA.--73,300 sq mi, approximately.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,400 ft above mean sea level (levels by Idaho Power Co.).

AVERAGE DISCHARGE.--7 years, 21,680 cfs (15,710,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 74,700 cfs Mar. 21 (gage height, 81.33 ft); minimum, 7,820 cfs July 6 (gage height, 64.06 ft); minimum daily discharge, 10,200 cfs July 30.
Period of record: Maximum discharge, 75,800 cfs Apr. 15, 1971 (gage height, 81.55 ft); minimum, 1,580 cfs Mar. 19, 1967 (gage height, 59.9 ft); minimum daily, 4,950 cfs May 26, 1968.

REMARKS.--Records excellent. Flow regulated by many reservoirs above station with a total usable capacity of more than 10,000,000 acre-feet, the most effective of which is Brownlee Reservoir 38 miles upstream (see sta 13289700). Diurnal fluctuations caused by Hells Canyon powerplant. Diversions above station for irrigation of about 3,820,000 acres of which 742,000 acres are by withdrawals from ground water (1966 determination). Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

65.0	9,720	72.0	31,700
66.0	12,000	75.0	44,600
68.0	17,500	78.0	57,700
70.0	24,200	81.1	73,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13,800	28,000	25,500	26,100	45,600	45,300	65,100	48,000	21,200	21,400	12,500	13,400
2	12,300	29,500	25,700	25,100	45,500	47,200	65,300	38,300	20,900	21,200	10,400	13,100
3	12,300	28,100	26,200	26,500	43,500	52,900	63,400	35,900	16,300	18,500	10,300	11,300
4	17,500	28,200	23,300	26,900	38,300	55,400	60,200	32,000	16,200	17,300	10,300	12,300
5	21,800	28,100	23,400	26,800	38,400	55,000	60,100	31,400	16,600	16,800	10,400	13,500
6	24,400	27,500	24,900	27,800	38,400	54,900	60,200	31,300	16,000	14,700	11,000	14,300
7	25,500	27,900	26,900	26,600	38,400	57,100	60,200	31,600	16,000	13,900	12,000	15,200
8	26,100	27,800	27,700	26,400	38,500	60,100	60,000	35,900	16,100	12,900	12,900	15,500
9	25,100	27,900	27,300	26,700	37,000	60,200	59,800	40,000	16,000	11,000	12,300	14,600
10	21,700	28,000	25,200	25,900	34,900	61,100	58,600	40,800	16,200	10,600	12,400	11,600
11	24,000	27,500	26,300	26,400	35,000	64,900	54,300	38,600	16,400	10,500	13,400	12,700
12	25,100	26,400	26,900	25,500	35,100	65,000	49,300	38,100	16,400	10,800	13,000	14,200
13	24,600	25,500	27,100	25,600	35,200	65,000	48,700	38,100	18,400	11,700	10,300	15,300
14	25,600	26,000	26,400	27,400	35,200	64,900	48,700	38,000	26,600	12,300	10,400	17,200
15	25,900	23,900	26,100	27,700	37,500	64,100	48,700	38,100	35,800	12,000	10,400	18,600
16	24,800	25,500	26,300	25,500	40,000	66,100	49,000	38,200	42,500	11,800	11,000	17,100
17	24,500	25,900	25,300	25,700	37,300	69,600	47,600	38,200	44,800	11,100	12,100	17,300
18	23,000	25,300	24,700	25,400	25,400	70,100	46,000	38,200	45,100	11,000	12,300	18,100
19	25,000	26,200	25,300	26,300	24,800	70,100	45,600	38,200	43,900	10,800	13,000	17,000
20	25,600	25,800	25,400	28,500	27,400	70,000	40,700	38,200	42,300	11,400	11,300	17,000
21	25,400	25,000	25,500	30,900	38,700	71,700	33,800	38,200	41,600	12,800	12,900	17,100
22	26,800	26,400	25,000	31,200	41,900	72,500	31,300	38,300	37,000	12,300	14,300	16,400
23	26,300	24,100	24,700	30,900	44,400	72,900	31,300	30,500	29,900	10,300	14,700	15,800
24	27,300	23,900	24,100	33,700	44,500	73,000	31,200	25,300	25,200	11,300	16,000	15,100
25	27,000	20,700	23,700	43,900	45,300	73,100	33,600	25,300	25,500	13,200	15,900	15,700
26	26,800	20,500	23,600	44,500	45,800	73,000	42,800	25,200	27,500	13,700	16,300	17,600
27	27,100	20,700	26,200	44,500	46,000	70,500	49,500	25,400	27,700	13,600	13,800	16,000
28	28,000	20,700	26,300	44,800	45,800	65,500	50,000	25,300	25,200	11,800	15,800	17,400
29	28,200	23,600	26,200	45,200	45,600	65,300	50,100	25,200	24,600	10,900	15,200	16,700
30	28,600	25,000	26,700	45,100	------	65,400	50,200	25,300	23,200	10,200	14,700	18,300
31	28,100	------	25,900	45,400	------	65,400	------	21,700	------	12,500	13,200	------
TOTAL	748,200	769,600	793,800	968,900	1,129.4M	1,987.3M	1,495.3M	1,052.8M	791,100	404,300	394,500	465,400
MEAN	24,140	25,650	25,610	31,250	38,940	64,110	49,840	33,960	26,370	13,040	12,730	15,510
MAX	28,600	29,500	27,700	45,400	46,000	73,100	65,300	48,000	45,100	21,400	16,300	18,600
MIN	12,300	20,500	23,300	25,100	24,800	45,300	31,200	21,700	16,000	10,200	10,300	11,300
AC-FT	1,484M	1,527M	1,575M	1,922M	2,240M	3,942M	2,966M	2,088M	1,569M	801,900	782,500	923,100

CAL YR 1971 TOTAL 12,026,190 MEAN 32,950 MAX 73,700 MIN 9,090 AC-FT 23,850,000
WTR YR 1972 TOTAL 11,000,600 MEAN 30,060 MAX 73,100 MIN 10,200 AC-FT 21,820,000

M Expressed in thousands.

13295000 Valley Creek at Stanley, Idaho

LOCATION.--Lat 44°13'21", long 114°55'49", in SE¼NW¼SW¼ sec.3, T.10 N., R.13 E., Custer County, Challis National Forest, on left bank at mile 0.2, 0.5 mile northeast of Stanley, and 0.8 mile southwest of Lower Stanley.

DRAINAGE AREA.--147 sq mi. Mean altitude, 7,400 ft.

PERIOD OF RECORD.--December 1910 to April 1911 (gage heights only), May 1911 to October 1913, May 1921 to December 1971, April to September 1972 (discontinued). Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 6,221.81 ft above mean sea level. Prior to May 28, 1911, nonrecording gage at site 0.2 mile upstream and May 28, 1911, to Oct. 31, 1913, at site 0.8 mile upstream, at different datums. May 2, 1921, to Apr. 30, 1949, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--52 years (1911-13, 1921-71), 200 cfs (18.48 inches per year, 144,900 acre-ft per year); 15-year base period (1952-67), 210 cfs.

EXTREMES.--Current year: Maximum discharge, 1,460 cfs June 8 (gage height, 3.38 ft); minimum not determined. Period of record: Maximum discharge, 2,000 cfs May 24, 1956; maximum gage height, 4.4 ft May 29, 1921; minimum discharge, 40 cfs (estimated) Nov. 17-30, 1929, Dec. 8-13, 1932.

REMARKS.--Records good. Diversions above station for irrigation of about 3,000 acres (1966 determination). Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 362: 1911-12. WSP 1567: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

0.9	76	2.5	804
1.0	94	3.0	1,170
1.5	242	3.5	1,560
2.0	493		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	108	91				-	223	1,320	722	220	108
2	135	108	83				-	249	1,400	686	213	106
3	135	109	102				-	308	1,390	645	203	105
4	133	110	105				-	397	1,320	602	193	103
5	130	96	105				-	503	1,280	586	179	108
6	128	85	101				-	582	1,290	589	175	136
7	123	93	88				-	562	1,360	593	169	121
8	119	102	-				-	620	1,430	574	164	116
9	118	99	-				-	545	1,420	544	160	110
10	115	104	-				-	523	1,390	499	157	110
11	113	108	-				-	530	1,390	468	156	125
12	112	120	-				-	549	1,230	457	156	129
13	112	120	-				-	577	1,070	467	160	121
14	127	115	-				-	629	1,000	474	162	114
15	115	111	-				-	693	1,020	455	168	109
16	121	97	-				-	743	1,070	418	158	107
17	125	104	-				-	802	1,090	379	149	104
18	120	96	-				-	782	1,100	359	144	105
19	119	101	-				-	748	1,010	345	131	133
20	132	103	-				-	708	891	328	133	139
21	134	102	-				-	713	840	315	139	128
22	120	95	-				-	651	809	300	130	141
23	117	83	-				-	633	833	269	126	128
24	118	101	-				168	641	813	255	122	123
25	114	96	-				164	643	770	245	121	129
26	116	91	-				159	653	698	237	118	127
27	117	101	-				184	700	629	235	115	148
28	101	103	-				237	768	611	234	112	133
29	84	103	-				275	869	638	229	111	124
30	103	97	-		------		231	986	709	228	114	121
31	110	------			------		------	1,160	------	227	110	------
TOTAL	3,711	3,061	-				-	19,690	31,821	12,964	4,668	3,611
MEAN	120	102	-				-	635	1,061	418	151	120
MAX	145	120	-				-	1,160	1,430	722	220	148
MIN	84	83	-				-	223	611	227	110	103
AC-FT	7,360	6,070	-				-	39,060	63,120	25,710	9,260	7,160

PEAK DISCHARGE (BASE, 600 CFS).--June 8 (1200) 1,460 cfs (3.38 ft).

13296500 Salmon River below Yankee Fork, near Clayton, Idaho

LOCATION.--Lat 44°16'06", long 114°43'55", in sec.20, T.11 N., R.15 E. (unsurveyed), Custer County, Challis National Forest, on left bank 700 ft downstream from Yankee Fork, 18 miles upstream from Clayton, and at mile 366.9.

DRAINAGE AREA.--802 sq mi. Mean altitude, 7,790 ft.

PERIOD OF RECORD.--October 1921 to December 1971, April to September 1972 (discontinued). Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 5,900 ft (by barometer). Sept. 3, 1927, to Nov. 5, 1934, at site 200 ft downstream at approximately present datum. Prior to Oct. 3, 1926, nonrecording gage at site 200 ft downstream at datum approximately 1.5 ft higher and Oct. 3, 1926, to Sept. 2, 1927, at site 200 ft downstream at approximately present datum.

AVERAGE DISCHARGE.--50 years (1921-71), 1,000 cfs (16.93 inches per year, 724,500 acre-ft per year); 15-year base period (1952-67), 1,069 cfs.

EXTREMES.--Current year: Maximum discharge, 8,740 cfs June 8 (gage height, 10.59 ft); minimum during period, 440 cfs Dec. 2 (gage height, 2.11 ft).
Period of record: Maximum discharge, 10,300 cfs May 24, 1956 (gage height, 11.60 ft); minimum, 160 cfs (estimated) Nov. 25-30, 1929.

REMARKS.--Records excellent. Diversions above station for irrigation of about 4,400 acres (1966 determination). Records of chemical analyses and suspended sediment loads for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1347: 1931. WSP 1567: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 29 to June 21)

2.0	389	6.0	2,910
2.5	584	8.0	4,880
3.0	818	10.0	7,430
4.0	1,380	10.8	8,590

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	767	643	532				-	1,040	7,740	3,410	1,090	643
2	739	634	483				-	1,110	8,320	3,320	1,060	633
3	741	634	568				-	1,280	8,460	3,150	1,040	616
4	749	640	568				-	1,630	7,930	2,970	1,000	606
5	748	600	579				-	1,980	7,610	2,840	961	618
6	735	543	591				-	2,290	7,610	2,780	934	716
7	718	575	517				-	2,310	7,960	2,750	906	675
8	702	617	-				-	2,420	8,620	2,670	871	652
9	693	597	-				-	2,190	8,480	2,560	843	630
10	685	609	-				-	2,100	8,560	2,400	840	662
11	675	619	-				-	2,100	8,320	2,240	840	740
12	667	648	-				-	2,240	7,330	2,150	824	779
13	664	665	-				-	2,490	6,290	2,130	835	734
14	715	648	-				-	2,960	5,680	2,110	853	707
15	679	626	-				-	3,500	5,660	2,060	855	690
16	689	573	-				-	3,870	5,880	1,960	826	673
17	699	599	-				-	4,230	6,020	1,840	797	668
18	689	575	-				-	4,020	5,880	1,750	778	673
19	675	592	-				-	3,720	5,400	1,680	746	729
20	701	598	-				-	3,650	4,720	1,620	752	765
21	721	593	-				-	3,650	4,380	1,580	752	728
22	692	572	-				-	3,280	4,210	1,520	728	754
23	683	523	-				-	3,040	4,260	1,400	716	742
24	689	600	-				769	3,040	4,180	1,320	710	722
25	678	590	-				803	3,080	3,900	1,260	703	733
26	677	554	-				784	3,160	3,560	1,230	688	721
27	684	604	-				843	3,490	3,230	1,190	674	779
28	621	606	-				1,070	4,090	3,090	1,160	658	756
29	539	608	-				1,310	4,890	3,140	1,120	648	725
30	623	590	-		------		1,120	5,860	3,340	1,110	663	715
31	655	------			------		------	6,830	------	1,120	652	------
TOTAL	21,392	18,075	-				-	95,540	179,760	62,400	25,243	20,984
MEAN	690	603	-				-	3,082	5,992	2,013	814	699
MAX	767	665	-				-	6,830	8,620	3,410	1,090	779
MIN	539	523	-				-	1,040	3,090	1,110	648	606
CFSM	.86	.75	-				-	3.84	7.47	2.51	1.02	.87
IN.	.99	.84	-				-	4.43	8.34	2.89	1.17	.97
AC-FT	42,430	35,850	-				-	189,500	356,600	123,800	50,070	41,620

PEAK DISCHARGE (BASE, 2,350 CFS).--May 17 (0400) 4,350 cfs (7.43 ft); June 8 (2100) 8,740 cfs (10.59 ft).

13297350 Bruno Creek near Clayton, Idaho

LOCATION.--Lat 44°17'56", long 114°26'50", in SW¼NE¼ sec.8, T.11 N., R.17 E., Custer County, Bureau of Land Management lands, on left bank 0.2 mile upstream from mouth and 4.8 miles northwest of Clayton.

DRAINAGE AREA.--6.29 sq mi.

PERIOD OF RECORD.--April 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,837 ft.

EXTREMES.--Current year: Maximum discharge, 42 cfs May 31 (gage height, 2.45 ft); minimum daily, 0.37 cfs Jan. 23 to Feb. 1.
Period of record: Maximum discharge, 42 cfs May 31, 1972 (gage height, 2.45 ft); minimum daily, 0.37 cfs Jan. 23 to Feb. 1, 1972.

REMARKS.--Records fair. Records of chemical analyses for the water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 31 to Sept. 30)

1.2	0.29	1.8	11.1
1.3	.84	2.0	17.9
1.4	1.83	2.2	25.9
1.6	5.70	2.4	34.8

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.84	.56	.56	.50	.37	.62	1.0	3.6	30	3.7	1.6	.70
2	.84	.50	.56	.50	.38	.62	1.1	3.5	29	3.7	1.5	.69
3	.84	.50	.56	.48	.38	.56	1.1	4.3	24	3.5	1.5	.69
4	.76	.56	.50	.46	.38	.50	1.3	6.5	21	3.2	1.4	.67
5	.76	.56	.50	.45	.39	.50	1.5	8.0	19	3.1	1.3	.65
6	.76	.56	.50	.44	.39	.50	1.7	9.2	19	2.5	1.2	.69
7	.69	.56	.50	.43	.39	.50	1.8	8.7	23	2.2	1.2	.69
8	.69	.50	.56	.42	.40	.50	1.6	8.9	21	1.9	1.1	.69
9	.62	.45	.56	.41	.40	.45	1.5	8.3	21	1.8	1.1	.69
10	.62	.45	.50	.41	.40	.45	1.5	8.0	22	1.8	1.1	.69
11	.56	.45	.50	.41	.40	.50	1.5	7.6	20	1.6	1.0	.69
12	.56	.50	.50	.41	.40	.56	1.5	7.9	18	1.4	.96	.74
13	.56	.50	.50	.41	.41	.62	1.4	8.7	17	1.5	.97	.76
14	.62	.50	.56	.41	.41	.69	1.2	11	16	1.4	1.1	.76
15	.62	.50	.56	.41	.41	.76	1.1	13	15	1.5	1.2	.74
16	.62	.50	.56	.41	.41	.76	1.1	14	15	1.4	1.1	.69
17	.62	.50	.56	.41	.41	.92	1.1	14	14	1.3	1.1	.69
18	.69	.50	.56	.41	.41	1.2	1.1	12	13	1.5	.97	.68
19	.69	.50	.56	.41	.45	1.5	1.1	9.0	11	1.5	.92	.70
20	.69	.45	.56	.41	.45	1.4	1.1	13	9.9	1.5	.92	.71
21	.69	.45	.56	.41	.45	1.4	1.1	15	8.8	1.6	.91	.76
22	.69	.45	.56	.41	.45	1.5	1.4	14	7.7	1.6	.88	.77
23	.69	.45	.56	.37	.41	2.1	1.6	9.2	7.0	1.8	.84	.76
24	.69	.56	.56	.37	.41	2.0	2.1	10	6.6	1.9	.84	.76
25	.69	.56	.56	.37	.41	1.6	2.6	11	6.3	2.0	.84	.76
26	.69	.56	.56	.37	.41	3.0	2.7	13	5.7	2.0	.81	.84
27	.69	.56	.56	.37	.41	1.3	3.0	15	5.3	1.9	.76	.91
28	.62	.56	.54	.37	.50	1.2	4.5	19	4.7	1.7	.75	.92
29	.56	.56	.52	.37	.62	1.2	5.8	17	4.3	1.6	.73	.92
30	.50	.56	.52	.37	------	1.1	4.3	23	4.0	1.6	.69	.88
31	.50	------	.50	.37	------	1.1	------	32	------	1.6	.70	------
TOTAL	20.66	15.37	16.72	12.75	12.11	31.61	55.4	357.4	438.3	61.3	31.99	22.29
MEAN	.67	.51	.54	.41	.42	1.02	1.85	11.5	14.6	1.98	1.03	.74
MAX	.84	.56	.56	.50	.62	3.0	5.8	32	30	3.7	1.6	.92
MIN	.50	.45	.50	.37	.37	.45	1.0	3.5	4.0	1.3	.69	.65
CFSM	.11	.08	.09	.07	.07	.16	.29	1.83	2.32	.31	.16	.12
IN.	.12	.09	.10	.08	.07	.19	.33	2.11	2.59	.36	.19	.13
AC-FT	41	30	33	25	24	63	110	709	869	122	63	44

WTR YR 1972 TOTAL 1,075.90 MEAN 2.94 MAX 32 MIN .37 CFSM .47 IN 6.36 AC-FT 2,130

PEAK DISCHARGE (BASE, 16 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-16	2200	2.03	17	5-31	0200	2.45	42
5-21	0600	2.03	16				

13297450 Little Boulder Creek near Clayton, Idaho

LOCATION.--Lat 44°05'57", long 114°26'56", in SW¼NE¼NW¼ sec.22, T.9 N., R.17 E., Custer County, on right bank 950 ft upstream from mouth and 11 miles south of Clayton.

DRAINAGE AREA.--18.4 sq mi.

PERIOD OF RECORD.--June 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,200 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 570 cfs June 1 (gage height, 5.84 ft); minimum, 3.9 cfs Apr. 19 (gage height, 3.68 ft).
Period of record: Maximum discharge, 570 cfs June 1, 1972 (gage height, 5.84 ft); minimum, 2.7 cfs Nov. 14, 1970 (gage height, 3.56 ft).

REMARKS.--Records fair. Records for water temperature and chemical analysis for the water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 24 to Feb. 20, May 29 to Sept. 30; stage-discharge relation affected by ice Oct. 28-30, Nov. 6, Nov. 30 to Dec. 2, Dec. 6-19, 26-30, Jan. 10 to Feb. 5, Mar. 26-28)

3.8	4.6	4.4	19	5.0	87
4.0	6.7	4.6	32	5.2	135
4.2	11	4.8	54	5.4	202
				5.7	350

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	10	7.8	7.4	6.6	8.0	5.9	7.0	231	101	41	16
2	12	10	7.6	7.3	6.2	8.2	6.0	7.2	322	105	42	15
3	12	10	7.9	7.3	6.5	8.3	6.0	8.0	299	86	40	14
4	12	10	7.6	7.2	6.8	9.0	6.0	10	240	80	39	13
5	12	9.2	7.6	7.3	6.7	8.4	6.3	13	236	79	38	14
6	11	8.8	7.6	7.4	6.8	7.7	6.4	15	206	82	35	16
7	11	9.2	7.6	7.2	6.8	7.4	6.3	15	154	88	33	15
8	10	8.9	7.4	7.2	6.6	7.1	6.2	14	100	86	33	14
9	10	8.6	7.3	6.8	6.5	7.1	6.2	13	73	80	33	13
10	9.8	8.9	7.6	6.8	6.5	7.3	6.1	13	98	72	32	14
11	9.4	8.9	7.5	6.8	6.5	6.9	6.0	13	82	65	32	15
12	8.9	8.9	7.4	6.8	6.5	6.7	6.0	15	104	68	32	15
13	8.9	8.7	7.4	6.7	6.5	6.9	6.0	17	124	75	34	13
14	10	8.5	7.3	6.5	6.5	6.7	6.1	23	119	78	36	13
15	8.9	8.1	7.3	6.8	6.6	6.6	6.2	31	113	76	35	12
16	8.9	8.1	7.3	6.9	6.7	6.7	6.3	38	82	70	32	11
17	9.2	7.9	7.5	7.0	7.0	6.9	6.0	45	70	65	30	11
18	9.8	7.9	7.4	7.0	7.1	6.8	5.9	44	80	64	28	10
19	9.2	7.9	7.4	7.1	7.1	6.8	6.0	40	116	62	26	12
20	9.5	7.8	7.5	7.2	7.0	6.6	5.9	39	107	58	26	12
21	10	7.8	7.5	7.4	6.8	6.6	5.9	34	101	53	26	11
22	10	7.7	7.5	7.2	6.9	6.8	6.0	30	104	50	24	11
23	10	7.4	7.6	7.0	6.9	7.1	6.1	29	120	47	23	11
24	10	7.8	7.8	6.7	6.9	6.6	6.4	30	112	44	22	11
25	10	7.7	7.8	6.6	7.0	6.5	6.4	29	91	43	22	10
26	9.8	7.6	7.6	6.6	7.0	6.3	6.2	31	73	43	21	9.9
27	9.2	7.8	7.3	6.3	7.0	6.4	6.6	41	62	44	20	10
28	7.5	8.0	7.0	6.4	7.5	6.5	7.8	62	62	42	18	10
29	7.0	8.1	7.4	6.5	7.8	6.2	8.4	87	72	41	18	9.6
30	9.6	7.9	7.5	6.5	------	6.0	7.5	132	95	41	17	9.3
31	11	------	7.5	6.5	------	6.0	------	206	------	40	16	------
TOTAL	308.6	254.1	232.5	214.4	197.3	217.1	189.1	1,131.2	3,848	2,028	904	370.8
MEAN	9.95	8.47	7.50	6.92	6.80	7.00	6.30	36.5	128	65.4	29.2	12.4
MAX	12	10	7.9	7.4	7.8	9.0	8.4	206	322	105	42	16
MIN	7.0	7.4	7.0	6.3	6.2	6.0	5.9	7.0	62	40	16	9.3
CFSM	.54	.46	.41	.38	.37	.38	.34	1.98	6.96	3.55	1.59	.67
IN.	.62	.51	.47	.43	.40	.44	.38	2.29	7.78	4.10	1.83	.75
AC-FT	612	504	461	425	391	431	375	2,240	7,630	4,020	1,790	735

CAL YR 1971 TOTAL 9,762.0 MEAN 26.7 MAX 215 MIN 4.9 CFSM 1.45 IN 19.74 AC-FT 19,360
WTR YR 1972 TOTAL 9,895.1 MEAN 27.0 MAX 322 MIN 5.9 CFSM 1.47 IN 20.01 AC-FT 19,630

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
6- 1	2300	5.84	570	6-19	1900	5.07	138
6-12	2400	5.07	138	7- 2	0515	4.95	106

13298500 Salmon River near Challis, Idaho

LOCATION.--Lat 44°22'43", long 114°15'18", in SE¼SE¼ sec.7, T.12 N., R.19 E., Custer County, on left bank 250 ft downstream from Bayhorse Creek, 9 miles south of Challis, and at mile 334.8.

DRAINAGE AREA.--1,800 sq mi, approximately. Mean altitude, 7,820 ft.

PERIOD OF RECORD.--October 1928 to December 1971, April to September 1972 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 5,163.92 ft above mean sea level.

AVERAGE DISCHARGE.--43 years, 1,488 cfs (11.23 inches per year, 1,078,000 acre-ft per year); 15-year base period (1952-67), 1,585 cfs.

EXTREMES.--Current year: Maximum discharge, 14,000 cfs June 10 (gage height, 10.01 ft); minimum during period, 536 cfs Dec. 2 (gage height, 1.91 ft).
Period of record: Maximum discharge, 15,400 cfs May 25, 1956 (gage height, 10.95 ft); minimum, 160 cfs Dec. 14, 1940 (gage height, 0.95 ft).

REMARKS.--Records excellent. No regulation. Diversions above station for irrigation of about 11,300 acres (1966 determination).

REVISIONS.--WSP 1043: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.5	388	6.0	4,890
2.0	583	8.0	8,360
3.0	1,160	10.0	14,000
4.0	2,100		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,140	920	768				-	1,540	11,900	5,030	1,690	1,070
2	1,100	906	639				-	1,550	13,400	4,900	1,640	1,070
3	1,090	903	739				-	1,690	13,400	4,620	1,610	1,050
4	1,100	905	760				-	2,130	12,300	4,340	1,570	1,030
5	1,100	888	829				-	2,550	11,700	4,190	1,500	1,020
6	1,090	793	868				-	3,050	11,800	4,090	1,470	1,110
7	1,060	803	790				-	3,190	12,800	4,050	1,470	1,130
8	1,030	890	-				-	3,250	13,700	3,930	1,420	1,090
9	1,010	854	-				-	3,030	13,400	3,770	1,360	1,060
10	998	867	-				-	2,880	13,800	3,530	1,370	1,060
11	981	875	-				-	2,830	13,300	3,320	1,370	1,180
12	971	892	-				-	2,980	11,400	3,220	1,350	1,270
13	962	931	-				-	3,200	9,640	3,200	1,340	1,230
14	1,000	918	-				-	3,790	8,650	3,180	1,410	1,180
15	997	890	-				-	4,590	8,500	3,110	1,400	1,160
16	986	843	-				-	5,170	8,830	2,960	1,400	1,130
17	999	841	-				-	5,840	9,020	2,800	1,330	1,090
18	999	831	-				-	5,640	8,950	2,660	1,310	1,100
19	974	835	-				-	5,250	8,130	2,540	1,270	1,140
20	990	848	-				-	5,170	7,060	2,470	1,250	1,250
21	1,020	844	-				-	5,180	6,520	2,370	1,250	1,200
22	998	826	-				-	4,690	6,240	2,330	1,230	1,200
23	982	775	-				-	4,340	6,370	2,170	1,200	1,220
24	990	825	-				1,090	4,290	6,250	2,050	1,180	1,180
25	977	842	-				1,170	4,350	5,720	1,960	1,170	1,190
26	963	794	-				1,160	4,400	5,230	1,910	1,130	1,180
27	980	840	-				1,180	4,820	4,710	1,860	1,110	1,210
28	907	849	-				1,390	5,690	4,530	1,810	1,090	1,240
29	778	852	-				1,850	7,030	4,590	1,750	1,070	1,170
30	839	836	-		------		1,710	8,680	4,920	1,720	1,080	1,150
31	939	------			------		------	10,300	------	1,720	1,080	------
TOTAL	30,950	25,716	-				-	133,090	276,760	93,560	41,120	34,360
MEAN	998	857	-				-	4,293	9,225	3,018	1,326	1,145
MAX	1,140	931	-				-	10,300	13,800	5,030	1,690	1,270
MIN	778	775	-				-	1,540	4,530	1,720	1,070	1,020
CFSM	.55	.48	-				-	2.39	5.13	1.68	.74	.64
IN.	.64	.53	-				-	2.75	5.72	1.93	.85	.71
AC-FT	61,390	51,010	-				-	264,000	549,000	185,600	81,560	68,150

13302000 Pahsimeroi River near May, Idaho

LOCATION.--Lat 44°41'23", long 114°02'40", in SE¼NW¼ sec.25, T.16 N., R.20 E., Lemhi County, on right bank on downstream side of old county road bridge approach, 0.2 mile southeast of Ellis, 10 miles northwest of May, and at mile 0.3.

DRAINAGE AREA.--845 sq mi, approximately.

PERIOD OF RECORD.--October 1929 to September 1959 (monthly discharge only, October 1929), July 1971 to June 1972 (discontinued).

GAGE.--Nonrecording gage. Datum of gage is 4,638.29 ft above mean sea level. Prior to September 30, 1959, at slightly different locations at datum 1.34 ft lower.

AVERAGE DISCHARGE.--30 years (1929-59), 212 cfs (153,000 acre-ft per year).

EXTREMES.--Maximum discharge observed during period October to June 1972, 407 cfs Feb. 29 (gage height, 1.50 ft); minimum observed, 114 cfs May 6 (gage height, 0.53 ft).
Period of record: Maximum discharge observed, 796 cfs June 8, 1957; maximum gage height observed, 5.71 ft May 25, 1956, present datum (backwater from Salmon River); minimum discharge observed, 74 cfs May 19, 1955 (gage height, 3.00 ft, present datum).

REMARKS.--Records fair. Diversions above station for irrigation of 27,000 acres of which about 24,500 acres are irrigated with surface water (1971 determination). Records of chemical analysis for the water year 1972 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	273	337	352	300	275	363	286	131	223			
2	286	340	352	304	286	340	290	131	391			
3	300	340	348	300	280	337	286	131	521			
4	318	340	348	300	260	329	286	119	458			
5	311	340	352	300	270	325	286	116	344			
6	305	333	359	293	270	344	283	114	315			
7	300	333	356	293	275	337	276	119	383			
8	293	344	315	293	286	329	267	140	700			
9	293	344	322	297	304	325	267	140	840			
10	293	344	356	297	297	325	267	138	760			
11	290	356	356	293	293	329	267	142	700			
12	286	359	318	304	283	325	267	142	580			
13	293	359	315	304	290	322	255	131	367			
14	290	363	315	293	293	322	242	131	315			
15	293	361	311	293	293	322	229	131	286			
16	307	359	311	293	311	315	226	131	270			
17	322	359	311	293	315	315	229	127	260			
18	325	356	311	297	318	307	223	125	257			
19	322	356	307	304	329	307	206	127	257			
20	322	356	307	315	322	307	197	131	260			
21	325	356	307	337	329	300	171	154	251			
22	325	352	311	352	333	293	159	161	240			
23	322	352	333	348	333	290	163	149	229			
24	325	352	344	337	329	286	161	149	217			
25	329	359	344	329	322	286	156	149	217			
26	329	359	348	325	322	290	131	147	235			
27	333	363	344	300	322	290	142	147	229			
28	333	359	322	304	348	286	127	159	223			
29	325	358	300	300	407	286	127	154	200			
30	325	356	300	283	------	286	127	145	197			
31	325	------	300	267	------	286	------	154	------			------
TOTAL	9,618	10,545	10,175	9,448	8,895	9,704	6,599	4,265	10,725			
MEAN	310	352	328	305	307	313	220	138	358			
MAX	333	363	359	352	407	363	290	161	840			
MIN	273	333	300	267	260	286	127	114	197			
AC-FT	19,080	20,920	20,180	18,740	17,640	19,250	13,090	8,460	21,270			

13302500 Salmon River at Salmon, Idaho

LOCATION.--Lat 45°11'00", long 113°53'40", in NE¼NE¼ sec.6, T.21 N., R.22 E., Lemhi County, on left bank 1,000 ft downstream from island, 0.4 mile upstream from Lemhi River, 0.5 mile downstream from highway bridge at Salmon, and at mile 258.9.

DRAINAGE AREA.--3,760 sq mi, approximately. Mean altitude, 7,380 ft.

PERIOD OF RECORD.--April 1912 to September 1916, July 1919 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 3,911.14 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 21, 1929, nonrecording gage at site 700 ft upstream at different datum.

AVERAGE DISCHARGE.--57 years, 1,965 cfs (1,424,000 acre-ft per year); 15-year base period (1952-67), 2,061 cfs.

EXTREMES.--Current year: Maximum discharge, 16,200 cfs June 8 (gage height, 7.77 ft); minimum daily, 950 cfs Dec. 9.
Period of record: Maximum discharge, 16,500 cfs May 25, 1956 (gage height, 8.25 ft); maximum gage height, 9.62 ft Jan. 8, 1942 (ice jam); minimum discharge, 242 cfs Jan. 8, 1937 (gage height, 1.50 ft).

