1973

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 1973

1972

OCTOBER

S	M	T	W	T	F	S
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8	9	10	11	12	13	14
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NOVEMBER

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31						

1973

JANUARY

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MAY

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JUNE

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JULY

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AUGUST

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SEPTEMBER

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Idaho Department of Water Resources
Idaho Department of Transportation
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, 1973
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 83724

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WATER RESOURCES DATA FOR IDAHO, 1973

Part 1. Surface-Water Records

INTRODUCTION

Surface-water records for the 1973 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 14 and 15. 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 th' 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 Resources, R. Keith Higginson, director.

Idaho Department of Transportation, Division of Highways,
Victor N. Richardson, State Highway Administrator.

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 25 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.

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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 1973 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 following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" 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 three tables at the end of the surface-water records in this report. The first is a table of low-flow measurements made at miscellaneous sites, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

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. Also specific conductance was obtained at the time of each discharge measurement at the stream-gaging stations. 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

The mean discharge for the 1973 water year was deficient (in the lowest 25 percent of record) over large parts of the State. Exceptions were in southwestern Idaho where flows in tributaries of the Snake River were excessive (in the highest 25 percent of record). The deficiency was most extreme in north and north-central Idaho. For example, streamflow in the Clearwater River at Spalding and several of the major tributaries averaged lower than any previous year of record; flow of Coeur d'Alene River at Enaville has been lower only 2 years in 36 years of record; flow of the Salmon River at White Bird has been lower 4 years in 61 years of record; and flow in the Boise River near Twin Springs has averaged less about once every 4 years. However, flows of Salmon Falls Creek near San Jacinto, Goose Creek above Trapper Creek, near Oakley, and Portneuf River at Pocatello were in the excessive range. Storage in most reservoirs was at relatively high levels at the beginning of the water year and at relatively low levels because of heavy irrigation and power demands and the deficient discharge.

Streamflow in southern Idaho continued excessive in October and November as in the 1972 snowmelt season. However, streams in north and north-central Idaho has receded to the deficient range. Record-breaking cold temperatures for the period December 4-15 caused flooding stages from ice jams in several reaches of the Snake and Salmon Rivers. Considerable stored water was released from the upper Snake River reservoirs as a result of prolonged excessive flows in the Snake River above American Falls, coupled with the storage limitation behind the weakened American Falls Dam. Streamflow declined statewide in relation to median through the winter months because of light precipitation. The March 1 forecasts for the April to September runoff, based on the snowpacks, ranged from a low of 13 percent of average on the Palouse River watershed to 148 percent of average on the Malad River in southeastern Idaho. Streamflow continued deficient or considerably below average from March until about September 20 except in southeastern Idaho where summer flows were near average. General rains beginning about the middle of September broke the drought, and streamflow had recovered considerably as the water year ended.

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.

Table 1.--Factors for converting English units to International System (SI) Units.

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply English units	By	To obtain SI units
	Length	
feet(ft)	0.3048	meters(m)
miles(mi)	1.609	kilometers(km)
	Area	
acres	.4047	square hectometer(hm^2)
square miles(mi^2)	2.590	square kilometers(km^2)
	Volume	
acre-feet(acre-ft)	1.233×10^{-3}	cubic hectometers(hm^3)
	Flow	
cubic feet per second(ft^3/s)	28.32	liters per second(l/s)
	.02832	cubic meters per second(m^3/s)

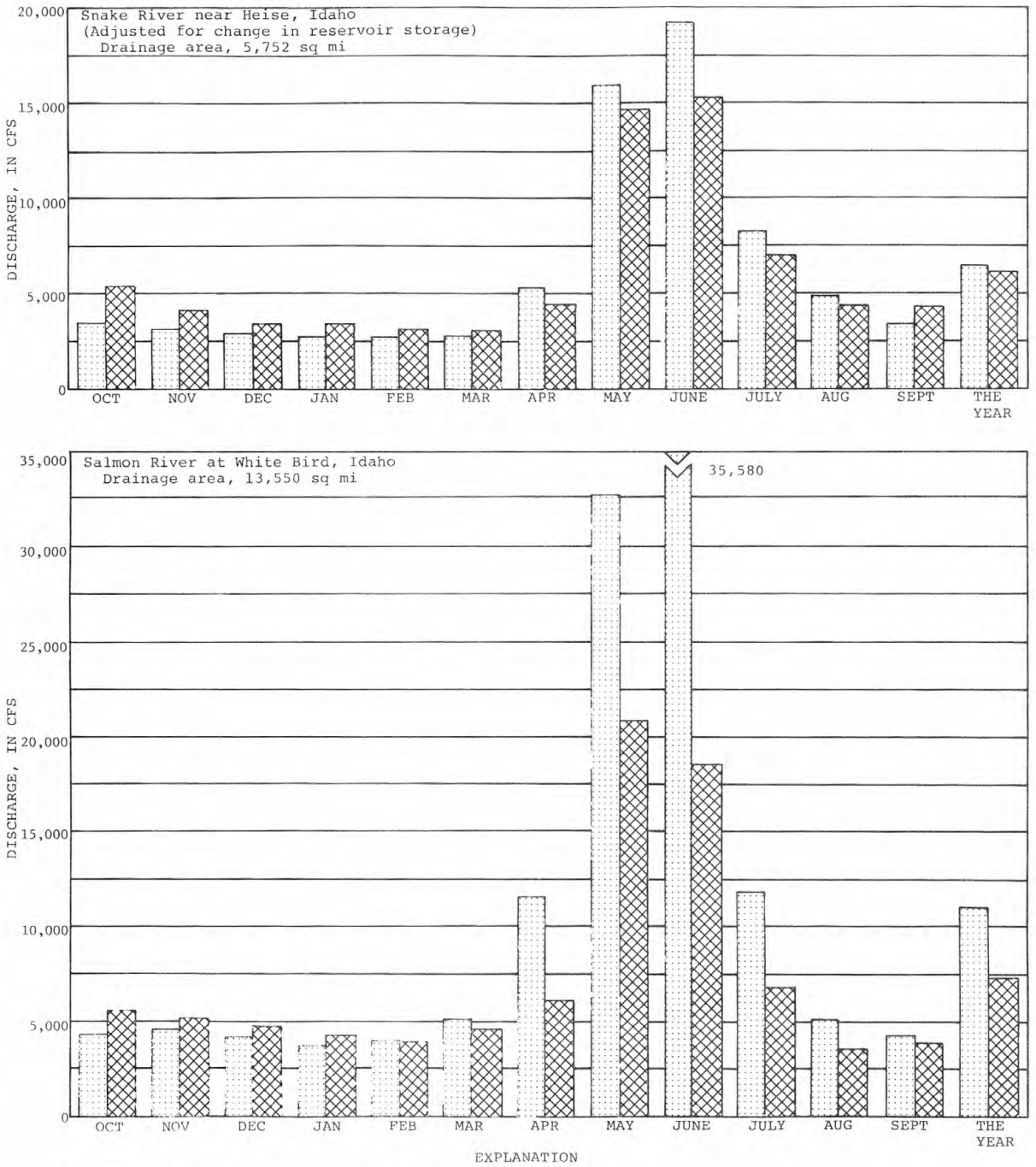

FIGURE 1. Comparison of discharge at two long-term representative gaging stations during 1973 water year with median discharge for period 1931-60.

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 mi (0.3 km) west of Wyoming-Idaho State line, 0.5 mi (0.8 km) west of Border, and 2.1 mi (3.4 km) upstream from Thomas Fork.

DRAINAGE AREA.--2,490 sq mi (6,450 sq km), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 6,051.63 ft (1,844.537 m) above mean sea level, unadjusted.

AVERAGE DISCHARGE.--36 years, 421 cfs (11.92 cu m/s), 305,000 acre-ft/yr (376 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 1,800 cfs (51.0 cu m/s) May 21 (gage height, 6.57 ft or 2.003 m); minimum daily, 182 cfs (5.15 cu m/s) Aug. 31, Sept. 7.
Period of record: Maximum discharge, 3,680 cfs (104 cu m/s) May 11, 1952 (gage height, 8.89 ft or 2.710 m); minimum daily, 30 cfs (0.85 cu m/s) Aug. 18-22, 1940.

REMARKS.--Records good except those for winter months, which are fair. Diversions for irrigation of about 122,000 acres (494 sq km) above station. Records of chemical analysis and water temperatures for the water year 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	274	283	270	190	190	210	414	1,180	1,330	405	435	184
2	274	274	270	190	190	210	400	1,210	1,240	374	416	193
3	272	288	270	190	190	210	387	1,250	1,150	343	392	193
4	270	292	270	190	190	210	403	1,300	1,020	321	382	190
5	294	299	250	190	190	210	441	1,330	855	303	384	190
6	303	299	240	190	200	220	490	1,300	832	292	377	188
7	294	299	240	190	200	220	577	1,300	794	303	357	182
8	292	305	240	190	200	220	632	1,350	700	299	336	190
9	285	310	240	190	200	220	603	1,400	690	296	322	208
10	283	305	240	190	200	220	632	1,400	697	308	310	208
11	279	303	210	190	200	240	779	1,450	597	331	301	236
12	258	303	210	190	200	250	956	1,500	593	355	294	257
13	261	299	210	190	200	270	1,140	1,530	564	352	283	251
14	268	296	210	190	200	300	1,350	1,580	512	374	263	255
15	266	292	210	190	210	330	1,450	1,630	683	372	251	253
16	261	294	210	190	210	325	1,440	1,660	754	377	246	257
17	263	294	210	190	210	320	1,410	1,720	787	405	240	251
18	263	296	210	190	210	320	1,340	1,740	816	387	238	263
19	257	296	210	190	210	340	1,200	1,720	816	405	232	268
20	257	294	210	190	210	355	1,080	1,760	783	455	222	256
21	261	294	220	190	200	350	992	1,780	722	616	212	272
22	263	288	230	190	200	350	948	1,750	649	832	214	270
23	263	283	230	190	200	350	932	1,660	599	852	222	261
24	277	280	230	190	200	350	952	1,570	509	765	220	290
25	279	280	210	190	200	365	948	1,590	593	669	218	305
26	277	280	200	190	200	400	916	1,660	551	603	216	305
27	274	280	200	190	200	403	904	1,620	511	580	210	296
28	279	280	200	190	200	422	960	1,600	508	561	203	288
29	285	280	200	190	------	430	1,080	1,610	487	526	201	283
30	292	280	200	190	------	419	1,130	1,540	444	493	193	277
31	294	------	200	190	------	411	------	1,440	------	464	182	------
TOTAL	8,528	8,746	6,950	5,890	5,610	9,450	26,886	47,130	22,087	14,018	8,572	7,350
MEAN	275	292	224	190	200	305	896	1,520	736	452	277	245
MAX	303	310	270	190	210	430	1,450	1,780	1,330	852	435	305
MIN	257	274	200	190	190	210	387	1,180	444	292	182	182
AC-FT	16,920	17,350	13,790	11,680	11,130	18,740	53,330	93,480	43,810	27,800	17,000	14,580

CAL YR 1972 TOTAL 280,644 MEAN 767 MAX 3,270 MIN 200 AC-FT 556,700
WTR YR 1973 TOTAL 171,217 MEAN 469 MAX 1,780 MIN 182 AC-FT 339,600

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 mi (2.1 km) upstream from State line, 1.5 mi (2.4 km) downstream from Giraffe Creek, and 3.5 mi (5.6 km) northeast of Geneva, Idaho.

DRAINAGE AREA.--113 sq mi (293 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,280 ft or 1,914 m (from topographic map). Prior to Aug. 23, 1957, at site 0.2 mi (0.3 km) upstream at different datum.

AVERAGE DISCHARGE.--24 years, 54.4 cfs (1.541 cu m/s), 39,410 acre-ft/yr (48.6 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 488 cfs (13.8 cu m/s) May 17, 18 (gage height, 2.81 ft or 0.856 m); minimum, 10 cfs (0.28 cu m/s) Mar. 15.
Period of record: Maximum discharge, 1,040 cfs (29.5 cu m/s) May 14, 1971 (gage height, 3.84 ft or 1.170 m); minimum, 2.6 cfs (0.074 cu m/s) Mar. 2, 1956, result of freezeup.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	24	17	17	17	16	16	91	151	57	33	22
2	25	24	17	17	17	16	16	86	148	55	31	26
3	25	24	17	17	17	16	17	93	135	53	32	23
4	25	24	17	17	17	16	17	117	129	51	35	21
5	39	24	17	17	17	16	18	141	122	50	33	20
6	31	23	17	17	17	16	20	194	116	49	34	20
7	27	22	17	17	17	16	21	235	111	47	33	20
8	26	24	17	17	17	16	19	252	107	46	29	31
9	25	24	17	17	17	16	19	259	103	46	28	29
10	29	22	17	17	17	17	21	293	101	44	27	24
11	27	22	17	17	17	16	24	323	100	43	27	26
12	25	22	17	17	18	16	28	339	95	44	26	23
13	26	22	17	17	17	16	36	379	90	46	26	21
14	25	21	17	17	17	16	43	395	102	46	25	21
15	27	21	17	17	17	15	42	398	97	44	24	21
16	26	22	17	18	16	16	45	410	90	45	24	20
17	25	21	17	19	16	16	49	425	99	42	24	20
18	24	22	17	17	16	16	47	419	87	40	23	20
19	24	21	17	18	16	16	38	397	83	49	23	20
20	25	22	17	17	16	16	35	364	78	59	22	20
21	25	22	17	17	16	17	33	315	75	46	22	23
22	24	20	17	17	16	16	41	273	73	44	23	21
23	24	18	17	17	16	16	54	249	70	43	26	23
24	28	17	17	17	16	16	69	235	68	39	23	28
25	25	17	17	17	16	17	77	273	66	38	22	31
26	24	17	17	17	16	17	75	227	64	37	21	24
27	23	17	17	17	16	17	95	200	62	39	21	22
28	22	17	17	17	16	17	127	185	72	38	21	21
29	24	17	17	17	------	16	122	173	68	35	20	21
30	23	17	17	17	------	16	91	162	62	35	20	20
31	25	------	17	17	------	17	------	154	------	34	20	------
TOTAL	798	630	527	531	464	502	1,355	8,056	2,824	1,384	798	682
MEAN	25.7	21.0	17.0	17.1	16.6	16.2	45.2	260	94.1	44.6	25.7	22.7
MAX	39	24	17	19	18	17	127	425	151	59	35	31
MIN	22	17	17	17	16	15	16	86	62	34	20	20
AC-FT	1,580	1,250	1,050	1,050	920	996	2,690	15,980	5,600	2,750	1,580	1,350

CAL YR 1972 TOTAL 34,399 MEAN 94.0 MAX 731 MIN 17 AC-FT 68,230
WTR YR 1973 TOTAL 18,551 MEAN 50.8 MAX 425 MIN 15 AC-FT 36,800

PEAK DISCHARGE (BASE, 150 CFS).--Apr. 28 (2300) 184 cfs (1.89 ft); May 17, 18 (2400) 488 cfs (2.81 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 (122 m) downstream from Sheep Creek, 0.8 mi (1.3 km) north of Harer siding on Union Pacific (Oregon Short Line) Railroad, and 5 mi (8 km) southeast of Dingle.

DRAINAGE AREA.--2,780 sq mi (7,200 sq km), 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 or 1,830 m (from topographic map). Prior to Aug. 24, 1914, nonrecording gage at site 1,500 ft (457 m) downstream at different datum.

AVERAGE DISCHARGE.--60 years, 519 cfs (14.70 cu m/s), 376,000 acre-ft/yr (464 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 2,220 cfs (62.9 cu m/s) May 21 (gage height, 8.11 ft or 2.472 m); minimum daily, 185 cfs (5.24 cu m/s) Dec. 16.
Period of record: Maximum discharge, 4,440 cfs (126 cu m/s) May 7, 1952 (gage height, 11.04 ft or 3.365 m); minimum daily, 26 cfs (0.74 cu m/s) Aug. 21-27, 1934.

REMARKS.--Records good except those for winter months, which are fair. Diversions above station for irrigation of about 140,000 acres (567 sq km).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	315	354	303	240	240	270	425	1,420	1,670	563	640	203
2	323	337	320	235	244	266	423	1,460	1,520	520	591	208
3	333	360	350	242	240	270	401	1,490	1,420	487	558	217
4	344	411	395	248	230	283	414	1,540	1,290	444	530	221
5	351	414	388	241	224	284	454	1,600	1,120	421	519	212
6	354	384	300	224	240	287	510	1,590	1,110	385	515	238
7	360	371	240	214	212	279	621	1,580	1,060	365	499	242
8	370	365	250	216	220	278	682	1,650	991	373	465	228
9	366	364	272	228	263	282	690	1,710	836	361	441	240
10	359	362	273	238	260	300	697	1,750	848	360	425	255
11	351	358	254	240	245	306	812	1,780	859	376	405	258
12	351	363	223	235	240	312	1,000	1,850	826	424	391	296
13	347	367	206	224	243	367	1,200	1,880	731	438	379	315
14	346	365	196	230	250	374	1,440	1,930	707	439	356	322
15	342	362	188	240	260	377	1,620	1,980	764	462	325	312
16	342	357	185	249	269	398	1,610	2,030	848	450	308	307
17	335	355	193	250	260	374	1,590	2,060	945	464	300	308
18	331	351	204	255	244	368	1,550	2,120	987	479	295	314
19	334	348	213	250	230	372	1,430	2,140	1,010	464	293	314
20	330	343	229	245	247	365	1,300	2,170	996	522	284	318
21	326	339	244	235	258	368	1,200	2,210	963	614	273	327
22	326	333	250	228	265	372	1,160	2,220	898	852	264	325
23	329	321	241	215	259	372	1,140	2,170	763	1,110	260	326
24	328	273	226	210	251	411	1,150	2,020	687	1,100	256	338
25	331	227	244	216	248	430	1,190	1,940	696	1,000	252	363
26	334	289	269	226	251	423	1,180	2,000	738	911	250	379
27	340	272	267	230	256	431	1,140	2,000	673	831	249	372
28	349	210	265	230	267	428	1,160	1,930	617	784	237	365
29	356	271	284	218	------	442	1,260	1,910	637	763	219	351
30	362	264	275	216	------	440	1,370	1,880	606	716	219	345
31	358	------	238	238	------	416	------	1,790	------	669	211	------
TOTAL	10,623	10,090	7,985	7,206	6,916	10,945	30,819	57,800	27,816	18,147	11,209	8,819
MEAN	343	336	258	232	247	353	1,027	1,865	927	585	362	294
MAX	370	414	395	255	269	442	1,620	2,220	1,670	1,110	640	379
MIN	315	210	185	210	212	266	401	1,420	606	360	211	203
AC-FT	21,070	20,010	15,840	14,290	13,720	21,710	61,130	114,600	55,170	35,990	22,230	17,490

CAL YR 1972 TOTAL 329,057 MEAN 899 MAX 3,270 MIN 185 AC-FT 652,700
WTR YR 1973 TOTAL 208,375 MEAN 571 MAX 2,220 MIN 185 AC-FT 413,300

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 mi (2.4 km) west of Dingle and 1.8 mi (2.9 km) 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 (1,805.03 m) above mean sea level (by topographic survey). Prior to Oct. 1, 1923, at site 300 ft (91 m) downstream at different datum; Oct. 1, 1923, to Oct. 27, 1944, at site 0.5 mi (0.8 km) downstream at different datum.

AVERAGE DISCHARGE.--51 years, 333 cfs (9.431 cu m/s), 241,300 acre-ft/yr (298 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 1,870 cfs (53.0 cu m/s) May 21 (gage height, 5.65 ft or 1.722 m); minimum, 51 cfs (1.44 cu m/s) July 11.
Period of record: Maximum discharge, 4,180 cfs (118 cu m/s) May 7, 1952 (gage height, 8.62 ft or 2.627 m); minimum daily, 1 cfs (0.028 cu m/s) on several days in 1931, 1934, 1940, 1948.

REMARKS.--Records good. Discharge measurements generally made three to five 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 1973 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	336	257	225	187	214	414	1,380	1,230	220	509	172
2	301	315	246	220	198	203	414	1,390	1,130	211	488	167
3	318	321	249	189	182	217	427	1,430	1,030	204	447	183
4	328	339	394	231	171	237	406	1,470	881	191	445	199
5	334	347	294	222	171	228	427	1,500	725	159	422	198
6	341	403	200	172	186	224	461	1,520	588	82	416	205
7	348	405	179	183	155	229	519	1,450	582	78	403	214
8	350	371	197	172	163	225	596	1,400	533	81	379	216
9	356	355	261	181	209	235	640	1,430	394	71	356	224
10	343	355	269	183	208	248	632	1,460	364	58	335	244
11	341	348	235	191	180	236	697	1,490	372	70	319	241
12	339	353	200	197	181	240	847	1,560	357	153	300	263
13	340	356	185	179	188	249	1,040	1,620	306	180	325	289
14	335	352	176	169	187	257	1,230	1,660	246	233	267	295
15	333	348	163	189	192	259	1,420	1,710	285	295	224	291
16	328	346	169	209	217	307	1,500	1,750	358	287	202	283
17	322	344	170	211	196	357	1,490	1,770	414	277	211	285
18	318	340	179	215	174	344	1,500	1,820	458	293	212	294
19	318	339	188	220	170	343	1,390	1,840	509	289	207	291
20	321	335	208	210	198	290	1,230	1,850	519	315	213	295
21	312	332	236	200	210	320	1,130	1,870	499	375	207	297
22	302	324	246	193	208	344	1,080	1,840	462	540	201	297
23	314	314	228	190	190	369	1,060	1,750	367	779	210	302
24	318	241	209	181	184	375	1,080	1,660	291	793	207	311
25	321	217	224	183	183	383	1,150	1,510	276	752	208	319
26	321	289	247	170	192	382	1,150	1,480	295	694	203	333
27	324	230	244	183	203	384	1,110	1,480	278	640	197	342
28	333	191	242	198	208	410	1,120	1,430	252	602	194	341
29	341	186	240	195	------	438	1,200	1,390	242	591	183	331
30	350	216	240	179	------	463	1,310	1,400	232	557	177	319
31	355	------	230	175	------	428	------	1,340	------	532	171	------
TOTAL	10,195	9,548	7,005	6,015	5,291	9,438	28,670	48,650	14,475	10,602	8,838	8,041
MEAN	329	318	226	194	189	304	956	1,569	483	342	285	268
MAX	356	405	394	231	217	463	1,500	1,870	1,230	793	509	342
MIN	290	186	163	169	155	203	406	1,340	232	58	171	167
AC-FT	20,220	18,940	13,890	11,930	10,490	18,720	56,870	96,500	28,710	21,030	17,530	15,950

CAL YR 1972 TOTAL 285,141 MEAN 779 MAX 2,760 MIN 163 AC-FT 565,600
WTR YR 1973 TOTAL 166,768 MEAN 457 MAX 1,870 MIN 58 AC-FT 330,800

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 (91 m) downstream from Stewart Dam and 4.5 mi (7.2 km) south of Montpelier.

DRAINAGE AREA.--2,820 sq mi (7,300 sq km), 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 or 1,814 m (from topographic map).

AVERAGE DISCHARGE.--51 years, 50.1 cfs (1.419 cu m/s), 36,300 acre-ft/yr (44.8 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 21 cfs (0.59 cu m/s) June 5 (gage height, 1.58 ft or 0.482 m); minimum, 2.0 cfs (0.057 cu m/s) Jan. 31.
Period of record: Maximum daily discharge, 3,050 cfs (86.4 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	7.1	5.6	2.9	2.1	2.4	4.7	5.3	13	12	7.8	7.6
2	11	6.9	5.6	2.7	2.1	2.5	4.1	5.5	13	12	7.3	7.6
3	11	7.2	7.2	2.5	2.2	2.6	4.8	5.5	12	12	7.1	7.6
4	11	7.5	8.4	2.5	2.3	2.6	5.7	5.7	12	11	6.9	7.6
5	11	7.7	5.2	2.6	2.4	2.7	5.7	6.0	15	11	6.7	8.0
6	11	8.3	4.4	2.7	2.4	2.6	5.8	6.2	20	9.9	6.6	8.4
7	11	8.1	4.4	2.7	2.4	2.6	6.0	6.2	19	10	6.4	9.3
8	11	7.7	4.0	2.4	2.4	2.5	6.1	5.8	19	10	6.2	9.4
9	10	7.5	3.4	2.2	2.4	2.4	6.2	6.4	19	10	6.0	11
10	10	7.7	2.9	2.2	2.4	2.4	6.4	8.9	16	9.7	6.0	13
11	10	7.6	2.5	2.2	2.4	2.3	6.2	9.9	15	9.5	6.0	14
12	9.7	7.7	2.4	2.2	2.4	2.3	5.9	11	15	9.3	6.0	12
13	9.2	7.8	2.3	2.2	2.3	2.2	5.9	11	15	9.9	6.1	12
14	8.3	7.8	2.2	2.3	2.3	2.4	5.7	12	14	10	6.1	12
15	7.7	7.8	2.3	2.3	2.3	3.5	5.7	12	15	10	7.5	12
16	7.3	7.9	2.3	2.3	2.2	3.7	6.1	12	15	10	8.8	12
17	7.2	8.0	2.4	2.3	2.2	4.0	5.4	12	15	10	8.6	12
18	7.1	7.9	2.6	2.2	2.2	4.0	4.9	13	15	9.7	8.4	12
19	7.0	7.8	2.9	2.2	2.2	4.3	4.8	13	16	9.6	8.1	11
20	6.9	7.7	3.3	2.2	2.1	4.1	4.5	14	16	9.2	8.0	11
21	6.9	7.8	3.7	2.2	2.2	4.0	4.5	14	15	9.1	8.0	11
22	6.8	7.7	4.1	2.2	2.2	4.1	4.6	14	15	9.1	7.8	10
23	6.8	7.4	4.2	2.2	2.2	4.1	4.5	14	14	9.1	7.7	10
24	7.0	6.9	4.1	2.1	2.2	4.6	4.5	13	14	9.6	7.7	9.8
25	7.2	6.0	4.0	2.1	2.2	4.6	4.5	14	14	9.3	7.7	9.7
26	7.3	6.6	3.8	2.1	2.2	5.2	4.7	14	14	9.1	7.7	9.7
27	7.2	6.3	3.6	2.1	2.3	4.7	5.1	14	13	8.9	7.7	9.7
28	7.3	5.6	3.4	2.1	2.4	5.0	5.1	14	13	8.7	7.7	9.6
29	7.7	5.1	3.3	2.1	------	5.0	5.1	13	13	8.5	7.7	9.5
30	7.7	5.5	3.1	2.0	------	5.4	5.2	13	13	8.3	7.6	9.4
31	7.4	------	3.0	2.0	------	5.1	------	14	------	8.2	7.6	------
TOTAL	267.7	218.6	116.6	71.0	63.6	109.9	158.4	332.4	447	302.7	225.5	307.9
MEAN	8.64	7.29	3.76	2.29	2.27	3.55	5.28	10.7	14.9	9.76	7.27	10.3
MAX	11	8.3	8.4	2.9	2.4	5.4	6.4	14	20	12	8.8	14
MIN	6.8	5.1	2.2	2.0	2.1	2.2	4.1	5.3	12	8.2	6.0	7.6
AC-FT	531	434	231	141	126	218	314	659	887	600	447	611

CAL YR 1972 TOTAL 3,332.7 MEAN 9.11 MAX 20 MIN 2.2 AC-FT 6,610
WTR YR 1973 TOTAL 2,621.3 MEAN 7.18 MAX 20 MIN 2.0 AC-FT 5,200

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, Caribou National Forest, on right bank 3 mi (5 km) east of Montpelier and 3.5 mi (5.6 km) downstream from South Fork.

DRAINAGE AREA.--50.9 sq mi (131.8 sq km).

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 or 1,893 m (from topographic map).

AVERAGE DISCHARGE.--28 years (1942-70), 21.2 cfs (0.600 cu m/s), 15,360 acre-ft/yr (18.9 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 102 cfs (2.89 cu m/s) May 8 (gage height, 2.16 ft or 0.658 m); minimum daily, 7.1 cfs (0.20 cu m/s) Feb. 8, 9, 26.
Period of record: Maximum discharge, 224 cfs (6.34 cu m/s) May 18, 1950; maximum gage height, 3.06 ft (0.933 m) Apr. 28, 1962; minimum discharge, 0.40 cfs (0.011 cu m/s) 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 or 4.73 cu hm) between sill of outlet gate and elevation 6,515.2 or 1,985.83 m (crest of spillway). Dead storage, 210 acre-ft (259,000 cu m). Earthfill dam 82 ft (25.0 m) high, completed December 1970 and storage began Dec. 23, 1970. Storage in 1971 reached an elevation of 6,513.8 ft (1,985.41 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	20	16	13	7.4	7.3	8.0	13	61	50	34	27
2	15	20	16	13	7.4	7.3	8.0	14	62	50	34	26
3	15	20	16	13	7.4	7.2	8.0	14	62	49	41	18
4	15	20	16	12	7.4	7.3	8.1	16	57	49	41	16
5	16	20	15	14	7.2	7.4	8.2	27	56	49	41	17
6	15	20	15	13	7.2	7.4	8.6	41	55	48	38	18
7	15	20	13	13	7.2	7.4	8.7	68	67	48	33	15
8	15	20	13	13	7.1	7.4	8.3	92	69	48	30	14
9	15	20	13	12	7.1	7.4	8.4	99	69	48	28	13
10	16	20	13	12	7.3	7.4	8.7	96	69	37	28	12
11	15	20	13	12	7.2	7.6	9.1	88	69	41	28	10
12	15	20	13	12	7.3	7.5	9.4	88	68	46	27	11
13	15	20	13	12	7.5	7.7	10	89	67	47	32	11
14	15	20	13	12	7.4	7.5	10	86	78	46	35	10
15	15	18	11	12	7.3	7.6	10	80	73	46	35	10
16	15	16	13	12	7.4	7.6	10	75	56	45	35	10
17	15	16	13	12	7.4	7.7	11	73	57	41	32	10
18	15	16	13	12	7.4	7.7	10	72	55	38	29	10
19	15	16	13	12	7.4	7.7	9.7	72	54	39	28	10
20	15	16	13	12	7.3	7.8	9.6	72	49	36	28	10
21	15	16	13	12	7.3	8.1	9.3	71	44	26	28	11
22	15	16	13	12	7.3	8.1	9.8	69	44	23	28	10
23	15	16	13	12	7.3	8.1	11	65	43	23	28	11
24	15	16	13	12	7.2	8.1	11	61	46	22	28	11
25	15	16	13	12	7.2	8.1	11	69	51	20	28	11
26	15	16	13	12	7.1	8.2	11	73	51	17	28	10
27	15	16	13	11	7.2	8.2	12	80	51	17	27	10
28	15	16	13	12	7.2	8.1	15	74	51	15	27	10
29	16	16	13	12	------	7.9	15	63	51	12	27	10
30	20	16	13	11	------	7.9	13	61	50	27	27	10
31	20	------	13	7.7	------	8.0	------	61	------	34	27	------
TOTAL	478	538	417	373.7	204.1	238.7	299.9	2,022	1,735	1,137	960	382
MEAN	15.4	17.9	13.5	12.1	7.29	7.70	10.0	65.2	57.8	36.7	31.0	12.7
MAX	20	20	16	14	7.5	8.2	15	99	78	50	41	27
MIN	15	16	11	7.7	7.1	7.2	8.0	13	43	12	27	10
AC-FT	948	1,070	827	741	405	473	595	4,010	3,440	2,260	1,900	758

CAL YR 1972 TOTAL 13,847.0 MEAN 37.8 MAX 135 MIN 11 AC-FT 27,470
WTR YR 1973 TOTAL 8,785.4 MEAN 24.1 MAX 99 MIN 7.1 AC-FT 17,430

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 mi (5.6 km) east of St. Charles.

DRAINAGE AREA.--435 sq mi (1,127 sq km), 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 (1,798.3 m) 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, 1,254,000 acre-ft (1.55 cu km) June 8-28 (elevation, 5,921.28 ft or 1,804.806 m); minimum, 1,062,000 acre-ft (1.31 cu km) Apr. 7-12 (elevation, 5,918.52 ft or 1,803.965 m).
Period of record: Maximum contents, 1,423,000 acre-ft (1.75 cu km) June 10, 1923 (elevation, 5,923.68 ft or 1,805.538 m); no usable contents Nov. 9-19, 1935 (elevation, 5,902.00 ft or 1,798.930 m, lower limit of pumps).

REMARKS.--Outflow regulated by gates and pumps at north end of Bear Lake and by gates in dike at north end of Mud Lake, a shallow interconnected lake. Principal inflow to Bear Lake is from Bear River through Rainbow inlet (see sta 10046000) and Dingle inlet canals, manmade diversions into Mud Lake from which flow can empty into Bear Lake either through the pumping plant or through an opening in the dividing causeway, or the flow can be routed directly into the Outlet canal (see sta 10059500). Capacity of Bear Lake is 1,421,000 acre-ft (1.75 cu km) between elevations 5,902.00 or 1,798.930 m (lower limit of pumps) and 5,923.65 ft or 1,805.529 m (present 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	5,922.50	1,340,100
5,919.00	1,095,200	5,921.00	1,234,900	5,923.00	1,375,400
5,919.50	1,130,000	5,921.50	1,269,900	5,923.40	1,403,600
5,920.00	1,164,900	5,922.00	1,305,000		

CONTENTS, IN ACRE-FEET, FOR STATISTIC 00000, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,223	1,208	1,179	1,137	1,115	1,089	1,067	1,130	1,242	1,252	1,212	1,164
2	1,222	1,207	1,178	1,136	1,113	1,088	1,066	1,134	1,245	1,252	1,212	1,164
3	1,222	1,206	1,176	1,136	1,113	1,088	1,065	1,137	1,247	1,252	1,212	1,162
4	1,222	1,204	1,175	1,135	1,112	1,087	1,065	1,141	1,249	1,251	1,212	1,162
5	1,222	1,203	1,174	1,134	1,111	1,086	1,064	1,145	1,251	1,250	1,212	1,161
6	1,222	1,202	1,173	1,134	1,110	1,085	1,063	1,149	1,252	1,248	1,212	1,161
7	1,222	1,201	1,173	1,133	1,110	1,084	1,062	1,152	1,253	1,245	1,212	1,161
8	1,222	1,201	1,172	1,132	1,108	1,083	1,062	1,156	1,254	1,241	1,212	1,161
9	1,222	1,201	1,170	1,131	1,107	1,081	1,062	1,159	1,254	1,238	1,211	1,161
10	1,223	1,201	1,169	1,131	1,106	1,080	1,062	1,161	1,254	1,234	1,210	1,161
11	1,223	1,201	1,168	1,130	1,105	1,079	1,062	1,164	1,254	1,231	1,208	1,161
12	1,223	1,201	1,166	1,129	1,104	1,078	1,062	1,167	1,254	1,227	1,207	1,161
13	1,223	1,200	1,164	1,129	1,104	1,077	1,063	1,170	1,254	1,224	1,206	1,161
14	1,223	1,198	1,162	1,128	1,103	1,076	1,065	1,173	1,254	1,222	1,204	1,161
15	1,223	1,197	1,161	1,127	1,102	1,076	1,067	1,178	1,254	1,220	1,202	1,161
16	1,223	1,196	1,159	1,127	1,102	1,074	1,070	1,182	1,254	1,217	1,200	1,161
17	1,223	1,194	1,158	1,126	1,101	1,074	1,074	1,185	1,254	1,216	1,197	1,161
18	1,223	1,193	1,156	1,125	1,099	1,073	1,079	1,189	1,254	1,214	1,194	1,161
19	1,222	1,192	1,155	1,124	1,099	1,072	1,085	1,194	1,254	1,213	1,192	1,160
20	1,222	1,192	1,154	1,124	1,098	1,072	1,090	1,198	1,254	1,212	1,190	1,159
21	1,222	1,191	1,152	1,123	1,097	1,071	1,094	1,202	1,254	1,212	1,187	1,158
22	1,220	1,190	1,150	1,122	1,095	1,071	1,100	1,206	1,254	1,212	1,186	1,156
23	1,219	1,189	1,149	1,122	1,094	1,070	1,105	1,210	1,254	1,212	1,185	1,156
24	1,217	1,189	1,147	1,121	1,092	1,070	1,108	1,215	1,254	1,212	1,184	1,156
25	1,217	1,187	1,145	1,120	1,092	1,070	1,110	1,219	1,254	1,212	1,182	1,156
26	1,215	1,187	1,143	1,120	1,091	1,070	1,113	1,222	1,254	1,212	1,180	1,155
27	1,214	1,185	1,141	1,119	1,090	1,069	1,116	1,226	1,254	1,212	1,178	1,155
28	1,212	1,184	1,140	1,118	1,090	1,068	1,118	1,229	1,254	1,212	1,175	1,154
29	1,212	1,182	1,139	1,117	------	1,068	1,122	1,233	1,253	1,212	1,171	1,154
30	1,210	1,180	1,138	1,116	------	1,067	1,126	1,236	1,253	1,212	1,168	1,154
31	1,210	------	1,138	1,115	------	1,067	------	1,239	------	1,212	1,166	------
MAX	1,223	1,208	1,179	1,137	1,115	1,089	1,126	1,239	1,254	1,252	1,212	1,164
MIN	1,210	1,180	1,138	1,115	1,090	1,067	1,062	1,130	1,242	1,212	1,166	1,154
(†)	5,920.64	5,920.22	5,919.61	5,919.29	5,918.92	5,918.60	5,919.44	5,921.06	5,921.26	5,920.68	5,920.01	5,919.84
(‡)	-14.0	-30.0	-42.0	-23.0	-25.0	-23.0	+59.0	+113.0	+14.0	-41.0	-46.0	-12.0

CAL YR 1972..... ‡ +16.0
WTR YR 1973..... ‡ -70.0

† 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 mi (2 km) west of Bloomington.

DRAINAGE AREA.--24.4 sq mi (63.2 sq km).

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

GAGE.--Water-stage recorder 4 ft (1.2 m) upstream from 8-ft (2.44-m) concrete flume. Altitude of gage is 6,070 ft or 1,850 m (from topographic map).

AVERAGE DISCHARGE.--13 years, 29.5 cfs (0.835 cu m/s) 21,370 acre-ft/yr (26.3 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 159 cfs (4.50 cu m/s) May 25 (gage height, 3.84 ft or 1.170 m); minimum, 14 cfs (0.40 cu m/s) Feb. 12.
Period of record: Maximum discharge, 248 cfs (7.02 cu m/s) June 11, 1971 (gage height, 4.66 ft or 1.420 m); minimum, 9.4 cfs (0.27 cu m/s) Jan. 27, 1961, Feb. 26, 1962.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	23	21	20	18	16	17	28	67	32	25	21
2	27	24	21	20	18	16	17	25	63	31	25	21
3	26	23	21	20	18	16	17	24	58	31	25	21
4	26	23	21	20	18	16	17	27	53	30	25	21
5	27	23	22	20	18	16	18	28	51	30	25	21
6	26	22	20	20	18	16	20	29	50	30	25	21
7	26	22	20	20	18	16	18	32	49	30	25	20
8	26	23	19	20	18	16	17	35	49	29	24	22
9	26	22	20	20	18	16	18	35	49	29	24	22
10	27	22	20	20	18	16	19	38	49	28	24	21
11	26	22	20	20	18	16	20	41	47	28	23	21
12	25	22	20	20	18	16	20	43	45	29	23	20
13	25	22	20	20	18	16	22	48	43	31	22	20
14	25	22	20	20	18	16	22	50	45	29	22	20
15	25	22	20	20	17	15	21	53	47	29	22	20
16	25	22	20	20	16	15	21	61	42	28	21	20
17	24	22	20	20	15	16	24	74	46	28	21	20
18	24	22	20	20	15	16	22	86	42	28	22	20
19	24	22	20	20	15	15	21	101	39	29	21	19
20	26	21	20	20	15	16	20	111	38	29	20	19
21	24	22	20	20	15	16	20	96	36	30	21	20
22	24	19	20	20	15	16	22	85	35	28	20	19
23	24	20	20	20	15	17	25	83	35	28	20	20
24	25	21	20	19	15	17	28	85	35	27	20	20
25	24	21	20	19	16	17	27	125	34	27	20	20
26	24	22	20	19	16	17	27	87	33	27	20	19
27	23	21	20	18	16	17	30	69	33	26	20	19
28	23	21	20	19	16	17	33	64	34	26	20	19
29	23	21	20	18	------	17	32	65	33	26	20	19
30	22	21	20	19	------	17	28	65	33	26	19	18
31	21	------	20	18	------	17	------	67	------	26	19	------
TOTAL	770	655	625	609	469	502	663	1,860	1,313	885	683	603
MEAN	24.8	21.8	20.2	19.6	16.8	16.2	22.1	60.0	43.8	28.5	22.0	20.1
MAX	27	24	22	20	18	17	33	125	67	32	25	22
MIN	21	19	19	18	15	15	17	24	33	26	19	18
AC-FT	1,530	1,300	1,240	1,210	930	996	1,320	3,690	2,600	1,760	1,350	1,200

CAL YR 1972 TOTAL 15,592 MEAN 42.6 MAX 166 MIN 16 AC-FT 30,930
WTR YR 1973 TOTAL 9,637 MEAN 26.4 MAX 125 MIN 15 AC-FT 19,110

NOTE.--No gage-height record Dec. 9 to Jan. 23.

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 (610 m) downstream from headgates (at dike) and 3 mi (5 km) 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 (1,802.16 m) above mean sea level (from topographic survey).

AVERAGE DISCHARGE.--51 years, 363 cfs (10.28 cu m/s), 263,000 acre-ft/yr (324 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 1,450 cfs (41.1 cu m/s) July 13 (gage height, 18.53 ft or 5.648 m); minimum daily, 10 cfs (0.28 cu m/s) Apr. 10.
Period of record: Maximum daily discharge, 1,870 cfs (53.0 cu m/s) Aug. 8, 1924; minimum daily, 1 cfs (0.28 cu m/s) for many days in 1937, 1954, 1959, 1961, 1964.

REMARKS.--Records good. Discharge measurements generally made five or six times a week during periods of release from Bear Lake. Records of chemical analyses for the water year 1973 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	754	910	978	830	902	919	871	10	10	843	493	703
2	659	886	950	785	903	919	810	10	10	971	583	723
3	143	868	862	843	937	924	528	10	10	1,100	644	720
4	400	867	775	844	956	937	349	10	10	1,040	635	674
5	371	864	815	876	957	948	369	10	10	1,150	616	588
6	198	829	842	889	940	940	395	10	10	1,370	559	583
7	32	807	917	890	939	938	383	10	10	1,360	522	540
8	28	801	872	890	852	930	384	10	10	1,350	510	458
9	27	794	890	896	841	922	172	10	10	1,360	501	398
10	26	787	899	895	893	919	10	10	10	1,390	494	374
11	25	781	873	900	916	915	10	10	132	1,410	490	377
12	399	774	893	904	939	901	10	10	365	1,400	488	368
13	744	838	905	900	931	942	10	10	362	1,440	488	371
14	727	909	918	916	929	964	10	10	356	1,420	622	376
15	711	898	911	918	844	954	10	10	349	1,430	718	380
16	764	941	905	926	815	953	10	10	351	1,360	800	386
17	910	930	911	922	880	964	10	10	340	1,240	907	395
18	928	931	908	927	849	965	10	10	339	1,240	911	383
19	917	931	940	944	807	886	10	10	368	1,200	896	497
20	906	932	910	674	810	862	10	10	370	1,170	902	609
21	884	928	892	921	827	910	10	10	369	1,160	907	618
22	862	922	939	906	859	925	10	10	357	1,150	922	632
23	873	914	916	901	927	941	10	10	363	879	926	647
24	905	900	895	903	937	943	10	10	352	517	871	252
25	928	890	898	920	918	950	10	10	354	540	887	503
26	920	891	911	921	933	864	10	10	354	530	884	662
27	911	891	904	918	926	819	10	10	516	523	876	970
28	914	886	873	899	930	837	10	10	674	516	883	637
29	921	931	774	880	------	855	10	10	792	511	820	626
30	911	972	939	901	------	857	10	10	896	512	735	616
31	912	------	875	916	------	860	------	10	------	504	715	------
TOTAL	19,610	26,403	27,690	27,555	25,097	28,363	4,471	310	8,459	32,586	22,205	16,066
MEAN	633	880	893	889	896	915	149	10.0	282	1,051	716	536
MAX	928	972	978	944	957	965	871	10	896	1,440	926	970
MIN	25	774	774	674	807	819	10	10	10	504	488	252
AC-FT	38,900	52,370	54,920	54,660	49,780	56,260	8,870	615	16,780	64,630	44,040	31,870

CAL YR 1972 TOTAL 325,464 MEAN 889 MAX 1,660 MIN 22 AC-FT 645,600
WTR YR 1973 TOTAL 238,815 MEAN 654 MAX 1,440 MIN 10 AC-FT 473,700

10068500 Bear River at Pescadero, Idaho

LOCATION.--Lat 4^°24'06", long 111°21'22", in SW¼SW¼SE¼ sec.6, T.12 S., R.44 E., Bear Lake County, on left bank at Pescadero, 4 ft (122 m) downstream from road bridge, 2 mi (3.2 km) downstream from Bennington Creek, and 6.5 mi (10.5 km) 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 or 1,798 m (from topographic map).

AVERAGE DISCHARGE.--37 years (1921-54, 1969-73), 598 cfs (16.94 cu m/s), 433,300 acre-ft/yr (534 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 1,750 cfs (49.6 cu m/s) July 13, 14 (gage height, 5.39 ft or 1.643 m); minimum daily, 115 cfs (3.26 cu m/s) Oct. 11.
Period of record: Maximum daily discharge, 3,840 cfs (109 cu m/s) June 10, 1923; minimum daily, 23 cfs (0.65 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	878	1,050	1,130	1,000	1,020	1,050	1,050	462	347	1,080	592	769
2	788	1,060	1,150	1,000	1,020	1,050	1,060	475	333	1,000	583	797
3	272	1,050	1,160	1,000	1,020	1,120	927	422	304	1,300	699	800
4	424	1,050	1,170	1,000	1,020	1,100	552	377	272	1,300	725	791
5	478	1,050	1,030	1,000	1,020	1,100	494	342	250	1,250	714	693
6	354	1,030	1,060	1,050	1,020	1,080	519	314	265	1,680	689	639
7	175	992	1,070	1,050	1,020	1,070	529	307	295	1,680	613	616
8	125	992	1,070	1,050	1,020	1,060	550	311	268	1,670	573	542
9	118	980	974	1,050	1,020	1,060	559	322	244	1,650	556	475
10	116	974	1,150	1,050	1,020	1,060	275	337	248	1,640	543	436
11	115	962	1,050	1,050	1,020	1,070	242	347	247	1,720	539	425
12	146	950	1,050	1,050	1,020	1,070	323	346	474	1,740	538	421
13	694	950	1,050	1,050	1,020	1,080	422	344	555	1,750	537	412
14	830	1,030	1,050	1,050	1,020	1,090	571	330	565	1,750	547	414
15	824	1,060	1,050	1,050	1,020	1,090	648	298	594	1,730	728	417
16	824	1,090	1,050	1,050	1,000	1,090	686	312	583	1,700	788	416
17	938	1,110	1,050	1,050	1,000	1,100	737	289	600	1,590	929	418
18	1,050	1,110	1,050	1,050	1,000	1,100	746	263	708	1,540	992	423
19	1,060	1,110	1,050	1,050	1,000	1,080	685	254	704	1,510	984	431
20	1,050	1,110	1,050	1,050	1,000	996	597	241	662	1,470	970	583
21	1,030	1,110	1,050	1,020	1,050	1,030	512	308	637	1,440	979	650
22	1,010	1,110	1,050	1,020	1,050	1,070	505	379	615	1,420	989	678
23	1,000	1,090	1,050	1,020	1,050	1,090	493	410	548	1,380	994	702
24	1,040	1,090	1,050	1,020	1,050	1,090	480	455	516	959	978	676
25	1,060	1,070	1,050	1,020	1,050	1,100	452	472	525	762	960	256
26	1,060	1,080	1,050	1,020	1,050	1,090	424	484	531	720	959	590
27	1,060	1,060	1,050	1,020	1,050	979	396	520	547	696	958	704
28	1,060	1,120	1,000	1,020	1,050	977	380	580	800	667	943	704
29	1,060	1,120	1,000	1,020	------	1,010	378	578	950	630	944	692
30	1,050	1,120	1,000	1,020	------	1,040	408	542	1,100	613	849	678
31	1,050	------	1,000	1,020	------	1,050	------	450	------	612	785	------
TOTAL	22,739	31,680	32,814	31,970	28,700	33,042	16,600	11,871	15,287	40,649	24,177	17,248
MEAN	734	1,056	1,059	1,031	1,025	1,066	553	383	510	1,311	780	575
MAX	1,060	1,120	1,170	1,050	1,050	1,120	1,060	580	1,100	1,750	994	800
MIN	115	950	974	1,000	1,000	977	242	241	244	612	537	256
AC-FT	45,100	62,840	65,090	63,410	56,930	65,540	32,930	23,550	30,320	80,630	47,960	34,210

CAL YR 1972 TOTAL 429,149 MEAN 1,173 MAX 2,180 MIN 115 AC-FT 851,200
WTR YR 1973 TOTAL 306,777 MEAN 840 MAX 1,750 MIN 115 AC-FT 608,500

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 (5 m) downstream from road bridge, 0.3 mi (0.5 km) north of Eightmile ranger station, and 8.4 mi (13.5 km) south of Soda Springs.

DRAINAGE AREA.--23.3 sq mi (60.3 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,170 ft or 1,881 m (from topographic map).

AVERAGE DISCHARGE.--13 years, 16.9 cfs (4.786 cu m/s), 12,240 acre-ft/yr (15.9 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 116 cfs (3.29 cu m/s) May 20 (gage height, 2.40 ft or 0.732 m); minimum, 1.6 cfs (0.045 cu m/s) Mar. 8-19.
Period of record: Maximum discharge, 160 cfs (4.53 cu m/s) June 18, 1971 (gage height, 2.57 ft or 0.783 m); minimum, 0.98 cfs (0.028 cu m/s) Mar. 3-5, 10, 20, 21, 1969.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	5.5	4.5	4.3	3.8	3.4	3.2	23	88	23	8.3	6.5
2	6.7	5.6	4.7	4.5	3.8	3.2	3.3	21	89	22	8.2	7.3
3	6.6	5.6	4.9	4.5	3.9	2.8	3.4	21	87	22	8.2	6.2
4	6.5	5.6	4.8	4.2	4.0	3.0	3.5	26	82	21	8.2	5.8
5	7.2	5.9	4.2	4.2	4.0	3.2	3.9	30	76	20	9.6	5.4
6	6.7	5.4	4.6	4.1	4.0	3.0	4.4	32	74	20	8.6	5.3
7	6.5	5.5	4.9	4.2	4.0	2.7	4.6	33	73	19	7.8	5.4
8	6.3	5.7	4.8	4.3	3.7	2.8	4.3	39	72	18	7.4	7.6
9	6.2	5.5	4.6	4.2	3.7	2.8	4.8	42	70	18	7.1	6.7
10	7.1	5.4	4.6	4.2	4.0	2.8	5.3	43	68	17	7.0	6.1
11	6.7	5.2	4.7	4.1	3.9	2.9	6.2	46	65	16	6.8	6.3
12	6.1	5.2	4.8	4.3	4.0	2.9	7.4	49	60	16	6.6	5.8
13	6.2	5.2	4.8	4.8	3.9	2.9	9.8	54	57	17	6.3	5.6
14	6.0	5.2	4.7	4.7	3.9	2.9	12	61	58	17	6.3	5.6
15	6.1	5.2	4.5	4.6	3.6	2.8	11	65	54	15	6.2	5.6
16	6.2	5.2	4.6	4.5	3.8	2.9	11	71	50	14	6.2	5.5
17	5.9	5.2	4.8	4.5	3.8	2.9	15	79	51	14	6.0	5.3
18	5.8	5.1	4.8	4.3	3.7	2.8	14	86	46	13	5.9	5.2
19	5.7	5.0	4.9	4.4	3.6	2.7	12	93	42	13	5.9	5.1
20	6.2	5.0	4.8	3.7	3.4	2.9	11	102	40	13	5.8	5.2
21	5.8	4.9	4.8	4.0	3.4	2.9	10	104	37	12	5.8	5.3
22	5.5	4.2	4.8	4.1	3.4	3.0	11	106	35	12	6.2	5.0
23	6.1	4.2	4.7	4.0	3.5	3.0	12	102	33	11	6.4	6.0
24	6.1	4.4	4.6	4.1	3.6	3.0	13	100	32	11	5.8	6.2
25	5.9	4.3	4.5	4.2	3.5	3.1	13	106	31	11	5.7	6.0
26	6.0	4.4	4.5	4.3	3.3	3.0	16	98	29	10	5.5	5.4
27	5.8	4.2	4.4	4.1	3.3	3.2	20	92	28	9.7	5.4	5.6
28	5.9	4.0	4.5	3.9	3.3	3.2	27	92	27	9.3	5.4	5.3
29	5.8	4.3	4.3	3.9	------	3.2	29	87	27	9.0	5.4	4.9
30	5.2	4.4	4.0	4.0	------	3.2	25	83	22	8.9	5.4	4.7
31	5.3	------	4.6	4.0	------	3.2	------	84	------	8.7	5.3	------
TOTAL	190.9	150.5	143.7	131.2	103.8	92.3	326.1	2,070	1,603	460.6	204.7	171.9
MEAN	6.16	5.02	4.64	4.23	3.71	2.98	10.9	66.8	53.4	14.9	6.60	5.73
MAX	7.2	5.9	4.9	4.8	4.0	3.4	29	106	89	23	9.6	7.6
MIN	5.2	4.0	4.0	3.7	3.3	2.7	3.2	21	22	8.7	5.3	4.7
AC-FT	379	299	285	260	206	183	647	4,110	3,180	914	406	341

CAL YR 1972 TOTAL 10,364.6 MEAN 28.3 MAX 148 MIN 2.8 AC-FT 20,560
WTR YR 1973 TOTAL 5,648.7 MEAN 15.5 MAX 106 MIN 2.7 AC-FT 11,200

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 (244 m) upstream from Bailey Creek road bridge and 2 mi (3 km) south of Soda Springs.

DRAINAGE AREA.--3,970 sq mi (10,280 sq km), 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 or 1,756 m (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 (244 m) downstream at different datum.

AVERAGE DISCHARGE.--20 years, 620 cfs (17.56 cu m/s), 449,200 acre-ft/yr (554 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 1,690 cfs (47.9 cu m/s) July 14 (gage height, 4.92 ft or 1.500 m); minimum, 243 cfs (6.88 cu m/s) Oct. 9.
Period of record: Maximum discharge, 6,380 cfs (181 cu m/s) June 9, 15, 1896 (gage height, 8.40 ft or 2.560 m, datum then in use); minimum daily, 60 cfs (1.70 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	880	1,110	1,140	1,030	1,100	1,240	1,090	738	672	1,070	691	829
2	876	1,120	1,140	1,060	1,110	1,260	1,100	751	607	1,040	679	885
3	597	1,120	1,160	1,100	1,100	1,190	1,050	712	566	1,140	721	876
4	405	1,120	1,200	1,110	1,120	1,160	798	685	533	1,280	802	867
5	577	1,120	799	1,080	1,120	1,210	657	670	483	1,270	809	836
6	529	1,100	571	1,050	1,140	1,180	681	628	469	1,360	799	761
7	400	1,080	706	1,080	1,150	1,190	686	616	481	1,480	749	745
8	272	1,070	891	1,070	1,110	1,180	688	637	487	1,510	691	743
9	246	1,060	769	1,050	1,060	1,180	723	651	455	1,510	669	687
10	255	1,050	588	1,050	1,120	1,160	607	652	449	1,520	658	617
11	253	1,030	817	1,050	1,130	1,170	490	669	447	1,570	653	613
12	246	1,020	1,060	1,110	1,150	1,180	564	681	498	1,630	649	589
13	494	1,000	1,100	1,100	1,140	1,130	705	691	691	1,660	645	565
14	847	1,050	1,110	1,150	1,130	1,110	889	701	719	1,680	641	560
15	870	1,100	1,110	1,190	1,110	1,120	969	685	760	1,670	707	557
16	863	1,120	1,130	1,210	1,090	1,120	991	692	759	1,640	810	565
17	911	1,140	1,150	1,140	1,020	1,130	1,070	725	754	1,580	880	561
18	1,030	1,140	1,180	1,160	1,030	1,130	1,080	713	808	1,480	972	564
19	1,090	1,140	1,190	1,150	1,080	1,130	968	731	832	1,470	995	564
20	1,100	1,140	1,190	1,080	1,080	1,060	844	747	795	1,480	986	622
21	1,080	1,140	1,220	865	1,060	1,070	760	763	771	1,410	982	743
22	1,060	1,130	1,210	1,040	1,060	1,120	811	807	749	1,410	996	769
23	1,050	1,120	1,200	1,080	1,110	1,120	847	833	700	1,390	1,000	805
24	1,070	1,100	1,200	1,000	1,160	1,130	847	857	650	1,180	997	832
25	1,100	1,090	1,180	1,100	1,170	1,140	825	952	639	879	974	658
26	1,110	1,100	1,170	1,110	1,190	1,140	763	961	639	819	972	499
27	1,100	1,090	1,120	1,080	1,190	1,060	726	903	639	786	972	786
28	1,110	1,140	1,170	1,060	1,210	1,030	721	919	748	760	969	808
29	1,110	1,110	1,090	1,070	------	1,050	712	912	917	733	965	801
30	1,100	1,140	927	1,110	------	1,070	719	854	1,010	708	924	791
31	1,110	------	976	1,120	------	1,090	------	779	------	710	857	------
TOTAL	24,741	32,990	32,464	33,655	31,240	35,250	24,381	23,315	19,727	39,825	25,814	21,098
MEAN	798	1,100	1,047	1,086	1,116	1,137	813	752	658	1,285	833	703
MAX	1,110	1,140	1,220	1,210	1,210	1,260	1,100	961	1,010	1,680	1,000	885
MIN	246	1,000	571	865	1,020	1,030	490	616	447	708	641	499
AC-FT	49,070	65,440	64,390	66,750	61,960	69,920	48,360	46,250	39,130	78,990	51,200	41,850

CAL YR 1972 TOTAL 465,531 MEAN 1,272 MAX 2,230 MIN 246 AC-FT 923,400
WTR YR 1973 TOTAL 344,500 MEAN 944 MAX 1,680 MIN 246 AC-FT 683,300

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 (30 m) southeast of Lau ranchhouse, 150 ft (46 m) downstream from Schmidt ditch, and 5 mi (8.0 km) north of Soda Springs.

DRAINAGE AREA.--49 sq mi (127 sq km), 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 or 1,822 m (from topographic map). April 1923 to October 1926 at different datum and Oct. 1, 1964, to Aug. 26, 1965, at site 400 ft (122 m) upstream at different datum.

AVERAGE DISCHARGE.--9 years (1964-73), 16.8 cfs (0.476 cu m/s), 12,170 acre-ft/yr (15.0 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 94 cfs (2.66 cu m/s) Apr. 14, 15 (gage height, 2.16 ft or 0.658 m); minimum daily, 12 cfs (0.34 cu m/s) Feb. 8.
Period of record: Maximum discharge, 98 cfs (2.78 cu m/s) Apr. 2, 1965 (gage height, 4.01 ft or 1.222 m, site and datum then in use); no flow Dec. 24, 1966.

REMARKS.--Records good. Schmidt ditch never exceeded an observed discharge of 0.4 cfs (0.01 cu m/s) during the irrigation season.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	24	24	22	20	16	17	26	26	22	24	26
2	28	25	25	22	19	16	17	26	26	22	24	28
3	26	26	25	22	19	16	17	26	26	22	25	27
4	27	27	26	22	19	16	17	27	25	22	25	26
5	31	28	24	22	19	17	19	28	25	23	25	25
6	27	26	24	21	19	16	21	27	25	23	25	25
7	26	26	25	21	18	16	21	27	25	23	25	26
8	26	28	25	22	12	16	21	28	25	23	25	30
9	26	27	25	22	16	16	21	28	25	23	25	30
10	38	26	24	23	17	16	23	28	25	23	25	28
11	34	26	23	21	17	17	26	27	25	23	25	29
12	29	25	24	21	17	17	32	27	24	24	25	28
13	28	25	24	21	17	17	58	27	24	25	25	27
14	27	25	23	20	17	17	85	27	25	25	24	26
15	29	25	22	20	17	16	90	26	26	25	24	26
16	28	25	22	21	17	15	78	26	26	25	24	26
17	27	26	22	21	17	17	59	26	26	25	24	26
18	26	26	22	20	17	17	57	26	25	25	24	25
19	26	26	22	21	17	15	39	26	25	25	24	25
20	29	26	22	21	16	16	30	27	25	28	24	25
21	30	25	22	20	16	18	27	27	24	26	24	25
22	27	25	23	20	17	17	25	27	24	26	25	25
23	27	25	23	20	17	17	25	26	24	26	25	26
24	30	25	23	20	17	16	25	26	24	26	24	27
25	27	24	22	20	17	16	25	28	24	25	24	27
26	27	25	22	20	17	16	25	28	24	25	24	25
27	26	25	22	20	17	17	25	27	23	25	24	25
28	26	25	24	20	16	17	26	26	23	25	24	25
29	26	24	22	20	------	16	26	26	23	25	24	25
30	25	24	24	20	------	17	26	25	23	25	24	25
31	24	------	22	20	------	17	------	26	------	24	25	------
TOTAL	860	765	722	646	481	511	1,013	828	740	754	758	789
MEAN	27.7	25.5	23.3	20.8	17.2	16.5	33.8	26.7	24.7	24.3	24.5	26.3
MAX	38	28	26	23	20	18	90	28	26	28	25	30
MIN	24	24	22	20	12	16	17	25	23	22	24	25
AC-FT	1,710	1,520	1,430	1,280	954	1,010	2,010	1,640	1,470	1,500	1,500	1,560

CAL YR 1972 TOTAL 10,539 MEAN 28.8 MAX 65 MIN 16 AC-FT 20,900
WTR YR 1973 TOTAL 8,867 MEAN 24.3 MAX 90 MIN 12 AC-FT 17,590

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 (183 m) downstream from Soda hydroelectric plant of Utah Power & Light Co., 0.5 mi (0.8 km) southeast of Alexander and 5 mi (8 km) downstream from Soda Creek.

DRAINAGE AREA.--4,050 sq mi (10,490 sq km), 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 or 1,722 m (from topographic map).

AVERAGE DISCHARGE.--62 years, 768 cfs (21.75 cu m/s), 556,400 acre-ft/yr (686 cu hm/yr); 15-year base period (1952-67), 604 cfs (17.11 cu m/s).

EXTREMES.--Current year: Maximum discharge, 2,230 cfs (63.2 cu m/s) Dec. 13 (gage height, 3.29 ft or 1.003 m); minimum, 142 cfs (4.02 cu m/s) July 26.
Period of record: Maximum discharge observed, 4,740 cfs (139 cu m/s) Mar. 31, 1911; maximum gage height, 15.95 ft (4.862 m) Dec. 11, 1919 (backwater from ice); minimum discharge, 28 cfs (0.79 cu m/s) 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 1973 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,270	1,190	1,280	1,270	1,280	1,260	1,270	868	758	1,000	701	889
2	401	1,190	1,320	1,270	1,260	1,250	1,260	866	677	1,070	702	880
3	280	1,190	1,330	1,280	1,230	1,240	1,270	861	644	1,120	710	882
4	284	1,190	1,330	1,280	1,230	1,260	1,270	861	833	1,130	715	880
5	282	1,190	1,160	1,260	1,230	1,260	1,270	859	836	1,310	712	883
6	285	1,200	935	1,260	1,240	1,260	1,010	795	614	1,410	716	887
7	284	1,200	891	1,250	1,250	1,270	916	770	811	1,440	722	882
8	288	1,190	835	1,260	1,250	1,270	904	763	830	1,450	716	896
9	287	1,190	944	1,260	1,260	1,280	933	680	608	1,450	721	892
10	293	1,190	961	1,270	1,260	1,270	918	630	612	1,460	718	849
11	294	1,170	986	1,280	1,270	1,270	743	631	604	1,480	720	711
12	824	1,170	1,060	1,310	1,270	1,270	795	621	616	1,510	772	711
13	1,220	1,170	1,030	1,310	1,260	1,280	939	617	621	1,750	818	713
14	1,250	1,170	1,100	1,310	1,260	1,280	1,090	619	620	1,730	879	658
15	1,240	1,170	1,230	1,310	1,260	1,250	1,090	615	613	1,720	912	662
16	1,210	1,210	1,260	1,290	1,260	1,270	1,180	612	614	1,640	910	663
17	1,180	1,200	1,270	1,260	1,190	1,280	1,260	612	614	1,690	765	668
18	1,170	1,250	1,260	1,270	1,270	1,270	1,260	611	614	1,540	614	675
19	1,180	1,260	1,270	1,260	1,270	1,250	1,250	611	584	1,570	912	673
20	1,190	1,280	1,270	1,260	1,280	1,240	1,250	615	543	1,530	1,030	680
21	1,190	1,250	1,260	1,280	1,270	1,230	1,240	611	598	1,510	1,050	802
22	1,180	1,260	1,280	1,290	1,260	1,240	1,250	724	602	1,470	1,080	841
23	1,170	1,260	1,260	1,290	1,280	1,250	1,250	857	612	1,450	1,100	905
24	1,170	1,260	1,250	1,070	1,260	1,250	1,180	853	605	1,370	1,120	927
25	1,170	1,210	1,250	1,180	1,240	1,260	1,070	959	580	1,210	1,090	1,020
26	1,170	1,190	1,260	1,280	1,250	1,250	1,060	1,010	607	1,150	1,070	1,030
27	1,190	1,210	1,250	1,290	1,270	1,260	943	936	741	996	1,070	1,030
28	1,190	1,210	1,310	1,290	1,260	1,260	877	890	825	816	1,060	1,030
29	1,180	1,190	1,260	1,270	------	1,260	872	922	890	765	962	1,000
30	1,200	1,200	1,270	1,280	------	1,260	870	875	996	760	893	1,030
31	1,190	------	1,260	1,280	------	1,270	------	810	------	715	897	------
TOTAL	27,712	36,210	36,632	39,330	35,170	39,070	32,490	23,564	20,322	41,212	26,857	25,249
MEAN	894	1,207	1,182	1,269	1,256	1,260	1,083	760	677	1,329	866	842
MAX	1,270	1,280	1,330	1,310	1,280	1,280	1,270	1,010	996	1,750	1,120	1,030
MIN	280	1,170	835	1,070	1,190	1,230	743	611	543	715	614	658
AC-FT	54,970	71,820	72,660	78,010	69,760	77,500	64,440	46,740	40,310	81,740	53,270	50,080

CAL YR 1972 TOTAL 514,544 MEAN 1,406 MAX 2,340 MIN 280 AC-FT 1,021,000
WTR YR 1973 TOTAL 383,818 MEAN 1,052 MAX 1,750 MIN 280 AC-FT 761,300

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 (152 m) upstream from Cleveland irrigation canal, 2.5 mi (4.0 km) west of Cleveland, and 4 mi (6 km) downstream from proposed Cottonwood Dam.

DRAINAGE AREA.--61.7 sq mi (159.8 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,150 ft or 1,570 m (from topographic map). Prior to Dec. 29, 1944, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--34 years (1939-73), 30.9 cfs (0.875 cu m/s), 22,390 acre-ft/yr (276 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 373 cfs (10.6 cu m/s) Apr. 26 (gage height, 3.39 ft or 1,033 m); minimum, 4.7 cfs (0.13 cu m/s) Nov. 22.
Period of record: Maximum discharge, 773 cfs (21.9 cu m/s) Apr. 27, 1952 (gage height, 3.83 ft or 1.167 m); minimum, 0.1 cfs (0.003 cu m/s) Aug. 11, 1961.

REMARKS.--Records good except those for period of no gage-height record, which are fair. A few small diversions for irrigation of meadowland in Cottonwood Valley above station. Treasureton Canal diverts from Cottonwood Creek 10.1 mi (16.3 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	16	12	25	13	16	20	153	45	9.3	9.1	11
2	14	17	12	16	13	16	23	203	42	9.8	8.8	17
3	13	16	14	16	13	14	29	213	40	10	8.9	15
4	13	16	13	16	14	17	38	217	38	10	9.8	11
5	16	17	16	16	13	16	33	210	36	9.8	10	9.6
6	14	15	14	16	13	15	36	247	33	9.8	9.3	8.8
7	14	15	8.8	16	13	15	38	219	32	10	8.4	8.7
8	14	19	10	16	14	17	44	207	30	9.9	8.4	20
9	14	17	12	16	14	17	56	192	28	9.9	8.3	20
10	19	16	13	15	14	17	79	184	26	8.8	7.6	13
11	16	16	12	14	14	17	119	179	25	7.9	7.4	15
12	14	15	11	14	14	16	127	164	24	14	7.2	12
13	15	15	13	15	13	17	120	151	22	13	7.0	11
14	14	15	14	15	14	16	122	140	23	12	6.9	10
15	15	15	14	15	14	15	154	137	28	10	6.7	10
16	15	17	14	15	16	16	111	131	24	9.9	6.9	10
17	14	16	14	15	13	17	92	126	23	9.6	7.0	9.9
18	14	16	15	15	14	16	78	123	20	13	7.0	9.9
19	14	15	16	13	15	15	81	104	16	16	9.2	10
20	18	15	16	16	15	17	103	91	15	18	9.2	10
21	17	15	16	15	15	18	144	81	14	13	8.3	10
22	15	11	17	15	16	18	186	82	13	12	8.9	9.9
23	16	8.7	17	15	16	18	192	88	12	12	9.3	10
24	18	12	16	15	15	18	219	73	11	13	6.7	14
25	16	10	15	15	14	21	250	65	10	11	6.9	13
26	15	13	15	14	15	20	290	59	9.0	10	6.7	12
27	15	12	15	14	15	19	210	55	9.6	11	6.9	10
28	15	11	16	14	15	19	165	55	11	11	7.6	10
29	16	11	16	14	------	20	140	54	11	11	8.0	9.7
30	13	13	16	14	------	19	139	51	9.9	12	7.7	9.5
31	13	------	16	13	------	20	------	48	------	11	6.5	------
TOTAL	463	435.7	438.8	473	397	532	3,438	4,102	680.5	347.7	246.6	350.0
MEAN	14.9	14.5	14.2	15.3	14.2	17.2	115	132	22.7	11.2	7.95	11.7
MAX	19	19	17	25	16	21	290	247	45	18	10	20
MIN	13	8.7	8.8	13	13	14	20	48	9.0	7.9	6.5	8.7
AC-FT	918	864	870	938	787	1,060	6,820	8,140	1,350	690	489	694

CAL YR 1972 TOTAL 20,223.1 MEAN 55.3 MAX 310 MIN 6.5 AC-FT 40,110
WTR YR 1973 TOTAL 11,904.3 MEAN 32.6 MAX 290 MIN 6.5 AC-FT 23,610

PEAK DISCHARGE (BASE, 150 CFS).--Apr. 15 (0800) 173 cfs (2.77 ft); Apr. 26 (1200) 373 cfs (3.39 ft).

NOTE.--No gage-height record May 28 to June 27.

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 (61 m) downstream from tailrace of Oneida plant and 6 mi (10 km) south of Cleveland.

DRAINAGE AREA.--4,400 sq mi (11,400 sq km), 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 or 1,460 m (from topographic map).

AVERAGE DISCHARGE.--52 years, 819 cfs (23.19 cu m/s), 593,400 acre-ft/yr (732 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 3,140 cfs (88.9 cu m/s) Jan. 19 (gage height, 6.79 ft or 2.070 m); minimum, 28 cfs (0.79 cu m/s) Jan. 8.
Period of record: Maximum daily discharge, 5,480 cfs (155 cu m/s) May 8, 1922; minimum daily, 10 cfs (0.28 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,490	1,440	1,460	1,350	1,200	1,650	1,580	1,240	755	790	534	1,000
2	1,220	1,370	1,530	1,520	1,440	1,560	1,620	1,110	625	972	800	701
3	504	1,530	1,580	1,500	1,490	1,290	1,590	1,470	791	748	488	1,210
4	608	1,400	1,560	1,470	1,420	1,570	1,410	1,290	1,010	995	555	944
5	682	1,390	1,300	911	1,460	1,570	1,520	1,480	145	1,070	553	1,090
6	674	1,490	969	1,410	1,270	1,230	1,610	1,300	618	969	608	1,020
7	490	1,450	1,120	911	1,370	1,340	1,330	1,540	650	1,350	704	1,110
8	619	1,480	1,700	1,670	1,530	1,670	950	1,330	521	1,020	404	1,080
9	644	1,470	945	1,720	1,270	1,940	1,340	1,230	425	1,270	531	973
10	636	1,370	779	1,540	1,470	1,410	1,170	1,220	146	1,240	567	1,120
11	607	1,530	970	1,550	1,550	1,400	1,060	1,050	471	1,150	583	681
12	622	1,500	1,010	1,650	1,470	1,600	1,180	1,060	372	1,150	517	1,090
13	1,390	1,140	1,280	1,520	1,420	1,390	1,210	1,240	331	1,450	617	869
14	1,680	1,480	1,530	1,660	1,500	1,510	1,410	973	226	1,410	1,040	851
15	1,570	1,280	1,370	1,780	1,420	1,310	1,740	1,260	188	1,750	335	1,270
16	1,530	1,540	1,260	1,450	1,290	1,370	1,500	927	225	1,280	839	336
17	1,530	1,350	1,280	1,490	1,330	1,660	2,080	900	388	1,690	883	1,230
18	1,470	1,460	1,620	1,760	1,430	1,820	1,760	1,070	504	1,450	554	645
19	1,470	1,320	1,500	1,310	1,450	1,250	1,640	959	321	1,350	565	578
20	1,400	1,530	1,610	1,310	1,430	1,720	1,710	962	455	1,400	729	895
21	1,490	1,470	1,610	1,560	1,380	1,500	1,530	597	349	1,630	1,120	988
22	1,460	1,430	1,540	1,380	1,460	1,220	1,630	1,490	479	1,340	763	918
23	1,580	1,460	1,510	1,430	1,430	1,580	1,730	847	290	1,370	610	1,160
24	1,290	1,420	1,500	1,400	1,370	1,570	1,800	1,220	339	1,310	984	1,170
25	1,560	1,460	1,470	1,480	1,430	1,310	1,790	1,130	589	1,260	1,070	1,410
26	1,530	1,490	1,400	1,270	1,440	1,570	1,600	1,200	307	1,090	808	1,350
27	1,300	1,350	1,570	1,630	1,500	1,680	1,730	1,350	547	1,190	1,120	1,190
28	1,790	1,440	1,490	1,240	1,390	1,680	1,680	721	394	1,070	1,030	1,280
29	1,300	1,320	1,500	1,380	------	1,380	1,160	881	678	227	868	1,260
30	1,630	1,430	1,320	1,580	------	1,570	1,430	1,040	779	730	878	1,290
31	1,270	------	1,610	1,620	------	1,380	------	1,190	------	423	767	------
TOTAL	37,036	42,790	42,893	45,452	39,610	46,700	45,490	35,277	13,918	36,144	22,424	30,709
MEAN	1,195	1,426	1,384	1,466	1,415	1,506	1,516	1,138	464	1,166	723	1,024
MAX	1,790	1,540	1,700	1,780	1,550	1,940	2,080	1,540	1,010	1,750	1,120	1,410
MIN	490	1,140	779	911	1,200	1,220	950	597	145	227	335	336
AC-FT	73,460	84,870	85,080	90,150	78,570	92,630	90,230	69,970	27,610	71,690	44,480	60,910

CAL YR 1972 TOTAL 995,757 MEAN 2,721 MAX 2,670 MIN 490 AC-FT 1,975,000
WTR YR 1973 TOTAL 436,443 MEAN 1,201 MAX 2,080 MIN 145 AC-FT 869,700

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 (183 m) downstream from headgates of West Cache Canal, 5 mi (8 km) downstream from Mink Creek, 5 mi (8 km) north of Preston, and 5.5 mi (8 km) upstream from Battle Creek.

DRAINAGE AREA.--4,500 sq mi (11,660 sq km), 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 (1,379.16 m) above mean sea level, unadjusted. October 1889 to September 1917 nonrecording gages at several sites within 5 mi (8 km) downstream at different datums.

AVERAGE DISCHARGE.--30 years (1943-73), 851 cfs (24.10 cu m/s), 616,500 acre-ft/yr (760 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 3,140 cfs (88.9 cu m/s) May 18 (gage height, 4.69 ft or 1.430 m); minimum not determined; minimum daily, 114 cfs (3.23 cu m/s) July 29.
Period of record (1889-1917): Maximum discharge, about 8,500 cfs (241 cu m/s) June 9, 10, 1907, estimated on basis of records for station near Collinston, Utah; maximum gage height observed, 9.04 ft (2.755 m) Jan. 17, 18, 1917 (backwater from ice), site and datum then in use; minimum discharge not determined.
(1943-73): Maximum discharge, 4,420 cfs (125 cu m/s) Apr. 17, 1950 (gage height, 5.61 ft or 1.710 m); minimum, 0.6 cfs (0.017 cu m/s) June 14, 1949; minimum daily, 2.0 cfs (0.057 cu m/s) May 11, 1968.

REMARKS.--Records good. Station is below all irrigation diversions from Bear River in Idaho except Cub River pumps in SE 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,600	1,450	1,390	1,410	1,160	1,360	1,510	1,430	608	597	364	494
2	1,300	1,440	1,610	1,700	1,560	1,260	1,620	1,110	727	750	574	877
3	636	1,520	1,600	1,530	1,500	1,000	1,420	1,430	755	514	386	665
4	646	1,420	1,620	1,500	1,450	1,300	1,300	1,330	761	792	379	1,060
5	673	1,350	1,390	1,100	1,500	1,240	1,400	1,580	389	931	344	817
6	709	1,400	1,130	1,300	1,340	874	1,550	1,450	537	648	484	930
7	564	1,620	906	1,100	1,390	1,330	1,480	1,620	625	1,200	519	881
8	727	1,430	1,600	1,600	1,500	1,460	1,030	900	278	836	223	1,020
9	724	1,410	1,000	1,800	1,340	1,680	1,200	1,310	336	1,040	326	968
10	672	1,440	840	1,700	1,520	1,350	1,180	1,390	316	996	344	695
11	669	1,620	900	1,600	1,480	1,350	858	1,170	232	938	421	1,000
12	662	1,300	1,000	1,650	1,510	1,510	1,310	1,340	319	934	301	572
13	1,270	1,350	1,400	1,600	1,410	1,370	1,180	1,220	249	1,240	509	983
14	1,620	1,580	1,500	1,700	1,460	1,420	1,340	1,280	199	1,150	732	732
15	1,610	1,350	1,400	1,600	1,480	1,290	1,750	1,560	166	1,520	196	754
16	1,760	1,440	1,300	1,630	1,370	1,340	1,460	1,120	218	1,230	505	1,160
17	1,530	1,360	1,400	1,460	1,310	1,570	1,960	1,080	340	1,510	651	249
18	1,400	1,500	1,650	1,720	1,390	1,780	1,770	1,210	453	1,310	396	1,120
19	1,570	1,530	1,700	1,440	1,500	1,210	1,570	1,120	281	1,180	292	520
20	1,380	1,580	1,700	1,470	1,500	1,640	1,640	1,240	286	1,250	434	543
21	1,530	1,450	1,600	1,650	1,450	1,430	1,520	1,220	296	1,420	694	742
22	1,510	1,470	1,650	1,470	1,470	1,110	1,540	1,340	298	1,160	442	738
23	1,480	1,480	1,720	1,320	1,350	1,490	1,680	1,230	178	1,200	419	831
24	1,340	1,560	1,470	1,500	1,540	1,470	1,720	1,260	337	887	701	1,010
25	1,550	1,430	1,530	1,200	1,320	1,220	1,780	1,710	300	1,090	862	992
26	1,630	1,560	1,560	1,800	1,520	1,480	1,720	1,090	302	924	563	1,060
27	1,280	1,480	1,450	1,400	1,320	1,580	1,740	1,000	281	1,020	819	1,280
28	1,700	1,550	1,660	1,500	1,280	1,570	1,810	1,070	260	899	867	647
29	1,380	1,410	1,440	1,700	------	1,330	1,350	1,270	400	114	829	1,110
30	1,550	1,390	1,380	1,740	------	1,480	1,460	864	567	539	676	1,120
31	1,310	------	1,600	1,650	------	1,220	------	1,060	------	285	609	------
TOTAL	37,982	43,870	44,096	47,540	39,920	42,714	44,848	39,004	11,294	30,104	15,861	25,570
MEAN	1,225	1,462	1,422	1,534	1,426	1,378	1,495	1,258	376	971	512	852
MAX	1,760	1,620	1,720	1,800	1,560	1,780	1,960	1,710	761	1,520	867	1,280
MIN	564	1,300	840	1,100	1,160	874	858	864	166	114	196	249
AC-FT	75,340	87,020	87,460	94,300	79,180	84,720	88,960	77,360	22,400	59,710	31,460	50,720

CAL YR 1972 TOTAL 597,225 MEAN 1,632 MAX 3,010 MIN 564 AC-FT 1,185,000
WTR YR 1973 TOTAL 422,803 MEAN 1,158 MAX 1,960 MIN 114 AC-FT 838,600

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 (12 m) above county road culvert, and 1.3 mi (2.1 km) northeast of Clifton.

DRAINAGE AREA.--119 sq mi (308 sq km), 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 or 1,434 m (from topographic map).