REMARKS.--Records good except those for no gage-height record, which are fair. Diversions above station for irrigation of about 83,800 acres of which about 900 acres are by withdrawals from ground water (1966 determination). Records of chemical analysis for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1043: Drainage area. WSP 1317: 1916.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.7	824	5.0	6,040
2.0	1,050	6.0	8,940
3.0	2,120	7.0	12,500
4.0	3,800	8.0	16,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,740	1,720	1,540	1,400	1,060	1,750	1,350	1,780	12,000	5,760	2,030	1,250
2	1,820	1,700	1,460	1,480	990	1,500	1,360	1,630	13,800	5,680	2,000	1,230
3	1,820	1,680	1,360	1,370	1,020	1,350	1,340	1,650	15,100	5,470	1,920	1,200
4	1,840	1,680	1,410	1,170	1,070	1,300	1,380	1,800	14,500	5,230	1,890	1,190
5	1,810	1,680	1,450	1,000	1,130	1,290	1,430	2,200	13,800	5,020	1,850	1,190
6	1,760	1,630	1,580	1,060	1,220	1,400	1,500	2,740	13,500	4,910	1,740	1,230
7	1,730	1,540	1,540	1,150	1,340	1,500	1,590	3,240	13,900	4,820	1,680	1,280
8	1,700	1,610	1,350	1,310	1,430	1,350	1,560	3,420	15,500	4,710	1,620	1,270
9	1,670	1,650	1,320	1,520	1,380	1,300	1,510	3,460	15,700	4,520	1,600	1,240
10	1,660	1,620	1,410	1,480	1,330	1,360	1,460	3,170	15,400	4,330	1,560	1,220
11	1,640	1,620	1,430	1,420	1,270	1,470	1,440	3,040	15,200	4,000	1,550	1,300
12	1,630	1,640	1,400	1,360	1,250	1,480	1,390	3,040	14,200	3,820	1,540	1,440
13	1,610	1,670	1,380	1,290	1,280	1,480	1,370	3,240	12,300	3,670	1,530	1,480
14	1,620	1,700	1,380	1,220	1,290	1,520	1,330	3,630	10,700	3,630	1,630	1,460
15	1,670	1,670	1,390	1,160	1,320	1,540	1,300	4,490	10,200	3,590	1,680	1,440
16	1,670	1,620	1,370	1,190	1,350	1,600	1,310	5,350	10,200	3,480	1,710	1,420
17	1,700	1,590	1,400	1,200	1,400	1,700	1,310	5,990	10,500	3,310	1,650	1,360
18	1,740	1,600	1,450	1,340	1,450	1,830	1,270	6,300	10,400	3,150	1,610	1,310
19	1,730	1,560	1,440	1,520	1,490	1,800	1,260	6,040	9,970	3,030	1,530	1,320
20	1,730	1,590	1,410	1,600	1,530	1,770	1,220	5,860	8,940	3,010	1,520	1,430
21	1,750	1,590	1,430	1,640	1,600	1,700	1,220	6,090	8,030	2,940	1,530	1,500
22	1,800	1,580	1,500	1,680	1,650	1,670	1,220	5,730	7,580	2,890	1,480	1,460
23	1,760	1,540	1,600	1,620	1,690	1,760	1,220	5,250	7,430	2,700	1,470	1,450
24	1,760	1,510	1,560	1,570	1,580	1,820	1,230	5,120	7,490	2,530	1,440	1,460
25	1,760	1,590	1,430	1,500	1,440	1,790	1,310	5,120	7,120	2,420	1,430	1,460
26	1,740	1,560	1,490	1,370	1,340	1,740	1,370	5,050	6,700	2,340	1,430	1,500
27	1,650	1,550	1,470	1,220	1,410	1,660	1,350	5,280	6,120	2,230	1,400	1,510
28	1,710	1,590	1,120	1,190	1,480	1,550	1,370	5,860	5,680	2,160	1,360	1,540
29	1,620	1,580	950	1,160	1,550	1,480	1,590	7,090	5,490	2,110	1,300	1,510
30	1,560	1,580	980	1,120	------	1,420	1,950	8,590	5,610	2,030	1,290	1,470
31	1,660	------	1,200	1,080	------	1,380	------	10,300	------	1,990	1,280	------
TOTAL	53,060	48,440	43,200	41,390	39,340	48,260	41,510	141,550	323,060	111,480	49,250	41,120
MEAN	1,712	1,615	1,394	1,335	1,357	1,557	1,384	4,566	10,770	3,596	1,589	1,371
MAX	1,840	1,720	1,600	1,680	1,690	1,830	1,950	10,300	15,700	5,760	2,030	1,540
MIN	1,560	1,510	950	1,000	990	1,290	1,220	1,630	5,490	1,990	1,280	1,190
AC-FT	105,200	96,080	85,690	82,100	78,030	95,720	82,340	280,800	640,800	221,100	97,690	81,560

CAL YR 1971 TOTAL 1,039,620 MEAN 2,848 MAX 12,300 MIN 860 AC-FT 2,062,000
WTR YR 1972 TOTAL 981,660 MEAN 2,682 MAX 15,700 MIN 950 AC-FT 1,947,000

NOTE.--No gage-height record Dec. 17 to Apr. 16.

13305000 Lemhi River near Lemhi, Idaho

LOCATION.--Lat 44°56'24", long 113°38'16", in NW¼NE¼ sec.32, T.19 N., R.24 E., Lemhi County, on right bank 35 ft upstream from bridge on State Highway 28, 1.4 miles south of Tendoy, 1.8 miles upstream from Agency Creek, 6.2 miles north of Lemhi, and at mile 28.8.

DRAINAGE AREA.--895 sq mi, approximately.

PERIOD OF RECORD.--November 1938 to August 1939, April 1955 to September 1963, water years 1964-67 (annual maximum), August 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,960 ft (from topographic map). Prior to Aug. 25, 1967, at site 1.5 miles upstream at different datum. November 1938 to August 1939, nonrecording gage, Apr. 29, 1955, to Sept. 30, 1963, nonrecording gage and supplemental crest-stage gage, Oct. 1, 1963, to Aug. 24, 1967, crest-stage gage only.

AVERAGE DISCHARGE.--13 years (1955-63, 1967-72), 272 cfs (197,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,250 cfs June 9 (gage height, 5.65 ft); minimum, 116 cfs Aug. 13, (gage height, 3.22 ft).
Period of record: Maximum discharge, 1,960 cfs June 27, 1971 (gage height, 6.01 ft); minimum, 63 cfs Aug. 25, 1967 (gage height, 2.56 ft).

REMARKS.--Records good except those for periods of no gage-height record, which are fair. State Fish Hatchery on Hayden Creek several miles upstream since fall of 1966 may affect maximums and minimums. Diversions above station for irrigation of about 25,500 acres of which about 200 acres are by withdrawals from ground water (1966 determination).

REVISIONS (WATER YEARS).--WSP 1397: 1939.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	352	348	263	290	302	320	280	220	758	356	195	136
2	344	344	246	280	280	305	283	220	887	360	192	136
3	340	344	283	260	276	294	263	220	887	320	187	135
4	336	356	263	234	294	266	273	228	842	298	167	138
5	324	348	243	265	290	294	280	238	822	287	162	140
6	320	313	259	280	280	344	290	250	809	294	151	151
7	324	316	234	290	276	328	298	256	861	305	145	154
8	305	328	195	283	259	298	280	260	1,090	287	138	154
9	305	328	190	280	256	320	273	260	1,130	269	138	158
10	305	340	200	269	249	388	266	250	1,120	259	138	169
11	305	352	200	287	276	388	266	240	1,070	240	133	177
12	298	364	200	283	259	364	259	233	935	243	122	184
13	309	380	200	298	259	368	252	242	803	240	123	187
14	313	380	200	290	259	376	246	250	704	237	147	192
15	328	368	212	292	259	356	243	260	668	230	151	182
16	352	356	215	300	263	360	243	268	698	221	156	164
17	356	352	273	295	266	372	240	283	740	209	158	154
18	348	348	273	287	266	372	240	263	698	201	151	149
19	360	344	273	283	269	380	230	258	590	206	154	149
20	364	348	263	283	280	352	230	258	510	227	151	156
21	360	348	259	287	280	332	230	270	481	273	147	158
22	352	340	259	294	276	332	212	260	454	259	143	158
23	352	313	276	290	269	356	192	250	500	237	147	162
24	372	324	273	280	266	328	198	248	481	230	151	174
25	372	328	276	283	259	320	208	246	441	227	147	182
26	372	302	290	269	252	287	210	227	400	215	141	187
27	364	320	266	259	266	287	220	234	376	215	133	198
28	332	320	243	246	332	283	230	287	364	204	129	201
29	305	313	252	283	380	283	237	392	356	195	129	198
30	320	302	270	290	------	287	228	477	364	177	135	215
31	344	------	280	287	------	276	------	606	------	192	138	------
TOTAL	10,433	10,167	7,629	8,697	7,998	10,216	7,400	8,454	20,839	7,713	4,599	4,998
MEAN	337	339	246	281	276	330	247	273	695	249	148	167
MAX	372	380	290	300	380	388	298	606	1,130	360	195	215
MIN	298	302	190	234	249	266	192	220	356	177	122	135
AC-FT	20,690	20,170	15,130	17,250	15,860	20,260	14,680	16,770	41,330	15,300	9,120	9,910

CAL YR 1971 TOTAL 126,007 MEAN 345 MAX 1,670 MIN 134 AC-FT 249,900
WTR YR 1972 TOTAL 109,143 MEAN 298 MAX 1,130 MIN 122 AC-FT 216,500

NOTE.--No gage-height record Apr. 24 to May 24.

13306500 Panther Creek near Shoup, Idaho

LOCATION.--Lat 45°18'22", long 114°23'31", in sec.19, T.23 N., R.18 E., Lemhi County, Salmon National Forest, on right bank 100 ft downstream from bridge on private road, at mile 1.0, and 7 miles southwest of Shoup.

DRAINAGE AREA.--529 sq mi. Mean altitude, 7,030 ft.

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,264.96 ft above mean sea level, unadjusted (planetable survey). Prior to Nov. 6, 1959, nonrecording gage 75 ft upstream at datum 0.94 ft higher.

AVERAGE DISCHARGE.--28 years, 257 cfs (6.60 inches per year, 184,700 acre-ft per year); 15-year base period (1952-67), 250 cfs.

EXTREMES.--Current year: Maximum discharge, 2,720 cfs June 2 (gage height, 5.63 ft); minimum daily, 49 cfs Jan. 28.
Period of record: Maximum discharge, 3,030 cfs May 13, 1971 (gage height, 5.86 ft); minimum observed, 22 cfs Nov. 17, 1958 (gage height, 0.57 ft, present datum).

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 1,100 acres (1966 determination).

REVISIONS (WATER YEARS).--WSP 1063: 1945. WRD Idaho 1970: 1965(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 10 to Dec. 2, July 25-27; stage-discharge relation affected by ice Dec. 3 to Jan. 31, Feb. 20 to Mar. 9)

0.7	43	3.0	763
1.0	80	4.0	1,410
1.5	178	5.0	2,160
2.0	327	6.0	3,100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	147	103	81	52	92	157	257	2,480	490	190	122
2	149	144	80	84	50	86	164	254	2,540	461	190	118
3	147	142	110	80	50	82	169	251	2,450	440	178	116
4	147	144	100	73	52	78	173	327	2,210	411	173	114
5	147	136	102	72	52	83	180	353	2,090	399	166	114
6	144	96	110	74	55	92	208	424	2,110	425	160	132
7	140	142	94	74	60	88	219	465	2,160	419	157	126
8	136	166	80	74	62	100	208	503	2,240	384	155	118
9	132	142	78	80	60	117	200	495	2,210	360	149	114
10	132	144	78	80	55	140	190	465	2,090	346	149	114
11	132	147	82	84	52	164	186	428	1,920	324	151	114
12	126	151	78	84	54	157	188	411	1,610	310	142	136
13	126	160	75	80	60	164	176	440	1,430	292	142	122
14	134	149	75	76	60	169	166	582	1,230	286	157	114
15	134	140	80	76	60	169	160	823	1,170	279	169	110
16	134	124	84	72	64	180	162	1,060	1,190	270	157	107
17	136	140	85	79	64	208	155	1,210	1,170	257	144	103
18	136	132	87	84	70	227	151	1,150	1,090	248	134	101
19	136	134	84	90	70	227	138	1,050	959	248	132	112
20	138	136	84	92	75	208	151	1,050	840	270	136	124
21	142	136	84	92	75	198	149	1,140	785	270	138	116
22	140	134	84	90	74	206	153	1,030	727	260	134	118
23	140	109	90	88	74	257	151	978	707	245	164	116
24	140	138	90	82	74	230	169	978	627	230	149	116
25	140	138	88	70	72	216	198	940	641	225	144	120
26	140	118	88	60	72	180	188	934	600	214	136	116
27	142	138	85	52	75	183	196	1,020	555	211	130	120
28	110	134	72	49	94	166	245	1,240	516	200	126	118
29	80	132	80	52	108	166	342	1,580	508	193	126	116
30	126	130	80	52	------	166	292	1,920	512	188	144	116
31	157	------	80	52	------	151	------	2,270	------	188	130	------
TOTAL	4,216	4,123	2,670	2,328	1,895	4,950	5,584	26,028	41,367	9,343	4,652	3,503
MEAN	136	137	86.1	75.1	65.3	160	186	840	1,379	301	150	117
MAX	157	166	110	92	108	257	342	2,270	2,540	490	190	136
MIN	80	96	72	49	50	78	138	251	508	188	126	101
CFSM	.26	.26	.16	.14	.12	.30	.35	1.59	2.61	.57	.28	.22
IN.	.30	.29	.19	.16	.13	.35	.39	1.83	2.91	.66	.33	.25
AC-FT	8,360	8,180	5,300	4,620	3,760	9,820	11,080	51,630	82,050	18,530	9,230	6,950

CAL YR 1971 TOTAL 159,324 MEAN 437 MAX 2,850 MIN 72 CFSM .83 IN 11.20 AC-FT 316,000
WTR YR 1972 TOTAL 110,659 MEAN 302 MAX 2,540 MIN 49 CFSM .57 IN 7.78 AC-FT 219,500

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-13-71	2330	5.12	2,320	5-17-72	0600	3.78	1,240
5-31-71	0230	5.86	3,030	6- 2-72	0500	5.63	2,720
6- 9-71	0600	5.48	2,650				

13307000 Salmon River near Shoup, Idaho

LOCATION.--Lat 45°19'20", long 114°26'23", in NE¼SW¼ sec.14, T.23 N., R.17 E., Lemhi County, Salmon National Forest, on right bank 0.6 mile upstream from Owl Creek, 2.3 miles downstream from Panther Creek, 9 miles southwest of Shoup, and at mile 207.8.

DRAINAGE AREA.--6,270 sq mi, approximately. Mean altitude, 7,140 ft.

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,153.7 ft above mean sea level, unadjusted. Prior to Sept. 18, 1951, nonrecording gage at different sites approximately 1.3 miles upstream at different datums.

AVERAGE DISCHARGE.--28 years, 3,058 cfs (2,216,000 acre-ft per year); 15-year base period (1952-67), 2,941 cfs.

EXTREMES.--Current year: Maximum discharge, 22,200 cfs June 10 (gage height, 12.23 ft); minimum, 1,280 cfs Dec. 29 (gage height, 2.19 ft).
Period of record: Maximum discharge, 24,900 cfs May 26, 1956 (gage height, 13.00 ft); minimum, 710 cfs Aug. 20, 21, 1966.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 149,000 acres of which about 1,200 acres are by withdrawals from ground water (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Aug. 23 to Sept. 30; stage-discharge relation affected by ice Dec. 3-16, 18-20, Jan. 1, 7-16, 18-20, Jan. 23 to Mar. 3)

2.2	1,300	7.0	9,200
3.0	2,200	9.0	13,900
4.0	3,560	11.0	19,000
5.0	5,230	12.1	21,900

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,370	2,390	2,120	2,340	1,700	6,240	2,260	2,830	17,800	7,250	2,610	1,680
2	2,510	2,390	1,890	2,490	1,600	4,600	2,260	2,610	19,700	7,160	2,650	1,670
3	2,540	2,370	1,750	2,430	1,640	3,280	2,260	2,470	20,800	6,960	2,570	1,620
4	2,530	2,360	1,790	1,860	1,680	2,380	2,290	2,650	20,600	6,640	2,500	1,570
5	2,530	2,340	1,820	1,580	1,800	2,170	2,360	2,970	19,400	6,350	2,430	1,540
6	2,480	2,260	2,000	1,740	2,030	2,310	2,460	3,520	18,700	6,210	2,350	1,620
7	2,430	2,160	1,900	2,200	2,180	2,490	2,580	4,160	18,900	6,090	2,270	1,710
8	2,410	2,190	1,880	2,480	2,400	2,190	2,620	4,550	20,300	5,890	2,210	1,720
9	2,360	2,270	1,790	2,600	2,300	2,120	2,540	4,720	21,900	5,620	2,140	1,670
10	2,340	2,270	2,150	2,500	2,240	2,190	2,460	4,500	21,800	5,450	2,100	1,640
11	2,320	2,280	2,500	2,370	2,170	2,410	2,390	4,240	21,300	5,110	2,080	1,700
12	2,280	2,310	2,400	2,300	2,100	2,440	2,370	4,120	20,200	4,820	2,040	1,920
13	2,240	2,360	2,370	2,220	2,130	2,440	2,310	4,280	17,700	4,590	2,010	2,040
14	2,270	2,390	2,440	2,090	2,210	2,510	2,230	4,760	15,400	4,470	2,090	2,030
15	2,290	2,370	2,410	1,850	2,280	2,560	2,140	5,880	14,100	4,400	2,230	1,980
16	2,360	2,290	2,470	1,900	2,330	2,580	2,120	7,320	14,000	4,300	2,250	1,970
17	2,380	2,260	2,410	1,910	2,380	2,670	2,090	8,480	14,200	4,130	2,230	1,910
18	2,420	2,210	2,580	2,200	2,420	2,800	2,060	9,220	14,100	3,890	2,150	1,800
19	2,430	2,220	2,610	2,520	2,490	2,940	2,000	8,870	13,600	3,720	2,080	1,730
20	2,420	2,190	2,550	2,680	2,550	2,880	1,970	8,630	12,100	3,750	2,030	1,800
21	2,460	2,220	2,560	2,840	2,700	2,760	1,930	9,140	10,800	3,730	2,040	1,940
22	2,470	2,210	2,670	2,880	2,780	2,700	1,910	8,960	10,100	3,780	2,020	1,940
23	2,470	2,160	2,710	2,750	2,820	2,840	1,890	8,240	9,720	3,640	2,020	1,880
24	2,460	2,130	2,680	2,670	2,700	2,940	1,930	7,860	9,800	3,400	1,990	1,910
25	2,470	2,160	2,480	2,520	2,500	2,900	2,020	7,760	9,440	3,240	1,950	1,950
26	2,440	2,170	2,590	2,260	2,300	2,710	2,110	7,620	8,970	3,090	1,920	2,000
27	2,410	2,180	2,510	1,940	2,500	2,530	2,110	7,820	8,260	2,990	1,860	2,060
28	2,330	2,170	1,820	1,900	2,750	2,420	2,170	8,770	7,490	2,910	1,820	2,040
29	2,220	2,180	1,420	1,870	4,800	2,410	2,470	10,600	7,130	2,830	1,770	2,100
30	2,180	2,180	1,490	1,810	------	2,330	2,830	13,000	7,100	2,700	1,750	2,010
31	2,230	------	2,000	1,720	------	2,280	------	15,500	------	2,600	1,740	------
TOTAL	74,050	67,640	68,760	69,420	68,480	85,020	67,140	206,050	445,410	141,710	65,900	55,150
MEAN	2,389	2,255	2,218	2,239	2,361	2,743	2,238	6,647	14,850	4,571	2,126	1,838
MAX	2,540	2,390	2,710	2,880	4,800	6,240	2,830	15,500	21,900	7,250	2,650	2,100
MIN	2,180	2,130	1,420	1,580	1,600	2,120	1,890	2,470	7,100	2,600	1,740	1,540
AC-FT	146,900	134,200	136,400	137,700	135,800	168,600	133,200	408,700	883,500	281,100	130,700	109,400

CAL YR 1971 TOTAL 1,566,510 MEAN 4,292 MAX 17,900 MIN 1,320 AC-FT 3,107,000
WTR YR 1972 TOTAL 1,414,730 MEAN 3,865 MAX 21,900 MIN 1,420 AC-FT 2,806,000

13308500 Middle Fork Salmon River near Cape Horn, Idaho

LOCATION.--Lat 44°24'30",, long 115°10'20", in NW¼ sec.3, T.12 N., R.11 E., Custer County, Challis National Forest, on left bank 1,100 ft downstream from Little Beaver Creek, 0.5 mile downstream from confluence of Marsh and Beaver Creeks, 2 miles northwest of Cape Horn, and at mile 110.3.

DRAINAGE AREA.--138 sq mi. Mean altitude, 7,370 ft.

PERIOD OF RECORD.--September 1928 to June 1972 (discontinued). Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 6,435 ft (by barometer).

AVERAGE DISCHARGE.--43 years (1928-71), 241 cfs (23.72 inches per year, 174,600 acre-ft per year); 15-year base peri period (1952-67), 250 cfs.

EXTREMES.--Maximum discharge during period (also maximum for water year) October 1971 to June 1972, 2,420 cfs May 31 (gage height, 6.43 ft); minimum daily, 56 cfs Feb. 10; minimum gage height, 2.33 ft Nov. 23.
Period of record: Maximum discharge, 2,980 cfs May 24, 1956 (gage height, 6.96 ft); minimum recorded, 31 cfs Apr. 14, 1945 (gage height, 2.12 ft).

REMARKS.--Records good except those for winter period, which are poor. No diversion above station.

REVISIONS.--WSP 738: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Oct. 28-30, Nov. 2-9, 26, 27, Dec. 1 to Jan. 31)

2.3	48	4.0	560
2.6	98	5.0	1,140
3.0	190	6.0	1,940
3.5	350	6.6	2,560

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	105	81	81	64	72	76	167	2,240	633		
2	130	103	74	76	56	72	80	212	2,080	580		
3	132	105	96	67	63	72	83	270	2,020	539		
4	129	102	90	69	66	66	86	329	2,040	529		
5	125	93	89	83	63	65	90	344	2,140	506		
6	121	85	89	84	64	66	98	341	2,200	477		
7	118	103	66	82	64	63	102	322	2,180	445		
8	115	110	64	78	62	63	98	312	2,130	426		
9	114	107	87	78	60	64	96	316	2,160	396		
10	112	98	89	76	56	66	95	357	1,850	375		
11	110	99	87	75	59	72	94	400	1,590	356		
12	109	105	85	76	60	74	87	507	1,440	340		
13	110	105	87	73	60	76	90	665	1,470	324		
14	117	102	86	70	58	76	89	832	1,570	310		
15	110	98	86	76	59	73	81	994	1,540	296		
16	114	91	82	74	59	74	83	1,000	1,490	282		
17	114	97	86	78	59	76	80	994	1,320	271		
18	109	93	88	79	60	82	84	916	1,130	-		
19	114	93	85	82	60	83	82	922	1,060	-		
20	125	93	85	85	62	81	81	880	1,030	-		
21	124	91	85	90	60	77	78	856	1,040	-		
22	115	88	86	84	62	81	83	856	988	-		
23	114	87	88	80	60	84	87	922	910	-		
24	113	92	79	76	58	85	86	970	844	-		
25	108	88	86	77	57	82	89	1,040	737	-		
26	113	90	84	77	57	78	104	1,190	707	-		
27	111	94	76	67	65	78	140	1,400	713	-		
28	93	94	58	70	83	80	136	1,640	741	-		
29	77	92	73	68	88	77	132	1,900	726	-		
30	100	89	84	61	------	75	144	2,170	692	-		
31	107	------	81	63	------	73	------	2,280	------			------
TOTAL	3,539	2,892	2,562	2,355	1,804	2,306	2,834	26,304	42,778	-		
MEAN	114	96.4	82.6	76.0	62.2	74.4	94.5	849	1,426	-		
MAX	136	110	96	90	88	85	144	2,280	2,240	-		
MIN	77	85	58	61	56	63	76	167	692	-		
CFSM	.14	.12	.10	.09	.07	.09	.11	1.02	1.72	-		
IN.	.16	.13	.11	.11	.08	.10	.13	1.18	1.92	-		
AC-FT	7,020	5,740	5,080	4,670	3,580	4,570	5,620	52,170	84,850	-		

PEAK DISCHARGE (BASE, 930 CFS).--May 31 (0700) 2,420 cfs (6.43 ft).

13310700 South Fork Salmon River near Krassel ranger station, Idaho

LOCATION.--Lat 44°59'30", long 115°43'30", in NE¼ sec.16, T.19 N., R.6 E., Valley County, Payette National Forest, on right bank 0.6 mile upstream from Fitsum Creek, 1.4 miles downstream from Krassel ranger station, 2 miles upstream from mouth of East Fork of South Fork Salmon River, 20 miles east of McCall, and at mile 39.2.

DRAINAGE AREA.--330 sq mi, approximately.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,750 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 604 cfs (24.85 inches per year, 437,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,630 cfs June 10 (gage height, 8.83 ft); minimum, 83 cfs Oct. 29 (gage height, 1.59 ft).
Period of record: Maximum discharge, 5,630 cfs June 10, 1972 (gage height, 8.83 ft); minimum, 71 cfs Nov. 28, 1969 (gage height, 1.48 ft), result of freezeup.
Flood of May 28, 1948, reached a discharge of 5,200 cfs by slope-area measurement at site 2.3 miles upstream.

REMARKS.--Records good except those for winter period, which are fair.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Oct. 29, 30, Nov. 5-9, Dec. 8-21, 27-30, Jan. 1 to Feb. 14)

1.6	87	4.0	920
2.0	163	5.0	1,540
2.5	290	6.0	2,340
3.0	454	7.0	3,370
3.5	664	9.0	5,930

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	161	127	159	104	473	358	678	4,910	1,280	286	154
2	163	161	114	160	90	364	368	702	4,850	1,180	271	150
3	161	154	163	134	100	368	401	777	4,540	1,080	261	147
4	161	154	159	137	110	320	429	980	4,120	999	252	145
5	159	142	148	165	143	290	462	1,160	3,890	959	245	145
6	154	118	156	168	140	299	698	1,320	3,920	935	236	171
7	150	150	112	163	145	302	737	1,430	3,930	918	228	165
8	143	165	118	159	145	290	655	1,450	4,920	841	222	152
9	139	160	150	159	142	293	592	1,340	4,920	777	216	146
10	137	159	160	154	130	364	557	1,240	5,230	711	214	143
11	135	156	154	151	138	492	532	1,200	4,500	650	210	147
12	135	172	153	152	146	516	532	1,260	3,360	616	202	164
13	133	177	158	145	153	557	496	1,400	2,890	588	196	179
14	135	161	154	140	142	641	454	1,720	2,660	561	196	166
15	139	150	157	152	141	574	436	2,160	2,890	529	230	155
16	139	139	150	149	141	570	454	2,610	3,000	497	235	148
17	139	139	164	156	145	618	443	2,760	2,760	474	209	142
18	141	139	169	158	154	712	422	2,790	2,590	450	198	139
19	148	137	166	163	163	707	401	2,470	2,150	445	193	144
20	179	139	165	165	181	623	408	2,270	1,920	477	189	155
21	179	139	170	175	203	570	422	2,200	1,880	440	188	146
22	161	137	170	160	222	566	440	2,050	1,810	426	182	151
23	156	127	172	148	215	678	432	1,990	1,830	392	178	149
24	159	137	168	138	193	646	484	1,910	1,680	370	175	144
25	152	143	168	134	179	578	492	1,880	1,550	355	174	153
26	150	139	152	129	170	496	473	1,930	1,410	339	170	156
27	154	139	142	116	254	454	500	2,100	1,280	324	165	156
28	127	148	130	118	570	432	632	2,470	1,280	311	161	156
29	108	150	120	115	742	391	849	3,070	1,340	298	171	148
30	155	143	162	102	------	371	747	3,790	1,370	291	169	145
31	170	------	156	106	------	354	------	4,380	------	290	159	------
TOTAL	4,629	4,435	4,707	4,530	5,501	14,909	15,306	59,487	89,380	18,803	6,381	4,561
MEAN	149	148	152	146	190	481	510	1,919	2,979	607	206	152
MAX	179	177	172	175	742	712	849	4,380	5,230	1,280	286	179
MIN	108	118	112	102	90	290	358	678	1,280	290	159	139
CFSM	.45	.45	.46	.44	.58	1.46	1.55	5.82	9.03	1.84	.62	.46
IN.	.52	.50	.53	.51	.62	1.68	1.73	6.71	10.08	2.12	.72	.51
AC-FT	9,180	8,800	9,340	8,990	10,910	29,570	30,360	118,000	177,300	37,300	12,660	9,050

CAL YR 1971 TOTAL 288,911 MEAN 792 MAX 4,670 MIN 108 CFSM 2.40 IN 32.57 AC-FT 573,100
WTR YR 1972 TOTAL 232,629 MEAN 636 MAX 5,230 MIN 90 CFSM 1.93 IN 26.22 AC-FT 461,400

PEAK DISCHARGE (BASE, 1,500 CFS).--May 18 (0430) 2,940 cfs (6.57 ft); June 10 (0745) 5,630 cfs (8.83 ft).

13313000 Johnson Creek at Yellow Pine, Idaho

LOCATION.--Lat 44°57'44", long 115°29'58", in NE¼ sec.29, T.19 N., R.8 E., Valley County, Boise National Forest, on right bank 700 ft upstream from mouth and 0.2 mile southwest of Yellow Pine.

DRAINAGE AREA.--213 sq mi. Mean altitude, 7,170 ft.

PERIOD OF RECORD.--August 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,657.70 ft above mean sea level.

AVERAGE DISCHARGE.--44 years, 350 cfs (23.31 inches per year, 253,600 acre-ft per year); 15-year base period (1952-67), 371 cfs.

EXTREMES.--Current year: Maximum discharge, 4,510 cfs June 2 (gage height, 7.10 ft); minimum, 44 cfs Oct. 29 (gage height, 0.94 ft).
Period of record: Maximum discharge, 5,440 cfs May 27, 1956 (gage height, 7.64 ft); minimum, 21 cfs Nov. 30, 1954 (gage height, 0.66 ft).

REMARKS.--Records good. Small diversion from Johnson Creek basin to Deadwood River basin (see REMARKS for sta 13236000).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

1.0	49	4.0	1,440
1.5	138	5.0	2,260
2.0	296	6.0	3,270
2.5	509	7.0	4,390
3.0	769		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	101	72	82	65	75	121	223	4,010	1,050	204	99
2	114	95	66	84	56	74	124	240	3,950	950	194	97
3	116	99	95	66	63	74	126	267	3,710	863	185	93
4	116	99	87	69	65	68	133	364	3,390	804	180	93
5	114	86	89	84	63	66	141	472	3,300	769	171	95
6	110	74	87	84	63	68	174	577	3,340	741	162	114
7	105	87	65	84	65	65	182	643	3,350	735	157	105
8	103	97	62	80	62	65	177	649	3,620	659	152	99
9	99	93	86	80	59	68	171	602	3,590	607	149	93
10	99	95	86	79	56	75	168	567	3,750	567	146	93
11	97	95	84	77	58	86	168	552	3,310	523	141	99
12	95	105	84	77	61	86	165	612	2,480	495	136	121
13	95	108	84	72	61	95	149	741	2,220	468	131	124
14	99	101	82	71	58	105	146	1,000	2,130	441	133	112
15	99	97	84	75	59	101	143	1,330	2,390	410	138	101
16	97	84	80	75	59	105	146	1,640	2,390	385	138	95
17	97	95	86	79	59	116	136	1,820	2,240	360	131	91
18	95	91	86	80	59	133	133	1,880	2,100	339	126	89
19	99	89	84	84	58	136	126	1,620	1,790	335	124	95
20	110	89	84	86	62	131	131	1,550	1,630	356	124	103
21	108	91	84	91	61	126	136	1,580	1,610	335	126	97
22	103	87	86	84	61	131	128	1,460	1,550	327	119	103
23	105	80	87	80	59	157	128	1,440	1,560	300	116	101
24	105	91	75	74	58	154	141	1,480	1,410	278	119	101
25	101	89	86	75	57	152	141	1,540	1,340	264	112	101
26	101	87	84	75	57	133	136	1,650	1,210	250	110	101
27	99	91	74	68	69	131	143	1,870	1,100	236	105	103
28	74	91	56	69	93	133	171	2,270	1,110	226	101	101
29	63	91	75	69	95	128	226	2,750	1,140	216	119	97
30	93	89	84	62	------	124	226	3,200	1,140	207	112	95
31	103	------	82	65	------	121	------	3,560	------	210	105	------
TOTAL	3,128	2,767	2,506	2,380	1,821	3,282	4,536	40,149	71,860	14,706	4,266	3,011
MEAN	101	92.2	80.8	76.8	62.8	106	151	1,295	2,395	474	138	100
MAX	116	108	95	91	95	157	226	3,560	4,010	1,050	204	124
MIN	63	74	56	62	56	65	121	223	1,100	207	101	89
AC-FT	6,200	5,490	4,970	4,720	3,610	6,510	9,000	79,640	142,500	29,170	8,460	5,970

CAL YR 1971 TOTAL 188,674 MEAN 517 MAX 3,410 MIN 56 AC-FT 374,200
WTR YR 1972 TOTAL 154,412 MEAN 422 MAX 4,010 MIN 56 AC-FT 306,300

PEAK DISCHARGE (BASE, 1,800 CFS).--June 2 (0200) 4,510 cfs (7.10 ft).

13316500 Little Salmon River at Riggins, Idaho

LOCATION.--Lat 45°24'47", long 116°19'29", SE¼SW¼ sec.15, T.24 N., R.1 E., Idaho County, on right bank 250 ft upstream from highway bridge, at mile 0.5, and 0.8 mile southwest of Riggins.

DRAINAGE AREA.--576 sq mi. Mean altitude, 5,430 ft.

PERIOD OF RECORD.--February 1951 to February 1955, September 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,760 ft (from topographic map). Prior to Feb. 25, 1966, at datum 5.00 ft higher.

AVERAGE DISCHARGE.--19 years (1951-54, 1956-72), 845 cfs (612,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,760 cfs June 1 (gage height, 9.46 ft); minimum, 162 cfs Dec. 8 (gage height, 3.03 ft).
Period of record: Maximum discharge, 7,500 cfs May 28, 1971; maximum gage height, 12.39 ft (present datum) June 13, 1953; minimum discharge observed, 110 cfs Oct. 25, 1961 (gage height, 5.41 ft, present datum).
Flood about June 1, 1948, reached an undetermined stage (discharge, 9,200 cfs by slope-area measurement).