AVERAGE DISCHARGE.--7 years, 12.4 cfs (0.351 cu m/s) 8,980 acre-ft/yr (11.1 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 106 cfs (3.00 cu m/s) probably Apr. 8 (gage height, 5.44 ft or 1.658 m, from high-water marks on outside of well); minimum, 0.90 cfs (0.025 cu m/s) Aug. 15.
Period of record: Maximum discharge, 152 cfs (4.30 cu m/s) Mar. 31, 1969 (gage height, 6.80 ft or 2.073 m, from high-water mark on outside of well); minimum, 0.57 cfs (0.016 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	6.1	10	4.0	3.5	4.5	60	37	13	4.4	2.5	2.3
2	3.2	6.3	10	4.0	3.5	5.5	60	35	12	3.7	2.8	3.5
3	3.3	6.5	10	4.0	3.5	7.0	60	34	11	4.5	2.7	2.0
4	3.3	6.8	10	4.0	3.5	9.5	60	35	11	3.9	3.3	1.6
5	4.1	7.2	10	4.0	3.5	11	70	36	10	3.3	2.5	1.5
6	4.3	7.5	8.0	4.0	3.5	16	80	35	10	2.8	2.8	1.3
7	4.1	8.0	7.0	4.0	3.5	21	95	34	10	3.0	1.5	1.3
8	3.9	8.4	7.0	4.0	3.5	30	100	32	9.4	2.5	2.1	3.3
9	3.7	8.8	7.0	4.0	3.5	36	86	31	10	2.5	2.3	3.7
10	4.0	9.3	6.0	4.0	3.5	40	77	30	8.8	2.4	1.6	2.4
11	4.0	9.3	5.4	4.0	3.5	50	72	29	8.8	2.8	1.4	3.3
12	3.7	9.1	5.0	4.0	3.5	60	68	27	7.4	2.7	1.8	3.2
13	3.7	9.1	5.8	4.0	3.5	70	62	25	6.8	3.0	1.6	2.4
14	3.6	9.0	6.6	4.0	3.5	63	61	23	9.0	3.4	1.3	2.4
15	3.7	9.0	6.1	4.0	3.5	58	57	21	12	3.1	1.3	2.5
16	4.3	9.1	5.8	4.0	3.5	56	53	20	13	2.7	2.4	2.4
17	4.3	9.8	6.0	4.0	3.5	54	54	19	8.8	2.8	1.5	2.5
18	4.3	9.8	6.0	4.0	3.5	52	54	18	8.6	3.9	1.9	2.6
19	4.4	10	6.0	4.0	3.5	51	53	17	8.2	4.7	1.6	2.7
20	4.5	11	6.6	4.0	3.5	48	52	16	9.0	6.8	1.7	2.7
21	4.5	11	6.7	4.0	3.5	47	48	17	8.2	6.4	1.3	3.0
22	4.6	10	6.8	4.0	3.5	44	45	16	8.6	5.2	2.3	3.0
23	4.7	11	7.0	4.0	3.5	49	45	16	8.8	5.6	1.5	3.9
24	4.8	11	7.0	4.0	3.5	52	45	18	5.5	4.4	1.9	4.1
25	4.9	11	7.0	4.0	3.5	54	43	26	5.3	3.3	1.5	3.7
26	5.2	11	6.5	4.0	3.5	54	41	24	5.3	2.7	1.3	3.3
27	5.3	10	6.0	4.0	3.5	54	39	23	5.5	2.5	1.4	3.1
28	5.5	10	5.5	4.0	3.5	54	38	20	5.0	2.0	2.0	3.0
29	5.6	10	5.0	4.0	------	54	38	19	5.0	1.9	1.7	3.0
30	5.7	10	4.8	4.0	------	56	38	15	5.8	1.9	1.5	4.5
31	5.9	------	4.4	4.0	------	60	------	13	------	1.7	1.4	------
TOTAL	134.3	275.1	211.0	124.0	98.0	1,320.5	1,754	761	259.8	106.5	58.4	84.2
MEAN	4.33	9.17	6.81	4.00	3.50	42.6	58.5	24.5	8.66	3.44	1.88	2.81
MAX	5.9	11	10	4.0	3.5	70	100	37	13	6.8	3.3	4.5
MIN	3.2	6.1	4.4	4.0	3.5	4.5	38	13	5.0	1.7	1.3	1.3
AC-FT	266	546	419	246	194	2,620	3,480	1,510	515	211	116	167

CAL YR 1972 TOTAL 7,194.3 MEAN 19.7 MAX 122 MIN 1.6 AC-FT 14,270
WTR YR 1973 TOTAL 5,186.8 MEAN 14.2 MAX 100 MIN 1.3 AC-FT 10,290

NOTE.--No gage-height record Mar. 24 to Apr. 9.

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 (320 m) downstream from inlet canal to Cub River pumps, 1.1 mi (1.8 km) downstream from Weston Creek, 1.8 mi (2.9 km) upstream from State line, and 3.5 mi (5.6 km) southeast of Weston.

DRAINAGE AREA.--4,840 sq mi (12,540 sq km), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,420 ft or 1,347 m (from topographic map).

EXTREMES.--Current year: Maximum discharge, 2,840 cfs (80.4 cu m/s) Apr. 18 (gage height, 6.43 ft or 1.960 m); minimum daily, 168 cfs (4.76 cu m/s) June 27.
Period of record: Maximum discharge, 4,190 cfs (119 cu m/s) June 12, 1971 (gage height, 8.25 ft or 2.515 m); minimum daily, 73 cfs (2.07 cu m/s) Nov. 20, 1970.

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,580	1,220	1,520	1,600	1,500	1,400	1,560	1,500	1,250	434	524	670
2	1,440	1,480	1,460	1,600	1,500	1,400	1,700	1,480	731	574	406	1,130
3	1,010	1,540	1,580	1,600	1,500	1,400	1,780	1,550	823	460	591	912
4	608	1,420	1,700	1,600	1,500	1,380	1,660	1,470	867	703	355	934
5	754	1,430	1,730	1,600	1,500	1,750	1,600	1,590	929	815	282	1,200
6	752	1,420	1,490	1,200	1,600	1,450	1,790	1,640	413	815	496	1,040
7	642	1,600	1,300	1,200	1,600	1,440	1,790	1,730	618	797	436	1,120
8	554	1,470	1,100	1,200	1,600	1,580	1,390	1,700	669	912	351	1,080
9	647	1,620	1,600	1,700	1,600	1,770	1,350	1,470	368	846	236	1,180
10	759	1,490	1,200	1,700	1,600	1,540	1,310	1,490	398	828	362	1,100
11	653	1,550	950	1,700	1,600	1,690	1,150	1,370	351	1,050	370	1,230
12	646	1,390	1,000	1,700	1,600	1,710	1,370	1,340	353	971	238	863
13	993	1,500	1,100	1,700	1,600	1,610	1,310	1,210	402	1,010	326	1,010
14	1,420	1,490	1,400	1,700	1,530	1,510	1,540	1,520	391	1,190	371	907
15	1,400	1,470	1,600	1,700	1,480	1,590	1,730	1,410	326	1,330	580	1,070
16	1,540	1,290	1,600	1,700	1,480	1,420	1,690	1,310	277	1,400	226	1,040
17	1,550	1,490	1,600	1,700	1,390	1,560	1,850	1,110	350	1,440	418	775
18	1,440	1,410	1,600	1,600	1,380	1,810	2,080	1,060	427	1,490	690	1,030
19	1,530	1,550	1,600	1,600	1,530	1,410	1,780	1,200	550	1,220	188	683
20	1,370	1,630	1,600	1,600	1,610	1,700	1,850	1,040	325	1,360	568	775
21	1,410	1,400	1,600	1,500	1,350	1,590	1,870	1,310	479	1,570	398	995
22	1,490	1,610	1,600	1,500	1,450	1,300	1,410	985	313	1,330	570	1,030
23	1,480	1,430	1,600	1,500	1,420	1,660	1,840	1,410	393	1,390	520	1,180
24	1,630	1,440	1,600	1,500	1,550	1,650	1,880	977	244	1,390	440	1,210
25	1,360	1,520	1,600	1,500	1,360	1,510	1,900	1,380	253	1,260	912	1,240
26	1,480	1,540	1,600	1,500	1,640	1,600	1,930	1,510	346	1,280	703	1,330
27	1,610	1,470	1,600	1,500	1,510	1,650	1,950	1,280	168	1,020	691	1,300
28	1,490	1,560	1,600	1,500	1,590	1,700	1,900	1,330	336	995	925	1,240
29	1,430	1,430	1,600	1,500	------	1,890	1,750	1,060	393	930	885	1,260
30	1,500	1,340	1,600	1,500	------	1,510	1,720	1,300	371	229	630	1,460
31	1,580	------	1,600	1,500	------	1,720	------	931	------	622	622	------
TOTAL	37,748	44,200	46,330	48,200	42,570	48,900	50,430	41,663	14,114	31,661	15,310	31,994
MEAN	1,218	1,473	1,495	1,555	1,520	1,577	1,681	1,344	470	1,021	494	1,066
MAX	1,630	1,630	1,730	1,700	1,640	1,890	2,080	1,730	1,250	1,570	925	1,460
MIN	554	1,220	950	1,200	1,350	1,300	1,150	931	168	229	188	670
AC-FT	74,870	87,670	91,900	95,600	84,440	96,990	100,000	82,640	28,000	62,800	30,370	63,460

CAL YR 1972 TOTAL 621,330 MEAN 1,698 MAX 3,050 MIN 554 AC-FT 1,232,000
WTR YR 1973 TOTAL 453,120 MEAN 1,241 MAX 2,080 MIN 168 AC-FT 898,800

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 mi (0.3 km) upstream from headgates of Cub River-Worm Creek Canal, 0.7 mi (1.1 km) upstream from forest boundary, and 10 mi (16 km) east of Preston.

DRAINAGE AREA.--19.4 sq mi (50.2 sq km).

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 (1,610.90 m) above mean sea level, unadjusted.

AVERAGE DISCHARGE.--30 years, 83.9 cfs (2.376 cu m/s), 60,790 acre-ft/yr (75.0 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 640 cfs (18.1 cu m/s) May 20 (gage height, 2.56 ft or 0.780 m); minimum, 18 cfs (0.51 cu m/s) Jan. 27-29, Feb. 5-27.
Period of record: Maximum discharge, 803 cfs (22.7 cu m/s) June 11, 1971 (gage height, 3.13 ft or 0.954 m); maximum gage height, 3.83 ft (1.167 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	28	24	21	19	19	23	62	393	112	49	37
2	31	28	24	21	19	20	23	55	388	105	49	36
3	31	28	25	21	19	21	23	55	359	100	48	34
4	31	28	25	22	19	20	24	70	313	97	48	33
5	31	28	25	21	18	20	26	83	280	94	47	33
6	31	28	24	21	18	20	31	100	276	91	47	32
7	32	27	24	21	18	20	32	112	295	87	46	32
8	31	28	24	20	18	20	29	119	322	84	45	34
9	31	27	24	20	18	21	28	132	342	81	44	33
10	32	27	24	20	18	21	30	150	355	78	44	32
11	31	27	24	20	18	22	33	181	337	75	43	32
12	31	27	24	20	18	22	38	198	299	73	43	31
13	31	26	24	21	18	22	45	234	272	73	42	31
14	30	26	24	20	18	21	52	283	258	71	42	31
15	30	26	24	20	18	21	46	313	253	69	41	31
16	30	26	23	20	18	21	46	339	231	67	41	31
17	30	26	23	20	18	22	58	390	215	65	40	30
18	30	26	23	20	18	21	51	470	200	64	40	30
19	29	26	23	20	18	21	43	508	183	64	39	29
20	31	26	23	19	18	22	39	604	171	64	38	30
21	30	25	23	19	18	23	37	575	160	62	39	29
22	29	25	23	20	18	24	38	533	157	60	38	29
23	30	25	23	19	18	22	40	490	154	59	38	30
24	29	25	23	19	18	22	42	488	152	58	37	30
25	29	25	22	19	18	23	46	578	148	56	37	30
26	29	26	22	19	18	24	49	557	142	55	37	29
27	29	25	22	18	18	25	59	419	135	54	36	28
28	29	25	22	18	19	25	75	322	130	53	36	28
29	29	25	22	18	------	25	82	311	124	52	36	28
30	29	24	22	19	------	24	71	330	118	51	35	27
31	28	------	21	19	------	24	------	356	------	50	35	------
TOTAL	935	789	723	615	509	678	1,259	9,417	7,162	2,224	1,280	930
MEAN	30.2	26.3	23.3	19.8	18.2	21.9	42.0	304	239	71.7	41.3	31.0
MAX	32	28	25	22	19	25	82	604	393	112	49	37
MIN	28	24	21	18	18	19	23	55	118	50	35	27
AC-FT	1,850	1,560	1,430	1,220	1,010	1,340	2,500	18,680	14,210	4,410	2,540	1,840

CAL YR 1972 TOTAL 37,785 MEAN 103 MAX 715 MIN 21 AC-FT 74,950
WTR YR 1973 TOTAL 26,521 MEAN 72.7 MAX 604 MIN 18 AC-FT 52,600

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 mi (3.4 km) north of Idaho-Utah State line.

DRAINAGE AREA.--485 sq mi (1,260 sq km), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,355 ft (1,327 m) (by barometer). Prior to Mar. 6, 1951, nonrecording gage at site 300 ft (91 m) downstream at datum 0.27 ft (0.082 m) lower. Mar. 6, 1951, to Sept. 30, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--34 years (1939-73), 59.3 cfs (1.68 cu m/s), 42,960 acre-ft/yr (53.0 cu hm/yr); 15-year base period (1952-67), 48.7 cfs (1.38 cu m/s).

EXTREMES.--Current year: Maximum discharge, 399 cfs (11.3 cu m/s) Mar 28 (gage height, 5.88 ft or 1.792 m); minimum discharge, 24 cfs (0.68 cu m/s) July 9, 11 (gage height, 1.91 ft or 0.582 m).
Period of record: Maximum discharge, 2,530 cfs (71.6 cu m/s) Feb. 12, 1962 (gage height, 8.93 ft or 2.722 m); minimum, 1.8 cfs July 14, 1964 (gage height, 1.30 ft or 0.396 m).

REMARKS.--Records excellent. Flow regulated by several small reservoirs above station. Diversions above station for irrigation of 25,000 (10,000) to 30,000 acres (12,000 sq hm). Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

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

Oct. 1-31		Nov. 1 to Sept. 30			
2.0	23	1.9	21	4.0	156
3.0	94	2.2	36	5.0	246
4.0	163	2.5	63	6.0	424
		3.0	93		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	78	90	70	81	101	338	124	37	27	41	31
2	37	82	93	70	81	107	303	122	34	27	41	35
3	37	85	100	71	81	119	268	122	33	27	39	41
4	41	86	102	68	82	123	265	124	33	26	39	38
5	46	85	73	67	82	122	272	136	32	26	40	35
6	59	80	79	66	84	121	273	133	32	25	41	34
7	59	77	69	63	84	120	254	122	31	25	44	33
8	57	79	68	64	85	121	214	117	30	26	40	35
9	57	89	71	63	84	125	178	116	29	25	42	66
10	59	89	67	64	87	133	169	110	27	25	37	79
11	62	87	64	67	87	161	165	100	27	25	36	70
12	58	85	60	70	88	180	157	89	26	25	36	62
13	58	84	56	69	89	184	147	84	26	27	36	55
14	59	84	54	73	89	171	141	80	28	39	35	51
15	57	84	49	83	89	158	135	77	35	47	35	47
16	62	85	45	84	88	149	132	77	53	47	34	43
17	64	92	46	84	89	148	131	78	46	47	32	43
18	66	94	47	92	90	151	140	75	43	44	31	45
19	66	91	49	99	90	155	137	71	40	45	30	46
20	79	94	53	81	88	157	125	67	38	55	29	47
21	113	94	71	82	87	164	119	71	37	67	29	48
22	122	88	90	84	84	181	119	71	34	65	30	52
23	108	83	101	80	87	209	117	63	32	58	33	55
24	96	82	114	79	91	255	120	53	31	54	32	67
25	89	82	113	81	90	312	120	57	30	49	32	73
26	82	83	101	86	93	334	116	71	29	44	31	75
27	78	97	91	89	95	363	114	68	29	42	31	72
28	77	94	86	90	97	391	114	60	28	40	29	69
29	79	87	81	82	------	354	116	54	28	39	31	68
30	77	88	74	80	------	320	123	49	28	39	30	67
31	75	------	73	82	------	327	------	46	------	39	30	------
TOTAL	2,116	2,588	2,330	2,383	2,442	6,016	5,122	2,687	986	1,196	1,076	1,582
MEAN	68.3	86.3	75.2	76.9	87.2	194	171	86.7	32.9	38.6	34.7	52.7
MAX	122	97	114	99	97	391	338	136	53	67	44	79
MIN	37	77	45	63	81	101	114	46	26	25	29	31
AC-FT	4,200	5,130	4,620	4,730	4,840	11,930	10,160	5,330	1,960	2,370	2,130	3,140

CAL YR 1972 TOTAL 28,166 MEAN 77.0 MAX 380 MIN 20 AC-FT 55,870
WTR YR 1973 TOTAL 30,524 MEAN 83.6 MAX 391 MIN 25 AC-FT 60,540

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 (550 m) downstream from highway bridge at Libby, 0.8 mi (1.3 km) downstream from Libby Creek, and at mile 204.3 (328.7 km).

DRAINAGE AREA.--10,240 sq mi (26,520 sq km), 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 (622.261 m) above mean sea level. Prior to Apr. 28, 1931, nonrecording gages at site 1,800 ft (550 m) upstream at different datum.

AVERAGE DISCHARGE.--63 years, 12,140 cfs (343.8 cu m/s), 16.10 in/yr (409 mm/yr), 8,795,000 acre-ft/yr (10.8 cu km/yr), adjusted for change in contents in Lake Koocanusa since Feb. 29, 1972.

EXTREMES.--Current year: Maximum discharge, 39,500 cfs (1,120 cu m/s) Oct. 12 (gage height, 10.49 ft or 3.197 m); minimum daily, 2,300 cfs (65.1 cu m/s) Jan. 9.
Period of record: Maximum discharge, 121,000 cfs (3,430 cu m/s) June 21, 1916 (gage height, 20.7 ft or 6.31 m, present datum, derived from gage-relation study); minimum observed, 895 cfs (25.3 cu m/s) Jan. 11, 1930 (discharge measurement).

REMARKS.-- cords good. Flow regulated since Mar. 21, 1972, by Lake Koocanusa. Diversions for irrigation of about 14,500 acres (58.7 sq km) from tributaries above station in Canada and the United States. Records of chemical analyses for the water year 1973 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33,200	27,200	8,220	6,200	3,440	3,240	3,910	3,560	3,640	2,860	4,300	19,400
2	33,400	26,300	4,610	6,090	3,560	3,490	3,900	3,480	3,380	2,790	4,360	19,400
3	34,000	25,900	4,720	5,830	4,830	3,470	3,890	3,550	3,100	2,710	4,330	19,400
4	34,500	27,900	4,610	5,780	5,530	3,430	3,910	3,630	2,770	2,750	4,310	22,000
5	35,500	30,500	3,910	5,140	4,820	3,420	3,940	3,740	3,110	2,740	4,350	24,800
6	35,500	32,900	3,000	2,870	3,190	3,400	4,050	3,840	3,180	2,700	4,340	24,500
7	34,200	33,300	2,980	2,700	3,120	3,400	4,060	3,960	3,620	2,670	4,360	23,000
8	31,800	31,900	2,700	2,500	3,090	3,380	4,050	4,040	3,640	2,630	4,380	19,500
9	30,400	30,600	2,400	2,300	3,150	3,430	4,060	3,960	3,970	2,960	4,450	19,400
10	30,600	29,600	2,500	2,700	3,130	3,710	4,070	3,810	3,380	5,290	4,460	19,400
11	32,300	30,400	2,600	3,000	3,130	3,760	4,120	3,600	3,170	6,730	4,450	19,600
12	35,000	29,600	2,400	2,500	3,160	3,740	4,270	3,490	3,150	6,510	4,460	19,700
13	37,600	28,600	2,400	2,400	3,150	3,730	4,490	3,470	3,070	9,350	4,460	19,600
14	34,400	28,700	2,400	2,600	3,140	3,750	4,720	3,730	3,170	15,200	4,450	19,800
15	32,200	26,400	2,600	2,900	3,140	3,760	4,760	4,150	3,200	10,200	5,930	20,000
16	33,200	25,600	2,600	3,200	3,140	3,750	4,780	4,610	3,100	8,130	7,910	20,100
17	33,500	24,200	2,700	3,500	3,150	3,760	4,530	5,360	3,030	8,150	8,200	20,100
18	31,800	22,800	2,800	3,700	3,140	3,740	3,380	5,440	3,410	8,120	11,000	21,200
19	32,200	22,200	2,900	3,600	3,120	3,720	3,380	5,180	4,680	8,320	15,000	22,400
20	32,200	21,800	3,200	3,440	3,120	3,730	3,350	4,870	4,660	8,340	15,000	17,600
21	31,100	21,700	3,600	3,390	3,130	3,740	3,320	4,230	4,930	8,350	14,800	13,600
22	30,800	21,200	3,850	3,270	3,130	3,750	3,320	3,890	6,370	8,360	16,700	20,800
23	30,700	21,100	3,760	3,310	3,140	3,790	3,370	3,720	8,640	6,450	19,400	21,000
24	30,700	20,400	3,800	3,380	3,150	3,810	3,410	3,470	8,780	4,400	19,200	20,800
25	31,000	20,100	3,770	3,460	3,160	3,790	3,410	4,030	8,760	4,430	19,400	19,800
26	30,800	20,100	3,840	3,350	3,200	3,640	3,450	3,670	9,380	4,520	19,500	19,800
27	30,500	19,300	4,370	3,300	3,240	3,530	3,610	3,420	9,080	4,370	19,400	20,100
28	30,300	17,700	6,710	3,340	3,260	3,870	3,740	3,270	8,330	4,280	19,500	15,600
29	30,000	17,100	6,420	3,380	------	3,890	3,710	3,200	5,480	4,250	19,500	10,500
30	29,500	13,500	6,340	3,430	------	3,930	3,660	3,300	2,920	4,260	19,200	10,300
31	28,600	------	6,210	3,460	------	3,920	------	3,580	------	4,250	19,300	------
TOTAL	1,001.5M	748,600	118,920	110,020	94,660	113,470	116,620	121,250	141,100	177,070	330,400	583,200
MEAN	32,310	24,950	3,836	3,549	3,381	3,660	3,887	3,911	4,703	5,712	10,660	19,440
MAX	37,600	33,300	8,220	6,200	5,530	3,930	4,780	5,440	9,380	15,200	19,500	24,800
MIN	28,600	13,500	2,400	2,300	3,090	3,240	3,320	3,200	2,770	2,630	4,300	10,300
AC-FT	1,986M	1,485M	235,900	218,200	187,800	225,100	231,300	240,500	279,900	351,200	655,300	1,157M
MEAN†	8,522	6,668	3,973	3,514	3,306	3,706	5,842	23,200	32,530	16,350	7,616	6,000
CFSM†	.83	.65	.39	.34	.32	.36	.57	2.27	3.18	1.60	.74	.59
IN†	.96	.73	.45	.40	.34	.42	.64	2.61	3.54	1.84	.86	.65
AC-FT†	524,000	396,800	244,300	216,100	183,600	227,900	347,900	1,427M	1,936M	1,005M	468,300	357,000

CAL YR 1972 TOTAL 5,928,300 MEAN 16,200 MAX 37,600 MIN 2,200 AC-FT 11,760,000
WTR YR 1973 TOTAL 3,656,810 MEAN 10,020 MAX 37,600 MIN 2,300 AC-FT 7,253,000

CAL YR 1972† TOTAL 6,065,802 MEAN 16,570 CFSM 1.62 IN 22.03 AC-FT 12,030,000
WTR YR 1973† TOTAL 3,697,101 MEAN 10,130 CFSM .99 IN 13.43 AC-FT 7,333,000

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

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 (150 m) upstream from bridge on U.S. Highway 2, 0.2 mi (0.3 km) upstream from mouth, and 7.7 mi (12.4 km) northwest of Troy.

DRAINAGE AREA.--766 sq mi (1,984 sq km).

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 (560.59 m) above mean sea level. Oct. 15, 1910, to Sept. 30, 1916, nonrecording gage at several sites within 11 mi (18 km) of present site at various datums.

AVERAGE DISCHARGE.--17 years, 916 cfs (25.9 cu m/s),16.67 in/yr (412 mm/yr), 663,600 acre-ft/yr (818 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 5,900 cfs (167 cu m/s) May 17 (gage height, 7.63 ft or 2.326 m); minimum daily, 50 cfs (1.42 cu m/s) Dec. 9.
Period of record: Maximum discharge, 12,100 cfs (343 cu m/s) May 21, 1956 (gage height, 9.70 ft or 2 957 m in gage well, 10.8 ft (32.9 m) from outside gage); minimum daily, 50 cfs (1.42 cu m/s) Dec. 9, 1972.
Flood in May to June 1948 reached a stage of 11.0 ft (3.35 m) from floodmarks (discharge, 12,500 cfs or 354 cu m/s). Flood in May 1954 reached a stage of 11.4 ft (3.47 m) from floodmarks (discharge, 13,400 cfs or 379 cu m/s).

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 30 acres (121,000 sq m) above station. Records of water temperatures for the water year 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	172	130	140	210	270	409	1,250	1,870	435	130	134
2	186	184	120	120	190	300	402	1,250	1,680	419	130	135
3	188	195	110	110	170	290	406	1,410	1,490	396	128	131
4	182	226	100	100	160	280	445	1,600	1,380	374	125	111
5	170	289	90	95	150	276	576	1,690	1,380	354	122	103
6	162	293	80	90	140	256	680	2,040	1,430	346	125	96
7	157	262	70	85	130	236	620	2,380	1,650	343	126	91
8	153	236	60	80	150	232	570	2,280	1,900	327	125	88
9	152	221	50	75	170	237	566	2,060	2,070	310	121	91
10	208	214	55	70	190	253	595	1,850	1,580	294	117	88
11	307	207	60	80	210	264	725	1,670	1,290	279	113	86
12	276	197	65	100	200	251	967	1,610	1,160	264	110	82
13	235	184	70	150	190	246	1,170	1,850	1,100	255	110	79
14	221	179	75	200	180	239	1,240	2,470	1,070	246	107	76
15	209	184	80	250	170	233	1,130	3,240	1,050	235	103	77
16	198	186	90	300	160	231	1,030	4,220	952	225	98	78
17	189	181	100	350	150	268	1,030	4,970	909	217	93	82
18	183	176	110	320	140	272	998	5,140	845	213	91	83
19	177	182	120	290	140	261	901	4,670	785	208	91	88
20	173	173	140	270	140	259	831	4,040	734	204	92	132
21	171	167	170	250	150	285	839	3,080	715	197	93	162
22	169	164	200	240	160	330	978	2,580	705	197	93	148
23	171	163	250	230	170	385	1,280	2,460	690	189	88	140
24	179	167	300	220	180	420	1,410	2,460	698	186	91	162
25	182	161	280	210	190	454	1,400	2,880	669	176	100	147
26	205	157	260	200	200	568	1,390	2,500	609	172	97	133
27	216	130	240	190	220	572	1,630	2,050	571	162	96	120
28	210	120	220	190	240	511	1,710	1,800	539	155	96	110
29	202	110	200	200	------	461	1,520	1,730	502	151	88	105
30	174	120	180	210	------	435	1,380	1,810	465	147	91	101
31	164	------	160	230	------	420	------	1,920	------	136	100	------
TOTAL	5,946	5,600	4,235	5,645	4,850	9,995	28,828	76,960	32,488	7,812	3,290	3,259
MEAN	192	187	137	182	173	322	961	2,483	1,083	252	106	109
MAX	307	293	300	350	240	572	1,710	5,140	2,070	435	130	162
MIN	152	110	50	70	130	231	402	1,250	465	136	88	7[illegible]
CFSM	.25	.24	.18	.24	.23	.42	1.25	3.24	1.41	.33	.14	.14
IN.	.29	.27	.21	.27	.24	.49	1.40	3.74	1.58	.38	.16	.16
AC-FT	11,790	11,110	8,400	11,200	9,620	19,830	57,180	152,700	64,440	15,500	6,530	6,460

CAL YR 1972 TOTAL 412,840 MEAN 1,128 MAX 8,300 MIN 50 CFSM 1.47 IN 20.05 AC-FT 818,900
WTR YR 1973 TOTAL 188,908 MEAN 518 MAX 5,140 MIN 50 CFSM .68 IN 9.17 AC-FT 374,700

PEAK DISCHARGE (BASE, 5,000 CFS).--May 17 (2400) 5,900 cfs (7.63 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 (137 m) east of Montana-Idaho State line, 0.5 mi (0.8 km) upstream from Boulder Creek, and at mile 171.6 (276.1 km).

DRAINAGE AREA.--11,740 sq mi (30,407 sq km), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 1,790.25 ft (545.668 m) above mean sea level. Prior to Oct. 1, 1970, at datum 90 ft (27 m) lower. Prior to Nov. 13, 1928, nonrecording gage on bridge 250 ft (76 m) upstream at datum 90.41 ft (27.557 m) lower.

AVERAGE DISCHARGE.--45 years, 13,990 cfs (396 cu m/s), 16.18 in/yr (411 mm/yr), 10,140,000 acre-ft/yr (125 cu km/yr); 15-year base period (1952-67), 15,290 cfs (433.0 cu m/s).

EXTREMES.--Current year: Maximum discharge, 39,400 cfs (1,116 cu m/s) Oct. 13 (gage height, 20.75 ft or 6.32 m); minimum daily, 2,270 cfs (64.3 cu m/s) Dec. 9; minimum gage height, 9.29 ft (2.83 m).
Period of record: Maximum discharge, 123,000 cfs (3,480 cu m/s) May 28, 1948 (gage height, 33.40 ft or 10.18 m); minimum, 996 cfs (28.2 cu m/s) Dec. 9, 1936; minimum gage height, 7.56 ft (2.30 m) Dec. 10, 1929.
Floods of June 1894 and 1916 reached stages of 34.6 (70.546) and 31.6 ft (9.631 m), respectively, present datum, from information by Great Northern Railway.

REMARKS.--Records good except those for winter periods, which are fair. Diversions above station for irrigation of about 14,600 acres (5,900 sq hm). Records of water temperatures for water year 1973 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. 1 to May 17; stage-discharge relation affected by ice Dec. 9-12, Jan. 27 to Feb. 1)

9.2	2,230	14.0	11,830
10.5	3,720	17.0	22,700
12.0	6,530	21.0	41,900

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33,100	26,400	10,900	6,650	3,650	3,680	4,830	5,840	7,600	3,310	4,310	19,300
2	33,100	25,500	5,310	6,530	3,830	3,950	4,800	5,690	6,850	3,200	4,390	19,300
3	33,800	24,900	5,190	6,030	4,560	3,980	4,780	6,030	6,130	3,110	4,390	19,300
4	34,200	26,900	4,870	5,820	6,400	3,920	4,830	6,490	5,060	3,050	4,360	20,900
5	35,300	29,800	4,780	5,540	6,010	3,900	5,080	6,900	5,540	3,040	4,380	25,300
6	35,700	32,800	2,750	3,150	3,900	3,890	5,310	7,600	5,820	2,970	4,380	24,700
7	34,600	34,100	2,540	2,520	3,770	3,870	5,250	8,380	6,920	2,960	4,410	24,100
8	31,900	32,400	2,520	2,500	3,580	3,870	5,160	8,400	7,600	2,870	4,410	19,400
9	29,800	31,100	2,270	2,550	3,710	3,890	5,160	8,050	8,400	2,850	4,390	19,100
10	30,000	29,500	2,300	2,700	3,620	4,190	5,230	7,480	6,830	4,670	4,380	19,100
11	31,600	30,700	2,300	2,900	3,480	4,380	5,480	6,780	5,770	7,550	4,360	19,200
12	34,300	29,800	2,350	3,100	3,470	4,340	6,050	6,380	5,310	7,240	4,360	19,400
13	38,100	28,600	2,660	3,610	3,450	4,310	6,710	6,670	5,080	8,080	4,360	19,300
14	34,700	29,300	2,730	3,860	3,410	4,330	7,240	8,000	5,060	15,300	4,330	19,400
15	32,400	26,700	2,790	4,190	3,380	4,330	7,170	9,760	5,210	12,100	4,830	19,700
16	32,400	25,900	3,140	4,550	3,380	4,310	6,990	12,000	4,850	8,900	8,150	19,900
17	33,800	24,500	3,440	5,560	3,380	4,390	7,170	14,300	4,620	8,950	8,350	19,900
18	31,300	22,900	3,720	5,040	3,370	4,410	5,190	14,800	4,390	8,800	9,820	20,500
19	31,900	22,400	3,710	4,580	3,340	4,340	4,890	13,800	6,110	8,980	14,600	22,800
20	32,200	21,900	3,650	4,310	3,300	4,360	4,720	12,500	6,220	9,030	14,600	20,200
21	30,600	21,900	3,860	4,090	3,330	4,430	4,670	10,300	6,240	9,030	14,500	11,500
22	30,100	21,300	4,630	4,010	3,300	4,510	4,810	9,060	7,290	9,010	15,600	21,400
23	30,100	21,500	4,680	3,810	3,310	4,620	5,330	8,750	10,000	8,250	19,300	20,800
24	30,000	20,700	4,630	3,870	3,300	4,720	5,630	8,350	10,400	4,650	19,100	21,500
25	30,500	20,100	4,460	3,930	3,370	4,760	5,650	9,480	10,300	4,460	19,200	20,100
26	30,300	20,500	4,480	3,810	3,470	4,990	5,710	8,680	10,700	4,650	19,500	19,900
27	30,000	19,900	4,810	3,550	3,550	4,480	6,070	7,580	10,500	4,580	19,300	20,100
28	29,800	17,800	7,200	3,500	3,640	4,930	6,760	6,740	10,300	4,360	19,400	17,600
29	29,300	17,600	7,220	3,500	------	4,990	6,490	6,430	7,850	4,330	19,500	11,100
30	28,800	15,000	7,010	3,550	------	4,910	6,150	6,670	3,950	4,330	19,100	10,800
31	27,700	------	6,620	3,590	------	4,870	------	7,680	------	4,290	19,300	------
TOTAL	991,400	752,400	133,520	126,900	104,260	134,850	169,310	265,570	206,900	188,900	325,360	585,600
MEAN	31,980	25,080	4,307	4,094	3,724	4,350	5,644	8,567	6,897	6,094	10,500	19,520
MAX	38,100	34,100	10,900	6,650	6,400	4,990	7,240	14,800	10,700	15,300	19,500	25,300
MIN	27,700	15,000	2,270	2,500	3,300	3,680	4,670	5,690	3,950	2,850	4,310	10,800
AC-FT	1,966M	1,492M	264,800	251,700	206,800	267,500	335,800	526,800	410,400	374,700	645,400	1,162M

CAL YR 1972 TOTAL 6,697,710 MEAN 18,300 MAX 45,000 MIN 2,270 AC-FT 13,280,000
WTR YR 1973 TOTAL 3,984,970 MEAN 10,920 MAX 38,100 MIN 2,270 AC-FT 7,904,000

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 (305 m) downstream from international boundary, and at mile 25.0 (40.2 km).

DRAINAGE AREA.--570 sq mi (1,476 sq km), 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 (798.594 m)above mean sea level. January 1915 to December 1916 nonrecording gage at site 0.2 mi (0.3 km) upstream at different datum.

AVERAGE DISCHARGE.--44 years (1929-73), 710 cfs (20.1 cu m/s), 16.91 in/yr (353.3 mm/yr), 514,400 acre-ft/yr (634 cu hm/yr); 15-year base period (1952-67), 756 cfs (21.4 cu m/s).

EXTREMES.--Current year: Maximum discharge, 5,400 cfs (153 cu m/s) May 18(gage height, 8.36 ft or 2.548 m); minimum, 47 cfs (1.33 cu m/s) Sept. 14-19 (gage height, 3.29 ft or 1.003 m).
Period of record: Maximum discharge observed, 10,600 cfs (300 cu m/s) June 19, 1916; maximum gage height, 10.55 ft (3.216 m) May 20, 1954; minimum discharge, 23 cfs (0.651 cu m/s) Nov. 7, 1936 (gage height, 3.20 ft or 0.975 m).

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 tables (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Nov. 27-30, Dec. 3 to Feb. 24)

Oct. 1 to Feb. 24		Feb. 25 to Sept. 30			
3.2	20	3.2	30	5.0	850
3.4	50	3.4	66	6.0	1,810
3.6	95	3.6	114	7.0	3,080
3.8	155	4.0	250	8.2	5,110
4.0	230	4.5	505		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	136	111	100	116	156	246	1,180	2,180	529	106	93
2	147	138	105	96	116	165	246	1,200	2,030	500	101	75
3	149	133	96	93	112	156	255	1,330	1,880	467	98	64
4	146	143	88	90	110	153	277	1,490	1,760	434	93	58
5	145	171	82	87	106	153	340	1,600	1,740	401	91	55
6	145	168	75	85	100	149	365	1,950	1,760	380	91	55
7	142	157	67	84	96	146	345	2,180	1,970	370	88	53
8	142	154	64	84	94	146	330	2,100	2,110	345	84	53
9	140	150	61	85	95	146	335	1,950	2,160	325	81	53
10	193	149	61	87	96	159	355	1,760	1,980	300	77	51
11	207	147	62	91	98	169	428	1,610	1,770	277	84	49
12	178	140	64	97	100	159	547	1,610	1,600	255	79	49
13	172	134	66	105	99	156	679	1,860	1,480	242	77	49
14	166	143	72	115	95	153	745	2,390	1,390	234	75	47
15	162	136	78	130	92	149	723	3,050	1,310	218	73	47
16	158	133	84	160	90	153	693	3,920	1,200	203	68	47
17	155	129	91	190	88	186	708	4,730	1,130	193	64	47
18	152	126	98	185	86	172	686	5,020	1,030	186	62	47
19	151	125	102	175	84	165	644	4,880	946	175	60	49
20	149	122	110	170	83	165	611	4,520	890	169	60	62
21	144	119	115	165	83	179	624	3,750	843	165	60	70
22	140	116	120	160	85	196	708	3,300	813	162	57	68
23	141	116	120	150	87	218	850	3,080	805	153	57	68
24	144	113	122	145	90	234	954	3,020	790	143	57	75
25	140	107	122	140	104	255	978	3,430	753	134	62	70
26	148	106	120	135	114	325	1,010	3,020	730	131	60	62
27	148	100	118	130	129	310	1,330	2,650	686	129	57	60
28	149	91	114	125	134	282	1,420	2,360	651	123	53	57
29	145	92	110	120	------	259	1,330	2,210	611	117	53	57
30	130	102	108	118	------	255	1,260	2,210	565	114	51	55
31	142	------	102	116	------	246	------	2,250	------	109	62	------
TOTAL	4,714	3,896	2,908	3,813	2,782	5,915	20,022	81,610	39,563	7,683	2,241	1,745
MEAN	152	130	93.8	123	99.4	191	667	2,633	1,319	248	72.3	58.2
MAX	207	171	122	190	134	325	1,420	5,020	2,180	529	106	93
MIN	130	91	61	84	83	146	246	1,180	565	109	51	47
CFSM	.27	.23	.16	.22	.17	.34	1.17	4.62	2.31	.44	.13	.10
IN.	.31	.25	.19	.25	.18	.39	1.31	5.33	2.58	.50	.15	.11
AC-FT	9,350	7,730	5,770	7,560	5,520	11,730	39,710	161,900	78,470	15,240	4,450	3,460

CAL YR 1972 TOTAL 347,778 MEAN 950 MAX 6,880 MIN 60 CFSM 1.67 IN 22.70 AC-FT 689,800
WTR YR 1973 TOTAL 176,892 MEAN 485 MAX 5,020 MIN 47 CFSM .85 IN 11.54 AC-FT 350,900

PEAK DISCHARGE (BASE, 2,900 CFS).--May 18 (0100) 5,400 cfs (8.36 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 (244 m) downstream from Skin Creek, 0.3 mi (0.5 km) southeast of Eileen, and at mile 5.0 (8 km).

DRAINAGE AREA.--755 sq mi (1,955 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 2,124.5 ft (648 m) 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 (0.3 m) higher.

AVERAGE DISCHARGE.--48 years, 882 cfs (25.0 sq m/s), 15.87 in/yr (403.1 mm/yr), 639,000 acre-ft/yr (789 cu hm/yr); 15-year base period (1952-67), 954 cfs (27.0 cu m/s).

EXTREMES.--Current year: Maximum discharge, 6,020 cfs (170 cu m/s) May 18 (gage height, 5.62 ft or 1.71 m); minimum daily, 64 cfs (1.81 cu m/s) Sept. 14-15 (gage height, 1.26 ft or 0.38 m).
Period of record: Maximum discharge, 11,000 cfs (312 cu m/s) May 20, 1954 (gage height, 6.99 ft or 2.13 m); minimum, 40 cfs (1.13 cu m/s) Nov. 27, 1936, and Dec. 17, 1964, both the result of freezeup; minimum gage height, 0.50 ft (0.15 m) Feb. 22, 1944, present datum.
Flood of June 19, 1916, was about 12,000 cfs (340 cu m/s).

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)
(Stage-discharge relation affected by ice Dec. 4 to Feb. 23)

1.2	51	3.0	990
1.4	96	3.5	1,550
1.7	183	4.0	2,310
2.0	298	5.0	4,350
2.5	570	6.0	7,350

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	183	153	135	155	264	295	1,500	2,520	591	153	120
2	204	183	143	130	155	275	300	1,600	2,310	557	147	123
3	204	183	141	130	150	260	325	1,720	2,130	525	141	99
4	201	204	125	125	150	245	365	1,900	1,990	494	141	89
5	197	234	120	120	145	235	410	2,200	1,960	459	132	84
6	197	238	110	120	140	230	445	2,500	1,960	437	129	79
7	190	218	100	115	135	230	410	2,700	2,170	426	132	77
8	190	211	93	115	130	230	405	2,550	2,280	404	126	74
9	194	204	90	120	130	235	420	2,400	2,430	388	120	77
10	250	204	98	125	130	245	465	2,250	2,180	368	115	74
11	282	201	105	135	135	255	540	2,100	1,950	348	120	72
12	242	194	115	150	135	230	650	2,200	1,770	325	120	67
13	226	190	125	165	135	205	810	2,600	1,630	316	112	67
14	222	187	130	190	135	200	930	3,200	1,540	303	112	64
15	211	190	135	210	130	220	860	4,000	1,430	290	104	65
16	208	183	140	240	125	241	830	5,100	1,300	274	99	67
17	204	183	145	260	120	260	850	5,700	1,230	262	94	68
18	197	183	150	265	120	235	800	6,000	1,140	250	91	67
19	194	180	155	250	120	220	750	5,700	1,060	242	89	73
20	194	177	160	240	120	235	730	5,100	990	234	86	94
21	190	174	165	230	120	260	760	4,120	940	226	84	99
22	183	168	165	220	125	285	870	3,730	900	226	82	99
23	183	168	170	210	130	315	1,030	3,510	881	215	79	109
24	190	168	170	200	139	345	1,140	3,450	863	201	82	107
25	190	165	170	190	154	395	1,180	3,920	827	194	84	111
26	201	162	165	185	176	430	1,300	3,510	792	187	89	95
27	204	144	160	180	203	375	1,680	3,050	760	180	82	88
28	208	135	155	175	223	350	1,850	2,700	720	177	77	84
29	201	147	150	170	------	325	1,700	2,520	672	171	77	82
30	183	165	145	165	------	300	1,600	2,500	626	168	74	79
31	180	------	140	160	------	295	------	2,590	------	162	91	------
TOTAL	6,321	5,526	4,288	5,425	3,965	8,425	24,700	98,620	43,951	9,600	3,264	2,553
MEAN	204	184	138	175	142	272	823	3,181	1,465	310	105	85.1
MAX	282	238	170	265	223	430	1,850	6,000	2,520	591	153	123
MIN	180	135	90	115	120	200	295	1,500	626	162	74	64
CFSM	.27	.24	.18	.23	.19	.36	1.09	4.21	1.94	.41	.14	.11
IN.	.31	.27	.21	.27	.20	.42	1.22	4.86	2.17	.47	.16	.13
AC-FT	12,540	10,960	8,510	10,760	7,860	16,710	48,990	195,600	87,180	19,040	6,470	5,060

CAL YR 1972 TOTAL 422,001 MEAN 1,153 MAX 7,800 MIN 86 CFSM 1.53 IN 20.79 AC-FT 837,000
WTR YR 1973 TOTAL 216,638 MEAN 594 MAX 6,000 MIN 64 CFSM .79 IN 10.67 AC-FT 429,700

PEAK DISCHARGE (BASE, 3,500 CFS).--May 18 (unknown) 6,020 cfs (5.62 ft).

NOTE.--No gage-height record Mar. 2 to May 25.

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 (13 m) downstream from highway bridge at Bonners Ferry, and at mile 152.8 (245.9 km).

DRAINAGE AREA.--13,000 sq mi (33,670 sq km), 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 (531.266 m) above mean sea level with respect to Geological Survey bench mark V-3-1929 at elevation 1,777.08 ft (541.654 m). Gage heights have been reduced to elevations above mean sea level. Datum of 1929, supplementary adjustment of 1947, is 0.02 ft (0.061 m) higher. May 1 to Oct. 15, 1904, nonrecording gage on railroad bridge 0.8 mi (1.3 km) 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 (12 m) 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 (0.070 m) lower.

EXTREMES.--Current year: Maximum elevation, 1,758.20 ft (535.899 m) Oct. 13; minimum elevation, 1,744.01 ft (531.574 m) Apr. 3, 4.
Period of record: Maximum elevation, 1,780.13 ft (542.584 m) May 29, 1961; minimum, 1,741.14 ft (530.699 m) Dec. 5, 1929, Dec. 29, 1930, datum then in use.
Flood of June 1894 reached a stage of 1,777.2 ft (541.69 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56.53	55.30	49.30	47.01	46.59	44.68	44.04	44.85	48.37	46.59	45.40	51.49
2	56.66	54.93	47.59	47.13	46.47	44.73	44.04	44.76	48.10	46.43	45.40	51.51
3	56.83	54.66	47.09	46.80	46.58	44.74	44.01	44.89	47.62	46.24	45.42	51.54
4	57.05	54.84	47.19	47.71	47.22	44.63	44.02	45.19	47.18	46.04	45.39	51.65
5	57.23	55.69	47.56	48.86	47.25	44.51	44.08	45.42	47.05	46.02	45.40	53.17
6	57.46	56.59	47.21	48.00	46.65	44.43	44.19	45.87	47.23	46.02	45.56	53.48
7	57.29	57.20	47.65	47.25	46.02	44.34	44.20	46.49	47.75	45.90	45.50	53.60
8	56.74	56.96	47.65	47.19	46.06	44.28	44.17	46.59	48.20	45.72	45.45	52.56
9	56.07	56.59	47.65	47.26	46.14	44.24	44.16	46.45	48.76	45.53	45.40	52.01
10	56.66	56.04	47.65	47.42	46.24	44.29	44.18	46.09	48.34	45.74	45.36	51.95
11	56.26	56.09	47.65	47.63	46.13	44.42	44.26	45.71	47.69	46.60	45.39	51.91
12	56.96	55.98	48.32	47.77	46.09	44.32	44.46	45.42	47.31	46.73	45.38	52.00
13	57.96	55.69	48.19	47.50	46.01	44.26	44.79	45.53	47.12	46.71	45.41	52.03
14	57.69	55.62	48.10	47.57	45.90	44.22	45.10	46.31	47.00	48.76	45.41	52.04
15	56.96	55.14	48.03	47.67	45.81	44.22	45.12	47.66	46.92	49.34	45.41	52.11
16	56.53	54.72	48.11	47.75	45.74	44.21	45.01	49.45	46.66	47.58	46.29	52.21
17	57.09	54.32	48.29	48.13	45.62	44.23	45.10	51.56	46.49	47.34	46.47	52.23
18	56.70	53.80	48.32	47.76	45.51	44.24	44.65	52.75	46.31	47.20	46.83	52.27
19	56.56	53.52	48.26	47.69	45.49	44.21	44.40	52.66	46.54	47.19	48.79	53.00
20	56.74	53.30	48.13	47.38	45.44	44.17	44.35	52.13	46.68	47.13	49.28	52.98
21	56.46	53.24	48.16	47.45	45.34	44.13	44.32	50.79	46.66	47.15	49.31	49.94
22	56.29	53.11	48.50	47.33	45.24	44.13	44.30	49.70	47.01	47.11	49.39	51.65
23	56.22	53.01	48.36	47.15	45.13	44.15	44.42	49.27	47.95	47.04	50.78	52.29
24	56.16	52.85	48.27	47.03	44.99	44.18	44.57	49.07	48.54	45.86	51.05	52.85
25	56.26	52.60	47.94	47.04	44.88	44.18	44.62	49.72	48.69	45.58	51.16	52.44
26	56.30	52.74	47.65	46.96	44.86	44.22	44.63	49.62	48.88	45.65	51.30	52.28
27	56.25	52.62	47.59	46.72	44.77	44.15	44.95	48.87	48.95	45.64	51.31	52.28
28	56.20	51.94	47.95	46.62	44.75	44.12	45.35	48.34	48.87	45.62	51.26	52.22
29	56.09	51.62	47.55	46.56	------	44.12	45.26	48.00	48.20	45.57	51.36	49.56
30	55.95	51.07	47.17	46.58	------	44.11	45.05	47.91	47.02	45.53	51.33	48.83
31	55.69	------	47.27	46.60	------	44.09	------	48.18	------	45.45	51.33	------
MEAN	56.64	54.39	47.88	47.34	45.82	44.29	44.53	47.91	47.60	46.48	47.69	52.00
MAX	57.96	57.20	49.30	48.86	47.25	44.74	45.35	52.75	48.95	49.34	51.36	53.60
MIN	55.69	51.07	47.09	46.56	44.75	44.09	44.01	44.76	46.31	45.45	45.36	48.83

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 (183 m) above county road bridge, 0.5 mi (0.8 km) upstream from mouth, and 8.2 mi (13.2 km) northwest of Bonners Ferry.

DRAINAGE AREA.--26.6 sq mi (68.9 sq km).

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 (555 m) (from topographic map). June 1928 to September 1934 nonrecording gage at site 30 ft (9 m) downstream at same datum.

EXTREMES.--Current year: Maximum discharge, 520 cfs (14.7 cu m/s) May 17 (gage height, 5.55 ft or 1.69 m); minimum discharge, 2.0 cfs (56.6 cu dm/s) Sept. 14-18 (gage height, 2.61 ft or 0.796 m); minimum gage height, 2.67 ft (0.796 m) Sept. 12-19.
Period of record: Maximum discharge, 1,190 cfs (33.7 cu m/s) May 30, 1972 (gage height 6.50 ft or 1.98 m); minimum discharge observed, 2 cfs (56.6 cu dm/s) Sept. 10, 1934, Sept. 14-19, 1973; minimum gage height, 2.61 ft (0.796 m) Sept. 12-19, 1973.

REMARKS.--Records good except those for winter period, which are poor. Diversion above station varies from 10 cfs (0.28 cu m/s) during high stages to approximately 50 percent of flow during July to September.

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

Oct. 1 to May 16				May 17 to Sept. 30			
2.9	4.1	3.6	41.5	2.6	2.0	3.6	41.5
3.0	6.9	4.0	88.0	2.7	3.2	4.0	86
3.1	10.2	4.5	185	2.9	7.0	4.5	177
3.3	19.5	5.0	340	3.1	13.0	5.0	320
				3.3	22.0	5.3	440

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	12	10	12	15	11	59	164	42	5.3	4.9
2	12	12	11	10	12	14	11	63	142	38	5.0	3.5
3	12	12	9.6	9.5	12	13	11	73	122	35	4.8	3.0
4	11	14	8.2	8.0	12	13	14	82	131	31	4.7	2.8
5	10	19	7.1	8.8	11	13	18	90	157	27	4.8	2.6
6	10	15	7.6	8.6	10	12	15	112	186	27	5.3	2.5
7	10	14	7.4	6.7	9.4	12	15	120	279	26	4.9	2.4
8	9.9	13	5.6	8.0	9.0	12	14	110	228	23	4.7	2.4
9	10	12	6.7	7.8	9.4	12	15	98	179	22	4.5	2.4
10	26	13	7.8	7.8	9.8	12	18	85	140	21	4.4	2.4
11	23	13	8.0	8.0	10	13	24	78	117	19	4.4	2.3
12	18	12	8.0	8.6	10	12	31	78	115	18	4.4	2.2
13	18	12	7.8	10	10	11	35	98	126	16	4.2	2.2
14	16	12	7.9	13	10	10	35	144	112	16	4.0	2.0
15	14	12	8.0	16	10	10	32	203	102	15	3.8	2.0
16	14	11	8.2	19	10	10	32	326	91	14	3.5	2.0
17	13	11	8.6	18	10	11	32	404	86	13	3.4	2.0
18	13	11	9.8	17	10	11	31	420	73	13	3.4	2.0
19	12	11	12	16	10	10	28	368	68	12	3.2	3.3
20	12	11	11	15	9.8	10	28	285	71	11	3.2	11
21	12	10	14	14	9.8	11	31	191	77	11	3.1	9.1
22	12	10	18	14	9.8	11	41	168	85	12	3.0	8.5
23	12	10	25	14	10	12	51	173	89	11	2.9	13
24	12	10	17	14	10	12	51	215	82	9.9	2.9	12
25	11	11	15	14	10	13	53	225	69	9.7	2.9	10
26	11	12	14	13	11	15	57	157	63	9.4	3.0	9.3
27	11	13	14	13	12	14	70	131	59	8.9	2.9	7.8
28	11	10	13	13	14	13	68	120	55	8.4	2.7	7.2
29	10	11	12	13	------	12	64	128	49	8.0	2.6	6.7
30	10	11	11	13	------	12	61	153	45	7.0	2.6	6.3
31	12	------	10	12	------	11	------	182	------	5.5	3.2	------
TOTAL	399.9	360	335.3	372.8	293.0	372	997	5,139	3,362	539.8	117.7	149.8
MEAN	12.9	12.0	10.8	12.0	10.5	12.0	33.2	166	112	17.4	3.80	4.99
MAX	26	19	25	19	14	15	70	420	279	42	5.3	13
MIN	9.9	10	5.6	6.7	9.0	10	11	59	45	5.5	2.6	2.9
CFSM	.48	.44	.40	.44	.39	.44	1.23	6.15	4.15	.64	.14	.18
IN.	.55	.50	.46	.51	.40	.51	1.37	7.08	4.63	.74	.16	.21
AC-FT	793	714	665	739	581	738	1,980	10,190	6,670	1,070	233	297

CAL YR 1972 TOTAL 30,753.6 MEAN 84.0 MAX 880 MIN 4.4 CFSM 3.11 IN 42.37 AC-FT 61,000
WTR YR 1973 TOTAL 12,438.3 MEAN 34.1 MAX 420 MIN 2.0 CFSM 1.26 IN 17.14 AC-FT 24,670

PEAK DISCHARGE (BASE, 300 CFS).--May 17 (1930) 520 cfs (5.55 ft); June 7 (0130) 416 cfs (5.31 ft).

NOTE.--No gage-height record Nov. 19 to Mar. 12.

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 mi (0.5 km) downstream from dike of drainage district No. 5, 8 mi (12.9 km) north of Bonners Ferry, and at mile 139.7 (224.2 km).

DRAINAGE AREA.--13,300 sq mi (34,450 sq km), 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 (518.1 m) 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 (0.009 m) higher. Prior to Sept. 12, 1928, several nonrecording gages within 300 ft (91.4 m) at different datums.

EXTREMES.--Current year: Maximum elevation, 1,755.28 ft (535.01 m) Oct. 13; minimum, 1,741.22 ft (530.72 m) Apr. 4, 5.
Period of record: Maximum elevation, 1,776.41 ft (541.45 m) June 7, 1961; minimum, 1,738.76 ft (529.97 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53.64	52.71	48.04	46.16	45.05	43.73	41.38	42.35	46.98	46.00	44.60	49.20
2	53.85	52.37	46.93	46.11	44.98	43.74	41.34	42.21	46.76	45.83	44.58	49.23
3	53.98	52.12	46.37	45.98	44.99	43.68	41.27	42.25	46.38	45.67	44.59	49.28
4	54.23	52.19	46.23	45.84	45.29	43.53	41.23	42.49	46.04	45.50	44.58	49.34
5	54.39	52.93	46.05	45.90	45.45	43.38	41.25	42.73	45.90	45.49	44.60	50.61
6	54.61	53.75	45.97	45.69	45.20	43.25	41.40	43.08	46.04	45.48	44.74	51.03
7	54.52	54.35	45.90	45.53	44.76	43.12	41.44	43.66	46.56	45.37	44.69	51.18
8	54.08	54.22	45.92	45.50	44.66	43.00	41.40	43.92	46.94	45.19	44.62	50.44
9	53.48	53.89	45.91	45.51	44.56	42.92	41.38	43.87	47.40	45.01	44.58	49.89
10	53.34	53.41	45.90	45.46	44.58	42.89	41.40	43.61	47.09	45.04	44.55	49.81
11	53.53	53.35	45.90	45.46	44.51	43.05	41.45	43.30	46.57	45.51	44.57	49.75
12	54.12	53.29	45.91	45.53	44.49	42.97	41.62	43.04	46.25	45.66	44.56	49.83
13	54.98	53.05	45.87	45.47	44.48	42.75	41.91	43.05	46.08	45.64	44.59	49.85
14	54.92	52.91	45.88	45.50	44.43	42.62	42.30	43.61	46.01	46.80	44.62	49.84
15	54.29	52.58	45.86	45.50	44.38	42.54	42.39	44.83	45.94	47.58	44.62	49.90
16	53.84	52.16	45.94	45.57	44.34	42.47	42.33	46.75	45.73	46.31	45.00	50.01
17	54.30	51.82	46.04	45.75	44.31	42.42	42.35	48.97	45.58	46.03	45.21	50.03
18	54.04	51.38	46.07	45.81	44.27	42.38	42.20	50.32	45.43	45.90	45.43	50.07
19	53.86	51.10	46.13	45.72	44.23	42.25	41.74	50.41	45.45	45.85	46.70	50.63
20	54.01	50.91	46.07	45.68	44.18	42.15	41.58	50.03	45.55	45.80	47.33	50.74
21	53.79	50.84	46.05	45.68	44.13	42.06	41.49	48.94	45.55	45.80	47.38	48.56
22	53.61	50.75	46.11	45.64	44.07	42.01	41.41	47.96	45.83	45.76	47.40	49.34
23	53.52	50.67	46.08	45.58	44.00	41.97	41.53	47.59	46.55	45.67	48.43	50.08
24	53.46	50.55	46.09	45.53	43.93	41.90	41.74	47.47	47.11	45.01	48.80	50.53
25	53.52	50.33	46.04	45.54	43.85	41.85	41.90	48.03	47.29	44.75	48.86	50.24
26	53.58	50.46	46.06	45.51	43.84	41.81	41.96	48.06	47.45	44.79	48.98	50.09
27	53.55	50.41	46.16	45.38	43.84	41.79	42.14	47.41	47.55	44.78	49.00	50.06
28	53.51	49.90	46.35	45.28	43.79	41.67	42.58	46.95	47.53	44.81	48.97	50.08
29	53.40	49.55	46.50	45.21	------	41.63	42.69	46.65	47.13	44.76	49.03	48.16
30	53.27	49.23	46.42	45.14	------	41.54	42.55	46.59	46.37	44.75	49.05	47.48
31	53.05	------	46.38	45.08	------	41.46	------	46.78	------	44.66	49.05	------
MEAN	53.88	51.91	46.17	45.59	44.45	42.53	41.78	45.71	46.43	45.52	46.25	49.84
MAX	54.98	54.35	48.04	46.16	45.45	43.74	42.69	50.41	47.55	47.58	49.05	51.18
MIN	53.05	49.23	45.86	45.08	43.79	41.46	41.23	42.21	45.43	44.66	44.55	47.48

CAL YR 1972 MEAN 50.27 MAX 64.28 MIN 43.68
WTR YR 1973 MEAN 46.68 MAX 54.98 MIN 41.23

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 mi (0.2 km) upstream from bridge crossing, 4 mi (6.4 km) northeast of Copeland, at mile 6.0 (9.7 km), and 17 mi (27.4 km) north of Bonners Ferry.

DRAINAGE AREA.--23 sq mi (60 sq km), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 2,814.5 ft (857.86 m), unadjusted.

AVERAGE DISCHARGE.--15 years, 37.8 cfs (1.07 cu m/s), 22.32 in/yr (566.9 mm/yr), 27,390 acre-ft/yr (33.8 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 306 cfs (8.67 cu m/s) May 17, gage height, 4.31 ft (1.313 m); minimum daily, 1.3 cfs (36.8 cu dm/s) Dec. 7-11; minimum gage height, 1.84 ft (0.561 m) Dec. 3.
Period of record: Maximum discharge, 528 cfs (15.0 cu m/s) May 26, 1961, gage height, 5.52 ft (1.682 m); from rating curve extended above 250 cfs on basis of indirect measurement of peak flow; minimum daily, 1.3 cfs (36.8 cu dm/s) Dec. 7-11, 1972.

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)
(Shifting-control method used May 8 to June 3; stage-discharge relation affected by ice Nov. 27, Dec. 3 to Feb. 4)

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	5.1	5.9	3.5	5.6	9.6	18	75	98	23	5.3	6.6
2	7.1	5.4	5.2	3.3	5.5	8.9	18	84	92	22	5.2	4.4
3	6.4	5.9	3.0	3.2	5.3	8.2	18	96	85	20	5.1	3.9
4	5.9	9.3	2.0	3.2	5.2	8.0	21	112	76	19	5.0	3.6
5	5.6	15	1.5	3.1	5.0	7.9	28	118	72	18	4.9	3.5
6	5.5	11	1.4	3.1	5.0	7.8	28	138	72	18	4.8	3.4
7	5.3	8.8	1.3	3.1	4.8	7.9	26	142	75	17	4.7	3.4
8	5.3	7.9	1.3	3.3	4.7	7.8	26	133	74	15	4.7	3.4
9	5.3	7.6	1.3	3.6	4.6	8.6	27	120	70	14	4.7	3.3
10	7.1	7.5	1.3	4.0	4.5	10	31	108	63	14	5.0	3.3
11	6.6	7.0	1.3	5.0	4.4	11	41	100	57	13	5.4	3.3
12	5.9	6.6	1.4	7.0	4.4	10	56	106	53	12	5.0	3.2
13	5.7	6.3	1.5	8.0	4.3	9.7	69	126	51	12	4.8	3.1
14	5.5	6.2	1.6	9.4	4.2	9.5	67	159	48	11	4.5	3.2
15	5.3	6.1	1.7	11	4.1	9.2	59	200	45	10	4.2	3.4
16	5.3	5.9	1.9	12	4.0	9.5	52	249	43	9.5	4.1	3.5
17	5.2	5.7	2.2	12	4.0	11	57	277	44	9.3	4.0	3.6
18	5.1	5.6	2.6	11	4.2	10	53	269	40	8.9	4.0	3.6
19	5.1	5.5	3.0	10	4.2	10	46	245	37	8.5	3.9	4.1
20	5.1	5.3	3.7	9.8	4.2	11	44	211	35	8.1	3.7	7.6
21	5.1	5.3	4.5	9.4	4.0	12	46	170	33	8.6	3.6	6.3
22	5.1	5.1	5.6	8.8	4.3	14	56	144	31	8.2	3.5	4.8
23	5.4	5.2	5.5	8.4	4.4	16	62	130	43	7.6	3.4	7.1
24	5.2	5.2	5.4	8.0	4.4	16	62	131	35	7.2	4.1	5.6
25	5.0	5.1	5.2	7.4	5.2	20	66	178	32	6.9	4.3	4.9
26	6.7	5.3	4.8	7.0	6.3	25	73	160	31	6.5	4.0	4.2
27	5.9	5.0	4.6	6.7	7.6	22	96	137	29	6.3	3.8	4.0
28	6.0	4.5	4.3	6.4	7.3	20	91	118	27	6.1	3.6	3.8
29	5.6	5.6	4.0	6.2	------	19	83	106	25	5.9	3.7	3.7
30	5.0	6.6	3.8	6.0	------	19	78	100	24	5.7	3.8	3.8
31	5.3	------	3.6	5.8	------	18	------	101	------	5.5	6.4	------
TOTAL	176.0	196.6	96.4	208.7	135.7	386.6	1,498	4,543	1,540	356.8	137.2	125.6
MEAN	5.68	6.55	3.11	6.73	4.85	12.5	49.9	147	51.3	11.5	4.43	4.19
MAX	7.4	15	5.9	12	7.6	25	96	277	98	23	6.4	7.6
MIN	5.0	4.5	1.3	3.1	4.0	7.8	18	75	24	5.5	3.4	3.1
CFSM	.25	.28	.14	.29	.21	.54	2.17	6.39	2.23	.50	.19	.18
IN.	.28	.32	.16	.34	.22	.63	2.42	7.35	2.49	.58	.22	.20
AC-FT	349	390	191	414	269	767	2,970	9,010	3,050	708	272	249

CAL YR 1972 TOTAL 15,758.2 MEAN 43.1 MAX 354 MIN 1.3 CFSM 1.87 IN 25.49 AC-FT 31,260
WTR YR 1973 TOTAL 9,400.6 MEAN 25.8 MAX 277 MIN 1.3 CFSM 1.12 IN 15.20 AC-FT 18,650

PEAK DISCHARGE (BASE, 170 CFS).--May 17 (1930) 306 cfs (4.31 ft); May 25 (1030) 188 cfs (3.72 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 mi (1.3 km) downstream from Mission Creek, 1.5 mi (2.4 km) northwest of Copeland, and at mile 123.2 (198.2 km).

DRAINAGE AREA.--13,400 sq mi (34,710 sq km), 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 (518.160 m) above mean sea level, referred to bench mark T-10-1914, elevation, 1,791.49 ft (546.046 m) (datum of 1929 is about 0.04 ft (0.012 m) higher). Prior to Nov. 20, 1929, nonrecording or recording gage at site 0.8 mi (1.3 km) upstream; datum 40.77 ft (12.427 m) higher prior to Apr. 18, 1929. Gage readings have been reduced to elevations above mean sea level.

AVERAGE DISCHARGE.--44 years, 15,660 cfs (443 cu m/s), 15.86 in/yr (402.8 mm/yr); 11,350,000 acre-ft/yr (13,990 cu hm/yr); 15-year base period (1952-67), 16,960 cfs (480 cu m/s).

EXTREMES.--Current year: Maximum discharge, 37,000 cfs (105 cu m/s) Oct. 13; maximum elevation, 1,752.22 ft (534.078 m) Oct. 13; minimum daily discharge, 2,550 cfs (72.2 cu m/s) Jan. 8, 9; minimum elevation, 1,740.43 ft (530.962 m) Apr. 3, 4.
Period of record: Maximum daily discharge, 124,000 cfs (3,510 cu m/s) May 30, 1948; maximum elevation, 1,772.55 ft (540.273 m) June 6, 1961; minimum daily discharge, 1,350 cfs (38.2 cu m/s) Feb. 8, 1936; minimum elevation, 1,738.52 ft (529.901 m) 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 1973 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32,800	28,100	12,300	6,800	4,630	4,450	5,420	8,720	11,600	4,990	4,410	20,000
2	33,100	26,800	8,120	6,600	4,550	4,550	5,470	8,430	10,900	4,590	4,480	19,900
3	33,600	26,000	5,400	6,200	4,710	4,550	5,440	8,540	9,920	4,380	4,480	19,900
4	34,100	25,800	5,200	5,700	5,770	4,480	5,450	9,020	9,020	4,150	4,380	20,000
5	34,600	28,200	4,500	5,400	6,210	4,340	5,330	9,700	8,810	4,150	4,510	25,100
6	35,200	31,100	3,800	3,500	5,330	4,340	5,730	10,300	9,210	4,360	4,780	25,300
7	34,700	33,300	3,500	2,600	3,940	4,290	5,980	11,700	10,300	4,230	4,610	25,200
8	33,100	33,000	3,400	2,550	3,820	4,290	5,910	12,300	11,000	4,090	4,480	21,100
9	31,000	32,000	3,450	2,550	3,750	4,170	5,860	12,100	12,300	3,920	4,400	19,700
10	30,400	30,400	3,500	2,600	4,000	4,340	5,900	11,400	10,700	4,930	4,370	19,600
11	31,200	30,000	3,700	2,650	4,040	4,920	5,980	10,600	9,320	7,550	4,510	19,600
12	33,200	30,200	3,910	2,800	3,840	5,120	6,370	9,890	8,670	7,880	4,490	20,100
13	36,000	29,500	4,000	3,000	3,820	4,850	6,900	9,800	8,310	7,930	4,410	20,100
14	35,700	28,800	3,900	3,300	3,720	4,710	7,920	11,000	7,990	13,700	4,360	20,100
15	33,400	28,000	3,950	3,600	3,740	4,590	8,310	13,600	7,810	15,700	4,340	20,300
16	31,800	26,400	4,000	4,400	3,780	4,680	8,250	17,900	7,430	10,100	6,690	20,700
17	33,500	25,400	4,100	4,800	3,820	4,640	8,260	22,800	7,110	9,350	7,210	20,600
18	32,500	23,800	4,250	5,000	3,840	4,920	8,110	25,200	6,800	9,080	7,920	20,700
19	31,700	22,800	4,300	4,900	3,920	4,870	7,110	24,500	7,560	9,150	12,900	23,300
20	32,200	22,000	4,300	4,800	3,840	4,840	6,730	22,600	8,220	9,220	14,400	22,800
21	31,600	21,600	4,300	4,700	3,920	4,850	6,690	18,800	8,120	9,190	14,300	13,100
22	30,900	21,400	4,400	4,600	4,000	4,920	6,500	15,600	8,780	9,130	14,200	19,400
23	30,500	21,100	4,500	4,500	3,940	5,090	6,830	14,300	10,800	9,070	18,400	21,000
24	30,500	20,800	4,600	4,500	4,020	5,130	7,310	13,700	11,900	6,010	19,300	22,700
25	30,600	19,500	4,600	4,500	4,040	5,200	7,740	15,100	11,900	5,050	19,300	20,900
26	30,700	19,800	4,500	4,550	4,160	5,240	7,860	14,700	12,200	5,310	19,800	20,500
27	30,600	20,100	4,700	4,600	4,390	5,410	8,010	12,700	12,200	5,180	19,800	20,600
28	30,500	18,600	5,800	4,650	4,430	5,360	9,020	11,400	11,800	4,980	19,600	20,700
29	30,300	17,100	6,600	4,700	------	5,510	9,390	10,700	9,730	4,800	19,900	12,100
30	29,900	16,800	7,000	4,750	------	5,530	9,130	10,600	6,450	4,720	19,800	10,500
31	29,100	------	6,900	4,760	------	5,400	------	11,100	------	4,530	19,600	------
TOTAL	999,000	758,400	151,480	134,560	117,970	149,580	208,910	418,800	286,860	211,420	320,130	605,600
MEAN	32,230	25,280	4,886	4,341	4,213	4,825	6,964	13,510	9,562	6,820	10,330	20,190
MAX	36,000	33,300	12,300	6,800	6,210	5,530	9,390	25,200	12,300	15,700	19,900	25,300
MIN	29,100	16,800	3,400	2,550	3,720	4,170	5,330	8,430	6,450	3,920	4,340	10,500
AC-FT	1,982M	1,504M	300,500	266,900	234,000	296,700	414,400	830,700	569,000	419,400	635,000	1,201M

CAL YR 1972 TOTAL 7,475,320 MEAN 20,420 MAX 56,700 MIN 2,600 AC-FT 14,830,000
WTR YR 1973 TOTAL 4,362,710 MEAN 11,950 MAX 36,000 MIN 2,550 AC-FT 8,653,000

M Expressed in thousands.

12318500 Kootenai River near Copeland, Idaho--Continued

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50.74	50.22	47.09	45.96	44.80	43.39	40.61	41.17	46.15	45.89	44.50	47.37
2	50.95	49.96	46.46	45.92	44.73	43.38	40.54	41.07	45.99	45.73	44.48	47.44
3	51.06	49.76	46.13	45.79	44.73	43.31	40.46	41.13	45.69	45.58	44.49	47.50
4	51.28	49.76	46.01	45.65	44.88	43.16	40.45	41.32	45.44	45.43	44.47	47.55
5	51.44	50.29	45.85	45.71	44.95	43.02	40.52	41.46	45.36	45.44	44.54	48.38
6	51.65	50.95	45.77	45.50	44.80	42.87	40.63	41.78	45.48	45.40	44.62	48.87
7	51.61	50.95	45.69	45.34	44.57	42.75	40.58	42.20	45.95	45.28	44.56	49.07
8	51.30	51.42	45.71	45.31	44.47	42.62	40.57	42.33	46.24	45.10	44.50	48.71
9	50.81	51.16	45.69	45.32	44.38	42.57	40.57	42.30	46.57	44.93	44.46	48.25
10	50.70	50.79	45.68	45.27	44.36	42.50	40.59	42.12	46.39	44.92	44.44	48.17
11	50.82	50.66	45.68	45.27	44.28	42.54	40.67	41.92	46.01	45.21	44.43	48.10
12	51.25	50.64	45.68	45.34	44.28	42.37	40.78	41.77	45.75	45.25	44.44	48.15
13	51.90	50.44	45.64	45.28	44.26	42.23	41.05	41.84	45.63	45.22	44.48	48.16
14	52.00	50.29	45.64	45.31	44.22	42.12	41.21	42.33	45.59	45.83	44.51	48.14
15	51.52	50.09	45.62	45.31	44.16	42.06	41.22	43.35	45.53	46.30	44.51	48.18
16	51.13	49.75	45.69	45.38	44.11	41.97	41.16	44.94	45.34	45.62	44.70	48.27
17	51.46	49.50	45.79	45.56	44.07	41.96	41.20	46.86	45.23	45.45	44.81	48.31
18	51.32	49.18	45.82	45.62	44.03	41.82	40.99	48.14	45.09	45.34	44.96	48.34
19	51.16	48.97	45.87	45.53	43.98	41.69	40.72	48.35	45.05	45.27	45.70	48.68
20	51.26	48.83	45.81	45.49	43.93	41.60	40.67	48.14	45.06	45.22	46.06	48.84
21	51.12	48.78	45.78	45.49	43.88	41.50	40.56	47.34	45.10	45.21	46.12	47.57
22	50.94	48.74	45.84	45.46	43.81	41.44	40.54	46.67	45.36	45.16	46.13	47.70
23	50.87	48.67	45.81	45.40	43.74	41.35	40.65	46.45	45.91	45.08	46.74	48.29
24	50.81	48.59	45.82	45.35	43.65	41.24	40.79	46.42	46.34	44.73	47.02	48.61
25	50.83	48.46	45.77	45.36	43.56	41.17	40.88	46.92	46.53	44.59	47.07	48.47
26	50.90	48.59	45.79	45.33	43.54	41.13	40.94	46.93	46.68	44.62	47.14	48.35
27	50.88	48.57	45.89	45.20	43.49	41.05	41.16	46.47	46.78	44.62	47.17	48.32
28	50.85	48.23	46.08	45.10	43.44	40.96	41.43	46.14	46.80	44.67	47.14	48.36
29	50.76	47.95	46.23	45.03	------	40.86	41.44	45.91	46.58	44.64	47.18	47.28
30	50.65	47.78	46.15	44.96	------	40.74	41.31	45.86	46.12	44.61	47.23	46.78
31	50.48	------	46.11	44.90	------	40.66	------	46.02	------	44.54	47.26	------
MEAN	51.11	49.60	45.89	45.40	44.18	42.00	40.83	44.38	45.86	45.19	45.48	48.14
MAX	52.00	51.42	47.09	45.96	44.95	43.39	41.44	48.35	46.80	46.30	47.26	49.07
MIN	50.48	47.78	45.62	44.90	43.44	40.66	40.45	41.07	45.05	44.54	44.43	46.78

CAL YR 1972 MEAN 48.67 MAX 61.53 MIN 42.17
WTR YR 1973 MEAN 45.68 MAX 52.00 MIN 40.45

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 mi (0.3 km) south of international boundary, 3 mi (4.8 km) west of Porthill, and at mile 3.5 (5.6 km).

DRAINAGE AREA.--97 sq mi (251 sq km), 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 (539.5 m) (from topographic map). Prior to Apr. 24, 1929, nonrecording gage at site 140 ft (42.7 m) upstream at different datum.

AVERAGE DISCHARGE.--43 years (1930-73), 194 cfs (5.49 cu m/s), 27.44 in/yr (689.9 mm/yr), 141,600 acre-ft (173 cu hm/yr); 15-year base period (1952-67), 208 cfs (5.89 cu m/s).

EXTREMES.--Current year: Maximum discharge, 2,120 cfs (60.0 cu m/s) May 17, gage height, 4.84 ft (1.475 m); minimum, 17 cfs (0.48 cu m/s) Sept. 14-19; gage height, 0.82 ft (0.250 m).
Period of record: Maximum discharge, 3,540 cfs (100 cu m/s) June 2, 1968, gage height, 6.00 ft (1.829 m); from rating curve extended above 2,000 cfs; minimum, 5 cfs (142 cu dm/s) sometime between Nov. 10 and Dec. 3, 1936; minimum gage height, 0.24 ft (0.073 m) Nov. 22, 1952.

REMARKS.--Records excellent except those for winter period and period of no gage-height record, which are fair. Diversion above station.

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

Rating tables (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 22 to Jan. 15; stage-discharge relation affected by ice Jan. 1-15, Feb. 6-16)

Oct. 1 to Jan. 15				Jan. 16 to Sept. 30			
0.7	17	2.5	365	0.8	15.1	2.5	345
1.0	37	3.0	585	1.0	27.3	3.0	570
1.5	94	4.0	1,310	1.2	45.8	3.5	900
2.0	203	5.1	2,450	1.6	100	4.5	1,800
				2.0	188		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	32	35	30	33	46	53	292	660	127	24	30
2	71	32	31	29	32	45	52	334	550	113	24	24
3	65	33	25	28	32	42	54	405	490	102	23	21
4	62	41	22	27	33	39	59	505	530	95	24	20
5	57	61	19	25	32	39	74	525	624	90	22	21
6	55	47	18	24	29	38	75	660	725	87	23	20
7	53	44	17	23	28	38	70	642	837	84	22	20
8	51	41	16	24	27	38	71	535	697	77	22	20
9	50	40	17	25	29	38	76	448	582	70	21	19
10	52	39	18	26	30	40	84	381	452	64	22	19
11	51	38	19	28	32	41	106	357	389	60	27	18
12	48	37	20	30	31	39	158	397	389	55	25	18
13	46	36	21	32	31	38	221	555	470	53	22	18
14	45	35	22	35	31	38	244	844	409	49	22	18
15	43	34	24	38	31	38	232	1,150	353	46	20	17
16	42	33	27	45	31	38	202	1,560	320	44	19	17
17	41	32	30	45	31	44	183	1,690	338	41	19	17
18	41	32	33	43	31	42	161	1,600	272	39	18	17
19	39	31	38	43	30	41	147	1,390	247	36	18	19
20	38	31	28	38	30	41	138	1,130	253	36	18	39
21	38	30	34	36	30	43	146	795	286	35	18	51
22	37	30	47	36	31	46	191	746	310	38	18	38
23	38	30	78	36	31	48	247	781	314	34	17	60
24	36	30	46	35	31	49	256	1,000	285	32	17	55
25	35	31	41	36	31	54	256	1,110	238	31	18	39
26	37	34	41	35	33	66	299	725	212	31	18	33
27	32	37	41	35	38	63	381	570	193	30	18	30
28	36	30	39	34	41	56	338	545	176	30	17	29
29	34	31	35	34	------	54	306	594	154	28	17	29
30	25	32	34	35	------	54	291	690	136	27	17	28
31	35	------	32	33	------	52	------	725	------	26	21	------
TOTAL	1,400	1,064	948	1,023	880	1,388	5,171	23,681	11,891	1,710	631	804
MEAN	45.2	35.5	30.6	33.0	31.4	44.8	172	764	396	55.2	20.4	26.8
MAX	71	61	78	45	41	66	381	1,690	837	127	27	60
MIN	25	30	16	23	27	38	52	292	136	26	17	17
CFSM	.47	.37	.32	.34	.32	.46	1.77	7.88	4.08	.57	.21	.28
IN.	.54	.41	.36	.39	.34	.53	1.98	9.08	4.56	.66	.24	.31
AC-FT	2,780	2,110	1,880	2,030	1,750	2,750	10,260	46,970	23,590	3,390	1,250	1,590

CAL YR 1972 TOTAL 89,141 MEAN 244 MAX 2,410 MIN 16 CFSM 2.52 IN 34.19 AC-FT 176,800
WTR YR 1973 TOTAL 50,591 MEAN 139 MAX 1,690 MIN 16 CFSM 1.43 IN 19.40 AC-FT 100,300

PEAK DISCHARGE (BASE, 1,300 CFS).--May 17 (2030) 2,120 cfs (4.84 ft); May 24 (2015 (1,390 cfs (4.15 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 (91.4 m) south of international boundary at Porthill, and at mile 105.63 (170 km).

DRAINAGE AREA.--13,700 sq mi (35.480 sq km), 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 (518.160 m) above mean sea level referred to bench mark "10-M-1928", at elevation 1,767.68 ft (538.789 m). 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 (0.091 m) higher. Prior to May 17, 1928, nonrecording gages at approximately same site. Datum of gages prior to July 28, 1928, 38.34 ft (11.686 m) higher, except in 1904 when different datum was used.

AVERAGE DISCHARGE.--45 years, 16,040 cfs (454 cu m/s), 15.88 in/yr (403.4 mm/yr), 11,620,000 acre-ft/yr (11.686 m); 15-year base period (1952-67), 17,490 cfs (495 cu m/s).

EXTREMES.--Current year: Maximum daily discharge, 35,800 cfs (1,014 cu m/s) Oct. 13, 14; maximum elevation, 1,749.56 ft (533.266 m) Nov. 13; minimum daily discharge, 2,610 cfs (73.9 cu m/s) Jan. 9; minimum elevation, 1,740.08 ft (530.376 m) Apr. 4, 5.
Period of record: Maximum daily discharge, 125,000 cfs (3,540 cu m/s) June 1, 1948; maximum elevation, 1,767.61 ft (538.768 m) June 7, 1961; minimum daily discharge, 1,380 cfs (39.1 cu m/s) Feb. 8, 1936; minimum elevation, 1,738.21 ft (529.806 m) Apr. 3, 1944.
Maximum elevation known, 1,772.7 ft (540.319 m) in June 1894, present datum.

REMARKS.--Records excellent, except for winter period, which are good. 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 1973 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33,000	28,300	12,600	6,940	4,760	4,600	5,590	9,570	13,200	5,450	4,490	20,000
2	33,200	27,000	8,340	6,690	4,660	4,670	5,640	9,370	12,400	4,980	4,550	19,900
3	33,700	26,100	5,520	6,310	4,800	4,700	5,620	9,630	11,300	4,730	4,530	19,900
4	34,200	25,800	5,330	5,840	5,810	4,640	5,620	10,300	10,500	4,490	4,440	20,000
5	34,700	28,100	4,540	5,450	6,260	4,500	5,510	11,100	10,500	4,400	4,550	25,000
6	35,300	31,000	3,850	3,610	5,440	4,510	5,900	11,900	11,000	4,620	4,770	25,100
7	34,800	33,300	3,570	2,720	4,090	4,450	6,190	13,200	12,300	4,520	4,680	25,100
8	33,300	33,200	3,430	2,620	3,930	4,450	6,110	13,700	12,700	4,380	4,560	21,100
9	31,300	32,200	3,500	2,610	3,860	4,290	6,070	13,300	13,700	4,200	4,460	19,900
10	30,600	30,600	3,600	2,690	4,090	4,480	6,130	12,500	11,900	5,140	4,440	19,700
11	31,300	30,100	3,760	2,730	4,160	5,020	6,260	11,600	10,500	7,640	4,570	19,700
12	33,200	30,400	3,920	2,840	3,910	5,300	6,780	11,000	9,820	7,980	4,550	20,200
13	35,800	29,700	4,050	3,090	3,900	5,020	7,420	11,300	9,590	8,090	4,440	20,100
14	35,800	28,900	3,950	3,390	3,810	4,860	8,520	13,000	9,080	13,700	4,390	20,100
15	33,700	28,200	4,010	3,710	3,840	4,720	8,960	16,200	8,770	15,600	4,380	20,300
16	32,000	26,600	4,020	4,480	3,880	4,820	8,830	21,200	8,370	10,400	6,720	20,700
17	33,500	25,600	4,120	4,860	3,910	4,780	8,760	26,200	8,060	9,540	7,200	20,600
18	32,700	24,000	4,310	5,080	3,930	5,090	8,640	28,600	7,590	9,230	7,910	20,700
19	31,800	22,900	4,370	5,040	4,020	5,040	7,630	27,900	8,280	9,280	12,800	23,300
20	32,300	22,100	4,390	4,910	3,940	5,000	7,140	25,500	8,910	9,350	14,300	22,800
21	31,800	21,700	4,420	4,780	4,020	5,010	7,150	21,200	8,870	9,280	14,300	13,500
22	31,100	21,500	4,500	4,690	4,120	5,080	7,050	17,800	9,500	9,240	14,200	19,700
23	30,600	21,200	4,730	4,620	4,040	5,260	7,480	16,400	11,400	9,200	18,300	20,900
24	30,600	20,900	4,710	4,610	4,140	5,310	7,960	16,300	12,400	6,170	19,200	22,800
25	30,700	19,500	4,720	4,590	4,160	5,390	8,410	17,800	12,400	5,200	19,300	21,000
26	30,800	19,800	4,600	4,650	4,260	5,440	8,650	16,600	12,700	5,380	19,800	20,600
27	30,700	20,300	4,810	4,760	4,520	5,620	8,950	14,400	12,700	5,250	19,800	20,700
28	30,600	18,800	5,780	4,770	4,560	5,570	9,830	13,000	12,300	5,020	19,600	20,800
29	30,400	17,200	6,610	4,820	------	5,700	10,200	12,400	10,200	4,880	19,900	12,400
30	30,000	17,100	7,110	4,870	------	5,740	9,980	12,400	6,980	4,790	19,800	10,800
31	29,300	------	7,000	4,880	------	5,580	------	12,900	------	4,550	19,600	------
TOTAL	1,002.8M	762,100	154,170	137,650	120,820	154,640	222,980	478,270	317,920	216,680	320,530	607,400
MEAN	32,350	25,400	4,973	4,440	4,315	4,988	7,433	15,430	10,600	6,990	10,340	20,250
MAX	35,800	33,300	12,600	6,940	6,260	5,740	10,200	28,600	13,700	15,600	19,900	25,100
MIN	29,300	17,100	3,430	2,610	3,810	4,290	5,510	9,370	6,980	4,200	4,380	10,600
AC-FT	1,989M	1,512M	305,800	273,000	239,600	306,700	442,300	948,600	630,600	429,800	635,800	1,205M

CAL YR 1972 TOTAL 7,706,690 MEAN 21,060 MAX 60,200 MIN 2,660 AC-FT 15,290,000
WTR YR 1973 TOTAL 4,495,960 MEAN 12,320 MAX 35,800 MIN 2,610 AC-FT 8,918,000

M Expressed in thousands.

12322000 Kootenai River at Porthill, Idaho--Continued

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48.34	48.15	46.18	45.62	44.52	43.09	40.25	40.58	45.54	45.68	44.27	46.11
2	48.56	48.01	45.90	45.58	44.45	43.08	40.18	40.51	45.45	45.54	44.24	46.18
3	48.63	47.89	45.79	45.49	44.43	43.00	40.11	40.51	45.21	45.40	44.25	46.25
4	48.83	48.03	45.64	45.34	44.50	42.87	40.09	40.65	45.02	45.25	44.24	46.31
5	48.93	48.44	45.64	45.36	44.56	42.75	40.14	40.75	44.92	45.24	44.25	46.67
6	49.09	48.84	45.61	45.26	44.49	42.61	40.21	40.99	45.01	45.21	44.36	47.21
7	49.09	49.10	45.54	45.13	44.32	42.48	40.18	41.31	45.37	45.10	44.33	47.43
8	48.88	48.98	45.54	45.10	44.23	42.35	40.17	41.44	45.67	44.94	44.27	47.45
9	48.57	48.77	45.52	45.10	44.14	42.30	40.17	41.45	45.92	44.77	44.24	47.11
10	48.52	48.52	45.40	45.05	44.10	42.23	40.19	41.34	45.88	44.70	44.21	47.01
11	48.59	48.53	45.37	45.02	44.02	42.24	40.24	41.20	45.59	44.83	44.21	46.94
12	48.90	48.41	45.44	45.08	44.02	42.08	40.31	41.10	45.36	44.92	44.20	46.92
13	49.39	48.23	45.43	45.05	44.01	41.93	40.50	41.14	45.26	44.88	44.24	46.96
14	49.39	48.22	45.42	45.04	43.97	41.83	40.64	41.48	45.24	45.05	44.28	46.96
15	49.06	47.97	45.41	45.02	43.91	41.77	40.63	42.24	45.19	45.47	44.28	46.95
16	48.84	47.81	45.48	45.09	43.86	41.69	40.59	43.52	45.03	45.20	44.31	47.01
17	49.07	47.62	45.57	45.20	43.82	41.64	40.62	45.16	44.93	45.04	44.41	47.06
18	48.94	47.45	45.60	45.26	43.78	41.51	40.48	46.37	44.82	44.94	44.51	47.09
19	48.90	47.35	45.64	45.20	43.73	41.38	40.28	46.69	44.72	44.86	44.84	47.19
20	48.96	47.30	45.60	45.18	43.68	41.28	40.23	46.67	44.70	44.79	45.19	47.41
21	48.82	47.32	45.53	45.19	43.63	41.18	40.14	46.19	44.72	44.78	45.28	46.93
22	48.71	47.26	45.56	45.18	43.55	41.10	40.11	45.74	44.92	44.74	45.31	46.50
23	48.70	47.23	45.52	45.12	43.49	41.01	40.16	45.60	45.32	44.65	45.52	47.01
24	48.61	47.15	45.53	45.08	43.40	40.91	40.26	45.60	45.74	44.49	45.79	47.17
25	48.67	47.23	45.49	45.08	43.31	40.82	40.33	45.97	45.96	44.35	45.85	47.23
26	48.71	47.31	45.50	45.05	43.27	40.78	40.37	46.09	46.09	44.36	45.89	47.15
27	48.69	47.14	45.49	44.91	43.21	40.71	40.55	45.78	46.20	44.37	45.92	47.11
28	48.66	46.90	45.71	44.83	43.16	40.60	40.76	45.52	46.25	44.42	45.92	47.10
29	48.57	46.83	45.84	44.76	------	40.51	40.78	45.33	46.18	44.40	45.92	46.69
30	48.48	46.49	45.79	44.69	------	40.39	40.68	45.28	45.88	44.39	45.98	46.27
31	48.35	------	45.75	44.92	------	40.31	------	45.39	------	44.32	46.02	------
MEAN	48.79	47.82	45.59	45.13	43.91	41.69	40.35	43.47	45.40	44.87	44.86	46.91
MAX	49.39	49.10	46.18	45.62	44.56	43.09	40.78	46.69	46.25	45.68	46.02	47.45
MIN	48.34	46.49	45.37	44.69	43.16	40.31	40.09	40.51	44.70	44.32	44.20	46.11

CAL YR 1972 MEAN 47.45 MAX 58.78 MIN 41.52
WTR YR 1973 MEAN 44.91 MAX 49.39 MIN 40.09

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

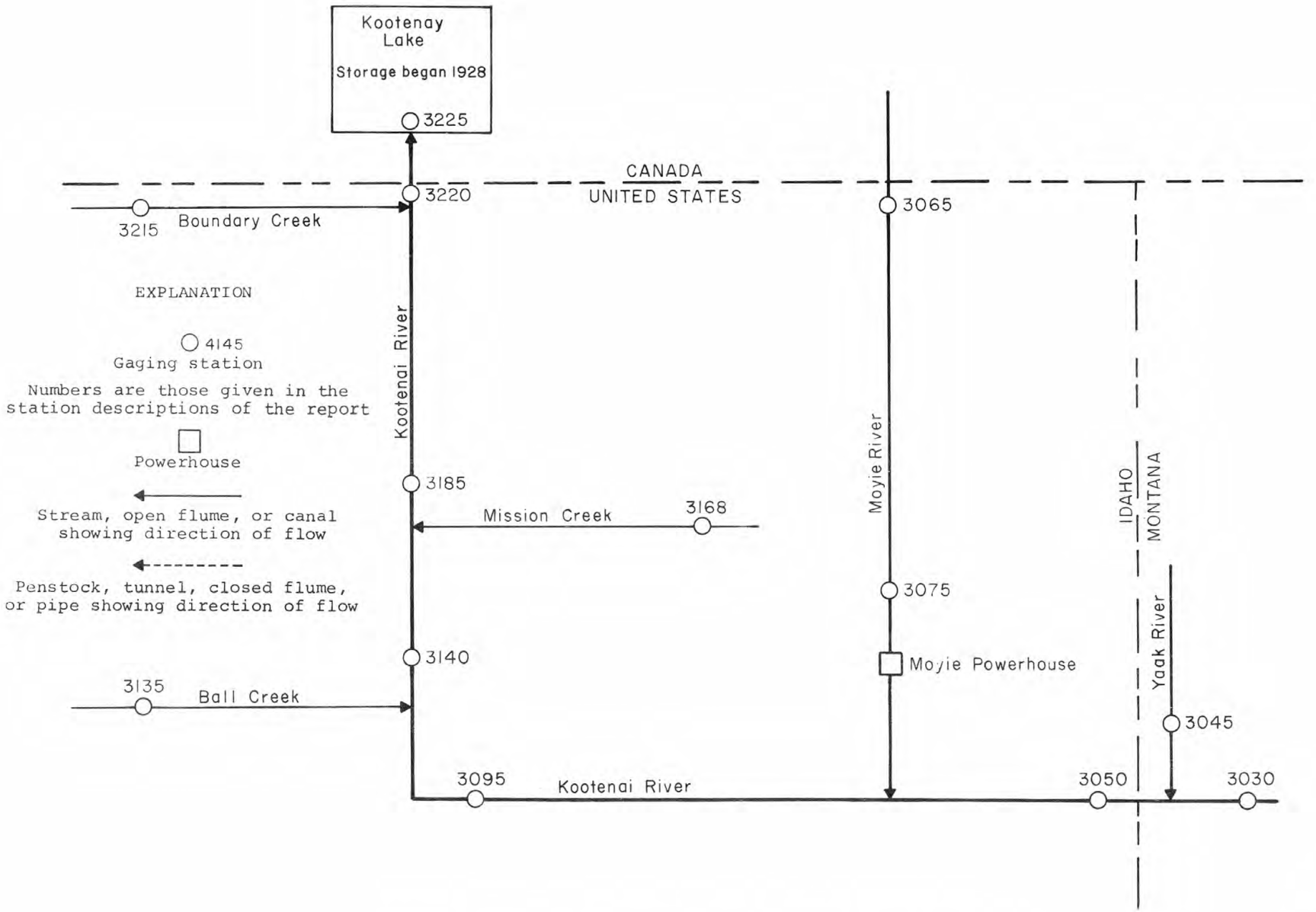

FIGURE 2. Schematic diagram showing Kootenai River basin.

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 (119.9 km).

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

GAGE.--Water-stage recorder. Datum of gage is 1,735.20 ft (528.889 m) 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 (0.009 m) 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 (0.914 m) higher.

EXTREMES.--Current year: Maximum elevation, 1,745.73 ft (532.098 m) Dec. 2; minimum daily, 1,739.65 ft (530.245 m) Apr. 23.
Period of record: Maximum elevation, 1,762.42 ft (537.186 m) June 9, 1961; minimum daily, 1,737.86 ft (529.700 m) 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 (5,910 sq hm) above Kootenay Lake.

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

ELEVATION, IN FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44.78	45.47	45.68	45.21	44.24	42.78	40.10	39.77	44.35	45.36	44.00	44.66
2	44.86	45.46	45.73	45.16	44.20	42.74	40.01	39.74	44.35	45.24	43.97	44.76
3	44.96	45.44	45.63	45.10	44.16	42.64	39.97	39.70	44.25	45.13	43.98	44.84
4	45.12	45.39	45.52	45.01	44.14	42.51	39.91	39.70	44.15	45.05	43.98	44.91
5	45.12	45.38	45.39	45.03	44.15	42.38	39.89	39.72	44.08	45.02	44.00	45.08
6	45.20	45.41	45.36	44.99	44.13	42.27	39.88	39.78	44.12	44.94	44.04	45.39
7	45.25	45.50	45.36	44.95	44.06	42.13	39.87	39.88	44.35	44.81	44.00	45.64
8	45.30	45.56	45.36	44.92	43.97	42.02	39.88	39.97	44.59	44.65	43.97	45.72
9	45.33	45.55	45.32	44.91	43.88	41.97	39.87	40.06	44.76	44.51	43.95	45.66
10	45.36	45.50	45.22	44.83	43.82	41.94	39.88	40.10	44.81	44.41	43.93	45.60
11	45.33	45.43	45.18	44.77	43.76	41.90	39.91	40.11	44.73	44.45	43.93	45.55
12	45.33	45.37	45.26	44.80	43.73	41.75	39.91	40.10	44.59	44.44	43.94	45.57
13	45.37	45.32	45.24	44.80	43.72	41.60	39.96	40.10	44.53	44.38	44.00	45.60
14	45.43	45.29	45.24	44.78	43.67	41.54	39.94	40.15	44.56	44.35	44.04	45.57
15	45.48	45.30	45.23	44.75	43.61	41.49	39.94	40.37	44.53	44.42	44.04	45.60
16	45.48	45.29	45.29	44.76	43.57	41.42	40.00	40.82	44.46	44.50	44.01	45.63
17	45.46	45.28	45.35	44.81	43.53	41.36	40.01	41.49	44.36	44.44	44.04	45.65
18	45.53	45.31	45.39	44.87	43.48	41.25	39.90	42.26	44.26	44.35	44.11	45.67
19	45.60	45.33	45.43	44.89	43.42	41.15	39.81	42.94	44.15	44.27	44.20	45.70
20	45.58	45.34	45.35	44.89	43.38	41.04	39.76	43.48	44.07	44.24	44.30	45.72
21	45.55	45.37	45.29	44.91	43.33	40.93	39.69	43.80	44.15	44.23	44.36	45.66
22	45.52	45.41	45.25	44.88	43.25	40.85	39.67	43.96	44.39	44.20	44.37	45.52
23	45.53	45.41	45.23	44.86	43.18	40.75	39.65	44.06	44.71	44.13	44.38	45.53
24	45.49	45.42	45.25	44.84	43.09	40.66	39.66	44.13	45.00	44.08	44.40	45.58
25	45.51	45.51	45.23	44.82	43.01	40.58	39.68	44.35	45.18	44.02	44.44	45.63
26	45.55	45.63	45.28	44.76	42.95	40.53	39.70	44.51	45.32	44.03	44.44	45.62
27	45.57	45.66	45.34	44.66	42.87	40.44	39.76	44.53	45.40	44.06	44.44	45.61
28	45.56	45.59	45.39	44.57	42.81	40.37	39.81	44.47	45.51	44.10	44.42	45.62
29	45.53	45.54	45.39	44.48	------	40.30	39.85	44.35	45.55	44.10	44.44	45.71
30	45.50	45.54	45.38	44.40	------	40.24	39.83	44.27	45.49	44.07	44.51	45.65
31	45.47	------	45.31	44.32	------	40.17	------	44.29	------	44.05	44.62	------
MEAN	45.38	45.43	45.35	44.83	43.61	41.41	39.86	41.84	44.63	44.45	44.17	45.49
MAX	45.60	45.66	45.73	45.21	44.24	42.78	40.10	44.53	45.55	45.36	44.62	45.72
MIN	44.78	45.28	45.18	44.32	42.81	40.17	39.65	39.70	44.07	44.02	43.93	44.66

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

12392000 Clark Fork at Whitehorse Rapids, near Cabinet, Idaho

LOCATION (revised).--Lat 48°05'18", long 116°04'16", in SW¼NW¼ sec.27, T.55 N., R.3 E., Bonner County, on right bank 0.8 mi (1.3 km) downstream from Cabinet Gorge Dam at cableway, 2.1 mi (3.4 km) downstream from Blue Creek, 6.1 mi (9.8 km) southeast of Clark Fork, and at mile 149.1 (239.9 km). Discharge computed at Whitehorse Rapids, 2.3 mi (3.7 km) downstream. Prior to May 21, 1973, at site 0.4 mi (0.6 km) upstream on left bank.
DRAINAGE AREA.--22,073 sq mi (57,169 sq km), based on revised area of 22,067 sq mi (57,154 sq km) for site 0.4 mi (0.6 km) upstream.
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 (628 m) above mean sea level, levels by Washington Water Power Co. See WSP 1934 for history of changes made prior to Sept. 30, 1952. Water-stage recorder at site 0.4 mi (0.6 km) upstream at datum 60.00 ft (18.288 m) lower Oct. 1, 1952, to Sept. 30, 1964, and at present datum Oct. 1, 1964, to May 21, 1973.
AVERAGE DISCHARGE.--45 years, 22,180 cfs (628.4 cu m/s), 16,080,000 acre-ft/yr (19.8 cu km/yr); 15-year base period (1952-67), 24,140 cfs (683.6 cu m/s).
EXTREMES.--Current year: Maximum discharge, 36,400 cfs (1,030 cu m/s) Jan. 8 (gage height, 14.97 ft or 4.563 m); minimum, 815 cfs (23.1 cu m/s) Dec. 10; minimum gage height, 4.04 ft (1.231 m) Oct. 1, Dec. 10.
Period of record: Maximum discharge, 153,000 cfs (43.33 cu m/s) May 29 to June 1, 1948; maximum gage height, 50.97 ft (15.536 m) May 31, 1948, site and datum then in use; minimum observed, 270 cfs (7.65 cu m/s) Aug. 12, 1952 (discharge measurement), at sites in use since October 1952, during filling of Cabinet Gorge reservoir; minimum daily since reservoir filled, 762 cfs (21.6 cu m/s) Sept. 2, 1962.
Maximum discharge known, 195,000 cfs (5,520 cu m/s) June 1894 (elevation of floodmark at site about 4 mi or 6.4 km upstream and 0.1 mi or 0.2 km below "near Heron" site, 2,137.1 ft or 651.4 m).
REVISIONS.--The maximum discharge for the water year 1972 has been revised to 139,000 cfs June 10, 1972 (gage height, 29.71 ft), superseding figure published in WRDI 1972.
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 (143,000 sq hm). Discharge measurements indicate about 800 cfs (22.7 cu m/s) ground-water inflow between Cabinet Gorge Dam and Whitehorse Rapids. Records given herein represent flow at Whitehorse Rapids, computed by adding 600 cfs (17.0 cu m/s) 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 (22.7 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15,900	17,500	16,800	15,200	23,200	14,800	12,000	16,400	24,600	14,100	15,000	5,230
2	15,700	17,400	10,800	17,600	22,900	19,100	13,200	15,900	22,200	24,200	13,300	4,720
3	14,400	15,200	12,900	20,800	7,150	16,600	14,600	13,300	24,100	28,200	13,200	3,720
4	14,400	9,950	21,500	21,900	10,400	21,300	15,800	8,980	25,900	17,600	3,740	8,640
5	17,100	8,010	21,100	18,700	18,200	22,500	16,600	5,280	27,400	23,100	3,590	6,580
6	18,100	14,800	16,600	14,500	18,200	20,100	16,600	6,820	26,300	18,800	8,310	6,600
7	8,040	16,200	18,700	9,730	17,600	21,900	15,300	8,770	25,100	8,830	12,900	4,700
8	4,190	15,000	20,900	21,000	19,100	23,300	13,100	11,500	25,700	9,760	8,490	3,720
9	14,900	18,400	8,130	17,800	19,100	20,300	16,200	10,100	24,500	19,500	11,600	4,110
10	15,000	17,300	6,110	15,400	9,400	16,300	14,200	11,700	23,200	16,800	9,370	4,420
11	15,900	10,100	13,600	18,500	12,100	16,600	14,700	12,600	24,400	16,100	4,630	3,740
12	16,300	7,400	11,900	15,500	14,000	23,800	16,800	9,750	26,400	17,400	3,570	6,500
13	19,400	17,200	10,200	6,850	19,000	22,100	17,000	7,210	28,700	21,700	7,490	6,470
14	9,860	18,500	11,700	5,120	20,700	21,300	17,100	14,800	30,200	15,400	13,700	7,460
15	9,220	15,100	13,600	12,100	20,000	20,800	19,200	10,600	26,900	7,370	11,800	4,700
16	19,900	14,300	11,600	16,600	17,800	23,600	23,000	16,500	26,800	17,000	10,700	4,320
17	17,300	13,900	3,590	23,700	13,600	23,900	19,500	22,000	25,900	17,400	12,800	5,680
18	15,500	6,600	12,300	18,000	13,700	16,500	18,700	27,100	27,200	17,800	4,780	6,340
19	15,900	6,900	15,800	20,000	17,100	21,200	15,700	27,700	32,500	18,200	3,740	5,350
20	16,200	14,200	16,400	15,800	19,200	21,100	12,600	27,000	30,000	18,000	10,200	6,960
21	5,930	14,500	18,800	8,670	18,900	19,200	14,200	27,900	28,300	10,000	9,790	5,510
22	4,320	20,000	14,400	18,000	20,500	17,700	6,170	25,400	27,700	6,030	9,980	5,850
23	12,900	9,340	12,800	17,500	17,200	16,300	16,600	27,300	21,000	15,800	13,200	5,470
24	13,300	14,700	17,100	14,200	12,100	15,800	14,100	27,700	13,500	16,400	6,870	5,230
25	12,700	12,400	10,200	15,300	10,500	15,800	16,900	26,600	22,600	17,800	7,210	5,780
26	15,500	9,890	16,900	15,500	19,200	17,600	18,100	24,400	25,500	18,400	4,300	6,960
27	19,100	19,200	19,500	17,300	15,600	18,000	20,300	18,100	28,100	19,300	6,110	5,900
28	8,670	20,900	21,600	13,000	18,200	19,400	17,000	17,600	26,400	5,030	7,090	7,570
29	4,070	17,500	21,400	18,200	------	17,000	14,500	25,600	26,800	4,480	7,400	4,870
30	17,800	15,900	8,070	22,600	------	15,500	19,800	22,000	17,200	10,000	7,040	4,270
31	18,000	------	7,920	20,600	------	13,400	------	23,600	------	11,900	7,460	------
TOTAL	425,500	428,290	442,920	505,670	464,650	592,800	479,570	550,210	765,100	482,400	269,360	167,370
MEAN	13,730	14,280	14,290	16,310	16,590	19,120	15,990	17,750	25,500	15,560	8,689	5,579
MAX	19,900	20,900	21,600	23,700	23,200	23,900	23,000	27,900	32,500	28,200	15,000	8,640
MIN	4,070	6,600	3,590	5,120	7,150	13,400	6,170	5,280	13,500	4,480	3,570	3,720
AC-FT	844,000	849,500	878,500	1,003M	921,600	1,176M	951,200	1,091M	1,518M	956,800	534,300	332,000

CAL YR 1972 TOTAL 11,317,900 MEAN 30,920 MAX 132,000 MIN 780 AC-FT 22,450,000
WTR YR 1973 TOTAL 5,573,840 MEAN 15,270 MAX 32,500 MIN 3,570 AC-FT 11,060,000

M Expressed in thousands.

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 (15 m) downstream from bridge on U.S. Highway 95, 2.2 mi (3.5 km) northeast of Colburn, 10 mi (16.1 km) north of Sandpoint, and at mile 28.07 (45.2 km).

DRAINAGE AREA.--124 sq mi (321 sq km). Mean altitude, 4,210 ft (1,283 m).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,130 ft or 649 m (from topographic map).

AVERAGE DISCHARGE.--15 years, 324 cfs (9.18 cu m/s), 35.48 in/yr (901 mm/yr), 234,700 acre-ft/yr (289 cu km/yr).

EXTREMES.--Current year: Maximum discharge, 1,870 cfs (53.0 cu m/s) May 18 (gage height, 9.32 ft or 2.841 m); minimum, 18 cfs (0.510 cu m/s) Sept. 14, 15 (gage height, 0.69 ft or 0.210 m).
Period of record: Maximum discharge, 4,370 cfs (124 cu m/s) May 30, 1969 (gage height, 13.69 ft or 4.173 m); minimum, 15 cfs (0.425 cu m/s) Sept. 2, 3, 1967; minimum gage height, 0.69 ft (0.210 m) Sept. 14, 15, 1973.

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 Mar. 21 to Apr. 12; stage-discharge relation affected by ice Dec. 5-17, Jan. 2-12, Jan. 28 to Feb. 12)

0.7	15	3.0	256
0.8	20	5.0	654
1.1	38	7.0	1,150
1.5	68	10.0	2,170
2.0	117		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	45	54	106	110	157	197	561	666	147	32	36
2	77	48	52	92	105	160	198	626	581	133	31	30
3	73	51	50	80	98	142	211	720	466	119	30	25
4	70	70	43	71	93	136	232	843	469	113	29	24
5	61	122	40	64	89	136	282	823	554	108	29	22
6	56	91	38	59	86	133	284	941	607	102	30	21
7	52	75	36	57	81	134	252	967	863	96	29	21
8	52	70	35	64	77	133	250	821	766	90	27	21
9	51	66	34	70	76	141	266	672	713	85	27	20
10	78	67	36	80	80	174	294	583	513	80	26	20
11	96	64	38	91	83	167	378	524	422	75	26	19
12	76	62	41	120	86	150	468	530	409	73	25	19
13	69	58	45	162	89	145	507	650	420	69	24	18
14	62	58	51	243	89	139	525	919	392	65	24	18
15	59	57	58	307	83	136	479	1,190	337	62	23	18
16	56	56	65	438	82	134	452	1,500	308	60	22	18
17	54	55	78	495	84	173	430	1,640	304	57	21	18
18	52	54	99	350	83	156	396	1,590	266	54	21	20
19	51	58	113	324	88	148	359	1,340	244	51	21	22
20	50	55	149	270	85	148	345	1,110	238	50	21	50
21	49	53	198	245	87	160	358	759	258	50	21	125
22	48	52	411	219	85	177	435	677	279	48	20	86
23	47	53	286	206	88	184	491	744	297	46	20	133
24	47	53	260	199	86	192	478	809	268	44	20	178
25	47	53	165	198	102	208	484	1,040	231	43	22	111
26	50	56	140	169	124	241	558	687	228	40	21	83
27	48	47	162	148	130	225	670	568	217	38	21	70
28	51	40	178	140	133	211	627	516	204	37	20	61
29	48	49	140	135	------	202	565	526	183	36	20	55
30	43	53	121	130	------	205	570	622	166	35	20	50
31	47	------	113	120	------	201	------	711	------	33	23	------
TOTAL	1,782	1,791	3,329	5,452	2,582	5,148	12,041	26,209	11,869	2,139	746	1,412
MEAN	57.5	59.7	107	176	92.2	166	401	845	396	69.0	24.1	47.1
MAX	96	122	411	495	133	241	670	1,640	863	147	32	178
MIN	43	40	34	57	76	133	197	516	166	33	20	18
CFSM	.46	.48	.86	1.42	.74	1.34	3.23	6.81	3.19	.56	.19	.38
IN.	.53	.54	1.00	1.64	.77	1.54	3.61	7.86	3.56	.64	.22	.42
AC-FT	3,530	3,550	6,600	10,810	5,120	10,210	23,880	51,990	23,540	4,240	1,480	2,800

CAL YR 1972 TOTAL 136,954 MEAN 374 MAX 2,390 MIN 32 CFSM 3.02 IN 41.09 AC-FT 271,600
WTR YR 1973 TOTAL 74,500 MEAN 204 MAX 1,640 MIN 18 CFSM 1.65 IN 22.35 AC-FT 147,800

PEAK DISCHARGE (BASE, 1,450 CFS).--May 18 (0600) 1,870 cfs (9.32 ft).

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 (59,310 sq km), 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 (609.600 m) 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 (13.856 m) higher. Oct. 1, 1921, to Sept. 30, 1929, nonrecording gage at present site at datum 45.47 ft (13.859 m) higher than present datum. Oct. 1, 1929, to Sept. 30, 1950, water-stage recorder at present site at datum 0.20 ft (0.061 m) lower than present datum.

EXTREMES.--Current year: Maximum elevation, 2,062.55 ft (628.665 m) July 27 (contents, 1,566,000 acre-ft or 1,931 cu hm); minimum, 2,052.98 ft (625.748 m) Apr. 4 (contents, 692,000 acre-ft or 853 cu hm).
Period of record: Maximum elevation, 2,071.62 ft (631.430 m), present datum, June 9, 1948 (contents, 2,462,000 acre-ft or 3,036 cu hm); minimum, 2,046.27 ft (623.703 m), present datum, Feb. 17, 1936 (contents, 117,700 acre-ft (145 cu hm).
Maximum elevation known, 2,075.88 ft (632.728 m), present datum, June 1894 (contents, 2,905,000 acre-ft (3,582 cu hm).

REMARKS.--Regulation at Albeni Falls Dam beginning June 4, 1952. Contents shown is that above elevation 2,044.8 ft (623.26 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60.84	56.17	53.48	53.53	54.49	54.33	53.31	54.36	56.57	61.79	62.38	62.28
2	60.84	56.07	53.48	53.56	54.52	54.50	53.28	54.37	56.63	61.88	62.47	62.23
3	60.75	55.95	53.46	53.59	54.10	54.63	53.09	54.35	56.69	62.07	62.50	62.13
4	60.62	55.73	53.48	53.62	53.88	54.71	53.07	54.31	56.82	62.11	62.38	62.12
5	60.51	55.47	53.35	53.49	53.86	54.68	53.15	54.23	56.99	62.24	62.25	62.11
6	60.53	55.31	53.21	53.34	53.84	54.62	53.19	54.16	57.18	62.28	62.18	62.09
7	60.38	55.17	53.27	53.23	53.87	54.57	53.27	54.11	57.39	62.18	62.27	62.02
8	60.09	55.05	53.40	53.28	54.00	54.54	53.33	54.19	57.66	62.14	62.27	61.90
9	59.93	54.97	53.36	53.29	54.14	54.53	53.38	54.21	57.97	62.21	62.32	61.81
10	59.77	54.86	53.35	53.27	54.12	54.54	53.37	54.19	58.17	62.25	62.36	61.63
11	59.60	54.65	53.43	53.42	53.94	54.48	53.37	54.19	58.28	62.25	62.28	61.46
12	59.45	54.38	53.41	53.55	53.78	54.56	53.42	54.19	58.45	62.27	62.20	61.34
13	59.48	54.31	53.36	53.50	53.74	54.55	53.47	54.16	58.66	62.38	62.17	61.15
14	59.33	54.29	53.28	53.39	53.75	54.49	53.56	54.24	58.88	62.41	62.26	61.06
15	59.02	54.21	53.28	53.45	53.75	54.42	53.72	54.21	59.09	62.29	62.34	61.00
16	58.88	54.04	53.35	53.68	53.83	54.43	53.98	54.21	59.37	62.30	62.44	60.87
17	58.77	53.83	53.25	53.98	53.86	54.44	54.04	54.40	59.62	62.31	62.44	60.75
18	58.62	53.51	53.29	54.16	53.85	54.28	53.99	54.74	59.80	62.34	62.36	60.63
19	58.47	53.26	53.37	54.34	53.93	54.23	53.95	55.07	60.12	62.37	62.26	60.50
20	58.40	53.31	53.46	54.43	54.04	54.17	53.93	55.38	60.34	62.46	62.29	60.46
21	58.12	53.43	53.64	54.36	54.01	54.07	53.99	55.59	60.57	62.41	62.32	60.36
22	57.82	53.53	53.61	54.42	54.03	53.95	53.90	55.72	60.82	62.20	62.35	60.23
23	57.70	53.42	53.61	54.41	54.00	53.82	54.02	55.86	61.00	62.17	62.45	60.13
24	57.55	53.39	53.71	54.38	53.96	53.76	54.06	56.07	60.98	62.23	62.40	59.92
25	57.37	53.41	53.57	54.37	54.03	53.67	54.12	56.24	61.09	62.32	62.41	59.70
26	57.25	53.33	53.58	54.37	54.13	53.52	54.22	56.34	61.23	62.43	62.42	59.51
27	57.16	53.37	53.57	54.38	54.10	53.43	54.34	56.30	61.45	62.54	62.43	59.28
28	56.89	53.41	53.53	54.31	54.20	53.42	54.39	56.24	61.62	62.40	62.40	59.14
29	56.52	53.42	53.57	54.35	------	53.38	54.37	56.34	61.83	62.27	62.36	58.98
30	56.37	53.37	53.47	54.43	------	53.43	54.39	56.38	61.86	62.23	62.36	58.78
31	56.26	------	53.41	54.44	------	53.43	------	56.47	------	62.27	62.37	------
MEAN	58.82	54.29	53.44	53.88	53.99	54.18	53.72	54.99	59.24	62.26	62.34	60.85
MAX	60.84	56.17	53.71	54.44	54.52	54.71	54.39	56.47	61.86	62.54	62.50	62.28
MIN	56.26	53.26	53.21	53.23	53.74	53.38	53.07	54.11	56.57	61.79	62.17	58.78
(†)	984.9	726.4	730.0	821.7	800.3	731.8	817.2	1,004	1,501	1,540	1,549	1,214
(‡)	-412.1	-258.5	+3.6	+91.7	-21.4	-68.5	+85.4	+186.8	+497.0	+39.0	+9.0	-335.0

CAL YR 1972..... ‡ +174
WTR YR 1973..... ‡ -183

† 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 mi (0.8 km) east of outlet, 1.8 mi (2.9 km) northwest of Coolin, and 44 mi (70.8 km) upstream from mouth of Priest River.

DRAINAGE AREA.--572 sq mi (1,480 sq km).

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 (742.078 m) 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 (122 m) north of lake outlet at present datum.

EXTREMES.--Current year: Maximum gage height, 3.76 ft (1.146 m) May 26 (contents, 137,400 acre-ft or 169 cu hm); minimum, -0.27 ft (-0.082 m) Dec. 15 (contents, 42,000 acre-ft or 5.179 cu hm).
Period of record: Maximum gage height, 6.46 ft (1.969 m) May 29, 30, 1948 (contents, 202,200 acre-ft or 249 cu hm); minimum, -0.27 ft (-0.082 m) Dec. 15, 1972 (contents, 42,000 acre-ft or 51.79 cu hm).

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 (-0.61 m). 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)

-0.3	41,260
0.0	48,000
5.0	167,000

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.03	1.28	.13	.12	.05	-.05	.20	1.32	3.58	3.26	3.13	2.87
2	3.00	1.21	.11	.12	.04	-.05	.20	1.36	3.54	3.23	3.11	2.87
3	2.98	1.15	.04	.10	.05	-.05	.21	1.43	3.50	3.20	3.10	2.87
4	2.97	1.13	-.01	.08	.03	-.04	.21	1.53	3.45	3.17	3.07	2.87
5	2.94	1.08	-.03	.06	.03	-.04	.24	1.60	3.42	3.15	3.07	2.88
6	2.93	1.02	-.07	.03	.02	-.04	.25	1.71	3.41	3.17	3.06	2.86
7	2.90	.95	-.13	.01	.00	-.04	.27	1.80	3.43	3.18	3.06	2.88
8	2.90	.88	-.15	.00	-.01	-.04	.28	1.93	3.45	3.19	3.05	2.87
9	2.90	.83	-.18	-.02	-.02	-.03	.30	2.00	3.40	3.22	3.04	2.86
10	2.90	.78	-.20	-.04	-.03	.02	.32	2.02	3.34	3.22	3.04	2.88
11	2.88	.73	-.20	-.02	-.03	.02	.36	2.02	3.25	3.25	3.04	2.87
12	2.87	.67	-.23	.01	-.03	.03	.42	2.01	3.20	3.28	3.02	2.87
13	2.86	.62	-.23	.04	-.05	.03	.48	2.03	3.22	3.29	3.01	2.89
14	2.82	.57	-.25	.05	-.06	.04	.56	2.12	3.26	3.29	3.00	2.85
15	2.76	.53	-.26	.08	-.07	.03	.63	2.29	3.27	3.29	2.99	2.82
16	2.70	.49	-.21	.14	-.08	.04	.72	2.54	3.35	3.30	2.90	2.81
17	2.65	.45	-.19	.14	-.07	.06	.78	2.83	3.40	3.29	2.93	2.80
18	2.61	.42	-.15	.15	-.08	.05	.81	3.08	3.42	3.27	2.92	2.84
19	2.57	.40	-.17	.14	-.09	.05	.84	3.23	3.43	3.27	2.91	2.89
20	2.52	.37	-.11	.14	-.10	.06	.85	3.36	3.45	3.23	2.90	2.93
21	2.43	.33	-.07	.14	-.11	.06	.87	3.37	3.46	3.26	2.89	2.95
22	2.31	.30	-.03	.13	-.12	.06	.89	3.36	3.45	3.23	2.90	2.98
23	2.18	.30	.05	.11	-.13	.07	.93	3.39	3.46	3.21	2.87	3.04
24	2.07	.27	.06	.12	-.13	.08	.97	3.51	3.47	3.21	2.87	3.07
25	1.98	.28	.07	.12	-.11	.09	1.02	3.67	3.46	3.20	2.88	3.09
26	1.89	.25	.08	.11	-.11	.12	1.07	3.74	3.45	3.19	2.88	3.10
27	1.82	.23	.15	.09	-.11	.14	1.12	3.72	3.43	3.19	2.85	3.11
28	1.72	.20	.17	.08	-.10	.15	1.19	3.67	3.38	3.18	2.86	3.12
29	1.60	.17	.15	.06	------	.16	1.25	3.63	3.35	3.17	2.87	3.13
30	1.48	.15	.15	.08	------	.16	1.28	3.60	3.29	3.15	2.85	3.12
31	1.37	------	.14	.07	------	.18	------	3.60	------	3.14	2.87	------
MEAN	2.50	.60	-.05	.08	-.05	.04	.65	2.63	3.40	3.22	2.97	2.93
MAX	3.03	1.28	.17	.15	.05	.18	1.28	3.74	3.58	3.30	3.13	3.13
MIN	1.37	.15	-.26	-.04	-.13	-.05	.20	1.32	3.20	3.14	2.85	2.80
(†)	80,600	51,800	51,600	50,000	46,000	52,500	78,500	133,600	126,200	122,600	116,200	122,100
(‡)	-39,600	-28,800	-200	-1,600	-4,000	+6,500	+26,000	+55,100	-7,400	-3,600	-6,400	+5,900

CAL YR 1972..... ‡ +2,100
WTR YR 1973..... ‡ +1,900

† 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 (58 m) downstream from Dickensheet Bridge, 2.5 mi (4 km) downstream from Binarch Creek, 3 mi (4.8 km) southwest of Coolin, 5.2 mi (8.4 km) downstream from outlet of Priest Lake, and at mile 38.8 (62.4 km).

DRAINAGE AREA.--611 sq mi (1,582 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 2,338.24 ft (712.70 m) above mean sea level. Prior to Feb. 23, 1949, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--25 years, 1,309 cfs (37.1 cu m/s), 29.09 in/yr (739 mm/yr), 948,400 acre-ft/yr (1,169 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 3,880 cfs (108 cu m/s) May 21 (gage height, 5.71 ft or 1.740 m); minimum, 75 cfs (2.12 cu m/s) Sept. 15-19, 21, 22; minimum gage height, 1.62 ft (0.49 m) Sept. 15-19.
Period of record: Maximum discharge, 8,130 cfs (230 cu m/s) May 27, 1956 (gage height, 8.15 ft or 2.484 m); minimum observed, 26 cfs (0.736 cu m/s) Sept. 25, 1958 (gage height, 1.16 ft or 0.354 m), 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 (2.560 m) on May 29, 1948 (discharge, 8,670 cfs or 246 cu m/s).

REMARKS.--Records excellent except those for periods of ice effect or no gage-height record, 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)
(Shifting-control method used June 3-11; stage-discharge relation affected by ice Dec. 6-14, Jan. 7-10)

1.5	63	3.5	930
1.6	76	4.0	1,400
2.0	152	5.0	2,690
2.5	315	6.0	4,190
3.0	570		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	534	1,500	533	576	516	415	635	1,600	3,410	1,310	239	97
2	522	1,430	526	563	500	425	642	1,640	3,400	1,280	237	94
3	512	1,370	511	550	490	440	642	1,690	3,340	1,020	236	94
4	502	1,350	469	530	480	455	655	1,800	3,290	880	232	93
5	487	1,320	447	517	470	465	668	1,870	3,250	801	221	91
6	476	1,270	420	506	450	475	687	1,950	3,220	536	222	91
7	465	1,210	400	470	440	490	694	2,060	3,250	385	217	91
8	455	1,160	380	460	430	500	714	2,160	3,260	270	212	90
9	446	1,100	360	450	425	500	728	2,260	3,240	277	210	90
10	450	1,070	340	450	420	510	735	2,300	3,200	280	204	90
11	451	1,020	330	455	420	510	763	2,320	3,130	224	193	90
12	437	969	320	469	415	510	810	2,320	2,860	183	183	89
13	432	929	310	488	410	500	866	2,330	2,360	238	179	87
14	724	893	310	496	400	494	922	2,390	1,830	340	176	81
15	938	863	310	499	395	499	984	2,540	1,310	382	162	76
16	900	826	319	542	395	499	1,060	2,770	1,200	384	149	75
17	863	794	344	565	390	522	1,110	3,080	1,240	383	129	75
18	827	763	356	564	390	522	1,150	3,380	1,280	379	123	76
19	794	750	356	569	390	516	1,170	3,610	1,290	375	122	76
20	762	727	374	560	385	522	1,190	3,800	1,300	369	120	79
21	1,380	694	433	556	380	528	1,200	3,860	1,310	367	119	75
22	1,820	671	464	549	380	534	1,210	3,700	1,440	369	118	75
23	1,690	658	499	541	380	546	1,240	3,160	1,500	360	118	78
24	1,590	641	528	543	385	552	1,280	3,230	1,510	355	112	79
25	1,490	631	532	547	390	564	1,310	3,380	1,500	351	103	82
26	1,400	630	535	541	395	583	1,360	3,500	1,490	348	103	83
27	1,330	618	574	527	400	590	1,400	3,550	1,480	342	102	82
28	1,690	594	602	512	410	596	1,460	3,500	1,430	337	100	84
29	1,850	571	599	504	------	603	1,520	3,460	1,400	330	99	84
30	1,730	552	593	507	------	616	1,570	3,440	1,350	321	98	84
31	1,600	------	585	504	------	622	------	3,410	------	273	100	------
TOTAL	29,547	27,574	13,659	16,110	11,731	16,103	30,375	86,060	65,070	14,049	4,938	2,531
MEAN	953	919	441	520	419	519	1,013	2,776	2,169	453	159	84.4
MAX	1,850	1,500	602	576	516	622	1,570	3,860	3,410	1,310	239	97
MIN	432	552	310	450	380	415	635	1,600	1,200	183	98	75
AC-FT	58,610	54,690	27,090	31,950	23,270	31,940	60,250	170,700	129,100	27,870	9,790	5,020

CAL YR 1972 TOTAL 526,794 MEAN 1,439 MAX 6,950 MIN 94 AC-FT 1,045,000
WTR YR 1973 TOTAL 317,747 MEAN 871 MAX 3,860 MIN 75 AC-FT 630,300

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 (152 m) downstream from Saddler Creek, 0.4 mi (0.6 km) downstream from Lower West Branch, 2.7 mi (4.3 km) north of Priest River, and at mile 3.8 (6.1 km).

DRAINAGE AREA.--902 sq mi (2,336 sq km).

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 (637 m) (from river-profile map). Prior to May 15, 1929, and Sept. 18, 1929, to Apr. 28, 1930, nonrecording gages at site 3 mi (4.8 km) downstream at altitude about 40 ft (12 m) 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.--45 years (1903-4, 1929-73), 1,661 cfs (47.0 cu m/s), 25.01 in/yr (635 mm/yr), 1,203,000 acre-ft/yr (1,480 cu hm/yr); 15-year base period (1952-67), 1,787 cfs (50.6 cu m/s).

EXTREMES.--Current year: Maximum discharge, 4,480 cfs (127 cu m/s) May 21 (gage height, 5.14 ft or 1.57 m); minimum, 168 cfs (4.76 cu m/s) Sept. 16, 17, 18; minimum gage height, 0.44 ft (0.013 m).
Period of record: Maximum discharge, 10,500 cfs (297 cu m/s) May 29, 30, 1948; maximum gage height, 8.97 ft (2.73 m) May 29, 1948; minimum discharge, 165 cfs (4.67 cu m/s) Sept. 26, 1958; minimum gage height, 0.44 ft (0.013 m) Sept. 16, 17, 18, 1974.

REMARKS.--Records excellent except those for winter period and no gage-height record, which are fair. 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. 5-20, Jan. 3-11, Feb. 2-12)

0.4	150	3.0	1,910
.6	205	4.0	3,000
1.0	375	5.0	4,260
1.5	680	7.7	8,190
2.0	1,040		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	610	1,670	699	841	700	939	1,000	1,910	3,760	1,460	363	209
2	600	1,610	680	799	700	964	1,000	1,940	3,740	1,430	344	199
3	590	1,540	640	740	700	871	1,010	2,000	3,670	1,340	339	193
4	580	1,560	628	730	690	841	1,020	2,180	3,590	1,040	335	190
5	560	1,610	600	710	690	836	1,070	2,280	3,510	997	325	187
6	540	1,500	550	700	690	819	1,100	2,340	3,470	821	321	187
7	520	1,400	540	690	680	804	1,070	2,450	3,490	696	321	184
8	510	1,340	520	680	680	791	1,070	2,620	3,510	462	316	184
9	505	1,270	500	690	670	906	1,080	2,740	3,520	432	307	181
10	500	1,230	490	720	660	1,130	1,100	2,770	3,440	435	307	181
11	510	1,190	480	760	640	1,080	1,130	2,760	3,360	430	298	181
12	500	1,140	470	820	630	968	1,190	2,730	3,260	351	285	178
13	480	1,090	460	862	623	934	1,280	2,720	2,670	329	276	178
14	700	1,050	450	928	617	910	1,340	2,760	2,410	403	272	175
15	1,050	1,010	460	950	613	836	1,380	2,920	1,720	506	264	173
16	1,000	978	490	1,200	605	871	1,490	3,190	1,410	516	248	168
17	960	942	530	1,480	606	1,030	1,620	3,550	1,470	515	237	168
18	920	919	600	1,240	604	963	1,610	3,950	1,490	510	223	173
19	890	914	760	1,080	596	915	1,580	4,230	1,490	504	219	190
20	850	908	1,000	1,020	585	905	1,560	4,390	1,490	501	219	233
21	1,300	879	1,540	958	577	944	1,550	4,460	1,480	491	216	252
22	2,000	845	1,580	920	567	986	1,560	4,430	1,510	491	212	226
23	1,900	827	1,470	905	566	1,000	1,600	3,780	1,660	483	212	233
24	1,750	814	1,410	870	565	998	1,630	3,690	1,650	471	212	252
25	1,600	798	1,120	840	618	1,020	1,660	3,950	1,660	466	209	240
26	1,530	807	912	810	702	1,070	1,690	4,010	1,650	463	199	216
27	1,470	765	1,020	790	744	1,040	1,750	4,040	1,640	456	199	205
28	1,540	732	1,160	760	740	1,010	1,810	3,980	1,600	450	193	205
29	2,010	723	1,000	740	------	999	1,850	3,880	1,560	440	187	202
30	1,890	714	912	710	------	1,000	1,890	3,820	1,510	434	190	202
31	1,770	------	869	700	------	1,000	------	3,780	------	420	196	------
TOTAL	32,135	32,775	24,540	26,643	18,058	29,380	41,690	100,250	72,390	18,743	8,044	5,945
MEAN	1,037	1,093	792	859	645	948	1,390	3,234	2,413	605	259	198
MAX	2,010	1,670	1,580	1,480	744	1,130	1,890	4,460	3,760	1,460	363	252
MIN	480	714	450	680	565	791	1,000	1,910	1,410	329	187	168
AC-FT	63,740	65,010	48,680	52,850	35,820	58,280	82,690	198,800	143,600	37,180	15,960	11,790

CAL YR 1972 TOTAL 705,424 MEAN 1,927 MAX 8,050 MIN 220 AC-FT 1,399,000
WTR YR 1973 TOTAL 410,593 MEAN 1,125 MAX 4,460 MIN 168 AC-FT 814,400

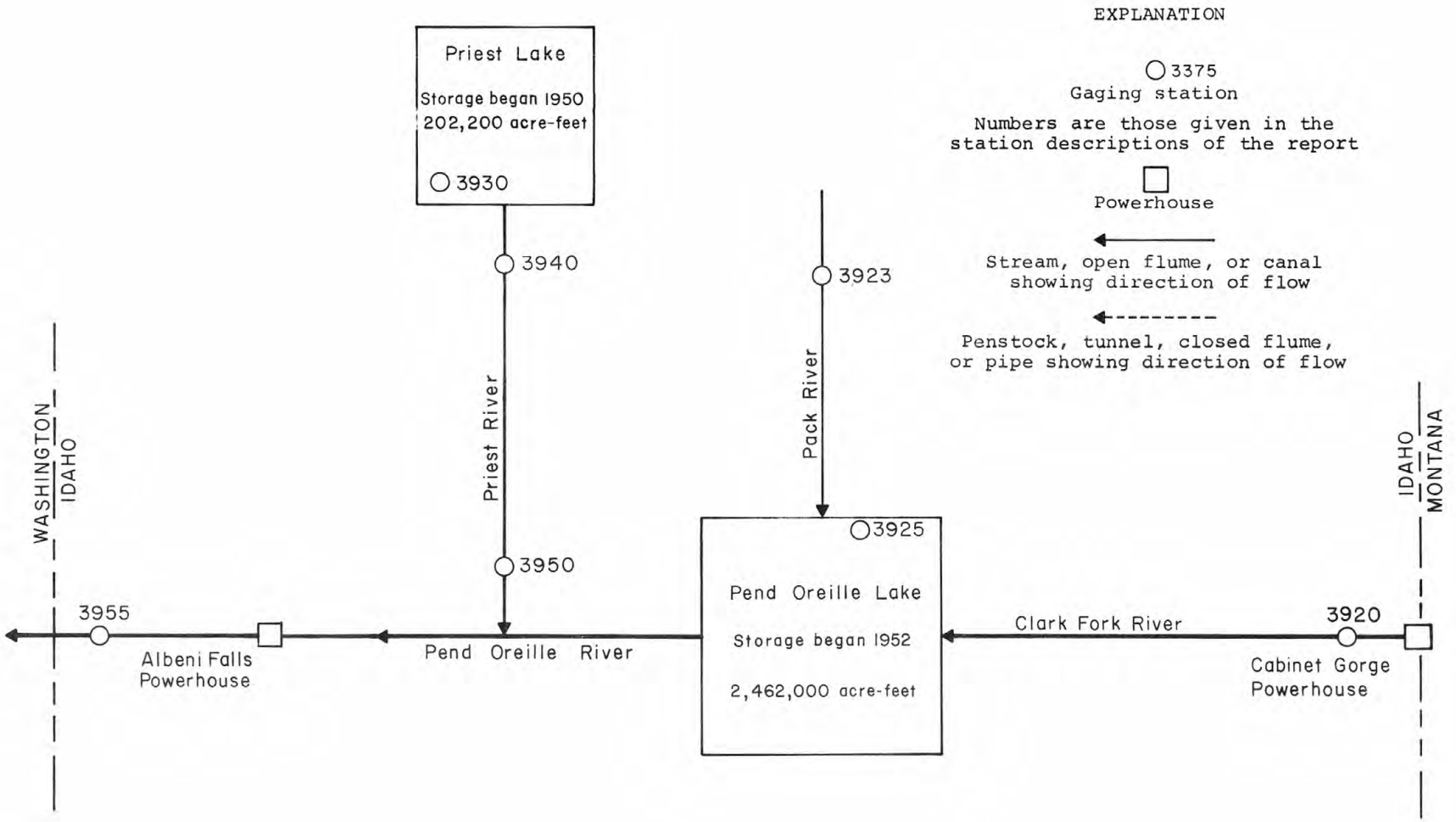

FIGURE 3. Schematic diagram showing Pend Oreille River basin.

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 mi (0.3 km) upstream from bridge on U.S. Highway 2, 0.2 mi (0.3 km) east of Idaho-Washington State line, 1.6 mi (2.6 km) downstream from Albeni Falls Dam, and at mile 88.5 (142.4 km).

DRAINAGE AREA.--24,200 sq mi (62,700 sq km), 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 (609.509 m) above mean sea level. Prior to Sept. 22, 1928, nonrecording 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 (609.6 m) above mean sea level, water-stage recorder at Priest River. Since December 1952, auxiliary water-stage recorder 2.74 mi (4.4 km) downstream from base gage.

AVERAGE DISCHARGE.--59 years (1903-41, 1952-73), 25,850 cfs (732 cu m/s), 18,730,000 acre-ft/yr (231 cu km/yr); 15-year base period (1952-67), 27,700 cfs (784 cu m/s).

EXTREMES.--Current year: Maximum discharge, 29,800 cfs (844 cu m/s) Dec. 5; maximum gage height, 36.12 ft (11.09 m) Feb. 3; minimum discharge, 4,330 cfs (123 cu m/s) Aug. 25; minimum gage height, 30.80 ft (9.388 m) Nov. 18.
Period of record: Maximum discharge, 136,000 cfs (3,850 cu m/s) June 15, 1913, June 21, 1933, June 12, 1972; minimum, 1,280 cfs (36 cu m/s) Sept. 1, 1961.
Maximum stage known, about 64.0 ft (19.51 m) in June 1894, present site and datum, from water-surface profiles (discharge, about 200,000 cfs or 5,660 cu m/s).

REMARKS.--Records good except those for May to August, which are fair. 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 (143,000 sq hm).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,930	24,900	14,600	10,800	21,400	13,100	15,300	20,600	25,100	17,700	8,300	8,160
2	16,400	25,600	11,700	14,600	22,700	13,300	16,300	19,600	25,000	19,000	9,600	8,160
3	19,800	24,400	13,800	17,000	27,800	13,300	24,300	19,100	24,900	19,000	10,600	8,160
4	21,100	23,900	21,200	18,900	21,800	18,700	18,200	16,400	24,800	17,000	10,300	8,340
5	21,100	24,100	26,600	21,600	19,300	24,900	15,500	13,700	22,200	17,000	10,200	8,120
6	16,100	24,200	21,100	17,200	19,000	24,600	15,600	15,100	22,000	16,900	9,400	8,250
7	16,500	24,000	17,100	12,700	16,400	24,700	13,500	16,600	22,100	13,500	8,300	8,250
8	19,400	24,100	14,400	15,900	13,800	25,100	13,400	13,500	18,700	12,000	8,500	8,300
9	23,900	23,900	12,700	15,600	13,100	23,000	15,300	15,300	14,600	15,400	8,200	9,850
10	24,000	24,100	10,000	15,500	13,100	20,800	17,100	16,900	18,300	15,200	8,300	12,700
11	23,800	23,200	14,600	14,000	20,500	21,000	17,000	16,800	22,000	15,900	8,200	12,600
12	22,300	21,500	16,400	14,200	21,100	21,500	17,100	13,700	21,900	14,800	8,300	12,700
13	18,200	21,300	15,200	14,400	21,100	24,300	17,100	13,600	22,100	14,800	8,200	12,600
14	19,600	21,100	18,000	14,100	21,100	24,900	15,200	16,700	21,900	14,800	8,200	10,900
15	25,100	21,400	16,500	14,200	21,000	25,200	15,100	19,100	18,900	14,600	8,200	8,120
16	28,300	24,300	12,200	14,300	14,400	25,100	16,600	23,900	14,700	15,800	8,300	10,700
17	24,400	24,400	12,100	14,300	13,800	24,600	20,600	21,100	16,800	16,300	8,200	12,900
18	24,100	24,400	12,000	14,300	14,000	24,800	23,100	20,300	19,100	15,800	8,300	12,700
19	24,700	19,500	14,000	14,400	14,200	25,300	21,100	20,500	19,000	15,900	8,300	12,600
20	21,300	13,200	15,000	14,200	13,900	25,400	16,400	20,700	19,100	15,100	8,200	12,700
21	21,200	10,500	17,200	14,100	19,800	25,200	14,000	24,300	19,100	12,500	8,300	12,800
22	21,300	16,000	21,300	16,800	20,200	25,100	14,000	26,000	17,000	15,800	8,370	12,900
23	21,300	18,100	18,900	19,300	20,100	22,900	14,400	26,200	14,700	16,100	8,210	14,200
24	22,600	16,800	17,500	17,500	14,200	20,600	15,000	26,000	16,700	12,800	8,670	16,900
25	24,200	15,000	19,200	17,400	9,610	22,600	16,800	25,800	19,000	11,800	4,330	16,800
26	24,100	14,900	21,600	16,300	16,300	25,300	16,800	26,000	19,000	12,900	4,490	16,900
27	24,200	17,100	24,200	17,700	17,600	22,900	16,900	25,800	19,100	14,500	5,160	17,000
28	24,000	19,800	25,900	17,600	15 500	21,000	18,000	24,800	19,100	11,400	7,310	15,500
29	24,700	18,300	21,700	17,600	------	21,000	19,300	25,800	18,100	11,400	8,120	12,900
30	26,000	18,000	15,500	19,900	------	19,000	21,100	25,600	16,800	11,900	8,120	14,400
31	25,100	------	11,100	21,300	------	16,000	------	25,000	------	10,000	8,120	------
TOTAL	677,730	622,000	523,300	497,700	496,810	685,200	510,100	634,500	591,800	457,600	253,300	357,110
MEAN	21,860	20,730	16,880	16,050	17,740	22,100	17,000	20,470	19,730	14,760	8,171	11,900
MAX	28,300	25,600	26,600	21,600	27,800	25,400	24,300	26,200	25,100	19,000	10,600	17,000
MIN	8,930	10,500	10,000	10,800	9,610	13,100	13,400	13,500	14,600	10,000	4,330	8,120
AC-FT	1,344M	1,234M	1,038M	987,200	985,400	1,359M	1,012M	1,259M	1,174M	907,600	502,400	708,300

CAL YR 1972 TOTAL 12,573,190.00 MEAN 34,350 MAX 133,000 MIN 7,680 AC-FT 24,940,000
WTR YR 1973 TOTAL 6,307,150.00 MEAN 17,280 MAX 28,300 MIN 4,330 AC-FT 12,510,000

M Expressed in thousands.
NOTE.--No gage-height record May 1 to Aug. 22.

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 mi (0.2 km) downstream from Uranus Creek, 0.5 mi (0.8 km) upstream from Shoshone Creek, 3.5 mi (5.6 km) north of Prichard, and 200.0 mi (322 km) upstream from mouth of Spokane River.

DRAINAGE AREA.--335 sq mi (868 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,485 ft (757 m) (from river-profile map).

AVERAGE DISCHARGE.--22 years (1951-73), 735 cfs (20.8 cu m/s), 29.80 in/yr (757 mm/yr), 532,500 acre-ft/yr (657 cu hm/yr); 15-year base period 1952-67), 750 cfs (21.2 cu m/s).

EXTREMES.--Current year: Maximum discharge, 3,110 cfs (88.1 cu m/s) Jan. 17 (gage height, 4.44 ft or 1.35 m); maximum gage height, 5.13 ft (1.56 m) Jan. 14 (ice jam); minimum, 55 cfs (1.7 cu m/s) Sept. 12-16 (gage height, 0.58 ft or 0.19 m).
Period of record: Maximum discharge, 11,900 cfs (337 cu m/s) Dec. 23, 1964 (gage height, 8.37 ft or 2.55 m); maximum gage height, 11.55 ft (3.52 m) Feb. 4, 1963 (backwater from ice); minimum discharge, 34 cfs (0.96 cu m/s) Dec. 26, 1952 (gage height, 0.69 ft or 0.21 m); minimum gage height, 0.58 ft (0.18 m) Sept. 12-16, 1973.

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 Nov. 28-29, Dec. 3 to Jan. 14, Jan. 26-31, Feb. 5-12)

0.5	42.5	2.0	570
.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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	96	100	350	312	791	540	830	380	157	83	66
2	110	110	126	310	284	892	520	780	400	157	81	68
3	108	123	112	280	282	725	490	820	380	151	79	66
4	106	155	96	230	275	614	520	880	350	146	79	65
5	105	217	90	220	220	551	550	930	330	141	77	63
6	103	196	84	210	190	492	620	980	315	138	75	61
7	103	154	78	190	165	465	650	1,020	324	138	77	59
8	103	134	76	205	175	450	600	1,090	329	133	77	60
9	102	124	82	210	210	455	620	980	333	131	75	59
10	109	117	84	215	255	540	660	900	307	126	73	58
11	141	113	90	220	260	720	760	860	278	123	72	56
12	132	108	92	250	250	640	1,100	840	263	118	72	55
13	116	103	92	520	233	580	1,250	960	255	118	70	55
14	110	102	92	1,200	216	540	1,200	1,200	251	116	68	55
15	106	102	92	1,120	209	490	1,120	1,370	259	114	70	55
16	103	104	94	1,720	197	450	1,100	1,460	247	111	68	55
17	102	101	102	2,830	193	560	1,400	1,350	251	109	66	56
18	100	100	115	1,820	187	520	1,320	1,250	247	107	65	58
19	99	102	160	1,220	169	480	1,190	1,140	229	105	65	70
20	98	107	230	912	178	460	1,020	990	212	103	63	118
21	98	105	350	760	164	500	900	850	202	105	63	147
22	96	101	520	626	183	560	920	680	193	105	61	115
23	97	100	820	530	201	640	930	590	190	103	61	115
24	99	104	1,300	479	209	720	940	640	190	100	61	163
25	97	101	950	473	233	780	950	600	190	98	61	143
26	108	109	720	375	358	840	960	550	240	96	63	110
27	114	99	810	320	408	770	1,100	510	216	94	61	92
28	112	94	680	340	499	700	1,060	460	190	93	60	83
29	106	98	640	335	------	630	990	410	174	91	60	77
30	99	101	510	330	------	600	910	410	165	88	60	74
31	98	------	420	320	------	570	------	400	------	86	60	------
TOTAL	3,291	3,480	9,807	19,120	6,715	18,725	26,890	26,730	7,890	3,601	2,126	2,377
MEAN	106	116	316	617	240	604	896	862	263	116	68.6	79.2
MAX	141	217	1,300	2,830	499	892	1,400	1,460	400	157	83	163
MIN	96	94	76	190	164	450	490	400	165	86	60	55
CFSM	.32	.35	.94	1.84	.72	1.80	2.67	2.57	.79	.35	.20	.24
IN.	.37	.39	1.09	2.12	.75	2.08	2.99	2.97	.88	.40	.24	.26
AC-FT	6,530	6,900	19,450	37,920	13,320	37,140	53,340	53,020	15,650	7,140	4,220	4,710

CAL YR 1972 TOTAL 353,184 MEAN 965 MAX 5,720 MIN 76 CFSM 2.88 IN 39.22 AC-FT 700,500
WTR YR 1973 TOTAL 130,752 MEAN 358 MAX 2,830 MIN 55 CFSM 1.07 IN 14.52 AC-FT 259,300

PEAK DISCHARGE (BASE, 3,600 CFS).--No peaks above base.

NOTE.--No gage-height record Mar. 11 to June 5.

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 (244 m) upstream from highway bridge, 0.2 mi (0.3 km) northwest of Enaville Post Office, 1.1 mi (1.8 km) upstream from South Fork, 3.5 mi (5.6 km) downstream from North Fork, and 168.9 mi (271.8 km) upstream from mouth of Spokane River.

DRAINAGE AREA.--895 sq mi (2,320 sq km).

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 (640.080 m) above mean sea level. Mar. 3, 1911, to Apr. 12, 1913, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum. Oct. 18 to Dec. 22, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--34 years (1939-73), 1,948 cfs (55.2 cu m/s), 29.55 in/yr (75.1 mm/yr), 1,411,000 acre-ft/yr (1,740 cu hm/yr); 15-year base period (1952-67), 2,027 cfs (57.4 cu m/s).

EXTREMES.--Current year: Maximum discharge, 8,200 cfs (232 cu m/s) Jan. 17 (gage height, 67.43 ft or 20.553 m); minimum, 169 cfs (4.79 cu m/s) Dec. 5 (gage height, 60.77 ft or 18.523 m).
Period of record: Maximum discharge, 34,800 cfs (986 cu m/s) Dec. 23, 1964 (gage height, 77.15 ft or 23.515 m); minimum, 104 cfs (2.94 cu m/s) Dec. 26, 1952 (gage height, 60.10 ft or 18.318 m).
Flood in December 1933 reached a stage of 79.47 ft (24.2 m) and that in April 1938 a stage of 78.16 ft (23.823 m), from local information concerning high-water marks.

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

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

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 6-7, Jan. 2-3)

60.80	176	62.00	755
60.90	203	63.00	1,600
61.00	233	65.00	4,000
61.20	300	68.00	9,300
61.40	385		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	304	269	265	1,260	883	1,980	1,500	2,240	1,100	488	259	209
2	297	293	316	1,120	814	2,610	1,400	2,080	1,120	476	255	206
3	293	316	300	920	794	2,220	1,340	2,060	1,110	458	249	200
4	290	363	200	760	781	1,870	1,330	2,240	988	440	246	195
5	286	494	179	720	716	1,660	1,490	2,380	924	424	243	192
6	283	512	198	700	664	1,470	1,740	2,440	875	418	243	187
7	279	424	235	660	742	1,350	1,750	2,510	947	412	243	187
8	279	372	240	720	775	1,270	1,680	2,600	955	408	239	187
9	276	340	245	760	848	1,260	1,670	2,450	1,030	402	236	187
10	283	320	250	790	723	1,500	1,730	2,250	930	392	230	184
11	324	308	260	820	703	1,940	1,910	2,200	855	384	230	184
12	336	300	265	1,020	684	1,730	2,320	2,150	813	376	227	181
13	316	290	270	1,420	645	1,600	2,800	2,500	785	370	227	179
14	297	283	270	2,860	606	1,440	3,090	2,900	781	362	224	176
15	290	283	275	3,450	580	1,310	2,980	3,100	787	355	224	176
16	286	279	300	4,840	548	1,230	2,820	3,200	755	348	221	179
17	279	276	360	7,670	542	1,430	3,330	3,090	782	340	212	184
18	276	276	450	5,320	536	1,400	3,270	2,900	757	335	209	187
19	276	283	640	3,640	512	1,320	2,940	2,640	707	328	209	195
20	272	286	1,000	2,780	494	1,290	2,650	2,370	660	320	209	243
21	272	283	1,550	2,310	476	1,350	2,420	2,070	627	325	209	328
22	269	276	2,770	1,900	464	1,520	2,330	1,790	606	324	206	304
23	269	272	2,700	1,650	494	1,650	2,410	1,630	586	318	203	297
24	269	283	3,970	1,460	524	1,800	2,460	1,580	586	304	206	354
25	269	279	2,970	1,370	586	1,930	2,450	1,690	593	292	209	367
26	276	293	2,180	1,220	820	2,130	2,450	1,580	658	285	209	312
27	293	293	2,440	973	1,000	2,170	2,620	1,430	632	279	209	269
28	297	272	2,620	1,180	1,220	1,990	2,840	1,280	560	276	206	246
29	293	255	2,220	1,170	------	1,820	2,740	1,180	530	265	203	233
30	279	265	1,790	1,020	------	1,690	2,490	1,120	506	262	200	227
31	272	------	1,500	980	------	1,600	------	1,110	------	259	200	------
TOTAL	8,880	9,338	33,228	57,463	19,174	51,530	68,950	66,760	23,545	11,025	6,895	6,755
MEAN	286	311	1,072	1,854	685	1,662	2,298	2,154	785	356	222	225
MAX	336	512	3,970	7,670	1,220	2,610	3,330	3,200	1,120	488	259	367
MIN	269	255	179	660	464	1,230	1,330	1,110	506	259	200	176
CFSM	.32	.35	1.20	2.07	.77	1.86	2.57	2.41	.88	.40	.25	.25
IN.	.37	.39	1.38	2.39	.80	2.14	2.87	2.77	.98	.46	.29	.28
AC-FT	17,610	18,520	65,910	114,000	38,030	102,200	136,800	132,400	46,700	21,870	13,680	13,400

CAL YR 1972 TOTAL 984,646 MEAN 2,690 MAX 16,300 MIN 179 CFSM 3.01 IN 40.93 AC-FT 1,953,000
WTR YR 1973 TOTAL 363,543 MEAN 996 MAX 7,670 MIN 176 CFSM 1.11 IN 15.11 AC-FT 721,100

PEAK DISCHARGE (BASE, 8,000 CFS).--Jan. 17 (0900) 8,200 cfs (67.43 ft).

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 (122 m) upstream from county road bridge, 0.3 mi (0.5 km) downstream from West Fork, 0.4 mi (0.6 km) south of Wallace city limits, and at mile 1.0 (1.6 km).

DRAINAGE AREA.--14.9 sq mi (38.6 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,840 ft or 866 m (from topographic map).

AVERAGE DISCHARGE.--5 years, 40.7 cfs (1.15 cu m/s), 37.09 in/yr (942 mm/yr), 29,490 acre-ft/yr (36 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 194 cfs (5.49 cu m/s) Jan. 16 (gage height, 3.18 ft or 0.97 m); minimum daily, 2.2 cfs (62 cu dm/s) Dec. 5; minimum gage height, 1.49 ft (0.45 m) Dec. 10.
Period of record: Maximum discharge, 517 cfs (14.6 cu m/s) May 13, 1971 (gage height, 3.92 ft or 1.19 m); minimum daily, 2.2 cfs (62 cu dm/s) Dec. 5, 1972; minimum gage height, 1.49 ft (0.45 m) Dec. 10, 1972.
Flood of Dec. 23, 1964, estimated at 1,300 cfs (36.8 cu m/s) 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 except those for winter periods, which are fair. Water for town of Wallace is diverted above the station.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 8-18 and Jan. 8-10)

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	5.1	4.1	12	15	24	22	47	35	13	6.0	4.2
2	5.5	6.6	5.0	12	15	22	21	48	33	13	5.9	3.8
3	5.2	6.6	3.8	11	15	19	20	50	29	12	5.8	3.7
4	5.1	9.3	3.1	10	15	18	22	53	25	12	5.7	3.5
5	5.1	10	2.2	9.2	14	17	26	54	24	12	5.9	3.5
6	5.1	7.3	2.7	8.6	14	16	26	56	25	12	6.1	3.4
7	5.1	6.4	2.6	8.0	13	16	24	59	27	11	5.8	3.4
8	5.1	6.0	2.4	8.8	13	16	25	64	27	11	5.5	3.6
9	5.0	5.6	2.5	9.4	13	17	29	58	27	10	5.3	3.4
10	6.2	5.4	2.5	9.6	13	25	33	53	23	10	5.1	3.2
11	6.7	5.2	2.6	9.8	13	22	42	50	22	9.8	5.2	3.2
12	5.4	5.1	2.8	11	12	20	50	52	21	9.8	4.9	3.1
13	5.3	5.0	2.7	60	12	19	53	64	20	9.6	4.9	3.2
14	5.9	4.9	2.7	86	11	18	55	80	23	9.1	4.6	3.4
15	5.7	4.8	2.6	62	11	17	50	95	20	8.9	4.5	3.6
16	5.3	4.7	2.6	139	11	18	53	105	20	8.7	4.4	3.6
17	5.3	4.7	2.9	113	11	21	54	100	21	8.6	4.5	3.5
18	5.1	4.8	3.4	62	11	19	50	98	19	8.3	4.6	3.6
19	5.1	4.7	5.5	45	10	19	46	88	18	8.0	4.6	4.2
20	5.1	4.5	10	36	10	19	41	76	17	8.2	4.4	5.8
21	5.1	4.2	35	31	10	21	38	60	17	8.6	4.3	5.9
22	5.1	4.1	46	27	10	23	40	49	16	8.0	4.1	5.1
23	5.1	4.0	33	25	10	26	42	43	17	7.8	4.2	5.6
24	5.1	4.1	56	23	11	27	43	44	17	7.5	4.7	7.9
25	5.1	4.2	37	22	15	30	44	45	17	7.2	4.8	7.4
26	5.1	4.3	24	20	16	32	49	41	16	7.1	4.5	5.1
27	5.1	3.6	20	18	16	30	55	38	15	7.1	4.3	4.5
28	5.3	3.2	19	18	17	27	58	36	14	6.9	3.8	4.1
29	5.3	3.4	16	17	------	25	54	33	14	6.8	3.7	4.2
30	5.2	3.6	15	17	------	24	50	34	14	6.6	3.7	3.8
31	5.1	------	14	16	------	23	------	35	------	6.4	4.0	------
TOTAL	164.4	155.4	383.7	956.4	357	670	1,215	1,808	633	285.0	149.8	126.5
MEAN	5.30	5.18	12.4	30.9	12.8	21.6	40.5	58.3	21.1	9.19	4.83	4.22
MAX	6.7	10	56	139	17	32	58	105	35	13	6.1	7.9
MIN	5.0	3.2	2.2	8.0	10	16	20	33	14	6.4	3.7	3.1
CFSM	.36	.35	.83	2.07	.86	1.45	2.72	3.91	1.42	.62	.32	.28
IN.	.41	.39	.96	2.39	.89	1.67	3.03	4.51	1.58	.71	.37	.32
AC-FT	326	308	761	1,900	708	1,330	2,410	3,590	1,260	565	297	251

CAL YR 1972 TOTAL 20,290.9 MEAN 55.4 MAX 396 MIN 2.2 CFSM 3.72 IN 50.66 AC-FT 40,250
WTR YR 1973 TOTAL 6,904.2 MEAN 18.9 MAX 139 MIN 2.2 CFSM 1.27 IN 17.24 AC-FT 13,690

PEAK DISCHARGE (BASE, 175 CFS).--Jan. 16 (2000) 194 cfs (3.18 ft).

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 (152 m) upstream from Lake Creek, 0.2 mi (0.3 km) upstream from Revenue Gulch, 1.2 mi (1.9 km) northwest of Wallace, and at mile 17.8 (28.6 km).

DRAINAGE AREA.--103 sq mi (267 sq km).

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

GAGE.--Nonrecording and crest-stage gages. Altitude of gage is 2,640 ft (805 m) (from topographic map).

AVERAGE DISCHARGE.--5 years, 260 cfs (7.36 cu m/s), 34.27 in/yr (870 mm/yr), 188,400 acre-ft/yr (232 cu hm/yr).

EXTREMES.--Current year: Maximum daily discharge, 806 cfs (28.8 cu m/s) May 16 (gage height, 5.75 ft or 1.75 m); minimum daily, 35 cfs (0.99 cu m/s) Sept. 14 (gage height, 2.93 ft or 0.89 m).
Period of record: Maximum discharge, 2,360 cfs (66.8 cu m/s) May 13, 1971 (gage height, 8.00 ft or 2.44 m); minimum daily, 35 cfs (0.99 cu m/s) Sept. 14, 1973 (gage height, 2.93 ft or 0.89 m).

REMARKS.--Records fair except those for winter period, which are poor. 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 June 4-9; stage-discharge relation affected by ice Dec. 4-17, Jan. 4-13)

Oct. 1 to Dec. 7		Dec. 8 to Sept. 30			
3.1	58	2.9	32.5	4.0	194
3.3	90	3.0	41	4.5	318
3.6	142	3.2	62	5.0	478
		3.5	102	6.0	910

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	54	50	79	83	96	104	272	310	128	56	49
2	68	61	58	79	78	96	100	277	318	132	56	47
3	66	58	48	75	82	86	99	340	264	113	59	45
4	63	71	41	47	79	82	100	349	247	104	59	44
5	61	82	39	68	66	84	120	340	233	105	58	43
6	61	82	39	62	67	75	125	368	238	98	59	43
7	60	68	40	58	61	74	125	391	312	104	55	43
8	60	66	41	66	59	72	125	467	287	88	55	44
9	61	63	43	72	56	72	135	407	296	88	53	42
10	74	60	45	74	73	84	147	352	264	90	55	39
11	77	58	48	80	67	99	185	312	226	88	56	39
12	66	57	50	94	64	84	230	304	218	84	54	39
13	61	56	53	220	64	83	285	326	207	82	54	36
14	61	55	56	277	61	83	290	474	259	88	50	35
15	61	54	60	207	60	80	267	693	225	78	48	36
16	61	54	66	500	55	80	277	806	201	74	47	38
17	58	52	77	365	59	83	296	801	203	74	48	38
18	56	53	100	254	58	84	245	796	172	72	49	46
19	58	55	170	196	51	88	235	675	152	69	50	46
20	58	54	149	160	54	102	209	594	170	73	48	59
21	56	53	190	145	54	96	212	475	162	77	47	54
22	56	53	242	132	56	96	209	384	158	72	46	46
23	63	52	200	125	55	118	203	384	150	66	49	59
24	58	51	350	118	54	116	214	407	150	62	53	73
25	56	50	250	107	69	123	230	423	156	68	54	59
26	55	58	132	104	68	138	257	420	152	64	51	49
27	58	54	121	96	73	135	321	326	144	62	49	46
28	60	51	112	93	75	138	356	321	138	60	46	46
29	56	50	96	93	------	118	277	298	121	58	45	47
30	54	49	88	83	------	121	272	290	132	59	44	44
31	50	------	88	78	------	121	------	315	------	58	47	------
TOTAL	1,881	1,734	3,142	4,207	1,801	3,007	6,250	13,387	6,265	2,538	1,600	1,374
MEAN	60.7	57.8	101	136	64.3	97.0	208	432	209	81.9	51.6	45.8
MAX	77	82	350	500	83	138	356	806	318	132	59	73
MIN	50	49	39	47	51	72	99	272	121	58	44	35
CFSM	.59	.56	.98	1.32	.62	.94	2.02	4.19	2.03	.80	.50	.44
IN.	.68	.63	1.13	1.52	.65	1.09	2.26	4.83	2.26	.92	.58	.50
AC-FT	3,730	3,440	6,230	8,340	3,570	5,960	12,400	26,550	12,430	5,030	3,170	2,730

CAL YR 1972 TOTAL 124,374 MEAN 340 MAX 2,080 MIN 36 CFSM 3.30 IN 44.92 AC-FT 246,700
WTR YR 1973 TOTAL 47,186 MEAN 129 MAX 806 MIN 35 CFSM 1.25 IN 17.04 AC-FT 93,590

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 mi (0.6 km) upstream from West Fork, 1.2 mi (1.9 km) downstream from East Fork, 3.3 mi (5.3 km) upstream from mouth, and 4 mi (6.4 km) southeast of Kellogg.

DRAINAGE AREA.--20.9 sq mi (54.1 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft or 853 m (from topographic map). No previous records obtained at this site.

EXTREMES.--Current year: Maximum discharge, 168 cfs (4.76 cu m/s) Jan. 16 (gage height, 5.50 ft or 1.68 m); minimum, 3.6 cfs (0.10 cu m/s) Dec. 4 (gage height, 3.93 ft or 1.20 m).
Period of record: Maximum discharge, 966 cfs (27.4 cu m/s) May 13, 1971 (gage height, 7.56 ft or 2.30 m); maximum gage height, 7.58 ft (2.31 m) May 15, 1972; minimum, 3.6 cfs (0.10 cu m/s) Dec. 4, 1973 (gage height, 3.93 ft or 1.20 m).

REMARKS.--Records good.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 5-14, Jan. 5-10)

3.9	2.6	4.6	33
4.0	4.3	4.9	65
4.1	6.6	5.2	108
4.2	9.7	5.5	166
4.4	19.2		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	8.2	6.4	16	19	33	27	68	56	22	13	8.5
2	11	10	8.8	15	19	32	25	69	56	21	12	8.5
3	11	10	5.0	13	18	27	24	71	50	21	12	8.2
4	11	14	4.3	13	19	25	28	75	44	20	11	8.1
5	10	16	4.0	13	17	22	35	77	44	19	11	7.8
6	10	11	4.5	12	16	20	37	78	44	19	11	7.8
7	9.7	9.1	5.0	10	14	19	32	82	47	19	11	7.9
8	9.7	8.8	5.5	12	13	19	32	86	47	18	11	8.1
9	9.7	8.5	5.6	12	16	20	37	83	46	18	11	7.8
10	11	8.5	5.7	13	17	34	42	79	42	18	11	7.8
11	12	8.2	5.8	14	15	32	53	73	39	17	11	7.8
12	11	8.2	5.9	17	14	29	64	71	39	17	11	7.5
13	11	7.8	6.0	58	13	26	69	78	38	17	10	7.8
14	11	7.5	6.2	95	13	23	73	105	37	17	10	7.8
15	11	7.5	6.6	68	13	21	70	130	35	17	10	7.8
16	10	7.5	6.9	126	13	22	72	145	34	16	10	7.8
17	9.7	7.5	7.2	113	12	29	75	150	35	16	10	7.8
18	9.7	7.5	8.5	82	12	25	70	145	32	15	9.7	7.8
19	9.4	7.8	18	68	11	24	66	125	31	15	9.7	8.1
20	9.4	7.5	16	57	11	24	62	105	29	15	9.6	9.7
21	9.4	6.6	65	48	11	26	59	88	28	15	9.1	10
22	9.4	6.4	63	42	11	28	61	70	28	15	9.1	9.6
23	9.7	6.6	60	38	11	30	64	66	27	14	9.1	9.8
24	9.1	6.6	72	35	12	33	65	70	27	14	9.1	15
25	9.1	6.9	42	32	19	38	65	73	28	14	9.1	13
26	9.1	7.8	31	28	21	43	69	75	27	13	8.8	9.8
27	8.8	6.6	28	24	22	39	76	65	25	13	8.8	8.8
28	9.1	5.9	26	24	24	35	79	55	24	13	8.7	8.6
29	8.5	6.1	22	23	------	32	75	53	23	13	8.5	8.5
30	8.5	6.1	20	23	------	31	70	52	22	13	8.5	8.2
31	8.2	------	18	22	------	29	------	54	------	13	8.5	------
TOTAL	307.2	246.7	588.9	1,166	426	870	1,676	2,616	1,084	507	312.3	261.7
MEAN	9.91	8.22	19.0	37.6	15.2	28.1	55.9	84.4	36.1	16.4	10.1	8.72
MAX	12	16	72	126	24	43	79	150	56	22	13	15
MIN	8.2	5.9	4.0	10	11	19	24	52	22	13	8.5	7.5
CFSM	.47	.39	.91	1.80	.73	1.34	2.67	4.04	1.73	.78	.48	.42
IN.	.55	.44	1.05	2.08	.76	1.55	2.98	4.66	1.93	.90	.56	.47
AC-FT	609	489	1,170	2,310	845	1,730	3,320	5,190	2,150	1,010	619	519

CAL YR 1972 TOTAL 28,406.7 MEAN 77.6 MAX 620 MIN 4.0 CFSM 3.71 IN 50.56 AC-FT 56,340
WTR YR 1973 TOTAL 10,061.8 MEAN 27.6 MAX 150 MIN 4.0 CFSM 1.32 IN 17.91 AC-FT 19,960

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 (149 m) downstream from county road bridge, 0.2 mi (0.3 km) downstream from Government Gulch, 0.6 mi (1.0 km) northwest of Smelterville Post Office, and at mile 5 (8.0 km).