REMARKS.--Records good. Diversions above station for irrigation of about 15,300 acres (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Nov. 7, May 16 to July 23)

Oct. 1-27		Oct. 28 to Sept. 30			
4.0	202	3.0	153	6.0	2,100
4.4	330	3.5	330	7.0	3,190
		4.0	560	8.8	5,680
		5.0	1,220		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	278	282	215	247	286	1,360	727	1,110	5,670	1,570	331	200
2	271	282	196	243	247	1,010	746	1,110	5,380	1,400	305	199
3	268	278	219	209	250	937	768	1,230	5,130	1,240	294	198
4	268	278	222	196	262	824	807	1,470	4,840	1,110	281	197
5	264	258	212	229	278	710	877	1,770	4,470	1,080	277	193
6	258	236	229	243	278	656	1,200	1,950	4,750	1,050	267	215
7	258	258	205	240	262	728	1,340	2,110	4,740	1,000	263	225
8	252	262	174	226	254	662	1,250	2,270	5,200	916	255	225
9	249	262	212	229	247	632	1,130	2,090	5,010	874	251	221
10	246	266	236	226	240	770	1,060	1,870	5,260	824	246	219
11	242	262	240	229	233	1,130	1,010	1,740	4,300	782	236	222
12	239	274	236	240	236	1,320	1,120	1,730	3,380	740	233	305
13	239	294	233	240	243	1,500	1,070	1,960	3,010	692	233	361
14	239	290	229	229	233	1,960	965	2,500	2,990	632	235	318
15	242	270	229	233	233	1,750	909	3,000	3,250	584	282	289
16	242	254	226	226	236	1,630	923	3,360	3,480	536	305	273
17	242	243	226	233	250	1,680	930	3,760	3,200	507	280	251
18	242	240	226	236	270	1,850	867	3,320	2,830	483	263	244
19	255	233	219	254	290	1,990	824	2,830	2,400	458	254	241
20	287	233	219	366	310	1,730	812	2,860	2,240	463	248	240
21	284	233	222	782	322	1,570	824	2,910	2,190	462	242	235
22	268	229	247	818	366	1,410	854	2,770	2,120	472	239	243
23	268	222	294	722	386	1,490	867	2,620	2,150	436	241	231
24	268	229	282	566	370	1,400	916	2,510	1,980	406	239	231
25	261	236	282	505	346	1,270	930	2,380	1,940	387	237	232
26	255	236	282	415	330	1,090	909	2,410	1,720	369	236	229
27	249	243	262	338	402	975	958	2,680	1,560	342	229	235
28	236	236	205	350	794	892	1,110	3,190	1,640	334	219	232
29	219	236	236	358	1,360	812	1,270	4,000	1,770	321	220	226
30	274	233	258	318	------	755	1,200	4,630	1,720	319	206	221
31	286	------	258	298	------	723	------	5,160	------	312	200	------
TOTAL	7,949	7,588	7,231	10,244	9,814	37,216	29,173	79,300	100,320	21,101	7,847	7,151
MEAN	256	253	233	330	338	1,201	972	2,558	3,344	681	253	238
MAX	287	294	294	818	1,360	1,990	1,340	5,160	5,670	1,570	331	361
MIN	219	222	174	196	233	632	727	1,110	1,560	312	200	193
AC-FT	15,770	15,050	14,340	20,320	19,470	73,820	57,860	157,300	199,000	41,850	15,560	14,180

CAL YR 1971 TOTAL 424,031 MEAN 1,162 MAX 6,700 MIN 174 AC-FT 841,100
WTR YR 1972 TOTAL 324,934 MEAN 888 MAX 5,670 MIN 174 AC-FT 644,500

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-14	1145	6.05	2,150	6- 1	2330	9.46	6,760
5-17	2345	8.00	4,330				

13317000 Salmon River at White Bird, Idaho

LOCATION.--Lat 45°45'01", long 116°19'23", in NE¼NW¼SW¼ sec.22, T.28 N., R.1 E., Idaho County, on left bank 0.1 mile upstream from White Bird Creek, 0.6 mile downstream from Canfield-Joseph highway bridge, 1 mile southwest of White Bird, and at mile 53.7. Records include flow of White Bird Creek.

DRAINAGE AREA.--13,550 sq mi, approximately, includes that of White Bird Creek. Mean altitude, 6,720 ft.

PERIOD OF RECORD.--August 1910 to September 1917, October 1919 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,412.65 ft above mean sea level. Aug. 18, 1910, to Sept. 30, 1917, and Oct. 1, 1919, to Sept. 13, 1920, nonrecording gages at site 600 ft downstream at different datum. Sept. 14, 1920, to Jan. 2, 1931, nonrecording gage on highway bridge 200 ft upstream at datum 10 ft higher.

AVERAGE DISCHARGE.--60 years, 11,220 cfs (11.24 inches per year, 8,129,000 acre-ft per year); 15-year base period (1952-67), 11,880 cfs.

EXTREMES.--Current year: Maximum discharge, 100,000 cfs June 2 (gage height, 32.23 ft); minimum, 3,110 cfs Dec. 30 (gage height, 11.88 ft).
Period of record: Maximum discharge, 106,000 cfs May 24, 1956 (gage height, 33.05 ft); minimum, 1,580 cfs Dec. 11, 1932 (gage height, 10.23 ft), from rating curve extended below 2,200 cfs.
Maximum stage known, about 37.5 ft, June 1894, present datum (discharge, 120,000 cfs).

REMARKS.--Records excellent except those for March to May, which are good. Diversions above station for irrigation of about 165,000 acres of which about 1,200 acres are by withdrawals from ground water (1966 determination). Records of water temperatures and chemical analysis for the water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 753: 1932. WSP 1043: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Jan. 29-31)

12.0	3,280	16.0	11,400	24.0	44,600
13.0	4,840	18.0	17,600	27.0	63,000
14.0	6,760	21.0	29,500	32.1	99,100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,780	5,550	5,160	4,050	3,600	8,980	7,460	12,600	92,200	28,500	8,050	5,150
2	5,840	5,660	4,910	4,370	3,300	7,790	7,590	11,900	98,500	27,200	8,010	5,020
3	5,910	5,570	4,440	4,640	3,320	6,800	7,720	11,900	97,700	25,500	7,830	4,970
4	5,900	5,510	4,440	4,050	3,390	6,250	7,920	13,200	92,900	23,900	7,500	4,880
5	5,950	5,510	4,690	3,700	3,720	5,930	8,270	16,400	87,000	22,700	7,220	4,810
6	5,860	5,340	4,840	3,450	4,150	5,700	9,310	19,200	86,200	22,100	7,030	4,820
7	5,780	5,000	5,040	4,050	4,360	6,010	10,900	22,800	86,100	21,600	6,820	5,070
8	5,820	4,790	4,520	4,370	4,970	6,390	11,200	25,000	88,500	20,700	6,590	5,180
9	5,700	5,240	3,880	4,840	5,130	5,930	10,700	25,200	91,500	19,300	6,430	5,040
10	5,650	5,400	3,720	5,040	4,770	6,110	10,000	23,400	92,800	18,400	6,310	4,890
11	5,640	5,380	4,580	4,910	4,500	7,520	9,550	21,500	92,900	17,200	6,210	4,880
12	5,600	5,530	4,860	4,770	4,340	9,010	9,480	20,600	82,600	16,100	6,090	5,400
13	5,580	5,720	4,770	4,670	4,260	9,600	9,310	21,500	71,300	15,200	5,930	5,890
14	5,560	5,780	4,530	4,530	4,340	10,500	8,780	26,000	62,500	14,600	5,860	5,890
15	5,600	5,720	4,700	4,290	4,520	10,500	8,320	33,100	58,400	14,000	6,030	5,660
16	5,660	5,530	4,620	4,020	4,640	10,200	8,230	42,200	60,700	13,400	6,390	5,420
17	5,800	5,340	4,670	4,080	4,760	10,800	8,160	47,900	60,400	12,900	6,410	5,290
18	5,840	5,220	4,550	4,180	4,860	12,800	7,940	50,300	58,300	12,300	6,170	5,180
19	5,860	5,200	4,860	4,500	5,060	14,000	7,590	48,100	53,000	11,700	6,030	5,090
20	5,860	5,180	4,970	5,160	5,250	13,200	7,350	44,800	47,200	11,800	5,890	5,160
21	5,880	5,180	4,860	5,840	5,440	11,900	7,430	45,300	43,500	11,800	5,840	5,360
22	5,890	5,200	4,860	6,410	5,550	11,100	7,460	45,200	40,800	11,600	5,740	5,530
23	5,840	5,160	5,160	6,330	5,680	11,400	7,430	42,300	39,900	11,200	5,760	5,610
24	5,820	5,020	5,310	5,800	5,650	12,600	7,540	40,300	38,900	10,600	5,760	5,530
25	5,740	5,040	5,060	5,330	5,380	12,200	7,980	38,200	36,600	10,200	5,700	5,480
26	5,720	5,220	4,840	5,020	5,150	11,000	8,320	37,700	34,000	9,790	5,590	5,440
27	5,700	5,270	4,980	4,500	5,020	9,790	8,520	39,400	31,400	9,330	5,480	5,510
28	5,570	5,220	4,640	3,880	5,530	8,940	9,170	44,900	29,600	9,030	5,340	5,570
29	5,200	5,200	3,990	3,800	7,870	8,380	11,000	55,300	29,000	8,750	5,290	5,530
30	4,880	5,240	3,280	3,820	------	8,050	13,000	68,100	28,900	8,450	5,200	5,530
31	4,970	------	3,580	3,650	------	7,680	------	79,600	------	8,140	5,220	------
TOTAL	176,400	159,920	143,310	142,050	138,510	287,060	263,630	1,073.9M	1,913.3M	477,990	193,720	158,780
MEAN	5,690	5,331	4,623	4,582	4,776	9,260	8,788	34,640	63,780	15,420	6,249	5,293
MAX	5,950	5,780	5,310	6,410	7,870	14,000	13,000	79,600	98,500	28,500	8,050	5,890
MIN	4,880	4,790	3,280	3,450	3,300	5,700	7,350	11,900	28,900	8,140	5,200	4,810
CFSM	.42	.39	.34	.34	.35	.68	.65	2.56	4.71	1.14	.46	.39
IN.	.48	.44	.39	.39	.38	.79	.72	2.95	5.25	1.31	.53	.44
AC-FT	349,900	317,200	284,300	281,800	274,700	569,400	522,900	2,130M	3,795M	948,100	384,200	314,900

CAL YR 1971 TOTAL 6,311,970 MEAN 17,290 MAX 88,900 MIN 3,280 CFSM 1.28 IN 17.33 AC-FT 12,520,000
WTR YR 1972 TOTAL 5,128,570 MEAN 14,010 MAX 98,500 MIN 3,280 CFSM 1.03 IN 14.08 AC-FT 10,170,000

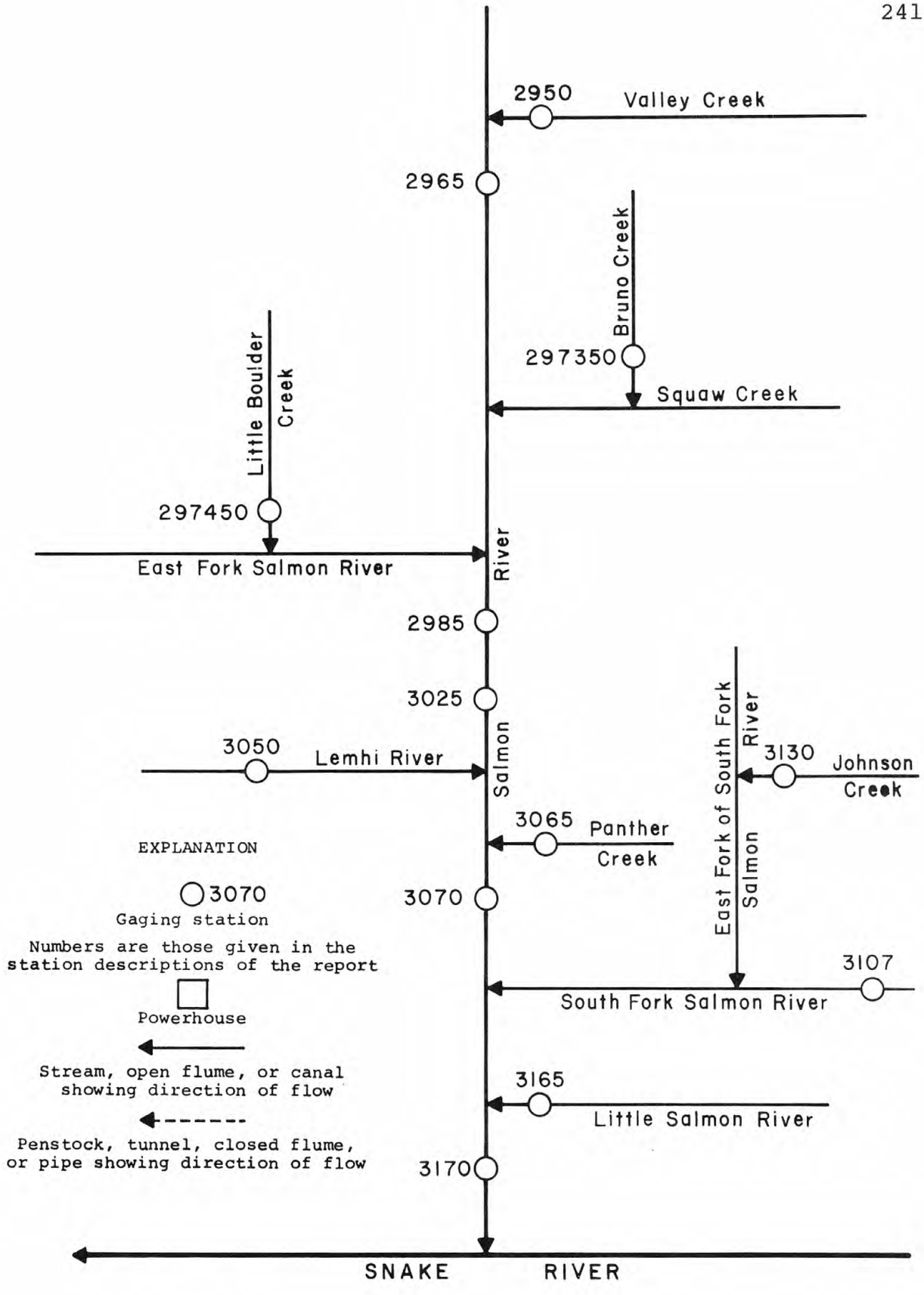


FIGURE 11. Schematic diagram showing Salmon River basin.

13334300 Snake River near Anatone, Wash.

LOCATION .--Lat 46°05'50", long 116°58'36", in SE¼NE¼ sec.12, T.7 N., R.46 E., Asotin County, on left bank 1.2 miles downstream from Grande Ronde River, 7.8 miles east of Anatone, 22 miles south of Clarkston,and at mile 167.2.

DRAINAGE AREA.--92,960 sq mi, approximately.

PERIOD OF RECORD.--July 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 806.78 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 35,820 cfs (25,950,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 138,000 cfs June 3 (gage height, 19.24 ft); minimum, 14,800 cfs Sept. 11 (gage height, 4.13 ft).
Period of record: Maximum discharge, 151,000 cfs May 29, 1971 (gage height, 19.98 ft); minimum, 6,010 cfs Sept. 2, 1958 (gage height, 1.29 ft).

REMARKS.--Records excellent. Diversions above station for irrigation of about 4,090,000 acres of which about 750,000 acres are by withdrawal from ground water. Flow regulated by many reservoirs above station with a total usable capacity of more than 10,000,000 acre-feet, the most effective of which is Brownlee Reservoir 106.3 miles upstream (see sta 13289700). Diurnal fluctuations caused by Hells Canyon powerplant. Records of water temperatures for the water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used June 1-2)

Oct. 1 to June 2				June 3 to Sept. 30			
4.0	15,600	14.0	88,100	4.0	14,200	15.0	95,000
6.0	26,600	20.0	151,000	6.0	24,800	20.0	147,400
9.0	46,000			10.0	52,200		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22,800	35,100	32,200	32,000	52,800	70,800	79,800	70,400	128,000	55,000	21,900	17,500
2	20,300	36,600	33,600	32,100	52,300	68,200	80,900	61,800	135,000	53,000	19,400	18,200
3	19,800	36,000	32,200	32,800	51,400	74,100	80,800	58,400	134,000	50,000	18,500	16,100
4	21,800	35,500	32,000	33,200	45,200	75,400	76,500	55,500	126,000	45,400	18,100	15,500
5	29,100	35,800	29,600	33,000	44,700	73,600	77,000	57,400	118,000	43,700	18,000	17,300
6	31,300	34,800	32,000	33,600	45,200	75,200	80,100	61,800	113,000	42,000	18,100	17,900
7	33,100	34,800	33,400	33,000	45,400	76,400	84,300	66,200	114,000	40,100	18,300	19,200
8	33,700	34,200	33,900	32,800	45,800	79,900	83,600	71,600	117,000	38,600	19,300	20,000
9	33,000	34,400	34,900	33,900	46,200	78,700	81,700	78,200	121,000	35,800	19,500	19,800
10	31,000	35,300	31,800	33,400	42,900	80,700	79,400	77,200	122,000	33,000	18,200	18,000
11	30,000	35,200	32,300	33,700	42,600	90,000	75,400	73,800	122,000	31,500	18,900	16,000
12	32,400	33,600	33,400	34,500	42,400	94,100	64,000	70,100	110,000	30,100	20,500	18,100
13	32,100	33,700	34,200	33,900	42,600	97,600	67,700	71,000	95,000	29,600	17,100	20,200
14	32,000	33,200	34,200	35,900	43,000	103,000	66,600	74,800	90,500	29,700	16,000	22,000
15	33,000	32,800	32,700	35,100	43,900	99,100	65,700	82,900	94,300	29,100	16,100	24,400
16	32,800	32,400	33,100	33,700	49,900	96,600	66,100	94,000	106,000	28,000	16,700	22,500
17	32,500	32,800	33,000	32,700	54,600	104,000	65,900	103,000	113,000	26,800	17,900	22,900
18	30,500	32,400	31,900	32,700	45,200	110,000	63,300	107,000	110,000	25,500	18,000	22,100
19	32,100	32,900	31,800	33,300	41,600	113,000	61,800	103,000	104,000	24,800	18,700	23,200
20	32,900	33,000	32,800	37,400	42,300	108,000	59,100	97,700	94,100	24,100	17,000	21,000
21	33,400	32,600	32,700	51,600	52,500	104,000	51,900	96,500	88,500	25,600	18,600	22,600
22	34,100	32,600	32,500	53,000	56,200	103,000	47,200	97,700	83,700	26,600	20,000	21,800
23	34,400	32,500	32,300	49,100	59,400	102,000	46,600	91,400	74,500	24,300	20,400	21,100
24	34,900	30,900	32,600	46,000	58,600	102,000	47,000	79,000	69,600	22,400	21,700	21,100
25	34,900	29,900	31,900	54,200	58,000	101,000	48,000	76,500	66,500	23,800	21,600	20,300
26	34,400	28,000	31,300	56,300	58,200	97,500	55,500	74,400	64,300	24,600	22,000	21,500
27	34,400	28,300	32,800	54,800	58,200	94,300	56,500	74,800	64,100	24,200	19,500	22,300
28	35,500	28,500	33,100	53,100	65,700	85,300	67,300	78,600	59,000	22,300	21,500	21,300
29	35,100	29,200	33,400	53,200	72,100	83,100	68,900	88,300	57,600	20,700	21,000	23,100
30	34,900	32,600	32,200	53,200	------	81,400	70,400	104,000	57,400	19,800	20,000	21,700
31	34,800	------	32,500	52,800	------	80,300	------	116,000	------	19,300	19,000	------
TOTAL	977,000	989,600	1,012.3M	1,250.0M	1,458.9M	2,802.3M	2,019.0M	2,513.0M	2,952.1M	969,400	591,500	608,700
MEAN	31,520	32,990	32,650	40,320	50,310	90,400	67,300	81,060	98,400	31,270	19,080	20,290
MAX	35,500	36,600	34,900	56,300	72,100	113,000	84,300	116,000	135,000	55,000	22,000	24,400
MIN	19,800	28,000	29,600	32,000	41,600	68,200	46,600	55,500	57,400	19,300	16,000	15,500
AC-FT	1,938M	1,963M	2,008M	2,479M	2,894M	5,558M	4,005M	4,985M	5,855M	1,923M	1,173M	1,207M

CAL YR 1971 TOTAL 20,287,900 MEAN 55,580 MAX 147,000 MIN 16,800 AC-FT 40,240,000
WTR YR 1972 TOTAL 18,143,800 MEAN 49,570 MAX 135,000 MIN 15,500 AC-FT 35,990,000

M Expressed in thousands.

13334700 Asotin Creek below Kearney Gulch, near Asotin, Wash.

LOCATION.--Lat 46°19'29", long 117°09'03", in SW¼SE¼ sec.22, T.10 N., R.45 E., Asotin County, on left bank 0.3 mile downstream from Kearney Gulch, 2.2 miles upstream from George Creek, 5.0 miles west of Asotin, and at mile 5.3.

DRAINAGE AREA.--170 sq mi.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,090 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 74.0 cfs (53,610 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 590 cfs Mar. 18 (gage height, 3.96 ft); minimum discharge, 30 cfs Sept. 3, 4 (gage height, 2.19 ft); minimum gage height, 1.83 ft Feb. 10.
Period of record: Maximum discharge, 2,720 cfs Dec. 23, 1964 (gage height, 7.95 ft, from rating curve extended above 250 cfs on basis of slope-area measurement of peak flow; minimum, 13 cfs Jan. 11, 1963 (gage height, 1.41 ft), result of freezeup.

REMARKS.--Records good. No regulation. Several diversions for irrigation. Prior to Nov. 20, 1959, at a point 3.3 miles upstream, the city of Clarkston diverted about 30 cfs for municipal use and irrigation. Natural low flows nearly equivalent to those of former station 3.3 miles upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	46	47	47	63	298	124	94	272	81	42	37
2	40	45	47	48	64	298	124	92	231	79	41	37
3	40	42	47	45	56	298	124	97	228	76	41	36
4	39	45	46	44	50	263	126	103	211	72	40	33
5	39	46	50	48	45	303	135	119	191	70	39	37
6	39	44	58	48	42	349	193	131	221	70	41	38
7	39	44	46	48	45	352	213	157	248	70	45	38
8	37	44	47	46	51	308	193	198	236	64	44	39
9	37	42	51	46	45	288	171	149	223	67	42	38
10	38	42	50	46	41	310	161	122	218	63	42	38
11	38	44	48	47	41	346	155	105	198	64	42	38
12	38	47	47	50	40	349	151	92	175	58	45	58
13	38	50	46	48	69	376	143	110	158	55	44	48
14	41	47	46	46	39	388	137	165	150	52	44	42
15	41	47	45	47	46	337	133	233	148	51	52	41
16	40	46	45	47	52	313	133	218	152	48	63	40
17	40	45	45	47	68	318	131	245	146	47	48	40
18	40	44	45	77	124	397	126	221	136	47	46	40
19	46	42	45	105	145	397	119	180	126	50	45	40
20	61	42	46	130	171	323	114	191	120	66	44	42
21	47	42	46	278	167	263	109	223	116	63	42	45
22	44	42	47	203	157	240	103	236	110	58	44	47
23	44	42	48	145	143	225	98	218	108	52	44	45
24	50	42	47	107	131	215	100	191	104	51	42	46
25	45	46	50	87	122	198	100	173	98	50	41	47
26	45	46	50	77	112	180	97	158	93	47	40	46
27	47	50	48	57	157	163	97	166	89	42	38	45
28	44	48	46	50	280	151	107	189	89	40	37	44
29	40	48	45	56	325	141	103	216	86	42	38	44
30	42	48	44	60	------	131	100	251	84	42	38	42
31	42	------	45	62	------	124	------	272	------	44	38	------
TOTAL	1,302	1,348	1,463	2,292	2,891	8,642	3,920	5,315	4,765	1,781	1,332	1,251
MEAN	42.0	44.9	47.2	73.9	99.7	279	131	171	159	57.5	43.0	41.7
MAX	61	50	58	278	325	397	213	272	272	81	63	58
MIN	37	42	44	44	39	124	97	92	84	40	37	33
AC-FT	2,580	2,670	2,900	4,550	5,730	17,140	7,780	10,540	9,450	3,530	2,640	2,480

CAL YR 1971 TOTAL 30,300 MEAN 83.0 MAX 300 MIN 35 AC-FT 60,100
WTR YR 1972 TOTAL 36,302 MEAN 99.2 MAX 397 MIN 33 AC-FT 72,010

PEAK DISCHARGE (BASE, 220 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	0515	3.74	464	5- 8	0945	3.32	331
3- 6	1015	3.38	379	5-17	1030	3.71	358
3-13	0715	3.75	510	5-20	2145	3.64	336
3-18	1100	3.96	590	6- 1	0200	3.57	314

13336500 Selway River near Lowell, Idaho

LOCATION.--Lat 46°05'12", long 115°30'46", in SE¼NE¼ sec.25, T.32 N., R.7 E., Idaho County, Nezperce National Forest, on right bank 0.2 mile upstream from O'Hara Creek, 7 miles upstream from Lowell, 7.6 miles upstream from confluence with Lochsa River, and 150.2 miles upstream from mouth of Clearwater River.

DRAINAGE AREA.--1,910 sq mi, approximately. Mean altitude, 5,640 ft.

PERIOD OF RECORD.--April 1911 to September 1912 (gage heights or fragmentary discharge records only), October 1929 to current year. Monthly discharge only for October 1929, published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 1,540 ft (from river-profile map). Apr. 11 to Sept. 2, 1911, nonrecording gage at site 2 miles downstream at different datum. Feb. 7 to Sept. 22, 1912, and Oct. 14, 1929, to Nov. 19, 1930, nonrecording gages at nearby sites at different datum.

AVERAGE DISCHARGE.--43 years (1929-72), 3,798 cfs (27.00 inches per year, 2,752,000 acre-ft per year); 15-year base period (1952-67), 3,914 cfs.

EXTREMES.--Current year: Maximum discharge, 43,400 cfs June 2 (gage height, 14.68 ft); minimum, 343 cfs Oct. 30 (gage height, 2.54 ft).
Period of record: Maximum discharge, 48,900 cfs May 29, 1948 (gage height, 16.04 ft); minimum, probably less than 100 cfs Jan. 8, 1937, during period of ice effect.

REMARKS.--Records good. Small diversions from headwaters.

REVISIONS.--WSP 1043: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 8-12, Dec. 29 to Jan. 10, Jan. 28 to Feb. 7)

2.5	343	6.0	5,630
3.0	650	8.0	12,000
3.5	1,070	10.0	20,700
4.0	1,660	12.0	30,500
5.0	3,410	14.1	41,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	610	664	637	500	700	4,420	3,630	6,090	40,800	12,200	2,050	753
2	596	630	519	540	640	3,410	4,280	5,980	39,900	10,900	1,880	730
3	590	623	458	530	620	3,130	4,420	6,140	36,300	9,690	1,770	715
4	583	664	650	480	640	2,710	4,420	7,720	33,100	9,120	1,670	700
5	570	657	630	530	680	2,500	4,370	9,350	31,700	9,050	1,580	693
6	564	532	715	600	740	3,390	5,070	11,200	32,900	9,590	1,500	730
7	557	464	583	625	840	4,280	6,220	12,100	34,200	9,520	1,430	745
8	545	570	400	620	948	3,670	5,980	13,600	35,200	8,530	1,390	708
9	538	637	425	615	903	3,210	5,560	13,700	32,800	7,900	1,330	679
10	532	637	460	610	894	3,690	5,090	12,400	32,800	6,650	1,260	672
11	525	664	560	700	885	5,610	4,800	11,400	32,800	5,980	1,230	672
12	519	722	630	800	860	6,460	4,680	11,400	24,800	5,530	1,170	834
13	545	826	650	745	1,000	6,900	4,390	13,200	20,200	5,680	1,130	885
14	693	784	657	738	1,130	7,720	4,050	17,000	17,900	5,360	1,110	769
15	630	693	672	745	1,110	7,510	3,840	23,200	19,800	5,030	1,190	715
16	577	650	664	753	1,280	7,720	4,030	27,200	22,900	4,570	1,470	679
17	557	630	672	745	1,740	9,320	3,820	28,200	23,300	4,260	1,210	657
18	557	610	686	769	1,790	9,860	3,610	26,400	21,400	3,990	1,100	643
19	577	603	686	792	1,860	9,120	3,430	23,600	17,300	3,930	1,070	672
20	700	623	686	1,060	1,940	8,060	3,370	23,600	15,200	3,820	1,040	834
21	700	643	672	1,940	1,890	7,340	3,430	25,400	15,700	3,570	1,000	877
22	643	650	657	2,140	1,770	6,820	3,410	24,100	15,200	3,490	957	868
23	610	617	686	1,500	1,720	8,150	3,310	21,400	16,100	3,130	957	894
24	630	630	672	1,170	1,570	7,930	3,780	19,900	14,800	2,950	966	868
25	617	679	637	1,010	1,430	6,900	4,220	17,500	13,200	2,920	930	851
26	657	657	637	868	1,280	5,780	4,200	15,800	12,200	2,710	894	800
27	730	679	590	686	1,500	4,980	4,500	16,900	11,000	2,580	851	769
28	596	679	417	620	3,090	4,390	5,810	21,100	10,800	2,430	826	761
29	429	679	392	640	4,980	3,990	7,660	27,600	12,400	2,280	792	738
30	393	672	415	670	------	3,630	6,900	33,400	12,800	2,160	800	722
31	623	------	460	690	------	3,490	------	38,100	------	2,060	784	------
TOTAL	18,193	19,468	18,275	25,431	40,430	176,090	136,280	564,680	699,500	171,580	37,337	22,633
MEAN	587	649	590	820	1,394	5,680	4,543	18,220	23,320	5,535	1,204	754
MAX	730	826	715	2,140	4,980	9,860	7,660	38,100	40,800	12,200	2,050	894
MIN	393	464	392	480	620	2,500	3,310	5,980	10,800	2,060	784	643
CFSM	.31	.34	.31	.43	.73	2.97	2.38	9.54	12.2	2.90	.63	.39
IN.	.35	.38	.36	.50	.79	3.43	2.65	11.00	13.62	3.34	.73	.44
AC-FT	36,090	38,610	36,250	50,440	80,190	349,300	270,300	1,120M	1,387M	340,300	74,060	44,890

CAL YR 1971 TOTAL 1,778,646 MEAN 4,873 MAX 32,800 MIN 392 CFSM 2.55 IN 34.64 AC-FT 3,528,000
WTR YR 1972 TOTAL 1,929,897 MEAN 5,273 MAX 40,800 MIN 392 CFSM 2.76 IN 37.59 AC-FT 3,828,000

PEAK DISCHARGE (BASE, 18,000 CFS).--May 17 (0430) 29,400 cfs (11.88 ft); June 2 (0230) 43,400 cfs (14.68 ft).

M Expressed in thousands.

13337000 Lochsa River near Lowell, Idaho

LOCATION.--Lat 46°09'02", long 115°35'11", in SW¼SE¼ sec.33, T.33 N., R.7 E., Idaho County, Clearwater National Forest, on right bank 0.7 mile upstream from Lowell, 0.9 mile upstream from confluence with Selway River, 1.2 miles downstream from Pete King Creek, and 19 miles east of Kooskia.

DRAINAGE AREA.--1,180 sq mi, approximately. Mean altitude, 5,250 ft.

PERIOD OF RECORD.--October 1910 to September 1912, October 1929 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 1,452.98 ft above mean sea level, unadjusted. Prior to Nov. 21, 1930, nonrecording gages at site 1 mile upstream at different datums.

AVERAGE DISCHARGE.--45 years, 2,903 cfs (33.41 inches per year, 2,103,000 acre-ft per year); 15-year base period (1952-67), 3,047 cfs.

EXTREMES.--Current year: Maximum discharge, 31,800 cfs June 2 (gage height, 13.18 ft); minimum, 284 cfs Oct. 29, 30 (gage height, 1.70 ft).
Period of record: Maximum discharge, 35,100 cfs June 8, 1964 (gage height, 13.50 ft), from rating curve extended above 17,000 cfs; minimum, probably less than 100 cfs Jan. 8, 1937, during period of ice effect.

REMARKS.--Records good.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 14 to May 25; stage-discharge relation affected by ice Dec. 8-9, Dec. 27 to Jan. 16, Jan. 28 to Feb. 5)

1.7	300	6.0	7,190
2.0	486	8.0	12,700
2.5	886	10.0	19,500
3.0	1,420	13.0	31,000
4.0	2,920		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	486	521	486	500	550	3,720	3,410	5,390	30,500	8,930	1,530	564
2	473	486	401	520	530	3,100	4,190	5,450	29,600	8,070	1,430	542
3	453	473	377	460	520	2,850	4,210	5,720	26,700	7,220	1,440	528
4	440	528	440	410	560	2,470	4,190	7,090	24,500	6,760	1,330	514
5	433	528	528	490	620	2,280	4,190	8,410	24,200	6,690	1,240	507
6	427	414	571	530	711	2,870	5,250	9,990	24,800	6,900	1,170	535
7	414	408	453	550	754	3,120	6,140	10,800	25,800	6,900	1,110	564
8	408	433	320	540	745	2,840	5,700	12,000	26,100	6,330	1,070	528
9	401	473	360	520	728	2,650	5,190	11,500	24,800	5,890	1,020	493
10	395	473	433	520	687	3,050	4,800	10,500	24,300	5,140	972	486
11	389	535	556	540	695	4,250	4,610	9,850	23,900	4,570	934	486
12	383	586	586	570	663	5,190	4,630	10,300	18,800	4,250	896	579
13	420	711	535	590	868	5,770	4,310	12,500	15,100	4,150	859	631
14	556	655	500	570	934	6,660	3,970	15,700	13,600	4,010	850	571
15	500	579	507	560	877	6,570	3,810	20,500	14,800	3,720	850	514
16	440	528	493	590	1,140	6,930	3,970	23,600	16,700	3,430	1,140	486
17	414	507	500	631	1,630	8,040	3,720	24,100	17,600	3,170	1,030	466
18	401	486	514	647	1,630	8,620	3,470	21,400	16,100	2,960	905	440
19	446	479	521	679	1,630	8,230	3,300	20,400	13,600	2,970	841	473
20	720	493	514	1,400	1,630	7,370	3,260	20,500	11,800	3,010	832	594
21	655	521	493	2,250	1,640	6,660	3,300	22,100	11,800	2,900	823	624
22	542	542	479	2,100	1,540	6,250	3,230	21,500	11,200	2,700	771	695
23	493	500	564	1,460	1,490	7,240	3,230	19,500	11,600	2,400	771	663
24	521	493	556	1,130	1,390	6,830	3,790	18,100	10,700	2,250	745	728
25	528	549	528	962	1,260	6,070	4,190	15,800	9,760	2,160	711	695
26	601	528	493	737	1,160	5,170	4,070	14,000	9,170	2,040	679	624
27	679	535	450	601	1,640	4,500	4,420	14,900	8,360	1,920	647	594
28	521	542	420	560	3,740	3,990	5,590	18,200	7,970	1,830	624	579
29	346	535	400	570	4,540	3,640	6,540	22,400	8,900	1,720	601	549
30	312	542	410	580	------	3,320	5,930	26,100	9,200	1,630	579	528
31	466	------	460	590	------	3,240	------	29,000	------	1,560	579	------
TOTAL	14,663	15,583	14,848	23,357	36,502	153,490	130,610	487,300	521,960	128,180	28,979	16,780
MEAN	473	519	479	753	1,259	4,951	4,354	15,720	17,400	4,135	935	559
MAX	720	711	586	2,250	4,540	8,620	6,540	29,000	30,500	8,930	1,530	728
MIN	312	408	320	410	520	2,280	3,230	5,390	7,970	1,560	579	440
CFSM	.40	.44	.41	.64	1.07	4.20	3.69	13.3	14.7	3.50	.79	.47
IN.	.46	.49	.47	.74	1.15	4.84	4.12	15.36	16.46	4.04	.91	.53
AC-FT	29,080	30,910	29,450	46,330	72,400	304,400	259,100	966,600	1,035M	254,200	57,480	33,280

CAL YR 1971 TOTAL 1,372,908 MEAN 3,761 MAX 24,600 MIN 312 CFSM 3.19 IN 43.28 AC-FT 2,723,000
WTR YR 1972 TOTAL 1,572,252 MEAN 4,296 MAX 30,500 MIN 312 CFSM 3.64 IN 49.57 AC-FT 3,119,000

PEAK DISCHARGE (BASE, 12,000 CFS).--May 17 (0230) 25,100 cfs (11.33 ft); June 2 (0330) 31,800 cfs (13.18 ft).

M Expressed in thousands.

13337100 Clear Creek near Kooskia, Idaho

LOCATION.--Lat 46°07'56", long 115°57'55", SE¼SE¼NW¼NW¼ sec.10, T.32 N., R.4 E., Idaho County, on left bank near upstream side of bridge, 0.1 mile upstream from mouth, 1.5 miles east of Kooskia, and 2 miles above the South Fork Clearwater River.

DRAINAGE AREA.--102 sq mi, approximately.

PERIOD OF RECORD.--March to November 1962; January to August 1968, July 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,150 ft (from topographic map). Prior to July 9, 1971, recording gage was 75 ft downstream at different datum.

EXTREMES.--Maximum discharge during period July 1971 to September 1972, 760 cfs Mar. 18 (gage height, 7.82 ft); minimum, 10 cfs Nov. 11 (gage height, 4.80 ft).
Period of record: Maximum discharge, 760 cfs Mar. 18, 1972 (gage height, 7.82 ft); minimum, 10 cfs Nov. 11, 1971; minimum gage height, 3.78 ft Sept. 26, 1962 (datum then in use).

REMARKS.--Records fair except those for August, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, 1971

DAY	JUL	AUG	SEP	DAY	JUL	AUG	SEP	DAY	JUL	AUG	SEP	DAY	JUL	AUG	SEP	DAY	JUL	AUG	SEP
1	-	39	29	7	-	36	29	13	82	25	22	19	63	22	18	25	50	27	16
2	-	39	37	8	-	33	27	14	79	24	21	20	64	21	18	26	48	25	20
3	-	39	45	9	96	31	25	15	75	24	21	21	60	21	17	27	46	22	25
4	-	36	51	10	115	30	24	16	72	23	20	22	57	24	17	28	44	21	34
5	-	36	42	11	99	28	23	17	67	23	20	23	54	28	16	29	42	20	31
6	-	36	35	12	88	26	22	18	63	22	19	24	52	32	15	30	42	19	29
																31	41	21	---
TOTAL																	-	853	768
MEAN																	-	27.5	25.6
MAX																	-	39	51
MIN																	-	19	15
CFSM																	-	.27	.25
IN																	-	.31	.28
AC-FT																	-	1,690	1,520

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	35	57	51	28	309	282	262	362	64	28	18
2	25	33	48	64	25	350	293	267	350	64	26	17
3	25	33	51	37	30	370	279	283	295	63	24	17
4	25	39	45	27	41	305	274	318	265	60	23	18
5	24	35	46	56	42	268	272	342	250	60	22	18
6	24	20	75	57	46	277	364	363	237	57	21	19
7	23	19	46	54	53	273	440	366	219	56	21	18
8	23	22	36	48	54	254	408	428	213	53	20	18
9	23	26	58	48	59	234	383	404	187	54	20	18
10	24	36	53	46	57	264	352	369	184	51	20	18
11	23	41	47	59	56	369	315	345	180	48	20	18
12	22	53	41	72	56	454	383	345	166	44	19	21
13	24	63	41	54	84	558	359	372	144	38	19	21
14	64	54	41	50	84	611	344	418	133	38	19	20
15	30	46	41	47	109	545	340	474	119	37	20	19
16	27	41	38	46	215	521	429	481	117	37	22	19
17	27	38	37	47	209	560	421	482	110	36	21	19
18	26	36	40	51	369	624	377	446	110	35	20	18
19	25	36	44	56	294	637	337	393	105	37	19	19
20	38	42	45	85	345	565	313	397	98	39	19	19
21	38	42	45	139	324	494	305	398	99	39	19	18
22	30	39	46	154	272	448	284	434	90	38	19	23
23	29	36	75	142	230	552	273	409	89	36	19	20
24	35	41	67	113	215	510	282	401	86	35	19	20
25	35	44	64	99	186	475	295	364	100	33	19	20
26	41	42	62	70	163	402	283	331	86	32	19	20
27	44	57	47	39	179	351	280	326	80	30	19	20
28	28	57	35	36	243	324	300	333	76	28	19	20
29	24	57	41	35	357	308	289	339	71	27	19	19
30	34	70	53	33	------	293	272	343	67	26	19	19
31	36	------	52	31	------	279	------	344	------	25	18	------
TOTAL	922	1,233	1,517	1,946	4,425	12,784	9,828	11,577	4,688	1,320	631	571
MEAN	29.7	41.1	48.9	62.8	153	412	328	373	156	42.6	20.4	19.0
MAX	64	70	75	154	369	637	440	482	362	64	28	23
MIN	22	19	35	27	25	234	272	262	67	25	18	17
CFSM	.29	.40	.48	.62	1.50	4.04	3.22	3.66	1.53	.42	.20	.19
IN.	.34	.45	.55	.71	1.61	4.66	3.58	4.22	1.71	.48	.23	.21
AC-FT	1,830	2,450	3,010	3,860	8,780	25,360	19,490	22,960	9,300	2,620	1,250	1,130

WTR YR 1972 TOTAL 51,442 MEAN 141 MAX 637 MIN 17 CFSM 1.38 IN 18.76 AC-FT 102,000

13337500 South Fork Clearwater River near Elk City, Idaho

LOCATION.--Lat 45°49'29", long 115°31'36", in SE¼NE¼ sec.25, T.29 N., R.7 E. (unsurveyed), Idaho County, Nezperce National Forest, on right bank just upstream from bridge on road to Orogrande, 0.2 mile upstream from Crooked River, 4.5 miles west of Elk City, and at mile 58.6.

DRAINAGE AREA.--261 sq mi. Mean altitude, 5,150 ft.

PERIOD OF RECORD.--September 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,816.27 ft above mean sea level. Prior to June 23, 1949, non-recording gage at site 24 ft downstream at datum 6.14 ft lower.

AVERAGE DISCHARGE.--28 years, 276 cfs (14.36 inches per year, 200,000 acre-ft per year); 15-year base period (1952-67), 260 cfs.

EXTREMES.--Current year: Maximum discharge, 3,220 cfs May 17 (gage height, 6.77 ft); minimum daily, 32 cfs Dec. 4-7; minimum gage height, 1.39 ft Oct. 29.
Period of record: Maximum discharge, 4,040 cfs June 8, 1964 (gage height, 7.48 ft); minimum daily, 10 cfs Nov. 28, 29, 1952.

REMARKS.--Records excellent except those for November to February, which are poor. No regulation or diversion above station except for mining operations.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Oct. 29 to Mar. 8)

1.3	23	2.5	220	4.0	930
1.6	48	3.0	394	5.0	1,630
2.0	104	3.5	645	6.5	2,980

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	40	35	46	59	126	403	828	2,040	266	115	49
2	54	41	34	47	60	124	510	876	1,900	247	92	48
3	52	42	33	48	63	122	510	1,010	1,720	235	87	46
4	52	41	32	50	64	120	525	1,300	1,540	223	84	44
5	50	40	32	53	67	120	601	1,530	1,380	212	78	44
6	49	39	32	55	69	130	864	1,790	1,300	203	74	51
7	48	40	32	57	72	140	972	1,910	1,260	217	69	48
8	47	41	33	59	76	160	828	2,330	1,230	190	67	45
9	47	44	35	60	80	200	750	2,320	1,240	182	66	44
10	46	48	38	62	85	235	673	2,080	1,150	185	63	44
11	45	51	40	62	90	314	634	1,880	1,170	172	62	45
12	45	54	43	61	93	407	645	1,860	942	165	59	89
13	46	55	45	60	98	530	574	2,040	834	153	58	75
14	73	54	47	60	102	601	510	2,400	755	146	59	58
15	62	53	48	60	108	574	489	2,760	717	140	68	52
16	54	52	50	62	112	629	546	2,930	678	134	96	50
17	53	52	51	67	116	822	465	2,950	618	127	75	48
18	52	51	52	73	122	876	428	2,780	590	125	67	46
19	54	49	53	78	126	852	407	2,350	557	144	66	60
20	60	47	54	82	130	783	428	2,160	489	182	63	92
21	72	46	54	82	133	722	479	2,100	552	185	62	74
22	65	45	53	81	134	728	465	2,050	451	170	58	89
23	64	44	52	77	134	1,150	504	1,930	479	138	60	77
24	70	43	50	72	134	918	634	1,870	428	123	62	72
25	66	41	47	69	133	761	651	1,650	442	127	59	75
26	69	40	46	67	132	612	634	1,510	398	117	56	71
27	83	39	45	64	131	515	799	1,510	362	110	52	68
28	46	38	44	60	130	446	1,080	1,630	332	102	50	66
29	40	37	44	59	128	398	1,110	1,800	303	97	52	62
30	38	36	44	58	------	362	906	1,950	282	92	69	59
31	39	------	45	58	------	366	------	2,010	------	99	55	------
TOTAL	1,697	1,343	1,343	1,949	2,981	14,843	19,024	60,094	26,139	5,008	2,103	1,791
MEAN	54.7	44.8	43.3	62.9	103	479	634	1,939	871	162	67.8	59.7
MAX	83	55	54	82	134	1,150	1,110	2,950	2,040	266	115	92
MIN	38	36	32	46	59	120	403	828	282	92	50	44
CFSM	.21	.17	.17	.24	.39	1.84	2.43	7.43	3.34	.62	.26	.23
IN.	.24	.19	.19	.28	.42	2.12	2.71	8.57	3.73	.71	.30	.26
AC-FT	3,370	2,660	2,660	3,870	5,910	29,440	37,730	119,200	51,850	9,930	4,170	3,550

CAL YR 1971 TOTAL 134,484 MEAN 368 MAX 2,890 MIN 32 CFSM 1.41 IN 19.17 AC-FT 266,700
WTR YR 1972 TOTAL 138,315 MEAN 378 MAX 2,950 MIN 32 CFSM 1.45 IN 19.71 AC-FT 274,300

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-19	0700	4.65	1,400	6- 1	0300	5.56	2,130
5-17	0200	6.77	3,220				

13338500 South Fork Clearwater River at Stites, Idaho

LOCATION.--Lat 46°05'12", long 115°58'32", in SE¼NE¼ sec.29, T.32 N., R.4 E., Idaho County, on left bank at Stites, 0.4 mile upstream from county road bridge, 0.4 mile downstream from Cottonwood Creek, and at mile 4.0.

DRAINAGE AREA.--1,150 sq mi, approximately.

PERIOD OF RECORD.--October 1910 to April 1912, October 1964 to current year. Published as "at Kooskia" 1910-12.

GAGE.--Water-stage recorder. Altitude of gage is 1,300 ft (from topographic map). October 1910 to April 1912, nonrecording gage 3.6 miles downstream at different datum.

AVERAGE DISCHARGE.--9 years (1910-1911, 1964-72), 1,109 cfs (13.10 inches per year, 803,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,560 cfs May 17 (gage height, 7.72 ft); minimum, 123 cfs Oct. 30 (gage height, 2.58 ft).
Period of record: Maximum discharge observed, 10,700 cfs May 29, 1912 (gage height, 6.00 ft, site and datum then in use); minimum, 106 cfs Nov. 29, 1969 (gage height, 2.51 ft); minimum gage height, 2.40 ft Dec. 18, 1965 (ice affected).
Flood of June 8, 1964, reached a stage of 10.3 ft, present site and datum (discharge, 17,500 cfs).

REMARKS.--Records good. No regulation above station.

REVISIONS.--WSP 1317: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 6-7, Jan. 29 to Feb. 2)

2.5	96	4.0	1,250
2.7	169	5.0	2,670
3.0	324	6.0	4,570
3.5	699	7.5	8,010

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	237	256	307	303	391	1,120	1,500	2,320	6,900	1,470	428	214
2	225	245	201	370	292	1,260	1,670	2,350	6,470	1,350	401	204
3	219	240	214	306	284	1,540	1,640	2,510	6,050	1,250	368	198
4	216	256	278	245	330	1,090	1,650	3,150	5,630	1,180	349	192
5	212	256	283	338	407	1,080	1,700	3,740	5,190	1,130	337	190
6	205	192	330	351	411	1,300	2,410	4,360	5,030	1,090	312	199
7	198	192	283	315	386	1,120	3,370	4,950	4,950	1,140	301	209
8	194	235	230	305	384	991	2,760	5,940	5,080	1,010	295	202
9	190	235	261	288	467	949	2,610	5,940	5,010	944	283	194
10	187	250	272	281	415	1,180	2,330	5,310	4,910	922	272	190
11	185	278	272	306	387	1,670	2,260	4,810	5,030	849	266	190
12	183	318	278	368	371	1,880	2,940	4,590	3,970	807	256	280
13	186	401	256	324	992	2,600	2,550	4,970	3,470	748	250	373
14	226	362	256	297	681	2,440	2,200	5,890	3,150	719	256	272
15	259	318	261	292	687	2,190	2,030	7,190	3,080	681	272	234
16	221	289	250	293	1,060	2,160	2,930	7,740	3,140	637	356	216
17	207	266	250	306	1,010	2,560	2,330	7,940	3,010	602	337	205
18	205	256	266	338	1,490	3,370	2,070	7,590	2,820	578	283	197
19	204	250	278	481	1,200	3,310	1,840	6,380	2,560	594	278	202
20	226	266	278	799	1,560	2,810	1,780	5,990	2,290	719	278	299
21	248	289	272	1,130	1,230	2,530	1,850	6,150	2,380	709	266	294
22	241	289	278	857	1,380	2,310	1,830	6,010	2,210	709	256	311
23	231	266	368	698	1,060	3,080	1,710	5,630	2,230	602	261	318
24	245	245	343	521	972	2,880	1,950	5,630	2,080	545	266	290
25	254	289	337	476	880	2,670	2,120	5,010	2,120	522	250	295
26	236	272	330	408	759	2,250	2,000	4,530	1,910	499	235	286
27	292	324	283	325	1,110	2,000	2,090	4,530	1,750	470	224	275
28	243	330	214	305	1,580	1,860	2,630	4,930	1,680	441	214	269
29	158	324	214	384	1,660	1,800	2,880	5,520	1,630	421	214	254
30	148	356	295	405	------	1,590	2,570	6,100	1,560	401	223	243
31	261	------	295	370	------	1,490	------	6,560	------	394	247	------
TOTAL	6,742	8,345	8,533	12,785	23,836	61,080	66,200	164,260	107,290	24,133	8,834	7,295
MEAN	217	278	275	412	822	1,970	2,207	5,299	3,576	778	285	243
MAX	292	401	368	1,130	1,660	3,370	3,370	7,940	6,900	1,470	428	373
MIN	148	192	201	245	284	949	1,500	2,320	1,560	394	214	190
CFSM	.19	.24	.24	.36	.71	1.71	1.92	4.61	3.11	.68	.25	.21
IN.	.22	.27	.28	.41	.77	1.98	2.14	5.31	3.47	.78	.29	.24
AC-FT	13,370	16,550	16,930	25,360	47,280	121,200	131,300	325,800	212,800	47,870	17,520	14,470

CAL YR 1971 TOTAL 481,685 MEAN 1,320 MAX 6,870 MIN 148 CFSM 1.15 IN 15.58 AC-FT 955,400
WTR YR 1972 TOTAL 499,333 MEAN 1,364 MAX 7,940 MIN 148 CFSM 1.19 IN 16.15 AC-FT 990,400

PEAK DISCHARGE (BASE, 3,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-18	1930	6.02	4,610	5-17	0600	7.72	8,560
4- 7	0500	5.62	3,790	6- 1	0300	7.17	7,210
4-16	1200	5.43	3,430				

13338800 Lawyer Creek near Nezperce, Idaho

LOCATION.--Lat 46°09'48", long 116°14'24", in NW¼NW¼ sec.32, T.33 N., R.2 E., Idaho County, Nez Perce Indian Reservation, on right bank, 350 ft upstream from State Highway 7 bridge, 5.0 miles south of Nezperce, and at mile 15.6.

DRAINAGE AREA.--150 sq mi, approximately.

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,675 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 50.5 cfs (4.57 inches per year, 36,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,430 cfs Mar. 18 (gage height, 7.85 ft); minimum, 2.4 cfs Oct. 29 (gage height, 2.15 ft).
Period of record: Maximum discharge, 2,430 cfs Mar. 18, 1972 (gage height, 7.85 ft); minimum, 1.2 cfs Aug. 16-23, 1967, July 29 to Aug. 4, 1968 (gage height, 1.33 ft).

REMARKS.--Records good. No regulation or diversion above station.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 17-28, Mar. 26 to June 3, Sept. 11-30; stage-discharge relation affected by ice Jan. 28 to Feb. 7)

Feb. 29 to Sept. 30						Oct. 1 to Feb. 28			
2.5	2.1	3.5	57	5.5	580	2.0	0.9	4.0	175
2.6	3.0	4.0	124	6.0	840	2.5	7.4	4.5	356
2.8	7.0	4.5	232	7.0	1,580	3.0	27	5.0	632
3.0	16	5.0	380			3.5	74		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	7.9	10	14	38	447	200	114	39	6.3	3.8	3.4
2	5.7	7.5	11	13	32	345	258	110	35	6.0	3.8	3.0
3	5.0	8.0	13	11	33	366	200	108	32	5.8	3.7	3.0
4	4.5	9.4	12	14	36	277	202	107	36	5.6	3.5	3.0
5	4.3	6.5	12	19	40	380	205	122	29	5.3	3.5	3.0
6	4.3	6.8	13	20	38	900	314	128	24	5.1	3.4	2.9
7	4.2	7.5	5.9	16	36	553	377	137	20	4.8	3.2	2.9
8	4.3	7.4	10	13	32	377	282	297	21	4.8	3.2	2.8
9	4.3	7.6	18	13	36	475	232	237	21	4.6	3.0	2.8
10	4.2	8.1	15	11	35	840	198	162	20	4.6	3.0	2.7
11	4.4	11	12	13	29	1,030	235	129	35	4.4	3.0	2.6
12	4.4	13	12	13	27	924	423	113	28	4.4	3.0	3.7
13	5.0	16	11	14	30	1,090	323	98	19	4.3	3.0	6.3
14	6.1	14	11	15	51	888	263	90	16	4.8	2.9	6.0
15	6.2	13	11	14	46	758	242	88	14	4.6	2.9	5.6
16	5.7	12	10	15	58	710	377	81	12	4.4	3.0	5.1
17	5.5	10	10	15	175	791	280	122	10	4.1	4.8	4.8
18	5.4	10	11	16	148	1,050	248	250	9.0	4.0	4.6	4.6
19	5.7	10	11	23	380	1,140	225	119	7.8	4.1	4.1	5.1
20	7.3	12	11	45	317	571	186	94	7.4	5.1	3.8	5.1
21	7.7	11	11	130	156	549	207	217	7.0	10	4.1	5.3
22	6.7	13	13	204	108	471	184	164	7.0	12	4.3	6.0
23	6.5	10	17	161	97	540	162	126	7.0	8.2	4.4	6.3
24	8.0	12	15	97	58	387	166	210	7.0	6.3	4.3	7.8
25	8.5	13	17	91	58	377	177	164	6.8	5.3	4.1	9.8
26	7.5	12	16	72	41	320	169	118	6.8	5.3	4.0	8.6
27	8.5	17	10	47	54	274	150	90	6.8	4.8	3.7	7.4
28	4.7	18	8.6	28	487	263	152	72	6.8	4.4	3.7	6.8
29	5.2	17	16	32	1,370	245	144	57	6.5	4.1	3.5	6.5
30	6.6	16	18	40	------	274	121	50	6.3	4.1	3.4	6.3
31	7.2	------	15	38	------	212	------	43	------	4.0	3.4	------
TOTAL	178.5	336.7	386.5	1,267	4,046	17,824	6,902	4,017	503.2	165.6	112.1	149.2
MEAN	5.76	11.2	12.5	40.9	140	575	230	130	16.8	5.34	3.62	4.97
MAX	8.5	18	18	204	1,370	1,140	423	297	39	12	4.8	9.8
MIN	4.2	6.5	5.9	11	27	212	121	43	6.3	4.0	2.9	2.6
CFSM	.04	.07	.08	.27	.93	3.83	1.53	.87	.11	.04	.02	.03
IN.	.04	.08	.10	.31	1.00	4.42	1.71	1.00	.12	.04	.03	.04
AC-FT	354	668	767	2,510	8,030	35,350	13,690	7,970	998	328	222	296

CAL YR 1971 TOTAL 16,479.1 MEAN 45.1 MAX 708 MIN 1.4 CFSM .30 IN 4.09 AC-FT 32,690
WTR YR 1972 TOTAL 35,887.8 MEAN 98.1 MAX 1,370 MIN 2.6 CFSM .65 IN 8.90 AC-FT 71,180

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-19	0330	6.30	1,280	4- 7	0045	4.99	495
2-29	0130	6.42	1,110	4-12	2000	4.97	515
3- 6	1715	6.51	1,180	4-16	1800	4.75	423
3-11	2230	6.65	1,290	5- 8	1600	4.76	412
3-18	2200	7.85	2,430				

13340000 Clearwater River at Orofino, Idaho

LOCATION.--Lat 46°28'43", long 116°15'23", in SW¼SE¼NW¼ sec.7, T.36 N., R.2 E., Clearwater County, on right bank 56 ft upstream from State Highway 7 bridge at Orofino, and at mile 44.6.

DRAINAGE AREA.--5,580 sq mi, approximately.

PERIOD OF RECORD.--October 1930 to September 1938, October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 990.80 ft above mean sea level (levels by Idaho Department of Highways). Prior to Sept. 30, 1938, nonrecording gage at site 0.1 mile downstream at different datum.

AVERAGE DISCHARGE.--16 years, 8,830 cfs (21.49 inches per year, 6,397,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 87,300 cfs June 2 (gage height, 18.84 ft); minimum, 1,100 cfs Dec. 29 (gage height, 2.75 ft).
Period of record: Maximum discharge, 87,300 cfs June 2, 1972 (gage height, 18.84 ft, present datum); minimum observed, probably less than 250 cfs Jan. 8, 1937, during period of ice effect; minimum gage height, 2.75 ft Dec. 29, 1971.
Flood of June 8, 1964, reached a stage of 20.32 ft present site and datum (discharge, 99,700 cfs).

REMARKS.--Records good.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Aug. 27 to Sept. 30)

2.5	810	6.5	9,650
3.0	1,430	8.0	15,500
3.5	2,180	11.0	30,100
4.0	3,120	15.0	57,250
5.0	5,350	19.0	88,660

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,680	1,760	2,280	2,100	2,620	17,000	11,700	18,000	81,000	23,800	4,150	1,680
2	1,600	1,840	1,920	2,180	2,230	18,400	13,800	17,500	81,200	21,600	4,010	1,600
3	1,560	1,750	1,700	2,150	1,880	14,600	14,700	17,800	73,700	19,400	3,770	1,540
4	1,510	1,740	1,660	1,880	2,040	11,900	14,400	21,000	66,900	17,900	3,620	1,510
5	1,490	1,920	2,000	2,000	2,800	10,500	14,200	25,000	64,000	17,500	3,360	1,490
6	1,470	1,720	2,280	2,510	3,120	12,900	17,000	29,200	65,400	17,900	3,140	1,500
7	1,440	1,420	2,180	2,510	3,060	14,500	23,600	32,700	67,600	18,500	2,980	1,540
8	1,420	1,360	1,570	2,370	3,180	12,900	21,000	36,800	69,300	16,900	2,860	1,570
9	1,370	1,570	1,320	2,180	3,280	11,400	19,000	39,200	65,400	15,600	2,760	1,510
10	1,350	1,700	1,870	1,990	3,220	12,600	17,200	34,800	63,700	14,000	2,640	1,440
11	1,330	1,760	2,040	1,940	2,980	17,500	16,800	31,300	65,300	12,100	2,530	1,440
12	1,320	1,940	1,960	2,280	2,880	21,900	19,400	30,200	53,200	11,100	2,440	1,500
13	1,320	2,400	1,860	2,280	3,670	25,300	17,900	33,600	42,700	10,600	2,370	2,050
14	1,540	2,610	1,860	2,160	4,840	28,300	15,600	41,400	37,000	10,400	2,280	2,000
15	1,810	2,330	1,840	2,050	4,700	26,500	14,400	52,100	38,400	9,720	2,300	1,720
16	1,630	2,080	1,860	2,000	6,010	26,000	16,600	62,300	42,800	8,970	2,740	1,580
17	1,490	1,930	1,840	2,050	7,860	29,700	15,600	66,000	45,400	8,310	3,240	1,530
18	1,440	1,870	1,860	2,150	10,100	32,000	14,100	64,800	42,700	7,710	2,610	1,470
19	1,570	1,840	1,920	2,230	10,200	33,300	12,900	56,600	36,700	7,410	2,400	1,440
20	1,720	1,760	1,960	3,220	10,500	27,900	12,400	54,300	31,200	7,800	2,280	1,640
21	2,080	1,840	1,960	6,850	9,820	25,000	12,500	58,900	30,400	7,410	2,300	2,020
22	1,930	1,880	1,940	9,030	9,180	22,600	12,700	59,500	30,200	7,260	2,180	2,080
23	1,720	1,940	2,070	7,080	8,610	27,000	12,100	54,300	29,900	6,500	2,080	2,160
24	1,680	1,880	2,260	5,600	7,860	26,100	13,300	50,400	29,400	6,000	2,100	2,160
25	1,750	1,980	2,200	4,680	7,110	23,200	14,700	44,600	26,400	5,720	2,070	2,200
26	1,720	2,150	2,100	3,900	6,320	19,500	14,700	39,300	24,500	5,580	1,980	2,130
27	2,020	2,250	1,980	2,660	7,890	16,500	14,900	39,500	22,400	5,200	1,920	1,980
28	2,020	2,280	1,500	2,120	15,100	14,700	17,700	39,500	21,100	4,960	1,820	1,900
29	1,540	2,300	1,170	2,350	19,200	13,400	20,800	56,900	22,900	4,740	1,750	1,840
30	1,250	2,350	1,390	2,760	------	12,100	20,200	67,600	24,200	4,470	1,690	1,780
31	1,250	------	1,860	2,570	------	11,400	------	75,600	------	4,240	1,690	------
TOTAL	49,020	58,150	58,210	93,830	182,260	616,600	475,900	1,350.7M	1,395.0M	339,300	80,060	52,000
MEAN	1,581	1,938	1,878	3,027	6,285	19,890	15,860	43,570	46,500	10,950	2,583	1,733
MAX	2,080	2,610	2,280	9,030	19,200	33,300	23,600	75,600	81,200	23,800	4,150	2,200
MIN	1,250	1,360	1,170	1,880	1,880	10,500	11,700	17,500	21,100	4,240	1,690	1,440
CFSM	.28	.35	.34	.54	1.13	3.56	2.84	7.81	8.33	1.96	.46	.31
IN.	.33	.39	.39	.63	1.22	4.11	3.17	9.00	9.30	2.26	.53	.35
AC-FT	97,230	115,300	115,500	186,100	361,500	1,223M	943,900	2,679M	2,767M	673,000	158,800	103,100

CAL YR 1971 TOTAL 4,196,380 MEAN 11,500 MAX 62,300 MIN 1,170 CFSM 2.06 IN 27.98 AC-FT 8,324,000
WTR YR 1972 TOTAL 4,751,030 MEAN 12,980 MAX 81,200 MIN 1,170 CFSM 2.33 IN 31.67 AC-FT 9,424,000

PEAK DISCHARGE (BASE, 30,000 CFS)

M Expressed in thousands.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-19	0015	12.19	37,000	6- 2	1000	18.84	85,400
5-18	0600	16.50	67,200				

13340600 North Fork Clearwater River near Canyon ranger station, Idaho

LOCATION.--Lat 46°50'26", long 115°37'11", in SE¼NE¼ sec.6, T.40 N., R.7 E., Clearwater County, Clearwater National Forest, on left bank immediately upstream from forest road bridge, 0.1 mile upstream from Beaver Creek, 1.7 miles downstream from Canyon ranger station, and at mile 58.0.

DRAINAGE AREA.--1,360 sq mi, approximately.

PERIOD OF RECORD.--April 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,660.00 ft above mean sea level.

AVERAGE DISCHARGE.--5 years (1967-72), 4,130 cfs (41.24 inches per year, 2,992,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 31,800 cfs June 1 (gage height, 17.04 ft); minimum, 565 cfs Dec. 3 (gage height, 6.01 ft).
Period of record: Maximum discharge, 31,800 cfs June 1, 1972 (gage height, 17.04 ft); minimum, 444 cfs Nov. 28, 1969 (gage height, 6.16 ft); minimum gage height, 6.01 ft Dec. 3, 1971.

REMARKS.--Records good. No regulation or diversion above station.

Rating tables (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 29 to Jan. 2, Feb. 1-7)

Oct. 1 to Mar. 20				Mar. 21 to Sept. 30			
6.1	630	8.0	2,870	6.2	830	9.0	4,660
6.5	905	10.0	7,370	6.5	1,020	11.0	9,810
7.0	1,360	12.0	12,900	7.0	1,430	14.0	19,600
7.5	1,950			8.0	2,680	17.0	31,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	950	989	898	860	1,300	7,540	4,990	7,860	30,300	8,100	1,820	935
2	928	943	658	900	1,200	5,740	6,500	8,450	28,500	7,500	1,730	929
3	913	935	672	978	1,050	4,850	6,410	9,160	26,000	6,950	1,600	926
4	905	964	893	719	1,050	3,970	6,380	11,500	23,300	6,570	1,500	913
5	898	977	878	835	1,100	3,680	6,250	13,400	22,900	6,380	1,420	905
6	890	778	958	1,100	1,200	5,450	8,770	15,400	23,200	6,390	1,350	959
7	875	728	832	1,250	1,300	5,920	9,730	16,000	24,000	6,240	1,300	955
8	875	865	655	1,180	1,290	4,990	8,440	16,600	24,000	5,900	1,230	916
9	868	929	707	1,060	1,280	4,510	7,370	15,900	23,300	5,510	1,180	893
10	868	912	1,040	954	1,120	4,930	6,550	14,700	22,600	4,970	1,140	889
11	860	1,010	992	892	1,100	6,330	6,310	13,700	22,200	4,650	1,100	892
12	853	1,020	963	1,000	1,040	7,740	6,400	14,100	18,200	4,310	1,080	955
13	883	1,240	914	966	1,370	8,210	5,980	17,100	15,100	4,180	1,070	1,000
14	1,130	1,150	902	940	1,510	8,420	5,420	20,900	13,400	4,080	1,100	918
15	997	1,030	888	1,010	1,390	8,380	5,160	24,600	13,600	3,780	1,270	891
16	913	960	871	1,020	1,600	8,830	5,300	27,400	14,600	3,530	1,400	872
17	890	927	870	1,000	2,460	9,770	4,900	28,200	15,300	3,310	1,320	856
18	890	900	904	991	2,350	10,300	4,550	26,700	14,200	3,130	1,200	843
19	950	876	912	1,190	2,420	9,770	4,370	23,600	12,800	3,340	1,160	885
20	1,540	886	918	3,190	2,370	9,550	4,470	24,500	11,500	3,310	1,150	1,110
21	1,220	937	887	8,480	2,300	9,640	4,590	26,200	11,600	3,130	1,120	1,120
22	1,020	943	865	5,160	2,290	9,290	4,490	25,800	10,600	2,990	1,090	1,210
23	961	888	918	3,170	2,210	10,600	4,670	23,400	10,400	2,660	1,120	1,100
24	978	883	961	2,180	1,990	9,650	5,970	21,800	9,560	2,500	1,120	1,120
25	995	981	885	1,750	1,790	8,400	6,560	19,400	8,940	2,390	1,080	1,090
26	1,170	949	880	1,360	1,600	7,120	6,380	17,700	8,720	2,270	1,060	1,000
27	1,360	939	873	1,110	2,930	6,090	7,480	18,600	7,980	2,170	1,030	972
28	964	957	771	1,110	10,400	5,370	9,610	21,600	7,610	2,060	1,010	949
29	654	953	660	1,350	10,600	4,870	9,990	25,300	8,100	1,970	986	920
30	730	948	730	1,530	------	4,450	8,480	28,800	8,280	1,910	968	908
31	1,010	------	800	1,410	------	4,430	------	30,200	------	1,850	945	------
TOTAL	29,938	28,397	26,555	50,645	65,610	218,790	192,470	608,570	490,790	128,030	37,649	28,831
MEAN	966	947	857	1,634	2,262	7,058	6,416	19,630	16,360	4,130	1,214	961
MAX	1,540	1,240	1,040	8,480	10,600	10,600	9,990	30,200	30,300	8,100	1,820	1,210
MIN	654	728	655	719	1,040	3,680	4,370	7,860	7,610	1,850	945	843
CFSM	.71	.70	.63	1.20	1.66	5.19	4.72	14.4	12.0	3.04	.89	.71
IN.	.82	.78	.73	1.39	1.79	5.98	5.26	16.65	13.42	3.50	1.03	.79
AC-FT	59,380	56,330	52,670	100,500	130,100	434,000	381,800	1,207M	973,500	253,900	74,680	57,190

CAL YR 1971 TOTAL 1,693,909 MEAN 4,641 MAX 24,600 MIN 654 CFSM 3.41 IN 46.33 AC-FT 3,360,000
WTR YR 1972 TOTAL 1,906,275 MEAN 5,208 MAX 30,300 MIN 654 CFSM 3.83 IN 52.14 AC-FT 3,781,000

PEAK DISCHARGE (BASE, 12,000 CFS)

M Expressed in thousands.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	0830	13.20	16,600	6- 1	0345	17.04	31,800
5-17	0300	16.55	29,700				

13340760 Little North Fork Clearwater River near Elk River, Idaho

LOCATION.--Lat 46°54'16", long 115°50'47", in NW¼NW¼ sec.16, T.41 N., R.5 E., Clearwater County, St. Joe National Forest, on left bank 360 ft upstream from former bridge site, 1.2 miles upstream from maximum pool elevation of Dworshak Reservoir, 4.0 miles upstream from Breakfast Creek, 8.0 miles above mouth, and 18 miles northeast of Elk River.

DRAINAGE AREA.--260 sq mi, approximately.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage and temperature recorders. Altitude of gage is 1,670 ft (from topographic map).

EXTREMES.--Current year: Maximum daily discharge, 6,800 cfs June 1 by a hydrologic study of runoff characteristics; maximum gage height, 12.35 ft June 1 (backwater from log jam); minimum daily discharge, 135 cfs Dec. 8; minimum gage height recorded, 4.83 ft.
Period of record: Maximum daily discharge, 6,800 cfs June 1, 1972, by hydrologic study of runoff characteristics; minimum gage height, 12.75 ft May 28, 1971 (backwater from log jam); minimum daily discharge, 135 cfs Dec. 8, 1971 (gage height, 4.83 ft).