DRAINAGE AREA.--202 sq mi (523 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,220 ft (677 m) (from topographic map).

AVERAGE DISCHARGE.--6 years (1967-73), 457 cfs (12.9 cu m/s), 30.72 in/yr (780 mm/yr), 331,100 acre-ft/yr (408 cu hm/yr).

EXTREMES.--Current year: Maximum daily discharge, 1,700 cfs (48.1 cu m/s) May 16; minimum, 50 cfs (1.42 cu m/s) Dec. 8 (gage height, 2.39 ft or 0.728 m).
Period of record: Maximum discharge, 4,060 cfs (115 cu m/s) Jan. 31, 1971 (gage height, 7.98 ft or 2.432 m); minimum, 50 cfs (1.42 cu m/s) Dec. 8, 1973 (gage height, 2.39 ft or 0.728 m).

REMARKS.--Records fair except December, January, April, and May, which are poor. Records of chemical analyses for the water year 1973 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. 25-30)

2.4	64	4.0	540
2.6	98	4.5	795
3.0	185	5.0	1,120
3.5	337	6.0	1,940

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	106	101	132	175	260	248	560	540	220	141	94
2	124	115	120	126	174	250	236	570	490	217	143	93
3	119	117	99	120	171	236	231	700	450	207	139	93
4	119	137	80	105	177	223	230	710	400	204	139	89
5	115	170	70	100	167	217	260	680	350	207	141	85
6	117	143	68	95	158	201	270	780	355	204	146	82
7	117	119	66	90	140	192	270	860	396	201	139	83
8	115	115	64	100	138	188	270	950	407	201	137	85
9	113	112	74	110	149	193	290	820	436	201	132	86
10	119	108	78	120	161	246	320	720	388	196	128	87
11	139	106	80	138	155	271	400	640	362	193	126	83
12	126	105	84	155	152	259	520	620	341	193	126	83
13	117	104	87	450	146	256	580	680	330	193	121	83
14	117	103	88	620	145	245	600	1,040	348	193	119	82
15	112	103	84	580	143	234	560	1,500	333	190	115	82
16	112	104	90	1,100	140	231	580	1,700	319	188	115	85
17	108	100	96	900	142	271	610	1,670	323	183	111	87
18	107	103	140	700	141	251	520	1,600	308	183	113	88
19	107	106	230	450	137	248	490	1,420	288	180	113	94
20	107	105	210	350	136	251	440	1,120	275	183	106	114
21	106	103	350	300	133	259	410	920	265	185	100	111
22	107	103	480	270	134	259	390	780	256	183	96	108
23	109	101	450	260	136	271	380	690	256	178	94	113
24	107	101	620	256	138	281	420	670	259	173	98	146
25	106	101	420	251	158	294	480	660	262	171	100	161
26	111	117	270	228	179	308	580	620	259	171	100	130
27	109	109	210	201	179	308	680	590	242	168	98	114
28	112	101	180	204	190	291	740	560	231	163	96	107
29	109	100	160	198	------	285	570	540	226	159	91	102
30	109	99	150	196	------	271	560	520	220	150	93	101
31	108	------	140	186	------	271	------	530	------	143	93	------
TOTAL	3,531	3,316	5,439	9,091	4,294	7,821	13,135	26,420	9,915	5,781	3,609	2,951
MEAN	114	111	175	293	153	252	438	852	331	186	116	98.4
MAX	139	170	620	1,100	190	308	740	1,700	540	220	146	161
MIN	106	99	64	90	133	188	230	520	220	143	91	82
CFSM	.56	.55	.87	1.45	.76	1.25	2.17	4.22	1.64	.92	.57	.49
IN.	.65	.61	1.00	1.67	.79	1.44	2.42	4.87	1.83	1.06	.66	.54
AC-FT	7,000	6,580	10,790	18,030	8,520	15,510	26,050	52,400	19,670	11,470	7,160	5,850

CAL YR 1972 TOTAL 234,209 MEAN 640 MAX 3,900 MIN 64 CFSM 3.17 IN 43.13 AC-FT 464,600
WTR YR 1973 TOTAL 95,303 MEAN 261 MAX 1,700 MIN 64 CFSM 1.29 IN 17.55 AC-FT 189,000

PEAK DISCHARGE (BASE, 1,600 CFS).--May 16 (unknown) 1,700 cfs (unknown).

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 (46 m) southwest of Chicago, Milwaukee, St. Paul, and Pacific Railroad station at Calder, and at mile 42.9 (69 km).

DRAINAGE AREA.--1,030 sq mi (2,668 sq km), 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 (662 m) above mean sea level, or 2,175 ft (663 m) 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 mi (4 km) downstream at different datum. July 13 to Dec. 21, 1920, nonrecording gage at present site and at datum 60 ft (18.3 m) lower. Dec. 22, 1920, to Sept. 30, 1966, water-stage recorder at present site at datum 60 ft (18.3 m) lower. Oct. 1, 1966, to Aug. 14, 1972, water-stage recorder at present site at datum 15 ft (5 m) lower.

AVERAGE DISCHARGE.--54 years, 2,360 cfs (66.8 cu m/s), 31.10 in/yr (790 mm/yr), 1,710,000 acre-ft/yr (2,108 cu hm/yr); 15-year base period (1952-67), 2,480 cfs (70.2 cu m/s).

EXTREMES.--Current year: Maximum discharge, 6,500 cfs (184 cu m/s) May 18 (gage height, 9.19 ft or 2.80 m); maximum gage height, 9.88 ft (3.01 m) Jan. 13 (ice jam); minimum discharge, 191 cfs (5.4 cu m/s) Dec. 4 (gage height, 4.32 ft or 1.32 m).

Period of record: Maximum discharge, 53,000 cfs (1,500 cu m/s) Dec. 23, 1933, computed on basis of slope between gages downstream; maximum gage height, 18.1 ft (5.5 m) Apr. 18, 1938, from floodmark, present datum; minimum discharge, 91 cfs (2.6 cu m/s) Nov. 27, 1952; minimum gage height, 3.43 ft (1.05 m) 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. 5-18, Jan. 5-11, Feb. 9-10)

4.3	181	6.5	1,870
4.6	325	7.5	3,300
5.1	590	9.1	6,310
5.6	920		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	590	404	436	787	822	1,220	1,050	2,820	2,940	1,140	508	383
2	490	491	546	752	836	1,350	1,000	2,820	2,840	1,100	497	373
3	450	541	409	697	773	1,120	984	3,010	2,670	1,050	491	363
4	442	579	277	618	773	992	1,040	3,280	2,440	992	486	354
5	436	773	220	590	717	936	1,240	3,270	2,330	960	475	344
6	436	645	210	580	724	878	1,420	3,420	2,300	928	497	339
7	431	530	210	580	634	857	1,300	3,620	2,580	913	486	339
8	431	486	210	570	585	836	1,310	4,100	2,570	878	469	349
9	425	464	220	600	620	857	1,500	3,880	2,770	850	458	344
10	541	442	240	700	670	976	1,700	3,610	2,460	822	453	339
11	724	425	250	800	717	1,070	2,120	3,300	2,220	794	447	335
12	585	415	270	960	704	968	2,550	3,140	2,090	766	442	325
13	497	399	290	1,810	691	944	2,820	3,190	2,010	752	431	315
14	535	394	310	3,490	634	892	3,060	3,850	2,210	731	420	315
15	491	409	340	2,800	612	843	2,850	4,860	2,250	710	409	335
16	453	415	400	3,660	612	836	2,790	5,850	2,010	697	404	335
17	442	399	500	4,750	607	1,040	3,000	6,270	2,100	678	404	330
18	431	394	900	3,200	585	952	2,680	6,180	1,970	665	399	335
19	420	420	1,350	2,430	585	920	2,440	5,950	1,830	645	399	359
20	415	409	1,910	1,920	579	944	2,270	5,480	1,720	634	394	475
21	409	389	3,040	1,660	557	1,000	2,170	4,660	1,630	645	383	579
22	409	349	3,970	1,380	574	1,110	2,260	4,170	1,600	629	378	535
23	404	287	2,710	1,260	585	1,180	2,440	3,900	1,560	612	378	491
24	415	359	3,060	1,250	596	1,270	2,430	3,950	1,580	596	389	618
25	409	415	2,070	1,160	634	1,370	2,460	4,170	1,510	579	415	704
26	431	453	1,500	1,010	731	1,580	2,640	3,670	1,570	563	394	596
27	480	420	1,260	878	773	1,490	3,160	3,270	1,420	557	383	464
28	458	359	1,220	936	857	1,320	3,560	3,060	1,320	546	378	399
29	431	330	1,050	936	------	1,200	3,250	2,890	1,250	530	368	373
30	399	436	913	944	------	1,150	3,030	2,830	1,190	519	363	359
31	378	------	857	906	------	1,110	------	2,880	------	513	359	------
TOTAL	14,288	13,231	31,148	44,614	18,787	33,211	66,524	121,350	60,940	22,994	13,157	12,104
MEAN	461	441	1,005	1,439	671	1,071	2,217	3,915	2,031	742	424	403
MAX	724	773	3,970	4,750	857	1,580	3,560	6,270	2,940	1,140	508	704
MIN	378	287	210	570	557	836	984	2,820	1,190	513	359	315
CFSM	.45	.43	.98	1.40	.65	1.04	2.15	3.80	1.97	.72	.41	.39
IN.	.52	.48	1.12	1.61	.68	1.20	2.40	4.38	2.20	.83	.48	.44
AC-FT	28,340	26,240	61,780	88,490	37,260	65,870	132,000	240,700	120,900	45,610	26,100	24,010

CAL YR 1972 TOTAL 1,273,122 MEAN 3,478 MAX 20,600 MIN 210 CFSM 3.38 IN 45.98 AC-FT 2,525,000
WTR YR 1973 TOTAL 452,348 MEAN 1,239 MAX 6,270 MIN 210 CFSM 1.20 IN 16.34 AC-FT 897,200

PEAK DISCHARGE (BASE, 8,500 CFS).--No peaks above base.

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 (137 m) upstream from bridge on U.S. Highway 95 Alternate, 0.3 mi (0.5 km) upstream from Santa Creek, 2.7 mi (4.3 km) northwest of Santa, and at mile 24.6 (39.6 km).

DRAINAGE AREA.--275 sq mi (712 sq km).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,574.56 ft (784.726 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 345 cfs (97.7 cu m/s), 17.04 in/yr (433 mm/yr), 250,000 acre-ft/yr (308 cu hm/yr).

EXTREMES.--Current year: Maximum daily discharge, 1,200 cfs (308 cu hm) Jan. 16; maximum gage height, 7.70 ft (2.35 m) Dec. 21; minimum, 33 cfs (80.8 cu dm) Aug. 16, 22-24; minimum gage height, 3.83 ft (1.17 m) Sept. 13. Period of record: Maximum discharge, 8,000 cfs (227 cu m/s) Feb. 20, 1968 (gage height, 9.90 ft or 3.02 m); minimum, 23 cfs (0.651 cu m/s) Nov. 26, 1967 (gage height, 3.42 ft or 1.04 m).

REMARKS.--Records good except those for November to January, which are fair.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Nov. 24 to Dec. 20, Jan. 23-26, Jan. 28 to Feb. 7)

3.8	29	5.0	245
4.0	44	6.0	710
4.5	114	7.0	1,570

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	79	95	165	140	404	242	236	180	79	39	39
2	84	110	120	150	130	504	233	226	175	76	40	40
3	72	142	120	140	125	348	230	230	177	74	39	39
4	73	152	105	130	115	294	230	272	167	70	38	38
5	72	205	90	120	110	255	252	283	152	68	41	36
6	70	152	84	105	100	233	265	259	142	67	42	35
7	69	116	79	98	95	230	269	248	147	67	43	35
8	69	104	76	100	90	226	272	336	149	65	40	37
9	68	97	77	110	112	230	272	395	164	63	38	38
10	72	91	78	120	133	382	272	348	149	62	38	38
11	147	90	80	140	137	460	272	386	133	59	39	35
12	110	86	83	200	137	350	286	328	127	59	40	35
13	110	84	88	360	133	300	309	301	124	57	38	34
14	104	82	98	900	129	270	324	286	129	56	36	35
15	91	82	110	800	118	250	298	283	142	57	35	35
16	82	84	130	1,200	114	240	320	294	127	55	35	36
17	79	81	155	980	114	270	515	301	142	53	35	36
18	77	82	190	750	114	250	427	305	162	52	35	37
19	76	91	290	500	110	245	360	298	137	51	37	42
20	76	93	615	380	110	250	316	283	120	52	37	57
21	74	90	920	330	104	255	294	269	110	54	35	95
22	74	74	752	290	106	260	279	242	103	55	34	74
23	73	70	633	230	116	275	286	223	99	52	33	73
24	72	72	690	200	112	290	276	220	99	49	35	106
25	72	79	480	180	131	309	265	344	101	48	40	118
26	74	84	410	155	172	332	259	269	114	46	42	81
27	93	82	320	140	188	298	272	236	103	45	39	60
28	97	73	280	145	208	265	269	220	91	43	38	54
29	97	78	240	155	------	245	259	205	84	43	36	52
30	90	84	210	155	------	236	248	191	81	42	35	49
31	82	------	190	145	------	236	------	182	------	41	37	------
TOTAL	2,598	2,889	7,888	9,573	3,503	8,992	8,671	8,499	3,930	1,760	1,169	1,519
MEAN	83.8	96.3	254	309	125	290	289	274	131	56.8	37.7	50.6
MAX	147	205	920	1,200	208	504	515	395	180	79	43	118
MIN	68	70	76	98	90	226	230	182	81	41	33	34
CFSM	.30	.35	.92	1.12	.45	1.05	1.05	1.00	.48	.21	.14	.18
IN	.35	.39	1.07	1.29	.47	1.22	1.17	1.15	.53	.24	.16	.21
AC-FT	5,150	5,730	15,650	18,990	6,950	17,840	17,200	16,860	7,800	3,490	2,320	3,010

C YR 1972 TOTAL 237,788 MEAN 650 MAX 5,120 MIN 61 CFSM 2.36 IN 32.17 AC-FT 471,700
WTR YR 1973 TOTAL 60,991 MEAN 167 MAX 1,200 MIN 33 CFSM .61 IN 8.25 AC-FT 121,000

PEAK DISCHARGE (BASE, 1,500 CFS).--No peaks above base.

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 (152 m) southwest of south end of Eleventh Street, Coeur d'Alene, and 113.1 mi (182 km) upstream from mouth of Spokane River.

DRAINAGE AREA.--3,700 sq mi (9,580 sq km), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 2,100.00 ft (640.080 m) above mean sea level, referred to originally accepted elevation (2,157.40 ft or 657.575 m) 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 (639.166 m) 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 (5.70 m) 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 (244 m) southeast of railroad station and 1 mi (1.6 km) northwest of present site at datum 19.75 ft (6 m) higher. Dec. 23, 1930, to Feb. 9, 1931, nonrecording gage at present site and datum.

EXTREMES.--Current year: Maximum contents, 240,400 acre-ft (296 cu hm) June 10 (elevation, 2,128.04 ft or 648.627 m); minimum, 64,200 acre-ft (79.2 cu hm) Feb. 26 (elevation, 2,122.39 ft or 646.904 m).
Period of record: Maximum contents, 834,900 acre-ft (1,029 cu hm) Dec. 25, 1933 (elevation, 2,139.05 ft or 651.982 m); minimum, 2,700 acre-ft (3.3 cu hm) below zero of contents table Oct. 10-12, 1904, Sept. 24, 25, 1905, Oct. 14 to Nov. 3, 1906 (elevation, 2,119.9 ft or 646.15 m).
Maximum contents known prior to 1903, 753,300 acre-ft (928.8 cu hm) May 31, 1894 (elevation, 2,137.6 ft or 651.54 m, 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 (646.18 m). Capacity of lake between elevations 2,120 (646.2 m) and 2,140 ft (652.3 m), 889,000 acre-ft (1,100) cu hm).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.95	25.86	25.23	25.87	25.93	22.70	23.57	24.78	27.89	27.94	27.96	27.40
2	26.93	25.83	25.17	25.78	25.72	22.90	23.52	24.76	27.93	27.92	27.97	27.40
3	26.87	25.85	25.12	25.64	25.50	23.04	23.46	24.77	27.94	27.94	27.97	27.37
4	26.81	25.89	25.07	25.49	25.33	23.13	23.41	24.87	27.95	27.95	27.97	27.33
5	26.77	25.89	24.90	25.34	25.12	23.16	23.37	24.92	27.95	27.92	27.94	27.26
6	26.78	25.88	24.71	25.19	24.92	23.18	23.35	24.93	27.97	27.91	27.91	27.22
7	26.72	25.88	24.54	25.00	24.74	23.17	23.36	24.98	27.97	27.89	27.93	27.12
8	26.68	25.85	24.37	24.80	24.55	23.17	23.36	25.18	27.99	27.88	27.93	27.04
9	26.64	25.83	24.17	24.62	24.34	23.18	23.36	25.35	28.02	27.88	27.92	26.96
10	26.61	25.79	23.97	24.42	24.22	23.27	23.37	25.49	28.00	27.89	27.93	26.90
11	26.59	25.77	23.79	24.30	24.06	23.37	23.42	25.60	27.98	27.91	27.92	26.84
12	26.54	25.72	23.60	24.20	23.91	23.43	23.52	25.70	27.96	27.90	27.93	26.74
13	26.52	25.69	23.41	24.39	23.74	23.46	23.65	25.79	27.96	27.91	27.93	26.60
14	26.50	25.65	23.32	24.72	23.58	23.46	23.83	25.93	27.96	27.93	27.95	26.55
15	26.47	25.61	23.31	25.07	23.43	23.42	23.99	26.14	27.94	27.94	27.93	26.56
16	26.44	25.58	23.38	25.57	23.28	23.41	24.19	26.41	27.92	27.93	27.92	26.58
17	26.17	25.53	23.49	26.34	23.15	23.45	24.41	26.68	27.92	27.90	27.86	26.57
18	26.13	25.51	23.61	26.96	23.03	23.46	24.53	26.93	27.90	27.89	27.81	26.58
19	26.33	25.47	23.71	27.25	22.90	23.45	24.58	27.16	27.88	27.90	27.77	26.55
20	26.28	25.43	23.86	27.35	22.79	23.46	24.58	27.29	27.87	27.89	27.75	26.58
21	26.24	25.40	24.12	27.36	22.67	23.47	24.58	27.39	27.88	27.90	27.74	26.54
22	26.22	25.36	24.63	27.30	22.58	23.49	24.54	27.46	27.91	27.89	27.71	26.52
23	26.17	25.36	25.05	27.22	22.50	23.51	24.51	27.53	27.93	27.89	27.68	26.51
24	26.13	25.32	25.48	27.12	22.43	23.53	24.51	27.65	27.93	27.91	27.65	26.48
25	26.08	25.34	25.79	27.01	22.41	23.58	24.50	27.72	27.97	27.92	27.61	26.46
26	26.04	25.33	25.89	26.91	22.42	23.62	24.51	27.76	27.99	27.93	27.60	26.40
27	26.00	25.30	25.97	26.75	22.43	23.66	24.61	27.78	28.01	27.92	27.59	26.34
28	25.99	25.27	26.01	26.58	22.49	23.68	24.67	27.78	28.01	27.93	27.54	26.28
29	25.95	25.25	26.04	26.42	------	23.67	24.71	27.78	27.99	27.95	27.50	26.21
30	25.90	25.23	26.01	26.26	------	23.64	24.79	27.83	27.95	27.96	27.47	26.13
31	25.86	------	25.95	26.12	------	23.61	------	27.86	------	27.97	27.43	------
MEAN	26.40	25.59	24.63	25.91	23.72	23.38	24.03	26.39	27.95	27.92	27.80	26.73
MAX	26.95	25.89	26.04	27.36	25.93	23.68	24.79	27.86	28.02	27.97	27.97	27.40
MIN	25.86	25.23	23.31	24.20	22.41	22.70	23.35	24.76	27.87	27.88	27.43	26.13
(†)	159,000	141,500	161,500	166,400	66,900	97,300	129,500	231,800	236,100	237,100	212,400	166,700
(‡)	-35,900	-17,500	+20,000	+4,900	-99,500	+30,400	+32,200	+102,300	+4,300	+1,000	-24,700	-45,700

CAL YR 1972..... ‡ +86,700
WTR YR 1973..... ‡ -28,200

† 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 mi (0.5 km) downstream from confluence of East Fork and North Fork, and 7.5 mi (12.1 km) northeast of Hayden Lake Post Office.

DRAINAGE AREA.--22.0 sq mi (570.0 sq km).

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 (722 m) (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 (61 m) downstream at datum 0.98 ft (0.30 m) 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 (0.12 m) higher.

AVERAGE DISCHARGE.--14 years (1948-53, 1958-59, 1965-73), 30.4 cfs (0.861 cu m/s), 18.77 in/yr (477 mm/yr), 22,020 acre-ft/yr (27.2 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 51 cfs (1.44 cu m/s) Mar. 2 (gage height, 3.01 ft or 0.92 m); minimum, 1.9 cfs (0.054 cu m/s) Dec. 8 (gage height, 2.22 ft or 0.68 m); minimum gage height, 2.19 ft (0.688 m) Dec. 12.

Period of record: Maximum discharge, 790 cfs (22.4 cu m/s) Dec. 23, 1964 (gage height, 4.56 ft or 1.39 m, present site and datum), from rating curve extended above 270 cfs (7.65 cu m/s) on basis of slope-area measurement; maximum gage height, 4.93 ft (1.50 m) Feb. 11, 1951 (ice jam), site and datum then in use; minimum discharge recorded, 1.9 cfs (0.054 cu m/s) Dec. 8, 1972 (gage height, 2.22 ft or 0.68 m); minimum gage height, 2.19 ft (0.668 m) Dec. 12, 1972.

REMARKS.--Records good except those for winter period, which are fair. Records of chemical analyses for the water year 1973 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. 1 to Dec. 2, Dec. 13 to Jan. 21, Mar. 28 to Apr. 11, May 14 to Sept. 30; stage-discharge relation affected by ice Dec. 10-15, Jan. 3-11, 25-21, Feb. 5-11)

2.2	1.9	2.6	10.0
2.3	2.9	2.7	16.5
2.4	4.3	2.9	39
2.5	6.4	3.1	74

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	4.9	5.0	8.2	9.5	46	21	21	13	6.8	4.3	3.7
2	5.1	6.3	6.4	8.0	9.2	45	19	20	13	6.8	4.3	4.2
3	5.1	5.8	5.2	7.6	9.1	41	18	20	13	6.4	4.3	6.8
4	5.1	8.4	4.5	7.0	8.8	35	19	22	12	6.4	4.2	6.3
5	4.9	9.5	2.5	6.6	8.5	32	20	21	11	6.2	4.2	6.6
6	4.9	6.3	2.5	6.1	8.0	29	19	21	11	6.2	4.3	6.7
7	4.9	5.5	2.5	5.8	7.4	27	17	20	12	6.0	4.2	6.9
8	4.9	5.2	2.3	5.9	7.4	25	17	27	12	6.0	3.9	7.3
9	5.0	5.0	2.2	6.0	7.5	30	17	25	11	5.8	3.9	7.2
10	6.8	4.9	2.3	6.3	7.6	41	17	24	11	5.8	3.9	7.1
11	6.4	4.9	2.4	6.7	7.5	38	18	22	10	5.6	3.9	6.7
12	5.4	4.7	2.5	7.2	7.2	33	20	21	9.6	5.4	3.7	6.5
13	5.1	4.7	2.7	16	6.6	31	21	20	9.6	5.1	3.9	6.6
14	5.0	4.7	2.9	39	6.2	28	21	20	9.6	5.1	3.7	6.5
15	4.9	4.7	3.2	36	6.2	26	21	20	9.3	5.1	3.5	6.5
16	4.9	4.5	3.6	24	5.6	26	27	20	9.6	5.1	3.3	6.5
17	4.9	4.5	4.5	20	5.9	30	33	20	10	5.1	3.0	6.5
18	4.9	4.6	6.8	11	5.7	27	30	20	8.9	4.9	3.2	7.0
19	4.9	5.3	9.6	9.3	5.5	26	28	19	8.6	4.9	3.0	8.8
20	4.9	4.9	9.5	7.9	5.2	27	26	18	8.2	4.9	2.9	11
21	4.8	4.7	15	7.5	5.8	33	25	17	8.2	4.9	2.8	8.8
22	4.7	4.5	13	6.5	5.9	33	25	16	7.5	4.9	2.8	8.0
23	4.7	4.7	14	6.2	5.4	32	24	16	7.5	4.7	2.7	10
24	4.7	4.8	16	6.2	5.3	30	24	17	7.5	4.7	3.1	12
25	4.9	4.8	12	6.3	10	31	24	20	9.3	4.7	3.1	9.0
26	5.3	6.0	10	6.5	11	30	23	16	10	4.7	3.0	8.0
27	4.8	5.2	11	6.7	15	27	24	15	7.8	4.5	2.9	7.5
28	5.1	4.5	11	6.9	21	25	24	15	7.5	4.5	2.7	7.2
29	4.9	4.4	10	7.2	------	23	23	14	7.1	4.5	2.6	7.1
30	4.7	4.4	9.2	7.5	------	22	22	14	7.1	4.3	2.6	7.1
31	4.7	------	8.9	8.4	------	22	------	13	------	4.3	3.2	------
TOTAL	156.4	157.3	213.2	320.5	224.0	951	667	594	291.9	164.3	107.1	220.1
MEAN	5.05	5.24	6.88	10.3	8.00	30.7	22.2	19.2	9.73	5.30	3.45	7.34
MAX	6.8	9.5	16	39	21	46	33	27	13	6.8	4.3	12
MIN	4.7	4.4	2.2	5.8	5.2	22	17	13	7.1	4.3	2.6	3.7
CFSM	.23	.24	.31	.47	.36	1.40	1.01	.87	.44	.24	.16	.33
IN.	.26	.27	.36	.54	.38	1.61	1.13	1.00	.49	.28	.18	.37
AC-FT	310	312	423	636	444	1,890	1,320	1,180	579	326	212	437

CAL YR 1972 TOTAL 13,832.6 MEAN 37.8 MAX 582 MIN 2.2 CFSM 1.72 IN 23.39 AC-FT 27,440
WTR YR 1973 TOTAL 4,066.8 MEAN 11.1 MAX 46 MIN 2.2 CFSM .50 IN 6.88 AC-FT 8,070

PEAK DISCHARGE (BASE, 200 CFS).--No peaks above base.

12417000 Hayden Lake at Hayden Lake, Idaho

LOCATION.--Lat 47°46'02", long 116°45'12", 300 ft (91 m) north of center of sec.18, T.51 N., R.3 W., Kootenai County, at Avondale pumping plant, 1.6 mi (2.6 km) northeast of Hayden Lake Post Office.

DRAINAGE AREA.--62.3 sq mi (161 sq km).

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

GAGE.--Nonrecording gage read once daily. Datum of gage is 2,200.21 ft (670.624 m) above mean sea level. Prior to Oct. 1, 1925, at datum 30.35 ft (9.251 m) higher. Oct. 1, 1925, to Mar. 26, 1931, at datum 21.60 ft (6.584 m) higher.

EXTREMES.--Current year: Maximum gage height observed, 35.80 ft (10.912 m) Apr. 20-28, May 9, 10; minimum observed, 30.98 ft (9.443 m) Sept. 18, 30.
Period of record: Maximum gage height observed, 42.46 ft (12.942 m) Apr. 22, 1956; minimum observed, 19.38 ft (5.907 m) 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, FOR STATISTIC 00004, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35.54	35.02	34.76	34.84	35.26	35.20	35.72	35.78	35.40	34.58	33.16	31.64
2	35.52	35.00	34.74	34.84	35.26	35.26	35.74	35.76	35.38	34.54	33.10	31.60
3	35.50	35.00	34.72	34.82	35.26	35.30	35.74	35.76	35.34	34.48	33.04	31.56
4	35.48	35.02	34.70	34.82	35.26	35.30	35.74	35.76	35.32	34.42	33.00	31.54
5	35.46	35.04	34.66	34.82	35.26	35.32	35.74	35.78	35.30	34.38	32.96	31.50
6	35.44	35.04	34.64	34.80	35.24	35.32	35.74	35.78	35.26	34.34	32.92	31.46
7	35.42	35.02	34.60	34.80	35.24	35.32	35.74	35.78	35.22	34.30	32.86	31.42
8	35.40	35.00	34.60	34.78	35.22	35.34	35.74	35.76	35.20	34.26	32.80	31.38
9	35.38	35.00	34.58	34.76	35.22	35.38	35.72	35.80	35.20	34.22	32.74	31.34
10	35.36	35.00	34.56	34.72	35.22	35.40	35.72	35.80	35.16	34.18	32.68	31.32
11	35.40	34.98	34.52	34.74	35.20	35.44	35.72	35.78	35.12	34.16	32.64	31.28
12	35.38	34.96	34.50	34.78	35.20	35.46	35.72	35.78	35.10	34.12	32.62	31.24
13	35.36	34.94	34.50	34.84	35.20	35.50	35.72	35.76	35.06	34.08	32.58	31.20
14	35.34	34.92	34.48	34.90	35.20	35.52	35.72	35.76	35.00	34.02	32.52	31.16
15	35.32	34.90	34.48	34.94	35.20	35.56	35.72	35.74	34.98	33.98	32.46	31.12
16	35.28	34.88	34.46	35.02	35.20	35.56	35.74	35.72	34.94	33.94	32.42	31.06
17	35.26	34.86	34.46	35.10	35.20	35.58	35.74	35.70	34.94	33.88	32.34	31.02
18	35.26	34.86	34.50	35.18	35.18	35.60	35.78	35.68	34.92	33.82	32.28	30.98
19	35.24	34.84	34.52	35.22	35.18	35.60	35.78	35.66	34.90	33.76	32.24	31.02
20	35.22	34.84	34.54	35.24	35.16	35.62	35.80	35.62	34.86	33.72	32.20	31.06
21	35.20	34.82	34.56	35.24	35.16	35.62	35.80	35.60	34.84	33.68	32.16	31.06
22	35.18	34.82	34.60	35.26	35.16	35.64	35.80	35.56	34.80	33.64	32.10	31.04
23	35.16	34.80	34.64	35.26	35.14	35.66	35.80	35.54	34.76	33.60	32.06	31.06
24	35.16	34.80	34.74	35.26	35.14	35.68	35.80	35.50	34.72	33.54	32.00	31.06
25	35.14	34.80	34.76	35.28	35.14	35.70	35.80	35.54	34.72	33.50	31.96	31.06
26	35.12	34.80	34.76	35.28	35.14	35.70	35.80	35.54	34.72	33.44	31.92	31.04
27	35.10	34.82	34.82	35.28	35.14	35.70	35.80	35.52	34.70	33.40	31.88	31.04
28	35.08	34.80	34.86	35.26	35.14	35.70	35.80	35.50	34.68	33.36	31.82	31.02
29	35.08	34.78	34.86	35.26	------	35.70	35.78	35.48	34.66	33.30	31.76	31.00
30	35.06	34.76	34.86	35.26	------	35.72	35.78	35.44	34.62	33.26	31.70	30.98
31	35.04	------	34.84	35.26	------	35.72	------	35.40	------	33.22	31.66	------
MEAN	35.29	34.90	34.64	35.03	35.20	35.52	35.76	35.66	34.99	33.91	32.41	31.21
MAX	35.54	35.04	34.86	35.28	35.26	35.72	35.80	35.80	35.40	34.58	33.16	31.64
MIN	35.04	34.76	34.46	34.72	35.14	35.20	35.72	35.40	34.62	33.22	31.66	30.98

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 (248 m) downstream from outlet of discharge pipe, 0.6 mi (1.0 m) north of pumping plant, and 0.8 mi (1.2 km) 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 (692.512 m) above mean sea level (Bureau of Reclamation bench mark). Prior to Oct. 5, 1967, water-stage recorder at site 365 ft (111 m) upstream at datum 1.00 ft (0.305 m) higher.

EXTREMES.--Period of record: Maximum daily discharge, 66 cfs (1.87 cu m/s) 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 or 1,210 sq hm).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	48	50	51	51
2								0	48	50	51	51
3								0	48	50	51	50
4								1.0	47	50	50	51
5								0	47	51	50	51
6								0	46	51	50	51
7								3.0	46	51	50	51
8								14	46	51	50	51
9								15	46	51	50	51
10								16	46	51	50	51
11								18	46	48	50	50
12								19	46	46	50	50
13								30	46	33	50	50
14								37	46	50	50	50
15								39	46	49	50	49
16								40	46	49	50	48
17								41	46	50	50	47
18								42	46	50	50	47
19								42	47	50	49	48
20								43	47	50	49	22
21								44	47	50	49	0
22								46	37	50	49	0
23								47	13	50	49	0
24								49	48	50	49	0
25								49	48	50	49	0
26								50	49	50	49	0
27								50	49	51	50	0
28								50	49	51	50	0
29					------			49	49	52	50	0
30					------			49	50	52	50	0
31		------			------		------	49	------	51	50	------
TOTAL	0	0	0	0	0	0	0	932.0	1,369	1,538	1,545	970
MEAN	0	0	0	0	0	0	0	30.1	45.6	49.6	49.8	32.3
MAX	0	0	0	0	0	0	0	50	50	52	51	51
MIN	0	0	0	0	0	0	0	0	13	33	49	0
AC-FT	0	0	0	0	0	0	0	1,850	2,720	3,050	3,060	1,920

CAL YR 1972 TOTAL 5,778.7 MEAN 15.8 MAX 52 MIN 0 AC-FT 11,460
WTR YR 1973 TOTAL 6,354.0 MEAN 17.4 MAX 52 MIN 0 AC-FT 12,600

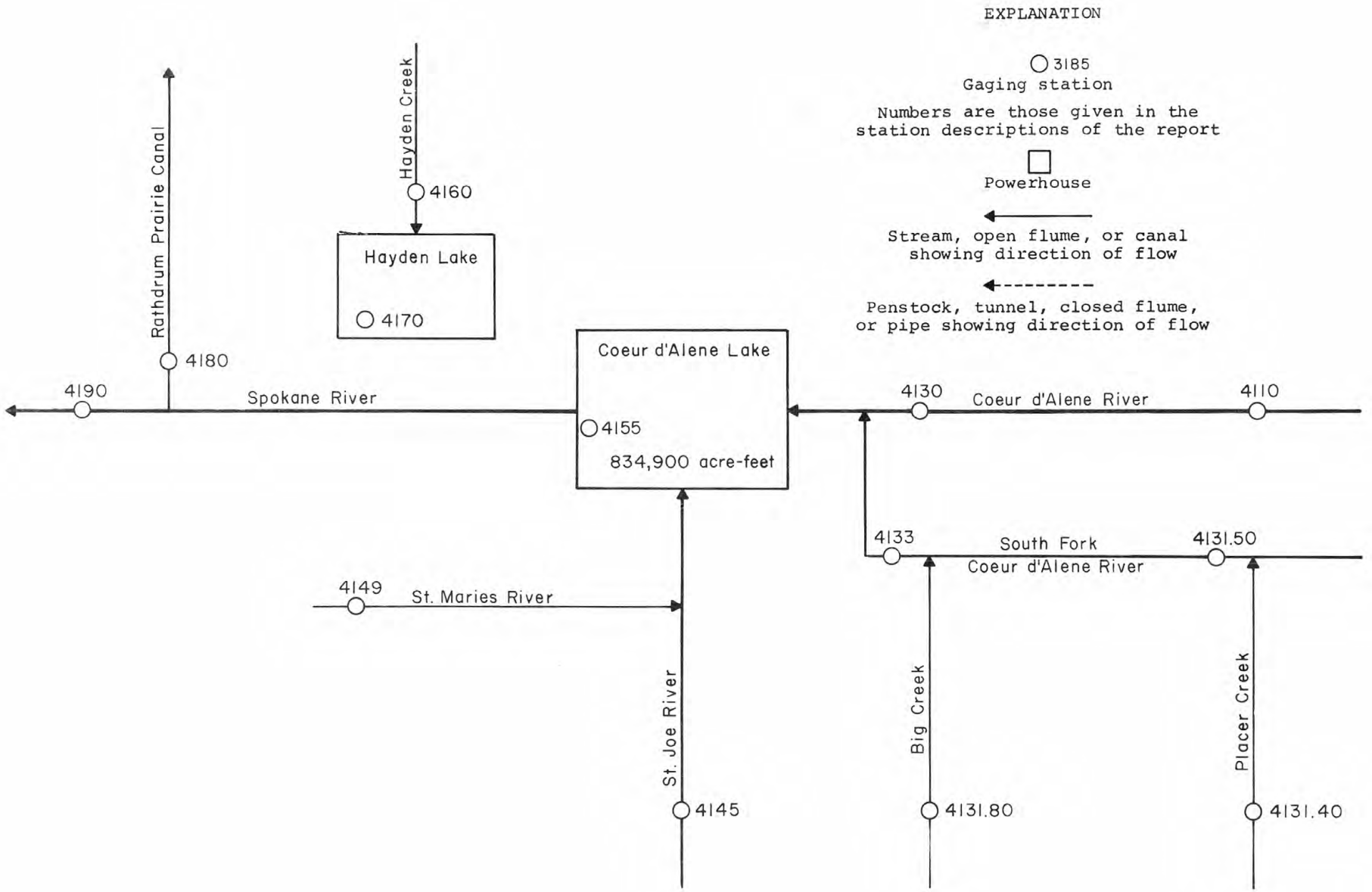

FIGURE 4. Schematic diagram showing Spokane River basin.

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 mi (1.6 km) downstream from powerplant of Washington Water Power Co., 1.5 mi (2.4 km) southwest of Post Falls, and at mile 100.7 (162 km).

DRAINAGE AREA.--3,840 sq mi (9,946 sq km) approximately, of which about 122 sq mi (316 sq km) 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 (624.8 m) 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 (625.8 m) 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 (1.0) or 0.8 mi (1.3 km) upstream at datum 50 ft (15.2 m) lower than present datum.

AVERAGE DISCHARGE.--River only, 61 years, 6,262 cfs (177 cu m/s), 4,537,000 acre-ft/yr (5,590 cu hm/yr); 15-year base period (1952-67), 6,697 cfs (190 cu m/s); combined river and diversions above gage, 61 years, 6,357 cfs (180 cu m/s), 4,606,000 acre-ft/yr (5,679 cu hm/yr); 15-year base period (1952-67), 6,794 cfs (192 cu m/s).

EXTREMES.--Current year: Maximum discharge, 8,600 cfs (243 cu m/s) May 5 (gage height, 12.58 ft or 3.834 m); minimum, 65 cfs (1.8 cu m/s) July 25-26; minimum gage height, 4.76 ft (1.451 m).
Period of record: Maximum discharge, 50,100 cfs (1,419 cu m/s) when recorder was not operating Dec. 25, 1933 (determined from unpublished records collected by Washington Water Power Co. for station at Liberty Bridge); minimum, 65 cfs (1.84 cu m/s) July 25, 30, 1973; minimum gage height, 4.76 ft (1.951 m) Sept. 18, 19, 1973.

REMARKS.--Records excellent. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,390	1,480	1,280	4,520	6,200	3,240	5,030	7,140	4,250	2,100	315	821
2	1,540	1,500	1,280	4,520	6,560	3,450	4,850	6,650	4,000	1,780	315	821
3	1,620	1,500	1,300	4,500	6,430	3,670	4,780	6,050	4,000	1,500	310	821
4	1,660	1,540	1,780	4,500	6,340	3,900	4,800	5,750	3,930	1,520	433	925
5	1,780	1,550	2,600	4,470	5,860	3,960	4,640	7,140	3,680	1,530	439	1,690
6	702	1,520	3,460	4,470	5,480	3,980	4,630	7,340	3,570	1,520	439	1,840
7	1,700	1,490	3,460	4,450	5,390	3,980	4,400	6,110	3,770	1,520	325	1,830
8	1,700	1,570	3,510	4,470	5,300	4,260	4,380	5,920	3,970	1,370	214	1,810
9	1,620	1,550	3,570	4,470	5,200	4,680	4,380	6,110	3,980	1,280	214	1,810
10	1,570	1,480	3,570	4,460	5,120	4,530	4,530	5,980	3,980	1,080	219	1,820
11	1,590	1,540	3,570	4,450	5,060	4,580	4,470	5,510	3,870	709	245	1,820
12	1,650	1,620	3,670	4,450	4,980	5,120	4,560	5,190	3,460	676	219	1,830
13	1,640	1,610	3,630	4,430	4,880	5,270	4,800	4,940	3,330	682	219	1,820
14	1,560	1,670	2,300	4,120	4,770	5,310	4,920	5,080	3,320	895	219	1,160
15	1,570	1,660	880	4,520	4,680	5,060	5,190	5,500	3,830	744	280	552
16	1,640	1,590	150	4,490	4,430	5,100	5,060	5,870	3,670	1,010	528	116
17	1,670	1,560	270	4,210	4,250	5,250	5,060	6,610	3,350	1,280	888	433
18	1,590	1,590	670	4,260	3,970	5,190	6,400	6,820	3,300	1,270	978	205
19	1,580	1,630	688	4,770	3,800	5,340	6,800	6,860	3,210	903	978	918
20	1,510	1,660	636	6,040	3,630	5,380	6,830	7,040	2,790	695	807	1,860
21	1,560	1,660	600	6,500	3,440	5,530	6,850	6,640	2,430	702	689	1,830
22	1,480	1,370	1,750	6,490	3,290	4,830	6,820	6,010	2,050	689	779	1,820
23	1,530	1,130	3,130	6,460	3,110	4,850	6,770	5,160	2,080	428	821	1,840
24	1,550	1,230	3,500	6,410	3,000	4,840	6,740	5,860	2,130	67	814	1,990
25	1,550	1,330	3,760	6,100	2,940	4,730	6,700	5,870	2,130	126	814	2,070
26	1,580	1,370	3,940	5,540	2,920	4,850	6,110	5,570	2,130	576	821	2,060
27	1,520	1,330	4,120	5,890	2,920	5,020	6,250	5,500	2,130	594	828	2,050
28	1,520	1,270	4,120	6,280	2,910	5,050	6,900	5,350	2,100	433	828	2,070
29	1,560	1,250	4,350	6,200	------	5,080	6,140	4,770	2,100	174	828	2,080
30	1,610	1,270	4,520	6,140	------	5,160	6,400	3,640	2,120	201	828	2,060
31	1,520	------	4,520	6,080	------	5,080	------	4,180	------	159	828	------
TOTAL	48,262	44,520	80,584	158,660	126,860	146,270	166,190	182,160	94,660	28,213	17,462	44,772
MEAN	1,557	1,484	2,599	5,118	4,531	4,718	5,540	5,876	3,155	910	563	1,492
MAX	1,780	1,670	4,520	6,500	6,560	5,530	6,900	7,340	4,250	2,100	978	2,080
MIN	702	1,130	150	4,120	2,910	3,240	4,380	3,640	2,050	67	214	116
AC-FT	95,730	88,310	159,800	314,700	251,600	290,100	329,600	361,300	187,800	55,960	34,640	88,810
MEAN†	1,557	1,484	2,599	5,118	4,531	4,718	5,540	5,906	3,201	960	613	1,525
AC-FT†	95,730	88,310	159,800	314,700	251,600	290,100	329,600	363,200	190,500	59,010	37,700	90,730

CAL YR 1972 TOTAL 3,420,589 MEAN 9,346 MAX 33,200 MIN 85 AC-FT 6,785,000 MEAN† 9,387 AC-FT† 6,796,000
WTR YR 1973 TOTAL 1,138,613 MEAN 3,119 MAX 7,340 MIN 67 AC-FT 2,258,000 MEAN† 3,137 AC-FT† 2,271,000

† Adjusted for diversion through Rathdrum Prairie Canal.

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, Grand Teton National Park, near left end of spillway over dam on Snake River, 4.3 mi (6.9 km) west of Moran, and at mile 1,000.2 (1,609.3 km).

DRAINAGE AREA.--824 sq mi (2,134 sq km).

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 (0.634 m) lower. Prior to June 1, 1941, at site 300 ft (91 m) upstream at same datum.

EXTREMES.--Current year: Maximum contents, 850,600 acre-ft (1,050 cu hm) June 27 (elevation, 6,769.14 ft or 2,063.234 m); minimum, 581,500 acre-ft (717 cu hm) Oct. 4 (elevation, 6,758.20 ft or 2,059.399 m).
Period of record: Maximum contents, 859,530 acre-ft (1,060 cu hm) July 11, 1965 (elevation, 6,769.49 ft or 2,063.341 m); 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 (370 cu hm). 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 (469 cu hm). The earth dam was raised in 1916, increasing the usable capacity to 790,000 acre-ft (974 cu hm). In 1917, by dredging the outlet, the capacity was further increased to 847,000 acre-ft (1,040 cu hm) between elevations 6,730 (2,051) (top of baffles to sluices) and 6,769 ft (2,063 m) (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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	583,200	593,400	601,900	616,000	628,200	636,400	640,000	647,700	791,800	849,000	771,700	671,900
2	582,400	593,400	601,900	616,200	628,200	636,900	640,000	647,900	797,500	847,000	767,700	670,200
3	581,700	593,600	602,900	617,200	628,400	636,900	639,800	648,400	801,100	845,200	763,700	667,300
4	581,500	593,800	604,000	618,400	628,700	637,100	639,800	648,600	802,100	843,900	762,500	664,100
5	582,200	594,500	604,500	618,900	629,200	637,100	639,800	649,400	801,300	842,400	759,700	661,500
6	582,700	595,200	604,800	619,300	630,100	637,100	640,000	650,100	799,600	841,400	756,200	658,800
7	582,700	595,500	604,800	619,600	630,400	637,300	640,200	651,300	800,000	839,800	753,500	656,900
8	582,900	596,000	605,000	619,800	630,600	637,300	640,200	653,000	802,800	838,300	750,000	654,900
9	583,200	596,400	605,500	620,300	630,600	637,300	640,500	655,700	807,100	836,300	746,000	652,800
10	584,100	596,900	605,700	620,300	631,600	637,600	640,700	657,100	814,000	834,300	743,100	650,600
11	586,000	597,200	605,700	620,500	632,800	638,100	641,000	658,300	819,800	831,700	739,900	648,900
12	586,500	597,400	606,000	621,000	633,200	638,300	641,200	661,000	824,600	829,700	736,400	646,200
13	587,200	597,400	606,200	622,000	634,000	638,300	641,200	663,700	829,900	827,100	732,900	643,800
14	587,700	597,600	606,200	622,400	634,200	638,500	641,400	667,500	835,000	824,600	729,500	641,400
15	587,900	597,900	606,400	622,700	634,500	638,800	641,400	672,100	842,400	821,800	726,000	638,100
16	588,600	598,100	606,700	622,900	634,500	638,800	641,700	678,000	846,000	819,000	722,600	635,200
17	589,100	598,600	606,900	623,900	634,700	638,800	642,200	685,500	847,000	816,000	719,100	631,800
18	589,100	598,800	606,900	624,600	634,700	638,800	642,400	695,000	848,200	813,400	715,900	628,900
19	589,300	599,000	607,600	625,600	634,700	638,800	642,400	706,100	847,700	809,900	713,000	626,000
20	589,800	599,300	609,300	626,300	634,900	639,000	642,200	718,400	847,500	808,100	710,000	623,400
21	590,700	599,800	609,800	626,500	634,900	639,000	642,400	732,700	846,700	806,100	706,800	620,800
22	591,200	600,000	612,200	626,800	634,900	639,000	642,200	743,600	847,000	803,600	704,100	618,400
23	591,500	599,800	612,600	627,000	634,700	639,300	642,400	753,300	847,700	800,800	700,700	616,500
24	591,900	599,500	613,400	627,000	634,700	639,300	642,900	760,500	848,500	797,500	697,000	614,600
25	591,900	599,500	614,300	627,000	635,700	639,300	643,600	769,200	849,800	794,300	693,800	613,100
26	591,700	600,500	614,800	627,200	635,900	639,300	644,600	777,500	849,800	791,200	690,700	611,700
27	592,600	601,000	615,000	627,200	636,100	639,500	645,000	781,700	850,600	788,000	687,500	610,500
28	592,900	601,200	615,000	627,500	636,100	639,800	646,000	784,700	849,800	785,000	684,600	609,100
29	593,100	601,400	615,300	627,700	------	639,800	647,000	785,500	849,300	781,700	681,200	608,100
30	593,100	601,700	615,500	627,700	------	639,800	647,400	786,500	849,800	778,500	678,000	607,400
31	593,400	------	615,800	628,000	------	640,000	------	788,200	------	775,200	674,300	------
MAX	593,400	601,700	615,800	628,000	636,100	640,000	647,400	788,200	850,600	849,000	771,700	671,900
MIN	581,500	593,400	601,900	616,000	628,200	636,400	639,800	647,700	791,800	775,200	674,300	607,400
(†)	6,758.70	6,759.05	6,759.64	6,760.15	6,760.49	6,760.65	6,760.96	6,766.68	6,769.11	6,766.16	6,762.07	6,759.29
(‡)	+8,600	+8,300	+14,100	+12,200	+8,100	+3,900	+7,400	+140,800	+61,600	-74,600	-100,900	-66,900

CAL YR 1972.....‡ -5,700
WTR YR 1973.....‡ -22,600

† 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 (305 m) downstream from Jackson Lake Dam, 4.1 mi (6.6 km) west of Moran, and at mile 1,000.1 (1,609.2 km).

DRAINAGE AREA.--824 sq mi (2,134 sq km). Mean altitude, 8,040 ft (2,450 m).

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 (2,050.646 m) 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 mi (2.4 km) downstream at different datums.

AVERAGE DISCHARGE.--70 years, 1,434 cfs (40.61 cu m/s), 1,039,000 acre-ft/yr (1,280 cu hm/yr); 15-year base period (1952-67), 1,392 cfs (39.42 cu m/s).

EXTREMES.--Current year: Maximum discharge, 4,580 cfs (130 cu m/s) June 4-6, 8 (gage height, 7.00 ft or 2.134 m); minimum, 299 cfs (8.47 cu m/s) Nov. 16 (gage height, 2.36 ft or 0.719 m).
Period of record: Maximum discharge, 15,100 cfs (428 cu m/s) June 12, 1918 (gage height, 10.41 ft or 3.173 m, site and datum then in use); minimum, 0.30 cfs (0.01 cu m/s) Oct. 26, 27, 28, 1969 (gage height, 0.89 ft or (0.271 m).
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). Records of chemical analyses for the 1973 water year are published in Part 2 of this report.

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)

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,430	602	368	372	386	386	394	405	3,190	3,510	2,460	1,980
2	1,160	531	353	372	386	387	394	405	3,400	3,190	2,450	1,980
3	962	495	354	375	387	385	394	408	3,860	2,730	2,450	1,970
4	843	495	354	376	386	386	390	412	4,210	2,540	2,450	1,970
5	755	495	356	377	386	386	390	415	4,570	2,530	2,450	1,960
6	688	495	359	377	382	386	390	413	4,570	2,530	2,440	1,960
7	685	495	359	377	381	387	394	410	4,560	2,520	2,440	1,950
8	685	495	359	377	381	388	390	407	4,420	2,520	2,410	1,950
9	685	495	363	377	382	390	390	402	4,120	2,520	2,420	1,950
10	697	495	366	381	382	390	394	401	4,130	2,520	2,390	1,940
11	692	491	367	381	381	390	394	402	3,420	2,520	2,330	1,940
12	685	487	368	381	383	390	388	402	2,240	2,520	2,310	1,950
13	685	486	368	381	386	390	396	402	1,980	2,520	2,300	1,940
14	684	485	368	381	381	390	400	402	1,960	2,510	2,280	1,940
15	682	485	369	377	383	390	399	404	2,500	2,510	2,270	1,940
16	679	433	372	379	384	390	396	404	3,350	2,510	2,250	1,930
17	679	435	372	377	385	390	397	410	3,510	2,510	2,250	1,930
18	680	435	372	377	384	390	397	420	3,160	2,500	2,250	1,920
19	679	435	368	377	385	390	394	423	3,110	2,510	2,240	1,910
20	679	435	368	376	385	390	395	426	2,740	2,510	2,230	1,910
21	679	435	367	377	386	390	395	426	2,730	2,510	2,220	1,910
22	679	435	365	378	386	390	395	423	2,730	2,500	2,210	1,900
23	681	433	363	381	381	390	400	894	2,730	2,500	2,200	1,900
24	679	431	363	381	381	390	403	1,860	2,740	2,490	2,180	1,800
25	678	432	364	381	382	390	404	2,260	2,770	2,490	2,170	1,600
26	645	431	367	381	384	390	400	2,620	2,990	2,490	2,170	1,420
27	607	431	368	383	386	394	403	2,630	3,340	2,480	2,160	1,200
28	608	430	368	385	386	394	404	2,960	3,500	2,480	2,150	972
29	608	402	368	386	------	394	408	3,190	3,500	2,480	2,090	898
30	605	374	371	386	------	394	405	3,180	3,500	2,470	2,000	920
31	602	------	372	386	------	394	------	3,190	------	2,470	1,980	------
TOTAL	22,485	13,934	11,319	11,753	10,748	12,081	11,893	31,806	99,530	79,590	70,600	53,440
MEAN	725	464	365	379	384	390	396	1,026	3,318	2,567	2,277	1,781
MAX	1,430	602	372	386	387	394	408	3,190	4,570	3,510	2,460	1,980
MIN	602	374	353	372	381	385	388	401	1,960	2,470	1,980	898
AC-FT	44,600	27,640	22,450	23,310	21,320	23,960	23,590	63,090	197,400	157,900	140,000	106,000

CAL YR 1972 TOTAL 699,790 MEAN 1,912 MAX 5,170 MIN 353 AC-FT 1,388,000
WTR YR 1973 TOTAL 429,179 MEAN 1,176 MAX 4,570 MIN 353 AC-FT 851,300

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 (2 m) upstream from bridge on U.S. Highway 287, at Moran, and at mile 0.5 (0.8 km).

DRAINAGE AREA.--160 sq mi (414 sq km). Mean altitude, 8,160 ft (2,490 m).

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 (2,050 m) (from topographic map). July 31 to Nov. 11, 1906, nonrecording gage at site 0.4 mi (0.6 km) downstream at different datum. July 20, 1917, to Sept. 30, 1918, nonrecording gage at site 0.1 mi (0.2 km) downstream at different datum. Sept. 23, 1944, to Nov. 13, 1959, at site 100 ft (30 m) upstream at same datum.

AVERAGE DISCHARGE.--29 years (1944-73), 266 cfs (7.533 cu m/s), 22.58 in/yr (573 mm/yr), 192,700 acre-ft/yr (238 cu hm/yr); 15-year base period (1952-67), 258 cfs (7.307 cu m/s).

EXTREMES.--Current year: Maximum discharge, 1,690 cfs (47.9 cu m/s) May 20 (gage height, 5.14 ft or 1.567 m); minimum daily, 48 cfs (138 cu m/s) Mar. 6-9, Sept. 19.
Period of record: Maximum discharge, 3,470 cfs (98.3 cu m/s) May 21, 1954; maximum gage height, 6.35 ft (1.935 m) June 23, 1971; minimum daily discharge, 22 cfs (0.62 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	128	85	64	54	50	52	100	990	318	82	60
2	131	120	85	63	53	50	51	96	1,030	280	74	64
3	128	119	84	62	53	50	51	108	842	256	74	60
4	128	120	80	60	53	50	51	131	670	239	85	57
5	147	122	76	60	53	50	50	162	625	222	102	55
6	139	119	80	60	53	48	52	206	728	212	84	52
7	137	112	80	58	53	48	50	272	833	199	76	55
8	133	119	80	58	53	48	50	296	900	187	72	56
9	133	115	80	58	53	48	51	296	980	181	71	56
10	164	114	78	58	53	50	52	292	1,050	170	70	53
11	178	112	76	58	52	53	51	318	880	154	70	56
12	172	109	75	60	52	53	55	386	694	135	68	58
13	160	108	73	64	52	53	60	490	662	133	68	56
14	159	108	71	64	52	53	65	584	678	137	68	55
15	156	110	70	62	52	53	64	725	744	135	66	56
16	154	109	70	60	52	52	62	851	552	131	65	52
17	148	109	72	58	52	52	66	1,030	571	124	61	51
18	145	107	75	57	52	50	65	1,150	534	118	62	49
19	143	107	76	56	52	50	62	1,270	484	116	64	48
20	144	95	76	56	52	50	61	1,460	460	122	62	49
21	151	80	76	56	52	52	60	1,250	445	137	58	55
22	145	84	75	56	52	52	60	1,080	450	139	60	56
23	143	90	74	55	52	51	62	1,060	465	126	60	56
24	144	90	72	55	52	50	71	1,020	445	114	60	61
25	139	90	72	55	51	52	74	1,230	420	112	58	58
26	138	90	72	54	51	53	71	1,050	400	108	55	57
27	133	90	70	54	50	55	80	788	376	100	52	56
28	121	90	70	54	50	51	102	702	358	93	53	56
29	122	88	68	54	------	55	106	694	350	91	52	56
30	121	86	66	54	------	53	102	710	368	87	51	55
31	120	------	65	54	------	51	------	833	------	84	51	------
TOTAL	4,407	3,140	2,322	1,797	1,461	1,586	1,909	20,640	18,984	4,760	2,054	1,664
MEAN	142	105	74.9	58.0	52.2	51.2	63.6	666	633	154	66.3	55.5
MAX	178	128	85	64	54	55	106	1,460	1,050	318	102	64
MIN	120	80	65	54	50	48	50	96	350	84	51	48
CFSM	.89	.66	.47	.36	.33	.32	.40	4.16	3.96	.96	.41	.35
IN.	1.02	.73	.54	.42	.34	.37	.44	4.80	4.41	1.11	.48	.39
AC-FT	8,740	6,230	4,610	3,560	2,900	3,150	3,790	40,940	37,650	9,440	4,070	3,300

CAL YR 1972 TOTAL 123,361 MEAN 337 MAX 2,860 MIN 40 CFSM 2.11 IN 28.68 AC-FT 244,700
WTR YR 1973 TOTAL 64,724 MEAN 177 MAX 1,460 MIN 48 CFSM 1.11 IN 15.05 AC-FT 128,400

PEAK DISCHARGE (BASE, 1,300 CFS).--May 20 (0600) 1,690 cfs (5.14 ft); June 10 (0200) 1,340 cfs (4.78 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, Grand Teton National Park, on right bank, underneath bridge on U.S. Highway 26, 287, about 2 mi (3 km) upstream from Lava Creek, 3.5 mi (5.6 km) east of Moran, and 4 mi (6 km) upstream from mouth.

DRAINAGE AREA.--355 sq mi (919 sq km).

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 mi (6 km) downstream.

GAGE.--Water-stage recorder. Datum of gage is 6,772.78 ft (2,064.343 m) above mean sea level (U.S. Bureau of Public Roads bench mark).

AVERAGE DISCHARGE.--8 years (1965-73), 573 cfs (16.23 cu m/s), 415,100 acre-ft/yr (512 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 4,160 cfs (118 cu m/s) June 10 (gage height, 6.68 ft or 2.036 m); minimum daily, 100 cfs (2.83 cu m/s) Mar. 3-22, Mar. 28 to Apr. 3.
Period of record: Maximum discharge, 5,160 cfs (146 cu m/s) June 8, 1972; maximum gage height, 7.66 ft (2.335 m) June 23, 1971; minimum daily, 82 cfs (2.32 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	338	225	185	140	130	105	100	169	1,810	1,940	318	179
2	330	288	185	135	130	105	100	169	1,920	1,480	318	177
3	322	272	180	135	130	100	100	173	1,490	1,350	318	177
4	318	265	170	130	130	100	105	186	1,170	1,230	318	177
5	330	268	155	130	130	100	110	218	1,160	1,220	320	177
6	312	258	160	130	125	100	120	250	1,420	1,120	318	179
7	310	238	160	125	120	100	115	318	1,990	1,000	302	179
8	308	258	160	125	120	100	112	330	2,670	920	300	177
9	305	248	155	125	120	100	114	318	3,130	850	298	177
10	348	240	150	125	120	100	112	318	3,830	780	288	177
11	363	230	150	125	120	100	126	366	3,110	700	285	182
12	332	230	150	130	120	100	139	442	2,410	660	282	179
13	330	225	145	135	115	100	153	654	2,320	570	280	177
14	332	220	140	140	115	100	161	900	2,520	520	275	177
15	320	220	135	140	115	100	153	1,080	2,130	520	258	175
16	315	215	135	140	115	100	149	1,390	1,540	515	255	177
17	305	215	145	135	115	100	159	1,730	1,420	500	255	177
18	300	215	155	135	115	100	151	2,050	1,200	470	255	175
19	298	215	158	135	110	100	141	2,400	1,120	452	255	177
20	295	190	150	135	110	100	131	2,400	1,010	442	255	177
21	300	160	150	130	110	100	133	1,970	1,060	442	250	175
22	300	155	145	130	110	100	137	1,630	1,260	442	250	175
23	290	150	145	130	110	105	143	1,690	1,560	435	248	173
24	298	160	145	130	110	105	151	1,710	1,720	420	245	173
25	282	170	145	130	110	105	151	1,980	1,660	405	245	173
26	285	175	145	130	110	105	149	1,520	1,910	387	245	173
27	275	175	145	130	110	105	171	1,110	1,980	372	240	171
28	252	160	145	130	110	100	202	998	2,110	366	240	171
29	268	160	140	130	------	100	199	975	1,870	348	238	171
30	240	170	140	130	------	100	173	1,040	2,160	348	220	171
31	230	------	140	130	------	100	------	1,330	------	338	197	------
TOTAL	9,431	6,370	4,708	4,080	3,285	3,135	4,160	31,814	56,660	21,542	8,371	5,275
MEAN	304	212	152	132	117	101	139	1,026	1,889	695	270	176
MAX	363	288	185	140	130	105	202	2,400	3,830	1,940	320	182
MIN	230	150	135	125	110	100	100	169	1,010	338	197	171
CFSM	.86	.60	.43	.37	.33	.28	.39	2.89	5.32	1.96	.76	.50
IN.	.99	.67	.49	.43	.34	.33	.44	3.33	5.94	2.26	.88	.55
AC-FT	18,710	12,630	9,340	8,090	6,520	6,220	8,250	63,100	112,400	42,730	16,600	10,460

CAL YR 1972 TOTAL 261,069 MEAN 713 MAX 5,010 MIN 100 CFSM 2.01 IN 27.36 AC-FT 517,800
WTR YR 1973 TOTAL 158,831 MEAN 435 MAX 3,830 MIN 100 CFSM 1.23 IN 16.64 AC-FT 315,000

PEAK DISCHARGE (BASE, 3,100 CFS).--June 10 (0400) 4,160 cfs (6.68 ft).

13016100 Snake River near Wilson, Wyo.

LOCATION.--Lat 43°29'57", long 110°50'16", in NW¼SW¼ sec.24, T.41 N., R.117 W., Teton County, on left bank 45 ft (14 m) upstream from State Highway 22 bridge, about 3.5 mi (5.6 km) upstream from Fish Creek, 1.5 mi (2.4 km) east of Wilson, and at mile 961.2 (1,546.6 km).

DRAINAGE AREA.--

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,160 ft (1,878 m) (from topographic map).

EXTREMES.--Current year: Maximum discharge, 11,000 cfs (312 cu m/s) June 10 (gage height, 11.81 ft or 3.600 m); minimum daily discharge, 900 cfs (25.5 cu m/s) Jan. 5.

REMARKS.--Records good. Flow partly regulated by Jackson Lake (see sta 13010500). Some diversions from tributaries above station.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 7-25; stage-discharge relation affected by ice Nov. 29, Dec. 4-19, Dec. 25 to Jan. 13, Jan. 20 to Feb. 3, Feb. 9-10, 15-17, 20-22)

7.4	940	10.0	5,800
8.0	1,850	11.0	8,500
9.0	3,540	12.0	11,650

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,720	1,410	1,220	1,050	1,010	1,020	1,050	1,500	7,060	7,560	4,000	3,230
2	2,570	1,480	1,230	1,040	1,000	1,010	1,050	1,380	7,870	6,850	3,980	3,210
3	2,260	1,470	1,260	1,010	1,000	982	1,040	1,350	7,860	6,100	3,980	3,170
4	2,040	1,440	1,220	950	1,100	968	1,040	1,400	7,500	5,660	4,030	3,130
5	2,160	1,430	1,100	900	1,110	968	1,070	1,470	7,420	5,460	4,050	3,110
6	1,940	1,420	1,080	950	1,110	968	1,110	1,660	7,570	5,320	4,000	3,080
7	1,780	1,410	1,080	1,040	1,110	996	1,120	1,910	8,120	5,250	3,940	3,100
8	1,700	1,400	1,100	1,050	1,110	989	1,100	2,030	9,000	5,130	3,880	3,130
9	1,660	1,400	1,100	1,020	1,100	1,010	1,070	2,110	9,630	5,000	3,820	3,170
10	2,150	1,400	1,100	990	1,100	1,040	1,110	2,030	10,400	4,860	3,790	3,150
11	2,220	1,400	1,100	1,020	1,110	1,050	1,180	2,120	10,200	4,750	3,720	3,190
12	2,050	1,390	1,080	1,050	1,110	1,050	1,240	2,330	7,830	4,690	3,680	3,240
13	1,930	1,380	1,080	1,080	1,090	1,060	1,330	2,840	6,710	4,680	3,630	3,210
14	1,900	1,380	1,070	1,080	1,080	1,050	1,450	3,310	6,540	4,630	3,600	3,190
15	1,880	1,380	1,050	1,050	1,080	1,040	1,480	3,780	6,970	4,520	3,560	3,190
16	1,860	1,370	1,050	1,050	1,090	1,050	1,400	4,390	7,300	4,450	3,520	3,170
17	1,810	1,360	1,060	1,070	1,090	1,050	1,450	5,210	7,100	4,400	3,500	3,150
18	1,760	1,320	1,070	1,070	1,070	1,060	1,450	6,070	6,690	4,380	3,520	3,130
19	1,710	1,300	1,080	1,090	1,070	1,060	1,360	7,230	6,190	4,380	3,510	3,100
20	1,720	1,270	1,070	1,080	1,070	1,040	1,280	7,660	5,720	4,520	3,490	3,080
21	1,850	1,260	1,070	1,060	1,050	1,060	1,250	7,600	5,470	4,640	3,450	3,120
22	1,790	1,210	1,080	1,040	1,040	1,070	1,280	6,880	5,560	4,550	3,450	3,080
23	1,730	1,160	1,060	1,050	1,030	1,070	1,340	6,330	5,870	4,420	3,540	3,080
24	1,770	1,130	1,050	1,050	1,020	1,070	1,410	6,730	6,030	4,320	3,460	3,120
25	1,670	1,200	1,020	1,050	1,050	1,050	1,480	7,730	6,110	4,260	3,440	2,960
26	1,620	1,380	1,000	1,050	1,020	1,070	1,390	8,040	6,400	4,180	3,410	2,840
27	1,560	1,320	1,000	1,050	1,020	1,080	1,440	6,990	6,860	4,140	3,380	2,620
28	1,520	1,260	1,050	1,050	1,020	1,070	1,560	6,410	7,470	4,100	3,180	2,360
29	1,480	1,240	1,070	1,050	------	1,060	1,680	6,280	7,460	4,040	3,110	2,120
30	1,440	1,200	1,060	1,030	------	1,060	1,560	6,170	7,770	4,020	3,140	2,070
31	1,410	------	1,060	1,020	------	1,070	------	6,400	------	4,010	3,160	------
TOTAL	57,660	40,170	33,720	32,140	29,860	32,191	38,770	137,340	218,680	149,270	111,920	90,500
MEAN	1,860	1,339	1,088	1,037	1,066	1,038	1,292	4,430	7,289	4,815	3,610	3,017
MAX	2,720	1,480	1,260	1,090	1,110	1,080	1,680	8,040	10,400	7,560	4,050	3,240
MIN	1,410	1,130	1,000	900	1,000	968	1,040	1,350	5,470	4,010	3,110	2,070
AC-FT	114,400	79,680	66,880	63,750	59,230	63,850	76,900	272,400	433,800	296,100	222,000	179,500

CAL YR 1972 TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1973 TOTAL 972,221.00 MEAN 2,664 MAX 10,400 MIN 900 AC-FT 1,928,000

13022500 Snake River above reservoir, near Alpine, Wyo.

LOCATION.--Lat 43°11'47", long 110°53'18", Lincoln County, on right bank 0.3 mi (0.5 km) downstream from Wolf Creek, 6.4 mi (10.3 km) upstream from Greys River, 7.4 mi (11.9 km) east of Alpine, and at mile 928.0 (1,493.2 km).

DRAINAGE AREA.--3,465 sq mi (8,974 sq km).

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 (1,732.453 m) above mean sea level, unadjusted. Mar. 16, 1937, to Mar. 31, 1939, at site 6.0 mi (9.7 km) downstream at different datum.

AVERAGE DISCHARGE.--21 years (1937-38, 1953-73), 4,549 cfs (128.8 cu m/s), 3,296,000 acre-ft/yr (4.06 cu km/yr).

EXTREMES.--Current year: Maximum discharge, 14,700 cfs (416 cu m/s) June 11 (gage height, 8.30 ft or 2.530 m); minimum daily, 1,400 cfs (39.6 cu m/s) Jan. 5.
Period of record: Maximum discharge, 26,800 cfs (759 cu m/s) June 28, 1954 (gage height, 11.68 ft or 3.560 m); minimum, 740 cfs (21.0 cu m/s) Nov. 16, 1955 (gage height, 2.19 ft or 0.668 m).

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 1973 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 Mar. 25 to Apr. 15; stage-discharge relation affected by ice Dec. 4-24, Dec. 28 to Feb. 7)

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,690	2,400	1,870	1,610	1,650	1,630	1,600	2,920	10,100	9,130	4,850	3,540
2	3,610	2,510	1,900	1,520	1,600	1,660	1,600	2,760	11,500	8,490	4,780	3,760
3	3,350	2,480	1,940	1,480	1,650	1,580	1,630	2,760	11,300	7,660	4,790	3,650
4	3,150	2,420	1,780	1,420	1,680	1,560	1,640	3,020	10,400	7,120	4,920	3,570
5	3,370	2,440	1,550	1,400	1,680	1,570	1,670	3,270	9,750	6,820	4,950	3,510
6	3,340	2,400	1,550	1,420	1,680	1,610	1,800	3,590	9,950	6,640	4,820	3,450
7	3,090	2,350	1,600	1,450	1,680	1,570	1,820	3,980	10,800	6,500	4,680	3,490
8	3,040	2,360	1,600	1,480	1,660	1,560	1,750	4,150	12,100	6,350	4,570	3,630
9	2,990	2,360	1,600	1,490	1,640	1,570	1,730	4,120	13,100	6,210	4,500	3,720
10	3,450	2,300	1,600	1,500	1,740	1,600	1,800	4,040	14,100	5,980	4,430	3,620
11	3,630	2,310	1,600	1,500	1,730	1,630	2,090	4,150	14,400	5,820	4,350	3,660
12	3,350	2,300	1,600	1,500	1,730	1,640	2,190	4,340	11,300	5,750	4,260	3,710
13	3,220	2,270	1,600	1,520	1,660	1,650	2,400	4,760	8,700	5,760	4,200	3,650
14	3,160	2,220	1,550	1,580	1,680	1,620	2,620	5,350	8,530	5,800	4,130	3,590
15	3,140	2,220	1,540	1,680	1,630	1,580	2,710	6,060	9,030	5,560	4,080	3,580
16	3,120	2,220	1,520	1,650	1,630	1,560	2,470	7,090	8,920	5,500	4,020	3,550
17	3,050	2,200	1,600	1,620	1,670	1,580	2,540	8,500	8,750	5,400	3,990	3,490
18	2,990	2,160	1,680	1,600	1,690	1,600	2,540	9,770	8,370	5,340	4,030	3,460
19	2,930	2,130	1,720	1,600	1,660	1,560	2,320	10,900	7,710	5,330	4,050	3,420
20	2,940	2,110	1,750	1,600	1,610	1,550	2,190	11,800	7,500	5,860	4,030	3,410
21	3,140	2,040	1,750	1,600	1,620	1,610	2,070	11,400	7,360	6,000	3,940	3,490
22	3,040	1,980	1,780	1,600	1,650	1,610	2,140	9,310	7,440	5,860	3,980	3,450
23	2,970	1,900	1,780	1,620	1,640	1,600	2,340	8,520	7,850	5,610	3,990	3,500
24	3,020	1,860	1,780	1,620	1,640	1,570	2,630	9,230	8,060	5,390	3,920	3,690
25	2,920	1,880	1,780	1,620	1,660	1,590	2,840	10,900	8,120	5,260	3,880	3,670
26	2,860	2,030	1,730	1,620	1,640	1,610	2,670	11,500	8,310	5,150	3,810	3,360
27	2,800	1,990	1,770	1,620	1,630	1,650	2,760	10,000	8,740	5,070	3,770	3,140
28	2,680	1,870	1,720	1,620	1,630	1,670	3,230	9,030	9,210	4,990	3,750	2,890
29	2,620	1,840	1,700	1,620	------	1,610	3,460	8,890	9,120	4,960	3,710	2,630
30	2,500	1,880	1,650	1,650	------	1,610	3,080	8,790	9,140	4,970	3,590	2,510
31	2,410	------	1,650	1,680	------	1,630	------	9,070	------	4,900	3,470	------
TOTAL	95,570	65,430	52,240	48,490	46,460	49,640	68,330	213,970	289,660	185,180	130,240	103,790
MEAN	3,083	2,181	1,685	1,564	1,659	1,601	2,278	6,902	9,655	5,974	4,201	3,460
MAX	3,690	2,510	1,940	1,680	1,740	1,670	3,460	11,800	14,400	9,130	4,950	3,760
MIN	2,410	1,840	1,520	1,400	1,600	1,550	1,600	2,760	7,360	4,900	3,470	2,510
AC-FT	189,600	129,800	103,600	96,180	92,150	98,460	135,500	424,400	574,500	367,300	258,300	205,900

CAL YR 1972 TOTAL 2,204,340 MEAN 6,023 MAX 23,800 MIN 1,520 AC-FT 4,372,000
WTR YR 1973 TOTAL 1,349,000 MEAN 3,696 MAX 14,400 MIN 1,400 AC-FT 2,676,000

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 mi (5 km) upstream from mouth, and 3.6 mi (5.8 km) southeast of Alpine.

DRAINAGE AREA.--448 sq mi (1,160 sq km). Mean altitude, 8,080 ft (2,460 m).

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 (1,740 m) (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 mi (2.9 km) downstream, and October 1953 to Sept. 22, 1965, water-stage recorder at site 1 mi (1.6 km) downstream at different datums.

AVERAGE DISCHARGE.--21 years (1937-38, 1953-73), 652 cfs (18.46 cu m/s), 19.76 in/yr (502 mm/yr), 472,400 acre-ft/yr (582 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 2,550 cfs (72.2 cu m/s) May 20 (gage height, 4.59 ft or 1.399 m); minimum daily, 200 cfs (5.66 cu m/s) Dec. 10.
Period of record: Maximum discharge observed, 7,230 cfs (205 cu m/s) June 19, 1971 (gage height, 6.33 ft or 1.929 m); maximum gage height observed, 19.1 ft (5.82 m) (former site and datum) about Dec. 18, 1965 (ice jam); minimum discharge, 111 cfs (3.14 cu m/s) Dec. 7, 1960 (gage height, 2.45 ft or 0.747 m, former site and datum).

REMARKS.--Records good except those for winter periods, which are fair. Less than 500 acres (202 sq hm) irrigated by diversions from Greys River and tributaries above station.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	435	340	313	275	250	230	218	480	1,840	1,080	520	415
2	430	386	309	270	250	230	224	470	1,890	992	515	490
3	425	368	313	265	250	230	228	480	1,740	929	520	460
4	415	368	317	250	250	230	228	520	1,560	894	580	425
5	500	381	256	240	250	225	249	600	1,450	868	555	410
6	465	372	252	260	250	224	277	700	1,460	850	530	400
7	440	358	302	260	250	207	280	800	1,600	826	515	405
8	425	368	288	260	250	210	260	800	1,760	796	500	490
9	420	363	252	260	250	221	263	770	2,000	766	485	550
10	470	350	200	260	250	232	284	760	2,400	742	480	460
11	460	358	210	260	250	249	300	880	2,100	730	480	435
12	425	350	240	260	250	235	320	1,000	1,500	712	470	420
13	430	345	260	270	245	249	350	1,200	1,300	736	465	405
14	425	337	270	285	245	235	440	1,510	1,350	724	460	390
15	435	341	275	280	245	228	420	1,640	1,400	700	450	395
16	430	350	280	280	245	210	380	1,760	1,350	658	445	386
17	415	341	285	280	245	232	460	1,960	1,250	652	450	381
18	410	341	285	280	245	235	430	2,210	1,100	625	450	381
19	405	337	300	280	245	210	400	2,350	1,080	635	440	376
20	415	325	310	280	245	221	350	2,410	1,060	712	435	372
21	455	317	305	270	240	252	370	2,420	1,010	676	445	386
22	415	298	300	265	240	235	400	2,250	1,030	640	460	381
23	415	277	300	260	240	228	430	2,120	1,090	620	475	368
24	440	260	295	260	235	214	460	2,110	1,150	595	460	430
25	420	298	290	260	235	221	440	2,390	1,150	580	435	445
26	410	350	280	255	235	232	480	2,210	1,180	565	425	410
27	386	309	280	255	235	252	540	1,820	1,190	560	420	386
28	376	280	280	255	235	246	640	1,600	1,200	555	415	376
29	395	288	280	255	------	228	630	1,530	1,180	535	410	372
30	372	298	280	255	------	232	550	1,560	1,130	540	405	363
31	350	------	280	255	------	238	------	1,650	------	535	400	------
TOTAL	13,109	10,054	8,687	8,200	6,855	7,121	11,301	44,960	42,500	22,028	14,495	12,363
MEAN	423	335	280	265	245	230	377	1,450	1,417	711	468	412
MAX	500	386	317	285	250	252	640	2,420	2,400	1,080	580	550
MIN	350	260	200	240	235	207	218	470	1,010	535	400	363
CFSM	.94	.75	.63	.59	.55	.51	.84	3.24	3.16	1.59	1.04	.92
IN.	1.09	.83	.72	.68	.57	.59	.94	3.73	3.53	1.83	1.20	1.03
AC-FT	26,000	19,940	17,230	16,260	13,600	14,120	22,420	89,180	84,300	43,690	28,750	24,520

CAL YR 1972 TOTAL 337,327 MEAN 922 MAX 4,820 MIN 180 CFSM 2.06 IN 28.01 AC-FT 669,100
WTR YR 1973 TOTAL 201,673 MEAN 553 MAX 2,420 MIN 200 CFSM 1.23 IN 16.75 AC-FT 400,000

PEAK DISCHARGE (BASE, 2,000 CFS).--May 20 (2000) 2,550 cfs (4.59 ft); June 10 (unknown) 2,500 cfs (unknown).

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 mi (5.5 km) northwest of Etna, and at mile 8.0 (12.9 km).

DRAINAGE AREA.--829 sq mi (2,147 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 5,675.78 ft (1,729.977 m) above mean sea level.

AVERAGE DISCHARGE.--20 years, 755 cfs (21.38 cu m/s), 547,000 acre-ft/yr (674 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 2,250 cfs (63.7 cu m/s) May 21 (gage height, 4.76 ft or 1.268 m); minimum, 409 cfs (11.6 cu m/s) Dec. 10, 16 (gage height, 1.96 ft or 0.597 m).
Period of record: Maximum discharge, 3,870 cfs (110 cu m/s) June 1, 1971 (gage height, 5.30 ft or 1.615 m); minimum, 160 cfs (4.53 cu m/s) Jan. 7, 8, 1971 (gage height, 1.53 ft or 0.466 m).

REMARKS.--Records excellent. Diversions above station for power developments, industry, municipal supply, and irrigation of about 60,500 acres (245 sq km) of which about 1,000 acres (405 sq hm) 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 1973 are published in Part 2 of this report.