REMARKS.--Records poor.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Nov. 5-8, Dec. 8-19, Dec. 28 to Jan. 17, Jan. 25 to Mar. 21; backwater from log jam May 5 to June 22)

4.8	134	7.0	2,130
5.1	258	8.0	3,920
5.5	492	8.6	5,310
5.9	807	9.7	8,480
6.5	1,450		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	209	198	156	160	210	1,500	1,090	1,260	6,800	1,500	325	170
2	208	201	148	170	170	1,100	1,210	1,400	6,300	1,450	310	165
3	204	199	186	165	165	900	1,170	1,670	5,500	1,300	295	165
4	200	213	164	150	190	750	1,170	1,890	5,100	1,250	280	170
5	196	170	171	160	220	660	1,210	2,120	4,900	1,200	260	175
6	192	165	180	170	225	900	1,820	2,380	4,900	1,150	250	175
7	188	160	150	180	230	1,100	1,750	2,500	5,000	1,130	240	170
8	187	175	135	190	225	900	1,580	2,650	4,900	1,050	230	165
9	188	191	170	185	230	820	1,340	2,310	4,800	1,000	220	163
10	187	208	185	175	225	920	1,220	2,160	4,700	920	210	160
11	187	211	175	170	200	1,200	1,180	2,070	4,500	860	205	158
12	184	226	170	170	210	1,400	1,150	2,310	4,200	810	200	180
13	205	258	170	165	230	1,500	1,110	2,820	3,500	760	195	165
14	243	220	170	165	275	1,550	1,030	3,300	2,800	730	190	162
15	199	200	173	170	270	1,500	1,020	4,540	2,700	690	210	158
16	190	191	168	175	310	1,600	1,010	5,260	2,900	650	260	157
17	179	185	170	185	450	1,700	961	5,510	2,750	600	215	160
18	178	180	173	207	390	1,800	895	5,440	2,650	560	200	190
19	256	178	175	254	400	1,770	879	4,900	2,600	620	195	200
20	345	184	175	740	415	1,750	908	5,480	2,400	600	190	196
21	233	187	173	1,800	415	1,720	978	5,800	2,300	650	185	196
22	206	178	180	771	430	1,740	942	5,800	2,100	540	185	196
23	205	160	200	528	440	1,890	949	5,240	1,950	470	205	200
24	224	188	186	410	420	1,720	1,080	4,540	1,850	450	190	200
25	203	186	178	330	400	1,460	1,100	3,720	1,750	430	185	199
26	321	179	173	240	370	1,260	1,100	3,650	1,650	410	183	196
27	270	185	171	185	800	1,140	1,270	3,840	1,550	390	180	196
28	183	181	160	195	1,300	1,080	1,550	5,210	1,450	370	179	196
29	185	184	145	210	1,700	1,060	1,420	5,800	1,500	360	178	204
30	210	175	140	215	------	1,000	1,290	6,200	1,550	340	176	204
31	209	------	150	215	------	1,010	------	6,600	------	330	172	------
TOTAL	6,574	5,716	5,220	9,205	11,515	40,400	35,382	118,370	101,550	23,570	6,698	5,391
MEAN	212	191	168	297	397	1,303	1,179	3,818	3,385	760	216	180
MAX	345	258	200	1,800	1,700	1,890	1,820	6,600	6,800	1,500	325	204
MIN	178	160	135	150	165	660	879	1,260	1,450	330	172	157
CFSM	.82	.73	.65	1.14	1.53	5.01	4.53	14.7	13.0	2.92	.83	.69
IN.	.94	.82	.75	1.32	1.65	5.78	5.06	16.94	14.53	3.37	.96	.77
AC-FT	13,040	11,340	10,350	18,260	22,840	80,130	70,180	234,800	201,400	46,750	13,290	10,690

CAL YR 1971 TOTAL 377,451 MEAN 1,034 MAX 8,200 MIN 135 CFSM 3.98 IN 54.00 AC-FT 748,700
WTR YR 1972 TOTAL 369,591 MEAN 1,010 MAX 6,800 MIN 135 CFSM 3.88 IN 52.88 AC-FT 733,100

PEAK DISCHARGE (BASE, 3,500 CFS).--May 21 (unknown) 5,800 cfs (mean daily); June 1 (unknown) 6,800 ft (mean daily).

13340780 Breakfast Creek near Elk River, Idaho

LOCATION.--Lat 46°53'10", long 115°56'43", in SE¼NW¼ sec.22, T.41 N., R.4 E., Clearwater County, on left bank 1,300 ft above maximum pool elevation of Dworshak Reservoir, 0.4 mile downstream from Floodwood Creek, and 13 miles northeast of Elk River.

DRAINAGE AREA.--130 sq mi, approximately.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,690 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 2,750 cfs May 17 (gage height, 5.42 ft); minimum discharge, 60 cfs Dec. 2 (gage height, 2.57 ft); minimum gage height, 2.25 ft Nov. 5.
Period of record: Maximum discharge, 2,820 cfs May 4, 1971 (gage height, 5.36 ft); maximum gage height, 5.42 ft May 17, 1972; minimum discharge, 60 cfs Dec. 2, 1971 (gage height, 2.27 ft); minimum gage height, 2.25 ft Nov. 5, 1971.

REMARKS.--Records good except those for winter period, which are fair.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Oct. 29-30, Nov. 6-8, Dec. 7 to Jan. 20, Jan. 28 to Feb. 14)

Oct. 1 to May 18				May 19 to Sept. 30			
2.3	66.5	3.5	578	2.4	61	3.7.7	635
2.5	112	4.0	1,000	2.6	103	4.3	1,200
2.7	172	5.0	2,240	2.9	190	5.3	2,560
3.0	292	5.2	2,550	3.3	367		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	112	88	81	125	649	636	860	2,400	583	183	108
2	101	112	83	83	90	523	747	981	2,210	560	177	106
3	97	105	100	85	86	436	714	1,150	1,990	532	174	106
4	97	126	88	83	105	369	691	1,350	1,810	518	164	103
5	95	97	95	79	130	352	706	1,550	1,770	511	157	106
6	92	80	103	81	134	538	1,150	1,710	1,780	511	154	113
7	90	76	80	84	136	500	1,150	1,680	1,840	511	151	111
8	90	82	77	86	134	435	924	1,750	1,800	471	145	108
9	90	100	86	85	140	402	790	1,600	1,770	445	143	106
10	88	112	96	84	140	501	730	1,480	1,700	408	137	106
11	88	123	95	83	116	781	706	1,380	1,590	413	134	106
12	86	143	94	82	125	904	683	1,530	1,350	367	137	126
13	119	159	93	80	145	1,190	644	1,840	1,170	367	131	111
14	121	140	92	80	155	1,260	578	2,020	1,060	346	131	108
15	100	126	90	81	142	1,090	578	2,180	1,050	325	140	103
16	95	118	89	82	198	1,200	600	2,240	1,100	306	194	103
17	93	110	91	86	216	1,420	558	2,490	1,060	296	143	106
18	102	105	93	92	189	1,540	511	2,320	990	287	137	101
19	216	102	95	150	194	1,480	511	2,180	900	320	131	108
20	248	105	92	400	203	1,220	551	2,290	854	296	128	143
21	143	107	91	1,060	205	1,130	615	2,260	827	351	126	128
22	123	102	90	555	213	1,150	600	2,350	775	287	121	151
23	123	95	92	375	214	1,320	644	2,110	766	260	137	137
24	134	102	91	285	207	1,070	764	1,920	707	252	131	167
25	118	105	90	220	195	878	773	1,730	675	243	123	145
26	240	100	88	140	182	722	798	1,680	643	231	121	131
27	162	105	84	96	474	622	972	1,780	590	220	116	126
28	107	105	74	94	1,050	558	1,160	1,980	590	209	113	116
29	64	105	70	118	923	505	1,010	2,170	613	201	111	113
30	80	102	72	125	------	468	860	2,370	613	194	111	113
31	110	------	76	120	------	480	------	2,480	------	190	108	------
TOTAL	3,616	3,261	2,738	5,235	6,566	25,693	22,354	57,411	36,993	11,011	4,309	3,515
MEAN	117	109	88.3	169	226	829	745	1,852	1,233	355	139	117
MAX	248	159	103	1,060	1,050	1,540	1,160	2,490	2,400	583	194	167
MIN	64	76	70	79	86	352	511	860	590	190	108	101
CFSM	.90	.84	.68	1.30	1.74	6.38	5.73	14.2	9.48	2.73	1.07	.90
IN.	1.03	.93	.78	1.50	1.88	7.35	6.40	16.43	10.59	3.15	1.23	1.01
AC-FT	7,170	6,470	5,430	10,380	13,020	50,960	44,340	113,900	73,380	21,840	8,550	6,970

CAL YR 1971 TOTAL 165,586 MEAN 454 MAX 2,540 MIN 64 CFSM 3.49 IN 47.38 AC-FT 328,400
WTR YR 1972 TOTAL 182,702 MEAN 499 MAX 2,490 MIN 64 CFSM 3.84 IN 52.28 AC-FT 362,400

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	0800	4.33	1,350	5-17	2200	5.42	2,750
3-18	2130	4.64	1,730	5-31	2130	5.38	2,680

13340950 Dworshak Reservoir near Ahsahka, Idaho

LOCATIONS.--Lat 46°31'00", long 116°17'30", in SW¼SE¼ sec.26, T.37 N., R.1 E., Nez Perce County, at log-handling area on dam structure, 1.5 miles northeast of Ahsahka, and at mile 2.0.

DRAINAGE AREA.--2,440 sq mi, approximately. Mean altitude, 4,220 ft.

PERIOD OF RECORD.--October 1971 to September 1972.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 2,502,000 acre-ft June 29, 30 (elevation, 1,540.0 ft); minimum observed, 14,600 acre-ft (elevation, 1,051.4 ft).

REMARKS.--Reservoir is formed by straight-axis concrete gravity dam. Usable capacity is 2,016,000 acre-ft between elevations 970 and 1,599.5 ft (maximum pool elevation). Storage began Sept. 27, 1971. Dworshak Dam used to regulate annual floodwaters of the North Fork Clearwater River and for power generation.

COOPERATION.--Gage-height record, capacity table, and record of level survey results furnished by Corps of Engineers.

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.60	106.5	193.7	264.1	427.5	690.8	1,133	1,074	1,835	2,499	2,495	2,497
2	17.00	109.8	196.6	267.2	430.2	713.2	1,131	1,075	1,898	2,495	2,495	2,497
3	19.90	113.0	198.2	269.3	432.4	733.4	1,131	1,078	1,953	2,494	2,495	2,497
4	22.50	116.4	201.6	270.7	434.6	754.9	1,127	1,092	2,000	2,495	2,494	2,497
5	24.90	119.3	204.3	272.0	437.4	763.9	1,123	1,106	2,045	2,495	2,492	2,495
6	27.40	121.7	206.9	273.9	440.2	781.2	1,133	1,129	2,104	2,497	2,491	2,495
7	30.10	124.2	208.8	276.2	444.2	801.7	1,144	1,150	2,163	2,491	2,488	2,497
8	32.90	126.8	210.3	278.7	448.2	820.3	1,148	1,176	2,211	2,499	2,488	2,497
9	35.70	129.2	212.0	281.2	451.8	837.5	1,149	1,199	2,254	2,491	2,488	2,495
10	38.10	131.9	214.6	283.7	455.4	854.5	1,148	1,216	2,290	2,490	2,488	2,495
11	40.20	135.0	216.8	286.0	459.1	885.3	1,147	1,228	2,322	2,491	2,488	2,495
12	42.70	138.2	219.3	288.2	463.3	923.5	1,144	1,239	2,344	2,495	2,487	2,497
13	45.70	141.2	221.9	290.4	467.9	957.9	1,138	1,258	2,359	2,494	2,487	2,497
14	49.20	144.7	224.3	292.7	473.8	987.4	1,131	1,286	2,368	2,492	2,487	2,497
15	52.80	147.9	226.9	294.9	478.9	1,014	1,125	1,326	2,378	2,494	2,488	2,497
16	55.80	151.2	229.0	297.2	486.0	1,032	1,121	1,368	2,386	2,495	2,491	2,497
17	58.20	154.0	231.6	299.1	494.4	1,065	1,115	1,406	2,393	2,495	2,491	2,497
18	60.70	156.6	234.2	304.7	504.0	1,100	1,110	1,441	2,397	2,497	2,491	2,497
19	63.90	159.4	236.8	313.0	513.3	1,128	1,094	1,467	2,398	2,498	2,492	2,497
20	68.00	162.0	239.1	322.2	523.4	1,147	1,089	1,501	2,402	2,494	2,495	2,498
21	72.10	164.8	241.7	340.8	532.6	1,159	1,081	1,530	2,413	2,497	2,497	2,499
22	75.80	167.4	244.0	359.1	541.0	1,168	1,074	1,561	2,421	2,499	2,497	2,501
23	78.40	170.2	246.4	380.8	549.8	1,182	1,069	1,582	2,435	2,499	2,498	2,499
24	81.00	173.4	248.7	394.5	557.8	1,191	1,065	1,600	2,452	2,499	2,498	2,499
25	83.70	176.5	251.1	401.3	568.2	1,194	1,062	1,608	2,468	2,501	2,498	2,499
26	86.70	179.6	253.4	405.8	580.7	1,190	1,059	1,611	2,483	2,499	2,498	2,499
27	90.00	182.9	255.5	410.0	593.7	1,187	1,060	1,617	2,492	2,498	2,498	2,498
28	93.50	186.0	257.1	413.8	624.4	1,180	1,068	1,627	2,497	2,497	2,498	2,497
29	97.00	188.6	258.8	417.2	662.7	1,168	1,074	1,650	2,502	2,497	2,498	2,497
30	100.3	191.2	260.5	421.0	------	1,153	1,075	1,697	2,501	2,495	2,497	2,495
31	103.3	------	262.4	424.5	------	1,140	------	1,772	------	2,495	2,497	------
MAX	103.3	191.2	262.4	424.5	662.7	1,194	1,149	1,772	2,502	2,501	2,498	2,501
MIN	14.60	106.5	193.7	264.1	427.5	690.8	1,059	1,074	1,835	2,490	2,487	2,495
(†)	150.8	199.2	227.3	276.7	330.9	405.5	397.0	479.1	539.9	539.5	539.6	539.5
(‡)	+93.1	+87.9	+71.2	162.1	+238.2	+477.3	-65.0	+69.7	+729	-6	+2	-2

CAL YR 1971.....‡ -
WTR YR 1972.....‡ +2,485

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.
NOTE.--Contents at 2400 hours from Oct. 1 to Mar. 15 was interpolated from elevations determined by level surveys and intermittent recorder record of elevation.

13341050 Clearwater River near Peck, Idaho

LOCATION.--Lat 46°30'00", long 116°23'30", in NE¼ sec.1, T.36 N., R.1 W., Nez Perce County, on left bank, 2 miles upstream from Big Canyon Creek, 2.2 miles northeast of Peck, 3 miles downstream from North Fork Clearwater River, and at mile 37.4.

DRAINAGE AREA.--8,040 sq mi, approximately.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 930 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 16,170 cfs (27.31 inches per year, 11,720,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 101,000 cfs June 1 (gage height, 20.99 ft); minimum, 1,260 cfs Oct. 31 (gage height, 2.24 ft).
Period of record: Maximum discharge, 107,200 cfs May 13, 1971 (gage height, 21.67 ft); maximum gage height, 25.00 ft Dec. 28, 1967 (ice jam); minimum discharge, 1,260 cfs Oct. 31, 1971 (gage height, 2.24 ft).
Flood of June 8, 1964, reached a stage of 23.95 ft, from floodmark (discharge, 118,000 cfs), from rating extended above 89,100 cfs.

REMARKS.--Records excellent except for November and December, which are good. Flow partly regulated by Dworshak Reservoir beginning September 1971 Records of water temperatures for the water year 1972 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

2.2	1,220	7.0	11,180
3.0	2,120	9.0	19,060
4.0	3,650	12.0	34,100
5.0	5,690	16.0	60,200
6.0	8,300	21.0	101,200

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,800	1,800	2,570	2,470	2,880	17,700	26,100	32,100	95,700	37,000	8,110	3,450
2	1,720	1,920	2,220	2,560	2,570	14,400	27,400	31,100	95,200	35,000	7,900	3,340
3	1,650	1,830	2,000	2,530	2,260	14,900	27,700	32,100	87,900	31,300	7,870	3,270
4	1,620	1,830	1,960	2,260	2,290	12,200	28,700	34,000	80,400	27,500	7,980	3,180
5	1,590	1,940	2,310	2,380	2,710	10,800	26,200	41,100	78,100	26,700	7,740	3,130
6	1,540	1,830	2,590	2,890	3,290	13,000	31,000	43,800	74,900	26,800	7,650	3,100
7	1,520	1,520	2,500	2,900	3,240	14,800	39,100	49,200	75,700	29,300	7,360	3,160
8	1,510	1,450	1,890	2,580	3,300	13,200	36,600	52,800	82,900	23,800	6,360	3,170
9	1,480	1,710	1,640	2,550	3,560	11,800	33,300	56,700	82,500	25,900	5,440	3,080
10	1,460	1,890	2,190	2,420	3,580	12,800	31,100	52,300	82,800	23,000	5,200	2,980
11	1,450	1,960	2,370	2,380	3,380	17,900	30,100	49,600	84,700	19,200	5,100	2,960
12	1,420	2,130	2,290	2,700	3,290	22,700	34,200	49,100	71,800	15,700	5,010	3,000
13	1,410	2,580	2,190	2,770	3,940	30,200	32,800	52,800	59,400	18,500	4,910	3,500
14	1,540	2,820	2,190	2,610	5,250	40,400	29,700	60,200	52,000	17,500	4,830	3,480
15	1,920	2,580	2,170	2,520	5,070	39,100	27,800	71,900	53,900	15,500	4,660	3,180
16	1,750	2,300	2,200	2,460	6,260	38,600	29,600	82,900	60,000	14,300	4,900	3,020
17	1,570	2,170	2,180	2,500	8,350	42,700	28,300	87,200	65,000	13,600	5,760	2,950
18	1,510	2,110	2,200	2,580	10,400	46,700	26,400	88,200	62,000	12,800	5,320	2,860
19	1,490	2,080	2,260	2,860	10,800	49,200	26,600	80,400	55,100	12,100	3,820	2,830
20	1,780	2,000	2,310	3,630	10,800	43,600	26,700	75,000	46,500	15,900	3,300	2,900
21	2,210	2,090	2,310	7,190	10,300	40,200	26,800	83,300	43,300	13,300	4,440	3,190
22	2,060	2,140	2,290	9,610	9,630	38,100	26,800	83,700	42,900	12,600	3,990	3,640
23	1,870	2,200	2,420	7,760	9,100	42,400	25,200	79,400	40,100	11,800	4,030	4,270
24	1,780	2,150	2,620	6,000	8,300	42,000	26,700	77,100	36,000	10,900	4,180	4,200
25	1,870	2,250	2,560	5,120	7,600	38,400	28,400	71,700	32,600	10,800	4,110	4,130
26	1,860	2,420	2,460	4,470	6,780	33,900	28,400	66,000	31,000	10,900	4,010	3,920
27	2,100	2,530	2,340	3,330	8,220	30,900	28,500	66,600	29,900	10,500	3,900	3,970
28	2,210	2,560	1,870	2,820	15,200	30,400	31,200	74,000	30,700	10,000	4,140	4,050
29	1,700	2,590	1,540	2,960	19,900	28,100	34,300	83,900	32,300	9,680	3,730	3,720
30	1,350	2,640	1,760	3,120	------	28,000	34,400	89,200	37,200	9,020	3,650	3,620
31	1,330	------	2,230	2,930	------	26,600	------	90,000	------	8,380	3,710	------
TOTAL	52,070	64,020	68,630	107,860	192,250	885,700	890,100	1,987.4M	1,802.5M	559,280	163,110	101,250
MEAN	1,680	2,134	2,214	3,479	6,629	28,570	29,670	64,110	60,080	18,040	5,262	3,375
MAX	2,210	2,820	2,620	9,610	19,900	49,200	39,100	90,000	95,700	37,000	8,110	4,270
MIN	1,330	1,450	1,540	2,260	2,260	10,800	25,200	31,100	29,900	8,380	3,300	2,830
AC-FT	103,300	127,000	136,100	213,900	381,300	1,757M	1,766M	3,942M	3,575M	1,109M	323,500	200,800

CAL YR 1971 TOTAL 6,939,800 MEAN 19,010 MAX 103,000 MIN 1,330 AC-FT 13,770,000
WTR YR 1972 TOTAL 6,874,170 MEAN 18,780 MAX 95,700 MIN 1,330 AC-FT 13,630,000

M Expressed in thousands.

13342500 Clearwater River at Spalding, Idaho

LOCATION.--Lat 46°26'55", long 116°49'35", in Indian allotment 198, NE¼SW¼ sec.22, T.36 N., R.4 W., Nez Perce County, Nez Perce Indian Reservation, on left bank 0.4 mile downstream from Lapwai Creek, 0.5 mile west of Spalding Post Office, 3,100 ft downstream from bridge on U.S. Highway 12, and at mile 11.6.

DRAINAGE AREA.--9,570 sq mi, approximately. Mean altitude, 4,360 ft.

PERIOD OF RECORD.--August 1910 to October 1913, October 1924 to January 1925, April 1925 to current year. Published as "near Lewiston" 1910-13, 1924-27. Records published for both sites March 1926 to September 1927.

GAGE.--Water-stage recorder. Altitude of gage is 770.5 ft (estimated from datum of gage 3,100 ft upstream). See WRD for Idaho 1966-68 for history of changes prior to Oct. 1, 1962.

AVERAGE DISCHARGE.--50 years (1910-13, 1925-72), 15,520 cfs (22.02 inches per year, 11,240,000 acre-ft per year); 15-year base period (1952-67), 15,970 cfs.

EXTREMES.--Current year: Maximum discharge, 94,200 cfs June 2 (gage height, 16.69 ft); minimum, 1,350 cfs Oct. 31 (gage height, 1.96 ft).
Period of record: Maximum discharge, 177,000 cfs May 29, 1948 (gage height, 23.76 ft); maximum gage height, 27.77 ft Feb. 5, 1963, from floodmark (ice jam); minimum daily discharge, 500 cfs Jan. 9, 1937, Dec. 1, 1952. Flood of June 1894 reached a stage of 20.8 ft, site and datum in use 1924-26 (discharge, 136,000 cfs).

REMARKS.--Records excellent. Diversions above station for irrigation of about 130 acres (1966 determination). Regulation of the North Fork Clearwater River at Ahsahka began on Sept. 27, 1971, when diversion tunnel at Dworshak Dam was closed. Records of chemical analysis and water temperatures for the water year 1972 are published in Part 2 of this report.

CORRECTIONS (WATER YEARS).--WSP 1737: 1927, 1935, 1943.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Mar. 4, May 15 to June 12, July 17; stage-discharge relation affected by ice Jan. 4-10 and Jan. 28 to Feb. 11)

2.0	1,140	8.0	22,800
3.0	2,950	11.0	43,000
4.0	5,470	14.0	69,000
6.0	12,760	17.0	100,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,800	1,640	2,950	2,570	3,600	25,300	28,400	33,000	91,400	38,100	7,610	3,390
2	1,730	2,040	2,570	2,750	3,300	21,500	30,300	31,800	92,200	36,600	7,500	3,280
3	1,660	1,940	2,250	2,650	2,700	22,900	30,500	32,600	85,200	33,400	7,260	3,190
4	1,610	1,890	2,110	2,500	3,000	18,300	30,700	34,000	78,200	28,900	7,500	3,130
5	1,580	1,960	2,400	2,700	3,700	17,100	30,600	40,300	75,400	27,700	7,290	3,060
6	1,560	1,980	3,060	2,800	4,500	23,500	33,200	43,200	72,700	28,000	7,120	3,020
7	1,550	1,700	3,150	2,900	5,200	22,400	42,300	49,200	71,900	30,000	6,980	3,020
8	1,510	1,510	2,400	2,600	5,300	19,300	40,100	53,000	79,400	26,100	6,400	3,080
9	1,500	1,590	2,060	2,300	5,400	17,600	36,400	58,500	79,700	25,600	5,470	3,040
10	1,480	1,890	2,230	2,200	5,300	20,000	33,400	54,000	79,800	24,400	5,090	2,930
11	1,470	1,910	2,510	2,710	5,200	26,400	32,200	50,700	81,200	21,100	4,980	2,880
12	1,430	2,090	2,530	3,150	4,550	31,700	35,800	50,100	71,300	16,300	4,840	2,880
13	1,450	2,420	2,470	3,390	6,150	40,800	35,900	53,100	60,100	19,000	4,730	3,210
14	1,430	2,990	2,440	3,240	8,300	51,200	32,400	60,500	52,800	18,600	4,680	3,510
15	1,870	2,840	2,360	3,020	8,380	47,100	30,100	71,100	53,900	16,100	4,580	3,210
16	1,800	2,470	2,340	2,910	14,100	45,200	32,600	82,500	59,300	15,100	4,550	3,020
17	1,610	2,280	2,280	2,910	17,000	49,400	31,800	86,700	65,300	14,300	5,500	2,910
18	1,530	2,170	2,300	2,970	18,800	54,900	29,000	86,100	62,500	13,600	5,470	2,820
19	1,510	2,090	2,400	3,100	19,600	58,100	28,200	78,900	57,200	12,700	4,370	2,730
20	1,610	2,040	2,550	5,790	18,200	50,000	28,600	73,300	48,000	14,600	2,710	2,730
21	2,210	2,060	2,550	19,500	16,500	45,600	28,500	80,900	43,800	14,200	4,110	3,080
22	2,170	2,170	2,510	19,100	15,100	42,800	28,800	81,800	43,900	12,200	3,890	3,350
23	1,960	2,230	2,630	13,500	13,900	46,000	26,700	78,900	40,800	11,500	3,920	4,370
24	1,830	2,250	3,040	9,820	11,400	46,300	27,800	74,300	37,000	10,600	4,010	4,320
25	1,870	2,280	2,990	7,990	11,000	42,500	29,800	69,700	33,800	10,200	4,010	4,320
26	1,980	2,510	2,880	6,590	9,750	37,800	29,900	64,600	31,800	10,600	3,940	4,060
27	2,060	2,730	2,710	4,860	16,300	33,900	29,700	63,700	30,700	10,100	3,850	4,090
28	2,400	2,800	2,360	3,500	31,100	31,400	32,200	70,100	31,600	9,710	3,750	3,940
29	1,960	2,860	1,800	3,600	32,000	30,200	35,100	79,900	32,800	9,250	3,650	3,820
30	1,510	2,930	1,780	3,800	------	30,600	35,500	86,300	38,000	8,690	3,560	3,700
31	1,390	------	2,250	3,700	------	29,000	------	85,800	------	7,960	3,490	------
TOTAL	53,030	66,260	76,860	155,120	319,330	1,078.8M	956,500	1,958.6M	1,781.7M	575,210	156,810	100,090
MEAN	1,711	2,209	2,479	5,004	11,010	34,800	31,880	63,180	59,390	18,560	5,058	3,336
MAX	2,400	2,990	3,150	19,500	32,000	58,100	42,300	86,700	92,200	38,100	7,610	4,370
MIN	1,390	1,510	1,780	2,200	2,700	17,100	26,700	31,800	30,700	7,960	2,710	2,730
AC-FT	105,200	131,400	152,500	307,700	633,400	2,140M	1,897M	3,885M	3,534M	1,141M	311,000	198,500

CAL YR 1971 TOTAL 7,149,610 MEAN 19,590 MAX 100,000 MIN 1,390 AC-FT 14,180,000
WTR YR 1972 TOTAL 7,278,310 MEAN 19,890 MAX 92,200 MIN 1,390 AC-FT 14,440,000

M Expressed in thousands.

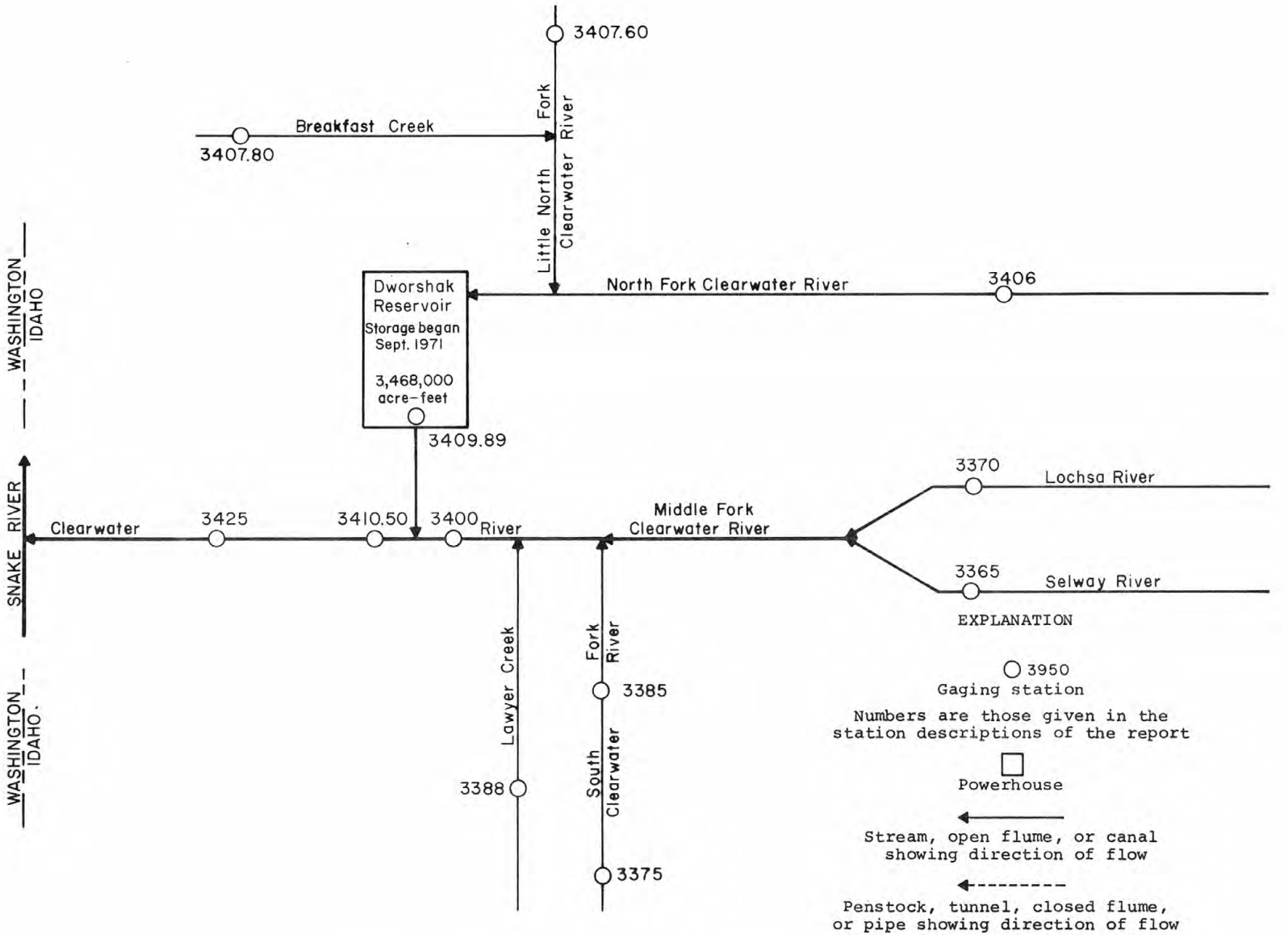


FIGURE 12. Schematic diagram showing Clearwater River basin.

13343500 Snake River near Clarkston, Wash.

LOCATION.--Lat 46°25'41", long 117°09'51", in SE¼SE¼ sec.16, T.11 N., R.45 E., Whitman County, on right bank 2.3 miles upstream from Alpowa Creek, 7.0 miles downstream from Clarkston, and at mile 132.9.

DRAINAGE AREA.--103,200 sq mi, approximately.

PERIOD OF RECORD.--October 1915 to current year. Monthly discharge only for some periods, published in WSP 1317. Prior to October 1935, published as "at Riparia." Monthly discharge only October 1909 to September 1915, published in State Water-Supply Bulletin 6. Gage-height records collected at Riparia 1900-16 (fragmentary) are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 670 ft above mean sea level (Corps of Engineers bench mark). Prior to Oct. 1, 1935, nonrecording gage at Riparia 65.8 miles downstream at different datum.

AVERAGE DISCHARGE.--57 years, 50,030 cfs (36,800,000 acre-ft per year); 15-year base period (1952-67), 50,970 cfs.

EXTREMES.--Current year: Maximum discharge, 240,000 cfs June 2 (gage height, 33.02 ft); minimum, 19,300 cfs Sept. 11 (gage height, 10.66 ft).
Period of record: Maximum discharge, 369,000 cfs May 29, 1948 (gage height, 40.36 ft, from high-water mark in well); minimum, 6,660 cfs Sept. 2, 1958 (gage height, 6.79 ft).
Flood of June 5, 1894, reached a stage of 24.7 ft, Riparia site and datum, determined from floodmarks by U.S. Weather Bureau (discharge, 409,000 cfs).

REMARKS.--Records excellent. Diversions above station for irrigation of 4,090,000 acres of which about 750,000 acres are by withdrawal from ground water. Regulation from many storage reservoirs above station and fluctuations during low-flow periods from powerplants on Clearwater River at Lewiston, Idaho, and Snake River at Hells Canyon Dam 114.1 miles upstream. Records of chemical analyses for water year 1972 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 463: 1916. WSP 933: 1937. WSP 1447: 1931(M), 1934(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24,000	35,000	33,700	32,600	54,800	96,800	109,000	104,000	226,000	93,600	29,900	22,000
2	22,100	36,700	34,800	33,800	54,200	89,400	111,000	94,500	237,000	89,800	28,100	22,500
3	21,000	37,000	33,200	33,600	52,900	96,400	113,000	90,200	228,000	84,400	26,300	21,300
4	21,000	36,000	33,300	34,000	48,300	95,000	108,000	88,400	213,000	74,700	26,200	20,100
5	28,000	36,200	30,500	33,700	46,700	91,000	108,000	95,900	201,000	71,900	25,700	20,900
6	30,500	36,000	32,600	34,000	47,800	98,200	112,000	103,000	193,000	70,400	25,600	21,900
7	32,900	35,200	34,600	34,600	48,500	100,000	127,000	115,000	191,000	69,500	25,900	22,900
8	33,500	34,700	35,200	34,000	48,800	99,300	126,000	124,000	203,000	67,000	26,400	24,000
9	33,400	34,600	36,100	35,600	49,700	96,800	120,000	139,000	209,000	60,800	25,800	24,300
10	31,700	35,600	33,300	34,300	47,200	99,800	115,000	134,000	210,000	59,700	24,600	22,800
11	29,300	35,700	32,800	35,300	45,900	114,000	110,000	127,000	212,000	53,200	24,200	19,900
12	32,300	34,800	34,500	35,700	45,600	126,000	106,000	121,000	191,000	47,600	25,800	21,700
13	32,000	34,900	34,800	36,400	47,100	136,000	104,000	124,000	161,000	48,400	23,700	23,800
14	31,900	34,400	35,000	37,000	50,100	157,000	99,600	135,000	147,000	49,000	21,800	26,100
15	33,200	35,300	33,700	36,700	50,200	149,000	95,800	155,000	150,000	46,000	21,900	28,000
16	33,300	32,800	33,900	35,600	60,700	143,000	97,800	180,000	167,000	43,900	22,200	27,000
17	32,400	33,900	34,200	33,700	70,300	154,000	98,400	195,000	184,000	41,800	23,900	26,900
18	31,100	33,700	33,000	34,000	65,000	166,000	92,400	200,000	178,000	39,700	25,100	25,600
19	31,400	33,300	32,600	34,500	60,300	177,000	89,600	189,000	167,000	38,000	24,300	26,800
20	32,900	33,800	33,700	40,100	58,800	162,000	88,400	176,000	147,000	38,300	22,500	25,100
21	34,100	33,500	34,000	66,600	65,200	152,000	81,000	182,000	136,000	41,200	21,700	26,400
22	34,300	32,900	33,700	72,700	69,600	147,000	76,200	185,000	132,000	38,600	24,400	25,900
23	35,500	34,200	33,300	62,400	72,000	149,000	72,900	178,000	120,000	37,000	25,000	26,600
24	35,100	32,000	34,100	55,100	69,900	150,000	73,600	157,000	109,000	33,800	25,400	26,500
25	35,500	31,700	33,600	58,100	67,800	145,000	76,300	149,000	102,000	34,100	26,500	25,500
26	35,000	29,300	33,100	61,400	66,500	137,000	82,500	141,000	97,400	35,500	26,600	26,300
27	35,000	29,600	33,400	58,200	71,600	130,000	92,200	139,000	96,500	34,700	25,900	27,700
28	35,800	30,000	34,400	55,100	94,200	119,000	98,200	149,000	91,200	33,000	24,000	26,100
29	36,000	30,000	33,900	55,300	104,000	114,000	103,000	170,000	89,800	31,000	25,500	27,400
30	35,100	33,400	32,600	55,400	------	114,000	106,000	194,000	95,500	29,400	24,600	26,200
31	35,100	------	33,400	55,200	------	111,000	------	206,000	------	27,800	23,700	------
TOTAL	984,400	1,016.2M	1,045.0M	1,354.7M	1,733.7M	3,914.7M	2,992.9M	4,540.0M	4,884.4M	1,563.8M	773,200	738,200
MEAN	31,750	33,870	33,710	43,700	59,780	126,300	99,760	146,500	162,800	50,450	24,940	24,610
MAX	36,000	37,000	36,100	72,700	104,000	177,000	127,000	206,000	237,000	93,600	29,900	28,000
MIN	21,000	29,300	30,500	32,600	45,600	89,400	72,900	88,400	89,800	27,800	21,700	19,900
AC-FT	1,953M	2,016M	2,073M	2,687M	3,439M	7,765M	5,936M	9,005M	9,688M	3,102M	1,534M	1,464M

CAL YR 1971 TOTAL 27,353,700 MEAN 74,940 MAX 253,000 MIN 20,000 AC-FT 54,260,000
WTR YR 1972 TOTAL 25,541,200 MEAN 69,780 MAX 237,000 MIN 19,900 AC-FT 50,660,000

M Expressed in thousands.

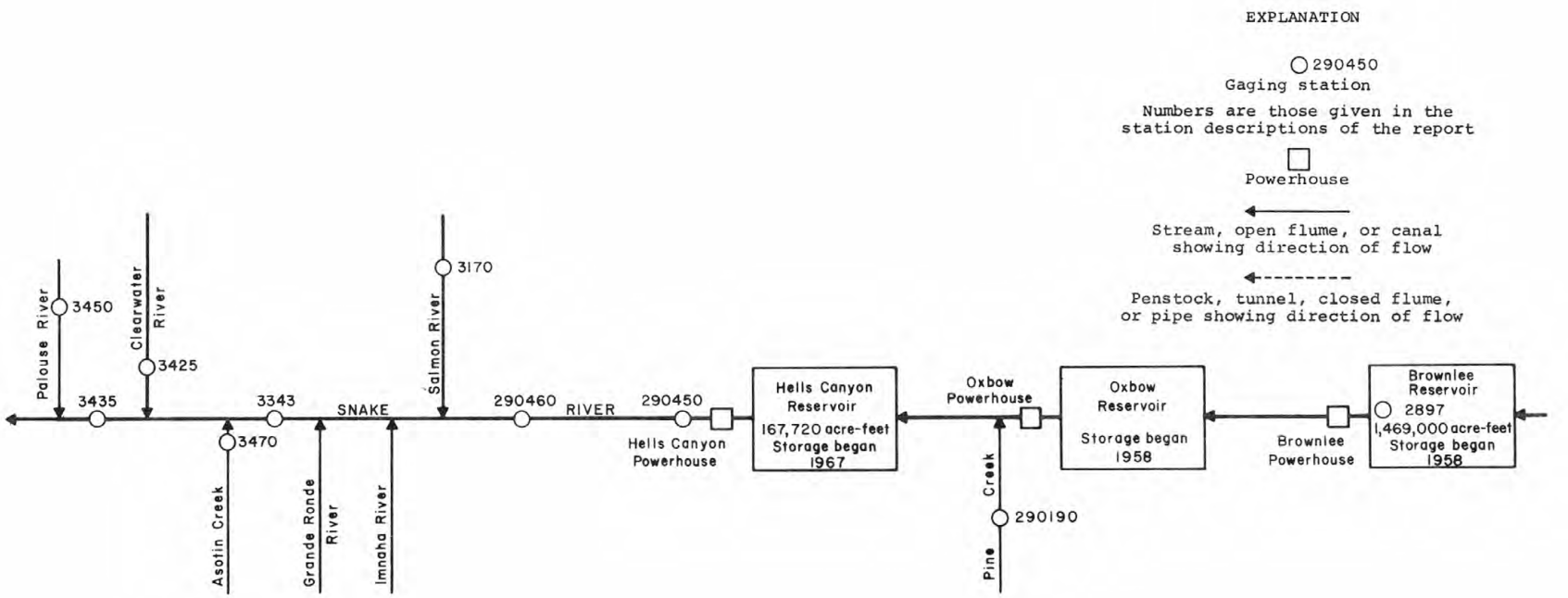


FIGURE 13. Schematic diagram showing gaging stations and storage in Snake River basin between Brownlee Reservoir and Clarkston, Wash.

13345000 Palouse River near Potlatch, Idaho

LOCATION.--Lat 45°54'55", long 116°57'00", in NE¼NW¼ sec.10, T.41 N., R.5 W., Latah County, on left bank 20 ft downstream from bridge on U.S. Highway 95, 1.0 mile downstream from Deep Creek, 2.0 miles west of Potlatch, and at mile 132.2.

DRAINAGE AREA.--317 sq mi.

PERIOD OF RECORD.--October 1914 to September 1919, December 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,483.10 ft above mean sea level (Idaho Department of Highways bench mark). October 1914 to September 1919 water-stage recorder at site 0.2 mile upstream at different datum.

AVERAGE DISCHARGE.--10 years (1914-19, 1967-72), 291 cfs (12.47 inches per year, 210,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,100 cfs Jan. 21 (gage height, 18.29 ft); minimum, 5.4 cfs Oct. 12, 13; minimum gage height, 4.28 ft Sept. 15, 16.
Period of record: Maximum discharge, 6,100 cfs Jan. 21, 1972 (gage height, 18.29 ft); minimum daily, 1.2 cfs Sept. 23, 24, 1967.

REMARKS.--Records good. Low flows regulated at millpond in Potlatch. Small amounts of water diverted for sprinkle irrigation systems above gage.

Rating table (gage height, in feet, and discharge in cubic feet per second)
(Stage-discharge relation affected by ice Jan. 10-17)

4.2	4.0	5.5	89.0	10.0	1,420
4.4	8.5	6.0	171	14.0	3,450
4.6	15.6	7.0	425	18.0	5,850
5.0	38.5	8.0	710		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	31	87	66	342	2,690	637	540	280	28	20	11
2	48	35	42	99	310	1,910	981	511	265	34	18	11
3	21	29	66	85	278	1,970	882	520	245	34	15	11
4	19	29	56	81	200	1,320	797	567	220	32	15	11
5	14	30	58	77	198	1,580	827	647	195	29	15	11
6	13	31	82	72	200	2,450	1,380	728	180	21	14	11
7	18	29	89	77	240	2,200	1,510	764	165	23	13	11
8	15	46	77	83	298	1,540	1,240	980	155	29	13	11
9	16	39	54	87	372	1,320	999	1,600	148	27	13	11
10	12	18	66	85	360	1,780	806	1,320	124	26	13	11
11	13	29	78	80	320	2,400	725	1,040	112	35	13	11
12	13	34	46	72	358	3,330	873	870	143	30	12	11
13	11	38	47	67	1,260	4,480	888	814	87	31	12	11
14	12	51	53	68	1,020	5,210	766	811	99	30	12	11
15	17	74	48	71	1,300	3,870	702	818	74	27	12	7.6
16	33	60	48	74	2,920	2,870	823	758	88	25	16	7.5
17	13	46	47	77	2,500	3,090	789	743	74	23	36	7.8
18	12	36	48	83	2,120	3,520	691	743	60	20	32	8.1
19	36	36	74	282	2,240	3,790	617	593	61	21	16	8.2
20	43	35	65	1,820	1,850	2,950	571	515	59	26	16	8.2
21	91	34	61	5,680	1,440	2,020	633	493	55	53	17	8.2
22	40	34	64	4,390	1,320	1,660	639	641	54	91	29	8.5
23	41	34	109	2,200	1,130	1,910	609	611	54	68	14	8.7
24	18	35	122	1,090	994	1,820	626	508	83	32	20	9.2
25	41	43	118	773	827	1,490	633	472	85	23	16	10
26	54	63	130	515	686	1,080	629	413	32	31	16	34
27	33	100	94	439	2,360	854	607	355	49	28	16	21
28	41	91	61	456	4,950	748	678	350	54	25	20	19
29	31	101	72	355	4,250	650	700	338	46	24	13	18
30	13	96	68	401	------	584	625	328	35	23	12	17
31	18	------	67	272	------	568	------	300	------	22	11	------
TOTAL	829	1,387	2,197	20,077	36,643	67,654	23,883	20,691	3,381	971	510	355.0
MEAN	26.7	46.2	70.9	648	1,264	2,182	796	667	113	31.3	16.5	11.8
MAX	91	101	130	5,680	4,950	5,210	1,510	1,600	280	91	36	34
MIN	11	18	42	66	198	568	571	300	32	20	11	7.5
CFSM	.08	.15	.22	2.04	3.99	6.88	2.51	2.10	.36	.10	.05	.04
IN.	.10	.16	.26	2.36	4.30	7.94	2.80	2.43	.40	.11	.06	.04
AC-FT	1,640	2,750	4,360	39,820	72,680	134,200	47,370	41,040	6,710	1,930	1,010	704

CAL YR 1971 TOTAL 109,357.1 MEAN 300 MAX 2,590 MIN 5.2 CFSM .95 IN 12.83 AC-FT 216,900
WTR YR 1972 TOTAL 178,578.0 MEAN 488 MAX 5,680 MIN 7.5 CFSM 1.54 IN 20.96 AC-FT 354,200

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	1100	18.29	6,100	3- 6	2300	12.97	2,810
2-16	2000	15.01	3,940	3-14	0415	17.36	5,430
2-28	0800	16.83	5,070				

13345000 Palouse River near Potlatch, Idaho

LOCATION.--Lat 45°54'55", long 116°57'00", in NE¼NW¼ sec.10, T.41 N., R.5 W., Latah County, on left bank 20 ft downstream from bridge on U.S. Highway 95, 1.0 mile downstream from Deep Creek, 2.0 miles west of Potlatch, and at mile 132.2.

DRAINAGE AREA.--317 sq mi.

PERIOD OF RECORD.--October 1914 to September 1919, December 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,483.10 ft above mean sea level (Idaho Department of Highways bench mark). October 1914 to September 1919 water-stage recorder at site 0.2 mile upstream at different datum.

AVERAGE DISCHARGE.--10 years (1914-19, 1967-72), 291 cfs (12.47 inches per year, 210,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,100 cfs Jan. 21 (gage height, 18.29 ft); minimum, 5.4 cfs Oct. 12, 13; minimum gage height, 4.28 ft Sept. 15, 16.
Period of record: Maximum discharge, 6,100 cfs Jan. 21, 1972 (gage height, 18.29 ft); minimum daily, 1.2 cfs Sept. 23, 24, 1967.

REMARKS.--Records good. Low flows regulated at millpond in Potlatch. Small amounts of water diverted for sprinkle irrigation systems above gage.

Rating table (gage height, in feet, and discharge in cubic feet per second)
(Stage-discharge relation affected by ice Jan. 10-17)

4.2	4.0	5.5	89.0	10.0	1,420
4.4	8.5	6.0	171	14.0	3,450
4.6	15.6	7.0	425	18.0	5,850
5.0	38.5	8.0	710		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	31	87	66	342	2,690	637	540	280	28	20	11
2	48	35	42	99	310	1,910	981	511	265	34	18	11
3	21	29	66	85	278	1,970	882	520	245	34	15	11
4	19	29	56	81	200	1,320	797	567	220	32	15	11
5	14	30	58	77	198	1,580	827	647	195	29	15	11
6	13	31	82	72	200	2,450	1,380	728	180	21	14	11
7	18	29	89	77	240	2,200	1,510	764	165	23	13	11
8	15	46	77	83	298	1,540	1,240	980	155	29	13	11
9	16	39	54	87	372	1,320	999	1,600	148	27	13	11
10	12	18	66	85	360	1,780	806	1,320	124	26	13	11
11	13	29	78	80	320	2,400	725	1,040	112	35	13	11
12	13	34	46	72	358	3,330	873	870	143	30	12	11
13	11	38	47	67	1,260	4,480	888	814	87	31	12	11
14	12	51	53	68	1,020	5,210	766	811	99	30	12	11
15	17	74	48	71	1,300	3,870	702	818	74	27	12	7.6
16	33	60	48	74	2,920	2,870	823	758	88	25	16	7.5
17	13	46	47	77	2,500	3,090	789	743	74	23	36	7.8
18	12	36	48	83	2,120	3,520	691	743	60	20	32	8.1
19	36	36	74	282	2,240	3,790	617	593	61	21	16	8.2
20	43	35	65	1,820	1,850	2,950	571	515	59	26	16	8.2
21	91	34	61	5,680	1,440	2,020	633	493	55	53	17	8.2
22	40	34	64	4,390	1,320	1,660	639	641	54	91	29	8.5
23	41	34	109	2,200	1,130	1,910	609	611	54	68	14	8.7
24	18	35	122	1,090	994	1,820	626	508	83	32	20	9.2
25	41	43	118	773	827	1,490	633	472	85	23	16	10
26	54	63	130	515	686	1,080	629	413	32	31	16	34
27	33	100	94	439	2,360	854	607	355	49	28	16	21
28	41	91	61	456	4,950	748	678	350	54	25	20	19
29	31	101	72	355	4,250	650	700	338	46	24	13	18
30	13	96	68	401	------	584	625	328	35	23	12	17
31	18	------	67	272	------	568	------	300	------	22	11	------
TOTAL	829	1,387	2,197	20,077	36,643	67,654	23,883	20,691	3,381	971	510	355.0
MEAN	26.7	46.2	70.9	648	1,264	2,182	796	667	113	31.3	16.5	11.8
MAX	91	101	130	5,680	4,950	5,210	1,510	1,600	280	91	36	34
MIN	11	18	42	66	198	568	571	300	32	20	11	7.5
CFSM	.08	.15	.22	2.04	3.99	6.88	2.51	2.10	.36	.10	.05	.04
IN.	.10	.16	.26	2.36	4.30	7.94	2.80	2.43	.40	.11	.06	.04
AC-FT	1,640	2,750	4,360	39,820	72,680	134,200	47,370	41,040	6,710	1,930	1,010	704

CAL YR 1971 TOTAL 109,357.1 MEAN 300 MAX 2,590 MIN 5.2 CFSM .95 IN 12.83 AC-FT 216,900
WTR YR 1972 TOTAL 178,578.0 MEAN 488 MAX 5,680 MIN 7.5 CFSM 1.54 IN 20.96 AC-FT 354,200

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	1100	18.29	6,100	3- 6	2300	12.97	2,810
2-16	2000	15.01	3,940	3-14	0415	17.36	5,430
2-28	0800	16.83	5,070				

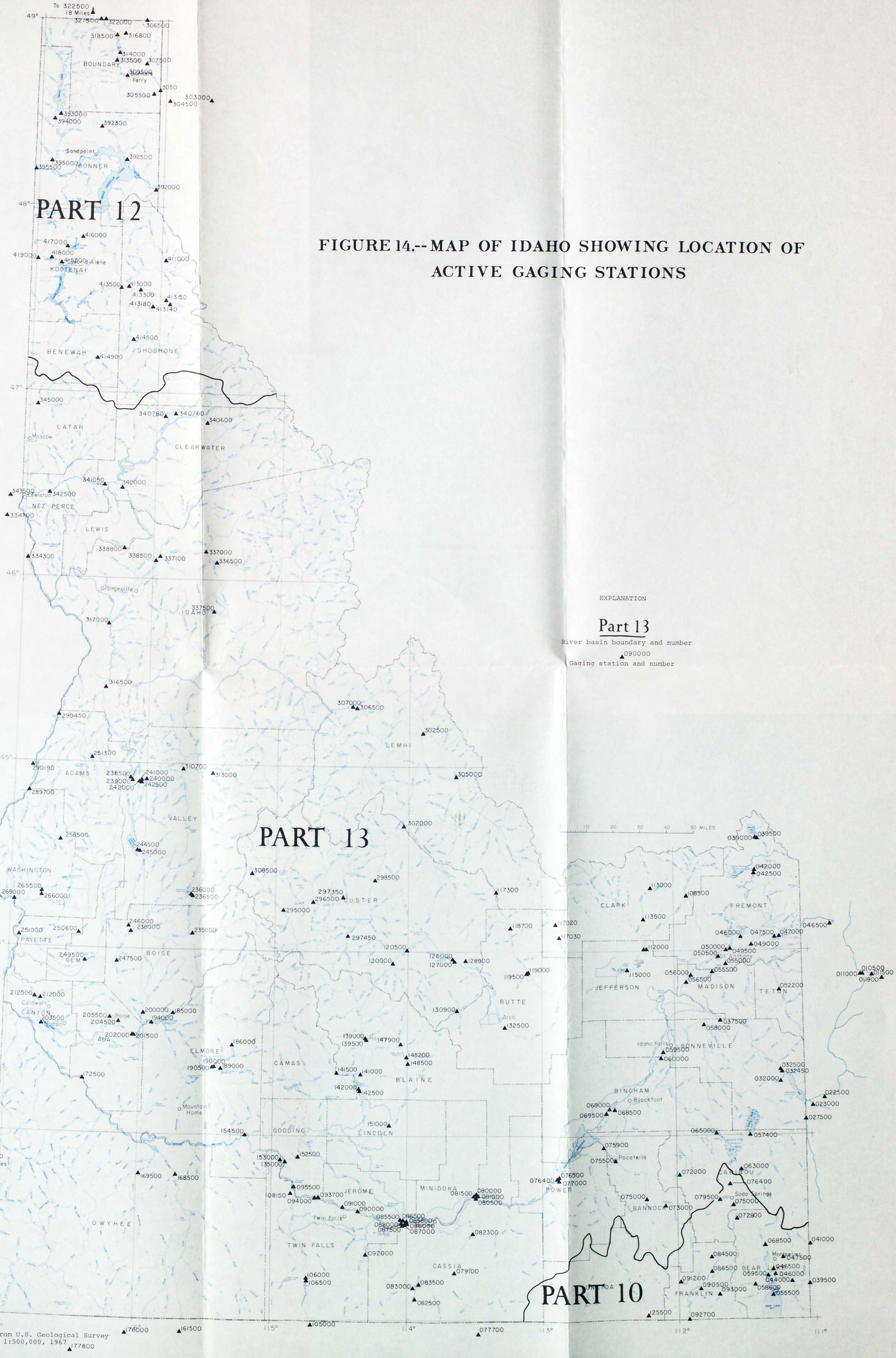


FIGURE 14.--MAP OF IDAHO SHOWING LOCATION OF ACTIVE GAGING STATIONS

EXPLANATION

Part 13

River basin boundary and number

▲090000

Gaging station and number

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are generally presented in two tables. However, no records at low-flow partial-record stations are available for the 1972 water year. A table of annual maximum discharge at crest-stage stations is given first, followed by a table of measurements made at miscellaneous sites. In addition, seepage measurements were made on the Boise River between Lucky Peak Dam and the mouth and on Big Creek in the Pahsimeroi Valley to determine gain or loss between measuring points. These measurements and computed gains or losses are summarized in two additional tables.

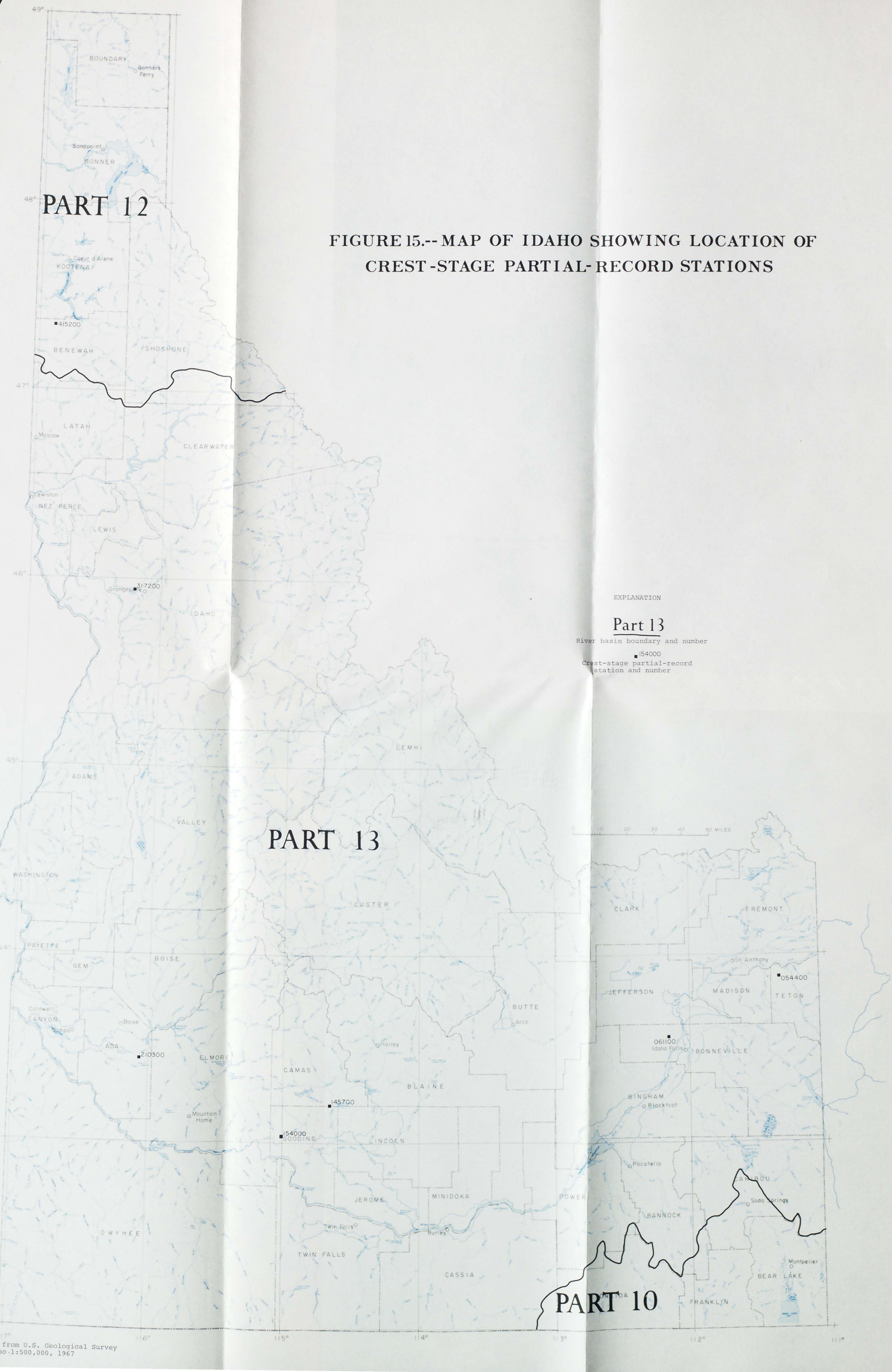
Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. Measurements made to rate the crest-stage stations are given in the list of miscellaneous measurements. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Spokane River basin					
12415200	Plummer Creek tributary at Plummer	Lat 47°20'20", long 116°53'14", in SW¼ sec.7, T.46 N., R.4 S., Benewah County, at U.S. Highway 95 and 0.2 mile north of Plummer.	2.10	1961-72	2-28-72	9.73	90
		Henrys Fork basin					
13054400	Milk Creek near Tetonia	Lat 43°53'00", long 111°20'40", in NE¼ sec.2, T.6 N., R.43 E., Teton County, at State Highway 33 and 10.5 miles northwest of Tetonia.	17.9	1962-72	6-24 or 7-20-72	4.04	48
		Snake River basin					
13061100	Snake River tributary near Osgood	Lat 43°34'07", long 112°08'47", 0.2 mile west of northeast corner sec.30, T.3 N., R.37 E., Bonneville County, 2.2 miles west of Osgood and 9 miles northwest of Idaho Falls.	7.64	1961-72	2-21-72	12.59	145
		Big Wood River basin					
13145700	Schooler Creek near Gooding	Lat 43°11'30", long 114°39'25", in SE¼NE¼ sec.3, T.3 S., R.15 E., Gooding County, at State Highway 46 and 18 miles north of Gooding.	2.22	1961-72	1-20-72	3.53	28
		Clover Creek basin					
13154000	Clover Creek near Bliss	Lat 43°01'30", long 115°00'20", in SE¼SE¼ sec.34, T.4 S., R.12 E., Gooding County, just downstream from Calf Creek and 6.5 miles northwest of Bliss.	140	1938-43‡, 1957-62‡, 1963-72	1-22-72	15.02	2,500
		Boise River basin					
13210300	Bryans Run near Boise	Lat 43°27'02", long 116°04'08", in NE¼NW¼ sec.11, T.1 N., R.3 E., Ada County, at U.S. Highway 30 crossing and 15 miles southeast of Boise.	7.94	1961-72	1-21-72	10.87	210
		Salmon River basin					
13317200	Johns Creek near Grangeville	Lat 45°56'16", long 116°12'03", on section line, 0.4 mile north of southwest corner sec.15, T. 30 N., R.2 E., Idaho County, at farm road 4 miles west of Grangeville.	6.67	1961-72	3-18-72	11.98	60

FIGURE 15.--MAP OF IDAHO SHOWING LOCATION OF CREST-STAGE PARTIAL-RECORD STATIONS



Base from U.S. Geological Survey
Idaho 1:500,000, 1967

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Bear River basin						
Malad River 10118200	Bear River	Lat 42°13'20", long 112°21'50", in sec.10, T.14 S., R.35 E., Oneida County, at springs 1 mile above dam on Samaria Reservoir No. 2, 5.8 miles northwest of Malad City, and 8.8 miles upstream from Little Malad River.	ab3.3	1932‡, 1941-47‡, 1948-71	10-14-71	*8.55
					2- 2-72	*8.33
					4-12-72	*9.67
					7-18-72	*10.7
					9-26-72	*9.81
Samaria Lake Canal 10121310	.....do.....	Lat 42°01'48", long 112°14'11", in NW¼NE¼ sec.22, T.16 S., R.36 E., Oneida County, 0.3 miles west of gaging station 10125500 Malad River at Woodruff.	-	-	10-23-69	a7.5
					12- 3-69	a1.5
					1-15-70	0
					2-19-70	a.2
					3-20-70	0
					4-24-70	a3.5
					5-20-70	a8
					6-19-70	a7
					7-16-70	a6
					8-19-70	a.5
					9-14-70	a6
					10-23-70	a6
					12- 3-70	a3
					1-15-71	0
					2-24-71	0
					3-31-71	a.2
					4-11-72	0
					5-18-72	10.2
					6-21-72	10.7
					7-19-72	10.7
					8-24-72	11.2
					9-27-72	13.3
Kootenai River basin						
Drainage District No. 1 12312300	Kootenai River	Lat 48°42'17", long 116°22'52", SW¼SE¼ sec.19, T.62 N., R.1 E., Boundary County, at mouth of Deep Creek in northwest corner, 3.2 miles west of Bonners Ferry, and at river mile 149.4.	-	-	2-17-72	63.2
					3-23-72	24.7
Drainage District No. 11 12313350	.....do.....	Lat 48°45'49", long 116°22'17", in SE¼SW¼ sec.31, T.63 N., R.1 E., Boundary County, near north end, 5.5 miles northwest of Bonners Ferry, and at river mile 143.6.	-	-	2-25-72	15.4
Spokane River basin						
South Fork Coeur d'Alene River 12413080	Coeur d'Alene River	Lat 47°28'15", long 115°46'22", NE¼NE¼ sec.35, T.48 N., R.5 E., Shoshone County, 0.9 mile east of Mullan, at U.S. Highway 10 crossing, and 1 mile upstream from mouth of Boulder Creek.	-	-	7-18-72	c59.5
					8-16-72	c30.5
Do..... 12413105	.....do.....	Lat 47°28'22", long 115°54'34", in NW¼NE¼ sec.35, T.48 N., R.4 E., Shoshone County, at wooden bridge crossing 0.5 mile east of Shoshone County Court House in Wallace.	-	-	7-18-72	c110
					8-16-72	c57.1
Canyon Creek 12413125	South Fork Coeur d'Alene River	Lat 47°28'24", long 115°54'50", in SE¼SW¼ sec.26, T.48 N., R.4 E., Shoshone County, at concrete bridge 200 ft above mouth.	-	-	7-19-72	c73.9
					8-16-72	c26.3
Nine Mile Creek 12413130	.....do.....	Lat 47°28'29", long 115°55'18", in SE¼SE¼ sec.27, T.48 N., R.4 E., Shoshone County, at wooden foot bridge 100 ft upstream from entrance of covered stream (mouth of creek located under covered section).	-	-	7-18-72	c18.2
					8-16-72	c8.80
Lake Creek 12413151	.....do.....	Lat 47°29'25", long 115°57'06", in NW¼SW¼SE¼ sec. 21, T.48 N., R.4 E., Shoshone County, at mouth 0.1 mile southeast of mouth of Revenue Gulch, and 1.3 miles southwest of Wallace.	-	-	7-19-72	3.18
					8-24-72	.87
Shields Gulch 12413165	.....do.....	Lat 47°28'55", long 115°59'40", in NW¼SW¼NE¼ sec. 30, T.48 N., R.4 E., Shoshone County, about 2 miles southeast of Osburn.	.68	1971	10-21-71	.33
					12- 1-71	.25
					2-29-72	9.53
					7-12-72	1.75
					8-23-72	.92
McFarren Gulch 12413170	.....do.....	Lat 47°29'20", long 116°00'56", in NW¼SW¼SE¼ sec. 24, T.48 N., R.3 E., Shoshone County, about 1.2 miles south-southwest of Osburn.	1.25	1971	10-21-71	1.06
					12- 1-71	.53
					2-29-72	16.1
					7-12-72	2.64
					8-23-72	1.11
South Fork Coeur d'Alene River 12413175	Coeur d'Alene River	Lat 47°31'20", long 116°01'18", in NE¼NW¼ sec.13, T.48 N., R.3 E., Shoshone County, at Terror Gulch bridge at Osburn.	-	-	7-20-72	c232
					8-23-72	c106
West Fork Big Creek 12413183	Big Creek	Lat 47°29'25", long 116°04'29", in SE¼NE¼SE¼ sec. 21, T.48 N., R.3 E., Shoshone County, about 3.5 miles east of Kellogg.	5.60	1971	10-21-71	2.47
					12- 1-71	2.32
					2-29-72	45.9
					7-12-72	11.0
					8-23-72	4.16

See footnotes at end of table, page 277.