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	762	702	639	517	497	455	415	1,050	1,200	737	638	604
2	754	716	636	517	479	456	414	1,040	1,200	721	624	663
3	745	716	640	548	477	451	414	1,030	1,170	694	611	667
4	743	721	652	510	502	453	418	1,100	1,160	677	603	675
5	783	724	590	500	490	460	425	1,250	1,110	667	618	669
6	809	725	589	529	486	448	442	1,340	1,040	651	605	662
7	776	719	597	506	492	432	465	1,420	984	635	582	654
8	760	726	569	504	484	428	459	1,440	958	640	566	717
9	749	737	551	481	472	430	450	1,490	1,000	633	565	795
10	785	725	494	484	500	433	462	1,490	1,090	622	558	738
11	795	720	514	472	495	441	494	1,510	1,160	621	545	724
12	767	711	522	503	492	438	530	1,520	1,110	617	539	726
13	756	705	509	539	487	449	583	1,560	1,050	664	531	711
14	748	698	491	539	486	447	702	1,610	1,090	679	528	693
15	749	696	467	528	474	435	742	1,650	1,150	703	526	684
16	759	693	436	521	465	437	714	1,730	1,150	782	521	675
17	745	698	486	526	482	445	783	1,810	1,150	782	523	665
18	738	691	575	522	488	450	815	1,910	1,160	747	524	657
19	732	686	594	532	481	439	726	2,010	1,150	687	529	653
20	744	682	613	523	469	439	677	2,110	1,070	792	527	648
21	775	677	617	507	462	451	651	2,180	991	787	532	656
22	752	666	605	505	471	449	689	2,020	937	778	561	658
23	742	652	606	500	470	433	776	1,860	877	806	595	678
24	769	645	597	500	488	422	886	1,820	818	751	589	735
25	750	641	586	500	476	422	1,000	1,880	779	731	603	763
26	736	679	582	495	467	422	975	1,920	738	714	599	719
27	731	669	576	495	466	426	1,060	1,800	717	694	590	678
28	722	639	565	495	457	427	1,210	1,630	711	688	596	657
29	729	644	571	495	------	425	1,280	1,510	749	677	594	643
30	711	641	533	495	------	420	1,090	1,360	760	670	594	635
31	697	------	544	495	------	421	------	1,260	------	658	593	------
TOTAL	23,313	20,744	17,546	15,783	13,455	13,584	20,747	49,310	30,229	21,705	17,709	20,502
MEAN	752	691	566	509	481	438	692	1,591	1,008	700	571	683
MAX	809	737	652	548	502	460	1,280	2,180	1,200	806	638	795
MIN	697	639	436	472	457	420	414	1,030	711	617	521	604
AC-FT	46,240	41,150	34,800	31,310	26,690	26,940	41,150	97,810	59,960	43,050	35,130	40,670

CAL YR 1972 TOTAL 407,459 MEAN 1,113 MAX 3,530 MIN 410 AC-FT 808,200
WTR YR 1973 TOTAL 264,627 MEAN 725 MAX 2,180 MIN 414 AC-FT 524,900

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 mi (5.6 km) upstream from Palisades Creek, 7 mi (11.3 km) southeast of Irwin, and at mile 902.0 (1,451.3 km).

DRAINAGE AREA.--5,208 sq mi (13,489 sq km).

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 (0.030 m) lower.

EXTREMES.--Current year: Maximum contents, 1,401,000 acre-ft (1,730 cu hm) June 20 (elevation, 5,620.00 ft or 1,712.976 m); minimum, 799,000 acre-ft (985 cu hm) Sept. 7 (elevation, 5,574.87 ft or 1,699.220 m).
Period of record: Maximum contents, 1,421,000 acre-ft (1,750 cu hm) June 17, 18, 1963 (elevation, 5,621.17 ft or 1,713.333 m); minimum observed, 565 acre-ft (0.697 cu hm) Jan. 31, 1956 (prior to filling of reservoir); minimum after first filling of reservoir in June 1958, 224,000 acre-ft (276 cu hm) Sept. 24, 25, 1960 (elevation, 5,502.3 ft or 1,677.106 m).

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 (1,730 cu hm) between elevations 5,372 or 1,637 m (river level at original outlet tunnels) and 5,620 ft (1,713 m). Dead storage 44,100 acre-ft (54.4 cu hm) at elevation 5,452.43 ft (1,661.901 m), elevation of completed outlet tunnels. Inactive storage for minimum power head, 199,600 acre-ft (246 cu hm) at elevation 5,497.5 ft (1,675.64 m). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,243	1,200	1,211	1,187	1,168	1,133	1,112	1,182	1,340	1,369	1,063	816.0
2	1,235	1,201	1,211	1,187	1,167	1,132	1,112	1,187	1,345	1,365	1,050	812.0
3	1,228	1,202	1,211	1,186	1,166	1,130	1,112	1,193	1,350	1,360	1,038	808.0
4	1,220	1,203	1,211	1,185	1,165	1,128	1,112	1,199	1,353	1,352	1,027	803.0
5	1,212	1,205	1,210	1,183	1,164	1,126	1,112	1,207	1,354	1,344	1,015	801.0
6	1,205	1,206	1,209	1,181	1,163	1,125	1,112	1,216	1,355	1,336	1,005	800.0
7	1,197	1,206	1,208	1,180	1,162	1,124	1,112	1,227	1,359	1,327	996.0	799.0
8	1,189	1,207	1,207	1,179	1,162	1,122	1,113	1,238	1,365	1,317	988.0	800.0
9	1,180	1,208	1,205	1,178	1,159	1,120	1,113	1,249	1,374	1,308	979.0	801.0
10	1,177	1,209	1,203	1,176	1,158	1,119	1,114	1,260	1,383	1,298	970.0	802.0
11	1,178	1,210	1,200	1,175	1,157	1,119	1,115	1,270	1,387	1,287	960.0	803.0
12	1,180	1,210	1,198	1,174	1,156	1,118	1,116	1,281	1,385	1,276	948.0	805.0
13	1,183	1,211	1,197	1,175	1,155	1,118	1,117	1,294	1,385	1,266	942.0	808.0
14	1,177	1,211	1,195	1,175	1,154	1,117	1,110	1,307	1,388	1,253	932.0	811.0
15	1,171	1,212	1,193	1,174	1,152	1,116	1,114	1,318	1,391	1,241	923.0	812.0
16	1,174	1,212	1,191	1,174	1,151	1,115	1,117	1,330	1,394	1,228	913.0	814.0
17	1,176	1,213	1,191	1,174	1,149	1,114	1,121	1,346	1,395	1,215	904.0	815.0
18	1,178	1,213	1,191	1,174	1,148	1,114	1,124	1,359	1,397	1,201	895.0	816.0
19	1,179	1,213	1,192	1,175	1,147	1,113	1,127	1,366	1,400	1,189	886.0	817.0
20	1,182	1,213	1,192	1,176	1,145	1,112	1,130	1,372	1,401	1,178	877.0	816.0
21	1,184	1,213	1,193	1,176	1,144	1,112	1,132	1,374	1,399	1,169	870.0	816.0
22	1,186	1,213	1,193	1,177	1,142	1,112	1,134	1,370	1,395	1,160	863.0	815.0
23	1,188	1,212	1,193	1,177	1,141	1,112	1,137	1,363	1,389	1,150	857.0	814.0
24	1,190	1,212	1,193	1,177	1,140	1,112	1,141	1,357	1,385	1,143	851.0	815.0
25	1,192	1,212	1,193	1,176	1,138	1,112	1,146	1,357	1,380	1,136	847.0	818.0
26	1,193	1,212	1,192	1,176	1,137	1,112	1,150	1,356	1,377	1,128	841.0	820.0
27	1,194	1,212	1,191	1,175	1,135	1,112	1,156	1,350	1,374	1,120	837.0	823.0
28	1,196	1,212	1,190	1,173	1,134	1,112	1,163	1,342	1,373	1,109	833.0	826.0
29	1,197	1,212	1,190	1,172	------	1,112	1,171	1,339	1,372	1,098	829.0	828.0
30	1,198	1,211	1,189	1,171	------	1,112	1,177	1,338	1,370	1,086	825.0	830.0
31	1,199	------	1,188	1,170	------	1,112	------	1,338	------	1,074	820.0	------
MAX	1,243	1,213	1,211	1,187	1,168	1,133	1,177	1,374	1,401	1,369	1,063	830.0
MIN	1,171	1,200	1,188	1,170	1,134	1,112	1,110	1,182	1,340	1,074	820.0	799.0
(†)	5,606.95	5,606.77	5,606.22	5,604.92	5,602.42	5,600.86	5,605.42	5,616.03	5,618.08	5,698.10	5,676.89	5,677.76
(‡)	-50	+12	-23	-18	-36	-22	+65	+161	+32	-296	-254	+10

CAL YR 1972.....‡ -
WTR YR 1973.....‡ -419

† 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 mi (2.4 km) downstream from Palisades Dam, 2 mi (3.2 km) upstream from Palisades Creek, 5 mi (8 km) southeast of Irwin, and at mile 900.2 (1,448.4 km).

DRAINAGE AREA.--5,225 sq mi (13,533 sq km).

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 (1,631.594 m) above mean sea level. Mar. 30, 1935, to Oct. 31, 1936, water-stage recorder at site 3.5 mi (5.6 km) downstream at different datum. May 1, 1949, to Mar. 22, 1950, nonrecording gage at site 1,100 ft (335 m) downstream at datum 1.9 ft (0.58 m) higher.

AVERAGE DISCHARGE.--24 years (1949-73), 6,560 cfs (185.8 cu m/s), 4,743,000 acre-ft/yr (5,860 cu hm/yr); 15-year base period (1952-67), 6,075 cfs (172.0 cu m/s).

EXTREMES.--Current year: Maximum discharge, 18,200 cfs (515 cu m/s) May 21-23, 25-28 (gage height, 10.58 ft or 3.225 m); minimum, 1,810 cfs (51.3 cu m/s) May 9 (gage height, 5.16 ft or 1.573 m).
Period of record: Maximum discharge, 31,800 cfs (901 cu m/s) June 4-6, 1956; maximum gage height, 13.31 ft (4.057 m) June 4, 1956; minimum discharge, 19 cfs (0.54 cu m/s) Nov. 8, 1956 (gage height, 2.43 ft or 0.741 m).
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 (38,570 cu hm) (1966 determination).

REVISIONS.--WSP 1217: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used June 24 to Aug. 24)

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,840	3,330	3,280	3,310	3,320	3,380	2,500	2,540	13,100	12,800	12,000	7,200
2	8,840	3,330	3,270	3,290	3,310	3,370	2,500	2,560	13,100	12,800	12,000	7,220
3	8,840	3,330	3,270	3,310	3,310	3,370	2,520	2,580	13,100	12,700	12,000	7,200
4	8,840	3,330	3,270	3,300	3,310	3,370	2,500	2,560	13,100	12,800	12,000	7,250
5	8,840	3,310	3,280	3,290	3,310	3,370	2,500	2,550	13,100	12,700	12,000	6,200
6	8,840	3,310	3,280	3,290	3,350	3,380	2,490	2,580	13,000	12,700	11,300	5,210
7	8,840	3,310	3,270	3,300	3,350	3,380	2,490	2,560	13,000	12,700	10,300	5,180
8	8,870	3,300	3,300	3,300	3,350	3,360	2,480	2,580	13,000	12,700	10,100	4,900
9	8,840	3,310	3,270	3,290	3,340	3,360	2,510	2,540	13,000	12,600	10,100	4,890
10	7,490	3,310	3,180	3,260	3,350	3,010	2,500	2,530	14,500	12,600	10,100	4,930
11	4,890	3,290	3,350	3,260	3,350	3,000	2,540	2,550	16,900	12,600	10,100	4,400
12	3,600	3,290	3,450	3,260	3,350	2,980	2,520	2,550	17,300	12,800	10,100	3,900
13	3,410	3,290	3,490	3,260	3,350	2,950	8,740	2,550	14,200	13,000	10,100	3,580
14	7,620	3,300	3,650	3,260	3,360	2,950	2,870	3,550	12,800	13,300	9,980	3,600
15	7,700	3,300	3,580	3,260	3,370	2,950	2,500	5,140	12,800	13,500	9,930	4,090
16	3,790	3,290	3,270	3,250	3,360	2,950	2,500	6,090	12,700	13,500	9,920	4,160
17	3,350	3,300	3,260	3,260	3,370	2,950	2,520	6,150	13,000	13,500	9,750	4,140
18	3,560	3,280	3,260	3,260	3,370	2,930	2,500	9,810	11,700	13,500	9,630	4,170
19	3,570	3,280	3,270	2,480	3,360	2,930	2,510	14,200	10,200	13,600	9,670	4,470
20	3,560	3,280	3,260	2,470	3,360	2,930	2,530	16,300	10,200	12,900	9,460	5,040
21	3,570	3,290	3,260	2,480	3,360	2,600	2,530	17,700	10,900	12,400	8,910	5,080
22	3,570	3,280	3,420	2,550	3,380	2,580	2,530	18,100	12,300	12,400	8,650	5,580
23	3,570	3,270	3,290	2,470	3,380	2,550	2,520	18,100	12,900	11,900	8,140	5,600
24	3,570	3,260	3,300	2,610	3,380	2,520	2,530	18,100	12,900	10,900	7,860	4,870
25	3,570	3,260	3,300	2,940	3,400	2,530	2,550	18,100	12,900	10,400	7,370	4,170
26	3,540	3,260	3,310	3,280	3,380	2,520	2,540	18,100	12,900	10,400	7,340	3,620
27	3,360	3,270	3,300	3,300	3,380	2,520	2,540	18,100	12,800	10,900	7,380	3,090
28	3,350	3,280	3,290	3,290	3,410	2,520	2,540	17,200	12,800	11,600	6,730	3,100
29	3,350	3,270	3,280	3,310	------	2,510	2,540	15,000	12,800	12,000	6,710	3,080
30	3,330	3,260	3,280	3,370	------	2,500	2,530	13,500	12,800	12,000	6,870	3,080
31	3,330	------	3,290	3,310	------	2,500	------	13,100	------	12,000	7,190	------
TOTAL	170,240	98,770	102,830	96,870	93,970	90,720	82,070	279,570	389,800	386,200	293,690	143,000
MEAN	5,492	3,292	3,317	3,125	3,356	2,926	2,736	9,018	12,990	12,460	9,474	4,767
MAX	8,870	3,330	3,650	3,370	3,410	3,380	8,740	18,100	17,300	13,600	12,000	7,250
MIN	3,330	3,260	3,180	2,470	3,310	2,500	2,480	2,530	10,200	10,400	6,710	3,080
AC-FT	337,700	195,900	204,000	192,100	186,400	179,900	162,800	554,500	773,200	766,000	582,500	283,600

CAL YR 1972 TOTAL 3,172,570 MEAN 8,668 MAX 18,100 MIN 3,070 AC-FT 6,293,000
WTR YR 1973 TOTAL 2,227,730 MEAN 6,103 MAX 18,100 MIN 2,470 AC-FT 4,419,000

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 (259 m) upstream from Anderson canal headgate, 2.4 mi (3.9 km) upstream from Heise, 6 mi (9.7 km) east of Ririe, 24 mi (38.6 km) upstream from Henrys Fork, and at mile 861.6 (1,386.3 km).

DRAINAGE AREA.--5,752 sq mi (14,898 sq km). Mean altitude, 7,770 ft (2,368 m).

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 (1,528.66 m) 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 (0.808 m) higher. Sept. 30, 1922, to Oct. 5, 1933, water-stage recorder at datum 2.0 ft (0.61 m) higher.

AVERAGE DISCHARGE.--63 years, 6,896 cfs (195.3 cu m/s), 4,996,000 acre-ft/yr (6,160 cu hm/yr); 15-year base period (1952-67), 6,596 cfs (186.8 cu m/s).

EXTREMES.--Current year: Maximum discharge, 18,900 cfs (535 cu m/s) May 25 (gage height, 7.07 ft or 2.15 m); minimum, 2,190 cfs (62.0 cu m/s) May 29 (gage height, 1.57 ft or 0.479 m).
Period of record: Maximum discharge, about 60,000 cfs (1,700 cu m/s) May 19, 1927, result of washing out of landslide on Gros Ventre River (gage height, about 16.0 ft or 4.88 m, present datum); minimum, 460 cfs (13.0 cu m/s) Nov. 10, 12, 1956 (gage height, -0.18 ft or -0.055 m).
Flood in early June 1894 was estimated as 65,000 cfs (1,840 cu m/s) 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 (7,290 acre-ft or 8.99 cu hm diverted during year) which diverts 1.5 mi (2.4 km) upstream from station. Diversions from tributaries above station for irrigation in Wyoming and Idaho of about 104,000 acres (421 cu km) (1966 determination). Records of chemical analysis and water temperatures for the water year 1973 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. 1-16; stage-discharge relation affected by ice Jan. 2-5)

Oct. 1 to Jan. 25		Jan. 26 to Sept. 30			
2.0	2,900	2.0	2,910	6.0	14,600
3.0	5,100	3.0	5,100	8.0	23,000
4.0	8,470	4.0	7,910		
5.0	12,000				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,350	3,750	3,720	3,580	3,660	3,720	2,940	3,050	13,900	13,400	12,600	7,640
2	9,330	3,800	3,710	3,600	3,640	3,690	2,960	3,010	13,800	13,400	12,600	7,630
3	9,340	3,790	3,730	3,600	3,650	3,670	2,970	3,020	13,700	13,300	12,600	7,600
4	9,320	3,780	3,750	3,640	3,660	3,660	3,000	3,100	13,700	13,300	12,700	7,620
5	9,350	3,820	3,680	3,640	3,670	3,680	3,050	3,240	13,600	13,200	12,700	6,920
6	9,350	3,810	3,680	3,660	3,660	3,670	3,230	3,300	13,500	13,200	12,300	5,920
7	9,330	3,780	3,680	3,680	3,670	3,700	3,140	3,400	13,400	13,200	11,200	5,570
8	9,350	3,820	3,690	3,680	3,650	3,700	3,060	3,870	13,400	13,200	10,600	5,470
9	9,360	3,800	3,660	3,670	3,650	3,650	3,090	4,080	13,400	13,200	10,600	5,330
10	9,070	3,790	3,540	3,640	3,680	3,450	3,240	4,030	14,100	13,200	10,600	5,290
11	5,680	3,780	3,670	3,650	3,670	3,300	3,380	4,030	16,800	13,200	10,600	5,100
12	4,330	3,780	3,740	3,680	3,680	3,300	3,520	4,150	17,600	13,200	10,600	4,760
13	3,330	3,770	3,850	3,760	3,680	3,250	6,590	4,160	15,600	13,500	10,600	4,280
14	6,940	3,770	4,040	3,830	3,670	3,250	6,000	4,260	13,300	13,700	10,500	4,030
15	8,210	3,790	4,000	3,770	3,640	3,250	3,240	5,370	13,400	14,000	10,300	4,300
16	5,560	3,780	3,760	3,740	3,660	3,300	2,970	6,650	13,300	14,000	10,400	4,530
17	3,760	3,780	3,650	3,780	3,670	3,340	3,110	7,620	13,500	14,000	10,300	4,530
18	3,880	3,780	3,670	3,720	3,690	3,330	3,030	8,370	13,200	13,900	10,100	4,500
19	3,990	3,790	3,670	3,200	3,680	3,320	2,830	11,800	10,900	14,000	10,100	4,640
20	4,030	3,780	3,660	2,830	3,680	3,320	2,720	15,700	10,900	13,800	10,100	4,790
21	4,100	3,770	3,670	2,810	3,670	3,140	2,740	17,900	11,100	13,000	9,590	5,320
22	4,030	3,750	3,740	2,870	3,680	2,980	2,740	18,600	12,600	13,000	9,180	5,510
23	4,040	3,720	3,790	2,780	3,680	2,960	2,880	18,700	13,500	12,700	8,830	5,800
24	4,070	3,730	3,680	2,880	3,700	2,950	2,990	18,700	13,600	11,700	8,500	5,300
25	4,050	3,760	3,650	3,170	3,700	2,950	2,990	18,800	13,500	11,000	8,080	4,760
26	4,040	3,790	3,660	3,540	3,680	2,970	2,920	18,800	13,500	11,000	7,880	4,090
27	3,910	3,750	3,630	3,640	3,680	2,980	2,940	18,600	13,500	11,200	7,850	3,920
28	3,820	3,720	3,640	3,620	3,680	2,960	3,070	18,000	13,500	12,000	7,420	3,400
29	3,810	3,740	3,640	3,640	------	2,950	3,230	16,300	13,500	12,600	7,150	3,380
30	3,790	3,720	3,630	3,680	------	2,950	3,120	14,400	13,500	12,500	7,160	3,380
31	3,770	------	3,650	3,690	------	2,960	------	13,800	------	12,600	7,610	------
TOTAL	186,290	113,190	114,930	108,670	102,780	102,300	97,690	298,810	406,800	403,200	311,350	155,310
MEAN	6,009	?,773	3,707	3,505	3,671	3,300	3,256	9,639	13,560	13,010	10,040	5,177
MAX	9,360	920	4,040	3,830	3,700	3,720	6,590	18,800	17,600	14,000	12,700	7,640
MIN	3,330	3 .20	3,540	2,780	3,640	2,950	2,720	3,010	10,900	11,000	7,150	3,380
AC-FT	369,500	224,500	228,000	215,500	203,900	202,900	193,800	592,700	806,900	799,700	617,600	308,100
MEAN†	5,335	4,114	3,563	3,410	3,169	3,005	4,474	14,540	15,130	6,977	4,272	4,222
AC-FT†	328,100	244,800	219,100	209,700	176,000	184,800	266,200	894,500	900,500	429,100	262,700	251,200

CAL YR 1972 TOTAL 3,407,760 MEAN 9,311 MAX 20,000 MIN 3,330 AC-FT 6,759,000 MEAN† 9,404 AC-FT† 6,826M
WTR YR 1973 TOTAL 2,401,320 MEAN 6,579 MAX 18,800 MIN 2,720 AC-FT 4,763,000 MEAN† 6,031 AC-FT† 4,367M

† Adjusted for storage in Jackson Lake and Palisades Reservoir; no account taken for time of travel between reservoirs and Heise gaging station.

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 mi (0.3 km) downstream from Henrys Lake Dam, 5.4 mi (8.7 km) south of former Lake Post Office, and at mile 123.7 (199.0 km).

DRAINAGE AREA.--99.3 sq mi (257.2 sq km) including 6.2 sq mi (16.1 sq km) 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 (1,966.149 m) above mean sea level, levels by Bureau of Reclamation (Corps of Engineers bench mark). Prior to September 1922, nonrecording gage at site 3 mi (4.8 km) downstream and below mouth of Dry Creek at different datum.

AVERAGE DISCHARGE.--44 years (1929-73), 52.2 cfs (1.478 cu m/s), 37,820 acre-ft/yr (46.6 cu hm/yr); 15-year base period (1952-67), 52.8 cfs (1.495 cu m/s).

EXTREMES.--Current year: Maximum discharge, 213 cfs (6.03 cu m/s) Aug. 17 (gage height, 2.09 ft or 0.637 m); minimum discharge, 3.5 cfs (0.099 cu m/s) Sept. 27-30 (gage height, 0.65 ft or 0.198 m).
Period of record: Maximum discharge, 907 cfs (25.7 cu m/s) June 13, 1926 (gage height, 5.40 ft or 1.646 m); 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 1973).

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 Jan. 20, Apr. 23 to May 5, July 21 to Sept. 30)

0.8	38	1.9	217
1.2	87	2.5	357

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	50	95	41	46	47	32	26	48	71	203	123
2	69	50	94	41	45	47	30	27	54	70	205	120
3	71	49	94	42	46	47	28	30	55	69	204	119
4	71	49	94	43	46	47	29	37	54	69	206	114
5	72	49	94	42	46	47	32	44	54	64	207	108
6	73	49	92	42	47	47	32	52	81	48	205	103
7	73	49	92	41	47	47	28	61	121	46	206	84
8	72	49	91	42	47	46	28	76	118	45	204	61
9	73	48	91	43	47	46	28	91	120	45	204	62
10	76	48	90	43	47	45	31	89	116	45	202	61
11	79	48	91	43	47	46	33	88	122	44	203	62
12	80	48	90	43	47	46	34	88	149	44	203	62
13	80	71	90	43	48	46	27	87	145	66	205	60
14	81	112	89	43	47	42	27	87	147	99	205	59
15	66	111	89	44	47	37	26	86	151	97	208	59
16	56	110	88	45	48	37	25	85	154	93	209	56
17	57	109	87	45	48	37	25	85	154	89	193	58
18	60	110	86	45	48	37	25	79	156	87	160	57
19	60	109	84	45	48	37	24	64	151	82	164	58
20	61	107	83	45	49	37	23	66	149	81	166	34
21	60	105	82	46	48	37	22	72	144	121	170	6.6
22	57	102	66	45	48	38	21	64	141	163	172	6.5
23	57	99	42	45	48	37	26	34	138	159	173	6.5
24	51	98	41	46	48	36	28	34	134	153	174	6.5
25	50	98	41	46	48	37	28	34	131	150	176	6.5
26	53	98	41	45	48	37	29	35	128	147	160	4.7
27	51	97	41	46	48	37	30	35	114	147	118	4.0
28	54	96	42	46	48	35	32	35	70	173	120	4.1
29	54	97	41	46	------	34	29	35	71	204	120	3.9
30	50	96	41	46	------	34	26	36	71	204	121	8.1
31	50	------	41	47	------	33	------	44	------	202	121	------
TOTAL	1,985	2,411	2,323	1,365	1,325	1,263	838	1,806	3,441	3,177	5,587	1,579.4
MEAN	64.0	80.4	74.9	44.0	47.3	40.7	27.9	58.3	115	102	180	52.6
MAX	81	112	95	47	49	47	34	91	156	204	209	123
MIN	50	48	41	41	45	33	21	26	48	44	118	3.9
AC-FT	3,940	4,780	4,610	2,710	2,630	2,510	1,660	3,580	6,830	6,300	11,080	3,130

CAL YR 1972 TOTAL 29,061.0 MEAN 79.4 MAX 239 MIN 38 AC-FT 57,640
WTR YR 1973 TOTAL 27,100.4 MEAN 74.2 MAX 209 MIN 3.9 AC-FT 53,750

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 mi (0.8 km) upstream from Buffalo River, 1.3 mi (2.1 km) west of Island Park Post Office, and at mile 93.0 (149.6 km).

DRAINAGE AREA.--481 sq mi (1,246 sq km).

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, 138,900 acre-ft (171 cu hm) May 12 (elevation, 6,303.45 ft or 1,921.292 m); minimum, 71,800 acre-ft (88.5 cu hm) Sept. 30 (elevation, 6,293.59 ft or 1,918.286 m).
Period of record: Maximum contents, 143,500 acre-ft (177 cu hm) May 16, 1971 (elevation, 6,304.01 ft or 1,921.462 m); minimum after first filling of reservoir in May 1939, 5,280 acre-ft (6.51 cu hm) Sept. 29, 1966 (elevation, 6,260.77 ft or 1,908.283 m).

REMARKS.--Reservoir is formed by earth-fill rock-faced dam. Storage began Nov. 15, 1938. Capacity, 127,300 acre-ft (157 cu hm) between elevations 6,239 ft or 1,901.6 m (normal low-water level with outlet gates open) and 6,302 ft or 1,920.8 m (crest of spillway). Natural flow passing through reservoir when outlet gates are open limits withdrawal of storage to elevation 6,230 ft or 1,898.9 m (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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86,300	77,400	73,900	83,200	95,800	100,500	119,400	133,200	136,400	134,400	114,400	81,200
2	85,900	77,300	73,600	83,300	96,000	101,100	120,000	133,400	136,700	134,300	113,000	80,100
3	85,500	77,100	73,400	83,500	96,100	101,500	120,700	133,600	136,700	134,100	111,600	79,000
4	85,200	77,000	73,300	83,700	96,200	102,000	121,400	133,700	136,400	133,900	110,200	77,800
5	84,800	77,100	73,100	84,100	96,400	102,500	122,100	133,800	136,100	133,900	109,200	76,600
6	84,800	77,000	72,800	85,100	96,600	102,900	122,800	134,400	135,800	133,800	107,800	75,400
7	84,200	76,900	72,600	86,200	96,700	103,400	123,500	135,000	135,700	133,500	107,100	74,700
8	83,600	76,800	72,300	87,200	96,800	104,000	124,200	136,000	135,500	133,200	106,500	74,000
9	83,000	76,600	72,500	88,000	96,800	104,700	124,800	137,200	135,500	132,800	105,900	73,800
10	82,800	76,400	72,800	88,300	96,900	105,400	125,400	137,900	135,300	131,900	105,500	73,800
11	82,800	76,200	73,000	88,500	97,100	106,200	126,100	138,700	135,400	130,400	104,900	73,800
12	82,400	76,100	73,300	88,700	97,300	107,100	126,900	138,900	135,400	128,800	104,200	73,800
13	81,800	76,000	73,600	88,800	97,500	107,900	127,400	138,700	135,300	127,200	103,600	73,600
14	81,300	75,700	74,000	88,900	97,500	108,400	128,600	138,700	135,200	125,600	102,900	73,600
15	81,200	75,800	74,700	89,000	97,700	109,100	129,100	138,600	135,900	124,000	102,400	73,300
16	81,400	75,800	75,900	89,200	97,700	109,700	129,500	138,300	136,100	122,500	101,400	73,100
17	81,900	75,700	77,100	89,700	97,700	110,200	130,200	138,200	136,100	121,300	100,200	72,900
18	82,600	75,700	78,300	89,800	97,900	110,900	131,000	138,100	136,400	120,100	98,700	72,800
19	83,500	75,700	79,700	90,700	97,900	111,600	131,300	138,000	136,300	118,900	97,300	72,700
20	84,400	75,700	80,000	91,800	98,000	112,200	131,600	138,000	136,100	118,100	96,000	72,800
21	84,100	75,600	80,500	92,800	98,100	112,900	131,600	138,200	135,900	117,800	94,800	72,400
22	83,300	75,400	80,800	93,800	98,300	113,600	131,800	137,900	135,700	117,500	93,700	72,200
23	82,900	75,200	81,100	94,800	98,600	114,100	132,000	137,700	135,400	117,400	92,600	72,600
24	82,400	75,100	81,500	95,000	98,900	114,700	132,600	137,400	135,400	117,600	91,400	72,500
25	81,700	74,900	81,700	95,100	99,200	115,300	132,700	137,200	135,100	117,700	90,100	72,600
26	81,100	74,700	81,900	95,200	99,500	115,900	132,700	138,000	135,000	117,800	88,800	72,600
27	80,500	74,600	82,200	95,300	99,800	116,600	132,800	138,000	135,000	118,000	87,500	72,300
28	79,700	74,400	82,400	95,400	100,100	117,100	132,900	137,600	135,000	117,600	86,400	72,200
29	79,100	74,100	82,700	95,400	------	117,600	133,100	137,100	134,600	117,200	85,100	72,000
30	78,300	74,100	82,800	95,500	------	118,200	133,100	136,800	134,700	116,400	83,700	71,800
31	77,200	------	83,000	95,600	------	118,800	------	136,500	------	115,700	82,300	------
MAX	86,300	77,400	83,000	95,600	100,100	118,800	133,100	138,900	136,700	134,400	114,400	81,200
MIN	77,200	74,100	72,300	83,200	95,800	100,500	119,400	133,200	134,600	115,700	82,300	71,800
(†)	6,294.58	6,294.03	6,295.58	6,297.59	6,298.26	6,300.89	6,300.74	6,303.16	6,302.94	6,300.48	6,295.46	6,293.59
(‡)	-9,500	-3,100	+8,900	+12,600	+4,500	+18,700	+14,300	+3,400	-1,800	-19,000	-33,400	-10,500

CAL YR 1972..... ‡ +200
WTR YR 1973..... ‡ -14,900

† 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 mi (0.3 km) downstream from Island Park Dam, 0.2 mi (0.3 km) upstream from Buffalo River, 1 mi (1.6 km) southwest of Island Park Post Office, and at mile 92.9 (149.5 km).

DRAINAGE AREA.--481 sq mi (1,246 sq km). Mean altitude, 7,080 ft (2,160 m).

PERIOD OF RECORD.--January 1933 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,225 ft (1,897 m) (from river-profile map). Prior to May 15, 1935, nonrecording gage at site about 0.8 mi (1.3 km) upstream at different datum. May 15 to Nov. 30, 1935, water-stage recorder at site 1,000 ft (305 m) downstream at different datum.

AVERAGE DISCHARGE.--40 years, 586 cfs (16.60 cu m/s), 424,600 acre-ft/yr (524 cu hm/yr); 15-year base period (1952-67), 590 cfs (16.71 cu m/s).

EXTREMES.--Current year: Maximum discharge, 1,600 cfs (45.3 cu m/s) Aug. 1 (gage height, 4.74 ft or 1.445 m); minimum discharge, 1.7 cfs (0.048 cu m/s) Oct. 5 (gage height, 1.62 ft or 0.494 m).
Period of record: Maximum discharge, 2,770 cfs (78.4 cu m/s) Apr. 26, 1946 (gage height, 6.15 ft or 1.875 m); minimum daily, 1 cfs (0.028 cu m/s) 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 (6,270 sq hm) (1966 determination); a considerable portion of which consists of partly subirrigated meadows.

REVISIONS.--WSP 1217: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	901	832	751	546	525	414	247	548	968	724	1,310	1,350
2	904	835	762	552	527	362	216	545	1,020	700	1,520	1,350
3	894	831	753	558	524	315	187	561	1,020	678	1,480	1,330
4	879	827	763	292	521	315	187	592	976	646	1,490	1,310
5	696	831	762	100	522	315	188	659	921	642	1,480	1,290
6	956	826	755	100	526	320	191	727	885	639	1,270	1,110
7	996	825	744	103	516	268	191	840	880	598	1,110	1,010
8	998	819	607	103	524	222	191	1,020	873	757	1,100	824
9	1,000	814	506	297	518	222	191	1,190	893	981	1,090	642
10	1,000	816	511	568	516	222	191	1,350	866	1,240	1,090	637
11	1,010	808	511	568	522	222	191	1,440	855	1,400	1,080	626
12	1,010	807	511	568	517	222	194	1,460	844	1,400	1,090	621
13	1,010	797	520	558	536	222	213	1,430	828	1,400	1,090	658
14	967	798	244	563	536	226	252	1,420	866	1,400	1,090	679
15	810	799	58	512	536	226	290	1,400	926	1,390	1,170	683
16	554	795	58	537	536	227	304	1,350	961	1,280	1,460	680
17	408	793	60	536	536	229	304	1,320	1,010	1,180	1,480	686
18	212	786	60	409	531	229	321	1,310	1,040	1,180	1,450	685
19	281	786	251	86	531	229	333	1,300	1,000	1,180	1,450	689
20	696	782	525	86	531	230	362	1,370	966	1,050	1,420	687
21	1,060	777	529	86	462	233	381	1,310	937	879	1,450	689
22	1,060	774	529	86	410	237	405	1,260	909	885	1,440	687
23	1,060	775	523	343	413	239	426	1,200	895	752	1,440	690
24	1,060	770	529	531	414	240	483	1,140	861	635	1,440	686
25	1,060	770	529	534	409	240	497	1,160	837	638	1,420	685
26	1,070	765	531	534	414	240	498	1,290	816	638	1,420	689
27	1,070	769	551	531	414	240	510	1,250	804	719	1,410	686
28	1,070	767	555	531	414	242	520	1,170	794	952	1,400	688
29	1,070	763	548	527	------	244	535	1,070	766	1,110	1,390	686
30	1,070	752	546	525	------	244	536	1,020	764	1,250	1,380	688
31	925	------	551	533	------	245	------	970	------	1,240	1,370	------
TOTAL	27,757	23,889	15,633	12,403	13,881	7,881	9,535	34,672	26,981	30,163	41,280	24,421
MEAN	895	796	504	400	496	254	318	1,118	899	973	1,332	814
MAX	1,070	835	763	568	536	414	536	1,460	1,040	1,400	1,520	1,350
MIN	212	752	58	86	409	222	187	545	764	598	1,080	621
AC-FT	55,060	47,380	31,010	24,600	27,530	15,630	18,910	68,770	53,520	59,830	81,880	48,440

CAL YR 1972 TOTAL 297,476 MEAN 813 MAX 1,750 MIN 58 AC-FT 590,000
WTR YR 1973 TOTAL 268,496 MEAN 736 MAX 1,520 MIN 58 AC-FT 532,600

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 mi (0.5 km) downstream from powerplant, 2.6 mi (4.2 km) west of Ashton, and at mile 43.8 (70.5 km).

DRAINAGE AREA.--1,040 sq mi (2,694 sq km). Mean altitude, 6,710 ft (2,050 m).

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 (1,553 m) (from river-profile map). April 1890 to June 1891, nonrecording gage at site 6 mi (9.7 km) 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 mi (2.4 km) downstream at different datum.

AVERAGE DISCHARGE.--53 years (1902-88, 1926-73), 1,422 cfs (40.27 cu m/s), 1,030,000 acre-ft/yr (1,270 cu hm/yr); 15-year base period (1952-67), 1,442 cfs (40.84 cu m/s).

EXTREMES.--Current year: Maximum discharge, 4,190 cfs (119 cu m/s) May 8 (gage height, 7.23 ft or 2.204 m); minimum discharge, 338 cfs (9.57 cu m/s) Mar. 10 (gage height, 5.32 ft or 1.622 m).
Period of record: Maximum discharge, 6,220 cfs (176 cu m/s) May 7, 1925 (gage height, 3.11 ft or 0.948 m, site and datum then in use); minimum, 53 cfs (1.50 cu m/s) Sept. 20, 1960 (gage height, 5.45 ft or 1.661 m); minimum daily, 171 cfs (4.84 cu m/s) 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 (9,920 sq hm) (1966 determination).

REVISIONS (WATER YEARS).--WSP 1217: Drainage area. WSP 1347: 1890-91.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,800	1,650	1,580	1,220	1,340	1,250	1,090	1,990	2,510	1,800	2,200	2,380
2	1,740	1,710	1,600	1,420	1,320	1,240	1,090	1,960	2,620	1,760	2,430	2,230
3	1,750	1,680	1,600	1,420	1,320	1,110	1,010	2,040	2,590	1,680	2,460	2,200
4	1,720	1,710	1,480	1,010	1,370	1,110	994	2,070	2,530	1,700	2,510	2,180
5	1,700	1,830	1,240	1,020	1,370	1,120	1,020	2,610	2,390	1,620	2,540	2,140
6	1,620	1,750	1,530	908	1,370	1,090	1,020	3,120	2,290	1,830	2,470	2,180
7	1,850	1,750	1,740	1,010	1,280	1,120	1,010	3,310	2,340	1,740	2,090	1,910
8	1,830	1,750	1,520	854	1,320	1,020	1,010	3,570	2,270	1,570	2,040	1,920
9	1,860	1,740	1,320	716	1,330	1,050	1,020	3,760	2,240	1,490	1,980	1,470
10	1,950	1,730	1,200	1,190	1,390	1,020	1,030	3,640	2,310	1,970	1,980	1,420
11	1,990	1,730	1,190	1,420	1,350	1,090	1,070	3,630	2,240	2,380	1,980	1,420
12	1,950	1,720	1,540	1,500	1,370	1,060	1,100	3,580	2,170	2,430	1,980	1,430
13	1,900	1,700	1,500	1,520	1,320	1,020	1,200	3,650	2,180	2,410	1,950	1,430
14	1,880	1,720	1,480	1,500	1,330	1,020	1,330	3,700	2,230	2,390	1,970	1,530
15	1,810	1,720	1,280	1,400	1,330	1,000	1,330	3,730	2,530	2,380	1,970	1,550
16	1,650	1,720	849	1,400	1,330	1,030	1,320	3,680	2,500	2,350	2,070	1,560
17	1,270	1,730	1,080	1,440	1,320	1,050	1,640	3,650	2,430	2,150	2,340	1,530
18	1,110	1,710	1,100	1,380	1,340	1,040	1,450	3,630	2,500	2,150	2,370	1,560
19	1,030	1,740	1,070	1,170	1,320	1,020	1,370	3,540	2,360	2,190	2,340	1,550
20	1,240	1,690	1,520	851	1,310	1,030	1,310	3,600	2,260	2,220	2,340	1,580
21	1,810	1,680	1,560	869	1,300	1,060	1,310	3,480	2,100	2,070	2,310	1,640
22	1,930	1,690	1,480	828	1,210	1,060	1,320	3,210	2,090	1,900	2,380	1,590
23	1,880	1,640	1,420	879	1,200	1,050	1,460	3,070	2,060	1,900	2,400	1,690
24	2,070	1,660	1,420	1,280	1,220	1,040	1,520	2,980	2,060	1,610	2,360	1,720
25	2,020	1,680	1,400	1,450	1,210	1,050	1,570	3,140	1,970	1,550	2,350	1,730
26	2,000	1,720	1,350	1,400	1,210	1,070	1,850	3,340	1,930	1,560	2,310	1,660
27	1,980	1,670	1,350	1,330	1,220	1,070	1,720	3,130	1,880	1,570	2,290	1,580
28	1,960	1,690	1,370	1,280	1,220	1,090	2,090	2,880	1,870	1,800	2,310	1,590
29	2,000	1,910	1,380	1,360	------	1,050	2,050	2,750	1,860	1,900	2,250	1,590
30	1,930	1,760	1,210	1,410	------	1,050	2,030	2,590	1,850	2,170	2,230	1,600
31	1,970	------	1,420	1,370	------	1,110	------	2,520	------	2,160	2,260	------
TOTAL	55,200	51,580	42,779	37,805	36,520	33,190	40,334	97,550	67,160	60,400	69,460	51,560
MEAN	1,781	1,719	1,380	1,220	1,304	1,071	1,344	3,147	2,239	1,948	2,241	1,719
MAX	2,070	1,910	1,740	1,520	1,390	1,250	2,090	3,760	2,620	2,430	2,540	2,380
MIN	1,030	1,640	849	716	1,200	1,000	994	1,960	1,850	1,490	1,950	1,420
AC-FT	109,500	102,300	84,850	74,990	72,440	65,830	80,000	193,500	133,200	119,800	137,800	102,300

CAL YR 1972 TOTAL 703,689 MEAN 1,923 MAX 4,600 MIN 849 AC-FT 1,396,000
WTR YR 1973 TOTAL 643,538 MEAN 1,763 MAX 3,760 MIN 716 AC-FT 1,276,000

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									171	215	204	92
2									171	221	203	89
3									171	218	204	90
4									171	230	208	88
5									171	228	188	87
6									171	233	145	87
7									171	226	145	79
8									171	220	140	80
9									171	214	159	85
10									171	228	159	88
11									171	231	159	89
12									171	212	153	90
13									171	225	154	89
14									171	217	155	89
15									171	217	155	87
16									145	214	153	85
17									145	223	154	84
18									145	226	155	82
19									145	223	153	82
20									145	203	158	81
21									145	158	153	84
22									145	150	128	88
23									146	150	122	88
24									173	149	122	88
25									175	150	119	90
26									199	170	98	85
27									202	173	76	79
28									228	175	75	79
29					------				235	175	76	78
30					------				227	175	77	77
31		------			------		------		------	185	90	------
TOTAL									5,165	6,234	4,440	2,559
MEAN									172	201	143	85.3
MAX									235	233	208	92
MIN									145	149	75	77
AC-FT									10,240	12,370	8,810	5,080

THE PERIOD: AC-FT 36,500

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 mi (0.3 km) upstream from road bridge, 0.5 mi (0.8 km) downstream from headgates of Marysville Canal, 4 mi (6.4 km) northeast of Squirrel, 10.8 mi (17.4 km) upstream from Conant Creek, and at mile 19.8 (31.9 km).

DRAINAGE AREA.--351 sq mi (909 sq km). Mean altitude, 7,520 ft (2,290 m).

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 (1,704 m) above mean sea level. Prior to Jan. 1, 1904, nonrecording gages at site 3 mi (4.8 km) upstream at different datum, Jan. 1, 1904 to Nov. 6, 1937, nonrecording gage at site 200 ft (61 m) upstream at different datum, and Nov. 7, 1937, to Oct. 7, 1948, nonrecording gage at site 100 ft (30 m) downstream at datum 0.29 ft (0.088 m) lower.

AVERAGE DISCHARGE.--59 years (1904-8, 1918-73), 769 cfs (21.78 cu m/s), 557,100 acre-ft/yr (687 cu hm/yr); 15-year base period (1952-67), 762 cfs (21.58 cu m/s).

EXTREMES.--Current year: Maximum discharge, 3,830 cfs (1,08 cu m/s) May 20 (gage height, 4.17 ft or 1.271 m); minimum daily discharge, 408 cfs (11.6 cu m/s) Aug. 19, 21.
Period of record: Maximum discharge observed, 6,440 cfs (182 cu m/s) June 27, 1927; minimum observed, 72 cfs (2.04 cu m/s) 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 (6,880 sq hm) below station and in adjacent basins, and diversions from tributary upstream from station for irrigation of about 500 acres or 200 sq hm (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 Dec. 5-19, Dec. 30)

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	697	718	639	527	491	482	454	698	2,170	1,660	534	618
2	683	728	636	561	486	477	445	668	2,230	1,310	534	519
3	670	720	648	558	477	461	446	721	2,040	1,120	599	505
4	662	727	618	544	491	458	445	829	1,740	1,050	643	477
5	701	776	500	540	509	452	452	995	1,640	983	674	470
6	696	749	540	540	492	458	460	1,190	1,800	924	655	471
7	683	733	600	540	482	456	450	1,460	2,060	820	632	492
8	674	745	570	540	484	452	440	1,740	2,390	706	547	553
9	679	737	540	540	493	451	446	1,870	2,730	647	505	513
10	869	726	570	561	487	456	451	1,890	3,320	625	505	477
11	883	719	590	582	488	475	457	1,990	3,320	681	505	471
12	793	707	600	627	490	467	490	2,110	2,790	688	491	488
13	747	709	610	678	478	465	536	2,300	2,530	681	491	465
14	728	697	630	560	477	455	574	2,460	2,480	666	491	460
15	745	701	650	536	468	455	546	2,530	3,060	662	484	466
16	742	688	720	530	465	460	545	2,640	2,520	649	498	461
17	716	685	680	550	465	465	568	2,770	2,040	634	484	451
18	702	689	620	529	473	465	532	2,850	1,840	625	420	448
19	696	698	610	540	466	460	509	2,940	1,590	626	408	447
20	704	676	595	502	462	455	497	3,580	1,410	717	433	459
21	757	668	617	495	459	470	487	3,140	1,330	791	408	505
22	730	655	601	489	463	480	488	2,640	1,360	730	498	482
23	712	624	596	497	465	465	521	2,460	1,550	725	458	503
24	767	665	598	508	462	460	527	2,410	1,670	692	458	588
25	739	660	579	516	473	460	541	3,080	1,630	626	445	622
26	729	658	568	509	464	470	549	3,100	1,660	609	470	545
27	715	635	566	497	470	470	618	2,320	1,520	586	484	492
28	704	612	561	482	465	458	694	1,940	1,570	578	498	474
29	693	632	559	499	------	453	760	1,840	1,710	573	491	462
30	666	640	520	498	------	447	700	1,820	1,730	561	477	456
31	684	------	536	498	------	463	------	1,960	------	540	464	------
TOTAL	22,366	20,777	18,467	16,573	13,345	14,321	15,628	64,941	61,430	23,485	15,684	14,840
MEAN	721	693	596	535	477	462	521	2,095	2,048	758	506	495
MAX	883	776	720	678	509	482	760	3,580	3,320	1,660	674	622
MIN	662	612	500	482	459	447	440	668	1,330	540	408	447
AC-FT	44,360	41,210	36,630	32,870	26,470	28,410	31,000	128,800	121,800	46,580	31,110	29,440

CAL YR 1972 TOTAL 391,378 MEAN 1,069 MAX 3,640 MIN 435 AC-FT 776,300
WTR YR 1973 TOTAL 301,857 MEAN 827 MAX 3,580 MIN 408 AC-FT 598,700

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								79	512	713	500	441
2								81	673	652	501	437
3								83	682	663	528	437
4								83	705	602	543	414
5								84	627	592	556	381
6								86	672	591	523	378
7								88	724	577	514	368
8								91	756	531	511	393
9								104	799	518	504	389
10								117	826	549	501	385
11								117	876	567	497	382
12								117	854	583	498	373
13								117	827	581	494	363
14								116	797	574	491	346
15								118	757	585	488	345
16								192	764	577	459	356
17								310	660	570	459	356
18								341	567	573	460	348
19								375	491	469	465	348
20								378	501	565	477	347
21								385	499	536	469	345
22								391	517	528	460	362
23								352	523	532	501	361
24								323	565	508	484	373
25								363	590	502	474	367
26								391	626	506	475	361
27								384	658	509	495	361
28								489	675	505	465	339
29					------			484	692	507	465	338
30					------			510	709	500	449	326
31		------			------		------	542	------	509	436	------
TOTAL								7,691	20,124	17,274	15,142	11,120
MEAN								248	671	557	488	371
MAX								542	876	713	556	441
MIN								79	491	469	436	326
AC-FT								15,260	39,920	34,260	30,030	22,060

THE PERIOD: AC-FT 141,500

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 mi (0.3 km) upstream from highway bridge, at mile 0.8 (1.3 km), and 1.5 mi (2.4 km) north of Chester.

DRAINAGE AREA.--520 sq mi (1,350 sq km), approximately. Mean altitude, 6,970 ft (2,124 m).

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 (1,539.82 m) above mean sea level. Prior to Aug. 9, 1920, nonrecording gage at site 200 ft (61 m) downstream at same datum. Aug. 9, 1920, to Apr. 28, 1921, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--12 years (1961-73), 742 cfs (21.01 cu m/s), 537,600 acre-ft/yr (663 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 4,230 cfs (120 cu m/s) May 20 (gage height, 5.47 ft or 1.667 m); maximum gage height, 5.69 ft (1.734 m) Dec. 9; minimum discharge, 57 cfs (1.61 cu m/s) Aug. 18 (gage height, 1.24 ft or 0.378 m).
Period of record: Maximum discharge recorded, 6,380 cfs (181 cu m/s) June 27, 1927 (gage height, 6.60 ft or 2.012 m); maximum gage height recorded, 7.93 ft (2.417 m) Jan. 18, 1966 (backwater from ice); minimum discharge, recorded, 7 cfs (0.198 cu m/s) June 27, 1961 (gage height, 0.74 ft or 0.226 m).

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 (1,860 sq hm) above station and about 36,000 acres (14,600 sq hm) in adjacent basins (1966 determination). Station is below all diversions from Falls River.

REVISIONS.--WSP 1217: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Mar. 24 to Apr. 3; stage-discharge relation affected by ice Dec. 5 to Feb. 28)

1.3	63	3.0	880
1.6	127	4.0	1,930
2.0	260	5.0	3,420
2.5	520	6.0	5,290

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	601	591	646	540	530	526	490	796	1,820	1,140	108	256
2	587	618	646	540	530	514	478	755	1,950	859	97	257
3	574	616	657	570	520	490	478	812	1,830	665	141	219
4	568	626	648	570	520	490	488	932	1,520	570	185	204
5	594	680	480	560	530	478	490	1,130	1,280	514	236	209
6	608	673	550	560	530	484	502	1,350	1,300	462	259	208
7	592	646	600	560	530	478	502	1,660	1,550	393	231	222
8	590	651	630	560	520	472	487	1,940	1,870	253	157	282
9	572	645	580	560	520	472	489	2,180	2,280	188	126	305
10	723	636	610	570	520	478	496	2,130	2,910	137	121	238
11	845	646	640	600	520	502	510	2,250	3,030	151	118	224
12	722	636	640	680	520	490	548	2,330	2,470	162	117	239
13	670	636	640	630	520	484	612	2,530	2,060	160	111	231
14	646	629	660	600	520	478	674	2,760	1,950	153	104	222
15	624	633	680	580	500	466	642	2,820	2,630	159	102	236
16	632	630	700	580	500	466	626	2,810	2,350	150	79	243
17	590	632	760	580	500	478	658	2,940	1,760	129	66	232
18	576	629	720	580	500	478	633	3,070	1,570	139	63	223
19	566	648	680	580	500	460	589	3,150	1,330	181	62	215
20	573	623	660	580	500	472	570	3,920	1,100	229	71	222
21	623	614	640	540	500	478	554	3,520	984	400	69	275
22	612	604	620	530	500	484	558	2,830	950	350	115	272
23	584	569	615	530	500	472	597	2,560	1,080	351	108	279
24	642	598	610	530	500	467	624	2,450	1,210	328	104	378
25	622	606	600	540	500	471	633	2,940	1,160	261	110	439
26	600	622	590	540	500	478	635	3,360	1,150	201	144	364
27	588	614	580	540	510	478	701	2,370	1,040	165	146	308
28	583	639	570	530	520	472	803	1,850	1,010	163	150	284
29	572	681	560	530	------	472	887	1,680	1,130	157	151	266
30	555	691	550	520	------	472	817	1,580	1,190	161	149	256
31	577	------	540	530	------	490	------	1,660	------	128	142	------
TOTAL	19,011	18,962	19,302	17,440	14,360	14,890	17,771	69,065	49,464	9,459	3,942	7,808
MEAN	613	632	623	563	513	480	592	2,228	1,649	305	127	260
MAX	845	691	760	680	530	526	887	3,920	3,030	1,140	259	439
MIN	555	569	480	520	500	460	478	755	950	128	62	204
AC-FT	37,710	37,610	38,290	34,590	28,480	29,530	35,250	137,000	98,110	18,760	7,820	15,490

CAL YR 1972 TOTAL 357,491 MEAN 977 MAX 3,520 MIN 350 AC-FT 709,100
WTR YR 1973 TOTAL 261,474 MEAN 716 MAX 3,920 MIN 62 AC-FT 518,600

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								461	1,640	1,300	1,320	956
2								458	1,630	1,240	1,480	921
3								475	1,610	1,230	1,520	813
4								539	1,550	1,310	1,540	814
5								598	1,520	1,360	1,300	817
6								648	1,580	1,380	1,210	821
7								643	1,650	1,380	1,010	813
8								600	1,700	1,390	1,100	687
9								731	1,790	1,110	1,100	650
10								783	1,880	1,390	1,100	612
11								814	1,800	1,560	1,120	616
12								842	1,710	1,630	1,140	607
13								946	1,450	1,580	1,190	607
14								1,130	1,420	1,470	1,230	614
15								1,220	1,090	1,490	1,260	580
16								1,340	897	1,410	1,330	546
17								1,420	822	1,370	1,280	522
18								1,580	849	1,380	1,290	514
19								1,680	834	1,060	1,250	514
20								1,720	972	1,040	1,190	498
21								1,620	1,180	942	1,150	516
22								1,610	1,250	980	1,100	531
23								1,660	1,380	938	1,100	514
24								1,630	1,420	900	1,090	495
25								1,650	1,490	1,000	1,000	493
26								1,620	1,500	1,060	987	495
27								1,570	1,540	1,070	978	485
28								1,530	1,540	1,170	959	467
29					------			1,510	1,530	1,260	953	467
30					------			1,550	1,400	1,350	964	467
31		------			------		------	1,600	------	1,310	932	------
TOTAL								36,178	42,624	39,060	36,173	18,452
MEAN								1,167	1,421	1,260	1,167	615
MAX								1,720	1,880	1,630	1,540	956
MIN								458	822	900	932	467
AC-FT								71,760	84,540	77,480	71,750	36,600

THE PERIOD: AC-FT 342,100

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 mi (0.8 km) upstream from bridge on main street of St. Anthony, 6.4 mi (10.3 km) downstream from Falls River, and at mile 33.6 (54.1 km).

DRAINAGE AREA.--1,770 sq mi (4,580 sq km), approximately. Mean altitude, 6,670 ft (2,033 m).

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 (1,508.97 m) above mean sea level. March 1919 to May 7, 1922, nonrecording gages and May 8, 1922, to Aug. 14, 1931, water-stage recorder, at site 150 ft (46 m) downstream at datum 0.08 ft (0.024 m) lower.

AVERAGE DISCHARGE.--12 years (1961-73), 1,878 cfs (53.18 cu m/s) 1,361,000 acre-ft/yr (1,680 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 6,220 cfs (176 cu m/s) May 20 (gage height, 6.00 ft or 1.829 m); minimum, 21 cfs (0.595 cu m/s) July 9 (gage height, 1.91 ft or 0.582 m).
Period of record: Maximum discharge recorded, 9,670 cfs (274 cu m/s) May 28, 1970 (gage height, 7.32 ft or 2.231 m, present datum); maximum gage height recorded, 7.62 ft (2.323 m) Dec. 14, 1967; minimum discharge recorded, 21 cfs (0.60 cu m/s) July 9, 1973 (gage height, 1.91 ft or 0.582 m).

REMARKS.--Records good. Diversions above station for irrigation of about 21,000 acres (8,500 sq hm) below and about 58,000 acres (23,500 sq hm) above station of which about 1,100 acres (450 sq hm) are by withdrawals from ground water (1966 determination). Flow regulated by powerplant 17 mi (27.4 km) 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)
(Stage-discharge relation affected by ice Dec. 4 to Jan. 12, Jan. 20, 24)

2.9	520	5.0	3,710
3.5	1,130	6.0	6,040
4.0	1,800	7.0	8,900

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,100	2,210	2,060	1,700	1,910	1,740	1,400	2,460	2,910	1,950	993	1,720
2	2,070	2,270	2,080	1,800	1,830	1,740	1,380	2,350	3,170	1,670	1,020	1,740
3	2,070	2,280	2,090	1,800	1,850	1,600	1,340	2,440	3,050	1,430	1,120	1,700
4	2,040	2,320	1,850	1,400	1,900	1,560	1,300	2,480	2,730	1,270	1,200	1,660
5	2,100	2,470	1,580	1,400	1,930	1,600	1,340	3,090	2,360	1,120	1,410	1,630
6	2,040	2,410	1,700	1,370	1,930	1,560	1,350	3,790	2,130	1,140	1,500	1,690
7	2,200	2,360	2,200	1,300	1,790	1,550	1,350	4,350	2,340	1,080	1,340	1,610
8	2,190	2,400	2,000	1,200	1,770	1,470	1,320	4,830	2,450	776	1,160	1,640
9	2,180	2,380	1,800	1,300	1,860	1,470	1,320	5,400	2,870	590	1,050	1,480
10	2,540	2,260	1,600	1,400	1,940	1,460	1,340	5,140	3,460	933	1,020	1,310
11	2,350	2,170	1,700	2,000	1,900	1,550	1,380	5,220	3,700	1,170	993	1,270
12	2,420	2,120	1,980	2,300	1,930	1,530	1,440	5,210	3,210	1,220	986	1,290
13	2,400	2,100	2,000	2,390	1,850	1,480	1,570	5,360	2,920	1,250	948	1,270
14	2,360	2,080	1,900	2,240	1,860	1,470	1,740	5,490	2,890	1,270	899	1,300
15	2,300	2,090	1,800	2,150	1,840	1,440	1,720	5,460	4,180	1,310	878	1,360
16	2,220	2,080	1,500	2,080	1,820	1,450	1,720	5,330	4,290	1,330	892	1,380
17	1,920	2,080	1,180	2,080	1,790	1,470	2,080	5,270	3,630	1,170	1,040	1,370
18	1,750	2,070	1,450	1,990	1,840	1,490	1,930	5,270	3,540	1,200	1,170	1,390
19	1,640	2,120	1,440	1,840	1,830	1,440	1,770	5,210	3,090	1,370	1,160	1,390
20	1,760	2,060	1,800	1,400	1,800	1,460	1,650	5,850	2,620	1,490	1,230	1,420
21	2,280	2,040	2,150	1,300	1,780	1,490	1,620	5,570	2,140	1,730	1,240	1,460
22	2,460	2,050	2,000	1,300	1,730	1,490	1,620	4,690	1,980	1,490	1,340	1,420
23	2,430	1,940	1,900	1,300	1,720	1,460	1,770	4,240	1,990	1,500	1,380	1,500
24	2,540	1,980	1,900	1,700	1,730	1,410	1,880	4,040	2,050	1,260	1,380	1,650
25	2,530	2,030	1,900	2,180	1,760	1,410	1,880	4,450	1,940	1,030	1,420	1,760
26	2,500	2,080	1,850	2,020	1,730	1,410	2,170	5,180	1,840	921	1,430	1,660
27	2,490	2,020	1,800	1,920	1,730	1,430	1,990	4,250	1,720	829	1,430	1,540
28	2,450	2,110	1,800	1,740	1,720	1,450	2,480	3,510	1,640	874	1,510	1,520
29	2,460	2,320	1,780	1,840	------	1,400	2,580	3,160	1,780	940	1,490	1,510
30	2,340	2,270	1,700	2,070	------	1,370	2,520	2,870	1,970	1,090	1,490	1,500
31	2,370	------	1,750	1,950	------	1,410	------	2,830	------	1,050	1,510	------
TOTAL	69,500	65,170	56,240	54,460	51,070	46,260	50,950	134,790	80,590	37,453	37,629	45,140
MEAN	2,242	2,172	1,814	1,757	1,824	1,492	1,698	4,348	2,686	1,208	1,214	1,505
MAX	2,540	2,470	2,200	2,390	1,940	1,740	2,580	5,850	4,290	1,950	1,510	1,760
MIN	1,640	1,940	1,180	1,200	1,720	1,370	1,300	2,350	1,640	590	878	1,270
AC-FT	137,900	129,300	111,600	108,000	101,300	91,760	101,100	267,400	159,900	74,290	74,640	89,540

CAL YR 1972 TOTAL 895,080 MEAN 2,446 MAX 6,270 MIN 1,170 AC-FT 1,775,000
WTR YR 1973 TOTAL 729,252 MEAN 1,998 MAX 5,850 MIN 590 AC-FT 1,446,000

HENRYS FORK BASIN

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 (23 m) upstream from county road bridge, 3.5 mi (5.6 km) southwest of Tetonia, 6.5 mi (10.5 km) northwest of Driggs, and at mile 56.3 (90.6 km).

DRAINAGE AREA.--335 sq mi (868 sq km), approximately.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,952.9 ft (1,814.44 m) above mean sea level.

AVERAGE DISCHARGE.--12 years, 400 cfs (11.33 cu m/s), 289,800 acre-ft/yr (357 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 1,100 cfs (31.2 cu m/s) June 15 (gage height, 3.03 ft or 0.924 m); minimum daily discharge, 140 cfs (3.96 cu m/s) Feb. 15-22.
Period of record: Maximum discharge, 2,050 cfs (58.1 cu m/s) June 18, 1964 (gage height, 4.36 ft or 1.329 m); maximum gage height, 6.37 ft (1.942 m) Feb. 1, 1963; minimum daily discharge, 75 cfs (2.12 cu m/s) Jan. 11, 1963.

REMARKS.--Records good except those for winter periods, which are fair. Diversions above station for irrigation of about 42,000 acres (17,000 sq hm) of which about 1,000 acres (400 sq hm) are by withdrawals from ground water (1966 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	420	360	304	160	145	160	215	390	382	813	433	385
2	413	370	273	165	145	160	215	351	433	697	419	399
3	402	386	282	165	145	160	218	337	431	620	423	368
4	402	423	252	165	145	165	222	355	403	587	435	354
5	431	427	155	165	150	170	235	377	369	564	448	342
6	434	389	170	165	145	170	264	375	366	544	435	333
7	415	359	200	160	145	180	261	374	389	532	410	343
8	405	360	210	160	145	195	250	394	521	528	390	456
9	401	370	218	165	145	223	254	407	663	529	389	464
10	480	364	220	175	145	220	284	386	828	504	391	391
11	514	349	220	185	145	224	345	374	981	490	386	375
12	455	336	220	200	145	225	399	379	794	486	377	367
13	426	330	210	215	145	222	501	388	692	519	373	346
14	414	321	200	180	145	220	631	404	748	512	346	336
15	425	322	195	165	140	213	591	428	1,020	497	343	335
16	420	326	190	160	140	213	476	457	877	480	348	330
17	413	327	195	160	140	222	636	498	735	442	341	319
18	396	325	200	160	140	219	661	517	690	425	342	319
19	392	322	220	160	140	209	497	555	631	442	341	315
20	400	313	225	155	140	216	415	663	568	669	354	319
21	580	305	225	150	140	224	404	682	535	655	360	338
22	512	298	215	150	140	217	495	582	526	618	381	337
23	446	287	208	150	145	215	669	502	547	614	382	346
24	462	284	200	150	150	214	746	476	596	530	358	418
25	428	283	200	150	160	215	617	506	609	490	347	394
26	410	294	195	150	165	218	599	544	645	475	341	359
27	401	316	180	150	165	224	657	465	705	463	336	341
28	404	364	170	150	165	217	711	420	726	457	335	329
29	403	318	170	150	------	214	552	379	728	456	333	326
30	392	313	165	150	------	215	414	356	865	459	324	324
31	378	------	160	150	------	219	------	356	------	453	330	------
TOTAL	13,274	10,141	6,447	5,035	4,105	6,378	13,434	13,677	19,003	16,550	11,551	10,708
MEAN	428	338	208	162	147	206	448	441	633	534	373	357
MAX	580	427	304	215	165	225	746	682	1,020	813	448	464
MIN	378	283	155	150	140	160	215	337	366	425	324	315
AC-FT	26,330	20,110	12,790	9,990	8,140	12,650	26,650	27,130	37,690	32,830	22,910	21,240

CAL YR 1972 TOTAL 184,614 MEAN 504 MAX 1,630 MIN 155 AC-FT 366,200
WTR YR 1973 TOTAL 130,303 MEAN 357 MAX 1,020 MIN 140 AC-FT 258,500

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 mi (0.8 km) upstream from railroad bridge, 4 mi (6.4 km) southeast of St. Anthony, and at mile 22 (35.4 km).

DRAINAGE AREA.--890 sq mi (2,305 sq km), 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 (1,515.40 m) above mean sea level. Apr. 5, 1890, to Sept. 30, 1893, nonrecording gage at site 1 mi (1.6 km) downstream at different datum. Apr. 23, 1903, to June 30, 1909, nonrecording gage at site 0.8 mi (1.3 km) 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 (12.0 m) downstream at different datum.

AVERAGE DISCHARGE.--40 years (1933-73), 795 cfs (22.51 cu m/s), 576,000 acre-ft/yr (710 cu hm/yr); 15-year base period (1952-67), 768 cfs (21.75 cu m/s).

EXTREMES.--Current year: Maximum discharge, 3,180 cfs (90.1 cu m/s) May 21 (gage height, 5.89 ft or 1.795 m); minimum daily discharge, 335 cfs (9.49 cu m/s) Jan. 5.
Period of record: Maximum discharge, 11,000 cfs (312 cu m/s) Feb. 12, 1962 (gage height, 9.36 ft or 2.853 m), on basis of contracted-opening measurement of peak flow; minimum, 214 cfs (6.06 cu m/s) Dec. 15, 1955 (gage height, 1.62 ft or 0.494 m).

REMARKS.--Records excellent except those for winter periods, which are good. Diversions above station for irrigation of about 58,000 acres (23,000 sq hm) of which about 4,400 acres (1,800 sq hm) are by withdrawals from ground water (1965 determination). Water is diverted at times (since 1939) during irrigation season from Henrys Fork through Cross Cut Canal to Teton River 0.8 mi (1.3 km) upstream from station (39,980 acre-ft or 49.3 cu hm) diverted into river during 1973 irrigation season). Records of chemical analyses for water year 1973 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 Oct. 24 to Dec. 3, May 14-23; stage-discharge relation affected by ice Dec. 4-26, Dec. 31 to Jan. 16, Jan. 22-24, Jan. 28, 30)

2.5	310	5.0	2,430
3.0	630	6.0	3,400
4.0	1,530		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	664	603	483	370	374	427	428	787	1,720	1,880	909	809
2	651	614	491	390	377	445	420	734	1,880	1,680	963	815
3	657	655	483	365	410	431	425	692	1,760	1,460	945	804
4	648	669	420	340	388	415	430	669	1,530	1,350	954	772
5	675	695	370	335	387	425	443	696	1,320	1,290	972	742
6	711	667	390	360	386	430	490	760	1,330	1,240	1,040	701
7	684	611	420	385	386	417	492	831	1,480	1,210	936	642
8	657	601	430	390	399	409	469	913	1,680	1,140	864	685
9	648	608	420	395	388	412	460	1,010	1,900	1,110	819	833
10	729	607	430	425	377	422	493	1,080	2,530	1,080	816	773
11	828	585	440	450	399	432	586	1,150	2,740	1,040	815	712
12	765	564	440	500	403	435	701	1,190	2,660	1,070	799	675
13	698	547	440	580	391	423	873	1,280	2,190	1,080	796	656
14	664	539	440	600	392	420	1,200	1,440	2,070	1,070	778	641
15	662	534	450	590	377	413	1,190	1,640	2,470	1,050	742	641
16	685	536	450	550	372	404	974	1,910	2,560	1,020	771	641
17	676	534	460	465	388	419	1,200	2,230	2,070	1,010	800	633
18	657	532	480	432	394	419	1,450	2,480	1,750	990	800	622
19	635	534	500	432	390	401	999	2,760	1,580	810	796	624
20	630	522	510	408	372	401	774	3,000	1,470	1,100	795	620
21	730	513	510	400	350	427	711	3,080	1,340	1,220	804	616
22	851	510	510	395	377	430	873	2,560	1,300	1,300	878	642
23	751	471	500	395	382	418	1,370	2,190	1,340	1,300	886	658
24	703	468	500	415	372	415	1,600	2,100	1,430	1,280	823	704
25	699	481	490	452	399	413	1,320	2,290	1,460	1,100	769	756
26	672	502	475	419	410	423	1,230	2,540	1,460	1,050	766	710
27	657	484	437	407	402	428	1,350	2,030	1,510	1,040	751	666
28	646	481	438	400	406	431	1,480	1,630	1,580	999	764	670
29	647	464	415	404	------	421	1,260	1,440	1,630	981	791	663
30	605	472	355	400	------	414	880	1,400	1,830	954	782	662
31	583	------	350	389	------	422	------	1,480	------	927	774	------
TOTAL	21,168	16,603	13,927	13,238	10,848	13,042	26,571	49,992	53,570	35,831	25,898	20,788
MEAN	683	553	449	427	387	421	886	1,613	1,786	1,156	835	693
MAX	851	695	510	600	410	445	1,600	3,080	2,740	1,880	1,040	833
MIN	583	464	350	335	350	401	420	669	1,300	810	742	616
AC-FT	41,990	32,930	27,620	26,260	21,520	25,870	52,700	99,160	106,300	71,070	51,370	41,230

CAL YR 1972 TOTAL 85,081 MEAN 232 MAX 851 MIN 305 AC-FT 168,800
WTR YR 1973 TOTAL 301,476 MEAN 826 MAX 3,080 MIN 335 AC-FT 598,000

PEAK DISCHARGE (BASE, 2,100 CFS)

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 (12,100 sq hm) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								38	1,350	1,210	996	792
2								38	1,320	1,190	1,100	769
3								38	1,340	1,160	1,120	750
4								55	1,330	1,050	1,140	753
5								56	1,250	1,060	1,140	726
6								56	1,210	1,020	1,040	734
7								55	1,360	1,100	967	721
8								56	1,470	1,120	941	737
9								61	1,550	1,140	893	769
10								97	1,610	1,100	935	749
11								152	1,700	1,160	942	716
12								169	1,620	1,270	948	699
13								197	1,550	1,110	907	669
14								382	1,450	1,190	882	657
15								507	1,290	1,120	817	639
16								664	1,200	1,180	807	629
17								935	1,090	1,120	853	631
18								1,210	973	1,080	785	631
19								1,240	957	867	793	614
20								1,300	963	1,230	864	583
21								1,340	982	949	748	567
22								1,280	965	772	817	575
23								1,300	1,060	881	789	600
24								1,290	1,130	869	749	581
25								1,270	1,230	811	757	565
26								1,260	1,260	850	743	562
27								1,130	1,300	836	749	556
28								1,240	1,320	835	768	542
29					------			1,210	1,410	947	751	536
30					------			1,200	1,410	933	776	536
31		------			------		------	1,220	------	1,020	744	------
TOTAL								21,046	38,650	32,180	27,261	19,588
MEAN								679	1,288	1,038	879	653
MAX								1,340	1,700	1,270	1,140	792
MIN								38	957	772	743	536
AC-FT								41,740	76,660	63,830	54,070	38,850

THE PERIOD: AC-FT 275,200

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								413	1,260	640	896	630
2								465	1,200	715	849	542
3								489	1,190	769	863	571
4								517	1,180	806	817	565
5								544	1,160	808	653	563
6								560	1,180	791	647	562
7								588	1,190	842	642	534
8								617	1,180	700	693	453
9								623	1,160	653	748	453
10								620	1,150	797	782	404
11								629	1,100	885	850	402
12								632	1,060	898	865	461
13								679	994	845	820	461
14								755	831	811	782	440
15								822	775	819	777	440
16								1,010	724	821	766	422
17								1,140	644	845	760	420
18								1,260	581	858	742	417
19								1,340	639	912	718	415
20								1,310	640	506	697	425
21								1,280	666	497	544	425
22								1,260	800	494	591	400
23								1,290	918	480	523	400
24								1,280	917	446	602	330
25								1,290	912	540	618	330
26								1,320	910	618	609	328
27								1,300	928	705	611	328
28								1,300	945	764	563	328
29					------			1,270	846	825	606	328
30					------			1,280	587	865	620	328
31		------			------		------	1,300	------	857	662	------
TOTAL								29,183	28,267	22,812	21,916	13,105
MEAN								941	942	736	707	437
MAX								1,340	1,260	912	896	630
MIN								413	581	446	523	328
AC-FT								57,880	56,070	45,250	43,470	25,990

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 (61 m) downstream from highway bridge, 6 mi (9.7 km) west of Rexburg, and at mile 9.3 (15.0 km).

DRAINAGE AREA.--2,920 sq mi (7,560 sq km), 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 (1,465.18 m) above mean sea level. Apr. 13, 1909, to Sept. 28, 1912, nonrecording gage at datum 0.67 ft (0.204 m) higher. Sept. 29, 1912, to Apr. 4, 1913, nonrecording gage at present datum.

AVERAGE DISCHARGE.--64 years, 1,967 cfs (55.71 cu m/s), 1,425,000 acre-ft/yr (1,760 cu hm/yr); 15-year base period (1952-67), 1,848 cfs (52.34 cu m/s).

EXTREMES.--Current year: Maximum discharge, 6,560 cfs (186 cu m/s) May 21 (gage height, 9.00 ft or 2.743 m); minimum discharge, 650 cfs (18.4 cu m/s) July 11 (gage height, 3.24 ft or 0.988 m).
Period of record: Maximum discharge, 11,200 cfs (317 cu m/s) May 29, 1970 (gage height, 10.30 ft or 3.139 m); minimum, 183 cfs (5.18 cu m/s) Mar. 24-28, 1934 (gage height, 1.45 ft or 0.442 m).

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 (2,000 sq hm) below and about 204,000 acres (82,600 sq hm) above station of which about 21,000 acres (8,500 sq hm) 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 1973 are published in Part 2 of this report.

REVISIONS.--WSP 1217: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,710	3,130	2,850	2,200	2,500	2,180	1,750	2,990	2,380	2,630	898	1,860
2	2,660	3,010	2,700	2,240	2,400	2,100	1,720	2,880	2,730	2,570	759	2,110
3	2,600	3,080	2,400	2,200	2,350	2,100	1,710	2,730	2,970	2,150	846	2,110
4	2,580	3,130	1,900	2,400	2,300	2,040	1,670	2,800	2,830	1,800	960	2,060
5	2,570	3,180	1,500	1,950	2,300	2,020	1,700	2,990	2,290	1,600	1,370	2,020
6	2,590	3,300	1,700	1,800	2,300	2,000	1,830	3,540	1,880	1,350	1,710	1,960
7	2,610	3,210	2,000	1,820	2,300	1,960	1,840	4,080	1,690	1,270	1,720	1,980
8	2,670	3,100	2,300	1,850	2,300	1,940	1,730	4,660	1,760	1,060	1,390	1,890
9	2,650	3,030	2,450	1,800	2,300	1,840	1,700	5,250	2,100	834	1,160	2,110
10	2,730	2,950	2,350	1,500	2,300	1,850	1,760	5,910	2,500	690	1,070	1,910
11	2,990	2,830	2,150	2,000	2,300	1,880	1,920	5,850	3,280	655	961	1,800
12	3,140	2,760	1,950	2,250	2,300	1,940	2,060	5,920	3,600	914	923	1,710
13	3,050	2,710	2,000	2,450	2,350	1,860	2,270	5,900	3,330	868	964	1,680
14	2,930	2,680	2,600	2,600	2,380	1,820	2,650	6,030	3,060	999	932	1,650
15	2,910	2,650	2,400	2,700	2,350	1,800	2,860	6,220	3,550	1,050	900	1,700
16	2,850	2,650	2,500	2,800	2,350	1,770	2,650	6,170	4,670	1,110	924	1,750
17	2,850	2,650	2,000	2,750	2,350	1,780	2,550	5,930	5,110	1,050	980	1,770
18	2,620	2,630	1,600	2,750	2,350	1,830	3,170	5,820	4,780	905	1,230	1,800
19	2,470	2,620	1,750	2,720	2,350	1,780	3,000	5,750	4,400	1,030	1,330	1,800
20	2,380	2,640	1,900	2,550	2,300	1,760	2,460	5,750	3,780	1,300	1,410	1,810
21	2,610	2,570	2,100	2,200	2,250	1,780	2,230	6,340	3,050	1,950	1,510	1,840
22	3,060	2,560	2,500	1,950	2,200	1,820	2,200	6,220	2,350	2,250	1,590	1,870
23	3,200	2,520	2,700	1,800	2,200	1,790	2,370	5,220	1,960	2,320	1,780	1,920
24	3,250	2,450	2,500	1,800	2,200	1,770	2,850	4,420	1,930	2,300	1,790	2,150
25	3,300	2,520	2,450	1,900	2,200	1,740	3,010	4,050	1,930	1,970	1,820	2,300
26	3,270	2,620	2,420	2,150	2,200	1,740	2,930	4,550	1,770	1,620	1,830	2,380
27	3,260	2,600	2,400	2,500	2,200	1,750	2,910	5,150	1,660	1,380	1,840	2,250
28	3,240	2,600	2,350	2,400	2,200	1,760	3,040	4,440	1,520	1,170	1,860	2,170
29	3,200	2,810	2,320	2,280	------	1,750	3,390	3,350	1,590	1,100	1,860	2,140
30	3,170	2,920	2,320	2,250	------	1,710	3,300	2,720	2,280	1,080	1,800	2,140
31	3,110	------	2,230	2,300	------	1,720	------	2,430	------	1,040	1,730	------
TOTAL	89,230	84,110	69,290	68,860	64,380	57,580	71,230	146,060	82,730	44,015	41,847	58,640
MEAN	2,878	2,804	2,235	2,221	2,299	1,857	2,374	4,712	2,758	1,420	1,350	1,955
MAX	3,300	3,300	2,850	2,800	2,500	2,180	3,390	6,340	5,110	2,630	1,860	2,380
MIN	2,380	2,450	1,500	1,500	2,200	1,710	1,670	2,430	1,520	655	759	1,650
AC-FT	177,000	166,800	137,400	136,600	127,700	114,200	141,300	289,700	164,100	87,300	83,000	116,300

CAL YR 1972 TOTAL 1,130,980 MEAN 3,090 MAX 7,710 MIN 1,070 AC-FT 2,243,000
WTR YR 1973 TOTAL 877,972 MEAN 2,405 MAX 6,340 MIN 655 AC-FT 1,741,000

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 mi (8.4 km) south of former Lake, Idaho, Post Office. Drainage area, 99.0 sq mi (256.4 sq km), including 6.2 sq mi (16.1 sq km) of Dry Creek basin. Period of record, June 1923 to current year (fragmentary). Nonrecording gage. Datum of gage is 6,457.16 ft (1,968.142 m) above mean sea level (levels by Bureau of Reclamation). Current year: Maximum contents observed, 90,400 acre-ft (111 cu hm) June 1 (gage height, 16.70 ft or 5,090 m); minimum observed, 73,400 acre-ft (90.5 cu hm) Sept. 12 (gage height, 14.06 ft or 4.285 m). Period of record: Maximum contents observed, 92,100 acre-ft (114 cu hm) June 26, 1969 (gage height, 16.95 ft or 5.166 m); minimum observed, 140 acre-ft (173,000 cu m) Nov. 8, 1934 (gage height, 0.03 ft or 0.009 m).

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 (111 cu hm) between gage heights 0.0 (low-water level of Henrys Lake prior to construction of dam) and 16.7 ft (5.09 m) (top of 4.7-ft or 1.43 m flashboards on spillway). Floodwaters of Dry Creek are diverted into Henrys Lake at times (some diverted during water year 1973). 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 mi (0.6 km) upstream from mouth on Grassy Creek, which is tributary to headwaters of Falls River, and 25.4 mi (40.9 km) northwest of Moran, Wyo. Drainage area, 10.4 sq mi (26.9 sq km), 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, 15,300 acre-ft (18.9 cu hm) June 23 (elevation, 7,210.35 ft or 2,197.715 m); minimum contents observed, 9,530 acre-ft (11.8 cu hm) Oct. 12 (elevation, 7,190.25 ft or 2,191.588 m). Period of record: Maximum contents observed, 15,446 acre-ft (19.0 cu hm) July 2, 1943 (elevation, 7,210.85 ft or 2,197.867 m); 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 (18.7 cu hm) between elevations 7,135.0 ft or 2,174.75 m (sill of trashrack) and 7,210.0 ft or 2,197.61 m (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 1972 TO SEPTEMBER 1973

	HENRYS LAKE			GRASSY LAKE		
	GAGE HEIGHT (FEET	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET	ELEVATION (FEET)	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
SEPT. 30	-	a82,700	-	-	a9,500	-
OCT. 31	15.74	84,100	+1,400	7,190.70	9,650	+150
NOV. 30	-	a83,000	-1,100	7,191.35	9,820	+170
DEC. 31	-	a83,300	+300	-	a10,100	+280
CALENDAR YEAR 1972	-	-	0	-	-	-3,400
JAN. 31	-	a83,100	-200	-	a10,300	+200
FEB. 28	-	a82,700	-400	7,193.75	10,500	+200
MAR. 31	-	a84,300	+1,600	-	a10,600	+100
APR. 30	15.92	85,200	+900	7,194.90	10,800	+200
MAY 31	-	a90,200	+5,000	-	a13,100	+2,300
JUNE 30	-	a89,600	-600	-	a15,200	+2,100
JULY 31	-	a83,300	-6,300	-	a12,000	-3,200
AUG. 31	-	a75,300	-8,000	-	a9,610	-2,390
SEPT. 30	-	a74,900	-400	-	a9,700	+90
WATER YEAR 1973			-7,800			+200

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 mi (5.6 km) west of Wayan.

DRAINAGE AREA.--137 sq mi (355 sq km).

RECORDS AVAILABLE.--June 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,380.00 ft (1,944.624 m) above mean sea level.