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Spokane River basin--Continued						
South Fork Coeur d'Alene River 12413250	Coeur d'Alene River	Lat 47°32'49", long 116°08'09", in SE¼ sec.36, T.49 N., R.2 E., Shoshone County, at concrete bridge crossing above Bunker Hill pond near Kellogg.	-	1934	7-20-72	c309
					8-24-72	c143
Do. 12413490	.....do.....	Lat 47°33'35", long 116°15'03", in SW¼ sec.30, T.49 N., R.1 E., Shoshone County, at highway crossing at Enaville.	-	-	1-12-72	c201
					3- 6-72	c3,180
					4- 3-72	c1,440
					6-14-72	c1,350
					7-19-72	c428
					8-23-72	c207
Coeur d'Alene River 12413600	Spokane River	Lat 47°32'52", long 116°20'00", in NE¼SE¼ sec.33, T.49 N., R.1 E., Kootenai County, at U.S. Highway 10 bridge crossing at Cataldo.	-	-	8-17-72	c716
Cherry Creek 12415100	St. Joe River	Operated as a crest-stage station.	7.07	1961-71	3-14-72	†d237
Plummer Creek tributary 12415200	Plummer Creek	Operated as a crest-stage station.	2.10	1961-71	1-22-72	13.9
					2-28-72	43.2
					4- 6-72	a2
Snake River basin						
Great Feeder Canal 13038000	Snake River	Lat 43°38'20", long 111°42'55", 800 ft south of N¼ cor. sec.35, T.4 N., R.40 E., Jefferson County, at head 3 miles east of Ririe.	-	1923-37‡, 1970-71	2- 4-72	82.5
					3-13-72	426
Do. 13038380	.....do.....	Lat 42°29'45", long 112°00'20", in NE¼SE¼, sec.5, T.4 N., R.38 E., Jefferson County, 0.3 mile north of Lewisville.	-	1971	1-20-72	a10
					3-14-72	192
					4- 7-72	1
Snake River 13038500	Columbia River	Lat 43°43'50", long 111°52'05", in SE¼SE¼ sec.28, T.5 N., R.39 E., on the Madison-Jefferson County line, 0.3 mile northeast of Lorenzo.	5,810	1919, 1924-27‡, 1970-71	1-20-72	2,990
					3-13-72	6,800
					4- 6-72	16,600
Henrys Fork basin						
Big Springs 13040500	Henrys Fork	Lat 44°29'52", long 111°15'33", in NW¼SE¼NE¼ sec. 33, T.14 N., R.44 E., Fremont County, Targhee National Forest, at site of former gaging station, 0.2 mile downstream from road bridge, and 0.5 mile southeast of Big Springs railroad station.	-	1922, 1924-25‡, 1926-28, 1931, 1946-50, 1959-65 1967-70	10-19-71	*198
Milk Creek 13054400	Teton River	Operated as a crest-stage station.	14.1	1962-71	3-17-72	a1
South Fork Teton River 13055340	Henrys Fork	Lat 43°50'07", long 111°46'38", in NE¼SE¼NE¼ sec. 19, T.6 N., R.40 E., Madison County, at U.S. Highway 20 and 191 bridge, about 3,300 ft north of county courthouse in Rexburg.	-	1971	10-13,71	c252
					11-30-71	c227
					5-17-72	c1,030
					6-14-72	c1,400
Snake River basin						
Snake River 13057000	Columbia River	Lat 43°45'10", long 111°58'50", in SW¼NW¼ sec.22, T.5 N., R.38 E., Madison-Jefferson County line, 2.0 miles north of Menan.	8,820	1923‡, 1971	1-20-72	5,400
					3-14-72	10,000
					4- 6-72	19,700
Do. 13057100	.....do.....	Lat 43°37'35", long 112°03'50", in NE¼NE¼ sec.2, T.3 N., R.37 E., Bonneville-Jefferson County line, 3.0 miles southwest of Grants.	-	1971	1-20-72	5,900
					3-14-72	9,760
					4- 7-72	18,100
Snake River tributary 13061100	Snake River	Operated as a crest-stage station.	7.64	1961-71	1-17-72	a5
					1-22-72	a10
					2-21-72	a31
Snake River 13062500	Columbia River	Lat 43°11'55", long 112°21'55", in SE¼SW¼ sec.33, T.2 S., R.35 E., Bingham County, 0.5 mile northwest of Blackfoot.	9,950	1913,1919, 1924-32‡, 1946,1948, 1949,1971	1-21-72	5,620
					3-14-72	9,500
					4- 7-72	17,900
Pyle Springs 13069511	Snake River	Lat 43°03'42", long 112°34'32", in NE¼ sec.22, T.4 S., R.33 E., Bingham County, 4 miles south of Pingree.	-	1926-29, 1932-71	5-16-68	4.8
					5-29-68	5.0
					6-11-68	13.7
					6-25-68	10.1
					7-11-68	8.2
					7-25-68	7.2
					8- 5-68	7.2
					8-21-68	11.1
					8-31-68	8.2
					9-14-68	8.2
					5- 3-69	12.0
					5-16-69	a6
					5-31-69	4.9
					6-16-69	4.9
					6-26-69	5.5
					7-11-69	4.3
					7-24-69	4.9
					8-15-69	3.9
					8-30-69	5.9
					9-20-69	6.1

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Snake River basin--Continued				
Pyle Springs--Continued					5- 9-70	9.8
					5-29-70	4.9
					6-12-70	3.7
					6-27-70	9.5
					7-17-70	7.4
					8- 4-70	3.6
					8-21-70	5.5
					9- 5-70	8.6
					9-26-70	4.3
					5-29-71	1.7
					6- 9-71	.7
					7-12-71	6.1
					7-27-71	7.1
					8- 5-71	5.5
					8-23-71	7.2
					9- 7-71	6.9
					9-30-71	8.2
					5-13-72	5.2
					6-10-72	3.4
					7- 3-72	5.2
					7-22-72	1.8
					8-11-72	1.5
					9- 2-72	5.4
Hull Springs 13069520	Snake River	Lat 43°02'49", long 112°39'39", in NE¼ sec.25, T.4 S., R.32 E., Bingham County, 2.5 miles southeast of Springfield.		1926-29, 1932-67, 1971	5-16-68	*7.9
					5-29-68	*10.9
					6-11-68	*8.8
					6-25-68	*7.0
					7-11-68	*7.4
					7-25-68	*7.7
					8- 5-68	*9.8
					8-21-68	11.3
					8-31-68	*9.2
					9-14-68	*9.9
					5- 3-69	*7.2
					5-16-69	*6.0
					5-31-69	*7.1
					6-16-69	*7.8
					6-26-69	*7.7
					7-11-69	*9.3
					7-25-69	*8.4
					8-15-69	*9.0
					9-20-69	*9.2
					9-20-69	*9.8
					5- 9-70	*9.0
					5-28-70	*10.2
					6-11-70	*11.6
					6-27-70	*9.7
					7-16-70	*12.4
					7-31-70	*9.6
					8-21-70	*10.6
					9- 5-70	*9.9
					9-26-70	*11.5
					5- 7-71	*11.3
					5-29-71	*7.5
					6- 9-71	*9.0
					6-30-71	*10.9
					7-12-71	*10.7
					7-27-71	*7.7
					8- 5-71	*8.4
					8-23-71	*8.4
					9- 7-71	*10.3
					9-30-71	*11.8
					5-13-72	*6.3
					6-10-72	*6.6
					7- 3-72	*8.3
					7-21-72	*7.7
					8-11-72	*8.1
					9- 2-72	*6.5
Danielson Creek 13069540	.....do.....	Lat 43°03'32", long 112°41'24", in NW¼SW¼ sec.23, T.4 S., R.32 E., Bingham County, 2.5 miles south of Springfield.	-	1926-29, 1932-71	5-13-72	*52.6
					6-10-72	*64.5
					7- 3-72	*67.4
					7-21-72	*51.2
					8-11-72	*65.7
					9- 2-72	*65.3

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Portneuf River basin				
Portneuf River 13072400	Snake River	Lat 42°45'00", long 112°00'00", in SW¼ sec.3, T.8 S., R.38 E., Caribou County, at Jim Mabey Ranch and 0.5 mile north of Pebble.	-	1923-25, 1968-71	10-13-71	115
					11-18-71	114
					12-20-71	113
					2- 1-72	125
					3- 6-72	428
					4-10-72	294
					5-17-72	351
					6-20-72	175
					7-18-72	186
					8-22-72	144
					9-28-72	128
Do. 13075909	.....do.....	Lat 42°56'07", long 112°32'40", in SE¼SE¼ sec.36, T.5 S., R.33 E., Bannock-Power County line, on downstream side of Siphon Road crossing, 0.2 mile east of Fort Hall Michaud pumping station, and 6 miles northwest of Pocatello.	-	-	9-26-72	c655
Do. 13975910	.....do.....	Lat 42°56'40", long 112°32'40", in NE¼ sec.36, T.5 S., R.33 E., Bannock-Power County line, 4 miles west of Tyhee.	-	1926-29, 1932-71	5-13-72	1,440
					6-12-72	778
					7- 4-72	436
					7-21-72	293
					8-12-72	290
					9- 2-72	466
Wide Creek 13075920	Portneuf River	Lat 42°57'30", long 112°34'10", in NW¼ sec.26, T.5 S., R.33 E., Power County, Fort Hall Indian Reservation, 8 miles northwest of Pocatello.	-	1926-29, 1932-71	7-22-72	*50.5
					8-12-72	*54.0
					9- 2-72	*50.5
Clear Creek 13075930	.....do.....	Lat 42°59'40", long 112°34'15", in SW¼ sec.11, T.5 S., R.33 E., Bannock County, just upstream from Ford Creek and 7 miles west of Fort Hall.	-	1926-29, 1932-71	7-27-68	*141
					8- 6-68	*133
					8-21-68	*146
					8-31-68	*133
					9-14-68	*138
					6-17-69	*133
					6-25-69	*143
					7-10-69	*153
					7-24-69	*131
					8-16-69	*137
					8-30-69	*130
					9-20-69	*135
					8- 3-70	*130
					8-22-70	*140
					9- 5-70	*149
					9-26-70	*144
					8-24-71	*148
					9- 8-71	*130
					9-28-71	*148
					7-22-72	*129
					8-12-72	*124
					9- 2-72	*129
Ford Creek 13075940	Clear Creek	Lat 42°59'40", long 112°34'15", in SW¼ sec.11, T.5 S., R.33 E., Bannock County, just upstream from mouth and 7 miles west of Fort Hall.	-	1926-29 1932-71	7-26-68	*6.3
					8- 6-68	*6.7
					8-21-68	14.1
					8-31-68	*6.6
					9-14-68	*7.0
					6-17-69	*7.0
					6-25-69	*6.7
					7-10-69	*7.1
					7-24-69	*6.6
					8-16-69	*6.7
					8-30-69	*5.9
					9-20-69	*7.4
					8- 4-70	*6.7
					8-22-70	*6.8
					9- 5-70	*7.2
					9-26-70	*7.1
					8-25-71	*6.0
					9- 8-71	*7.0
					9-28-71	*6.9
					7-22-72	*6.7
					8-12-72	*6.0
					9- 2-72	*6.3
Ross Fork Creek 13075960	.....do.....	Lat 42°59'10", long 112°33'50", near center of sec.14, T.5 S., R.33 E., Bannock County, 7 miles southwest of Fort Hall.	-	1926-29, 1932-71	5-16-68	85.1
					5-30-68	68.1
					6-12-68	90.6
					6-25-68	64.5
					7-12-68	53.0
					7-26-68	62.1
					8- 6-68	66.3
					8-21-68	98.1

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Portneuf River basin--Continued				
Ross Fork Creek--Continued					8-30-68	82.6
					9-14-68	76.1
					5- 3-69	84.5
					5-17-69	68.2
					6- 2-69	77.9
					6-17-69	122
					6-25-69	110
					7-10-69	63.1
					7-24-69	79.4
					8-16-69	88.6
					8-30-69	74.3
					9-20-69	84.0
					5- 9-70	129
					5-29-70	85.3
					6-12-70	95.0
					6-27-70	65.6
					7-17-70	68.5
					8- 4-70	71.7
					8-22-70	76.1
					9- 5-70	82.2
					12-26-70	91.5
					5- 8-71	114
					5-29-71	91.8
					6-10-71	111
					7- 1-71	112
					7-13-71	69.0
					7-28-71	78.5
					8- 6-71	81.3
					8-25-71	85.6
					9- 8-71	128
					9-29-71	99.4
					5-13-72	106
					7- 4-72	93.5
					7-22-72	111
					8-12-72	90.7
					9- 2-72	121
Kinney Creek 13075970	Portneuf River	Lat 42°59'10", long 112°35'05", near center of sec.15, T.5 S., R.33 E., Bannock County, 8 miles west of Fort Hall.	-	1926-29, 1932-71	7-22-72	*28.4
					8-12-72	*27.2
					9- 2-72	*27.5
Spring Creek 13075985	.....do.....	Lat 43°00'09", long 112°36'01", in NE¼ sec.9, T.5 S., R.33 E., Bannock County, at road crossing and 8 miles west of Fort Hall.	-	1926-29, 1932-71	5-13-72	*498
					6-10-72	*c492
					7- 3-72	*478
					7-22-72	*459
					8-12-72	*461
					9- 2-72	*488
					9-22-72	*c513
Big Jimmy Creek 13075990	Spring Creek	Lat 43°00'47", long 112°36'04", in SE¼ sec.4, T.5 S., R.33 E., Bannock County, 8 miles west of Fort Hall.	-	1928, 1932-71	5-16-68	*33.9
					5-30-68	*33.1
					6-12-68	*33.0
					6-26-68	*25.7
					7-12-68	*24.7
					7-26-68	*23.4
					8- 6-68	*22.5
					8-21-68	*30.3
					8-31-68	*24.2
					9-14-68	*25.1
					5- 3-69	*31.0
					5-17-69	*28.4
					6- 2-69	*26.7
					6-17-69	*31.1
					6-26-69	*28.6
					7-11-69	*23.1
					7-25-69	*21.4
					8-16-69	*26.7
					8-30-69	*26.0
					9-20-69	*24.2
					5- 9-70	*32.9
					5-29-70	*33.6
					6-12-70	*29.0
					6-27-70	*23.6
					7-17-70	*27.4
					8- 4-70	*25.2
					8-21-70	*22.7
					9- 5-70	*29.5
					9-26-70	*32.6
					5- 8-71	*48.4
					5-29-71	*33.8

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Portneuf River basin--Continued						
Big Jimmy Creek--Continued					6-10-71	*37.6
					6-30-71	*51.3
					7-13-71	*29.9
					7-28-71	*30.4
					8- 5-71	*29.3
					8-24-71	*24.3
					9- 7-71	*32.6
					9-28-71	*31.5
					5-13-72	*31.4
					6-10-72	*31.6
					7- 3-72	*31.1
					7-22-72	*31.8
					8-12-72	*25.9
					9- 2-72	*27.8
Bannock Creek 13076200	Portneuf River	Lat 42°53'10", long 112°38'30", near center of sec.20, T.6 S., R.33 E., Power County, Fort Hall Indian Reservation, at Highway 30N crossing, 10 miles west of Pocatello.	413	1962-63, 1965, 1968-71	5-13-72	38.5
					6-12-72	17.8
					7- 4-72	45.6
					7-22-72	40.1
					8-12-72	41.4
					9- 2-72	41.1
					10- 3-72	23.4
Snake River basin						
Aberdeen Wasteway 13076300	Snake River	Lat 42°55'27", long 112°48'38", in SE¼SE¼ sec.3, T.6 S., R.31 E., Bingham County, 1.5 miles southeast of Aberdeen.	-	1970-71	6-10-72	c53.0
					9-22-72	c51.2
Ruegar Springs 13076600	.....do.....	Lat 42°46'00", long 112°52'55", in SW¼ sec.31, T.8 S., R.31 E., Power County, at fish hatchery and 0.9 mile downstream from American Falls Dam.	-	1927-29, 1932-53, 1961-71	5-12-72	*21
					6-10-72	*a21
					7-22-72	*a21
					8-11-72	*19
					9- 2-72	*a19
					10- 3-72	*19
Tributaries between Snake River at Milner and Salmon Falls Creek						
Devils Washbowl Spring 13089600	Snake River	Lat 42°35'18", long 114°20'45", in NE¼NE¼ sec.4, T.10 S., R.18 E., Jerome County, at old abandoned powerplant, about 0.2 mile upstream from mouth on right bank of Snake River, 0.5 mile upstream from Twin Falls, and 3.5 miles north of Kimberly.	-	1902, 1917, 1923-24, 1950-59, 1963-71	10- 1-71	*c20.6
					3-31-72	*c16.2
Devils Corral Spring (upper outlet) 13090100	.....do.....	Lat 42°35'38", long 114°21'55", in SE¼SE¼ sec.32, T.9 S., R.18 E., Jerome County, 100 ft above point where flow cascades into right bank of Snake River at mile 617.1, about 2 miles upstream from Shoshone Falls and powerplant, and 4 miles north of Kimberly.	-	1902, 1923-24, 1939, 1950-59, 1963-71	3-27-72	*c42.1
Devils Corral Spring (lower outlet) 13090100	.....do.....	Lat 42°36'01", long 114°22'30", in SE¼NW¼ sec.32, T.9 S., R.18 E., Jerome County, 0.1 mile upstream from mouth on right bank of Snake River 0.7 mile northwest of upper outlet, and 4.5 miles north of Kimberly.	-	1902, 1923, 1950-59, 1963-71	3-27-72	*6.91
Unnamed Spring No. 1 13090300	.....do.....	Lat 42°36'03", long 114°23'36", in SW¼NE¼ sec.31, T.9 S., R.18 E., Jerome County, near mouth on right bank of Snake River, 0.5 mile upstream from Shoshone powerplant, and 4 miles northeast of Twin Falls.	-	1950-59, 1963-71	3-27-72	*e1.35
Unnamed Spring No. 2 13090350	.....do.....	Lat 42°35'52", long 114°23'55", in NW¼SW¼ sec.31, T. 9 S., R.18 E., Jerome County, on right bank of Snake River just above Shoshone Falls and 4 miles northeast of Twin Falls.	-	1950-59, 1963-71	3-27-72	*4.38
Ellisons Springs 13093300	.....do.....	Lat 42°38'13", long 114°33'40", in NE¼ sec.22, T.9 S., R.16 E., Jerome County, near entry to right bank of Snake River, 1.3 miles downstream from Rock Creek, and 6.5 miles south of Jerome.	-	1950-59, 1963-71	3-31-72	*c2.10
Briggs Creek 13095200	.....do.....	Lat 42°40'20", long 114°49'00", in NW¼SE¼ sec.4, T.9 S., R.14 E., Gooding County, 500 ft upstream from mouth on right bank of Snake River, 2 miles downstream from Clear Lakes Spring Outlet, and 6 miles northwest of Buhl.	-	1902, 1913, 1917-20, 1924-25, 1931 1950-59, 1963-70	3-31-72	*f110
Blind Canyon 13095400	.....do.....	Lat 42°42'12", long 114°49'20", in SE¼NW¼ sec.28, T.8 S., R.14 E., Gooding County, at outlet on right bank of Snake River, 1,300 ft upstream from Box Canyon Springs outlet, and 8 miles northwest of Buhl.	-	1902, 1917, 1919, 1950-59, 1963-71	3-29-72	*c11.3

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Salmon Falls Creek basin						
Salmon Falls Creek 13103510	Snake River	Lat 41°56'35", long 114°41'00", in SE¼ sec.23, T.47 N., R.64 E., Elko County, above mouth of Shoshone Creek and 5 miles north of San Jacinto, Nev.	-	1969-71	3-24-72 5-20-72	389 496
Shoshone Creek 13104800	Salmon Falls Creek	Lat 41°56'36", long 114°41'02", in SE¼ sec.23, T.47 N., R.64 E., Elko County, at mouth and 5 miles north of San Jacinto, Nev.	-	1909,1914, 1938,1942, 1969-71	3-24-72 5-20-72	529 183
Mud Lake-Lost River basins						
Birch Creek diversion 13117023	from Birch Creek	Lat 44°08'40", long 112°54'10", in NE¼SE¼ sec.5, T.9 N., R.30 E., Clark County, near head on left bank, about 0.5 mile downstream from State Highway 28 bridge south of Blue Dome Inn, and 33.4 miles west of Dubois.	-	1968-71	10- 4-71 5- 8-72 6-12-72 7-13-72 8-15-72 9-22-72	5.5 3.6 4.4 5.3 2.8 5.6
Tributaries to Snake River from Thousand Springs to Big Wood River						
Sand Springs Creek 13132600	Snake River	Lat 42°43'36", long 114°50'00", in SE¼ sec.17, T.8 S., R.14 E., Gooding County, 0.5 mile upstream from mouth, on right bank of Snake River, and 7 miles southeast of Hagerman.	-	1902, 1912-13, 1917-21, 1924-25, 1932, 1954-59, 1963-71	3-30-72	f95.5
Bickel Spring 13132790	.....do.....	Lat 42°45'29", long 114°51'19", in SE¼NW¼SE¼ sec. 6, T.8 S., R.14 E., Gooding County, 0.2 mile upstream from mouth on right bank of Snake River and 4.6 miles southeast of Hagerman.	-	1970-71	3-30-72	*20.2
Riley Creek 13133800	.....do.....	Lat 42°45'46", long 114°51'31", in SW¼NE¼ sec.6, T.8 S., R.14 E., Gooding County, at Hagerman Hatchery of U.S. Fish & Wildlife Service, 100 ft downstream from small unnamed spring entering from right, 260 ft upstream from site of Riley Creek below Lewis Spring discontinued gaging station, 300 ft downstream from mouth of Lewis Creek, about 2 miles upstream from mouth, and 4.2 miles southeast of Hagerman.	-	1950-59, 1963-71	3-30-72	*f66.1
Billingsley Creek 13134600	.....do.....	Lat 42°46'35", long 114°50'55", in SW¼SW¼NW¼ sec. 32, T.7 S., R.14 E., Gooding County, 0.1 mile downstream from head of creek, 3.8 miles southeast of Hagerman, and about 7.5 miles upstream from mouth.	-	1902, 1917,1931, 1950-59, 1963-71	3-31-72	*f40.7
Do..... 13134800	.....do.....	Lat 42°50'10", long 114°53'40", in SW¼NE¼ sec.11, T.7 S., R.13 E., Gooding Count6, 700 ft northwest of U.S. Highway 30 bridge and 1.4 miles north of Hagerman.	-	1902,1917, 1919, 1924-25, 1932, 1956-59, 1963-71	3-30-72	c226
Birch Creek 13135100	.....do.....	Lat 42°51'10", long 114°53'30", in SE¼SE¼ sec.34, T.6 S., R.13 E., Gooding County, just downstream from left bank tributary, 0.5 mile upstream from entry to right bank of Snake River 0.8 mile south of Big Wood River, and 2.5 miles north of Hagerman.	-	1917,1919, 1950-59, 1963-71	3-30-72	*cf10.6
Clover Creek basin						
Clover Creek 13154000	Snake River	Operated as a crest-stage station.	140	1938-43‡, 1957-62‡, 1963-66, 1969-71	11- 8-71 4-24-72	a4.1 a20
Bruneau River basin						
Sugar Creek tributary 13170100	Sugar Creek	Lat 42°33'49", long 115°54'25", in NE¼ sec.18, T.10 S., R.5 E., Owyhee County, at State Highway 51 and 13.5 miles north of Grasmere.	4.50	1961-71	11-24-71	0
Fossil Creek basin						
Fossil Creek 13172200	Snake River	Lat 43°05'39", long 116°26'56", in NW¼NW¼ sec.10, T.4 S., R.1 W., Owyhee County, at Murphy-Grand View road crossing 4 miles northwest of Oreana.	19.7	1961-71	11-24-71	0
Snake River basin						
Snake River 13172900	Columbia River	Lat 43°37'10", long 116°55'20", in SE¼SE¼SW¼ sec. 3, T.3 N., R.5 W., Owyhee County, at U.S. Highway 95 crossing at Homedale.	-	1971	10-13-71	18,600

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
South Boise Drain basin						
South Boise Drain 13173630	Snake River	Lat 43°46'47", long 117°00'40", in SW¼SW¼SW¼ sec. 12, T.5 N., R.6 W., Canyon County, at section line road bridge, 2 miles upstream from mouth, and 3.2 miles west of Parma.	-	1970	11-18-71 8-15-72	20.2 c73.6
Ross Drain 13173635	South Boise Drain	Lat 43°47'21", long 117°00'40", in SW¼NW¼NW¼ sec. 12, T.5 N., R.6 W., Canyon County, at section line road, 0.4 mile upstream from mouth, and 3.2 miles west of Parma.	-	-	11-18-71 8-15-72 8-16-72	0 c2.6 c2.1
Boise River basin						
Boise River 13206000	Snake River	Lat 43°39'50", long 116°17'10", in NE¼ sec.25, T.4 N., R.1 E., Ada County, at Strawberry Glen bridge, 5 miles northwest of Boise, and at mile 47.1.	g2,800	1938-40‡, 1971	7-17-72 8-23-72 9-18-72	c932 c694 c492
Eagle Drain 13206400	Boise River	Lat 43°41'38", long 112°21'12", in SE¼NE¼SE¼SE¼ sec.8, T.4 N., R.1 E., Ada County, at Eagle Road (Highway 69) crossing and 0.1 mile south of Eagle.	-	1936	11-18-71 8-15-72	14.5 c58.1
Dry Creek 13208000	.....do.....	Lat 43°41'44", long 116°22'05", in NW¼SE¼SW¼ sec. 8, T.4 N., R.1 E., Ada County, at Highway 44 crossing and 0.8 miles west of Eagle.	66.4	1954-57‡	11-18-71 8-15-72	a.1 c3.34
Thurman Drain 13209450	.....do.....	Lat 43°40'01", long 116°21'13", in SE¼SE¼NE¼SE¼ sec.20, T.4 N., R.1 E., Ada County, at Eagle Road (Highway 69) crossing and 2.0 miles south of Eagle.	-	-	11-18-71 8-15-72	20.2 c37.1
Bryans Run 13210300	Blacks Creek	Operated as a crest-stage station.	7.03	1961-68, 1971	1-21-72 6- 7-72	87.2 0
Fifteenmile Creek 13210815	Boise River	Lat 43°35'40", long 116°41'27", in SW¼SW¼NW¼ sec. 16, T.4 N., R.2 W., Canyon County, at mouth 2 miles southeast of Middleton.	-	-	8-15-72 8-16-72	c149 c143
Mill Slough 13210825	.....do.....	Lat 43°42'13", long 116°38'16", in SW¼NE¼SE¼ sec. 12, T.4 N., R.3 W., Canyon County, at mouth 0.8 mile southwest of Middleton.	-	-	8-15-72	c243
Willow Creek 13210835	.....do.....	Lat 43°42'20", long 116°38'31", in NE¼NW¼SE¼ sec. 12, T.4 N., R.3 W., Canyon County, 0.1 mile above mouth and 0.8 mile southwest of Middleton.	-	-	8-15-72	c19.3
Mason Slough 13210850	.....do.....	Lat 43°41'32", long 116°39'56", in SW¼SE¼SW¼ sec. 11, T.4 N., R.3 W., Canyon County, at mouth 2.0 miles northeast of Caldwell.	-	-	11-19-71 8-15-72 8-16-72	4.17 c32.0 c24.2
Mason Creek 13210985	.....do.....	Lat 43°41'55", long 116°40'22", in SW¼SE¼SE¼ sec. 10, T.4 N., R.3 W., Canyon County, at mouth 2.0 miles north of Caldwell.	-	-	11-19-71 8-15-72 8-16-72	89.0 c187 c174
Hartley Drain 13210988	.....do.....	Lat 43°41'45", long 116°41'09", in SW¼NE¼SW¼ sec. 10, T.4 N., R.3 W., Canyon County, at mouth 1.2 miles north of Caldwell.	-	-	11-18-71 8-15-72	35.5 c98.1
Indian Creek 13211350	.....do.....	Lat 43°38'54", long 116°39'08", in SE¼SE¼SE¼ sec. 26, T.4 N., R.3 W., Canyon County, at Elm Lane bridge and 1.9 miles southeast of Caldwell.	-	-	7-17-72 8-23-72 9-19-72	c142 c157 c128
Conway Gulch 13212550	.....do.....	Lat 43°43'36", long 116°48'12", in NE¼NE¼SW¼ sec. 34, T.5 N., R.4 W., Canyon County, at Highway 20-26 crossing on west edge of Notus.	-	-	11-18-71 8-15-72	25.9 c45.9
Dixie Slough 13212890	.....do.....	Lat 43°43'51", long 116°53'17", in SE¼NW¼NW¼ sec. 36, T.5 N., R.5 W., Canyon County, at county road crossing, 0.1 mile upstream from mouth, and 3.7 miles north of Wilder.	-	-	11-18-71 8-15-72 8-16-72	102 c225 c207
Snake River basin						
Sand Run Gulch (formerly Sand Hollow drain) 13213080	Snake River	Lat 43°49'16", long 117°00'47", in NW¼NW¼NW¼ sec. 36, T.6 N., R.6 W., Canyon County, 0.5 mile above mouth and 4.2 miles northwest of Parma.	-	1970	11-19-71 8-15-72 8-16-72	76.5 c195 c202
Payette River basin						
West Side Lake Fork Canal (formerly Cruzen Canal) 13243000	from Lake Fork Payette River	(Revised) Lat 44°50'36", long 116°04'24", in SE¼ NE¼ sec.3, T.17 N., R.3 E., Valley County, 600 ft below head, 0.5 mile northeast of Lake Fork, and 5 miles south of McCall.	-	1938-40	8-18-72	56.4
Cottonwood Creek 13248900	Harris Creek	Lat 43°53'35", long 116°12'09", in NW¼NE¼ sec.3, T.6 N., R.2 E., Boise County, at Harris Creek road 1.5 miles south of Horseshoe Bend.	6.53	1961-71	10-21-71	a.01
Black Canyon Canal 13249400	from Payette River	Lat 43°56'36", long 116°26'20", in SE¼ sec.22, T.7 N., R.1 W., Gem County, 0.2 mile downstream from Black Canyon Dam and 5 miles northeast of Emmett.	-	1925-31, 1950,1955, 1957-71	7-12-72 8- 8-72 9-20-72	1,260 1,230 672

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Salmon River basin				
Salmon River 13292200	Snake River	Lat 43°53'03", long 114°45'47", in NE¼NE¼NE¼ sec. 1, T.6 N., R.13 E. (unsurveyed), Blaine County, at Highway 93 bridge crossing, 0.3 mile upstream from Frenchman Creek, and 14 miles south of Obsidian.	17.5	1971	6-20-72	c84.8
Beaver Creek 13292400	Salmon River	Lat 43°55'10", long 114°48'48", in NE¼NE¼SE¼ sec. 21, T.7 N., R.14 E., Custer County, at U.S. Highway 93 crossing, about 0.3 mile north of Beaver Creek store, and 23.5 miles southeast of Stanley.	15.0	1962-71	6-16-72	ac90
Champion Creek 13293200	.....do.....	Lat 44°01'39", long 114°49'54", in NW¼NW¼SW¼ sec. 16, T.8 N., R.14 E., Custer County, at Highway 93 bridge crossing, 0.4 mile upstream from mouth, and 4.0 miles south of Obsidian.	h17.5	1971	6-20-72	c56.7
Fourth of July Creek 13293400	.....do.....	Lat 44°01'48", long 114°49'54", in SW¼SW¼SW¼ sec. 9, T.8 N., R.14 E., Custer County, at Highway 93 bridge crossing, 0.2 mile upstream from mouth, and 3.4 miles south of Obsidian.	h18.5	1971	6-27-72	c87.1
Basin Creek 13295650	.....do.....	Lat 44°15'47", long 114°49'03", in NW¼SE¼SE¼ sec. 21, T.11 N., R.14 E., Custer County, at Highway 93 bridge crossing, 0.1 mile upstream from mouth, and 6.7 miles northeast of Stanley.	51	1971	6-26-72	c195
Yankee Fork Salmon River 13296000	.....do.....	Lat 44°17'15", long 114°43'11", in NE¼SW¼ sec.17, T.11 N., R.15 E. (unsurveyed), Custer County, at Sunbeam-Custer road bridge crossing, 1.75 miles north of Sunbeam, 1.9 miles upstream from mouth, and 12 miles northeast of Stanley.	195	1921-49‡, 1971	6-16-72	c1,830
Warm Springs Creek 13297000	.....do.....	Lat 44°14'50", long 114°40'11", in SW¼ sec.27, T.11 N., R.15 E. (unsurveyed), Custer County, 160 ft upstream from Robinson Bar bridge, 0.6 mile upstream from mouth, and 13.7 miles west of Clayton.	79	1929-23‡, 1971	10- 8-71 6-14-72	80.6 ac400
Peach Creek 13297100	.....do.....	Lat 44°15'50", long 114°38'50", in SE¼SW¼ sec.24, T.11 N., R.15 E., Custer County, 12.5 miles west of Clayton.	7.62	1962-71	6-14-72	ac28
Slate Creek 13297250	.....do.....	Lat 44°15'19", long 114°33'48", in SW¼SW¼NW¼ sec. 27, T.11 N., R.16 E., Custer County, at bridge crossing at mouth and 8.1 miles west of Clayton.	31.6	1971	5-29-72 6- 1-72 6- 2-72 6-15-72 6-16-72 6-17-72	c42.8 c81.2 c80.8 c108 c97.6 c108
Holman Creek 13297300	.....do.....	Lat 44°14'52", long 114°31'43", in SE¼SW¼SW¼ sec. 25, T.11 N., R.16 E., Custer County, in Holman Creek Campground 6.5 miles west of Clayton.	6.10	1962-71	6-14-72	ac6.3
Thompson Creek 13297310	.....do.....	Lat 44°17'26", long 114°33'25", in SW¼SE¼SE¼ sec. 10, T.11 N., R.16 E., Custer County, 0.6 mile upstream from Pat Hughes Creek and 8.2 miles west of Clayton.	22.5	1971	6-18-72	c104
Pat Hughes Creek 13297320	Thompson Creek	Lat 44°17'18", long 114°32'49", in NW¼NE¼NW¼ sec. 14, T.11 N., R.16 E., Custer County, 0.1 mile upstream from mouth and 7.6 miles west of Clayton.	h2.5	1971	6-18-72	c2.11
Thompson Creek 13297330	Salmon River	Lat 44°15'36", long 114°30'50", in NE¼NE¼ sec.25, T.11 N., R.16 E., Custer County, 0.8 mile upstream from mouth and 5.7 miles west of Clayton.	29.1	1971	6-14-72	c110
Squaw Creek 13297340	.....do.....	Lat 44°18'05", long 114°28'36", in SW¼NE¼NE¼ sec. 8, T.11 N., R.17 E., Custer County, at bridge crossing, 0.3 mile upstream from Bruno Creek, and 4.8 miles northwest of Clayton.	60	1971	6-19-72	c178
Do..... 13297360	.....do.....	Lat 44°15'35", long 114°27'27", in NW¼NE¼NE¼ sec. 28, T.11 N., R.17 E., Custer County, at bridge crossing, 0.9 mile upstream from mouth, and 2.8 miles west of Clayton.	80	1971	6-15-72	c274
Salmon River 13297380	Snake River	Lat 44°15'59", long 114°19'34", in SW¼NE¼SW¼ sec. 22, T.11 N., R.18 E., Custer County, at Highway 93 bridge crossing, 0.2 mile upstream from East Fork, and 3.4 miles east of Clayton.	1,170	1971	10- 8-71 6-19-72	c1,070 ac6,900
South Fork of East Fork Salmon River 13297384	East Fork Salmon River	Lat 43°55'44", long 114°33'15", in SW¼SE¼SE¼ sec. 15, T.7 N., R.16 E. (unsurveyed), Custer County, 100 ft upstream from West Fork and 24 miles southwest of Clayton.	18.0	1971	9-29-72	c5.52
West Fork of East Fork Salmon River 13297388	.....do.....	Lat 43°55'46", long 114°33'18", in SW¼SE¼SE¼ sec. 15, T.7 N., R.16 E. (unsurveyed), Custer County, 100 ft upstream from South Fork and 24 miles southwest of Clayton.	8.62	1971	9-29-72	c5.11