EXTREMES.--Current year: Maximum gage height observed, 7.56 ft (2.304 m) May 5-9; minimum observed, 4.58 ft (1.396 m) Sept. 14, 18.
Period of record: Maximum gage height, 8.40 ft (2.560 m) May 5, 1971; water below gage height 4.5 ft (1.372 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	5.15	5.63	6.20	-	6.34	6.48	7.47	6.91	6.12	6.05	5.67
2	-	5.19	5.63	6.20	-	6.35	6.48	7.47	6.81	6.10	6.04	5.72
3	-	5.21	5.67	6.20	-	6.35	6.48	7.49	6.81	6.08	6.00	5.71
4	-	5.24	5.67	6.20	-	6.35	6.48	7.52	6.78	6.04	6.02	5.74
5	-	5.28	5.73	6.20	-	6.36	6.49	7.56	6.69	5.99	5.97	5.67
6	-	5.30	5.76	6.20	-	6.35	6.52	7.56	6.57	5.97	5.93	5.68
7	-	5.32	5.78	6.19	-	6.37	6.52	7.56	6.53	5.93	5.96	5.66
8	-	5.34	5.81	6.18	-	6.37	6.52	7.56	6.50	5.88	5.95	5.74
9	-	5.37	5.85	6.20	-	6.37	6.53	7.55	6.37	5.88	5.93	5.75
10	4.65	5.37	5.87	6.20	-	6.37	6.58	7.54	6.33	5.87	5.90	5.77
11	4.64	5.39	5.91	6.20	-	6.37	6.62	7.53	6.26	5.84	5.87	5.79
12	4.63	5.41	5.98	6.21	-	6.39	6.66	7.52	6.14	5.86	5.87	5.75
13	4.63	5.42	6.01	6.23	-	6.39	6.75	7.52	6.12	5.93	5.82	5.74
14	4.60	5.43	6.02	6.23	-	6.39	6.77	7.49	6.10	5.93	5.80	5.74
15	4.63	5.44	6.02	6.24	-	6.39	6.80	7.46	6.09	5.92	5.77	5.73
16	4.63	5.46	6.03	6.24	6.31	6.39	6.84	7.48	6.11	5.92	5.74	5.74
17	4.63	5.48	6.04	6.24	6.31	6.40	6.90	7.44	6.11	5.94	5.69	5.73
18	4.62	5.49	6.05	-	6.31	6.40	6.93	7.35	6.12	5.94	5.70	5.69
19	4.65	5.50	6.07	-	6.31	6.42	6.97	7.37	6.11	6.03	5.69	5.69
20	4.73	5.52	6.09	-	6.32	6.42	6.99	7.35	6.13	6.02	5.66	5.68
21	4.82	5.52	6.10	-	6.30	6.42	6.98	7.35	6.13	6.08	5.74	5.68
22	4.86	5.53	6.10	-	6.31	6.44	6.98	7.35	6.13	6.11	5.74	5.67
23	4.91	5.55	6.10	-	6.31	6.44	6.96	7.31	6.15	6.11	5.70	5.69
24	4.98	5.55	6.10	-	6.32	6.44	7.08	7.29	6.14	6.13	5.71	5.76
25	5.00	5.59	6.10	-	6.34	6.44	7.15	7.25	6.15	6.11	5.69	5.76
26	5.02	5.60	6.11	-	6.33	6.44	7.25	7.25	6.17	6.11	5.66	5.78
27	5.06	5.60	6.12	-	6.33	6.44	7.37	7.22	6.17	6.07	5.65	5.68
28	5.10	5.60	6.15	-	6.33	6.44	7.45	7.17	6.16	6.06	5.65	5.50
29	5.11	5.62	6.16	-	------	6.47	7.47	7.16	6.16	6.06	5.63	5.24
30	5.12	5.62	6.18	-	------	6.48	7.48	7.07	6.14	6.08	5.59	4.99
31	5.13	------	6.20	-	------	6.48	------	6.94	------	6.06	5.60	------
MEAN	-	5.44	5.97	-	-	6.40	6.85	7.39	6.30	6.01	5.80	5.67
MAX	-	5.62	6.20	-	-	6.48	7.48	7.56	6.91	6.13	6.05	5.79
MIN	-	5.15	5.63	-	-	6.34	6.48	6.94	6.09	5.84	5.59	4.99

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 mi (2 km) upstream from mouth of canyon, 1.5 mi (2.4 km) upstream from Eagle Rock Canal, and 2.6 mi (4.2 km) south of Ririe.

DRAINAGE AREA.--627 sq mi (1,620 sq km).

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 or 1,506 m (from topographic map). Prior to September 1904, nonrecording gage at site about 1.5 mi (2.4 km) downstream at different datum. October 1916 to June 1921, nonrecording gage, and after June 1921 water-stage recorder at sites about 2 (3 m) and 2.2 mi (3.5 km) upstream at different datums.

AVERAGE DISCHARGE.--21 years (1903-4, 1916-25, 1962-73), 183 cfs (51.83 cu m/s), 132,600 acre-ft/yr (163 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 1,400 cfs (39.6 cu m/s) May 6 (gage height, 12.35 ft or 3.764 m); minimum discharge, 31 cfs (0.88 cu m/s) Aug. 14 (gage height, 1.44 ft or 0.439 m).
Period of record: Maximum discharge observed, 4,200 cfs (119 cu m/s) May 15, 1917 (gage height, 16.3 ft or 4.97 m); minimum, 5.8 cfs (0.16 cu m/s) Aug. 30, 1963, and Mar. 7, 1967.
Maximum discharge known, 5,080 cfs (144 cu m/s) Feb. 11, 1962, from estimate based on field survey (gage height, 15.0 ft or 4.57 m, from floodmarks); stream reported practically dry during summers of 1899 and 1934.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 7,300 acres (3,000 sq hm) of which about 100 acres (40 sq hm) 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 mi (64 km) upstream to Blackfoot Reservoir. Records of chemical analyses, water temperatures, and suspended sediment loads for the water year 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	77	90	66	70	160	66	943	280	110	67	38
2	76	95	94	68	66	170	70	930	260	101	64	45
3	75	87	83	66	66	140	84	890	240	96	60	55
4	74	84	60	63	76	121	96	965	225	90	60	59
5	78	88	49	61	76	120	146	1,160	210	87	58	54
6	81	93	62	63	76	108	320	1,320	200	82	56	52
7	82	92	66	63	75	99	253	1,180	195	78	53	49
8	82	87	65	64	71	94	140	1,030	192	76	53	48
9	82	86	65	65	64	91	137	951	212	72	52	57
10	87	86	60	65	72	85	177	850	200	70	52	83
11	103	86	60	64	82	80	350	758	192	67	49	77
12	113	84	60	66	80	77	610	698	194	63	46	66
13	100	84	61	81	78	76	864	653	170	63	45	60
14	93	82	62	145	76	77	1,040	624	174	67	43	55
15	88	80	64	160	73	78	565	601	196	74	40	51
16	96	80	66	145	72	70	434	567	246	75	40	49
17	98	80	66	120	81	70	495	547	225	73	40	49
18	93	82	69	100	80	71	606	532	232	68	39	49
19	92	82	77	70	79	68	394	522	207	64	39	48
20	90	82	100	59	75	65	321	521	182	79	39	48
21	117	82	114	60	72	73	262	520	181	137	40	46
22	148	78	112	60	75	74	311	488	168	141	43	47
23	123	66	110	61	79	67	471	451	159	149	42	49
24	114	58	108	61	86	69	691	438	151	133	43	54
25	105	75	96	65	91	69	713	438	143	104	43	61
26	95	87	99	67	102	79	698	480	138	89	42	69
27	90	87	100	65	110	88	780	450	129	79	40	74
28	86	77	92	63	110	75	905	400	123	73	39	67
29	85	72	78	65	------	68	1,140	350	120	67	39	62
30	74	62	69	72	------	68	1,160	320	118	65	39	57
31	71	------	65	73	------	66	------	300	------	64	36	------
TOTAL	2,871	2,441	2,422	2,366	2,213	2,716	14,299	20,877	5,662	2,656	1,441	1,678
MEAN	92.6	81.4	78.1	76.3	79.0	87.6	477	673	189	85.7	46.5	55.9
MAX	148	95	114	160	110	170	1,160	1,320	280	149	67	83
MIN	71	58	49	59	64	65	66	300	118	63	36	38
AC-FT	5,690	4,840	4,800	4,690	4,390	5,390	28,360	41,410	11,230	5,270	2,860	3,330

CAL YR 1972 TOTAL 93,164 MEAN 255 MAX 1,510 MIN 44 AC-FT 184,800
WTR YR 1973 TOTAL 61,642 MEAN 169 MAX 1,320 MIN 36 AC-FT 122,300

PEAK DISCHARGE (BASE, 850 CFS).--Apr. 14 (0730) 1,350 cfs (12.15 ft); May 6 (0500) 1,400 cfs (12.35 ft).

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 mi (2.4 km) above Heise gaging station. Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								245	10,700	10,000	10,500	7,590
2								574	10,700	10,100	10,700	7,050
3								923	10,400	10,200	10,800	6,950
4								1,060	10,900	10,000	10,600	6,730
5								1,040	11,200	10,100	9,970	6,790
6								1,100	11,400	10,400	9,930	6,410
7								1,350	11,800	10,400	9,670	6,200
8								1,490	12,000	10,400	9,570	6,160
9								1,730	12,100	10,700	9,590	5,850
10								2,260	12,100	11,000	9,310	5,690
11								2,690	11,900	11,300	9,180	5,510
12								3,270	11,900	11,400	9,100	5,320
13								3,750	12,000	11,600	9,160	5,150
14								4,790	11,400	11,500	9,140	5,040
15								6,870	10,600	11,400	9,110	5,390
16								8,070	10,100	11,300	9,140	5,620
17								8,960	9,360	11,400	9,080	5,670
18								9,600	9,220	11,500	8,900	5,810
19								9,940	9,050	11,300	8,780	5,930
20								10,400	9,300	9,970	8,740	6,280
21								10,500	9,810	8,510	8,530	6,230
22								10,800	10,200	7,940	8,080	6,430
23								10,900	10,300	7,540	8,080	6,220
24								10,600	9,830	7,120	7,770	6,140
25								10,100	10,000	7,130	7,380	5,510
26								9,930	10,300	7,530	7,060	5,010
27								9,620	10,400	8,140	7,280	4,670
28								9,730	10,600	8,780	7,280	4,300
29					------			9,840	10,600	9,010	7,490	4,210
30					------			10,100	10,300	9,860	7,420	4,200
31		------			------		------	10,400	------	10,400	7,650	------
TOTAL								192,632	320,470	307,930	274,990	174,060
MEAN								6,214	10,680	9,933	8,871	5,802
MAX								10,900	12,100	11,600	10,800	7,590
MIN								245	9,050	7,120	7,060	4,200
AC-FT								382,100	635,700	610,800	545,400	345,200

THE PERIOD: AC-FT 2,519,000

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 mi (0.5 km) southeast of Woodville, 2.5 mi (4.0 km) north of Shelley, at mile 791.7 (1,273.8 km).

DRAINAGE AREA.--9,790 sq mi (25,400 sq km), 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 (1,401.78 m) above mean sea level.

AVERAGE DISCHARGE.--42 years (1931-73), 5,497 cfs (155.7 cu m/s), 3,983,000 acre-ft/yr (4,910 cu hm); 15-year base period (1952-67), 5,232 cfs (148.2 cu m/s).

EXTREMES.--Current year: Maximum discharge, 16,800 cfs (476 cu m/s) May 28 (gage height, 10.02 ft or 3.054 m); minimum, 2,120 cfs (60.0 cu m/s) Sept. 17 (gage height, 5.25 ft or 1.600 m).
Period of record: Maximum discharge, 47,200 cfs (1,340 cu m/s) June 17, 1918 (gage height, 16.97 ft or 5.172 m); minimum, 288 cfs (8.16 cu m/s) Nov. 5, 1934 (gage height, 2.22 ft or 0.677 m).
Maximum discharge known, 75,000 cfs or 2,100 cu m/s (estimated) June 6, 1894, at former station at Eagle Rock (now Idaho Falls), 7 mi (11 km) upstream from present site.

REMARKS.--Records excellent except those for winter periods, which are fair. 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 (16,000 sq hm) below and about 637,000 acres (258,000 sq hm) above station of which about 100,000 acres (40,500 sq hm) 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)
(Stage-discharge relation affected by ice Dec. 5-17, Dec. 30 to Jan. 17, Jan. 24 to Feb. 4)

5.0	1,810
6.0	3,540
8.0	9,680
10.0	17,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,680	5,560	6,110	4,700	6,100	5,400	4,250	6,150	8,210	9,010	5,300	4,040
2	8,570	5,710	5,890	4,600	5,900	5,470	4,240	5,700	8,510	9,250	4,950	4,770
3	8,440	5,760	5,970	4,300	5,500	5,310	4,280	5,290	9,230	8,790	4,780	5,230
4	8,410	5,780	5,940	3,600	5,600	5,310	4,340	5,110	9,250	8,410	5,260	5,320
5	8,380	5,790	4,400	3,100	5,550	5,000	4,380	5,190	8,360	7,990	6,070	5,330
6	8,460	5,880	4,000	3,000	5,670	5,220	4,570	5,450	7,380	7,350	6,700	4,650
7	8,500	5,890	4,100	2,900	5,610	4,970	4,850	6,010	6,340	6,850	6,340	3,970
8	8,630	5,840	4,200	3,100	5,620	5,000	4,580	6,390	5,650	6,710	5,390	3,760
9	8,640	5,730	4,500	3,400	5,440	4,820	4,420	6,830	5,500	6,390	4,650	4,050
10	8,880	5,660	4,650	3,600	5,330	4,800	4,620	7,110	5,940	5,670	4,670	4,180
11	8,370	5,560	4,900	3,800	5,340	4,750	4,970	7,380	7,810	5,210	4,660	3,950
12	6,640	5,430	5,200	4,200	5,530	4,570	5,340	7,020	10,600	4,910	4,900	3,560
13	5,660	5,360	5,600	4,700	5,550	4,570	5,790	6,570	11,500	5,110	4,990	3,080
14	5,030	5,310	6,000	5,500	5,550	4,470	10,000	5,840	9,450	5,450	4,790	2,630
15	7,820	5,300	6,700	6,000	5,450	4,360	7,830	5,510	8,760	6,000	4,680	2,410
16	8,590	5,410	7,600	6,100	5,440	4,340	6,300	6,390	10,400	6,560	4,550	2,450
17	6,310	5,480	7,700	6,100	5,420	4,290	5,900	6,350	12,300	6,390	4,630	2,550
18	5,200	5,470	7,130	6,050	5,440	4,390	6,340	5,830	13,300	6,270	4,730	2,420
19	4,930	5,430	6,010	6,110	5,400	4,390	6,440	7,650	12,100	6,190	5,100	2,270
20	4,790	5,420	5,960	5,640	5,390	4,310	5,930	11,800	9,700	8,140	5,390	2,190
21	4,790	5,570	6,230	5,180	5,400	4,290	5,300	14,200	8,400	9,560	5,380	2,540
22	5,020	5,520	6,440	4,860	5,510	4,160	5,060	15,600	7,310	10,200	5,480	2,830
23	5,420	5,490	6,620	4,300	5,380	4,260	5,180	15,800	7,520	10,900	5,450	3,120
24	5,760	5,500	6,370	4,000	5,350	3,910	5,540	15,200	8,300	10,700	5,380	3,690
25	5,830	5,440	6,630	4,400	5,350	4,190	5,890	14,900	8,430	9,530	5,360	4,000
26	5,850	5,550	6,010	4,800	5,380	3,940	5,770	15,400	7,850	8,260	5,100	4,050
27	5,810	5,680	5,890	5,100	5,350	3,960	5,760	16,300	7,470	7,160	5,040	3,890
28	5,680	5,640	5,890	5,300	5,380	4,000	5,670	16,700	7,090	6,420	4,730	3,490
29	5,660	5,650	5,800	5,100	------	4,010	6,150	15,300	7,240	6,540	4,170	3,220
30	5,570	5,940	4,800	5,200	------	4,330	6,520	11,900	7,890	6,510	3,840	3,130
31	5,570	------	4,800	5,700	------	4,200	------	9,280	------	5,730	3,670	------
TOTAL	209,890	167,750	178,040	144,440	153,930	140,990	166,210	290,150	257,790	228,160	156,130	106,770
MEAN	6,771	5,592	5,743	4,659	5,498	4,548	5,540	9,360	8,593	7,360	5,036	3,559
MAX	8,880	5,940	7,700	6,110	6,100	5,470	10,000	16,700	13,300	10,900	6,700	5,330
MIN	4,790	5,300	4,000	2,900	5,330	3,910	4,240	5,110	5,500	4,910	3,670	2,190
AC-FT	416,300	332,700	353,100	286,500	305,300	279,700	329,700	575,500	511,300	452,600	309,700	211,800

CAL YR 1972 TOTAL 3,343,410 MEAN 9,135 MAX 21,400 MIN 2,990 AC-FT 6,632,000
WTR YR 1973 TOTAL 2,200,250 MEAN 6,028 MAX 16,700 MIN 2,190 AC-FT 4,364,000

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 (21 m) upstream from railroad bridge immediately upstream from the Monsanto Chemical Company "Haul Road", 5 mi (8 km) upstream from Blackfoot Reservoir flow line, 6 mi (10 km) south of Henry, and 11 mi (18 km) north of Soda Springs.

DRAINAGE AREA.--350 sq mi (910 sq km), 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 (1,908 m) (from topographic map). Mar. 25, 1914, to Sept. 30, 1914, nonrecording gage at site 3.3 mi (5.3 km) downstream at different datum. Oct. 1, 1915, to Sept. 30, 1925, nonrecording gage at site 4 mi (6 km) downstream at different datum.

AVERAGE DISCHARGE.--7 years (1914-15, 1967-73), 174 cfs (4.928 cu m/s), 6.75 in/yr (171 mm/yr), 126,100 acre-ft/yr (155 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 1,000 cfs (28.3 cu m/s) May 8 (gage height, 6.25 ft or 1.905 m); minimum daily, 60 cfs (1.70 cu m/s) Dec. 5, 10.
Period of record: Maximum discharge, 2,060 cfs (58.3 cu m/s) May 16, 1917 (gage height, 6.85 ft or 2.088 m, from floodmark), from rating curve extended above 1,000 cfs (28.3 cu m/s); minimum daily, 23 cfs (0.65 cu m/s) Jan. 7, 1971.

REMARKS.--Records excellent except those for winter periods, which are fair. Diversions above station for irrigation of about 4,500 acres (1,820 sq hm) (1966 determination). Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	105	118	72	78	86	74	463	254	113	85	67
2	125	120	110	74	70	90	75	435	254	105	83	79
3	122	125	100	74	78	85	75	445	245	104	81	83
4	122	130	82	71	86	82	74	509	222	102	83	76
5	131	135	60	68	85	81	76	645	219	99	85	72
6	133	128	65	69	85	80	81	806	214	125	92	70
7	127	128	68	70	84	80	83	897	207	115	84	70
8	125	129	66	70	72	81	78	918	198	109	81	78
9	123	131	64	70	72	82	81	833	191	106	79	111
10	154	129	60	70	82	83	84	761	186	104	77	93
11	172	127	63	72	88	84	93	630	181	103	75	107
12	141	122	64	80	86	84	109	538	173	103	72	97
13	134	121	65	87	85	84	119	464	166	136	71	88
14	133	119	66	93	84	84	145	421	164	136	70	84
15	133	117	67	97	75	82	157	391	198	126	70	82
16	136	117	70	97	77	80	163	370	189	116	69	82
17	134	118	74	97	81	80	201	359	180	100	70	81
18	128	118	80	96	81	80	199	358	195	90	68	79
19	126	117	90	94	80	80	177	362	183	93	68	79
20	134	118	100	80	78	80	142	390	168	123	67	79
21	151	116	115	74	77	81	128	447	157	137	65	82
22	139	110	125	77	75	82	158	460	149	121	71	85
23	132	100	125	79	77	82	183	363	143	119	75	87
24	150	103	115	80	78	82	244	329	138	111	73	108
25	140	105	110	82	79	82	308	345	135	101	67	126
26	132	106	115	85	80	80	324	415	93	95	66	115
27	127	108	120	86	83	80	388	387	95	92	64	98
28	124	104	105	77	85	79	509	331	100	90	64	91
29	118	100	94	77	------	77	643	296	113	88	64	87
30	108	112	80	84	------	75	569	277	118	87	64	84
31	96	------	70	84	------	77	------	264	------	87	64	------
TOTAL	4,076	3,518	2,706	2,486	2,241	2,525	5,740	14,909	5,228	3,336	2,267	2,620
MEAN	131	117	87.3	80.2	80.0	81.5	191	481	174	108	73.1	87.3
MAX	172	135	125	97	88	90	643	918	254	137	92	126
MIN	96	100	60	68	70	75	74	264	93	87	64	67
CFSM	.01	.01	.009	.008	.008	.008	.02	.05	.02	.01	.008	.009
IN.	.02	.01	.01	.009	.008	.009	.02	.06	.02	.01	.008	.009
AC-FT	8,080	6,980	5,370	4,930	4,450	5,010	11,390	29,570	10,370	6,620	4,500	5,200

CAL YR 1972 TOTAL 98,877 MEAN 270 MAX 1,670 MIN 60 CFSM .03 IN .38 AC-FT 196,100
WTR YR 1973 TOTAL 51,652 MEAN 142 MAX 918 MIN 60 CFSM .01 IN .20 AC-FT 102,500

PEAK DISCHARGE (BASE, 600 CFS).--May 8 (0030) 1,000 cfs (6.25 ft).

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 mi (19 km) northwest of Henry, and at mile 78.0 (125.5 km).

DRAINAGE AREA.--581 sq mi (1,500 sq km).

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, 334,700 acre-ft (413 cu hm) June 28 (elevation, 6,119.71 ft or 1,865.288 m); minimum observed, 221,600 acre-ft (273 cu hm) Oct. 7-9 (elevation, 6,113.02 ft or 1,863.248 m).
Period of record: Maximum contents observed, 349,800 acre-ft (431 cu hm) Apr. 22, 23, 1951 (elevation, 6,120.56 ft or 1,865.541 m); minimum observed, 610 acre-ft (0.252 cu hm) Sept. 12-15, 19, 21, 22, 1934; minimum elevation observed, 6,088.59 ft (1,815.2 m) Sept. 22, 1934.

REMARKS.--Water diverted from reservoir for irrigation of about 50,000 acres (20,000 sq hm) near Pocatello and on Fort Hall Indian Reservation. Capacity is 313,000 acre-ft (386 cu hm) between elevations 6,086 ft or 1,855 m (bottom of outlet tunnel) and 6,118.5 ft or 1,864.92 m (crest of spillway) with provision for additional storage of 100,000 acre-ft (123 cu hm) to elevation 6,124 ft (1,866.6 m) 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	339,800
6,116	270,600		

CONTENTS, IN ACRE-FEET, FOR STATISTIC 00004, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221,900	227,700	-	-	-	-	-	-	334,300	-	281,000	263,300
2	221,900	-	-	-	-	-	281,300	-	334,100	318,700	280,600	263,100
3	221,900	-	-	-	-	-	-	307,000	334,000	318,300	279,300	263,100
4	221,700	-	-	-	-	-	-	-	334,000	317,400	278,800	263,100
5	221,700	-	-	-	-	-	-	-	333,800	316,700	277,400	263,100
6	221,700	-	-	-	-	-	-	-	333,600	315,900	276,900	263,000
7	221,600	-	-	-	-	-	-	309,600	333,600	315,000	275,500	263,000
8	221,600	-	-	-	-	-	-	-	333,400	314,100	274,500	263,000
9	221,600	-	-	-	-	-	-	-	333,200	313,300	273,900	263,000
10	-	-	-	-	-	-	-	322,700	332,900	311,400	273,500	263,000
11	-	-	-	-	-	-	-	322,700	332,700	310,700	-	263,000
12	-	-	-	-	-	-	281,300	322,700	332,000	308,700	271,800	262,800
13	-	-	244,700	-	-	-	-	322,700	331,300	308,000	270,600	262,800
14	-	-	-	-	-	-	-	322,700	330,600	305,300	270,000	262,800
15	-	-	-	-	-	-	-	322,700	329,900	303,700	269,500	262,800
16	-	-	247,400	-	-	-	286,400	326,700	329,900	302,000	269,100	262,800
17	-	-	-	-	-	-	-	326,900	328,700	300,300	268,800	262,800
18	-	-	-	-	-	-	-	327,800	328,500	298,500	-	262,800
19	-	-	-	-	-	276,600	288,400	328,500	328,100	298,500	267,800	262,800
20	-	-	-	-	-	-	-	329,200	327,800	298,500	267,300	262,800
21	-	-	-	-	-	-	-	330,100	327,300	295,600	267,000	262,800
22	-	-	-	-	-	-	-	331,800	326,700	-	-	262,800
23	-	-	-	258,100	-	-	-	332,200	326,000	292,700	266,500	263,000
24	-	-	-	-	-	-	-	332,400	325,300	290,700	266,100	263,000
25	-	-	-	-	-	-	-	332,700	324,600	289,600	-	263,000
26	-	-	-	-	269,500	-	295,000	333,100	323,900	288,400	-	263,000
27	-	-	-	-	-	-	-	333,400	323,000	287,400	265,100	263,000
28	-	239,100	-	-	a270,200	-	-	333,800	322,100	-	264,800	263,000
29	-	-	-	-	------	-	-	334,100	-	284,700	264,500	263,000
30	-	a239,800	-	-	------	-	a301,900	334,700	a320,400	284,000	264,000	263,000
31	a227,400	------	a251,600	a260,800	------	a280,600	------	334,500	------	282,800	263,600	------
MAX	-	-	-	-	-	-	301,900	334,700	334,300	-	281,000	263,300
MIN	-	-	-	-	-	-	-	-	320,400	282,800	263,600	262,800
(†)	-	-	-	-	-	-		6,119.70	-	6,116.72	6,115.58	6,115.54
(‡)	+5,500	+12,400	+11,800	+9,200	+9,400	+10,400	+21,300	+32,600	-14,100	-37,600	-19,200	-600

CAL YR 1972..... ‡ -4,900
WTR YR 1973..... ‡ +41,100

† 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 (3 m) upstream from highway bridge, at mile 2.3 (3.7 km), and 8 mi (13 km) southwest of Blackfoot.

DRAINAGE AREA.--1,295 sq mi (3,354 sq km), 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 (1,350 m) (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 mi (0.8 km) upstream at different datum. June 26, 1937, to Aug. 16, 1963, water-stage recorder at site 175 ft (53 m) downstream at same datum.

AVERAGE DISCHARGE.--42 years (1931-73), 178 cfs (5.041 cu m), 129,000 acre-ft/yr (159 cu hm/yr); 15-year base period (1952-67), 153 cfs (4.333 cu m).

EXTREMES.--Current year: Maximum discharge, 442 cfs (12.5 cu m/s) May 8 (gage height, 4.35 ft or 1.326 m); maximum gage height, 5.00 ft (1.524 m) Dec. 8; minimum daily discharge, 2.0 cfs (0.057 cu m/s) July 12.
Maximum combined daily discharge during year (Blackfoot River and Blackfoot River bypass), 1,070 cfs (30.3 cu m/s) May 7.
Period of record: Maximum discharge, 1,710 cfs (48.4 cu m/s) Feb. 11, 1962 (gage height, 7.68 ft or 2.341 m); no flow on many days.
Maximum combined discharge (Blackfoot River and Blackfoot River bypass), 1,840 cfs (52.1 cu m/s) 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 (11,000 sq hm) below and about 32,000 acres (13,000 sq hm) above station of which about 900 acres (360 sq hm) 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 mi (8.8 km) 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 1973 are published in Part 2 of this report.

REVISIONS.--WSP 1217: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	295	177	130	90	219	137	422	9.2	120	38	78
2	166	302	199	128	88	266	136	387	67	130	12	196
3	146	277	189	122	110	230	140	356	148	140	27	223
4	112	266	165	120	128	192	159	356	171	105	110	214
5	131	264	130	112	124	186	174	378	129	75	200	184
6	116	264	140	118	123	160	215	430	72	25	232	135
7	121	263	155	128	122	149	256	418	10	15	210	128
8	126	264	165	138	108	153	218	412	10	10	133	151
9	129	263	170	150	115	164	179	359	70	5.0	114	238
10	146	262	165	170	116	178	183	336	85	5.0	154	257
11	176	262	170	178	116	188	230	330	90	4.0	176	233
12	215	260	155	175	120	173	271	330	90	2.0	174	201
13	213	258	160	180	121	160	314	328	95	4.0	178	196
14	292	257	162	250	119	149	360	250	115	75	167	198
15	321	253	145	240	100	140	393	89	160	110	124	190
16	353	248	138	201	100	144	381	121	220	140	61	187
17	337	241	135	160	103	153	342	83	220	163	40	181
18	292	232	138	134	112	145	326	72	180	160	21	169
19	317	222	141	100	120	144	327	59	145	161	34	160
20	311	221	160	84	100	141	321	99	125	248	62	159
21	315	214	170	74	106	145	293	120	100	278	38	149
22	319	214	180	68	110	152	254	125	85	280	56	157
23	323	208	180	72	109	148	248	130	100	280	39	183
24	336	194	180	70	104	143	255	134	95	280	33	188
25	328	192	175	80	110	148	300	115	95	270	46	209
26	310	224	170	94	133	151	359	155	95	236	67	223
27	301	224	157	102	168	176	373	241	85	232	76	215
28	294	183	144	87	201	189	370	233	80	220	49	207
29	296	187	147	82	------	166	381	185	80	193	30	204
30	288	172	142	94	------	134	429	80	105	164	17	200
31	285	------	138	92	------	130	------	12	------	76	25	------
TOTAL	7,603	7,186	4,942	3,933	3,276	5,116	8,324	7,145	3,131.2	4,206.0	2,743	5,613
MEAN	245	240	159	127	117	165	277	230	104	136	88.5	187
MAX	353	302	199	250	201	266	429	430	220	280	232	257
MIN	112	172	130	68	88	130	136	12	9.2	2.0	12	78
AC-FT	15,080	14,250	9,800	7,800	6,500	10,150	16,510	14,170	6,210	8,340	5,440	11,130
MEAN†	443	370	174	157	121	201	539	418	178	249	123	249
AC-FT†	27,250	22,020	10,710	9,660	6,740	12,360	32,050	25,720	10,570	15,290	7,540	14,820

CAL YR 1972 TOTAL 96,477.0 MEAN 264 MAX 590 MIN 71 AC-FT 191,400
WTR YR 1973 TOTAL 63,218.2 MEAN 173 MAX 430 MIN 2.0 AC-FT 125,400

CAL YR 1972† TOTAL 191,206.6 MEAN 524 MAX 1,220 MIN 103 AC-FT 379,300
WTR YR 1973† TOTAL 98,178.6 MEAN 269 MAX 1,070 MIN 2.0 AC-FT 194,700

† 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 (63,900 sq hm) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								551	4,480	3,790	3,770	2,530
2								648	4,520	3,780	3,740	2,560
3								685	4,490	3,430	3,730	2,300
4								1,010	4,490	3,590	3,750	2,240
5								1,040	4,470	3,950	3,410	2,230
6								1,080	4,490	4,000	3,000	2,220
7								1,240	4,480	3,760	3,060	2,180
8								1,460	4,530	3,840	3,390	2,090
9								1,640	4,540	4,030	3,300	2,000
10								1,940	4,490	3,960	3,230	1,920
11								2,270	4,500	4,100	3,180	1,890
12								2,520	4,500	4,160	3,200	1,810
13								2,710	4,500	4,250	3,240	1,790
14								3,060	4,250	4,280	3,150	1,790
15								3,600	4,040	4,220	3,120	1,780
16								4,080	3,630	4,010	3,360	1,740
17								4,290	3,320	4,160	3,400	1,740
18								4,350	3,150	4,150	3,330	1,730
19								4,450	3,260	4,140	3,170	1,730
20								4,330	3,300	3,860	3,140	1,810
21								4,060	3,550	3,040	3,230	1,870
22								4,170	3,660	2,840	3,310	1,860
23								4,200	3,740	2,370	3,290	2,000
24								4,140	3,830	2,250	3,220	1,990
25								4,080	3,860	2,270	3,180	1,900
26								4,060	3,870	2,690	3,110	1,720
27								4,010	3,900	2,770	3,120	1,630
28								4,000	3,990	2,970	3,160	1,580
29					------			3,950	3,760	3,200	3,150	1,590
30					------			3,980	3,790	3,400	3,160	1,610
31		------			------		------	4,180	------	3,720	3,080	------
TOTAL								91,784	121,380	110,980	101,680	57,830
MEAN								2,961	4,046	3,580	3,280	1,928
MAX								4,450	4,540	4,280	3,770	2,560
MIN								551	3,150	2,250	3,000	1,580
AC-FT								182,100	240,800	220,100	201,700	114,700

THE PERIOD: AC-FT 959,400

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 mi (0.5 km) downstream from highway bridge, 0.7 mi (1.1 km) downstream from Blackfoot River, 10 mi (16 km) southwest of Blackfoot, and at mile 750.8 (1,208.0 km).

DRAINAGE AREA.--11,310 sq mi (29,290 sq km), 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 (1,341.068 m) above mean sea level. Prior to July 6, 1913, nonrecording gages about 0.1 mi (0.2 km) upstream at datum about 1.00 ft (0.3 m) higher. July 6, 1913, to Aug. 19, 1962, water-stage recorder at site 0.1 mi (0.2 km) upstream at datum 1.00 ft (0.3 m) higher.

AVERAGE DISCHARGE.--63 years, 4,722 cfs (133.7 cu m/s), 3,421,000 acre-ft/yr (4,220 cu hm/yr); 15-year base period (1952-67) 3,977 cfs (112.6 cu m/s).

EXTREMES.--Current year: Maximum discharge, 14,000 cfs (396 cu m/s) May 28 (gage height, 8.39 ft or 2.558 m); minimum, 557 cfs (15.8 cu m/s) Sept. 21 (gage height, 1.56 ft or 0.475 m).
Period of record: Maximum discharge, 46,200 cfs (1,310 cu m/s) June 18, 1918 (gage height, 14.80 ft or 4.511 m, site and datum then in use); minimum, 111 cfs (3.14 cu m/s) Nov. 10, 1934 (gage height, 0.80 ft or 0.244 m, site and datum then in use).
Late in summer of 1905 there was no flow in Snake River for a distance of 10 mi (16 km) in vicinity of Blackfoot. Aug. 9, 1905, discharge of Snake River just below mouth of Blackfoot River was 39 cfs (1.10 cu m/s, 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 (3,550 cu hm). Diversions above station for irrigation of about 93,000 acres (38,000 sq hm) below and about 832,000 acres (337,000 sq hm) above station of which about 155,000 acres (62,700 sq hm) 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)
(Stage-discharge relation affected by ice Dec. 8-10, Jan. 6-9)

1.0	230	5.0	4,920
2.0	840	7.0	9,700
3.0	1,840	9.0	15,800
4.0	3,220		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,860	6,000	5,990	4,860	5,760	5,670	4,260	6,510	4,530	5,130	2,160	1,110
2	7,750	6,110	5,970	4,750	5,250	5,930	4,240	5,860	4,420	5,870	1,750	2,090
3	7,540	6,050	5,910	4,900	5,080	5,700	4,290	5,260	5,290	5,830	1,560	3,110
4	7,460	6,050	5,990	4,240	5,360	5,400	4,410	4,940	5,810	5,390	1,780	3,450
5	7,490	6,050	5,090	3,190	5,360	5,220	4,460	4,900	5,050	4,500	2,810	3,550
6	7,450	6,080	3,810	2,800	5,350	5,120	4,600	5,020	3,980	3,790	4,140	3,180
7	7,540	6,170	4,390	2,650	5,450	5,090	4,980	5,490	2,870	3,430	4,330	2,390
8	7,580	6,120	4,600	2,900	5,420	5,090	4,810	5,800	2,050	3,160	3,010	1,950
9	7,650	6,020	4,800	3,300	5,310	5,070	4,540	5,920	1,840	2,950	2,200	2,530
10	7,900	5,940	5,000	3,660	5,130	5,010	4,500	6,050	2,000	2,300	1,950	3,030
11	8,140	5,830	5,200	3,920	5,130	5,010	4,870	6,010	3,010	1,680	2,070	2,860
12	6,490	5,680	5,600	3,410	5,340	4,820	5,330	5,530	5,720	1,240	2,230	2,540
13	5,490	5,590	5,800	5,130	5,310	4,730	5,860	4,650	7,460	1,130	2,440	2,010
14	4,920	5,530	6,200	5,920	5,580	4,640	8,470	3,950	6,810	1,460	2,290	1,550
15	6,100	5,460	7,200	6,640	5,390	4,500	10,500	2,580	5,570	2,000	2,120	1,200
16	8,180	5,520	7,800	6,570	5,200	4,470	7,300	2,890	7,390	2,880	1,700	1,060
17	7,440	5,580	8,000	6,960	5,180	4,470	6,480	2,680	9,450	2,890	1,560	1,090
18	5,200	5,560	7,600	6,880	5,290	4,460	6,430	2,420	11,100	2,730	1,640	1,000
19	4,920	5,520	6,200	6,320	5,300	4,500	6,840	2,220	10,800	2,550	2,030	762
20	4,990	5,540	5,950	5,590	5,190	4,450	6,520	6,040	8,110	4,190	2,530	664
21	5,210	5,590	5,950	4,900	5,110	4,470	5,780	9,210	6,360	7,190	2,640	576
22	5,280	5,630	6,430	4,320	5,050	4,450	5,330	11,100	4,680	7,990	2,640	889
23	5,610	5,560	6,410	3,820	5,110	4,320	5,270	11,800	4,200	9,270	2,540	1,210
24	6,030	5,530	6,410	3,550	5,200	4,230	5,540	11,600	4,810	9,610	2,560	1,910
25	6,210	5,510	5,960	3,720	5,460	4,170	5,960	11,400	5,230	8,620	2,590	2,750
26	6,190	5,590	5,870	4,460	5,540	4,150	6,310	11,800	4,670	6,820	2,520	3,140
27	6,250	5,710	5,760	4,810	5,500	4,210	6,230	13,000	4,070	5,500	2,460	3,200
28	6,150	5,720	5,680	4,960	5,600	4,250	6,200	13,800	3,740	4,290	2,230	2,970
29	6,050	5,560	5,680	4,410	------	4,220	6,450	13,100	3,640	3,810	1,690	2,590
30	5,990	5,760	5,030	4,690	------	4,200	6,830	10,100	4,150	3,810	1,180	2,410
31	5,990	------	5,070	5,270	------	4,220	------	6,720	------	2,850	979	------
TOTAL	203,050	172,560	181,350	143,500	148,950	146,240	173,590	218,350	158,810	134,860	70,329	62,771
MEAN	6,550	5,752	5,850	4,629	5,320	4,717	5,786	7,044	5,294	4,350	2,269	2,092
MAX	8,180	6,170	8,000	6,960	5,760	5,930	10,500	13,800	11,100	9,610	4,330	3,550
MIN	4,920	5,460	3,810	2,650	5,050	4,150	4,240	2,220	1,840	1,130	979	576
AC-FT	402,700	342,300	359,700	284,600	295,400	290,100	344,300	433,100	315,000	267,500	139,500	124,500

CAL YR 1972 TOTAL 3,090,432 MEAN 8,444 MAX 20,500 MIN 904 AC-FT 6,130,000
WTR YR 1973 TOTAL 1,814,360 MEAN 4,971 MAX 13,800 MIN 576 AC-FT 3,599,000

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 (27 m) downstream from county bridge, 4.8 mi (7.7 km) upstream from Pebble Creek, and 3.5 mi (5.6 km) north of Pebble.

DRAINAGE AREA.--260 sq mi (670 sq km), 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 (1,615.827 m) above mean sea level. October 1910 to July 1913 nonrecording gage 0.5 mi (0.8 km) downstream at different datum.

AVERAGE DISCHARGE.--7 years (1911-12, 1969-73), 108 cfs (3.059 cu m/s), 78,250 acre-ft/yr (96.5 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 433 cfs (12.3 cu m/s) Apr. 14 (gage height, 3.68 ft or 1.122 m); minimum discharge, 13 cfs (0.37 cu m/s) July 3; minimum gage height, 1.78 ft (0.543 m) Feb. 20.
Period of record: Maximum discharge observed, 624 cfs (17.7 cu m/s) Jan. 31, 1911 (gage height, 6.00 ft or 1.829 m, site and datum then in use); minimum discharge, 12 cfs (0.34 cu m/s) Jan. 11, 1972 (gage height, 1.27 ft or 0.387 m).

REMARKS.--Records good. Flow regulated by Portneuf Reservoir (capacity, 23,695 acre-ft or 29.2 cu hm) and Chesterfield Reservoir on Twenty-Four Mile Creek (capacity, 685 acre-ft or 0.845 cu hm). Diversions above station for irrigation of about 14,000 acres (5,700 sq hm) of which about 4,800 acres (1,900 sq hm) are by withdrawals from ground water (1966 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	78	98	84	84	84	90	178	123	146	105	96
2	74	81	100	84	85	86	89	171	126	31	104	106
3	73	83	100	88	81	83	93	188	125	38	102	85
4	72	84	93	89	83	84	103	205	125	131	103	85
5	74	85	91	87	87	86	117	229	127	136	104	83
6	74	81	88	87	89	86	145	234	129	139	100	82
7	74	80	88	86	90	85	146	260	122	144	96	83
8	74	78	87	86	89	81	133	271	115	159	96	84
9	80	78	88	88	87	73	137	273	105	168	95	97
10	91	76	82	87	89	68	173	262	101	176	95	88
11	90	76	76	86	92	71	214	256	103	176	99	55
12	84	76	76	88	92	70	290	252	100	175	96	45
13	82	74	80	93	92	73	375	248	111	182	96	42
14	82	74	80	100	92	68	392	248	147	191	97	43
15	82	75	77	97	88	67	329	249	171	187	97	38
16	84	77	77	96	85	69	248	247	155	188	99	36
17	83	78	78	97	85	71	229	245	141	185	99	37
18	83	78	78	94	87	72	214	246	132	185	100	40
19	83	78	81	94	85	72	193	249	122	194	100	44
20	84	82	83	90	82	72	177	264	116	211	102	47
21	89	97	89	88	83	76	166	256	94	211	104	47
22	92	99	100	89	82	76	157	237	96	201	105	49
23	92	96	102	86	81	74	161	214	97	202	109	57
24	92	95	100	86	81	75	166	204	102	190	85	57
25	91	96	93	84	84	77	164	213	117	175	84	66
26	90	107	92	89	84	79	158	216	132	135	83	65
27	90	109	95	87	83	83	158	203	136	128	82	59
28	89	101	95	86	84	84	168	190	143	130	85	57
29	87	98	84	82	------	82	189	184	148	129	88	57
30	85	94	88	83	------	86	186	138	147	120	90	56
31	83	------	85	84	------	89	------	124	------	110	90	------
TOTAL	2,576	2,564	2,724	2,745	2,406	2,402	5,560	6,954	3,708	4,873	2,990	1,886
MEAN	83.1	85.5	87.9	88.5	85.9	77.5	185	224	124	157	96.5	62.9
MAX	92	109	102	100	92	89	392	273	171	211	109	106
MIN	72	74	76	82	81	67	89	124	94	31	82	36
AC-FT	5,110	5,090	5,400	5,440	4,770	4,760	11,030	13,790	7,350	9,670	5,930	3,740

CAL YR 1972 TOTAL 52,746 MEAN 144 MAX 409 MIN 44 AC-FT 104,600
WTR YR 1973 TOTAL 41,388 MEAN 113 MAX 392 MIN 31 AC-FT 82,090

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 (60 m) upstream from Bob Smith Creek, 800 ft (240 m) downstream from Topaz siding, 1.5 mi (2.4 km) upstream from diversion dam of Portneuf-Marsh Valley Canal Co., 4 mi (6 km) west of Lava Hot Springs, and at mile 47.3 (76.1 km).

DRAINAGE AREA.--570 sq mi (1,480 sq km), approximately (includes that of Bob Smith Creek). Mean altitude, 6,080 ft (1,850 m).

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 (1,499.006 m) above mean sea level, preliminary, unadjusted. Prior to July 20, 1919, nonrecording gage at site 0.3 mi (0.5 km) downstream at datum 3.0 ft (0.91 m) lower. July 20, 1919, to June 22, 1954, nonrecording gage at site 0.3 mi (0.5 km) downstream at datum 2.00 ft (0.610 m) lower than present datum.

AVERAGE DISCHARGE.--56 years, 195 cfs (5.522 cu m/s), 141,300 acre-ft/yr (174 cu km/yr); 15-year base period (1952-67), 169 cfs (4.786 cu m/s).

EXTREMES.--Current year: Maximum discharge, 564 cfs (16.0 cu m/s) Apr. 14 (gage height, 4.00 ft or 1.219 m); minimum, 134 cfs (3.79 cu m/s) July 4 (gage height, 2.41 ft or 0.735 m).
Period of record: Maximum discharge, 7,120 cfs (202 cu m/s) Feb. 1, 1963 (gage height, 8.22 ft or 2.505 m), result of highway fill failure 2 mi (3 km) upstream; minimum, 64 cfs (1.81 cu m/s) Sept. 23, 1966 (gage height, 2.27 ft or 0.692 m).

REMARKS.--Records good. Flow regulated by Portneuf Reservoir (capacity, 23,695 acre-ft or 29.2 cu hm) and Chesterfield Reservoir on Twenty-Four Mile Creek (capacity, 685 acre-ft or 0.845 cu hm). Diversions above station for irrigation of about 29,000 acres (12,000 sq hm) of which about 7,400 acres (3,000 sq hm) are by withdrawals from ground water (1966 determination). Records of chemical analyses for the water year 1973 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	198	205	275	201	200	224	229	370	296	270	180	192
2	198	213	280	207	196	232	222	355	299	234	173	208
3	196	215	280	212	196	219	225	371	293	151	176	193
4	196	217	265	199	202	216	234	411	288	174	178	184
5	203	219	250	202	202	219	249	449	279	192	180	183
6	199	212	250	208	204	217	304	456	275	192	176	181
7	199	209	250	202	208	216	327	469	267	190	174	181
8	200	209	245	201	200	215	300	495	260	202	171	211
9	199	208	240	202	198	204	280	501	248	215	174	224
10	234	205	220	201	212	202	307	492	243	217	175	198
11	220	205	210	199	208	209	372	489	240	214	175	188
12	211	205	208	206	216	201	428	484	234	207	174	162
13	209	202	206	222	211	200	501	482	225	209	174	154
14	205	202	203	243	210	194	545	484	269	217	175	151
15	207	202	196	236	201	190	515	486	312	211	175	151
16	209	204	198	221	201	193	443	486	288	208	178	150
17	207	205	200	246	208	201	415	492	267	209	178	154
18	205	205	202	227	208	202	395	498	255	202	177	151
19	205	215	207	226	202	197	360	510	248	213	175	145
20	218	240	214	206	197	201	328	526	241	255	176	150
21	226	270	218	213	202	206	306	526	221	247	182	149
22	222	270	240	203	201	205	297	500	213	234	198	150
23	219	265	248	209	203	205	303	471	210	236	210	161
24	222	260	239	207	204	206	319	448	210	234	200	167
25	220	280	221	210	207	212	326	465	208	223	187	171
26	217	300	221	211	207	218	323	466	226	211	183	168
27	214	300	219	205	210	228	334	438	229	183	180	165
28	215	285	221	198	213	227	372	416	242	184	169	162
29	214	275	212	203	------	218	401	385	243	187	168	160
30	198	270	200	203	------	220	384	361	250	185	180	159
31	199	------	213	202	------	228	------	295	------	192	182	------
TOTAL	6,484	6,972	7,051	6,531	5,727	6,525	10,344	14,077	7,579	6,498	5,553	5,123
MEAN	209	232	227	211	205	210	345	454	253	210	179	171
MAX	234	300	280	246	216	232	545	526	312	270	210	224
MIN	196	202	196	198	196	190	222	295	208	151	168	145
AC-FT	12,860	13,830	13,990	12,950	11,360	12,940	20,520	27,920	15,030	12,890	11,010	10,160

CAL YR 1972 TOTAL 115,250 MEAN 315 MAX 754 MIN 165 AC-FT 228,600
WTR YR 1973 TOTAL 88,464 MEAN 242 MAX 545 MIN 145 AC-FT 175,500

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 (3 m) downstream from abandoned highway bridge, 70 ft (21 m) upstream from county road crossing, 2 mi (3 km) southwest of McCammon, and at mile 11.0 (17.7 km).

DRAINAGE AREA.--355 sq mi (919 sq km). Mean altitude, 5,630 ft (1,720 m).

PERIOD OF RECORD.--September 1954 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,610 ft (1,405 m) (by barometer). Prior to July 14, 1965, non-recording gage 10 ft (3 m) upstream at datum.

AVERAGE DISCHARGE.--19 years, 81.8 cfs (2.317 cu m/s), 59,260 acre-ft/yr (73.1 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 278 cfs (7.87 cu m/s) Mar. 3 (gage height, 5.35 ft or 1.631 m); minimum discharge, 41 cfs (1.16 cu m/s) Dec. 5, June 5; minimum gage height, 2.30 ft (0.701 m) June 5.
Period of record: Maximum discharge observed, 1,120 cfs (31.7 cu m/s) Feb. 12, 1962 (gage height, 13.25 ft or 4.039 m); minimum observed, 20 cfs (0.57 cu m/s) Aug. 5, 1961.

REMARKS.--Records good. Diversions above station for irrigation of about 19,000 acres (7,700 sq hm) of which about 5,500 acres (2,200 sq hm) are by withdrawals from ground water and about 5,000 acres (2,000 sq hm) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	94	94	78	77	162	138	138	65	68	77	61
2	88	97	94	81	80	277	133	133	65	62	77	94
3	88	99	95	82	81	246	138	122	60	60	80	82
4	89	97	95	70	84	197	136	134	57	54	74	77
5	97	97	70	66	84	166	138	146	46	59	69	77
6	95	95	80	60	83	139	150	140	57	57	62	77
7	96	95	80	62	79	132	146	143	51	53	64	74
8	101	95	73	63	80	133	131	137	49	51	70	102
9	104	94	60	64	81	134	130	136	51	53	82	161
10	110	94	72	65	81	140	131	131	54	51	68	142
11	98	95	72	66	80	163	131	129	47	50	61	138
12	96	94	68	67	80	146	131	122	49	51	61	127
13	97	94	71	74	83	133	133	117	51	69	68	110
14	96	94	71	114	83	118	139	118	66	66	68	105
15	97	95	69	122	81	110	136	117	85	65	65	102
16	100	96	68	107	78	107	132	112	79	65	68	101
17	101	100	67	147	75	111	132	108	72	64	73	98
18	99	97	70	181	73	123	137	86	66	65	75	98
19	100	98	76	136	72	125	138	90	65	67	77	96
20	110	101	91	105	74	121	136	78	55	105	76	96
21	114	99	109	98	73	130	135	93	53	91	66	98
22	107	94	135	72	76	130	133	103	66	106	62	98
23	104	90	181	77	76	138	132	87	60	113	59	108
24	105	86	138	77	75	162	131	75	60	101	49	112
25	102	86	118	78	80	168	129	79	64	93	54	123
26	100	107	103	75	90	178	130	79	63	89	59	113
27	97	106	96	76	95	188	132	77	65	87	58	109
28	97	95	95	78	129	157	136	77	68	87	70	105
29	98	90	91	81	------	141	138	71	69	83	65	102
30	94	92	80	84	------	132	140	67	71	82	55	99
31	93	------	85	81	------	132	------	65	------	76	55	------
TOTAL	3,060	2,866	2,767	2,687	2,283	4,641	4,052	3,310	1,829	2,243	2,067	3,085
MEAN	98.7	95.5	89.3	86.7	81.5	150	135	107	61.0	72.4	66.7	103
MAX	114	107	181	181	129	277	150	146	85	113	82	161
MIN	87	86	60	60	72	107	129	65	46	50	49	61
AC-FT	6,070	5,680	5,490	5,330	4,530	9,210	8,040	6,570	3,630	4,450	4,100	6,120

CAL YR 1972 TOTAL 40,542 MEAN 111 MAX 258 MIN 54 AC-FT 80,420
WTR YR 1973 TOTAL 34,890 MEAN 95.6 MAX 277 MIN 46 AC-FT 69,200

PORTNEUF RIVER BASIN

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 (430 m) downstream from Carson Street Bridge, at Pocatello, 1.2 mi (1.9 km) upstream from Pocatello Creek and at mile 15.8 (25.4 km).

DRAINAGE AREA.--1,250 sq mi (3,240 sq km), approximately. Mean altitude, 5,850 ft (1,780 m).

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 (1,346.731 m) above mean sea level (U.S. Corps of Engineers datum). May 18, 1897, to Oct. 14, 1899, nonrecording gage at site 1.6 mi (2.6 km) upstream at different datum. Aug. 31, 1911, to May 13, 1927, and Oct. 13, 1927, to June 13, 1928, nonrecording gage 0.3 mi (0.5 km) 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 mi (0.5 km) 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 mi (1.6 km) upstream at datum 18.57 ft (5.660 m) higher.

AVERAGE DISCHARGE.--60 years (1912-16, 1917-73), 261 cfs (7.392 cu m/s), 189,100 acre-ft/yr (233 cu hm/yr); 15-year base period (1952-67), 228 cfs (6.457 cu m/s).

EXTREMES.--Current year: Maximum discharge, 980 cfs (27.8 cu m/s) May 8 (gage height, 7.02 ft or 2.140 m); maximum gage height, 10.69 ft (3.258 m) Jan. 9 (backwater from ice jam); minimum discharge, 24 cfs (0.680 cu m/s) July 8 (gage height, 1.96 ft or 0.597 m).
Period of record: Maximum discharge, 2,990 cfs (84.7 cu m/s) Feb. 14, 1962 (gage height, 11.35 ft or 3.459 m); minimum, 0.4 cfs (0.011 cu m/s) July 3, 1961 (gage height, 2.90 ft or 0.884 m).

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 (2.1 m) in 1950 (capacity, 23,695 acre-ft or 29.2 cu hm; 16,410 acre-ft or 20.2 cu hm prior to 1950) and Chesterfield Reservoir (capacity, 685 acre-ft or 0.845 cu hm). Diversions above station for irrigation of about 55,000 acres (22,000 sq hm) of which about 13,000 acres (5,300 sq hm) are by withdrawals from ground water (1966 determination). Records of chemical analysis for the water year 1973 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)
(Shifting-control method used Jan. 15 to Mar. 10, Sept. 11-30; stage-discharge relation affected by ice Dec. 3-23, Jan. 3-14)

2.1	34	5.0	540
3.0	167	7.0	980

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	354	362	297	363	328	503	760	277	80	138	142
2	242	359	366	308	359	375	477	760	264	96	134	168
3	239	372	365	310	352	415	477	764	253	87	130	173
4	241	392	330	300	349	432	490	808	243	74	130	165
5	244	385	270	295	348	432	505	883	232	65	133	153
6	259	371	280	290	348	408	565	931	211	63	126	151
7	259	364	300	290	348	384	624	938	209	60	114	153
8	262	366	280	290	348	373	574	958	191	42	111	192
9	269	357	240	290	346	385	553	968	182	45	113	281
10	296	352	280	300	343	407	567	962	160	53	115	322
11	344	345	280	310	343	412	625	921	156	54	101	310
12	326	344	280	330	353	432	691	895	149	57	98	321
13	320	348	280	350	367	410	764	868	138	50	95	332
14	327	344	280	380	368	400	842	848	163	55	93	285
15	333	331	285	428	363	384	886	822	232	61	94	273
16	333	336	290	408	351	370	878	776	266	61	104	279
17	335	342	290	402	348	366	836	736	252	79	112	279
18	332	344	300	416	350	366	815	708	230	76	101	277
19	338	350	310	428	350	366	756	693	209	94	102	273
20	363	348	330	416	350	365	701	727	205	180	99	268
21	389	347	350	374	342	366	660	689	192	239	95	284
22	378	352	370	351	338	372	644	662	177	264	110	285
23	370	352	410	357	332	372	656	584	191	255	131	308
24	377	336	416	351	323	378	660	512	168	235	129	316
25	377	342	395	434	322	397	680	506	159	216	116	326
26	374	370	360	377	320	415	700	507	172	197	109	333
27	366	415	343	365	320	500	730	470	159	188	108	321
28	368	389	338	358	320	480	760	427	71	173	100	314
29	370	371	338	354	------	480	800	388	94	160	107	306
30	361	364	317	375	------	480	800	345	103	153	107	303
31	348	------	298	365	------	489	------	313	------	147	114	------
TOTAL	9,983	10,742	9,933	10,899	9,664	12,539	20,219	22,129	5,708	3,659	3,469	7,893
MEAN	322	358	320	352	345	404	674	714	190	118	112	263
MAX	389	415	416	434	368	500	886	968	277	264	138	333
MIN	239	331	240	290	320	328	477	313	71	42	93	142
AC-FT	19,800	21,310	19,700	21,620	19,170	24,870	40,100	43,890	11,320	7,260	6,880	15,660

CAL YR 1972 TOTAL 177,911 MEAN 486 MAX 1,250 MIN 73 AC-FT 352,900
WTR YR 1973 TOTAL 126,837 MEAN 347 MAX 968 MIN 42 AC-FT 251,600

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 mi (8 km) downstream from Pocatello Creek and 6 mi (10 km) northwest of Pocatello.

RECORDS AVAILABLE.--April 1964 to current year.

GAGE.--Sparling meters at pumping plant.

AVERAGE DISCHARGE.--10 years, 38.0 cfs (1.076 cu m/s), 27,530 acre-ft/yr (33.9 cu hm/yr).

EXTREMES.--Period of record: Maximum daily discharge, 224 cfs (6.34 cu m/s) 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 (27 m) for irrigation of 8,690 acres (3,520 sq hm) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	94	150	129	66
2								0	73	130	130	67
3								0	73	130	126	67
4								0	108	142	98	65
5								0	134	169	102	67
6								0	133	169	140	63
7								0	149	169	130	65
8								0	144	169	130	65
9								0	127	171	132	72
10								0	125	171	103	72
11								0	153	171	101	72
12								0	151	170	101	68
13								0	164	158	100	65
14								0	139	116	112	65
15								21	119	114	112	68
16								64	94	139	112	66
17								61	90	150	106	68
18								74	96	158	83	66
19								83	136	158	92	65
20								80	160	148	107	65
21								88	156	100	100	64
22								97	153	99	100	65
23								97	155	97	100	66
24								97	157	97	100	65
25								97	153	97	101	23
26								97	158	99	89	0
27								98	159	99	112	0
28								99	165	99	106	0
29					------			101	139	103	106	0
30					------			104	151	130	106	0
31		------			------		------	87	------	133	102	------
TOTAL	0	0	0	0	0	0	0	1,445	4,008	4,205	3,368	1,620
MEAN	0	0	0	0	0	0	0	46.6	134	136	109	54.0
MAX	0	0	0	0	0	0	0	104	165	171	140	72
MIN	0	0	0	0	0	0	0	0	73	97	83	0
AC-FT	0	0	0	0	0	0	0	2,870	7,950	8,340	6,680	3,210

CAL YR 1972 TOTAL 12,813.00 MEAN 35.0 MAX 167 MIN 0 AC-FT 25,410
WTR YR 1973 TOTAL 14,646.00 MEAN 40.1 MAX 171 MIN 0 AC-FT 29,050

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 (244 m) downstream from dam at American Falls.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Sparling meter in pipeline at pumping plant.

AVERAGE DISCHARGE.--16 years, 28.6 cfs (0.810 cu m/s), 20,720 acre-ft/yr (25.5 cu hm/yr).

EXTREMES.--Period of record: Maximum daily discharge, 142 cfs (4.021 cu m/s) 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 (3,240 sq hm) from this canal and 3,810 acres (1,540 sq hm) by pumping from ground water in 1973.

COOPERATION.--Record of pump operation furnished by Falls Irrigation District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18						0	18	89	136	86	68
2	18						0	18	89	136	86	68
3	18						0	18	89	136	84	41
4	18						0	18	90	136	84	32
5	18						0	18	104	136	84	32
6	18						0	18	108	136	84	32
7	18						0	18	115	136	69	32
8	18						0	18	117	136	64	32
9	18						0	18	117	136	64	32
10	18						0	18	117	136	64	32
11	18						0	18	117	136	64	32
12	18						0	18	117	136	63	32
13	9.0						0	18	117	135	63	32
14	0						0	31	117	124	63	32
15	0						0	35	96	119	63	32
16	0						0	47	75	119	63	32
17	0						0	51	70	119	62	32
18	0						0	60	70	119	62	31
19	0						0	68	93	119	62	31
20	0						0	68	101	119	61	31
21	0						0	68	114	97	61	31
22	0						0	78	118	90	61	31
23	0						0	81	118	90	60	31
24	0						0	81	118	74	60	31
25	0						0	84	130	69	60	31
26	0						0	59	135	83	61	31
27	0						0	53	135	88	63	31
28	0						0	65	135	88	64	31
29	0				------		0	69	135	88	66	31
30	0				------		15	85	135	88	68	31
31	0	------			------		------	90	------	88	68	------
TOTAL	225.0	0	0	0	0	0	15	1,407	3,281	3,548	2,087	1,028
MEAN	7.26	0	0	0	0	0	.50	45.4	109	114	67.3	34.3
MAX	18	0	0	0	0	0	15	90	135	136	86	68
MIN	0	0	0	0	0	0	0	18	70	69	60	31
AC-FT	446	0	0	0	0	0	30	2,790	6,510	7,040	4,140	2,040

CAL YR 1972 TOTAL 11,513.00 MEAN 31.5 MAX 120 MIN 0 AC-FT 22,840
WTR YR 1973 TOTAL 11,591.00 MEAN 31.8 MAX 136 MIN 0 AC-FT 22,990

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 (1,148.8 km).

DRAINAGE AREA.--13,580 sq mi (35,170 sq km), 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, 1,134,000 acre-ft (1,400 cu hm) Apr. 27 (elevation, 4,343.40 ft or 1,323.868 m); maximum gage height, 4,344.22 ft (1,324.118 m) Apr. 7 (wind effect); minimum contents, 43,400 acre-ft (53.5 cu hm) Sept. 25 (elevation, 4,303.00 ft or 1,311.554 m).
Period of record: Maximum contents, 1,748,000 acre-ft (2,160 cu hm) June 21, 1963 (elevation, 4,355.34 ft or 1,327.508 m); minimum since full capacity was attained July 13, 1927, 2,000 acre-ft (2.47 cu hm) Sept. 9, 1961 (elevation, 4,296.26 ft or 1,309.500 m).

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 (2,100 cu hm) between elevations 4,295.66 ft or 1,309.317 m (bottom of outlet gate) and 4,354.50 ft or 1,327.252 m (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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	993.8	1,057	1,079	1,082	1,084	1,091	1,117	1,128	1,076	887.6	558.3	160.4
2	1,005	1,055	1,079	1,081	1,086	1,093	1,120	1,126	1,069	881.0	544.7	152.0
3	1,015	1,053	1,084	1,084	1,087	1,094	1,123	1,126	1,066	872.3	528.3	145.8
4	1,021	1,050	1,086	1,085	1,086	1,093	1,124	1,128	1,057	862.1	513.1	141.6
5	1,027	1,047	1,084	1,083	1,087	1,092	1,122	1,125	1,051	853.0	499.7	138.5
6	1,027	1,052	1,078	1,080	1,087	1,091	1,124	1,120	1,042	838.1	486.9	137.1
7	1,027	1,061	1,080	1,079	1,088	1,091	1,126	1,123	1,028	825.2	478.1	133.2
8	1,029	1,073	1,078	1,076	1,089	1,092	1,128	1,123	1,018	809.6	469.2	129.9
9	1,030	1,089	1,077	1,077	1,088	1,093	1,127	1,122	999.0	795.1	457.6	126.8
10	1,034	1,090	1,075	1,078	1,088	1,094	1,128	1,124	986.1	778.7	442.8	123.6
11	1,040	1,088	1,074	1,078	1,087	1,096	1,128	1,127	975.6	760.6	429.1	120.2
12	1,041	1,084	1,073	1,080	1,087	1,096	1,128	1,127	968.1	742.8	415.5	115.2
13	1,040	1,082	1,075	1,084	1,088	1,095	1,129	1,123	965.2	724.9	400.6	110.5
14	1,034	1,080	1,075	1,089	1,088	1,094	1,128	1,116	959.3	706.9	386.1	104.3
15	1,030	1,079	1,077	1,092	1,087	1,093	1,127	1,104	960.6	688.8	372.8	99.30
16	1,031	1,076	1,079	1,087	1,087	1,094	1,122	1,091	962.7	672.0	357.5	91.60
17	1,030	1,075	1,083	1,088	1,086	1,094	1,119	1,078	962.7	657.4	341.2	84.90
18	1,028	1,075	1,089	1,089	1,086	1,094	1,122	1,063	964.8	643.0	325.5	77.40
19	1,023	1,076	1,089	1,089	1,086	1,095	1,124	1,051	985.7	627.8	310.8	70.40
20	1,021	1,077	1,091	1,088	1,085	1,096	1,129	1,038	990.8	616.2	296.3	61.00
21	1,020	1,078	1,091	1,084	1,085	1,098	1,123	1,039	990.4	611.2	282.9	55.30
22	1,021	1,077	1,093	1,082	1,084	1,100	1,121	1,041	984.0	608.4	270.2	49.40
23	1,024	1,077	1,093	1,080	1,085	1,103	1,120	1,045	973.5	609.0	256.8	44.80
24	1,029	1,077	1,092	1,078	1,086	1,103	1,125	1,048	966.0	611.5	244.8	43.70
25	1,041	1,070	1,091	1,077	1,087	1,104	1,130	1,050	956.4	613.1	233.9	44.70
26	1,051	1,078	1,088	1,077	1,088	1,104	1,132	1,055	946.0	611.5	223.0	49.90
27	1,061	1,078	1,087	1,079	1,090	1,107	1,132	1,064	935.7	608.4	213.0	57.80
28	1,060	1,078	1,088	1,079	1,091	1,111	1,130	1,073	924.4	601.2	203.2	65.30
29	1,065	1,076	1,087	1,079	------	1,112	1,132	1,086	911.5	592.5	193.3	73.50
30	1,059	1,077	1,086	1,080	------	1,113	1,132	1,089	895.5	583.5	182.6	82.50
31	1,059	------	1,084	1,082	------	1,116	------	1,084	------	571.0	170.8	------
MAX	1,065	1,090	1,093	1,092	1,091	1,116	1,132	1,128	1,076	887.6	558.3	160.4
MIN	993.8	1,047	1,073	1,076	1,084	1,091	1,117	1,038	895.5	571.0	170.8	43.70
(†)	4,341.75	4,342.15	4,342.31	4,342.25	4,342.45	4,343.00	4,343.35	4,342.31	4,337.85	4,328.54	4,312.01	4,306.41
(‡)	+75.5	+18	+7	-2	+9	+25	+16	-48	-188.5	-324.5	-400.2	-88.3

CAL YR 1972..... ‡ -190.0
WTR YR 1973..... ‡ -901.0

† 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 (122 m) upstream from fish hatchery buildings, 0.9 mi (1.4 km) downstream from American Falls Dam, at mile 713.0 (1,147.2 km). Records computed to show flow at former site in sec.11, T.8 S., R.30 E., 0.5 mi (0.8 km) north of Neeley and 2.5 mi (4.0 km) downstream from present site, by adding inflow between sites.
DRAINAGE AREA.--13,600 sq mi (35,200 sq km), 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 (1,292.840 m) 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 mi (4.0 km) downstream at different datum. June 7, 1930, to Mar. 19, 1945, water-stage recorder at site 0.4 mi (0.6 km) upstream at datum 0.4 ft (0.12 m) higher.
AVERAGE DISCHARGE.--47 years (1926-73), 7,032 cfs (199.1 cu m/s), 5,095,000 acre-ft/yr (6,280 cu hm/yr); 15-year base period (1952-67), 6,704 cfs (189.9 cu m/s).
EXTREMES.--Current year: Maximum discharge, 13,400 cfs (379 cu m/s) Apr. 15 (gage height, 6.99 ft or 2.131 m); minimum discharge, 1,420 cfs (40.2 cu m/s) Sept. 30 (gage height, 3.70 ft or 1.128 m).
Period of record: Maximum daily discharge, 48,400 cfs (1,370 cu m/s) June 20, 1918 (gage height, 13.5 ft or 4.11 m, site and datum then in use); minimum, 50 cfs (1.42 cu m/s) 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 (5,670 cu hm). Diversions above station for irrigation of about 1,080,000 acres (437,000 sq hm) of which about 228,000 acres (92,000 sq hm) 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 1973 are published in Part 2 of this report.
REVISIONS (WATER YEARS).--WSP 1317: 1910.

Rating tables (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 5-23, Oct. 28 to Feb. 22)

Oct. 1 to Feb. 22		Feb. 23 to Sept. 30			
4.0	2,220	3.0	780	6.0	8,600
4.5	3,500	4.0	2,100	7.0	13,600
5.0	5,240	5.0	4,800		
6.2	10,600				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,720	9,730	8,130	8,180	6,710	9,150	6,120	9,030	11,300	11,800	11,100	8,950
2	5,390	9,920	8,130	7,690	7,000	8,900	5,880	8,970	11,200	11,600	11,300	8,680
3	5,650	9,930	8,130	6,580	7,190	8,730	5,750	8,640	10,800	11,700	11,400	8,350
4	6,560	9,940	8,140	6,160	7,210	8,730	6,770	8,430	10,700	12,000	11,300	7,970
5	7,660	9,940	8,380	6,650	7,470	8,740	7,120	8,440	11,100	12,000	11,000	7,350
6	9,130	7,590	8,560	6,910	7,570	8,340	6,730	8,280	11,500	12,000	11,000	6,760
7	9,790	3,250	8,090	6,890	7,560	7,750	6,820	8,410	11,700	12,200	11,100	6,810
8	9,730	2,370	7,520	6,870	7,860	7,570	6,490	8,470	11,700	12,300	11,200	7,040
9	9,860	2,360	7,330	6,580	8,050	7,590	6,790	8,340	11,700	12,400	11,300	7,120
10	8,930	8,140	7,310	6,030	8,070	7,620	7,250	7,830	11,700	12,400	11,500	7,250
11	8,250	9,590	6,730	5,830	8,050	7,610	7,450	7,940	11,500	12,300	11,500	7,430
12	8,260	9,590	6,310	5,850	7,890	7,600	8,060	8,660	11,300	12,300	11,500	7,600
13	9,550	9,580	6,320	5,810	7,780	7,600	8,970	9,230	11,300	12,400	11,500	7,780
14	10,300	9,250	6,320	5,790	7,780	7,610	11,500	9,910	10,900	12,400	11,500	7,340
15	10,300	9,000	6,320	8,750	7,780	7,460	13,100	10,800	9,950	12,400	11,600	7,330
16	10,300	9,000	6,310	10,600	7,780	7,280	12,800	11,200	9,200	12,400	11,700	7,190
17	10,300	8,670	6,320	9,650	7,780	7,220	10,000	11,400	8,930	12,400	11,800	6,990
18	10,300	8,470	7,260	9,240	7,790	7,200	8,480	11,600	8,710	12,400	11,700	7,040
19	10,300	8,470	7,950	9,290	7,780	6,850	8,470	11,800	8,580	12,400	11,600	7,220
20	8,630	8,220	8,180	9,270	7,770	6,640	8,870	11,900	8,820	12,300	11,500	6,860
21	7,870	8,050	9,140	9,250	7,760	6,670	9,290	11,800	9,670	12,100	11,600	6,500
22	8,090	8,050	9,820	8,020	7,480	6,660	9,000	11,800	10,300	11,600	11,500	6,100
23	8,120	8,050	9,930	6,840	7,310	6,660	7,540	11,600	11,000	11,200	11,100	5,580
24	5,590	8,070	9,880	6,710	7,300	6,660	6,790	11,500	11,400	10,700	10,700	5,200
25	3,030	8,120	9,850	6,710	7,320	6,700	6,820	11,700	11,700	10,400	10,500	4,680
26	3,030	8,140	9,830	6,710	7,330	6,270	7,500	11,500	12,000	10,400	10,000	3,930
27	5,670	8,120	9,110	6,710	7,950	5,710	8,960	10,500	11,900	10,400	9,540	3,360
28	8,680	8,100	8,670	6,710	8,800	5,530	9,490	10,600	11,800	10,400	9,460	3,260
29	8,600	8,120	8,430	6,710	------	5,890	9,850	10,500	11,900	10,800	9,360	2,340
30	8,870	8,130	8,230	6,700	------	6,110	9,490	10,800	11,800	10,800	8,960	1,570
31	9,140	------	8,190	6,710	------	6,130	------	11,100	------	11,000	8,810	------
TOTAL	251,600	243,960	248,820	226,400	214,120	225,180	248,150	312,680	326,060	363,900	339,630	191,580
MEAN	8,116	8,132	8,026	7,303	7,647	7,264	8,272	10,090	10,870	11,740	10,960	6,386
MAX	10,300	9,940	9,930	10,600	8,800	9,150	13,100	11,900	12,000	12,400	11,800	8,950
MIN	3,030	2,360	6,310	5,790	6,710	5,530	5,750	7,830	8,580	10,400	8,810	1,570
AC-FT	499,000	483,900	493,500	449,100	424,700	446,600	492,200	620,200	646,700	721,800	673,700	380,000

CAL YR 1972 TOTAL 4,140,170 MEAN 11,310 MAX 22,700 MIN 2,360 AC-FT 8,212,000
WTR YR 1973 TOTAL 3,192,080 MEAN 8,745 MAX 13,100 MIN 1,570 AC-FT 6,331,000

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 (305 m) upstream from section corner and boundary of Sawtooth National Forest, 4.5 mi (7.2 km) southeast of Yost, 5 mi (8 km) south of Utah-Idaho State line, and 16 mi (26 km) southwest of Strevell, Idaho.

DRAINAGE AREA.--7.84 sq mi (20.31 sq km).

PERIOD OF RECORD.--July 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,000 ft or 2,134 m (from topographic map).

AVERAGE DISCHARGE.--14 years, 7.46 cfs (0.211 cu m/s), 5,400 acre-ft/yr (6.66 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 61 cfs (1.73 cu m/s) May 20 (gage height, 1.19 ft or 0.363 m); minimum, 1.8 cfs (0.051 cu m/s) Dec. 7, Mar. 3.
Period of record: Maximum discharge, 146 cfs (4.13 cu m/s) June 10, 1963 (gage height, 1.96 ft or 0.597 m); minimum daily, 1.1 cfs (0.031 cu m/s) several days in January and February 1962.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.4	2.2	2.3	2.1	2.2	2.4	13	42	20	4.1	3.1
2	2.5	2.4	2.2	2.3	2.0	2.1	2.4	11	39	18	4.1	3.5
3	2.5	2.4	2.2	2.3	2.1	2.1	2.3	12	35	16	4.7	3.2
4	2.8	2.4	2.3	2.2	2.0	2.3	2.4	15	33	15	4.7	2.9
5	3.2	2.4	2.2	2.2	2.0	2.3	2.9	17	33	13	4.4	2.8
6	2.8	2.4	2.5	2.2	2.1	2.2	3.2	19	32	12	4.4	2.8
7	2.6	2.4	2.1	2.2	2.2	2.2	3.2	22	32	11	4.1	2.8
8	2.6	2.5	2.1	2.2	2.0	2.2	3.3	24	33	10	4.1	2.8
9	2.8	2.3	2.2	2.2	2.0	2.2	3.3	27	36	9.5	3.8	3.3
10	3.0	2.3	2.1	2.2	2.0	2.2	3.3	33	38	8.0	3.5	2.9
11	2.8	2.3	2.0	2.2	2.0	2.2	3.8	37	33	7.4	3.5	2.9
12	2.6	2.3	2.0	2.2	2.1	2.2	5.3	41	29	9.7	3.4	2.8
13	2.6	2.3	2.0	2.2	2.2	2.2	7.7	45	29	9.7	3.3	2.7
14	2.6	2.3	2.0	2.2	2.2	2.2	8.0	48	32	8.0	3.3	2.5
15	2.7	2.3	2.0	2.2	2.0	2.2	7.2	47	29	6.9	3.3	2.5
16	2.7	2.3	2.0	2.2	2.0	2.2	7.1	47	27	6.4	3.2	2.5
17	2.7	2.4	2.0	2.2	2.0	2.2	7.0	49	27	5.9	3.1	2.5
18	2.7	2.3	2.1	2.2	2.0	2.1	6.1	46	26	6.4	3.1	2.5
19	3.1	2.3	2.1	2.3	2.0	2.1	5.4	54	26	6.4	3.1	2.5
20	3.5	2.4	2.3	2.2	2.0	2.2	4.9	54	25	6.4	3.0	2.5
21	3.3	2.2	2.3	2.2	2.0	2.2	4.5	55	25	6.9	3.0	2.5
22	3.1	2.1	2.3	2.2	2.0	2.2	4.4	47	24	6.4	3.5	2.5
23	2.8	2.1	2.3	2.2	2.0	2.4	5.0	48	25	5.9	3.4	3.3
24	2.7	2.2	2.3	2.2	2.0	2.3	6.1	48	24	5.5	3.0	3.1
25	2.6	2.2	2.3	2.2	2.0	2.4	7.9	53	24	5.1	3.0	3.3
26	2.5	2.5	2.3	2.2	2.0	2.5	11	43	23	4.7	2.9	2.9
27	2.4	2.3	2.3	2.2	2.2	2.5	16	36	23	4.7	2.8	2.8
28	2.4	2.2	2.3	2.2	2.2	2.5	19	37	22	4.7	2.8	2.7
29	2.4	2.2	2.3	2.2	------	2.5	20	37	22	4.4	2.8	2.5
30	2.4	2.2	2.3	2.2	------	2.3	16	38	21	4.4	2.7	2.5
31	2.4	------	2.3	2.2	------	2.3	------	39	------	2.0	2.7	------
TOTAL	84.3	69.3	67.9	68.6	57.4	69.9	201.1	1,142	869	260.4	106.8	84.1
MEAN	2.72	2.31	2.19	2.21	2.05	2.25	6.70	36.8	29.0	8.40	3.45	2.80
MAX	3.5	2.5	2.5	2.3	2.2	2.5	20	55	42	20	4.7	3.5
MIN	2.4	2.1	2.0	2.2	2.0	2.1	2.3	11	21	2.0	2.7	2.5
AC-FT	167	137	135	136	114	139	399	2,270	1,720	517	212	167

CAL YR 1972 TOTAL 2,281.9 MEAN 6.23 MAX 52 MIN 2.0 AC-FT 4,530
WTR YR 1973 TOTAL 3,080.8 MEAN 8.44 MAX 55 MIN 2.0 AC-FT 6,110

NOTE.--No gage-height record Oct. 7 to Nov. 8.

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 (9.1 m) upstream from Stinson Creek, and 5 mi (8.0 km) west of Elba.

DRAINAGE AREA.--7.2 sq mi (18.6 sq km), approximately.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,900 ft (1,800 m) (from topographic map).

AVERAGE DISCHARGE.--8 years, 4.06 cfs (115.0 cu dm/s), 7.66 in/yr (195 mm/yr), 2,940 acre-ft/yr (3.62 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 58 cfs (1.64 cu m/s) May 8 (gage height, 2.44 ft or 0.744 m); minimum, 1.2 cfs (22.7 cu dm/s) Dec. 3, but may have been less during period of ice effect (gage height, 1.17 ft or 0.357 m); minimum gage height, 1.16 ft (0.354 m).
Period of record: Maximum discharge, 58 cfs (1.64 cu m/s) May 8, 1973 (gage height, 2.44 ft or 0.744 m); minimum, 0.19 cfs (5.38 cu dm/s) July 23, 1968 (gage height, 1.17 ft or 0.357 m).

REMARKS.--Records good except those for December to February, which are fair.

Rating tables (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Apr. 5-10; stage-discharge relation affected by ice Nov. 21-24, Dec. 4-15, Dec. 27 to Jan. 9, Jan. 27-29, Feb. 1-3, 8-9, 14-16, 19-22, Mar. 3, 6-7, 21-22)

Oct. 1 to Apr. 10				Apr. 11 to Sept. 30			
1.26	0.98	1.6	7.4	1.18	1.4	1.8	21
1.30	1.3	1.9	18	1.20	1.8	2.1	36
1.40	3.0			1.30	4.1	2.4	54
				1.50	9.7		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.6	1.6	1.5	1.9	2.3	5.2	22	8.5	3.7	2.1	2.7
2	1.5	2.0	1.6	1.4	1.8	2.4	5.0	20	8.0	3.7	2.1	2.3
3	1.5	1.8	1.5	1.3	1.7	2.4	5.0	20	7.4	3.4	2.1	1.9
4	1.5	2.1	1.4	1.2	1.7	2.4	5.2	24	7.1	3.4	2.3	1.6
5	1.6	2.4	1.3	1.2	1.7	2.4	8.8	26	6.8	3.4	2.1	1.6
6	1.5	1.7	1.2	1.2	1.7	2.4	14	33	6.5	3.2	2.1	1.6
7	1.5	1.6	1.3	1.3	1.7	2.3	15	37	6.2	3.2	1.9	1.6
8	1.8	1.6	1.2	1.3	1.7	2.2	13	42	5.9	3.0	1.9	2.3
9	1.6	1.4	1.1	1.4	1.6	2.2	12	41	5.6	3.0	1.9	2.1
10	2.7	1.5	1.0	1.5	1.6	2.5	14	36	5.4	2.7	1.9	1.9
11	1.6	1.5	1.0	1.5	1.6	3.1	19	33	5.4	2.7	1.6	1.9
12	1.5	1.5	1.0	2.8	1.7	3.1	24	30	4.6	2.7	1.6	1.6
13	1.5	1.4	1.1	5.7	1.7	2.1	34	29	4.4	3.0	1.6	1.9
14	1.5	1.5	1.1	6.0	1.6	3.2	33	29	8.0	3.2	1.4	1.9
15	1.5	1.6	1.0	5.2	1.5	3.2	28	27	6.5	3.0	1.6	1.9
16	1.4	1.5	1.1	4.8	1.4	3.0	25	26	5.6	2.7	1.4	1.9
17	1.5	1.4	1.6	4.4	1.4	3.2	32	24	5.9	2.7	1.4	1.9
18	1.5	1.5	1.9	4.0	1.4	3.2	23	24	5.4	2.7	1.6	1.9
19	1.6	1.4	2.0	3.2	1.3	3.0	18	23	5.1	3.0	1.6	1.9
20	2.7	1.3	2.3	3.6	1.3	3.4	14	20	4.9	3.0	1.4	2.5
21	2.1	1.2	3.2	3.5	1.4	4.3	13	18	4.6	3.0	2.1	2.1
22	1.7	1.2	3.8	3.1	1.3	4.7	14	16	4.4	2.7	2.1	2.1
23	1.6	1.2	3.3	2.9	1.3	4.6	19	14	4.4	3.4	1.9	3.0
24	1.7	1.4	2.9	2.7	1.4	4.8	22	13	4.4	3.0	1.6	2.5
25	1.6	1.7	2.5	2.6	1.4	4.8	26	15	4.1	2.5	1.9	2.5
26	1.5	3.7	2.2	2.5	1.5	5.5	29	12	4.1	2.5	1.4	2.1
27	1.4	2.8	2.1	2.3	1.7	5.7	32	11	3.9	2.3	1.6	1.9
28	1.5	2.1	1.9	2.2	1.9	5.2	35	9.7	4.1	2.3	1.6	1.9
29	1.5	1.8	1.7	2.1	------	5.0	32	9.1	3.9	2.3	1.6	1.9
30	1.9	1.7	1.6	2.1	------	5.2	25	8.8	3.9	2.3	1.4	1.4
31	1.6	------	1.7	2.0	------	5.2	------	8.5	------	2.1	1.6	------
TOTAL	51.2	51.1	54.2	82.5	43.9	109.0	594.2	701.1	165.0	89.8	54.4	60.3
MEAN	1.65	1.70	1.75	2.66	1.57	3.52	19.8	22.6	5.50	2.90	1.75	2.01
MAX	2.7	3.7	3.8	6.0	1.9	5.7	35	42	8.5	3.7	2.3	3.0
MIN	1.4	1.2	1.0	1.2	1.3	2.1	5.0	8.5	3.9	2.1	1.4	1.4
CFSM	.23	.24	.24	.37	.22	.49	2.75	3.14	.76	.40	.24	.28
IN.	.26	.26	.28	.43	.23	.56	3.07	3.62	.85	.46	.28	.31
AC-FT	102	101	108	164	87	216	1,180	1,390	327	178	108	120

CAL YR 1972 TOTAL 2,252.8 MEAN 6.16 MAX 33 MIN 1.0 CFSM .86 IN 11.64 AC-FT 4,470
WTR YR 1973 TOTAL 2,056.7 MEAN 5.63 MAX 42 MIN 1.0 CFSM .78 IN 10.63 AC-FT 4,080

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 (180 m) downstream from headgates at Minidoka Dam and 6 mi (10 km) 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 (1,274.165 m) above mean sea level (Bureau of Reclamation bench mark). April to November 1910 at datum 0.08 ft (0.024 m) higher.

AVERAGE DISCHARGE.--32 years (1941-73), 617 cfs (17.47 cu m/s), 447,000 acre-ft/yr (551 cu hm/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,920 cfs (54.4 cu m/s) 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 (25,900 sq hm) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	535						0	1,220	1,600	1,830	1,420	1,020
2	535						0	1,360	1,500	1,830	1,470	803
3	537						0	1,380	1,400	1,830	1,400	836
4	535						0	1,490	1,390	1,830	1,300	836
5	535						0	1,490	1,490	1,830	1,260	856
6	535						0	1,340	1,660	1,830	1,330	913
7	515						0	1,140	1,690	1,830	1,360	958
8	487						0	994	1,690	1,830	1,480	941
9	485						0	889	1,620	1,830	1,550	858
10	485						0	911	1,480	1,830	1,570	843
11	487						0	963	1,400	1,830	1,580	823
12	487						0	1,060	1,460	1,830	1,580	860
13	481						25	1,210	1,500	1,830	1,500	852
14	481						50	1,320	1,370	1,800	1,520	821
15	476						50	1,600	1,100	1,750	1,640	808
16	478						50	1,790	1,010	1,760	1,690	766
17	445						50	1,820	927	1,810	1,600	766
18	214						119	1,820	932	1,810	1,570	766
19	0						281	1,820	963	1,810	1,490	801
20	0						353	1,820	1,100	1,760	1,540	770
21	0						353	1,820	1,310	1,540	1,600	674
22	0						352	1,830	1,490	1,350	1,550	622
23	0						350	1,830	1,600	1,320	1,360	620
24	0						411	1,830	1,580	1,320	1,080	620
25	0						591	1,780	1,640	1,320	972	576
26	0						708	1,640	1,740	1,320	1,000	497
27	0						850	1,510	1,810	1,320	1,040	463
28	0						1,010	1,470	1,830	1,300	1,160	458
29	0				------		1,050	1,390	1,830	1,260	1,220	479
30	0				------		1,180	1,510	1,830	1,290	1,220	510
31	0	------			------		------	1,570	------	1,360	1,210	------
TOTAL	8,733	0	0	0	0	0	7,833	45,617	43,942	50,990	43,262	22,416
MEAN	282	0	0	0	0	0	261	1,472	1,465	1,645	1,396	747
MAX	537	0	0	0	0	0	1,180	1,830	1,830	1,830	1,690	1,020
MIN	0	0	0	0	0	0	0	889	927	1,260	972	458
AC-FT	17,320	0	0	0	0	0	15,540	90,480	87,160	101,100	85,810	44,460

CAL YR 1972 TOTAL 232,745.00 MEAN 636 MAX 1,870 MIN 0 AC-FT 461,600
WTR YR 1973 TOTAL 222,793.00 MEAN 610 MAX 1,830 MIN 0 AC-FT 441,900

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 (270 m) downstream from headgates at Minidoka Dam and 6 mi (10 km) 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 (1,275 m) above mean sea level (Bureau of Reclamation bench mark). Prior to 1910 at site 600 ft (180 m) upstream at same datum.

AVERAGE DISCHARGE.--32 years (1941-73), 488 cfs (13.82 cu m/s), 353,600 acre-ft/yr (436 cu hm/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,490 cfs (42.2 cu m/s) 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 (23,000 sq hm) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	544						0	614	1,230	1,370	1,240	841
2	549						0	641	1,220	1,360	1,260	732
3	549						0	641	1,170	1,350	1,260	662
4	547						0	665	1,150	1,370	1,200	601
5	547						0	735	1,140	1,380	1,120	601
6	549						0	738	1,160	1,380	1,080	596
7	547						0	740	1,190	1,400	1,090	596
8	547						0	746	1,180	1,400	1,120	596
9	542						0	743	1,200	1,390	1,260	596
10	542						0	746	1,210	1,370	1,310	604
11	542						0	757	1,210	1,380	1,310	625
12	539						0	877	1,210	1,380	1,300	625
13	539						0	919	1,220	1,380	1,270	625
14	536						0	1,000	1,150	1,380	1,260	625
15	534						0	1,160	847	1,380	1,280	619
16	532						0	1,290	729	1,380	1,280	622
17	529						0	1,310	712	1,370	1,290	622
18	282						0	1,330	665	1,350	1,280	622
19	0						0	1,350	668	1,350	1,280	622
20	0						136	1,350	805	1,350	1,270	627
21	0						235	1,350	1,070	1,360	1,220	630
22	0						233	1,350	1,230	1,360	1,260	638
23	0						231	1,350	1,300	1,320	1,080	638
24	0						333	1,340	1,350	1,230	949	633
25	0						488	1,320	1,350	1,150	841	560
26	0						536	1,220	1,370	1,110	784	484
27	0						542	1,110	1,380	1,100	796	476
28	0						547	1,060	1,380	1,120	787	434
29	0				------		542	1,070	1,380	1,130	772	445
30	0				------		536	1,140	1,370	1,180	817	496
31	0	------			------		------	1,210	------	1,260	856	------
TOTAL	9,496	0	0	0	0	0	4,359	31,872	34,246	40,790	34,922	18,093
MEAN	306	0	0	0	0	0	145	1,028	1,142	1,316	1,127	603
MAX	549	0	0	0	0	0	547	1,350	1,380	1,400	1,310	841
MIN	0	0	0	0	0	0	0	614	665	1,100	772	434
AC-FT	18,840	0	0	0	0	0	8,650	63,220	67,930	80,910	69,270	35,890

CAL YR 1972 TOTAL 188,834.00 MEAN 516 MAX 1,420 MIN 0 AC-FT 374,600
WTR YR 1973 TOTAL 173,778.00 MEAN 476 MAX 1,400 MIN 0 AC-FT 344,700

13081000 Lake Walcott near Minidoka, Idaho

LOCATION.--Lat 42°40'15", long 113°29'00", near center of sec.1, T.9 S., R.25 E., Minidoka County, on south wall in powerhouse at Minidoka Dam on Snake River, 6 mi (10 km) southeast of Minidoka, and at mile 675.0 (1,086.1 km).

DRAINAGE AREA.--15,700 sq mi (40,700 sq km), 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 (15.094 m) below mean sea level.

EXTREMES.--Current year: Maximum contents observed, 99,500 acre-ft (123 cu hm) Aug. 27 (elevation, 4,245.36 ft or 1,293.986 m); minimum observed, 50,500 acre-ft (62.3 cu hm) Jan. 12 (elevation, 4,241.00 ft or 1,292.657 m). Period of record: Maximum contents, 110,740 acre-ft (137 cu hm) Aug. 8, 1922 (elevation, 4,246.28 ft or 1,294.266 m); minimum, -101,410 acre-ft (125 cu hm) Nov. 17, 1941 (elevation, 4,215.19 ft or 1,284.790 m).

REMARKS.--Reservoir is formed by rock-fill dam with concrete core; storage began in 1906. Capacity, 107,240 acre-ft (132 cu hm) between elevations 4,236.00 ft or 1,291.133 m (sill of powerhouse penstock) and 4,246.00 ft or 1,294.181 m (top of flashboards). Dead storage below elevation 4,236.00 ft (1,291.133 m) about 115,000 acre-ft (142 cu hm). Water used for power development and irrigation on Minidoka project of Bureau of Reclamation. Contents given herein are above elevation 4,236.00 ft (1,291.133 m). 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, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95,800	87,600	57,800	57,800	53,100	58,700	91,200	95,800	96,400	95,900	95,600	86,100
2	95,800	87,600	57,400	57,700	53,300	61,200	92,900	95,800	95,200	96,400	95,300	95,500
3	96,300	88,200	57,700	56,900	54,000	61,900	95,200	95,800	96,400	95,600	95,900	94,600
4	96,300	88,200	57,400	55,300	54,200	61,900	97,000	95,800	95,400	95,600	95,900	94,400
5	97,000	86,700	57,300	54,800	55,000	61,900	97,600	96,400	95,400	95,600	96,400	94,400
6	95,800	88,600	58,000	53,100	54,900	61,900	96,400	95,800	95,400	95,600	95,900	93,900
7	94,700	82,300	58,400	52,200	55,500	62,400	98,800	95,800	95,400	94,700	95,900	92,900
8	94,500	70,600	57,600	51,800	55,400	61,600	99,000	96,900	94,500	94,700	95,800	91,700
9	93,800	57,000	57,000	52,200	56,300	62,600	99,000	97,500	95,000	95,200	96,000	93,300
10	94,100	50,700	56,600	52,000	56,300	64,500	98,300	97,500	93,800	96,200	95,800	93,300
11	94,800	56,800	55,700	51,200	56,100	66,200	98,600	96,400	95,000	95,800	95,300	94,000
12	94,800	59,000	54,400	50,500	56,100	68,900	98,900	96,400	95,700	96,000	95,700	94,000
13	93,800	60,200	53,800	50,800	56,700	70,200	98,100	96,400	95,700	96,000	95,700	94,000
14	93,100	60,200	53,800	51,100	56,000	70,200	97,600	95,300	95,700	96,400	95,700	94,600
15	91,700	60,000	53,800	51,100	56,000	71,000	96,400	95,300	95,700	96,000	95,200	94,600
16	91,500	60,000	53,800	59,700	56,000	71,000	95,800	94,500	97,100	96,200	94,500	94,000
17	91,500	59,000	53,800	60,200	56,200	69,000	95,200	94,700	95,000	96,600	93,800	94,600
18	91,800	58,600	53,800	60,000	56,200	68,300	95,800	94,600	96,200	96,400	94,600	94,600
19	91,500	58,300	55,500	59,100	56,300	67,300	95,800	94,500	96,900	96,400	95,200	94,600
20	91,000	58,200	56,800	59,300	56,300	67,300	95,800	95,000	96,900	96,400	94,500	93,900
21	88,400	58,000	57,400	59,300	56,300	67,300	94,600	95,200	97,100	96,200	95,200	95,200
22	85,000	57,600	58,900	59,300	56,300	68,800	96,400	95,800	97,100	96,800	95,200	95,200
23	82,800	57,400	60,200	57,000	55,700	69,200	95,800	96,200	96,900	97,100	96,600	95,200
24	79,000	57,100	60,800	55,400	55,700	70,400	95,200	96,400	96,600	97,500	94,900	94,000
25	77,900	57,200	60,800	53,800	55,000	71,400	95,800	94,600	97,100	98,000	97,500	92,400
26	78,800	55,700	60,800	52,700	55,900	72,300	95,800	95,400	97,600	97,800	98,300	91,700
27	81,500	57,600	60,600	52,700	55,900	74,900	95,800	96,800	97,500	97,100	99,500	90,300
28	83,200	57,200	59,300	52,200	58,000	78,900	94,600	96,000	97,200	96,600	97,800	87,700
29	83,500	57,300	58,900	52,200	------	83,000	95,400	96,000	97,600	96,600	97,700	84,500
30	84,100	57,400	58,500	52,600	------	87,000	95,400	96,000	97,100	96,400	97,300	82,400
31	86,400	------	58,000	52,900	------	89,400	------	96,400	------	96,200	95,200	------
MAX	97,000	88,600	60,800	60,200	58,000	89,400	99,000	97,500	97,600	98,000	99,500	95,500
MIN	77,900	50,700	53,800	50,500	53,100	58,700	91,200	94,500	93,800	94,700	93,800	82,400
(†)	4,244.25	4,241.64	4,241.70	4,241.22	4,241.70	4,244.50	4,245.02	4,245.10	4,245.16	4,245.08	4,245.00	4,243.90
(‡)	-10,000	-29,000	+600	-5,100	+5,100	+31,400	6,000	+1,000	+700	-900	-1,000	-12,800

CAL YR 1972..... ‡ +2,500
WTR YR 1973..... ‡ -14,000

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

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 mi (2 km) downstream from Minidoka Dam, 6 mi (10 km) south of Minidoka, at mile 673.7 (1,084.0 km).

DRAINAGE AREA.--15,700 sq mi (40,700 sq km), 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 mi (10 km) downstream "at Montgomery Ferry."

GAGE.--Water-stage recorder. Datum of gage is 4,132.2 ft (1,259.49 m) above mean sea level (river-profile survey). Prior to Apr. 21, 1910, nonrecording gage at site 6 mi (10 km) downstream at different datum. Apr. 21, 1910, to Aug. 28, 1911, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--47 years (1926-73), 6,015 cfs (170.3 cu m/s), 4,358,000 acre-ft/yr (5,370 cu hm/yr); 15-year base period (1952-67), 5,655 cfs (160.1 cu m/s).

EXTREMES.--Current year: Maximum discharge, 14,200 cfs (402 cu m/s) Apr. 15 (gage height, 8.87 ft or 2.704 m); minimum, 1,730 cfs (49.0 cu m/s) Oct. 27 (gage height, 4.18 ft or 1.274 m).
Period of record: Maximum discharge, 47,500 cfs (1,350 cu m/s) May 29, 30, 1897 (gage height, 12.6 ft or 3.84 m, former site and datum); minimum, 37 cfs (1.05 cu m/s) 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 (5,800 sq hm). Diversions above station for irrigation of about 128,000 acres (51,800 sq hm) below and about 1,200,000 acres (486,000 sq hm) above station of which about 304,000 acres (123,000 sq hm) are by withdrawals from ground water (1966 determination). Considerable water leaks into the Snake Plain aquifer above station.

REVISIONS (WATER YEARS).--WSP 1347: 1911.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Mar. 27 to Apr. 10, May 12 to Sept. 17; stage-discharge relation affected by ice Dec. 7-19, Dec. 31 to Jan. 12)

4.0	1,520	7.0	7,880
5.0	3,000	9.0	14,400
6.0	5,140		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,110	10,100	8,920	8,600	7,470	9,420	5,910	7,920	8,450	9,210	8,590	7,440
2	4,370	10,500	8,860	8,300	7,560	9,350	5,770	7,800	8,810	8,970	8,650	7,380
3	4,540	10,600	8,830	7,500	7,810	9,670	5,460	7,430	8,570	8,850	8,710	7,300
4	5,370	10,600	9,190	7,000	8,000	9,670	6,560	7,190	8,370	8,970	8,530	7,050
5	7,050	10,600	9,010	7,600	8,130	9,580	7,790	7,180	8,290	8,980	8,410	6,490
6	9,190	10,700	8,860	7,600	8,320	9,410	7,620	7,100	8,380	9,110	8,470	5,920
7	10,100	9,870	8,500	7,600	8,450	9,100	7,250	7,250	8,600	9,100	8,450	5,810
8	10,100	10,000	8,200	7,600	8,450	8,410	7,200	7,440	8,590	9,090	8,470	5,820
9	10,200	8,270	8,000	7,400	8,820	7,580	7,740	7,380	8,580	9,040	8,490	5,800
10	9,290	5,740	7,800	7,300	9,080	7,650	8,050	7,440	8,660	8,940	8,600	5,880
11	8,450	8,430	7,200	7,200	9,090	7,730	8,050	7,340	8,340	8,950	8,690	6,150
12	8,420	9,500	7,000	7,200	9,080	7,580	8,890	7,480	8,030	9,100	8,710	6,420
13	9,620	10,100	7,000	7,270	8,650	7,940	10,000	7,790	7,910	9,090	8,720	6,420
14	10,700	10,100	7,000	7,000	8,650	8,430	12,000	8,290	7,830	9,140	8,790	6,420
15	10,300	9,870	7,000	7,270	8,640	8,860	14,000	8,850	7,770	9,210	8,780	6,310
16	10,300	9,780	7,000	9,260	8,640	8,810	13,800	8,840	7,450	9,060	8,850	6,150
17	10,300	9,610	7,300	10,600	8,680	8,810	11,400	8,820	7,530	9,180	8,910	6,090
18	10,800	9,390	7,600	10,400	8,700	8,780	9,070	9,020	7,160	9,250	8,920	6,120
19	11,300	9,300	8,100	10,400	8,760	8,150	9,160	9,050	6,900	9,180	8,860	6,060
20	11,000	9,190	8,870	10,300	8,700	7,460	9,570	9,130	6,890	9,260	8,790	6,120
21	10,700	9,060	9,130	10,200	8,670	7,390	10,000	8,950	7,210	9,240	8,770	5,850
22	10,100	8,850	9,900	9,970	8,600	7,400	9,790	8,840	7,710	9,090	8,650	5,500
23	10,300	8,810	10,300	8,850	8,380	7,290	8,250	8,750	8,080	8,740	8,410	5,240
24	8,350	8,770	10,700	8,200	8,330	7,190	6,890	8,770	8,370	8,380	8,400	4,890
25	2,990	8,800	10,600	8,000	8,340	7,190	6,580	9,260	8,730	8,230	8,290	4,590
26	2,300	8,560	10,500	7,860	8,570	5,920	7,000	9,230	9,010	8,380	8,220	4,100
27	3,430	9,070	10,300	7,730	8,940	4,400	8,410	8,570	8,920	8,440	8,070	3,760
28	8,870	9,010	9,870	7,640	9,620	4,070	9,120	8,700	8,890	8,500	7,840	3,770
29	8,960	8,860	9,670	7,600	------	4,130	9,150	8,440	9,040	8,620	7,710	3,320
30	8,730	8,890	9,300	7,600	------	5,000	8,540	8,260	9,040	8,620	7,480	2,770
31	9,080	------	8,800	7,330	------	5,910	------	8,340	------	8,530	7,440	------
TOTAL	260,320	280,930	269,310	254,380	239,130	238,280	259,020	254,850	246,110	276,450	262,670	170,940
MEAN	8,397	9,364	8,687	8,206	8,540	7,686	8,634	8,221	8,204	8,918	8,473	5,698
MAX	11,300	10,700	10,700	10,600	9,620	9,670	14,000	9,260	9,040	9,260	8,920	7,440
MIN	2,300	5,740	7,000	7,000	7,470	4,070	5,460	7,100	6,890	8,230	7,440	2,770
AC-FT	516,300	557,200	534,200	504,600	474,300	472,600	513,800	505,500	488,200	548,300	521,000	339,100

CAL YR 1972 TOTAL 3,940,840 MEAN 10,770 MAX 21,700 MIN 2,300 AC-FT 7,817,000
WTR YR 1973 TOTAL 3,012,390 MEAN 8,253 MAX 14,000 MIN 2,300 AC-FT 5,975,000

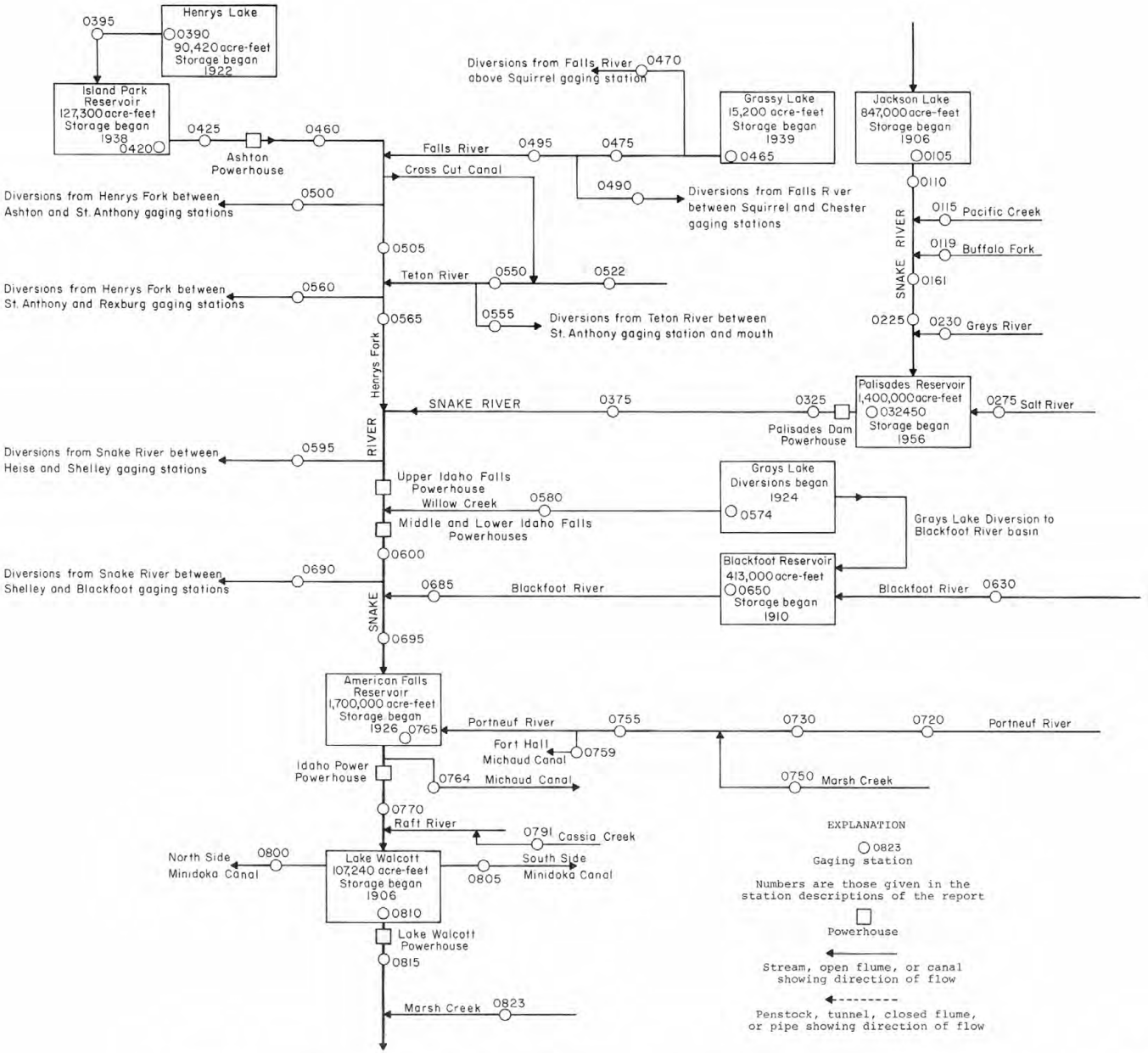

FIGURE 5. Schematic diagram showing gaging stations on streams, diversions, storage, and return flows in upper Snake River basin between Jackson Lake and Minidoka.

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 (229 m) upstream from concrete diversion dam and 5 mi (8 km) northeast of Albion.

DRAINAGE AREA.--86 sq mi (223 sq km), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,500 ft (1,370 m) (from topographic map).

AVERAGE DISCHARGE.--7 years, 22.4 cfs (0.634 cu m/s), 16,230 acre-ft/yr (20.0 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 177 cfs (5.01 cu m/s) Apr. 28 (gage height, 4.35 ft or 1.326 m); minimum, 6.2 cfs (0.18 cu m/s) Aug. 8, 11, 13, 16 (gage height, 2.89 ft or 0.881 m).
Period of record: Maximum discharge, 828 cfs (23.4 cu m/s) Jan. 17, 1971 (gage height, 7.26 ft or 2.213 m) by slope-area measurement; minimum, 1.0 cfs (0.028 cu m/s) Dec. 14, 1967 (gage height, 2.00 ft or 0.61 m).

REMARKS.--Records good except those for October and April, which are fair. Diversions above station for irrigation of about 5,000 acres (2,020 sq hm) (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 June 30 to Sept. 30; stage-discharge relation affected by ice Dec. 9-22, Jan. 5-12)

3.0	5.6	4.0	64
3.2	12	4.5	121
3.4	21	5.0	200
3.6	32		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.8	16	16	19	19	25	38	70	41	17	7.6	11
2	9.8	16	15	19	17	27	37	64	44	15	7.4	13
3	10	15	15	19	18	22	36	68	40	14	7.5	11
4	11	16	10	19	19	22	40	70	36	12	7.9	10
5	12	17	8.9	12	20	21	45	80	35	11	8.1	9.5
6	13	15	13	15	21	19	50	84	34	11	7.8	9.1
7	12	15	14	18	21	19	47	96	33	10	7.4	9.1
8	11	15	14	19	18	20	45	78	33	10	7.0	11
9	12	15	11	19	18	20	44	60	33	9.4	6.9	10
10	13	14	10	18	19	20	42	58	32	9.2	7.2	9.6
11	12	14	9.5	23	19	23	46	51	31	8.7	6.7	9.9
12	12	15	11	34	18	22	52	47	30	9.0	6.9	8.7
13	11	14	13	69	19	19	68	44	27	10	6.8	8.5
14	11	14	16	55	18	17	74	43	37	10	7.5	8.0
15	10	14	16	43	18	23	90	44	51	11	7.2	8.4
16	10	14	15	39	18	23	110	43	42	10	7.1	8.6
17	10	15	15	45	19	27	140	43	39	9.8	7.1	8.8
18	11	15	16	38	19	26	130	51	38	10	7.0	8.7
19	11	15	19	30	17	24	110	62	31	10	7.3	8.6
20	12	15	23	23	17	24	100	90	29	11	7.1	8.7
21	13	15	27	28	17	28	120	74	28	11	8.9	9.7
22	14	13	32	25	17	17	100	63	25	11	9.3	9.1
23	14	13	29	23	19	34	110	54	23	11	7.6	12
24	13	13	28	23	20	39	110	52	22	11	6.9	10
25	13	14	24	24	24	41	110	82	22	11	7.1	10
26	13	24	21	22	24	46	120	70	22	11	7.4	9.5
27	13	18	21	20	25	45	140	56	19	11	7.4	8.7
28	14	15	18	21	25	38	160	48	18	9.3	7.7	8.4
29	15	16	7.8	20	------	35	105	43	20	8.4	7.7	8.2
30	14	17	10	20	------	35	82	39	20	7.9	7.5	8.0
31	15	------	18	20	------	37	------	38	------	7.6	8.0	------
TOTAL	374.6	457	516.2	822	543	838	2,501	1,865	935	328.3	231.0	283.8
MEAN	12.1	15.2	16.7	26.5	19.4	27.0	83.4	60.2	31.2	10.6	7.45	9.46
MAX	15	24	32	69	25	46	160	96	51	17	9.3	13
MIN	9.8	13	7.8	12	17	17	36	38	18	7.6	6.7	8.0
AC-FT	743	906	1,020	1,630	1,080	1,660	4,960	3,700	1,850	651	458	563

CAL YR 1972 TOTAL 12,728.9 MEAN 34.8 MAX 285 MIN 6.7 AC-FT 25,250
WTR YR 1973 TOTAL 9,694.9 MEAN 26.6 MAX 160 MIN 6.7 AC-FT 19,230

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 mi (0.3 km) upstream from maximum flow line of Oakley Reservoir, 5 mi (8 km) upstream from Trapper Creek, 5 mi (8 km) south of Oakley Dam, and 9 mi (14.5 km) southwest of Oakley.

DRAINAGE AREA.--633 sq mi (1,640 sq km). Mean altitude, 6,030 ft (1,837.9 m).

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 (1,453.8 m) (by barometer). Prior to Aug. 29, 1912, at site 200 ft (60.9 m) downstream at different datum.

AVERAGE DISCHARGE.--59 years, 45.4 cfs (1.29 cu m/s), 32,890 acre-ft/yr (40.55 cu hm); 15-year base period (1952-67), 38.0 cfs (1.08 cu m/s).

EXTREMES.--Current year: Maximum discharge, 304 cfs (8.61 cu m/s) May 12 (gage height, 3.66 ft or 1.116 m); minimum, 6.8 cfs (0.19 cu m/s) July 7 (gage height, 1.27 ft or 0.387 m).
Period of record: Maximum discharge, 3,240 cfs (91.8 cu m/s) Feb. 11, 1962 (gage height, 9.3 ft or 283 m), from rating curve extended above 200 cfs (5.66 cu m/s) 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 October to May, which are poor. Decreed water rights are reported to apply to about 2,700 acres (1,090 sq hm) 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 (see sta 13083500). Records of chemical analyses for the water year 1973 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 Nov. 23-27, Dec. 4 to Feb. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	32	41	38	33	63	73	263	98	18	20	17
2	22	35	39	37	32	66	73	260	98	18	18	20
3	24	39	38	37	35	70	67	235	94	17	18	21
4	25	37	35	26	42	71	64	235	88	12	21	21
5	49	39	22	17	42	72	66	238	84	13	24	19
6	34	37	24	18	43	69	86	254	77	12	26	16
7	26	38	29	20	43	67	77	258	70	8.8	23	16
8	25	37	35	24	44	67	67	279	58	8.0	20	16
9	29	37	24	28	42	65	80	292	49	9.4	19	19
10	26	37	14	31	41	62	98	289	47	9.1	18	19
11	28	37	18	35	40	56	98	292	44	7.8	16	19
12	26	37	26	44	40	62	111	296	42	9.7	13	20
13	25	37	38	52	42	64	136	287	34	12	12	18
14	24	37	36	56	40	67	164	272	47	14	12	17
15	25	38	33	58	42	59	185	270	63	15	13	16
16	22	38	33	55	42	65	190	263	65	16	14	16
17	22	40	34	50	44	72	189	254	54	14	11	15
18	25	40	38	47	53	61	189	240	50	16	10	15
19	24	40	44	41	46	56	181	238	51	16	10	15
20	31	42	48	33	43	58	166	242	52	18	10	15
21	55	39	53	31	44	66	151	227	45	31	13	17
22	57	35	56	23	45	69	144	210	38	32	18	20
23	44	38	55	24	57	64	139	181	33	39	21	25
24	38	41	54	25	64	56	146	162	30	32	23	25
25	34	42	51	27	64	69	150	164	29	28	21	27
26	37	40	48	26	66	83	167	174	26	30	18	26
27	34	38	46	25	68	93	189	154	25	25	16	26
28	34	36	45	27	64	89	216	138	25	23	14	26
29	34	38	39	30	------	83	238	125	24	23	14	23
30	33	40	35	37	------	76	251	111	20	22	13	20
31	31	------	41	37	------	74	------	100	------	22	14	------
TOTAL	966	1,141	1,172	1,059	1,301	2,116	4,151	7,003	1,560	570.8	513	585
MEAN	31.2	38.0	37.8	34.2	46.5	68.3	138	226	52.0	18.4	16.5	19.5
MAX	57	42	56	58	68	93	251	296	98	39	26	27
MIN	22	32	14	17	32	56	64	100	20	7.8	10	15
AC-FT	1,920	2,260	2,320	2,100	2,580	4,200	8,230	13,890	3,090	1,130	1,020	1,160

CAL YR 1972 TOTAL 28,416.2 MEAN 77.6 MAX 348 MIN 7.1 AC-FT 56,370
WTR YR 1973 TOTAL 22,137.8 MEAN 60.7 MAX 296 MIN 7.8 AC-FT 43,910

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 mi (6.4 km) upstream from Oakley Dam and 7 mi (11.3 km) southwest of Oakley.

DRAINAGE AREA.--53.7 sq mi (139 sq km). Mean altitude, 6,360 ft (1,938 m).

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 (1,469 m) (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 mi (1.6 km) upstream at different datum. Sept. 1, 1912, to Apr. 7, 1913, nonrecording gage at site 0.8 mi (1.3 km) downstream at different datum.

AVERAGE DISCHARGE.--59 years, 14.6 cfs (0.41 cu m/s) 10,580 acre-ft/yr (13.0 cu hm/hr); 15-year base period (1952-67), 13.1 cfs (0.371 cu m/s).

EXTREMES.--Current year: Maximum discharge, 62 cfs (1.76 cu m/s) Jan. 13, gage height, 5.35 ft (1.63 m); minimum, 8.3 cfs (0.235 cu m/s) Dec. 5, gage height, 4.79 ft (1.46 m).
Period of record: Maximum discharge recorded, 270 cfs (7.64 cu m/s) Aug. 17, 1941, gage height, 6.99 ft (2.13 m) during cloudburst, from rating curve extended above 100 cfs (2.83 cu m/s) 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 (36.8 cu dm/s) Jan. 1, 1970, gage height, 4.53 ft (1.38 m).

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 1973 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)

4.8	8.3
5.0	20
5.2	38
5.4	64

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	14	15	14	19	17	35	33	16	12	12
2	13	15	14	15	14	17	17	32	31	16	12	12
3	13	15	14	15	14	15	16	32	30	15	13	12
4	14	15	14	12	14	15	17	33	29	15	14	11
5	16	15	9.8	12	14	15	18	35	28	15	13	11
6	14	15	13	11	14	14	24	42	27	15	13	11
7	14	15	16	15	14	15	23	43	26	15	13	11
8	14	15	13	15	14	15	20	44	25	14	13	11
9	14	14	9.3	15	14	14	20	43	25	14	13	12
10	17	14	9.8	17	14	14	21	42	24	14	12	12
11	14	14	9.9	17	14	16	22	56	24	14	12	12
12	13	14	10	25	14	15	24	55	23	14	12	11
13	14	14	12	44	14	15	29	54	23	15	11	11
14	13	14	13	23	14	14	28	53	29	15	11	11
15	14	14	12	19	14	14	27	47	26	15	11	11
16	14	15	16	18	14	14	26	46	24	14	11	11
17	14	14	17	18	14	15	30	46	24	13	11	11
18	14	14	17	16	13	14	28	46	22	13	11	11
19	15	15	16	16	13	14	27	47	22	14	11	11
20	18	14	16	14	13	14	26	47	21	15	11	12
21	18	14	17	16	13	17	26	45	20	18	12	12
22	16	13	19	15	13	15	25	42	19	16	18	12
23	15	14	17	14	14	16	26	40	19	14	14	13
24	15	14	16	14	15	17	27	42	19	14	12	13
25	15	14	15	14	17	17	27	46	18	14	11	13
26	15	16	14	15	18	18	28	41	17	13	11	12
27	15	16	14	14	21	19	32	36	17	13	11	12
28	15	15	15	15	19	17	34	35	18	13	11	12
29	15	15	14	14	------	17	36	34	18	13	11	12
30	15	15	15	14	------	16	36	32	17	13	11	11
31	14	------	15	14	------	16	------	31	------	13	11	------
TOTAL	453	436	436.8	511	407	483	757	1,302	698	445	373	349
MEAN	14.6	14.5	14.1	16.5	14.5	15.6	25.2	42.0	23.3	14.4	12.0	11.6
MAX	18	16	19	44	21	19	36	56	33	18	18	13
MIN	13	13	9.3	11	13	14	16	31	17	13	11	11
AC-FT	899	865	866	1,010	807	958	1,500	2,580	1,380	883	740	692

CAL YR 1972 TOTAL 8,306.6 MEAN 22.7 MAX 75 MIN 8.4 AC-FT 16,480
WTR YR 1973 TOTAL 6,650.8 MEAN 18.2 MAX 56 MIN 9.3 AC-FT 13,190

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 mi (6.4 km) southwest of Oakley, and at mile 26.0 (41.8 km).

DRAINAGE AREA.--729 sq mi (1,888 sq km).

PERIOD OF RECORD.--October 1912 to current year.

GAGE.--Nonrecording gage. Altitude of gage is 4,630 ft (1,410 m) (by barometer).

EXTREMES.--Current year: Maximum contents observed, 58,900 acre-ft (72.6 cu hm) May 28, gage height, 121.7 ft (37.1 m); minimum observed, 34,600 acre-ft (42.7 cu hm) Sept. 30, gage height, 93.4 ft (28.5 m).
Period of record: Maximum contents observed, 74,600 acre-ft (92.0 cu hm) June 15, 1921, gage height, 136.2 ft (41.5 m); 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 (91.7 cu hm) between gage heights 0.0 (bottom of diversion tunnel) and 136.0 ft (41.5 m) (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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	38,500	40,400	41,700	-	-	-	-	-	52,600	-	-
2	-	-	-	-	-	-	53,000	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	37,200
4	-	-	-	-	-	-	-	-	58,300	-	-	-
5	-	-	-	-	-	49,600	-	-	-	-	-	-
6	-	38,900	-	-	-	-	-	-	-	-	41,400	-
7	-	-	-	-	-	-	-	57,600	-	-	41,400	-
8	-	-	-	42,300	-	-	-	-	-	-	-	-
9	37,100	-	-	-	-	-	54,200	57,600	-	49,600	-	-
10	-	-	-	-	-	-	54,300	-	-	49,200	-	36,400
11	-	-	-	-	-	-	-	-	56,800	-	-	36,400
12	-	-	-	-	44,600	-	-	-	56,500	-	-	-
13	-	-	-	-	-	50,500	-	-	-	-	40,400	-
14	-	39,300	40,900	-	-	-	-	57,700	-	-	-	-
15	37,500	-	-	42,900	-	-	-	-	55,900	46,600	-	-
16	-	-	-	-	-	-	56,000	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	35,900
18	-	-	-	-	-	-	-	-	55,800	-	-	-
19	-	-	41,000	-	45,100	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	39,300	-
21	-	39,600	-	-	-	51,200	-	58,300	-	-	-	-
22	-	-	-	43,200	-	-	-	-	-	-	-	-
23	38,100	-	-	-	-	-	58,800	-	55,000	44,400	-	-
24	-	-	-	43,700	-	-	-	-	-	-	-	35,400
25	38,100	-	-	-	-	-	-	-	-	-	-	-
26	-	-	41,400	-	-	51,900	-	-	-	-	-	-
27	-	40,100	-	-	-	-	-	-	-	-	38,400	-
28	-	-	-	-	47,300	-	-	58,900	-	-	-	-
29	-	40,200	-	-	------	-	-	-	-	-	-	-
30	-	40,300	-	-	------	-	57,700	-	52,900	42,700	-	34,600
31	38,400	------	41,700	44,000	------	52,900	------	58,700	------	42,500	37,700	------
MAX	38,400	40,300	41,700	44,000	47,300	52,900	-	-	-	52,600	-	-
MIN	-	38,500	40,400	41,700	-	-	-	-	52,900	42,500	37,700	34,600
(†)	-	-	-	105.1	109.0	-	120.4	-	-	103.6	-	93.4
(‡)	+1,900	+1,900	+1,400	+2,300	+3,300	+5,600	+4,800	+1,000	-5,800	-10,400	-4,800	-3,100

CAL YR 1972..... ‡ +4,000
WTR YR 1973..... ‡ -1,900

† 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 mi (6.4 km) east of Milner, and 8 mi (12.9 km) west of Burley.

PERIOD OF RECORD.--October 1956 to current year.

GAGE.--Sparling meter at pumping plant.

AVERAGE DISCHARGE.--17 years, 72.3 cfs (2.048 cu m/s), 52,380 acre-ft/yr (64.6 cu hm/yr).

EXTREMES.--Period of record: Maximum daily discharge, 267 cfs (7.56 cu m/s) 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 (5,870 sq hm) of land in Minidoka North Side project.

COOPERATION.--Record of pump operation and 18 discharge measurements furnished by A and B Irrigation District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53						0	39	172	235	221	119
2	53						0	49	157	234	212	119
3	53						0	51	156	237	203	94
4	45						0	51	163	233	189	96
5	35						0	63	175	238	188	89
6	35						0	63	181	243	186	92
7	30						0	67	193	248	186	92
8	30						0	67	193	248	211	96
9	30						0	67	185	249	213	96
10	30						0	64	185	249	228	91
11	30						0	76	189	250	210	82
12	30						0	94	184	250	210	86
13	0						0	94	174	251	221	84
14	0						0	117	182	251	225	82
15	0						0	140	142	252	235	78
16	0						16	151	108	244	225	78
17	0						26	165	108	249	231	78
18	0						26	185	115	250	220	78
19	0						26	208	111	247	220	76
20	0						26	210	107	241	220	66
21	0						18	212	125	232	220	66
22	0						18	212	146	232	222	59
23	0						18	207	171	213	220	79
24	0						18	207	172	200	216	59
25	0						18	209	196	178	196	61
26	0						18	186	212	178	196	56
27	0						18	186	219	187	181	52
28	0						18	176	218	182	160	57
29	0				------		18	168	237	182	158	62
30	0				------		29	168	236	214	150	62
31	0	------			------		------	168	------	222	143	------
TOTAL	454	0	0	0	0	0	311	4,120	5,112	7,119	6,316	2,385
MEAN	14.6	0	0	0	0	0	10.4	133	170	230	204	79.5
MAX	53	0	0	0	0	0	29	212	237	252	235	119
MIN	0	0	0	0	0	0	0	39	107	178	143	52
AC-FT	901	0	0	0	0	0	617	8,170	10,140	14,120	12,530	4,730

CAL YR 1972 TOTAL 26,000.00 MEAN 71.0 MAX 244 MIN 0 AC-FT 51,570
WTR YR 1973 TOTAL 25,817.00 MEAN 70.7 MAX 252 MIN 0 AC-FT 51,210

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 (180 m) downstream from pumping station and 2.8 mi (4.5 km) northeast of Milner, and 9 mi (14 km) 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 (1,279 m) (river survey).

AVERAGE DISCHARGE.--25 years (1948-73), 25.6 cfs (0.725 cu m/s), 18,550 acre-ft/yr (22.9 cu hm/yr).

EXTREMES.--Period of record: Maximum daily discharge observed, 82 cfs (2.32 cu m/s) July 11, 1973; no flow for many days each year.

REMARKS.--Records excellent. Flow regulated by pumping plant which lifts water 65.3 ft (19.90 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	28	70	69	65	62
2							0	26	70	69	65	61
3							0	26	67	75	64	56
4							0	45	66	77	64	56
5							0	45	66	81	64	56
6							0	45	67	81	63	58
7							0	46	66	81	63	58
8							0	49	68	79	63	58
9							0	49	65	79	63	58
10							0	78	63	79	63	58
11							0	78	63	82	63	56
12							0	79	63	80	64	55
13							0	64	63	80	64	53
14							0	64	62	80	66	52
15							0	60	62	78	66	49
16							0	66	62	77	64	49
17							0	71	56	76	64	50
18							0	72	56	76	61	50
19							0	74	50	73	61	47
20							0	74	52	73	61	47
21							0	74	52	73	65	47
22							0	73	52	73	66	47
23							0	74	64	73	66	47
24							0	75	66	73	66	47
25							0	73	66	67	65	47
26							6.4	73	66	67	65	20
27							17	73	66	66	64	0
28							18	73	66	66	63	0
29					------		18	72	66	66	63	0
30					------		33	72	66	65	62	0
31		------			------		------	70	------	65	62	------
TOTAL	0	0	0	0	0	0	92.4	1,941	1,887	2,299	1,978	1,344
MEAN	0	0	0	0	0	0	3.08	62.6	62.9	74.2	63.8	44.8
MAX	0	0	0	0	0	0	33	79	70	82	66	62
MIN	0	0	0	0	0	0	0	26	50	65	61	0
AC-FT	0	0	0	0	0	0	183	3,850	3,740	4,560	3,920	2,670

CAL YR 1972 TOTAL 9,052.00 MEAN 24.7 MAX 73 MIN 0 AC-FT 17,950
WTR YR 1973 TOTAL 9,541.40 MEAN 26.1 MAX 82 MIN 0 AC-FT 18,930

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 mi (1.0 km) 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 (180 m) downstream.

AVERAGE DISCHARGE.--29 years (1944-73), 82.1 cfs (2.325 cu m/s), 59,480 acre-ft/yr (73.2 cu hm/yr).

EXTREMES.--Period of record: Maximum daily discharge, 301 cfs (8.52 cu m/s) 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 (5,420 sq hm) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74						0	70	219	274	240	128
2	74						0	79	219	280	254	165
3	74						0	92	219	282	259	159
4	74						0	107	233	282	259	145
5	74						0	118	238	282	259	131
6	74						0	121	253	282	253	122
7	56						0	127	253	293	250	119
8	0						0	154	253	299	250	119
9	0						0	165	253	299	250	119
10	0						0	180	228	299	245	119
11	0						0	194	228	299	243	119
12	0						0	197	222	299	243	119
13	0						0	197	220	299	243	119
14	0						0	224	204	299	243	112
15	0						0	241	195	299	256	102
16	0						0	250	186	299	260	100
17	0						0	253	181	299	260	106
18	0						0	253	181	299	260	108
19	0						0	259	181	294	259	108
20	0						0	261	169	274	259	108
21	0						0	268	163	265	161	103
22	0						0	271	163	266	142	100
23	0						0	271	175	255	244	100
24	0						14	270	181	245	244	100
25	0						21	258	194	244	245	90
26	0						21	253	217	232	245	84
27	0						21	248	215	227	239	84
28	0						26	243	230	228	236	84
29	0				------		29	238	249	228	227	84
30	0				------		42	233	269	236	219	84
31	0	------			------		------	228	------	240	206	------
TOTAL	500	0	0	0	0	0	174	6,323	6,391	8,498	7,453	3,340
MEAN	16.1	0	0	0	0	0	5.80	204	213	274	240	111
MAX	74	0	0	0	0	0	42	271	269	299	260	165
MIN	0	0	0	0	0	0	0	70	163	227	142	84
AC-FT	992	0	0	0	0	0	345	12,540	12,680	16,860	14,780	6,620

CAL YR 1972 TOTAL 32,966.00 MEAN 90.1 MAX 280 MIN 0 AC-FT 65,390
WTR YR 1973 TOTAL 32,679.00 MEAN 89.5 MAX 299 MIN 0 AC-FT 64,820

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 mi (5.5 km) downstream, nonrecording gage on A lateral 1.9 mi (3.1 km) downstream, and differential recorder on control gates of North Side diversion 3.4 mi (5.5 km) downstream, all referred to Milner Lake.

AVERAGE DISCHARGE.--38 years (1935-73), total 1,046 cfs (29.62 cu m/s), 757,800 acre-ft/yr (934 cu hm/yr); Milner-Gooding project, 603 cfs (17.1 cu m/s); North Side Canal Co. project, 443 cfs (12.6 cu m/s).

EXTREMES.--Period of record: Maximum daily discharge, 2,770 cfs (78.4 cu m/s) 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 (0.991 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,110	1,020	260				0	1,890	2,350	2,460	2,480	2,290
2	2,120	1,010	0				0	1,960	2,340	2,450	2,480	2,280
3	2,120	960	0				0	2,100	2,340	2,470	2,460	2,270
4	2,120	940	0				0	2,170	2,350	2,470	2,460	2,270
5	2,120	940	0				110	2,160	2,340	2,490	2,460	2,270
6	2,120	850	0				310	2,160	2,340	2,500	2,450	2,230
7	2,150	810	0				150	2,170	2,330	2,500	2,410	2,210
8	2,180	810	0				180	2,120	2,340	2,500	2,400	2,210
9	2,180	810	0				180	2,090	2,330	2,540	2,390	2,210
10	1,490	810	0				180	2,100	2,330	2,560	2,400	2,190
11	1,120	810	0				270	2,090	2,330	2,580	2,420	2,160
12	1,130	810	0				350	2,100	2,320	2,600	2,430	2,120
13	1,160	750	0				530	2,090	2,330	2,610	2,430	2,110
14	1,180	720	0				760	2,090	2,340	2,620	2,430	2,110
15	1,180	720	0				700	2,160	2,340	2,620	2,430	2,100
16	1,180	730	0				700	2,210	2,340	2,610	2,430	2,100
17	1,180	720	0				700	2,210	2,350	2,610	2,430	2,100
18	1,180	730	0				950	2,250	2,340	2,610	2,440	2,100
19	1,180	730	0				1,160	2,290	2,340	2,610	2,440	2,090
20	1,150	730	0				1,150	2,310	2,350	2,610	2,400	2,110
21	1,120	730	0				1,170	2,290	2,330	2,600	2,410	2,110
22	1,120	720	0				1,180	2,280	2,320	2,580	2,420	2,070
23	1,120	720	0				1,170	2,280	2,340	2,560	2,380	2,070
24	1,120	710	0				1,160	2,300	2,330	2,550	2,360	2,060
25	1,120	720	0				1,180	2,300	2,320	2,510	2,370	2,040
26	1,130	710	0				1,400	2,310	2,330	2,500	2,360	2,030
27	1,070	710	0				1,790	2,300	2,340	2,500	2,340	2,030
28	1,020	720	0				1,910	2,310	2,340	2,500	2,330	2,030
29	1,030	720	0		------		1,910	2,310	2,400	2,490	2,330	2,020
30	1,070	710	0		------		1,900	2,300	2,460	2,490	2,330	1,280
31	1,060	------	0		------		------	2,340	------	2,490	2,330	------
TOTAL	44,330	23,580	260	0	0	0	23,150	68,040	70,280	78,790	74,630	63,270
MEAN	1,430	786	8.39	0	0	0	772	2,195	2,343	2,542	2,407	2,109
MAX	2,180	1,020	260	0	0	0	1,910	2,340	2,460	2,620	2,480	2,290
MIN	1,020	710	0	0	0	0	0	1,890	2,320	2,450	2,330	1,280
AC-FT	87,930	46,770	516	0	0	0	45,920	135,000	139,400	156,300	148,000	125,500

CAL YR 1972 TOTAL 457,750.00 MEAN 1,251 MAX 2,540 MIN 0 AC-FT 907,900
WTR YR 1973 TOTAL 446,330.00 MEAN 1,223 MAX 2,620 MIN 0 AC-FT 885,300

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 mi (1.0 km) downstream from headgates at Milner Dam and 0.8 mi (1.3 km) 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 (1,256.81 m) above mean sea level. Prior to Apr. 1, 1916, nonrecording gages at two sites within 0.5 mi (0.8 km) of present site at slightly different datum.

AVERAGE DISCHARGE.--38 years (1935-73), 1,226 cfs (34.72 cu m/s), 888,200 acre-ft/yr (1,090 cu hm/yr).

EXTREMES.--Period of record: Maximum daily discharge, 3,240 cfs (91.8 cu m/s) 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 (64,800 sq hm) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	803					0	431	1,650	2,800	2,910	2,750	2,270
2	692					0	483	1,700	2,780	2,980	2,760	2,210
3	599					0	497	1,730	2,820	2,960	2,750	2,160
4	671					0	425	1,770	2,820	2,940	2,760	2,110
5	596					0	398	1,880	2,800	2,960	2,750	2,000
6	532					0	455	1,920	2,820	2,930	2,760	1,840
7	184					0	504	2,100	2,820	2,970	2,760	1,770
8	0					0	504	2,140	2,830	2,990	2,760	1,770
9	0					0	513	2,170	2,800	2,980	2,780	1,760
10	0					0	586	2,160	2,780	2,960	2,760	1,780
11	0					0	736	2,250	2,720	2,930	2,760	1,710
12	0					0	806	2,340	2,670	2,940	2,780	1,650
13	0					0	820	2,370	2,660	2,940	2,760	1,550
14	0					0	936	2,390	2,560	2,940	2,750	1,490
15	0					0	1,070	2,540	2,460	2,960	2,760	1,470
16	0					0	1,070	2,720	2,340	2,960	2,760	1,470
17	0					0	1,000	2,760	2,280	2,940	2,760	1,380
18	0					0	948	2,760	2,290	2,960	2,750	1,340
19	0					0	1,020	2,780	2,280	2,950	2,740	1,350
20	0					0	1,170	2,770	2,260	2,960	2,740	1,340
21	0					0	1,260	2,730	2,370	2,940	2,740	1,310
22	0					0	1,240	2,680	2,540	2,940	2,720	1,210
23	0					0	1,230	2,680	2,580	2,940	2,720	1,200
24	0					214	1,260	2,680	2,590	2,800	2,640	1,150
25	0					395	1,420	2,680	2,660	2,680	2,600	976
26	0					366	1,570	2,780	2,760	2,650	2,550	968
27	0					431	1,600	2,800	2,900	2,650	2,490	976
28	0					449	1,680	2,800	2,960	2,660	2,440	972
29	0				------	416	1,670	2,800	2,960	2,660	2,410	968
30	0				------	419	1,640	2,790	2,940	2,740	2,350	924
31	0	------			------	428	------	2,790	------	2,750	2,270	------
TOTAL	4,077	0	0	0	0	3,118	28,942	75,110	79,850	89,470	83,080	45,074
MEAN	132	0	0	0	0	101	965	2,423	2,662	2,886	2,680	1,502
MAX	803	0	0	0	0	449	1,680	2,800	2,960	2,990	2,780	2,270
MIN	0	0	0	0	0	0	398	1,650	2,260	2,650	2,270	924
AC-FT	8,090	0	0	0	0	6,180	57,410	149,000	158,400	177,500	164,800	89,400

CAL YR 1972 TOTAL 433,430.00 MEAN 1,184 MAX 3,060 MIN 0 AC-FT 859,700
WTR YR 1973 TOTAL 408,721.00 MEAN 1,120 MAX 2,990 MIN 0 AC-FT 810,700

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 (9 m) upstream from highway bridge and 900 ft (270 m) 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 (1,256.23 m) above mean sea level. Prior to May 13, 1913, nonrecording 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 (15 m) upstream, all at same datum.

AVERAGE DISCHARGE.--47 years (1926-73), 1,737 cfs (49.19 cu m/s), 1,258,000 acre-ft/yr (1,550 cu hm/yr).

EXTREMES.--Period of record: Maximum daily discharge, 4,600 cfs (130 cu m/s) Aug. 12, 1918, including about 1,200 cfs (34.0 cu m/s) wasted through spillway below station and returned to river; maximum daily discharge for irrigation use, 4,000 cfs (113 cu m/s) July 16, 1971; no flow during nonirrigation season several years.

REMARKS.--Records excellent except those below about 20 cfs (0.566 cu m/s), which are fair. Flow controlled by headgates. Diversions began in March 1905 when 30,000 acres (12,100 sq hm) was reported as irrigated. By 1912 this had increased to 147,000 acres (59,500 sq hm), and in 1965 the irrigated area was reported to be 203,000 acres (82,200 sq hm).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,560	610	442			0	24	2,220	3,490	3,720	3,660	3,120
2	1,490	613	412			0	23	2,520	3,460	3,720	3,660	3,100
3	1,420	613	395			0	132	2,790	3,460	3,730	3,640	3,090
4	1,350	595	292			0	398	2,970	3,400	3,720	3,620	3,010
5	1,290	571	38			0	514	3,030	3,350	3,720	3,620	2,870
6	1,270	565	37			0	706	3,080	3,330	3,720	3,620	2,720
7	1,230	586	37			0	751	3,180	3,290	3,700	3,600	2,650
8	1,210	450	38			0	676	3,180	3,260	3,690	3,620	2,640
9	1,170	372	38			0	676	3,240	3,270	3,690	3,600	2,640
10	1,140	375	38			0	679	3,330	3,270	3,680	3,580	2,650
11	1,090	320	39			0	769	3,360	3,260	3,740	3,580	2,640
12	1,050	348	38			0	817	3,340	3,230	3,740	3,590	2,670
13	974	415	38			0	814	3,340	3,220	3,740	3,570	2,650
14	943	478	19			0	856	3,440	3,160	3,760	3,550	2,610
15	954	493	0			0	876	3,500	3,080	3,770	3,560	2,610
16	890	526	0			0	901	3,540	3,060	3,750	3,550	2,620
17	803	529	0			0	926	3,610	3,030	3,740	3,570	2,620
18	772	526	0			0	943	3,710	2,950	3,750	3,550	2,620
19	772	523	0			135	1,010	3,730	2,930	3,770	3,550	2,630
20	778	490	0			236	1,070	3,670	2,930	3,750	3,550	2,590
21	766	458	0			137	1,170	3,710	2,990	3,760	3,550	2,600
22	751	452	0			21	1,190	3,710	3,170	3,770	3,500	2,600
23	736	448	0			20	1,180	3,670	3,360	3,740	3,460	2,550
24	760	445	0			18	1,300	3,650	3,450	3,660	3,460	2,330
25	748	445	0			18	1,310	3,620	3,700	3,630	3,420	2,050
26	730	455	0			19	1,530	3,610	3,670	3,660	3,420	1,880
27	718	455	0			22	1,900	3,590	3,600	3,670	3,360	1,800
28	673	452	0			23	2,300	3,580	3,600	3,670	3,330	1,700
29	718	428	0		------	25	2,530	3,550	3,640	3,680	3,250	1,560
30	721	442	0		------	25	2,300	3,530	3,680	3,690	3,230	1,510
31	643	------	0		------	24	------	3,530	------	3,670	3,180	------
TOTAL	30,120	14,478	1,901	0	0	723	30,271	104,530	99,290	115,200	109,000	75,330
MEAN	972	483	61.3	0	0	23.3	1,009	3,372	3,310	3,716	3,516	2,511
MAX	1,560	613	442	0	0	236	2,530	3,730	3,700	3,770	3,660	3,120
MIN	643	320	0	0	0	0	23	2,220	2,930	3,630	3,180	1,510
AC-FT	59,740	28,720	3,770	0	0	1,430	60,040	207,300	196,900	228,500	216,200	149,400

CAL YR 1972 TOTAL 602,890.00 MEAN 1,647 MAX 3,960 MIN 0 AC-FT 1,196,000
WTR YR 1973 TOTAL 580,843.00 MEAN 1,591 MAX 3,770 MIN 0 AC-FT 1,152,000

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 (60 m) downstream from highway bridge at Milner, 0.4 mi (0.6 km) downstream from Milner Dam, at mile 639.70 (1,029.28 km).

DRAINAGE AREA.--17,180 sq mi (44,500 sq km), 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 (1,238.37 m) above mean sea level. Prior to May 28, 1919, nonrecording gages at slightly different sites and datums.

AVERAGE DISCHARGE.--47 years (1926-73), 2,286 cfs (64.74 cu m/s), 1,656,000 acre-ft/yr (2,040 cu hm/yr); 15-year base period (1952-67), 1,750 cfs (49.56 cu m/s).

EXTREMES.--Current year: Maximum discharge, 14,500 cfs (411 cu m/s) Jan. 29 (gage height, 16.33 ft or 4.977 m); minimum, 5.4 cfs (0.153 cu m/s) June 9, 10 (gage height, 1.34 ft or 0.408 m).
Period of record: Maximum discharge, 40,000 cfs (1,130 cu m/s) June 21, 1918 (gage height, 19.9 ft or 6.07 m, site and datum then in use); minimum, 2 cfs (0.057 cu m/s) 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 (5,800 cu hm). Considerable water leaks into the Snake Plain aquifer above station. Diversions above station for irrigation of about 1,990,000 acres (805,000 sq hm) of which about 504,000 acres (204,000 sq hm) are by withdrawals from ground water and about 436,000 acres (176,000 sq hm) 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)

1.3	5.0	3.0	131	6.0	1,400
1.5	8.0	3.5	226	8.0	3,300
1.7	15	4.0	366	11.0	6,600
2.0	30	5.0	740	15.0	12,000
2.5	67				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,370	8,520	10,100	9,570	7,760	9,930	5,630	2,390	7.5	7.0	7.7	8.5
2	1,120	8,980	9,970	9,420	7,860	9,420	5,720	1,170	6.6	17	7.7	9.4
3	1,500	9,570	9,580	9,020	7,810	9,860	5,160	626	6.6	13	7.9	10
4	2,260	9,590	9,190	7,610	8,330	9,950	5,240	145	6.6	8.2	8.2	13
5	3,690	9,200	9,360	6,070	8,350	9,720	6,370	62	6.6	7.8	8.3	19
6	5,910	8,590	7,080	7,850	8,550	9,910	5,790	58	6.6	7.4	8.2	13
7	7,140	8,550	8,140	8,900	8,820	9,530	5,760	40	6.6	7.5	8.5	10
8	7,440	10,800	8,180	8,310	8,730	9,270	5,740	25	6.6	7.8	8.5	8.7
9	7,720	8,450	8,800	7,240	8,880	8,120	5,880	27	5.7	9.9	8.3	8.5
10	7,690	6,760	8,740	7,840	9,340	7,570	6,440	24	5.7	14	8.5	7.9
11	7,520	7,440	8,500	8,070	9,510	7,860	6,270	23	34	8.6	8.7	7.6
12	7,390	8,100	8,220	8,060	9,380	7,760	6,290	21	40	8.1	9.1	7.6
13	8,310	9,280	7,850	8,120	9,310	7,690	7,350	21	20	8.1	9.6	8.0
14	9,140	9,780	7,580	8,060	9,010	8,070	7,900	16	7.3	8.2	9.8	8.5
15	9,300	8,940	7,310	7,950	8,980	8,720	10,900	9.2	6.3	8.8	9.9	9.5
16	9,270	8,900	7,270	8,720	8,940	8,960	11,500	11	20	10	9.9	10
17	9,510	8,830	7,450	10,700	9,000	8,820	9,920	12	13	9.8	9.8	11
18	9,530	8,610	7,500	11,400	8,710	8,910	6,860	8.9	9.6	8.0	10	11
19	9,760	8,450	8,070	10,500	9,160	8,660	6,250	8.2	15	6.5	10	12
20	9,750	8,440	8,800	10,900	9,080	7,650	6,000	7.9	9.1	7.3	10	12
21	9,610	8,340	9,470	11,100	9,040	7,310	6,370	8.7	7.1	11	10	13
22	9,230	8,140	10,500	10,800	8,920	7,650	6,580	12	6.7	13	14	15
23	8,420	7,980	11,400	10,200	8,800	7,440	5,870	11	6.3	19	15	13
24	7,650	7,900	11,100	9,050	8,690	7,190	4,020	7.5	6.1	13	11	12
25	4,000	7,900	11,400	8,620	8,520	6,920	2,680	7.0	6.0	8.9	11	11
26	1,200	7,510	11,300	8,200	8,700	4,970	1,930	12	5.7	7.4	11	12
27	1,740	7,860	11,200	8,190	8,880	3,300	1,920	78	6.4	7.0	10	12
28	5,980	8,260	10,500	7,570	9,530	3,040	2,520	50	8.2	7.0	10	10
29	6,800	5,700	10,200	6,840	------	2,950	3,090	64	9.3	7.0	9.4	9.5
30	7,960	5,760	10,100	9,140	------	3,280	3,720	34	9.7	7.5	8.8	56
31	7,870	------	9,730	8,440	------	4,960	------	13	------	7.7	8.3	------
TOTAL	205,780	251,130	284,590	272,460	246,590	235,390	175,670	5,002.4	310.9	291.5	297.1	368.7
MEAN	6,638	8,371	9,180	8,789	8,807	7,593	5,856	161	10.4	9.40	9.58	12.3
MAX	9,760	10,800	11,400	11,400	9,530	9,950	11,500	2,390	40	19	15	56
MIN	1,120	5,700	7,080	6,070	7,760	2,950	1,920	7.0	5.7	6.5	7.7	7.6
AC-FT	408,200	498,100	564,500	540,400	489,100	466,900	348,400	9,920	617	578	589	731

CAL YR 1972 TOTAL 2,591,322.0 MEAN 7,080 MAX 20,000 MIN 22 AC-FT 5,140,000
WTR YR 1973 TOTAL 1,677,880.6 MEAN 4,597 MAX 11,500 MIN 5.7 AC-FT 3,328,000

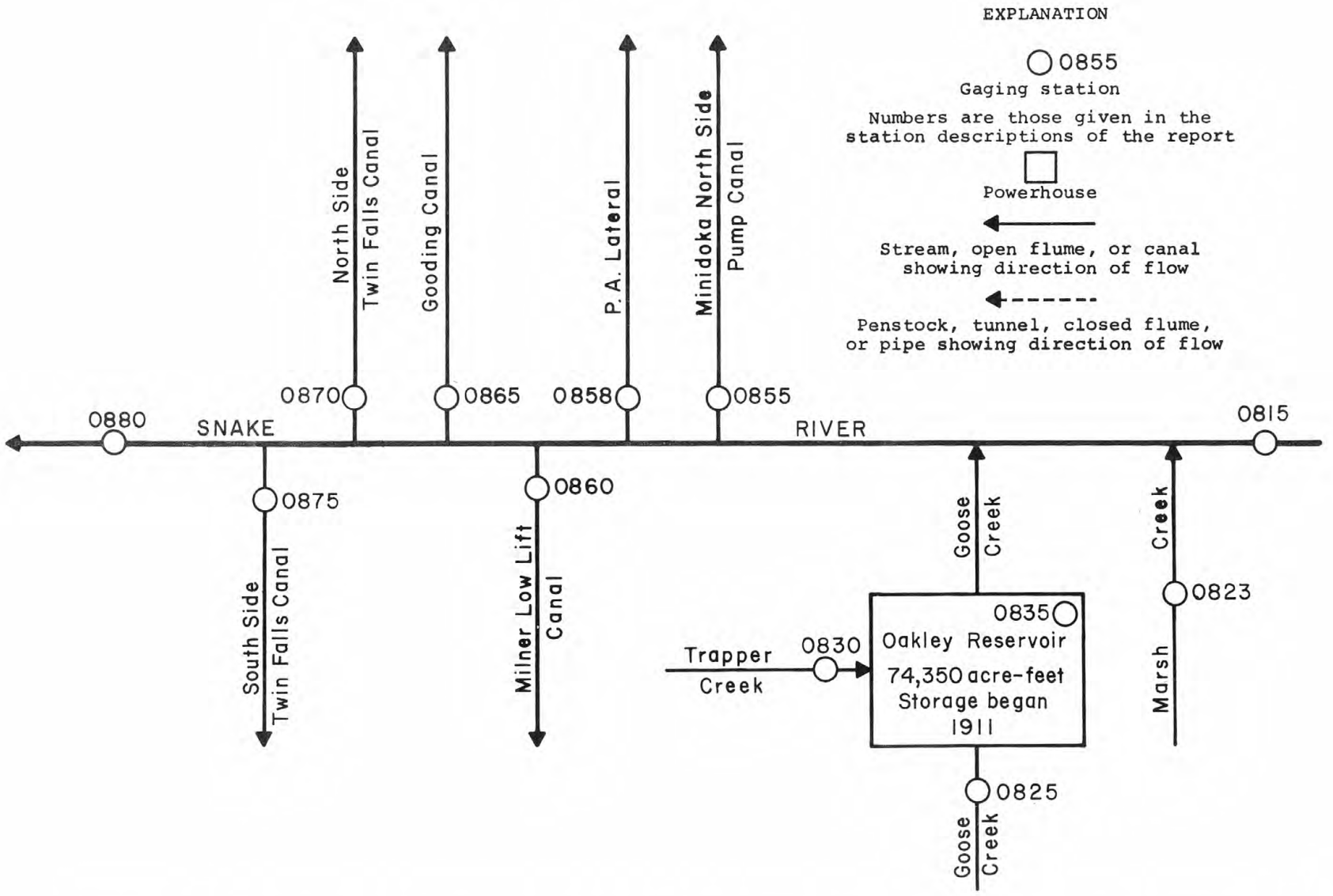

FIGURE 6. Schematic diagram showing gaging stations, diversions, and storage in Snake River basin between Minidoka and Milner.

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 (370 m) downstream from Twin Falls powerplant, 2.2 mi (3.5 km) upstream from Shoshone Falls, 4 mi (6.4 km) north of Kimberly, and at mile 617.5 (993.6 km).

PERIOD OF RECORD.--July 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,362.67 ft (1,024.942 m) above mean sea level (levels by Idaho Power Co.). Prior to Aug. 31, 1938, at site 2,000 ft (610 m) downstream at different datum.

AVERAGE DISCHARGE.--50 years, 2,720 cfs (77.03 cu m/s), 1,971,000 acre-ft/yr (2,430 cu hm/yr); 15-year base period (1952-67), 2,121 cfs (60.07 cu m/s).

EXTREMES.--Current year: Maximum discharge, 13,300 cfs (377 cu m/s) Jan. 29 (gage height, 16.27 ft or 4.949 m); minimum, 219 cfs (6.20 cu m/s) May 8 (gage height, 3.47 ft or 1.058 m); minimum daily, 287 cfs (8.13 cu m/s) May 11, 12.
Period of record: Maximum discharge, 27,200 cfs (770 cu m/s) June 4, 1927 (gage height, 14.76 ft or 4.499 m, site and datum then in use), from rating curve extended above 20,000 cfs (566 cu m/s); minimum recorded, 10 cfs (0.28 cu m/s) May 17, 1944 (gage height, 1.15 ft or 0.350 m); minimum daily recorded, 110 cfs (3.12 cu m/s) Apr. 6, 1959.

REMARKS.--Records fair. Flow regulated by American Falls Reservoir 96.5 mi (155.3 km) upstream (see sta 13076500) and other reservoirs having a combined usable capacity of 4,700,000 acre-ft (5,800 cu hm). Diurnal fluctuation caused by hydroelectric powerplant 1,200 ft (370 m) 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 (817,000 sq hm) of which about 537,000 acres (217,000 sq hm) are by withdrawals from ground water and about 364,000 acres (147,000 sq hm) 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 1973 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	10.0	3,400
5.0	580	12.0	5,750
6.0	925	14.0	8,800
8.0	1,840	17.0	15,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,850	8,650	10,300	9,720	8,090	10,100	5,750	3,330	378	381	413	458
2	1,770	9,230	10,200	9,590	8,170	9,680	6,060	1,950	354	385	420	458
3	1,660	9,730	9,840	9,230	8,120	10,000	5,390	1,390	356	376	410	460
4	2,460	9,860	9,350	8,150	8,630	10,100	5,240	931	359	381	408	455
5	3,600	9,510	9,770	6,310	8,670	9,910	6,600	452	354	389	415	463
6	5,790	9,530	7,830	7,590	8,820	10,100	6,130	359	356	381	420	453
7	7,390	7,710	8,310	8,730	9,100	9,810	5,980	387	359	387	413	448
8	7,820	11,000	8,550	8,410	9,020	9,570	5,970	350	361	392	415	455
9	8,040	9,830	8,520	8,070	9,110	8,620	6,000	344	365	389	420	455
10	8,150	6,300	8,700	8,070	9,530	7,970	6,680	310	370	389	413	455
11	7,930	7,720	8,600	8,190	9,750	8,080	6,580	287	376	394	418	450
12	7,770	8,330	8,400	8,360	9,620	8,140	6,430	287	387	396	415	453
13	8,390	9,370	8,200	8,390	9,620	8,020	7,580	291	406	398	420	450
14	9,390	9,990	8,000	8,340	9,280	8,310	7,950	293	438	396	413	448
15	9,610	9,360	7,800	8,220	9,260	8,900	10,700	304	425	394	420	450
16	9,590	9,140	7,560	8,800	9,210	9,230	11,500	312	406	394	423	455
17	9,740	9,150	7,700	10,600	9,280	9,090	10,500	314	408	394	420	445
18	9,810	8,960	7,800	11,400	8,960	9,180	7,350	316	423	398	420	453
19	9,990	8,810	8,200	10,700	9,410	9,020	6,610	324	406	403	413	458
20	10,100	8,760	8,800	10,900	9,350	8,120	6,270	326	394	408	420	453
21	9,890	8,680	9,700	11,200	9,310	7,680	6,630	332	385	423	428	453
22	9,590	8,490	10,500	10,900	9,200	7,990	6,900	336	376	410	430	458
23	8,950	8,320	11,300	10,500	9,110	7,760	6,500	334	385	430	433	465
24	8,440	8,250	11,100	9,450	9,000	7,580	4,640	334	374	430	425	470
25	5,160	8,210	11,200	8,950	8,840	7,230	3,470	352	374	428	443	460
26	2,420	7,980	11,200	8,590	8,960	5,990	2,400	352	383	415	440	450
27	951	8,000	11,100	8,550	9,100	3,650	2,380	344	370	410	445	443
28	5,760	8,610	10,700	7,940	9,650	3,410	2,790	374	374	403	428	435
29	6,990	7,250	10,300	6,640	------	3,300	3,200	387	374	408	438	438
30	8,030	4,540	10,200	9,550	------	3,400	4,100	389	376	418	435	438
31	8,320	------	9,890	8,980	------	4,900	------	389	------	418	448	------
TOTAL	215,351	259,270	289,620	279,020	254,170	244,840	184,280	16,780	11,452	12,418	13,122	13,585
MEAN	6,947	8,642	9,343	9,001	9,078	7,898	6,143	541	382	401	423	453
MAX	10,100	11,000	11,300	11,400	9,750	10,100	11,500	3,330	438	430	448	470
MIN	951	4,540	7,560	6,310	8,090	3,300	2,380	287	354	376	408	435
AC-FT	427,100	514,300	574,500	553,400	504,100	485,600	365,500	33,280	22,720	24,630	26,030	26,950

CAL YR 1972 TOTAL 2,669,696 MEAN 7,294 MAX 19,500 MIN 379 AC-FT 5,295,000
WTR YR 1973 TOTAL 1,793,908 MEAN 4,915 MAX 11,500 MIN 287 AC-FT 3,558,000

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 mi (9.7 km) upstream from mouth, 1.2 mi (1.9 km) northwest of Perrine Memorial Bridge, 3.5 mi (5.6 km) north of Twin Falls, and 610.8 mi (982.8 km) 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 (1,010 m) (from topographic map).

AVERAGE DISCHARGE.--23 years, 216 cfs (6.117 cu m/s), 156,500 acre-ft/yr (193 cu hm/yr); 15-year base period (1952-67), 216 cfs (6.117 cu m/s).

EXTREMES.--Period of record: Maximum daily discharge, 256 cfs (7.25 cu m/s) Nov. 10, 11, 1951, Oct. 24 to Nov. 13, 1952, Sept. 29, 30, 1953, Oct. 23, 24, 1957; minimum daily, 178 cfs (5.04 cu m/s) May 30 to June 6, 1965.

REMARKS.--Records good. No regulation or diversion above station. Records of chemical analysis for the water year 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	228	236	228	232	224	212	208	208	205	202	205	208
2	228	236	232	232	224	212	208	208	205	205	205	208
3	228	235	231	236	224	213	208	208	202	205	208	208
4	228	233	230	236	224	212	208	209	202	205	205	208
5	230	233	229	236	224	212	208	208	202	205	205	208
6	232	232	229	236	224	212	211	209	202	205	205	212
7	232	232	229	236	225	211	212	210	204	208	205	212
8	232	232	232	236	224	210	212	211	205	208	202	212
9	232	230	232	239	224	209	212	207	202	208	202	212
10	232	228	232	236	224	209	212	207	202	208	202	212
11	232	228	232	236	224	208	212	208	202	208	205	212
12	233	228	232	236	220	208	212	208	203	212	205	212
13	233	227	232	236	220	207	216	208	204	212	205	212
14	232	229	232	235	218	208	215	208	202	212	205	212
15	232	228	236	236	217	207	216	208	202	212	205	212
16	232	228	234	237	216	206	215	208	202	212	205	212
17	232	228	232	236	216	206	214	208	202	212	205	212
18	232	228	232	236	216	205	214	209	202	216	205	216
19	235	226	232	236	216	205	213	207	199	216	205	216
20	236	224	229	236	215	206	213	207	199	212	205	216
21	236	224	232	236	215	205	212	208	199	212	208	216
22	236	224	232	236	214	205	213	208	199	212	208	216
23	236	223	232	233	212	205	212	208	202	212	208	216
24	236	222	232	232	212	208	209	205	202	208	208	216
25	236	225	231	232	212	207	208	205	202	208	208	216
26	236	230	228	231	213	206	208	205	202	208	208	220
27	240	229	232	227	212	206	208	205	202	208	208	220
28	239	228	232	226	212	205	208	205	202	208	208	220
29	237	228	232	226	------	205	208	202	202	208	208	220
30	236	228	232	224	------	205	208	203	202	208	208	220
31	236	------	232	224	------	208	------	203	------	205	208	------
TOTAL	7,235	6,862	7,174	7,242	6,121	6,443	6,333	6,421	6,062	6,480	6,382	6,412
MEAN	233	229	231	234	219	208	211	207	202	209	206	214
MAX	240	236	236	239	225	213	216	211	205	216	208	220
MIN	228	222	228	224	212	205	208	202	199	202	202	208
AC-FT	14,350	13,610	14,230	14,360	12,140	12,780	12,560	12,740	12,020	12,850	12,660	12,720

CAL YR 1972 TOTAL 76,063 MEAN 208 MAX 240 MIN 187 AC-FT 150,900
WTR YR 1973 TOTAL 79,167 MEAN 217 MAX 240 MIN 199 AC-FT 157,000

13092000 Rock Creek near Rock Creek, Idaho

LOCATION.--Lat 42°21'23", long 114°18'12", in NW¼NW¼ sec.25, T.12 S., R.18 E., Twin Falls County, on right bank 0.1 mi (0.2 km) downstream from road bridge, 0.8 mi (1.3 km) downstream from Fifth Fork Rock Creek, 5 mi (8 km) south of Rock Creek settlement, and 12 mi (19 km) south of Hansen.

DRAINAGE AREA.--80 sq mi (210 sq km), approximately. Mean altitude, 6,330 ft (1,929 m).

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 (1,325.0 m) (levels by Topographic Division). Nov. 20, 1943, to Sept. 30, 1963, at datum 1.00 ft (0.30 m) higher. Nonrecording gage Nov. 28, 1909, to Aug. 16, 1913, at site 2 mi (3 km) downstream at different datum and Nov. 23, 1938, to July 21, 1939, at present site at datum 2.25 ft (0.69 m) higher.

AVERAGE DISCHARGE.--31 years (1910-12, 1944-73), 33.9 cfs (0.960 cu m/s), 24,560 acre-ft/yr (30.3 cu hm/yr); 15-year base period (1952-67), 27.5 cfs (0.779 cu m/s).

EXTREMES.--Current year: Maximum discharge, 230 cfs (6.51 cu m/s) Apr. 30 (gage height, 2.12 ft or 0.646 m); minimum, 6.8 cfs (0.19 cu m/s) Aug. 18 (gage height, 0.11 ft or 0.034 m).
Period of record: Maximum discharge, 461 cfs (13.1 cu m/s) May 19, 1970 (gage height, 3.81 ft or 1.161 m), but may have been more May 21, 1912; minimum, 2.7 cfs (0.076 cu m/s) July 23, 1961 (gage height, 0.76 ft or 0.232 m, present datum); minimum gage height, 0.43 ft (0.131 m) Sept. 3, 4, 5, 1970.

REMARKS.--Records good except those for November to January, which are fair. Small ranch diversion above station.

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

0.1	6.1	1.0	60
.3	13	1.5	113
.5	23	2.0	184
.7	35	2.5	270

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	16	18	17	18	18	64	189	68	22	11	12
2	14	16	17	17	17	19	58	168	63	21	11	12
3	13	16	18	16	17	18	55	162	60	20	11	11
4	15	16	17	15	17	19	55	165	57	19	13	9.8
5	19	16	15	15	17	19	61	171	52	18	12	9.4
6	16	16	16	16	17	18	76	195	46	18	12	8.7
7	15	16	16	18	17	18	87	213	42	18	11	9.4
8	14	16	17	20	17	18	81	223	39	17	11	11
9	14	17	15	22	17	18	77	219	39	16	11	11
10	17	17	14	25	16	18	74	222	37	16	10	9.8
11	15	16	16	29	17	20	77	214	37	15	10	9.8
12	15	15	18	33	17	19	90	207	37	15	10	9.1
13	14	15	17	35	16	19	102	203	35	16	9.1	8.7
14	14	15	16	36	16	18	116	196	47	17	8.4	8.4
15	15	16	16	34	16	18	113	190	43	17	8.4	9.1
16	15	16	16	31	16	18	112	183	37	15	8.4	9.8
17	15	16	17	29	16	19	141	172	38	15	8.4	9.8
18	15	16	18	27	16	19	141	165	37	14	8.1	8.7
19	15	16	20	27	15	19	134	156	36	19	8.1	9.1
20	20	17	22	25	15	19	117	146	33	17	8.4	11
21	19	16	24	25	15	24	103	133	32	17	8.7	13
22	17	15	25	24	15	23	93	119	29	18	11	11
23	16	17	24	22	16	26	92	106	29	16	12	13
24	16	18	22	22	16	37	98	96	28	15	10	13
25	16	19	20	22	16	55	111	101	27	14	10	14
26	15	17	19	21	17	77	134	88	26	13	10	13
27	15	17	18	17	17	88	169	82	24	13	9.4	12
28	16	16	18	18	17	84	202	76	24	13	9.8	11
29	16	17	17	20	------	75	221	74	24	13	9.4	11
30	16	18	18	19	------	68	218	71	24	13	8.7	11
31	15	------	18	19	------	65	------	68	------	12	9.4	------
TOTAL	481	490	562	716	459	993	3,272	4,773	1,150	502	308.7	319.6
MEAN	15.5	16.3	18.1	23.1	16.4	32.0	109	154	38.3	16.2	9.96	10.7
MAX	20	19	25	36	18	88	221	223	68	22	13	14
MIN	13	15	14	15	15	18	55	68	24	12	8.1	8.4
AC-FT	954	972	1,110	1,420	910	1,970	6,490	9,470	2,280	996	612	634

CAL YR 1972 TOTAL 23,405.0 MEAN 63.9 MAX 348 MIN 11 AC-FT 46,420
WTR YR 1973 TOTAL 14,026.3 MEAN 38.4 MAX 223 MIN 8.1 AC-FT 27,820

PEAK DISCHARGE (BASE, 130 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1972				1973			
3-24	unknown	2.17	178	4-17	1000	1.81	156
4-11	2200	2.09	164	4-30	0300	2.12	230
5- 8	0900	2.78	360	5- 8	2100	2.11	228

NOTE.--No gage-height record Nov. 3 to Dec. 1, Dec. 5 to Jan. 17.