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Salmon River basin--Continued				
West Pass Creek 13297396	East Fork Salmon River	Lat 43°59'07", long 114°29'15", in NE¼NW¼NW¼ sec. 32, T.8 N., R.17 E., Custer County, 0.2 mile upstream from mouth, at bridge crossing, 0.6 mile northeast of Bowery guard station, and 19.5 miles south of Clayton.	26.1	1971	5-30-72	c172
East Fork Salmon River 13297400	Salmon River	Lat 44°00'23", long 114°28'48", in NW¼NW¼SE¼ sec. 20, T.8 N., R.17 E., Custer County, at bridge crossing, 1.6 miles downstream from West Pass Creek, and 18 miles south of Clayton.	75.6	1971	9-29-72	26.1
Germania Creek 13297404	East Fork Salmon River	Lat 44°02'21", long 114°27'40", in SE¼SE¼NW¼ sec. 9, T.8 N., R.17 E., Custer County, at bridge crossing, 0.6 mile downstream from Bowery Creek, and 15.5 miles south of Clayton.	48.9	1971	9-30-72	c43.3
Wickiup Creek 13297418	.....do.....	Lat 44°03'42", long 114°27'43", in NW¼NW¼NE¼ sec. 33, T.9 N., R.17 E., Custer County, 13.5 miles south of Clayton.	6.50	1971	5-31-72	c50.8
East Fork Salmon River 13297425	Salmon River	Lat 44°04'58", long 114°26'56", in NE¼SW¼NW¼ sec. 27, T.9 N., R.17 E., Custer County, at farm road bridge crossing, 1.2 miles upstream from Little Boulder Creek, and 12.5 miles south of Clayton.	164	1971	10- 7-71 6-21-72	c108 c725
Little Boulder Creek 13297440	East Fork Salmon River	Lat 44°03'30", long 114°34'27", in SE¼SE¼ sec.33, T.9 N., R.16 E. (unsurveyed), Custer County, at narrow constriction between two meadows, 0.4 mile downstream from unnamed lake, 0.5 mile upstream from mouth of Castle Creek, 0.6 mile west of Baker Lake, 8.5 miles upstream from mouth, and 16.5 miles southwest of Clayton.	2.83	1970-71	10- 5-71 6-20-72 7-18-72 8-29-72	c.82 c27.1 c19.3 c3.76
Do..... 13297445	.....do.....	Lat 44°03'36", long 114°32'31", in NW¼SE¼ sec.35, T.9 N., R.16 E. (unsurveyed), Custer County, just below Boulder Chain Lakes Outlet, 6 miles upstream from mouth, and 15.6 miles southwest of Clayton.	9.94	1970-71	10- 5-71 6-20-72 7-18-72 8-29-72	c8.45 c104 c61.7 c13.2
Big Boulder Creek 13297480	.....do.....	Lat 44°07'47", long 114°31'33", in NW¼NE¼ sec.12, T.9 N., R.16 E. (unsurveyed), Custer County, 0.4 mile upstream from mouth of Jim Creek, 5.2 miles upstream from mouth, and 10 miles southwest of Clayton.	12.7	1970-71	10- 6-71 6-19-72 7-18-72 8-29-72	c6.81 c72.1 c46.4 c15.7
Jim Creek 13297485	Big Boulder Creek	Lat 44°07'54", long 114°31'43", in SW¼SW¼ sec.1, T.9 N., R.16 E. (unsurveyed), Custer County, 0.2 mile upstream from crossing at Livingston Mill, 0.6 mile upstream from mouth, and 10 miles southwest of Clayton.	53.4	1970-71	10- 6-71 6-19-72 7-18-72 8-29-72	c3.62 c16.5 c9.88 c4.57
Big Boulder Creek 13297500	East Fork Salmon River	Lat 44°05'58", long 114°26'24", in SW¼NW¼NE¼ sec. 15, T.9 N., R.17 E., Custer County, at bridge crossing and 0.4 mile upstream from mouth.	27.4	1926-30, 1971	6-20-72	c103
Big Lake Creek 13297530	.....do.....	Lat 44°09'30", long 114°22'43", in NW¼NE¼NW¼ sec. 31, T.10 N., R.18 E., Custer County, 1.0 mile upstream from mouth and 7.0 miles south of Clayton.	26.5	1971	6-21-72	c16.4
Lake Creek 13297590	Herd Creek	Lat 44°05'41", long 114°10'52", in NE¼NE¼NE¼SE¼ sec.23, T.9 N., R.19 E., Custer County, near end of road, 0.5 mile downstream from mouth of Herd Lake, 3.8 miles upstream from mouth, and 15.2 miles southeast of Clayton.	10.4	-	9-28-72	3.28
Herd Creek 13297600	East Fork Salmon River	Lat 44°09'11", long 114°17'54", in SE¼SW¼NE¼ sec. 35, T.10 N., R.18 E., Custer County, 500 ft upstream from mouth and 8.8 miles southeast of Clayton.	112	1971	6-15-72	ac200
Road Creek 13297670	.....do.....	Lat 44°10'36", long 114°12'03", in SW¼SW¼SE¼ sec. 22, T.10 N., R.19 E., Custer County, 0.2 mile upstream from Horse Basin Creek and 11 miles southeast of Clayton.	37.9	1971	5-31-72	c16.1
Horse Basin Creek 13297680	Road Creek	Lat 44°10'40", long 114°12'07", in NE¼SE¼SW¼ sec. 22, T.10 N., R.19 E., Custer County, at mouth on bridge crossing and 11 miles southeast of Clayton.	32.6	1971	5-31-72	c5.75
Road Creek 13297700	East Fork Salmon River	Lat 44°11'15", long 114°17'09", in NW¼NE¼NW¼ sec. 24, T.10 N., R.18 E., Custer County, 300 ft upstream from bridge crossing, 0.3 mile upstream from mouth, and 7.5 miles southeast of Clayton.	85.0	1971	6-21-72 9-28-72	c10.4 c4.31
East Fork Salmon River 13298000	Salmon River	Lat 44°13'29", long 114°17'06", in NW¼NE¼SW¼ sec. 1, T.10 N., R.18 E., Custer County, at bridge crossing and 5.2 miles southeast of Clayton.	532	1928-39‡, 1971	5-29-72 5-30-72 6- 2-72 6-15-72	c1,370 c1,720 c3,170 c1,730
Malm Gulch 13298300	.....do.....	Lat 44°21'18", long 114°15'45", in NE¼NE¼SW¼ sec. 19, T.12 N., R.19 E., Custer County, at U.S. Highway 93, 9.5 miles northeast of Clayton.	9.38	1962-71	6-16-72	†d430

Discharge measurements made at miscellaneous sites during water year 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Salmon River basin--Continued				
Big Creek 13301500	Pahsimeroi River	Lat 44°26'38", long 113°36'25", in SE¼SE¼NE¼ sec. 21, T.13 N., R.24 E., Lemhi County, at private road bridge, above diversions, 0.3 mile above old staff gage site, 0.4 mile downstream from confluence of North and South Forks, and 7 miles southeast of Patterson.	54.8	1910-13‡, 1938,1971	6-16-71 10-13-71 11-19-71 12-14-71	i338 c25.8 22.3 24.0
Grouse Creek 13301510	.....do.....	Lat 44°26'50", long 113°53'14", in NW¼NW¼ sec.20, T.13 N., R.22 E., Custer County, at road crossing and 11 miles south of May.	26.4	1971	10-13-71 11-18-71 12-14-71	c1.16 0 0
Meadow Creek 13301520	.....do.....	Lat 44°27'29", long 113°55'10", in SW¼NE¼ sec.13, T.13 N., R.21 E., Custer County, at road crossing and 10.2 miles south of May.	10.1	1971	10-13-71 11-18-71 12-14-71	c.73 .44 .40
Sulphur Creek 13301530	.....do.....	Lat 44°30'29", long 113°56'40", in SE¼SW¼ sec.26, T.14 N., R.31 E., Custer County, 7 miles south of May	9.28	1971	10-13-71 11-18-71 12-14-71	c1.19 .82 .76
Patterson Creek 13301595	.....do.....	Lat 44°32'06", long 113°41'03", in NW¼ sec.24, T.14 N., R.23 E., Lemhi County, below Inyo Creek and 1.5 miles northeast of Patterson.	-	-	10-13-71	ac15.3
Do..... 13301600	.....do.....	Lat 44°31'28", long 113°42'11", in SW¼SW¼ sec.23, T.14 N., R.23 E., Lemhi County, 0.3 mile above mouth of canyon and 0.5 mile east of Patterson.	31.4	1971	10-13-71 11-19-71 12-14-71	c15.8 16.0 13.1
Morse Creek 13301700	Patterson Creek	Lat 44°36'55", long 113°48'25", in SW¼ sec.24, T.15 N., R.22 E., Lemhi County, 5.2 miles east of May.	18.0	1962-71	10-13-71 11-19-71 12-14-71	c6.75 6.38 6.46
Johns Creek 13317200	Salmon River	Operated as a crest-stage station.	6.67	1961-71	3- 2-72	25.8
		Clearwater River basin				
Red Horse Creek 13337200	Red River	Lat 45°47'39", long 115°23'59", in SW¼SW¼NW¼ sec. 6, T.28 N., R.9 E., Idaho County, 75 ft upstream from Elk City-Dixie road and 3.0 miles southeast of Elk City.	9.13	1961-71	10-21-71	a2
Peasley Creek 13337700	South Fork Clearwater River	Lat 45°49'05", long 115°49'01", in SE¼ sec.27, T.29 N., R.5 E. (unsurveyed), Idaho County, at State Highway 14 and 6.6 miles west of Golden.	14.2	1961-71	10-21-71	a3
Cold Springs Creek 13341100	Clearwater River	Lat 46°14'10", long 116°31'06", in NE¼ sec.1, T.33 N., R.2 W., Lewis County, at U.S. Highway 95 and 2.7 miles west of Craigmont.	8.07	1961-65, 1968-71	10-21-71	a.5
Clearwater River 13343100	Snake River	Lat 46°25'08", long 116°59'57", in NW¼SW¼ sec.32, T.36 N., R.5 W., Nez Perce County, at U.S. Highway 12, Clearwater River Memorial bridge at Lewiston, and at mile 1.5.	g9,640	1924	4- 5-72 6- 7-72	25,500 78,400
		Palouse River basin				
Deep Creek 13344800	Palouse River	Lat 46°57'38", long 116°56'04", in SW¼ sec.23, T.42 N., R.5 W., Latah County, on farm road 3.3 miles northwest of Potlatch.	36.6	1961-71	1-21-72	†d1,340
South Fork Palouse River 13346450	.....do.....	Lat 46°42'41", long 116°58'45", on line between secs.16 and 17, 0.2 mile north of SW cor. sec. 16, T.39 N., R.5 W., Latah County, on county road, 0.7 mile south of Highway 8, 1.8 miles southeast of Moscow Post Office, and at mile 35.6.	25.1	-	1-21-72	†d1,200
Paradise Creek 13346700	South Fork Palouse River	Lat 46°44'15", long 116°58'32", in SE¼SW¼NW¼ sec. 9, T.39 N., R.5 W., Latah County, at "D" Street crossing in Moscow, and 11 miles upstream from mouth.	12.3	-	1-21-72	†d780
Do..... 13346800	.....do.....	Lat 46°43'56", long 117°01'25", in NE¼SE¼SE¼ sec. 12, T.39 N., R.6 W., Latah County, at access road to University of Idaho farm from Moscow-Pullman highway, 0.7 mile east of Idaho-Washington stateline, 1.1 miles west of Main Street in Moscow, and at mile 6.8.	17.7	-	1-21-72	†d900

* Base flow.
† Peak flow.
‡ Operated as a continuous-record gaging station.
a Estimated.
b Flow derived largely from springs.
c Record of chemical analysis and/or suspended sediment of sample is published in Part 2 of this report.
d Discharge determined by indirect methods.
e Does not include all of flow from the spring.
f Discharge represents actual spring flow adjusted for diversions.
g Approximately.
h Drainage area determined at mouth of stream.
i Published in error in 1971 Part 1.

Boise River base flow investigation--Lucky Peak Dam to mouth

One series of measurements was made during Nov. 18 and 19, 1971, on the Boise River to determine the gain along the 64-mile reach, extending from Lucky Peak Dam downstream to the mouth of the river. The gates at the dam were closed at 1200 on Nov. 13 and remained closed during the measurements. There were no irrigation diversions at this time of year, and antecedent precipitation was negligible. Except for minute amounts from city or industrial sources, the gain is from ground-water discharge and thus is the base flow of this reach of river.

The Boise River and significant flows in other surface channels were listed separately and totaled at cross sections which are north-south lines across Boise River Valley. Small gains with respect to the totals should be considered as indications only, as small inaccuracies in the individual measurements are amplified in comparison of differences.

River mile	Stream	Location	Date Nov.	Boise River tributaries, diversions, and drains measured at cross sections: Discharge (cfs)	Boise River tributaries, diversions, and drains measured at cross sections: Gain (cfs)	Boise River tributaries, diversions, and drains not measured at a cross section: Discharge (cfs)	Boise River tributaries, diversions, and drains not measured at a cross section: Gain (cfs)
63.0	Boise River 13202000	Gaging station near Boise	18	0.99			
58.8	Boise River 13203700	(Revised) Lat 43°33'41", long 116°07'18", in SW¼SW¼ SE¼ sec.29, T.3 N., R.3 E., Ada County, at site of discontinued gaging station, 400 ft below Barber Dam, 0.7 mile south of Barber Road and State Highway 21 junction, and 5.5 miles southeast of Boise.	18	5.93	4.94		
56.3	Boise River 13204150	Lat 43°34'55", long 116°09' 28", in NE¼NW¼SE¼ sec.24, T.3 N., R.2 E., Ada County, at power line crossing, 0.5 mile south of Olson City, and 3.2 miles southeast of Boise.	18	6.89	.96		
53.7	Boise River 13204510	Lat 43°36'14", long 116°11' 34", in NE¼NE¼NE¼NE¼ sec. 15, T.3 N., R.2 E., Ada County, at Broadway Bridge, 1.0 mile southeast of State Capitol Building in Boise.	18	13.7	6.8		
52.8	Boise River 13205500	Gaging station at Boise.	18	14.7			
	Total	At north-south line along Capitol Boulevard.		17.7	4.0		
51.5	Boise River 13205605	Lat 43°37'11", long 116°13' 42', in SE¼SE¼SW¼SW¼ sec.4, T.3 N., R.2 E., Ada County, at Fairview Avenue bridge, 1.4 miles west of State Capitol Building in Boise.	18	23.1			
	Total	At north-south line through Fairview Avenue bridge.		23.4	5.7		
--	Boise City Sewer outflow	Lat 43°38'23", long 116°14' 38", in NE¼NE¼SW¼ sec.32, T.4 N., R.2 E., Ada County, at Boise City Sewer outflow to Boise River, 2.8 miles northwest of State Capitol Building in Boise.	18			6.6	--
49.4	Boise River 13205645	Lat 43°38'37", long 116°15' 04", in NW¼SW¼NW¼ sec.32, T.4 N., R.2 E., Ada County, 400 ft northeast of E. 47th Street in Garden City, 0.5 mile downstream from Boise City Sewer outflow, and 3.2 miles northwest of the State Capitol Building in Boise.	18	56.5	33.1		

Boise River base flow investigation--Lucky Peak Dam to mouth--Continued

River mile	Stream	Location	Date Nov.	Boise River tributaries, diversions, and drains measured at cross sections: Discharge (cfs)	Boise River tributaries, diversions, and drains measured at cross sections: Gain (cfs)	Boise River tributaries, diversions, and drains not measured at a cross section: Discharge (cfs)	Boise River tributaries, diversions, and drains not measured at a cross section: Gain (cfs)
47.1	Boise River 13206000	Lat 43°39'46", long 116° 17'04", in NE¼NE¼NW¼ sec. 25, T.4 N., R.1 E., Ada County, at site of dis continued gaging station, at Strawberry Glenn bridge, and 5.3 miles northwest of Boise.	18	65.4			
--	Unnamed drain	Lat 43°39'21", long 116°17' 53", in NE¼NW¼SE¼ sec.26, T.4 N., R.1 E., Ada County, at Garrett Street, south of Highway 20, and 5.5 miles northwest of Boise.	(a)	8.58			
--	Four small drains	At drain crossing of Garrett and Marigold Streets north of unnamed drain at Garrett Street.	(a)	b.75			
	Total	At north-south line through Strawberry Glenn bridge.		74.8	18.3		
42.8	Boise River, north channel 13206300	Lat 43°41'12", long 116°21' 12", in SE¼SE¼NE¼ sec.17, T.4 N., R.1 E., Ada County, at Eagle Road crossing and 0.6 mile south of Eagle.	18	35.8			
42.8	Boise River, south channel 13206305	Lat 43°40'31", long 116°21' 13", in NE¼SE¼NE¼NE¼ sec. 20, T.4 N., R.1 E., Ada County, at Eagle Road crossing, 1.4 miles south of Eagle, and at mile 4.2 (south channel).	18	32.7			
--	Eagle drain 13206400	Lat 43°41'38", long 116°21' 12", in SE¼NE¼SE¼SE¼ sec.8, T.4 N., R.1 E., Ada County, at Eagle Road crossing and 0.1 mile south of Eagle.	18	14.5			
--	Ballentine Canal	Lat 43°41'33", long 116°21' 12", in SE¼SE¼SE¼SE¼ sec.8, T.4 N., R.1 E., Ada County, at Eagle Road crossing and 0.2 mile south of Eagle.	18	1.11			
--	Unnamed canal	Lat 43°40'27", long 116°21' 13", in SE¼SE¼NE¼NE¼ sec.20, T.4 N., R.1 E., Ada County, at Eagle Road crossing and 1.5 miles south of Eagle.	18	b.5			
--	Thurman Mill Canal	Lat 43°40'04", long 116°21' 13", in SE¼SE¼SE¼NE¼ sec.20, T.4 N., R.1 E., Ada County, at Eagle Road crossing and 1.7 miles south of Eagle.	18	2.55			
--	Thurman drain 13209450	Lat 43°40'01", long 116°21' 13", in SE¼SE¼NE¼SE¼ sec.20, T.4 N., R.1 E., Ada County, at Eagle Road crossing and 2.0 miles south of Eagle.	18	20.2			
	Total	At north-south road through Eagle.		107	32		

Boise River base flow investigation--Lucky Peak Dam to mouth--Continued

River mile	Stream	Location	Date Nov.	Boise River tributaries, diversions, and drains measured at cross sections: Discharge (cfs)	Boise River tributaries, diversions, and drains measured at cross sections: Gain (cfs)	Boise River tributaries, diversions, and drains not measured at a cross section: Discharge (cfs)	Boise River tributaries, diversions, and drains not measured at a cross section: Gain (cfs)
0.4	Dry Creek 13208000	Lat 43°41'45", long 116°22' 05", in NE¼SW¼SW¼ sec.8, T.4 N., R.1 E., Ada County, at State Highway 44 crossing and 0.7 mile west of Eagle.	18			b0.1	
39.1	Boise River, north channel 13209000	Lat 43°41'18", long 116°24' 46", in SW¼NW¼NW¼ sec.13, T.4 N., R.1 W., Ada County, at Linder Road (Darland Lane), 0.4 mile south of Highway 44, and 3.1 miles west of Eagle.	18	60.9			
39.1	Boise River, south channel 13209500	Lat 43°40'26", long 116°24' 46", in NW¼SW¼NW¼ sec.24, T.4 N., R.1 W., Ada County, at Linder Road crossing, 1.4 miles south of Highway 44, 3.5 miles southwest of Eagle, and at mile 0.9 (south channel).	18	69.7			
--	Drain	Lat 43°40'48", long 116°24' 46", in NE¼SE¼SE¼ sec.14, T.4 N., R.1 W., Ada County, at Linder Road crossing, 0.9 mile south of Highway 44, and 3.4 miles southwest of Eagle.	18	5.29			
--	Phyllis Canal	Lat 43°40'22", long 116°24' 46", in NE¼SE¼NE¼ sec.23, T.4 N., R.1 W., Ada County, at Linder Road crossing, 1.4 miles south of Highway 44, and 3.5 miles southwest of Eagle.	18	b.3			
	Total	At Linder Road.		136	29		
--	Pioneer Canal	Lat 43°41'27", long 116°29' 33", in NE¼NE¼NE¼ sec.18, T.4 N., R.1 W., Ada County, at Star Highway crossing and 0.1 mile south of Star.	18	b2.0			
--	Canyon Canal	Lat 43°40'56", long 116°29' 34", in SE¼NE¼SE¼ sec.18, T.4 N., R.1 W., Ada County, at Star highway crossing and 0.65 mile south of Star.	18	b.1			
34.1	Boise River 13210000	Lat 43°40'54", long 116°29' 17", in SE¼NW¼SW¼ sec.17, T.4 N., R.1 W., Ada County, at site of discontinued gaging station, about 0.2 mile upstream from Star Bridge, and 0.7 mile south of Star.	18	154			
--	Bypass channel	Lat 43°40'38", long 116°29' 34", in NE¼NE¼NE¼ sec.19, T.4 N., R.1 W., Ada County, at Star highway crossing on south bank of Boise River and 1.0 mile south of Star.	18	b.2			
--	Phyllis Slough	Lat 43°40'19", long 116°29' 34", in SE¼SE¼NE¼ sec.19, T.4 N., R.1 W., Ada County, at Star highway crossing and 1.4 miles south of Star.	18	13.9			

Boise River base flow investigation--Lucky Peak Dam to mouth--Continued

River mile	Stream	Location	Date Nov.	Boise River tributaries, diversions, and drains measured at cross sections: Discharge (cfs)	Boise River tributaries, diversions, and drains measured at cross sections: Gain (cfs)	Boise River tributaries, diversions, and drains not measured at a cross section: Discharge (cfs)	Boise River tributaries, diversions, and drains not measured at a cross section: Gain (cfs)
--	Lateral	Lat 43°40'30", long 116°29'34", in SE¼NE¼SE¼ sec.19, T.4 N., R.1 W., Ada County, at Star highway crossing and 1.7 miles south of Star.	18	b.8			
	Total	At Star Road.		171	35.0		
--	Tenmile Creek (tributary to Fifteenmile Creek) 13210600	Lat 43°37'19", long 116°29'34", in NE¼SE¼SE¼ sec.6, T.3 N., R.1 W., Canyon County, at Star highway crossing and 4.8 miles south of Star.	19			6.56	
--	Fivemile Creek (tributary to Tenmile Creek) 13210700	Lat 43°38'42", long 116°29'34", in NE¼SE¼NE¼ sec.31, T.4 N., R.1 W., Ada County, at Star highway crossing and 3.2 miles south of Star.	19			35.8	
--	Fifteenmile Creek (tributary to Boise River) 13210810	Lat 43°40'27", long 116°35'04", in SE¼NE¼NW¼ sec.21, T.4 N., R.2 W., Canyon County, at county road crossing, 0.8 mile north of State Highways 20-26, 1.4 miles east of Middleton Road, 1.5 miles above mouth, 2.8 miles southeast of Middleton.	18			55.9	13.5
--	Mill Slough	Lat 43°42'21", long 116°37'02', in NE¼NW¼NE¼ sec.7, T.4 N., R.2 W., Canyon County, at Highway 44 bridge, 50 ft west of Highway 44-Middleton Road junction at Middleton.	18	15.1			
--	Unnamed drain (tributary to Mill Slough)	Lat 43°42'09", long 116°36'52", in NE¼SE¼NE¼ sec.7, T.4 N., R.2 W., Canyon County, at Middleton Road crossing, 0.3 mile southeast of Highway 44-Middleton Road junction in Middleton.	18	53.2			
26.7	Boise River 13210820	Lat 43°41'49", long 116°36'45", in SE¼NE¼SE¼ sec.7, T.4 N., R.2 W., Canyon County, at Middleton Road crossing and 0.8 mile southeast of Middleton.	18	214			
--	Bypass channel	Lat 43°41'48", long 116°36'45", in SE¼NE¼SE¼ sec.7, T.4 N., R.2 W., Canyon County, on south bank of Boise River, at Middleton Road crossing, and 0.8 mile southeast of Middleton.	18	7.53			
--	Unnamed slough	Lat 43°41'38", long 116°36'44", in NE¼SE¼SE¼ sec.7, T.4 N., R.2 W., Canyon County, at Middleton Road crossing and 1.0 mile southeast of Middleton.	18	6.93			
--	Unnamed drain	Lat 43°41'16", long 116°36'44", in NE¼SE¼NE¼ sec.18, T.4 N., R.2 W., Canyon County, at Middleton Road crossing and 1.4 miles south of Middleton.	18	b.2			
	Total	At Middleton Road.		297	c126		

Boise River base flow investigation--Lucky Peak Dam to mouth--Continued

River mile	Stream	Location	Date Nov.	Boise River tributaries, diversions, and drains measured at cross sections Discharge (cfs)	Gain (cfs)	Boise River tributaries, diversions, and drains not measured at a cross section Discharge (cfs)	Gain (cfs)
--	Unnamed drain (tributary to Mason Slough)	Lat 43°40'54", long 116°36' 44", in SE¼NE¼SE¼ sec.18, T.4 N., R.4 W., Canyon County, at Middleton Road crossing and 1.8 miles south of Middleton.	18			b.5	
--	Mason Slough (tributary to Boise River) 13210850	Lat 43°41'32", long 116°39' 56", in SW¼SE¼SW¼ sec.11, T.4 N., R.3 W., Canyon County, at mouth 2.0 miles northeast of Caldwell.	19			4.17	
--	Mason Creek 13210970	Lat 43°39'52", long 116°36' 45", in SE¼SE¼SE¼ sec19, T.4 N., R.2 W., Canyon County, at Middleton Road crossing and 2.9 miles south of Middleton.	18			79.6	
--	Lower Fivemile drain (tributary to Mason Creek)	Lat 43°40'25", long 116°36' 45", in NE¼SE¼NE¼ sec.19, T.4 N., R.2 W., Canyon County, at Middleton Road crossing and 2.3 miles south of Middleton.	18			1.67	
--	Mason Creek (tributary to Boise River) 13210985	Lat 43°41'55", long 116°40' 22", in SW¼SE¼SE¼ sec.10, T.4 N., R.3 W., Canyon County, at mouth and 2.0 miles north of Caldwell.	19			89.0	7.7
--	Hartley drain (tributary to Boise River) 13210988	Lat 43°41'45", long 116°41' 09", in SW¼NE¼SW¼ sec.10, T.4 N., R.3 W., Canyon County, at mouth and 1.2 miles north of Caldwell.	18			35.5	
21.1	Boise River 13211000	Lat 43°40'52", long 116°41' 18", in SE¼NW¼SW¼ sec.15, T.4 N., R.3 W., Canyon County, at Highway 20-26 crossing and 1.1 miles north of Caldwell City Hall.	18	441			
--	Riverside Canal	Lat 43°40'45", long 116°41' 16", in NE¼SW¼SW¼ sec.15, T.4 N., R.3 W., Canyon County, at Highway 20-26 crossing and 0.9 mile north of Caldwell City Hall.	18	.82			
	Total Boise River and Canal	At Highway 20-26.		442	d145		
--	Indian Creek 13211260	Lat 43°32'43", long 116°29' 04", in SW¼SW¼SW¼ sec.32, T.3 N., R.1 W., Canyon County, at road crossing, 5 miles east of Nampa, and 8.1 miles north of Kuna.	19			20.0	
--	Indian Creek (tributary to Boise River) 13211440	Lat 43°40'11", long 116°41' 33", in NE¼NE¼ sec.21, T.4 N., R.3 W., Canyon County, at Aven Street bridge and 0.3 mile northwest of Caldwell City Hall.	18			263	243
--	Conway Gulch 13212550	Lat 43°43'36", long 116°48' 12", in NE¼NE¼SW¼ sec.34, T.5 N., R.5 W., Canyon County, at Highway 20-26 crossing on west edge of Notus.	18	25.9			

Boise River base flow investigation--Lucky Peak Dam to mouth--Continued

River mile	Stream	Location	Date Nov.	Boise River tributaries, diversions, and drains measured at cross sections Discharge (cfs)	Gain (cfs)	Boise River tributaries, diversions, and drains not measured at a cross section Discharge (cfs)	Gain (cfs)
13.8	Boise River 13212500	Gaging station at Notus	18	746			
--	Unnamed canal	Lat 43°42'36", long 116°47' 50", in NE¼SE¼NW¼SE¼ sec.3, T.4 N., R.4 W., Canyon County, at county road crossing and 1.0 mile south of Notus.	18	b.2			
	Total	At Notus.		772	e330		
--	West end drain (tributary to Dixie Slough) 13212870	Lat 43°40'11", long 116°47' 26", in SW¼SW¼NW¼ sec.23, T.4 N., R.4 W., Canyon County, at Highway 19 crossing and 1.5 miles east of Greenleaf.	18			37.5	
--	West end drain (tributary to Dixie Slough)	Lat 43°40'36", long 116°48' 05", in NW¼NW¼NE¼ sec.22, T.4 N., R.4 W., Canyon County, at county road crossing and 1.0 mile northeast of Greenleaf.	18			39.6	2.1
--	Pipe Gulch (tributary to Dixie Slough) 13212875	Lat 43°40'11", long 116°48' 35", in SW¼SW¼NW¼ sec.22, T.4 N., R.4 W., Canyon County, at Highway 19 crossing and 0.5 mile east of Greenleaf.	18			23.2	
--	Riverside drain (tributary to Dixie Slough)	Lat 43°40'55", long 116°48' 07", in SE¼NE¼SW¼ sec.15, T.4 N., R.4 W., Canyon County, at county road crossing and 3.0 miles south of Notus.	18			b1.9	
--	South drain (tributary to Dixie Slough)	Lat 43°41'44", long 116°48, 07", in SE¼NE¼SW¼ sec.10, T.4 N., R.4 W., Canyon County, at county road crossing and 2.1 miles south of Notus.	18			4.69	
--	South branch south drain (tributary to Dixie Slough)	Lat 43°41'24", long 116°48' 07", in NE¼NE¼NW¼ sec.15, T.4 N., R.4 W., Canyon County, at county road crossing and 2.4 miles south of Notus.	18			b.1	
--	North drain (tributary to Dixie Slough)	Lat 43°42'34", long 116°48' 12", in SE¼SE¼NW¼SE¼ sec.3. T.4 N., R.4 W., Canyon County, at county road crossing and 1.1 miles south of Notus.	18			2.61	
--	South branch north drain (tributary to Dixie Slough)	Lat 43°42'08", long 116°48' 07", in SE¼NE¼NW¼ sec.10, T.4 N., R.4 W., Canyon County, at county road crossing and 1.6 miles south of Notus.	18			b.3	
--	Dixie Slough 13212890	Lat 43°43'51", long 116°53' 17", in SE¼NW¼NW¼ sec.36, T.5 N., R.5 W., Canyon County, at county road crossing, 0.1 mile upstream from mouth, and 3.7 miles north of Wilder.	18			102	29.6
8.0	Boise River 13212900	Lat 43°44'53", long 116°54' 44", in NE¼NE¼NE¼ sec.27, T.5 N., R.5 W., Canyon County, at Highway 95 crossing and 3.1 miles southeast of Parma.	18	867			

Boise River base flow investigation--Lucky Peak Dam to mouth--Continued

River mile	Stream	Location	Date Nov.	Boise River tributaries, diversions, and drains measured at cross sections: Discharge (cfs)	Boise River tributaries, diversions, and drains measured at cross sections: Gain (cfs)	Boise River tributaries, diversions, and drains not measured at a cross section: Discharge (cfs)	Boise River tributaries, diversions, and drains not measured at a cross section: Gain (cfs)
--	Unnamed drain	Lat 43°45'34", long 116°54' 40", in NW¼SW¼NW¼ sec.23, T.5 N., R.5 W., Canyon County, at Highway 95 crossing and 2.4 miles southeast of Parma.	18	b0.5			
	Total	At Highway 95 crossing.		868	f96		
3.8	Boise River 13213000	Gaging station near Parma.	18	911	43		
.3	Boise River north and south channels 13213030	Lat 43°48'50", long 117°00' 55", in NE¼NE¼SE¼ sec.35., T.6 N., R.6 W., 0.3 mile above mouth and 4.0 miles northwest of Parma.	18	905			
	Total	Boise River channels at mouth.		905	-6		
--	Ross East End drain (tributary to South Boise drain)	Lat 43°44'23", long 116°54' 52", in SW¼NE¼SE¼ sec.27, T.5 N., R.5 W., Canyon County, at Highway 95 crossing and 3.6 miles southeast of Parma.	18			11.6	
--	Ross drain (tributary to South Boise drain) 13173635	Lat 43°47'21", long 117°00' 40", in SW¼NW¼NW¼ sec.12, T.5 N., R.6 W., Canyon County, at county road crossing, 0.4 mile upstream from mouth, and 3.5 miles west of Parma.	18			0	
--	South Boise drain (tributary to Snake River) 13173630	Lat 43°46'47", long 117°00' 40", in SW¼SW¼SW¼ sec.12, T.5 N., R.6 W., Canyon County, at county road crossing, 2.0 miles above mouth, and 3.2 miles west of Parma.	18			20.2	8.6
--	North Alkali drain (tributary to South Boise drain)	Lat 43°46'39", long 117°01' 16", in NW¼NW¼NE¼ sec.14, T.5 N., R.6 W., Canyon County, at county road crossing, 0.3 mile above mouth, and 4.0 miles west of Parma.	18			b2	
--	Sand Run Gulch	Lat 43°45'51", long 116°54' 40", in SE¼SE¼SE¼ sec.15, T.5 N., R.5 W., Canyon County, at Highway 95 crossing and 2.2 miles southeast of Parma.	18			69.4	
--	Sand Run Gulch (tributary to Snake River) (formerly Sand Hollow drain) 13213080	Lat 43°49'16", long 116°00' 47", in NW¼NW¼NW¼ sec.36, T.6 N., R.6 W., Canyon County, 0.5 mile above mouth and 4.2 miles northwest of Parma.	19			76.5	7.14
--	Unnamed drain (tributary to Snake River)	Lat 43°49'21", long 117°00' 32", in SE¼SW¼SW¼ sec.25, T.6 N., R.6 W., Canyon County, at road crossing, 0.8 mile upstream from mouth, and 4.4 miles northwest of Parma.	19			4.93	
0	Total	Inflow to Snake River from the Boise River and drains listed above.		1,009			

a Measured Jan. 12, 1972.
b Estimated.
c This total includes contribution by Fifteenmile Creek.
d This total includes contribution by Mason Slough, Mason Creek, and Hartley drain.
e This total includes contribution by Indian Creek.
f This total includes contribution by Dixie Slough.

Big Creek seepage investigation

One series of measurements was made on Big Creek from the head of its alluvial fan to the point where flow ceased. The length of reach is less than 8.0 miles and all diversions were inactive at time of measurement. The loss of water as Big Creek traverses its alluvial fan is typical of most of the tributaries to the Pahsimeroi River. Small gains or losses should be considered as indications only, as small inaccuracies in the individual measurements are amplified in comparison of differences.

Station No.	Stream	Location	Date	Discharge (cfs)	Loss (cfs)	Distance downstream (miles)
13301500	Big Creek	Same as published under Discharge measurements made at miscellaneous sites.	11-19-71	22.3	-	-
13301504	Big Creek	Lat 44°28'15", long 113°42'00", in NE¼SW¼ sec.11, T.13 N., R.23 E., Lemhi County, at Patterson-Howe road crossing and 4 miles south of Patterson.	11-19-71	17.7	4.6	5.5
13301505	Big Creek	Lat 44°28'26", long 113°42'35", in NE¼ sec.10, T.13 N., R.23 E., Lemhi County, 0.5 mile downstream from Patterson-Howe road crossing and 4 miles south of Patterson.	11-19-71	16.5	1.2	.5
13301506	Big Creek	Lat 44°28'28", long 113°43'10", in NW¼ sec.10, T.13 N., R.23 E., Lemhi County, 1.0 mile downstream from Patterson-Howe road crossing and about 4 miles south of Patterson.	11-19-71	12.3	4.2	.5
13301507	Big Creek	Lat 44°28'38", long 113°43'46", in NE¼ sec.9, T.13 N., R.23 E., Lemhi County, 1.5 miles downstream from Patterson-Howe road crossing and about 4 miles south of Patterson.	11-19-71	8.66	3.6	.5
13301508	Big Creek	Lat 44°28'50", long 113°44'21", in SW¼ sec.4, T.13 N., R.23 E., Lemhi County, 2.0 miles downstream from Patterson-Howe road crossing and about 4 miles south of Patterson.	11-19-71 11-20-71	7.34 7.38	1.32 -	.5 -
-	-	Flow stops between 2.0 and 2.5 miles downstream from Patterson-Howe road crossing.	11-20-71	0	7.38	.5

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