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 mi (3.2 km) downstream from Niagara Springs, 3.8 mi (6.1 km) upstream from outlet of Clear Lakes, 6 mi (9.7 km) northeast of Buhl, and at mile 597.2 (960.9 km).

PERIOD OF RECORD.--December 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,951.9 ft (899.74 m) above mean sea level (stadia levels). Jan. 17, 1947, to July 12, 1965, at datum 1.00 ft (0.305 m) higher. Prior to Jan. 17, 1947, nonrecording gage at datum 1.0 ft (0.30 m) higher.

AVERAGE DISCHARGE.--26 years, 4,869 cfs (137.9 cu m/s), 3,528,000 acre-ft/yr (4,350 cu hm/yr); 15-year base period (1952-67), 3,866 cfs (109.5 cu m/s).

EXTREMES.--Current year: Maximum discharge, 13,600 cfs (385 cu m/s) Nov. 8 (gage height, 8.08 ft or 2.463 m); minimum, 1,880 cfs (53.2 cu m/s) May 18 (gage height, 1.36 ft or 0.415 m).
Period of record: Maximum discharge, 23,700 cfs (671 cu m/s) June 24, 1964 (gage height, 11.54 ft or 3.517 m, present datum); minimum, 1,580 cfs (44.7 cu m/s) Mar. 28, 1963 (gage height, 0.83 ft or 0.253 m, present datum).

REMARKS.--Records excellent. Flow regulated by American Falls Reservoir 116.8 mi (187.9 km) 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 (822,000 sq hm) of which about 542,000 acres (219,000 sq hm) are by withdrawals from ground water and about 230,000 acres (93,000 sq hm) are irrigated below station. In addition, about 26,000 acres (11,000 sq hm) 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)

1.3	1,840	4.0	4,760
1.6	2,050	6.0	8,500
2.0	2,380	8.0	13,400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,950	10,400	11,800	11,400	9,640	11,500	6,900	5,390	2,180	2,130	2,170	2,640
2	3,950	11,300	12,100	11,400	9,610	11,300	7,330	3,940	2,170	2,140	2,220	2,690
3	3,690	11,600	11,800	11,100	9,570	11,400	6,850	3,120	2,190	2,110	2,200	2,740
4	4,150	12,000	11,300	10,300	10,000	11,600	6,540	2,910	2,210	2,120	2,230	2,720
5	5,230	11,600	11,700	8,060	10,200	11,400	7,500	2,510	2,160	2,110	2,250	2,720
6	7,310	11,800	9,980	8,720	10,300	11,600	7,750	2,220	2,120	2,120	2,260	2,640
7	9,410	8,850	9,720	10,500	10,600	11,400	7,290	2,160	2,100	2,130	2,230	2,600
8	10,100	13,200	10,500	10,500	10,500	11,100	7,430	2,120	2,140	2,140	2,220	2,660
9	10,200	12,500	10,600	9,300	10,600	10,400	7,460	2,110	2,110	2,150	2,230	2,670
10	10,600	7,980	10,900	9,290	11,000	9,490	7,910	2,060	2,130	2,180	2,240	2,650
11	10,200	9,930	10,700	9,980	11,200	9,400	8,090	2,020	2,180	2,210	2,220	2,620
12	10,000	10,100	10,500	10,100	11,200	9,600	7,830	1,990	2,200	2,240	2,220	2,630
13	10,300	11,000	10,100	10,400	11,200	9,390	8,720	1,950	2,180	2,240	2,250	2,640
14	11,500	12,000	9,690	10,100	10,800	9,550	9,470	1,910	2,280	2,210	2,220	2,640
15	11,800	11,700	9,460	9,880	10,800	10,200	11,600	1,920	2,420	2,210	2,270	2,670
16	11,600	10,900	9,210	10,100	10,700	10,600	13,200	1,930	2,430	2,180	2,280	2,720
17	11,800	11,200	9,430	11,800	10,800	10,600	12,800	1,910	2,440	2,140	2,300	2,750
18	12,000	11,000	9,440	12,900	10,500	10,600	9,720	1,900	2,480	2,120	2,320	2,750
19	12,100	10,800	9,840	12,500	10,900	10,500	8,290	1,950	2,420	2,120	2,340	2,780
20	12,300	10,700	10,600	12,300	10,800	9,790	7,860	1,980	2,310	2,160	2,360	2,850
21	12,100	10,600	11,300	12,800	10,800	9,170	8,060	2,020	2,170	2,210	2,350	2,910
22	11,800	10,400	12,000	12,500	10,700	9,390	8,400	2,000	2,120	2,160	2,390	2,970
23	11,400	10,200	12,900	12,200	10,600	9,190	8,320	2,050	2,140	2,230	2,400	3,050
24	10,500	10,100	13,000	11,300	10,500	9,100	6,570	2,010	2,170	2,300	2,400	3,070
25	8,300	10,100	12,900	10,600	10,300	8,630	5,260	2,070	2,140	2,220	2,430	3,020
26	5,050	9,960	13,000	10,200	10,400	8,230	4,110	2,140	2,090	2,210	2,480	2,900
27	3,540	9,660	12,900	10,100	10,500	5,180	3,930	2,100	2,070	2,170	2,500	2,800
28	5,660	10,500	12,600	9,460	11,000	4,850	4,220	2,120	2,070	2,150	2,460	2,750
29	8,720	10,100	12,100	8,150	------	4,700	4,610	2,130	2,100	2,180	2,460	2,730
30	9,640	5,170	12,000	10,700	------	4,670	5,660	2,100	2,110	2,200	2,480	2,720
31	10,600	------	11,800	10,800	------	5,570	------	2,120	------	2,200	2,530	------
TOTAL	279,700	317,350	345,870	329,440	295,720	290,100	229,680	70,860	66,030	67,390	71,910	82,700
MEAN	9,023	10,580	11,160	10,630	10,560	9,358	7,656	2,286	2,201	2,174	2,320	2,757
MAX	12,300	13,200	13,000	12,900	11,200	11,600	13,200	5,390	2,480	2,300	2,530	3,070
MIN	3,540	5,170	9,210	8,060	9,570	4,670	3,930	1,900	2,070	2,110	2,170	2,600
AC-FT	554,800	629,500	686,000	653,400	586,600	575,400	455,600	140,600	131,000	133,700	142,600	164,000

CAL YR 1972 TOTAL 3,393,090 MEAN 9,271 MAX 22,500 MIN 2,280 AC-FT 6,730,000
WTR YR 1973 TOTAL 2,446,750 MEAN 6,703 MAX 13,200 MIN 1,900 AC-FT 4,853,000

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 (46 m) downstream from waterfall, at mile 0.5 (0.8 km), 0.8 mi (1.3 km) downstream from source, 7.5 mi (12.1 km) southwest of Wendell, and 588.8 mi (947.4 km) 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 (899 m) (from topographic map).

AVERAGE DISCHARGE.--23 years, 409 cfs (11.58 cu m/s), 296,300 acre-ft/yr (365 cu hm/yr); 15-year base period (1952-67), 407 cfs (11.53 cu m/s).

EXTREMES.--Period of record: Maximum daily discharge, 483 cfs (13.68 cu m/s) Oct. 9, 14, 15, 18, 19, 1965; minimum daily, 346 cfs (9.80 cu m/s) 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. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	448	461	448	425	405	390	380	382	397	405	420	440
2	450	461	448	425	405	390	380	380	397	405	420	440
3	450	461	448	425	405	387	380	380	397	405	420	443
4	453	461	450	425	405	390	380	382	395	405	422	443
5	450	461	448	425	402	390	380	382	395	402	422	445
6	453	458	448	425	402	387	380	382	397	405	425	445
7	456	458	448	417	402	387	377	382	397	405	425	448
8	458	456	448	422	402	387	377	382	397	407	425	445
9	458	456	448	422	400	387	380	382	395	407	425	445
10	461	458	448	420	402	387	377	382	395	407	425	445
11	458	458	448	420	402	387	377	382	397	407	425	445
12	461	458	448	417	400	385	377	382	397	407	425	448
13	461	456	445	417	397	387	380	382	400	410	425	448
14	464	456	445	417	397	385	382	385	402	410	425	448
15	464	456	443	417	395	385	380	385	402	407	430	448
16	464	456	437	417	395	382	382	382	400	410	432	448
17	464	453	437	417	395	385	382	382	400	412	432	448
18	467	456	435	417	395	382	382	385	400	412	432	448
19	467	456	435	417	392	382	382	385	400	412	432	451
20	467	453	435	415	392	382	382	385	400	412	435	451
21	464	450	435	415	392	385	380	387	402	415	435	451
22	464	450	435	412	392	382	382	387	402	415	435	454
23	464	450	432	412	392	382	382	387	402	415	437	455
24	464	450	432	412	390	380	382	390	405	415	435	457
25	464	448	430	412	390	380	382	392	402	415	437	456
26	467	453	430	410	390	382	380	395	400	415	437	453
27	464	450	430	407	390	382	382	390	402	417	437	453
28	+	450	432	407	390	380	382	392	402	417	437	453
29	461	448	430	407	------	380	382	392	402	417	437	454
30	458	448	427	407	------	380	382	392	402	417	440	456
31	458	------	427	407	------	377	------	397	------	417	440	------
TOTAL	14,266	13,646	13,630	12,910	11,116	11,914	11,413	11,952	11,981	12,727	13,329	13,464
MEAN	460	455	440	416	397	384	380	386	399	411	430	449
MAX	467	461	450	425	405	390	382	397	405	417	440	457
MIN	448	448	427	407	390	377	377	380	395	402	420	440
AC-FT	28,300	27,070	27,040	25,610	22,050	23,630	22,640	23,710	23,760	25,240	26,440	26,710

CAL YR 1972 TOTAL 152,213 MEAN 416 MAX 467 MIN 374 AC-FT 301,900
WTR YR 1973 TOTAL 152,348 MEAN 417 MAX 467 MIN 377 AC-FT 302,200

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 (192 m) downstream from bridge on U.S. Highway 93, 550 ft (168 m) downstream from Shoshone Creek, and 5 mi (8 km) north of San Jacinto.

DRAINAGE AREA.--1,450 sq mi (3,760 sq km), approximately. Mean altitude, 6,350 ft (1,935 m).

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 (1,561 m) (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 (11 m) upstream at same datum.

AVERAGE DISCHARGE.--61 years (1910-16, 1918-73), 138 cfs (3.91 cu m/s), 99,980 acre-ft/yr (123 cu hm/yr); 15-year base period (1952-67), 123 cfs (3.48 cu m/s).

EXTREMES.--Current year: Maximum discharge, 847 cfs (24.0 cu m/s) Apr. 30, gage height, 7.51 ft (2.29 m); minimum, 14 cfs (0.396 cu m/s) Aug. 25, gage height, 4.15 ft (1.26 m).
Period of record: Maximum discharge, 1,970 cfs (55.8 cu m/s) Feb. 12, 1962, gage height, 12.65 ft (3.86 m), 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 (0.074 cu m/s) Sept. 4, 1961, gage height, 3.37 ft (1.03 m).

REMARKS.--Records good. Diversions above station for irrigation of about 18,200 acres (7,370 sq hm) (1966 determination). Salmon Dam of Salmon River Canal Co. is 15 mi (24.1 km) downstream (see sta 13106500).

REVISIONS (WATER YEARS).--WSP 1934: 1943(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	69	92	77	68	502	312	734	329	77	45	32
2	60	73	90	72	66	452	286	603	390	72	40	30
3	58	76	93	79	74	273	257	545	327	68	42	31
4	65	78	94	54	86	199	287	544	291	67	53	29
5	73	82	39	41	86	172	346	560	262	65	58	28
6	79	83	58	42	88	151	457	582	237	63	50	27
7	74	82	70	46	87	139	553	563	213	59	48	27
8	69	82	71	52	90	142	574	577	201	57	44	29
9	66	81	59	58	85	147	512	568	201	56	38	33
10	78	80	51	63	84	151	470	554	191	49	37	32
11	75	80	49	65	84	212	465	557	184	47	35	32
12	69	83	56	77	85	181	519	563	176	46	34	34
13	66	81	63	138	82	159	632	560	170	48	34	32
14	66	77	62	474	81	133	774	553	192	54	33	30
15	61	81	60	500	79	130	776	558	290	65	32	30
16	62	82	59	252	79	130	710	561	274	66	31	30
17	67	84	61	195	83	148	673	564	222	59	31	31
18	67	80	70	150	89	136	699	592	195	47	28	31
19	71	81	80	126	82	129	633	667	179	53	28	35
20	95	82	89	97	77	128	543	679	164	58	29	43
21	118	78	110	112	77	161	478	650	145	63	27	49
22	109	68	121	102	78	136	433	586	128	72	28	50
23	96	60	119	96	90	109	384	534	119	80	25	50
24	88	68	121	95	118	123	402	492	114	75	19	52
25	84	70	112	99	181	170	442	493	108	69	15	51
26	82	73	102	95	370	268	495	500	100	62	17	52
27	80	81	99	73	405	411	576	433	90	53	18	52
28	77	93	96	58	366	386	672	374	87	50	20	52
29	78	95	70	70	------	318	774	344	86	49	22	52
30	75	98	61	83	------	292	826	314	84	54	21	51
31	71	------	87	83	------	297	------	298	------	49	23	------
TOTAL	2,339	2,381	2,464	3,624	3,320	6,485	15,960	16,702	5,749	1,852	1,005	1,137
MEAN	75.5	79.4	79.5	117	119	209	532	539	192	59.7	32.4	37.9
MAX	118	98	121	500	405	502	826	734	390	80	58	52
MIN	58	60	39	41	66	109	257	298	84	46	15	27
AC-FT	4,640	4,720	4,890	7,190	6,590	12,860	31,660	33,130	11,400	3,670	1,990	2,260

CAL YR 1972 TOTAL 83,518 MEAN 228 MAX 990 MIN 12 AC-FT 165,700
WTR YR 1973 TOTAL 63,018 MEAN 173 MAX 826 MIN 15 AC-FT 125,000

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 mi (0.8 km) downstream from Salmon River Canal Co. reservoir and 7 mi (11.3 km) west of Rogerson.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft (1,506 m) by barometer. Oct. 1, 1953, to Sept. 30, 1954, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--36 years, 104 cfs (2.95 cu m/s), 75,300 acre-ft/yr (92.8 cu hm/yr); 15-year base period (1952-67), 94.0 cfs (2.66 cu m/s).

EXTREMES.--Period of record: Maximum daily discharge, 660 cfs (18.7 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0							0	464	481	413	282
2	8.4							0	452	509	421	258
3	6.8							0	457	506	427	247
4	0							0	430	502	413	234
5	0							0	424	500	387	233
6	0							0	421	497	387	225
7	0							0	429	504	398	232
8	0							0	446	519	397	241
9	8.8							0	456	528	396	170
10	0							0	462	540	397	0
11	0							0	457	542	398	0
12	0							0	454	534	400	0
13	0							0	460	542	403	0
14	0							206	444	541	401	0
15	0							307	423	528	416	0
16	0							344	334	509	415	0
17	0							428	307	515	413	0
18	0							438	257	520	411	0
19	0							484	249	521	414	0
20	0							491	211	517	413	0
21	0							506	223	504	414	0
22	0							511	251	475	412	0
23	0							510	280	457	409	0
24	0							517	349	437	399	0
25	0							512	355	448	375	0
26	0							504	372	420	367	0
27	0							478	394	424	343	0
28	0							476	458	434	338	0
29	0				------			480	473	431	336	0
30	0				------			477	478	418	324	0
31	0	------			------		------	484	------	421	298	------
TOTAL	24.0	0	0	0	0	0	0	8,153	11,670	15,224	12,135	2,122
MEAN	.77	0	0	0	0	0	0	263	389	491	391	70.7
MAX	8.8	0	0	0	0	0	0	517	478	542	427	282
MIN	0	0	0	0	0	0	0	0	211	418	298	0
AC-FT	48	0	0	0	0	0	0	16,170	23,150	30,200	24,070	4,210

CAL YR 1972 TOTAL 49,039.00 MEAN 134 MAX 541 MIN 0 AC-FT 97,270
WTR YR 1973 TOTAL 49,328.00 MEAN 135 MAX 542 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 mi (12.1 km) west of Rogerson, and at mile 46.0 (74.0 km).

DRAINAGE AREA.--1,610 sq mi (4,170 sq km), approximately.

PERIOD OF RECORD.--January 1922 to current year.

GAGE.--Nonrecording gage. Datum of gage is 4,945.8 ft (1,507.5 m) above mean sea level.

EXTREMES.--Current year: Maximum contents observed, 147,800 acre-ft (182 cu hm) May 19 gage height, 69.30 ft (21.12 m); minimum observed, 67,400 acre-ft (83.1 cu hm) Sept. 20, gage height, 38.95 ft (11.87 m).
Period of record: Maximum contents observed, 158,000 acre-ft (195 cu hm) June 15 1972, gage height, 72.52 ft (22.10 m); minimum observed, 125 acre-ft (0.154 cu hm) Sept. 21 to Oct. 5, 1934, gage height, 0.1 ft (0.03 m).

REMARKS.--Reservoir is formed by gravity-section concrete-arch dam completed in 1911; storage began in 1910. Usable capacity, 182,650 acre-ft (225 cu hm) between gage heights 0.0 (bottom of outlet tunnel) and 80.0 ft (24.4 m) maximum operating level. Dead storage, 48,000 acre-ft (59.2 cu hm). 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)

30.0	48,800	60.0	120,600
40.0	69,800	70.0	150,000
50.0	93,800		

CONTENTS, IN ACRE-FEET, FOR STATISTIC 00011, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89,600	90,800	91,900	93,200	96,900	100,100	109,100	134,800	144,300	127,100	96,600	71,900
2	-	-	-	-	96,900	100,900	109,600	136,100	143,700	126,100	95,800	71,200
3	89,600	-	-	-	96,900	101,600	110,100	137,000	143,200	125,100	94,900	70,800
4	89,600	-	-	93,200	96,900	101,900	110,400	137,900	143,000	124,200	94,100	70,300
5	-	-	92,000	93,300	97,000	102,100	110,900	138,800	142,500	123,200	93,200	69,800
6	89,800	-	-	93,300	97,100	102,500	111,400	139,700	142,000	122,200	92,400	69,400
7	89,800	-	92,100	-	97,100	102,600	112,100	140,600	141,300	121,100	91,500	68,900
8	89,900	90,800	-	-	97,300	102,700	113,000	141,400	140,700	120,000	90,900	68,500
9	-	90,900	91,900	-	97,400	102,800	113,900	142,400	140,100	118,800	90,000	67,900
10	-	-	-	-	97,500	103,000	114,800	143,200	139,400	117,800	89,200	67,800
11	90,000	-	-	-	97,600	103,300	115,600	144,200	138,600	116,600	88,500	67,800
12	-	91,000	-	-	97,600	103,500	116,300	145,200	137,900	115,300	87,800	-
13	-	91,000	-	93,500	97,700	103,700	117,200	146,000	137,000	114,200	87,000	-
14	-	-	-	93,800	97,800	103,800	118,100	146,900	136,400	113,000	86,200	67,700
15	-	91,100	-	94,300	97,800	104,000	119,200	147,200	135,800	111,800	85,300	-
16	-	-	92,000	94,800	97,800	104,200	120,600	147,500	135,500	110,600	84,500	-
17	90,100	91,200	-	95,500	97,900	104,300	121,900	147,600	135,100	109,800	83,600	67,500
18	-	91,400	-	95,800	97,900	104,400	122,900	147,700	134,800	108,700	82,800	-
19	90,100	-	-	96,000	97,900	104,600	124,000	147,800	134,500	107,700	81,900	-
20	90,200	-	92,100	96,200	98,000	104,700	125,000	147,800	134,200	106,700	81,100	67,400
21	90,300	91,600	92,100	-	98,000	104,900	125,800	147,800	133,900	105,800	80,200	-
22	90,400	-	92,200	-	98,100	105,300	126,700	147,800	133,600	105,000	79,400	-
23	90,500	91,500	92,400	96,400	98,200	105,500	127,600	147,800	133,200	104,200	78,600	-
24	-	-	92,700	96,400	98,300	105,600	128,100	147,500	132,800	103,200	77,700	-
25	-	-	92,900	96,500	98,400	105,800	128,900	147,200	132,200	102,300	76,900	67,500
26	90,600	-	-	96,500	99,000	106,000	129,700	146,900	131,600	101,400	76,100	-
27	-	-	-	96,600	99,600	106,300	130,500	146,600	131,700	100,600	75,300	67,700
28	-	-	-	96,700	99,800	107,100	131,300	146,100	130,200	99,900	74,700	-
29	90,600	91,600	-	96,700	------	107,700	132,300	145,700	129,200	99,000	74,000	-
30	90,700	91,800	-		------	108,300	133,500	145,200	128,100	98,200	73,300	67,700
31	90,800	------	93,000	96,800	------	108,700	------	144,800	------	97,400	72,600	------
MAX	90,800	91,800	-	96,800	99,800	108,700	133,500	147,800	144,300	127,100	96,600	71,900
MIN	89,600	-	-	93,200	96,900	100,100	109,100	134,800	128,100	97,400	72,600	-
(†)	48.80	49.20	49.70	-	-	55.70	64.50	68.30	62.65	51.40	41.20	-
(‡)	+1,200	+1,000	+1,200	+3,800	+3,000	+8,900	+24,800	+11,300	-16,700	-30,700	-24,800	-4,900

CAL YR 1972..... ‡ +13,500
WTR YR 1973..... ‡ -21,900

† 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 (8 m) upstream from U.S. Highway 30, at mile 1.9 (3.1 km), and 8.5 mi (13.7 km) south of Hagerman.

DRAINAGE AREA.--2,120 sq mi (5,490 sq km), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 2,900 ft (880 m) (from topographic map).

EXTREMES.--Current year: Maximum discharge, 398 cfs (11.3 cu m/s) Oct. 7 (gage height, 5.54 ft or 1.689 m); minimum, 21 cfs (0.60 cu m/s) July 7 (gage height, 2.95 ft or 0.899 m).
Period of record: Maximum discharge, 1,360 cfs (38.5 cu m/s) Jan. 19, 1972 (gage height, 9.04 ft or 2.755 m); minimum, 21 cfs (0.60 cu m/s) July 7, 1973 (gage height, 3.07 ft or 0.899 m).

REMARKS.--Records good except for October and November, which are fair. Flow completely regulated by Salmon River Canal Co. reservoir 44 mi (71 km) 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)
(Shifting-control method used Jan. 13 to Feb. 16, Apr. 13 to May 17, July 16-18, Aug. 20 to Sept. 30)

3.2	44	5.0	278
3.5	70	6.0	478
4.0	124		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	342	229	216	190	179	163	158	174	114	57	91	185
2	350	226	216	185	176	169	157	149	120	49	85	197
3	358	228	216	187	175	169	156	140	126	61	90	201
4	352	244	199	181	178	171	154	149	119	49	98	199
5	362	235	149	173	178	167	154	158	111	43	97	199
6	370	229	143	176	175	159	153	153	105	40	105	180
7	378	253	141	173	180	159	157	155	99	36	106	174
8	343	251	144	175	178	162	168	155	93	36	102	161
9	352	255	148	181	175	175	161	155	93	36	101	169
10	372	260	144	182	177	176	143	147	87	34	112	177
11	344	256	136	182	180	175	153	139	100	30	115	174
12	333	258	135	191	180	169	154	136	98	33	110	168
13	301	255	136	255	177	167	199	108	100	37	108	181
14	316	255	139	242	174	163	199	119	113	40	102	180
15	335	255	143	214	173	161	199	93	120	40	95	181
16	343	253	146	209	172	162	205	74	125	49	99	193
17	298	251	152	223	171	164	211	69	134	50	104	208
18	282	247	146	207	169	164	207	68	146	51	99	225
19	283	253	161	198	170	164	202	85	145	57	100	233
20	283	255	173	190	169	166	219	92	130	67	108	228
21	283	247	163	188	169	166	220	89	108	68	115	236
22	283	242	163	187	170	169	220	86	91	73	109	238
23	282	237	165	182	169	166	210	81	75	87	115	237
24	283	237	166	183	171	163	198	75	71	88	121	239
25	289	240	185	186	170	161	187	86	64	86	133	252
26	291	247	188	185	170	161	177	91	60	88	140	254
27	276	237	196	180	164	173	154	100	64	88	141	248
28	269	238	196	175	162	173	145	113	54	87	143	246
29	267	228	193	174	------	165	157	110	44	90	144	236
30	264	216	187	180	------	162	180	134	48	97	133	224
31	242	------	185	183	------	159	------	101	------	100	139	------
TOTAL	9,726	7,317	5,170	5,917	4,851	5,143	5,357	3,584	2,957	1,847	3,460	6,223
MEAN	314	244	167	191	173	166	179	116	98.6	59.6	112	207
MAX	378	260	216	255	180	176	220	174	146	100	144	254
MIN	242	216	135	173	162	159	143	68	44	30	85	161
AC-FT	19,290	14,510	10,250	11,740	9,620	10,200	10,630	7,110	5,870	3,660	6,860	12,340

CAL YR 1972 TOTAL 70,962 MEAN 194 MAX 1,160 MIN 48 AC-FT 140,800
WTR YR 1973 TOTAL 61,552 MEAN 169 MAX 378 MIN 30 AC-FT 122,100

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 mi (11 km) south of Kilgore, and 18.5 mi (29.8 km) northeast of Dubois.

DRAINAGE AREA.--210 sq mi (540 sq km), 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 or 1,908 m (from topographic map). Prior to Sept. 23, 1938, at datum 1.21 ft (0.369 m) higher.

AVERAGE DISCHARGE.--11 years (1946-53, 1969-73), 86.6 cfs (2.452 cu m/s), 62,740 acre-ft/yr (77.4 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 1,340 cfs (37.9 cu m/s) May 6 (gage height, 5.66 ft or 1.725 m); minimum, 16 cfs (0.45 cu m/s) Aug. 21 (gage height, 1.12 ft or 0.341 m).
Period of record: Maximum discharge, 2,590 cfs (73.3 cu m/s) May 8, 1969 (gage height, 7.04 ft or 2.146 m); no flow for short periods in February 1949.

REMARKS.--Records good except those for winter periods, which are poor. Diversions above station for irrigation of about 7,500 acres or 3,000 sq hm (1966 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	46	36	25	24	35	31	317	222	66	32	30
2	49	49	37	25	22	32	31	384	367	63	32	38
3	46	50	31	25	24	31	31	519	375	61	33	34
4	45	57	26	21	26	30	32	526	275	57	36	32
5	44	81	25	22	27	30	33	666	229	56	45	29
6	46	70	24	24	25	30	33	879	199	53	44	28
7	45	60	23	24	24	32	33	883	181	48	39	26
8	45	59	22	22	24	34	33	887	164	46	37	29
9	49	54	21	21	24	32	34	875	150	44	34	29
10	63	55	20	22	24	30	35	607	138	41	30	33
11	105	53	22	23	25	29	37	442	130	40	27	29
12	72	59	24	23	25	30	45	367	120	39	26	28
13	59	54	24	24	24	29	60	348	112	41	24	26
14	55	53	25	26	24	28	57	343	112	40	19	26
15	56	54	26	27	24	28	54	354	164	37	19	28
16	69	54	27	29	24	28	56	364	199	34	18	30
17	59	54	29	27	25	28	67	395	179	31	18	31
18	55	49	28	26	25	28	66	433	197	28	18	31
19	54	49	27	25	26	28	66	470	183	29	17	33
20	55	46	28	24	26	28	66	516	150	37	17	36
21	55	44	29	23	26	28	66	532	129	46	17	38
22	54	41	30	22	26	29	66	466	114	58	17	41
23	53	37	29	22	26	29	78	381	102	65	18	46
24	55	30	29	23	27	28	110	335	95	54	18	48
25	54	32	27	25	27	28	150	343	88	47	20	56
26	54	33	27	24	29	29	181	545	83	43	19	55
27	51	31	27	22	32	30	181	545	81	41	18	48
28	49	32	27	22	39	30	191	375	74	39	20	43
29	47	33	26	23	------	30	214	272	70	37	23	41
30	45	35	26	24	------	30	233	235	73	41	19	39
31	44	------	25	24	------	30	------	212	------	35	18	------
TOTAL	1,682	1,454	827	739	724	921	2,370	14,816	4,755	1,397	772	1,061
MEAN	54.3	48.5	26.7	23.8	25.9	29.7	79.0	478	159	45.1	24.9	35.4
MAX	105	81	37	29	39	35	233	887	375	66	45	56
MIN	44	30	20	21	22	28	31	212	70	28	17	26
AC-FT	3,340	2,880	1,640	1,470	1,440	1,830	4,700	29,390	9,430	2,770	1,530	2,100

CAL YR 1972 TOTAL 37,165 MEAN 102 MAX 545 MIN 20 AC-FT 73,720
WTR YR 1973 TOTAL 31,518 MEAN 86.4 MAX 887 MIN 17 AC-FT 62,520

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 (46 m) upstream from county road bridge, 250 ft (76 m) upstream from Union Pacific Railroad bridge at Camas, and about 1.1 mi (1.8 km) upstream from Beaver Creek.

DRAINAGE AREA.--400 sq mi (1,040 sq km), approximately. Mean altitude, 6,450 ft (1,966 m).

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 (1,465.125 m) above mean sea level (unadjusted). Prior to Aug. 21, 1925, nonrecording gage at site 0.1 mi (0.2 km) 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 (76 m) upstream at datum 2.01 ft (0.613 m) higher.

AVERAGE DISCHARGE.--46 years (1926-70, 1971-73), 33.3 cfs (0.943 cu m/s), 24,130 acre-ft/yr (29.8 cu hm/yr); 15-year base period (1952-67), 37.5 cfs (1.062 cu m/s).

EXTREMES.--Current year: Maximum discharge, 745 cfs (21.1 cu m/s) May 9 (gage height, 6.42 ft or 1.957 m); minimum discharge, no flow Aug. 22 to Sept. 30.
Period of record: Maximum discharge, 1,220 cfs (34.6 cu m/s) May 2 or 3, 1952 (gage height, 6.53 ft or 1.990 m); from rating curve extended above 510 cfs (14.4 cu m/s); no flow at times in many years.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 8,100 acres or 3,280 sq hm (1966 determination). No water diverted into flood channel about 25 mi (40.1 km) upstream. Records of chemical analyses for the 1973 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	20	12	5.0	8.0	17	13	215	108	8.1	7.7	
2	20	22	13	5.0	7.0	15	14	306	144	6.6	5.9	
3	19	23	10	5.0	8.0	13	15	402	272	14	5.6	
4	18	26	9.0	4.0	9.0	12	16	464	218	12	6.2	
5	16	33	7.0	5.0	9.0	10	17	518	154	11	7.7	
6	16	54	6.0	5.0	9.0	11	17	588	121	10	7.7	
7	16	46	6.0	5.0	9.0	12	18	660	99	8.9	9.6	
8	16	35	5.0	4.0	8.0	13	18	662	88	8.1	8.9	
9	14	38	4.0	4.0	8.0	12	18	710	82	7.0	7.3	
10	18	34	4.0	4.0	8.0	11	19	652	69	12	7.3	
11	26	33	4.0	5.0	8.0	12	20	466	45	12	6.2	
12	63	32	4.0	5.0	8.0	12	24	347	33	2.5	5.3	
13	34	29	5.0	6.0	8.0	12	32	285	27	3.1	5.6	
14	35	33	5.0	6.0	8.0	12	47	270	26	4.6	5.3	
15	31	23	5.0	7.0	8.0	11	47	275	29	5.9	2.9	
16	30	29	5.0	8.0	8.0	11	43	279	75	4.6	1.4	
17	40	31	5.0	8.0	8.0	11	41	290	89	3.4	1.2	
18	34	30	5.0	8.0	9.0	11	61	290	82	2.9	1.4	
19	31	28	5.0	8.0	9.0	11	59	328	92	4.3	1.1	
20	29	29	5.0	8.0	9.0	11	57	360	74	9.6	1.0	
21	29	23	6.0	7.0	9.0	11	56	376	55	9.6	1.1	
22	29	20	6.0	7.0	9.0	12	55	374	41	7.3	.10	
23	29	15	6.0	7.0	9.0	12	54	311	33	14	0	
24	27	11	6.0	7.0	9.0	12	51	240	33	23	0	
25	28	9.0	6.0	8.0	10	12	104	207	33	18	0	
26	28	11	6.0	8.0	11	12	122	262	25	14	0	
27	28	10	6.0	7.0	13	12	144	414	17	10	0	
28	27	9.0	6.0	7.0	17	13	144	342	16	9.6	0	
29	24	10	5.0	7.0	------	13	159	221	12	8.5	0	
30	18	11	5.0	8.0	------	13	185	164	12	8.1	0	
31	19	------	5.0	8.0	------	13	------	126	------	8.9	0	------
TOTAL	813	757.0	187.0	196.0	253.0	375	1,670	11,404	2,204	281.6	106.50	0
MEAN	26.2	25.2	6.03	6.32	9.04	12.1	55.7	368	73.5	9.08	3.44	0
MAX	63	54	13	8.0	17	17	185	710	272	23	9.6	0
MIN	14	9.0	4.0	4.0	7.0	10	13	126	12	2.5	0	0
AC-FT	1,610	1,500	371	389	502	744	3,310	22,620	4,370	559	211	0

CAL YR 1972 TOTAL 17,380.60 MEAN 47.5 MAX 375 MIN 4.0 AC-FT 34,470
WTR YR 1973 TOTAL 18,247.10 MEAN 50.0 MAX 710 MIN 0 AC-FT 36,190

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 (19 m) upstream from State Highway 22, 0.4 mi (0.6 km) southeast of Spencer Post Office, and 2.5 mi (4.0 km) upstream from Rattlesnake Creek.

DRAINAGE AREA.--120 sq mi (310 sq km), 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 or 1,783 m (by barometer). December 1938 to November 1952 nonrecording gage. Prior to October 1940, at site 1.6 mi (2.6 km) upstream at different datum.

AVERAGE DISCHARGE.--7 years (1939-41, 1968-73), 48.1 cfs (1.362 cu m/s), 34,850 acre-ft/yr (43.0 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 388 cfs (11.0 cu m/s) Apr. 29 (gage height, 5.95 ft or 1.814 m); minimum discharge, 9.4 cfs (0.27 cu m/s) Sept. 13; minimum gage height, 2.42 ft (0.738 m) Aug. 14, 15, 16. Period of record: Maximum discharge, 642 cfs (18.2 cu m/s) Apr. 24, 1969 (gage height, 7.63 ft or 2.326 m); minimum observed, 0.5 cfs (0.014 cu m/s) Jan. 26, 1942, Feb. 22, 1944.

REMARKS.--Records fair except those for winter period, which are poor. Diversions above station for irrigation of about 850 acres or 340 sq hm (1966 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	30	26	19	21	33	24	99	77	35	17	25
2	27	31	25	18	22	31	26	94	92	34	14	32
3	25	31	21	15	24	27	27	130	83	34	16	27
4	25	44	19	13	27	24	29	169	72	32	26	14
5	29	53	17	16	28	22	30	198	66	29	31	12
6	30	48	17	18	27	23	28	149	58	26	23	12
7	29	42	16	16	26	24	28	126	54	24	19	13
8	27	34	16	15	25	25	28	129	50	24	17	14
9	27	33	15	16	23	23	31	117	45	24	16	16
10	47	32	13	16	24	22	40	101	43	22	15	13
11	42	31	16	17	26	23	54	93	46	21	14	12
12	35	31	17	18	25	23	67	78	43	22	14	11
13	32	30	18	19	24	23	77	54	39	23	13	9.5
14	30	30	19	23	23	22	75	49	55	22	11	10
15	46	31	21	30	22	22	79	46	82	21	11	12
16	42	32	23	31	22	23	70	45	82	20	11	13
17	35	32	25	29	23	22	66	60	67	18	10	12
18	34	32	25	22	23	22	72	90	58	17	10	12
19	32	30	24	20	24	22	76	115	51	24	10	12
20	32	28	25	19	25	23	69	150	47	35	10	15
21	32	23	27	19	24	24	66	115	46	36	10	21
22	30	19	29	19	24	25	79	84	42	40	11	17
23	27	16	28	19	24	25	100	80	39	45	12	26
24	31	16	27	21	24	24	141	80	44	33	14	29
2	32	17	25	22	25	24	201	92	43	26	13	28
26	33	21	22	22	27	24	237	100	42	23	12	21
27	30	19	22	21	32	24	281	87	43	21	13	18
28	30	18	21	20	33	25	251	77	40	20	14	19
29	29	20	21	20	------	25	248	72	39	19	16	17
30	29	24	20	22	------	24	129	67	43	20	12	16
31	29	------	20	23	------	24	------	64	------	22	12	------
TOTAL	985	878	660	618	697	747	2,729	3,010	1,631	812	447	508.5
MEAN	31.8	29.3	21.3	19.9	24.9	24.1	91.0	97.1	54.4	26.2	14.4	17.0
MAX	47	53	29	31	33	33	281	198	92	45	31	32
MIN	25	16	13	13	21	22	24	45	39	17	10	9.5
AC-FT	1,950	1,740	1,310	1,230	1,380	1,480	5,410	5,970	3,240	1,610	887	1,010

CAL YR 1972 TOTAL 20,849.0 MEAN 57.0 MAX 228 MIN 13 AC-FT 41,350
WTR YR 1973 TOTAL 13,722.5 MEAN 37.6 MAX 281 MIN 9.5 AC-FT 27,220

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 mi (1.1 km) north of Dubois.

DRAINAGE AREA.--220 sq mi (570 sq km), approximately. Mean altitude, 6,760 ft (2.060 m).

PERIOD OF RECORD.--April 1921 to September 1973 (discontinued). No winter records 1925-28, 1930.

GAGE.--Water-stage recorder. Datum of gage is 5,158.87 ft (1,572.424 m) above mean sea level. Prior to May 8, 1927, nonrecording gage at site 175 ft (53 m) downstream at datum 1.16 ft (0.354 m) lower. May 8, 1927, to Sept. 15, 1957, at same site at datum 0.92 ft (0.280 m) higher.

AVERAGE DISCHARGE.--47 years (1921-24, 1928-29, 1930-73), 21.9 cfs (0.620 cu m/s), 15,870 acre-ft/yr (19.6 cu hm/yr); 15-year base period (1952-67), 18.5 cfs (0.524 cu m/s).

EXTREMES.--Current year: Maximum discharge, 420 cfs (11.9 cu m/s) Apr. 29 (gage height, 4.42 ft or 1.347 m); minimum discharge, 0.15 cfs (0.004 cu m/s) Aug. 19, 20 (gage height, 0.64 ft or 0.195 m); minimum gage height, 0.53 ft (0.162 m) July 10-12.
Period of record: Maximum discharge, 858 cfs (24.30 cu m/s) Apr. 7, 1930; maximum gage height, 6.39 ft 1.948 m Apr. 24, 1969; no flow for long periods in most years.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 850 acres or 340 sq hm (1966 determination).

COOPERATION.--Water-stage recorder inspected occasionally by Watermaster of Water District 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	24	22	12	15	19	17	102	68	24	8.1	7.1
2	22	24	20	11	15	18	18	90	102	21	5.4	20
3	21	27	18	10	15	17	20	123	87	20	4.3	13
4	20	28	16	10	17	16	21	153	72	20	7.4	9.1
5	20	59	15	11	18	14	23	204	63	16	15	7.4
6	24	34	15	13	18	16	23	169	56	5.4	9.9	1.9
7	22	30	13	12	17	16	23	133	51	1.1	5.7	2.9
8	22	30	13	11	16	17	23	130	45	.68	3.7	7.7
9	21	26	12	11	16	15	25	132	41	.52	3.2	11
10	36	28	11	12	16	15	27	110	37	.52	2.1	11
11	41	28	11	12	17	16	35	97	37	.52	1.7	5.7
12	29	25	13	12	17	15	50	80	34	.52	1.7	4.9
13	27	27	14	13	16	15	64	60	30	.68	1.7	5.1
14	26	27	15	14	15	15	69	50	32	2.9	1.1	4.0
15	34	27	16	16	15	15	66	46	74	4.9	.82	7.1
16	39	27	16	17	15	14	67	45	75	9.5	.60	9.1
17	28	27	17	16	15	14	62	70	60	8.1	.52	9.5
18	27	24	18	15	15	14	66	100	69	7.7	.45	8.1
19	26	23	18	14	16	14	70	135	53	9.1	.15	7.7
20	26	19	17	14	16	15	63	160	43	17	.30	8.4
21	26	16	18	14	16	16	62	145	35	25	.22	11
22	25	15	20	14	16	16	80	125	31	23	.15	10
23	25	15	19	14	16	16	110	111	28	30	.90	11
24	25	14	18	15	16	15	150	101	28	24	2.1	18
25	25	15	17	15	16	15	191	113	27	14	2.3	16
26	25	17	17	15	17	15	230	144	26	13	1.7	12
27	26	18	16	14	19	16	302	111	27	8.8	2.5	8.8
28	25	17	16	14	20	17	262	88	26	6.7	3.2	7.4
29	22	18	15	14	------	17	282	79	25	8.8	4.0	6.4
30	23	20	14	14	------	17	145	70	27	7.7	2.9	7.1
31	23	------	13	16	------	17	------	64	------	8.8	2.1	------
TOTAL	805	729	493	415	456	487	2,646	3,340	1,409	339.94	95.91	268.4
MEAN	26.0	24.3	15.9	13.4	16.3	15.7	88.2	108	47.0	11.0	3.09	8.95
MAX	41	59	22	17	20	19	302	204	102	30	15	20
MIN	20	14	11	10	15	14	17	45	25	.52	.15	1.9
AC-FT	1,600	1,450	978	823	904	966	5,250	6,620	2,790	674	190	532

CAL YR 1972 TOTAL 18,452.00 MEAN 50.4 MAX 205 MIN 11 AC-FT 36,600
WTR YR 1973 TOTAL 11,484.25 MEAN 31.5 MAX 302 MIN .15 AC-FT 22,780

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 mi (0.2 km) west of railroad crossing at Camas and about 1.4 mi (2.3 km) upstream from mouth.

DRAINAGE AREA.--510 sq mi (1,320 sq km), approximately. Mean altitude, 6,190 ft (1,887 m).

PERIOD OF RECORD.--April 1921 to current year (flood season only 1971-73).

GAGE.--Water-stage recorder. Altitude of gage is 4,790 ft or 1,460 m (by barometer). Prior to Dec. 22, 1949, nonrecording gages at nearby sites at present datum.

AVERAGE DISCHARGE.--49 years (1921-70), 6.00 cfs (0.170 cu m/s), 4,350 acre-ft/yr (5.36 cu hm/yr); 15-year base period (1952-67), 7.02 cfs (0.199 cu m/s).

EXTREMES.--Current year: Maximum discharge, 298 cfs (8.44 cu m/s) Apr. 29 (gage height, 3.92 ft or 1.195 m); no flow for long periods.
Period of record: Maximum discharge, 298 cfs (8.44 cu m/s) Apr. 29, 1973; maximum gage height, 4.03 ft (1.228 m) 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 mi (22.5 km) above station, and by heavy channel losses below Dubois. Diversions above station for irrigation of about 5,800 acres or 2,350 sq hm (1966 determination).

COOPERATION.--Occasional inspections of recorder by Watermaster of Water District 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	78	0	0		
2							0	57	36	0		
3							0	66	62	0		
4							0	102	55	0		
5							0	154	7.0	0		
6							0	133	.41	0		
7							0	87	0	0		
8							0	72	0	0		
9							0	75	0	0		
10							0	57	0	0		
11							0	1.9	0	0		
12							14	0	0	0		
13							43	0	0	0		
14							66	0	0	0		
15							54	27	.19	0		
16							66	.64	24	0		
17							53	.12	1.2	0		
18							59	20	14	-		
19							47	66	5.0	-		
20							16	69	3.0	-		
21							.09	70	2.0	-		
22							9.7	59	1.0	-		
23							31	42	0	-		
24							79	34	0	-		
25							150	26	0	-		
26							199	65	0	-		
27							243	57	0	-		
28							247	24	0	-		
29					------		245	1.3	0	-		
30					------		133	.18	0	-		
31		------			------		------	0	------			------
TOTAL							1,754.79	1,444.14	210.80	-		
MEAN							58.5	46.6	7.03	-		
MAX							247	154	62	-		
MIN							0	0	0	-		
AC-FT							3,480	2,860	418	-		

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 (204 m) north of mouth of Camas Creek, 4.4 mi (7.1 km) northeast of First Owsley pumphouse, and 5.5 mi (8.8 km) northeast of Terreton.

DRAINAGE AREA.--1,130 sq mi (2,930 km), 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 (1,455.417 m) 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 mi (4.3 km) southwest and 2 mi (3.2 km) north of First Owsley pumphouse at same datum.

EXTREMES.--Current year: Maximum contents, 42,100 acre-ft (51.9 cu hm) May 12, 13; maximum gage height, 8.72 ft (2.658 m) May 8, 9 (affected by wind); minimum contents, 8,630 acre-ft (10.6 cu hm) Oct. 9, 10 (gage height, 2.15 ft or 6.55 m).
Period of record: Maximum contents observed, 61,660 acre-ft (76.0 cu hm) May 5, 1923 (gage height, 9.20 ft or 2.804 m); 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 1973. 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 (-1.22 m). 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 1973 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,900	9,350	15,400	21,300	26,600	30,700	34,300	38,700	34,700	20,400	19,700	11,600
2	9,660	9,420	15,600	21,500	26,800	30,900	34,200	39,000	34,500	20,500	19,600	11,500
3	9,480	9,590	15,800	21,700	26,900	31,100	34,300	39,400	34,500	20,500	19,500	11,500
4	9,380	9,720	16,100	21,900	27,000	31,200	34,400	39,800	34,500	20,600	19,200	11,300
5	9,180	9,810	16,300	22,100	27,200	31,300	34,500	40,300	34,200	20,500	19,100	11,300
6	9,020	9,900	16,500	22,300	27,400	31,400	34,500	40,700	33,900	20,200	18,900	11,100
7	8,890	10,000	16,700	22,400	27,500	31,500	34,500	41,300	33,300	2,000	18,500	11,000
8	8,730	10,200	17,000	22,600	27,600	31,500	34,500	41,300	32,600	19,600	17,900	11,000
9	8,630	10,400	17,200	22,900	27,700	31,600	34,600	41,500	31,700	19,300	17,400	10,900
10	8,950	10,700	17,400	23,000	27,800	31,900	34,700	41,600	31,200	19,000	17,100	10,900
11	8,920	10,900	17,500	23,200	28,100	32,100	34,700	41,500	30,400	18,800	16,500	10,800
12	8,920	11,100	17,600	23,300	28,400	32,300	34,800	42,000	29,600	18,500	16,300	10,700
13	8,820	11,400	17,900	23,500	28,500	32,500	35,000	42,000	28,500	18,200	16,000	10,700
14	8,790	11,800	18,100	23,600	28,700	32,600	35,200	42,000	28,000	18,000	14,900	10,500
15	8,790	12,000	18,300	23,700	28,900	32,600	35,300	41,800	26,900	17,900	14,000	10,400
16	8,820	12,200	18,500	23,900	29,000	32,700	35,400	41,700	26,100	17,800	13,900	10,300
17	8,950	12,500	18,700	24,200	29,200	32,800	35,300	40,900	25,500	17,400	13,100	10,300
18	9,050	12,700	18,900	24,300	29,400	32,900	35,500	40,400	24,900	17,100	13,700	10,100
19	9,150	13,000	19,000	24,500	29,500	33,000	35,700	39,800	24,400	17,300	13,600	10,000
20	8,950	13,300	19,100	24,700	29,700	33,100	35,700	38,900	23,800	17,400	13,800	9,970
21	9,020	13,500	19,300	24,800	29,800	33,200	35,800	38,300	23,300	17,400	13,300	10,200
22	9,120	13,700	19,500	25,000	29,900	33,400	36,000	37,700	22,800	17,700	11,800	9,760
23	8,920	13,900	19,700	25,100	30,000	33,400	36,100	37,100	22,700	17,800	12,100	9,620
24	8,890	14,200	19,800	25,400	30,100	33,600	36,300	37,000	22,300	18,100	11,400	9,480
25	8,950	14,300	20,000	25,500	30,300	33,700	36,400	36,400	21,900	18,300	11,800	9,280
26	8,990	14,500	20,200	25,700	30,400	33,800	36,700	36,000	21,400	18,600	11,800	9,120
27	9,020	14,700	20,400	25,800	30,500	33,800	37,000	35,800	21,000	18,800	11,800	9,020
28	9,020	14,900	20,600	25,900	30,600	33,900	37,300	35,500	20,800	19,000	11,700	8,950
29	9,150	15,100	20,800	26,100	------	33,900	37,800	35,300	20,700	19,300	11,600	8,890
30	9,020	15,300	21,000	26,300	------	34,100	38,300	35,300	20,700	19,600	11,800	8,890
31	9,120	------	21,100	26,500	------	34,100	------	35,000	------	19,700	11,600	------
MAX	9,900	15,300	21,100	26,500	30,600	34,100	38,300	42,000	34,700	20,600	19,700	11,600
MIN	8,630	9,350	15,400	21,300	26,600	30,700	34,200	35,000	20,700	2,000	11,400	8,890
(†)	2.30	3.89	5.12	6.13	6.84	7.41	8.05	7.55	5.04	4.84	2.98	2.23
(‡)	-1,080	+6,180	+5,800	+5,400	+4,100	+3,500	+4,200	-3,300	-14,300	-1,000	-8,100	-2,710

CAL YR 1972..... ‡ -3,300
WTR YR 1973..... ‡ -1,310

† 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 (12 m) upstream from bridge on Highway 28, 0.2 mi (0.3 km) downstream from Blue Dome Inn, 9 mi (14 km) southeast of former Reno Post Office, and 34 mi (55 km) west of Dubois.

DRAINAGE AREA.--380 sq mi (980 sq km), approximately.

PERIOD OF RECORD.--June 1967 to current year (no winter records). Prior to June 1972 at site 40 ft (12 m) downstream at same datum.

GAGE.--Water-stage recorder. Altitude of gage is 6,050 ft (1,840 m) (from topographic map).

EXTREMES.--Current year: Maximum discharge, 92 cfs (2.61 cu m/s) July 21 (gage height, 1.62 ft or 0.494 m); minimum discharge, 63 cfs (1.78 cu m/s) June 9 (gage height, 1.45 ft or 0.442 m).
Period of record: Maximum discharge, 149 cfs (4.22 cu m/s) July 30, 1969 (gage height, 1.56 ft or 0.475 m); minimum, 53 cfs (1.50 cu m/s) June 29, 30, July 1-5, 1968 (gage height, 0.88 ft or 0.268 m).

REMARKS.--Records good. Diversions above station for irrigation of about 280 acres (110 sq hm) (1966 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								-	72	73	77	71
2								-	72	72	76	70
3								-	72	71	76	69
4								-	72	72	77	69
5								-	71	72	76	69
6								-	71	72	76	69
7								-	70	72	73	69
8								-	67	73	73	69
9								-	65	72	73	67
10								78	65	72	72	66
11								78	65	71	72	66
12								79	65	73	72	65
13								76	65	73	72	66
14								71	69	73	70	66
15								74	70	73	70	65
16								73	69	76	71	66
17								73	69	77	72	66
18								73	70	78	70	66
19								73	70	79	70	66
20								74	70	85	71	-
21								74	70	84	70	-
22								74	70	85	72	-
23								74	71	82	71	-
24								72	71	80	70	-
25								72	71	79	70	-
26								72	72	78	69	-
27								74	72	78	69	-
28								72	72	78	67	-
29					------			70	72	78	67	-
30					------			70	73	78	67	-
31		------			------		------	70	------	77	67	------
TOTAL								-	2,093	2,356	2,218	-
MEAN								-	69.8	76.0	71.5	-
MAX								-	73	85	77	-
MIN								-	65	71	67	-
AC-FT								-	4,150	4,670	4,400	-

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 (91 m) downstream from Eight-Mile Canyon road crossing, 5.5 mi (8.8 km) downstream from Blue Dome Inn, 14 mi (23 km) southeast of Reno.

DRAINAGE AREA.--400 sq mi (1,040 sq km), approximately.

PERIOD OF RECORD.--June 1967 to current year (no winter records).

GAGE.--Water-stage recorder. Altitude of gage is 5,770 ft (1,760 m) (from topographic map).

EXTREMES.--Current year: Maximum discharge, 85 cfs (2.41 cu m/s) July 21 (gage height, 1.48 ft or 0.451 m); minimum, 38 cfs (1.08 cu m/s) June 9 (gage height, 1.29 ft or 0.393 m).
Period of record: Maximum discharge, 108 cfs (3.06 cu m/s) July 31, 1969 (gage height, 1.62 ft or 0.494 m); minimum, 11 cfs (0.312 cu m/s) July 5, 1967 (gage height, 0.97 ft or 0.296 m).

REMARKS.--Records good. Diversions above station for irrigation of about 350 acres (140 sq hm) (1966 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								-	47	48	60	52
2								-	46	47	56	47
3								-	46	47	56	46
4								-	44	46	58	43
5								-	43	47	58	42
6								-	43	48	58	42
7								-	43	47	58	42
8								-	42	46	58	43
9								-	41	44	54	42
10								56	42	43	54	42
11								62	42	44	56	43
12								60	43	46	58	44
13								60	43	46	56	46
14								60	49	46	54	48
15								52	49	49	56	50
16								48	50	50	56	52
17								48	48	49	54	52
18								48	47	52	49	50
19								49	46	54	49	52
20								52	46	66	49	-
21								52	43	68	50	-
22								52	43	68	52	-
23								50	42	70	52	-
24								48	43	64	49	-
25								48	44	62	50	-
26								49	44	62	50	-
27								49	43	60	50	-
28								48	44	58	50	-
29					------			45	47	60	50	-
30					------			45	48	60	50	-
31		------			------		------	42	------	62	49	------
TOTAL								-	1,341	1,659	1,659	-
MEAN								-	44.7	53.5	53.5	-
MAX								-	50	70	60	-
MIN								-	41	43	49	-
AC-FT								-	2,660	3,290	3,290	-

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 (7.6 m) downstream from bridge, 0.4 mi (0.6 km) upstream from Warm Creek, 2 mi (3.2 km) southeast of Fairview guard station, and 16 mi (26 km) east of Goldburg.

DRAINAGE AREA.--74.3 sq mi (192 sq km).

PERIOD OF RECORD.--July 1960 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft or 2,010 m (from topographic map).

AVERAGE DISCHARGE.--13 years, 50.3 cfs (1.424 cu m/s), 9.19 in/yr (233 mm/yr), 36,440 acre-ft/yr (44.9 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 286 cfs (8.10 cu m/s) May 20 (gage height, 2.95 ft or 0.899 m); minimum daily discharge, 11 cfs (0.312 cu m/s) Nov. 24.
Period of record: Maximum discharge, 651 cfs (18.4 cu m/s) June 12, 1965 (gage height, 4.45 ft or 1.356 m); minimum, 3.9 cfs (0.110 cu m/s) Apr. 2, 1967 (gage height, 1.68 ft or 0.512 m).

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)
(Stage-discharge relation affected by ice Oct. 29-31, Nov. 21 to Feb. 27)

1.4	16	2.4	155
1.7	40	3.0	310
2.0	76		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	30	13	14	20	28	25	38	153	46	26	21
2	28	29	14	12	21	26	24	40	143	45	26	21
3	28	28	15	12	22	25	24	43	124	44	27	21
4	28	29	14	12	23	25	24	46	111	42	29	19
5	28	28	12	13	24	26	24	52	103	40	29	18
6	28	29	13	14	22	26	24	58	102	40	25	18
7	28	31	13	15	21	26	24	67	103	39	24	20
8	28	27	13	16	20	26	24	72	103	38	23	21
9	27	28	12	17	20	26	24	70	100	38	23	20
10	31	27	12	19	22	26	25	68	93	37	23	19
11	30	25	12	20	24	26	26	66	85	36	24	18
12	29	25	12	22	23	26	26	75	80	38	24	18
13	28	26	12	23	22	26	27	93	76	36	22	17
14	28	26	12	23	22	26	28	110	91	36	20	18
15	32	25	12	22	21	26	27	126	92	35	20	19
16	30	25	13	21	21	26	26	154	80	34	23	20
17	28	24	14	21	21	26	23	179	79	34	22	19
18	28	25	15	20	20	25	23	216	74	34	22	18
19	29	24	16	20	19	25	21	246	69	35	21	18
20	40	24	17	19	19	25	21	263	66	46	21	19
21	31	19	17	19	20	26	21	232	60	42	22	19
22	29	15	18	18	22	26	22	204	59	46	25	20
23	30	12	18	18	23	26	25	192	57	42	22	20
24	29	11	17	18	23	25	28	183	55	37	21	21
25	29	13	16	19	24	25	31	186	54	35	20	21
26	29	15	15	20	25	25	36	168	52	34	19	21
27	26	14	15	20	27	25	43	144	49	32	19	20
28	25	13	16	19	29	25	47	129	49	31	19	20
29	24	12	15	19	------	25	45	124	51	32	18	19
30	23	13	15	19	------	25	39	123	48	32	17	19
31	24	------	14	19	------	25	------	127	------	28	19	------
TOTAL	884	672	442	563	620	795	827	3,894	2,461	1,164	695	582
MEAN	28.5	22.4	14.3	18.2	22.1	25.6	27.6	126	82.0	37.5	22.4	19.4
MAX	40	31	18	23	29	28	47	263	153	46	29	21
MIN	23	11	12	12	19	25	21	38	48	28	17	17
CFSM	.38	.30	.19	.25	.30	.34	.37	1.70	1.10	.50	.30	.26
IN.	.44	.34	.22	.28	.31	.40	.41	1.95	1.23	.58	.35	.29
AC-FT	1,750	1,330	877	1,120	1,230	1,580	1,640	7,720	4,880	2,310	1,380	1,150

CAL YR 1972 TOTAL 22,166 MEAN 60.6 MAX 501 MIN 11 CFSM .82 IN 11.10 AC-FT 43,970
WTR YR 1973 TOTAL 13,599 MEAN 37.3 MAX 263 MIN 11 CFSM .50 IN 6.81 AC-FT 26,970

PEAK DISCHARGE (BASE, 130 CFS).--May 20 (1100) 286 cfs (2.95 ft); June 1 (1000) 162 cfs (2.49 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 mi (1.0 km) downstream from Wet Creek, and 27 mi (43 km) northwest of Howe.

DRAINAGE AREA.--440 sq mi (1,140 sq km), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,880 ft or 1,792 m (from topographic map).

AVERAGE DISCHARGE.--15 years, 65.4 cfs (1.85 cu m/s), 47,380 acre-ft/yr (58.4 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 219 cfs (6.20 cu m/s) May 20 (gage height, 2.87 ft or 0.875 m); minimum daily, 16 cfs (0.45 cu m/s) Dec. 10.
Period of record: Maximum daily discharge, 475 cfs (13.5 cu m/s) June 12, 1965, but may have been more during period of doubtful gage-height record in 1958; maximum gage height recorded, 4.75 ft (1.448 m) Jan. 12, 1968 (ice jam); minimum discharge recorded, 2.8 cfs (0.079 cu m/s) Dec. 13, 1962.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 3,800 acres (1,500 sq hm) of which about 2,000 acres (800 sq hm) are by withdrawals from ground water (1966 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	45	22	17	23	24	33	59	173	110	50	49
2	52	50	22	18	23	25	33	59	169	96	49	49
3	60	52	24	18	24	25	35	63	160	98	51	46
4	64	54	22	17	24	25	36	66	148	87	56	44
5	68	57	20	17	24	25	37	65	138	84	55	42
6	66	46	21	18	26	25	39	77	141	81	49	42
7	65	48	22	18	26	25	39	74	148	78	47	47
8	66	55	20	19	25	25	40	80	153	75	46	52
9	65	49	18	19	24	25	40	83	153	70	47	49
10	67	54	16	19	24	25	42	83	155	68	48	45
11	67	54	17	20	25	25	43	84	148	68	48	43
12	66	50	17	24	24	25	53	86	142	69	50	42
13	65	47	17	28	23	25	63	89	140	68	48	43
14	65	55	17	29	23	25	59	97	153	66	45	42
15	70	56	17	29	23	25	55	104	169	63	45	45
16	69	56	17	29	23	26	55	118	154	63	45	47
17	67	48	17	29	22	26	53	163	143	59	45	44
18	66	51	17	28	22	26	51	185	134	55	44	43
19	67	54	18	27	22	27	50	205	125	57	44	42
20	78	47	18	26	22	27	50	211	117	77	43	46
21	70	38	18	25	22	28	50	203	110	84	42	46
22	69	32	19	24	23	28	50	182	115	87	49	46
23	68	30	18	23	23	29	51	175	118	87	48	46
24	73	26	17	24	24	28	58	172	115	77	44	47
25	71	26	17	25	24	30	60	169	110	70	44	49
26	72	29	17	24	24	30	60	158	112	65	43	49
27	65	29	17	24	24	32	66	149	113	61	42	47
28	65	27	17	23	24	32	69	138	112	60	44	46
29	51	23	17	23	------	32	71	132	118	57	41	44
30	43	21	16	23	------	32	63	137	118	60	38	44
31	38	------	17	23	------	33	------	147	------	56	40	------
TOTAL	1,991	1,309	569	710	660	840	1,504	3,813	4,104	2,256	1,430	1,366
MEAN	64.2	43.6	18.4	22.9	23.6	27.1	50.1	123	137	72.8	46.1	45.5
MAX	78	57	24	29	26	33	71	211	173	110	56	52
MIN	38	21	16	17	22	24	33	59	110	55	38	42
AC-FT	3,950	2,600	1,130	1,410	1,310	1,670	2,980	7,560	8,140	4,470	2,840	2,710

CAL YR 1972 TOTAL 30,280 MEAN 82.7 MAX 402 MIN 16 AC-FT 60,060
WTR YR 1973 TOTAL 20,552 MEAN 56.3 MAX 211 MIN 16 AC-FT 40,760

NOTE.--No gage-height record Jan. 1 to Mar. 22.

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 mi (0.3 km) upstream from diversion dam of Blaine County Investment Co. and 7 mi (11 km) northwest of Howe.

DRAINAGE AREA.--703 sq mi (1,820 sq km). Mean altitude, 7,370 ft (2,246 m).

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 or 1,530 m (by barometer). Prior to Sept. 2, 1938, nonrecording gage at site 120 ft (37 m) downstream at datum 1.39 ft (0.424 m) higher.

AVERAGE DISCHARGE.--33 years (1940-73), 74.6 cfs (2.113 cu m/s), 54,050 acre-ft/yr (66.6 cu hm/yr); 15-year base period (1952-67), 69.0 cfs (1.954 cu m/s).

EXTREMES.--Current year: Maximum discharge, 225 cfs (6.37 cu m/s) May 21 (gage height, 3.82 ft or 1.164 m); maximum recorded gage height, 4.81 ft or 1.466 m (ice jam) Dec. 31; minimum daily discharge, 30 cfs (0.850 cu m/s) Jan. 4, 5.
Period of record: Maximum discharge, about 450 cfs (12.7 cu m/s) Aug. 11, 1936, during cloudburst (gage height, 5.4 ft or 1.65 m, present site and datum from rating curve extended above 220 cfs (6.23 cu m/s); maximum gage height observed, 6.63 ft (2.021 m) Jan. 23, 1957 (backwater from ice); minimum discharge observed, 4.1 cfs (0.116 cu m/s) Dec. 12, 1940.

REMARKS.--Records good except those for winter period, which are fair. Records of chemical analysis for the water year 1973 are published in Part 2 of this report. Diversions above station for irrigation of about 11,500 acres (4,650 sq hm) of which about 7,600 acres (3,100 sq hm) are by withdrawals from ground water (1966 determination).

REVISIONS.--WSP 1637: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	61	55	33	35	54	81	99	165	129	81	66
2	80	69	57	34	35	56	81	105	193	123	78	68
3	79	70	62	32	35	56	83	103	186	114	77	66
4	83	74	58	30	37	58	87	105	179	108	77	64
5	92	76	38	30	38	59	90	104	167	104	78	61
6	94	73	40	32	41	59	92	102	163	100	78	60
7	90	72	45	33	41	60	87	103	166	97	77	66
8	89	84	40	33	40	63	88	106	167	93	75	69
9	88	86	35	33	41	62	91	108	166	89	74	70
10	90	86	32	34	42	63	92	108	168	88	71	66
11	87	89	33	37	43	64	94	109	169	86	70	63
12	88	87	35	42	43	66	98	109	158	85	69	61
13	88	88	35	45	44	68	107	108	153	86	69	62
14	86	93	36	45	44	69	109	108	155	85	69	62
15	93	96	36	45	43	71	104	112	179	85	68	63
16	93	97	36	45	43	72	106	119	176	86	68	71
17	89	97	36	45	43	75	104	129	169	84	67	68
18	91	94	37	44	44	73	100	155	164	81	67	68
19	90	96	38	42	43	73	96	185	154	79	66	67
20	104	94	39	40	43	74	92	205	142	86	66	68
21	105	84	41	38	45	76	92	214	136	100	66	69
22	99	76	41	37	48	77	91	222	131	107	66	68
23	96	62	36	35	48	76	90	220	132	110	67	70
24	100	60	36	36	48	77	93	214	134	110	68	70
25	101	60	36	37	49	80	95	214	129	100	68	73
26	102	70	36	38	49	83	94	205	124	93	67	74
27	100	71	36	36	49	85	95	194	123	89	65	73
28	99	59	37	35	52	81	99	180	123	86	63	72
29	94	59	36	35	------	80	100	170	130	85	61	70
30	84	57	34	35	------	80	99	161	137	83	59	67
31	68	------	32	35	------	81	------	159	------	83	57	------
TOTAL	2,821	2,340	1,224	1,151	1,206	2,171	2,830	4,535	4,638	2,934	2,152	2,015
MEAN	91.0	78.0	39.5	37.1	43.1	70.0	94.3	146	155	94.6	69.4	67.2
MAX	105	97	62	45	52	85	109	222	193	129	81	74
MIN	68	57	32	30	35	54	81	99	123	79	57	60
AC-FT	5,600	4,640	2,430	2,280	2,390	4,310	5,610	9,000	9,200	5,820	4,270	4,000

CAL YR 1972 TOTAL 38,676 MEAN 106 MAX 240 MIN 32 AC-FT 76,710
WTR YR 1973 TOTAL 30,017 MEAN 82.2 MAX 222 MIN 30 AC-FT 59,540

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 (270 m) downstream from headgates, and 7 mi (11 km) 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 or 1,530 m (from nearby barometric determination). Prior to June 26, 1927, at site 700 ft (210 m) upstream at different datum. June 26, 1927, to May 6, 1945, at site 180 ft (55 m) upstream at present datum.

EXTREMES.--Period of record: Maximum daily discharge, 146 cfs (4.13 cu m/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	29					0	33	59	27	13	5.4
2	6.9	29					0	36	77	21	13	5.4
3	6.9	29					0	30	67	16	9.8	5.4
4	11	29					0	30	67	19	9.8	5.4
5	12	29					0	30	52	17	9.8	5.4
6	12	29					0	24	52	14	11	5.4
7	11	29					0	24	47	13	11	5.4
8	12	15					0	10	46	11	11	5.4
9	12	0					0	14	46	11	11	5.4
10	14	0					0	18	45	11	3.6	6.8
11	14	0					0	19	51	12	3.6	6.8
12	15	0					0	19	46	12	3.4	6.8
13	14	0					0	18	39	13	4.4	6.8
14	14	0					0	17	36	13	4.4	6.0
15	15	0					0	16	52	14	4.4	6.0
16	15	0					0	19	51	13	4.1	6.0
17	20	0					0	33	52	14	1.6	5.4
18	20	0					0	76	48	12	1.7	5.7
19	20	0					0	102	45	12	1.7	5.4
20	24	0					0	103	27	14	1.7	5.4
21	24	0					0	120	22	22	1.7	5.4
22	24	0					0	109	19	21	1.7	5.4
23	25	0					0	100	19	26	1.7	5.4
24	25	0					0	90	19	29	5.0	5.7
25	25	0					0	85	20	20	5.0	5.7
26	25	0					0	80	18	20	5.0	5.7
27	29	0					0	81	19	16	5.0	6.1
28	28	0					18	69	19	16	5.0	6.1
29	28	0			------		36	55	20	16	5.0	5.8
30	29	0			------		36	41	26	16	5.4	5.8
31	29	------			------		------	40	------	16	5.4	------
TOTAL	566.7	218	0	0	0	0	90	1,541	1,206	507	179.9	172.8
MEAN	18.3	7.27	0	0	0	0	3.00	49.7	40.2	16.4	5.80	5.76
MAX	29	29	0	0	0	0	36	120	77	29	13	6.8
MIN	6.9	0	0	0	0	0	0	10	18	11	1.6	5.4
AC-FT	1,120	432	0	0	0	0	179	3,060	2,390	1,010	357	343

CAL YR 1972 TOTAL 10,049.50 MEAN 27.5 MAX 126 MIN 0 AC-FT 19,930
WTR YR 1973 TOTAL 4,481.40 MEAN 12.3 MAX 120 MIN 0 AC-FT 8,890

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 mi (.3 km) upstream from East Fork, 2 mi (3.2 km) downstream from Wild Horse damsite, and 16 mi (25.7 km) southwest of Chilly.

DRAINAGE AREA.--114 sq mi (295 sq km). Mean altitude, 8,540 ft (2,603 m).

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 (2,079 m) (from topographic map).

AVERAGE DISCHARGE.--29 years, 105 cfs (2.97 cu m/s), 12.51 in/yr (317.8 mm/yr), 76,100 acre-ft/yr (93.8 cu hm/yr); 15-year base period (1952-67), 102 cfs (2.89 cu m/s).

EXTREMES.--Current year: Maximum discharge, 577 cfs (40.2 cu m/s) May 19, gage height, 4.17 ft (1.27 m); minimum, 9.4 cfs (0.266 cu m/s) Feb. 15, gage height, 1.07 ft (0.33 m).
Period of record: Maximum discharge, 1,420 cfs (40.2 cu m/s)June 12, 1965, gage height, 6.39 ft (1.95 m); minimum, 6.5 cfs (0.184 cu m/s) Mar. 15, 1962, gage height, 1.05 ft (0.32 m).

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)
(Stage-discharge relation affected by ice Nov. 21, 22, Dec. 5, Feb. 9, 10)

1.1	10	2.5	139
1.3	19	3.0	234
1.6	37	4.0	524

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	40	30	24	21	20	20	57	382	203	66	41
2	40	40	31	26	22	20	21	56	338	167	66	43
3	39	40	31	26	22	19	21	63	287	153	67	41
4	41	41	27	22	23	20	21	68	254	148	68	39
5	52	41	21	24	23	21	23	66	243	148	67	38
6	49	37	25	25	22	20	24	66	277	148	60	38
7	47	38	27	23	22	20	23	75	322	139	57	44
8	47	38	28	24	20	20	23	100	347	125	55	44
9	45	37	25	24	20	20	24	110	370	117	54	43
10	50	37	25	24	21	20	24	115	382	110	53	41
11	49	38	27	24	22	21	28	119	325	110	52	38
12	47	37	27	24	22	20	34	153	294	110	53	37
13	46	36	25	24	22	21	36	219	299	126	47	36
14	46	37	24	24	21	20	33	279	379	112	48	36
15	48	37	23	24	21	20	32	320	364	103	45	37
16	48	36	23	24	22	20	31	367	284	95	45	38
17	48	36	22	23	21	21	31	427	247	90	43	36
18	47	35	23	23	22	19	30	495	209	86	43	35
19	47	34	25	23	20	20	28	520	185	86	42	34
20	55	35	25	14	20	21	28	502	170	89	41	38
21	53	26	26	23	21	20	27	430	182	119	41	37
22	51	25	27	21	21	20	28	358	213	122	43	36
23	50	28	27	23	22	20	35	344	228	119	44	37
24	50	31	27	23	21	20	41	355	209	99	43	36
25	48	30	25	24	22	21	40	364	211	88	41	37
26	48	34	25	23	20	21	46	317	234	84	41	36
27	45	29	25	21	20	21	61	270	247	83	39	35
28	44	26	26	23	21	20	63	249	243	77	38	34
29	41	26	25	23	------	20	61	256	261	74	37	34
30	38	28	23	24	------	20	60	277	236	73	36	34
31	38	------	25	23	------	20	------	317	------	69	36	------
TOTAL	1,437	1,033	795	720	597	626	997	7,714	8,222	3,472	1,511	1,133
MEAN	46.4	34.4	25.6	23.2	21.3	20.2	33.2	249	274	112	48.7	37.8
MAX	55	41	31	26	23	21	63	520	382	203	68	44
MIN	38	25	21	14	20	19	20	56	170	69	36	34
CFSM	.41	.30	.22	.20	.19	.18	.29	2.18	2.40	.98	.43	.33
IN.	.47	.34	.26	.23	.19	.20	.33	2.52	2.68	1.13	.49	.37
AC-FT	2,850	2,050	1,580	1,430	1,180	1,240	1,980	15,300	16,310	6,890	3,000	2,250

CAL YR 1972 TOTAL 39,358 MEAN 108 MAX 903 MIN 18 CFSM .95 IN 12.84 AC-FT 78,070
WTR YR 1973 TOTAL 28,257 MEAN 77.4 MAX 520 MIN 14 CFSM .68 IN 9.22 AC-FT 56,050

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-19	0200	4.17	577	6- 9	2400	3.75	427
6- 1	0900	3.71	414	6-14	2300	3.75	427

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 mi (3.4 km) downstream from Burnt Creek, 7.7 mi (12.4 km) downstream from East Fork, 9 mi (14.5 km) southwest of Chilly, and 21 mi (33.8 km) northwest of Mackay.

DRAINAGE AREA.--450 sq mi (1,170 sq km). Mean altitude, 8,590 ft (2,618 m).

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 (2,018.37 m) above mean sea level. See WSP 1737 for history of changes prior to June 11, 1920.

AVERAGE DISCHARGE.--26 years (1904-5, 1948-73), 320 cfs (9.06 cu m/s), 9.66 in/yr (245.4 mm/yr), 231,000 acre-ft/yr (285 cu hm); 15-year base period (1952-67), 311 cfs (8.81 cu m/s).

EXTREMES.--Current year: Maximum discharge, 1,990 cfs (56.4 cu m/s) May 19, gage height, 4.08 ft (1.24 m); minimum daily, 60 cfs (1.70 cu m/s) Jan. 21.
Period of record: Maximum discharge, 4,420 cfs (125 cu m/s) May 25, 1967, gage height, 6.02 ft (1.83 m); minimum observed, 19 cfs (0.54 cu m/s) 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 (1,210 sq hm) (1966 determination). Hammerly ditch (capacity, about 20 cfs) diverts 0.2 mi (0.3 km) downstream.

REVISIONS (WATER YEARS).--WSP 1287: Drainage area. WSP 1317: 1905.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Oct. 30 to Nov. 2, Nov. 6-9, 13-27, Nov. 30 to Dec. 1)

1.0	49	2.5	583
1.5	158	3.0	934
2.0	326	4.0	1,900
2.5	583		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	127	115	80	68	83	83	185	1,360	640	243	142
2	132	128	120	82	71	80	83	180	1,100	501	230	150
3	130	125	118	82	71	80	85	200	864	457	230	150
4	135	127	105	70	74	80	85	220	726	447	247	142
5	180	132	79	76	74	81	85	210	692	447	247	140
6	164	116	86	80	74	81	85	215	864	452	214	140
7	158	117	93	74	71	81	86	230	1,070	426	198	161
8	155	120	98	77	66	81	86	260	1,240	383	183	166
9	150	115	92	77	72	81	89	280	1,300	365	175	161
10	175	120	92	77	76	81	89	300	1,410	348	172	150
11	175	122	94	77	80	82	93	320	1,110	356	169	145
12	164	120	94	77	78	77	106	402	942	348	169	140
13	158	105	89	77	76	80	125	571	990	388	164	135
14	158	117	85	77	75	78	115	768	1,310	360	158	130
15	164	118	82	74	76	80	110	918	1,280	318	153	132
16	166	114	78	76	78	80	105	1,140	903	286	145	140
17	166	112	78	74	80	79	105	1,360	740	272	140	130
18	161	107	83	74	80	77	100	1,620	621	261	137	122
19	161	104	88	74	79	77	95	1,800	535	275	132	118
20	189	112	88	68	78	83	95	1,660	501	290	130	130
21	178	98	88	60	78	81	92	1,430	553	383	132	132
22	169	89	91	72	80	80	98	1,150	679	411	140	127
23	164	95	91	70	82	80	110	1,120	747	378	140	127
24	158	106	91	72	82	80	125	1,130	653	310	135	130
25	155	110	86	74	83	80	125	1,160	666	279	132	130
26	153	120	83	76	83	83	140	958	754	264	127	130
27	135	108	83	68	83	83	170	789	826	264	122	125
28	135	100	88	70	83	81	205	719	775	254	122	120
29	125	91	80	72	------	81	195	782	864	247	118	115
30	122	98	72	74	------	83	190	864	775	294	113	113
31	118	------	82	71	------	83	------	1,010	------	261	110	------
TOTAL	4,785	3,373	2,792	2,302	2,151	2,497	3,355	23,951	26,850	10,965	5,027	4,073
MEAN	154	112	90.1	74.3	76.8	80.5	112	773	895	354	162	136
MAX	189	132	120	82	83	83	205	1,800	1,410	640	247	166
MIN	118	89	72	60	66	77	83	180	501	247	110	113
AC-FT	9,490	6,690	5,540	4,570	4,270	4,950	6,650	47,510	53,260	21,750	9,970	8,080

CAL YR 1972 TOTAL 118,623 MEAN 324 MAX 2,990 MIN 57 AC-FT 235,300
WTR YR 1973 TOTAL 92,121 MEAN 252 MAX 1,800 MIN 60 AC-FT 182,700

NOTE.--No gage-height record Dec. 2 to Mar. 19 and Apr. 14 to May 11.

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 mi (6.4 km) northwest of Mackay.

DRAINAGE AREA.--788 sq mi (2,040 sq km).

PERIOD OF RECORD.--January 1919 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,000 ft (1,828 m) above mean sea level, Utah Construction Co. datum, or 6,000.4 ft (1,828.9 m) above mean sea level. Prior to Oct. 15, 1959, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 40,530 acre-ft (50.0 cu hm) May 5, 6, gage height, 63.64 ft (19.40 m); minimum, 890 acre-ft (0.110 cu hm) Sept. 30.
Period of record: Maximum contents, 45,910 acre-ft (56.6 cu hm) June 24, 25, 1971, gage height, 67.62 ft (20.61 m); no available contents during periods in 1919-20, 1924, 1926, 1929, 1931-35; minimum gage height observed, 6.3 ft (1.9 m) 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 (2 m) in September 1956. Capacity is 44,370 acre-ft (54.7 cu hm) between gage heights 7.0 (2 m) and 66.5 ft (20 m) (crest of spillway). Dead storage reported to be about 125 acre-ft (0.154 cu hm). Water is used for irrigation of about 33,000 acres (13,400 sq hm) in Big Lost River irrigation district. About 12,700 acres (5,140 sq hm) irrigated from Big Lost River and tributaries above reservoir by surface diversions, and about 10,200 acres (4,130 cu hm) 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 (1.233 cu hm) 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)

11.0	820	35.0	12,020
15.0	1,930	40.0	15,800
20.0	3,740	50.0	24,680
25.0	5,990	60.0	35,900
30.0	8,730	68.0	46,440

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,520	16,660	25,430	30,790	34,530	37,030	39,250	40,480	32,390	30,090	19,720	2,540
2	9,550	17,010	25,640	30,930	34,620	37,090	39,300	40,490	32,590	29,770	19,010	2,600
3	9,570	17,360	25,880	31,070	34,730	37,150	39,360	40,490	32,590	29,390	18,220	2,700
4	9,620	17,720	26,070	31,200	34,830	37,270	39,410	40,520	32,510	29,010	17,390	2,780
5	9,660	18,080	26,260	31,370	34,920	37,340	39,490	40,530	32,370	28,610	16,490	2,850
6	9,710	18,370	26,480	31,490	35,020	37,440	39,560	40,530	32,200	28,240	15,590	2,930
7	9,770	18,690	26,750	31,640	35,120	37,530	39,590	40,520	32,080	27,920	14,640	3,010
8	9,800	19,030	-	31,740	35,200	37,610	39,640	40,490	32,050	27,610	13,740	3,090
9	9,870	19,330	-	31,880	35,310	37,680	39,690	40,450	32,160	27,500	12,780	3,150
10	9,930	19,650	-	32,010	35,420	37,800	39,770	40,310	32,430	27,300	11,820	3,160
11	10,000	20,240	-	32,150	35,530	37,860	39,820	40,190	32,620	26,860	10,800	3,120
12	10,060	20,310	27,620	32,260	35,610	37,940	39,900	40,080	32,520	26,530	9,910	3,060
13	10,130	20,640	27,770	32,390	35,710	38,020	39,990	39,950	32,310	26,110	8,970	3,000
14	10,230	20,940	27,940	32,510	35,780	38,060	40,040	39,800	32,300	25,690	8,060	2,900
15	10,310	21,280	28,110	32,650	35,880	38,100	40,060	39,630	32,780	25,250	7,240	2,770
16	10,760	21,600	28,280	32,790	35,960	38,150	40,110	39,060	33,050	24,850	6,470	2,640
17	10,970	21,920	28,450	32,920	36,070	38,240	40,180	38,440	33,140	24,370	5,720	2,540
18	11,390	22,230	28,610	33,050	36,150	38,280	40,200	37,990	33,080	23,740	5,100	2,430
19	11,820	22,500	28,800	33,190	36,230	38,340	40,240	37,870	32,920	23,040	4,560	2,310
20	12,260	22,770	28,940	33,250	36,300	38,420	40,240	38,110	32,750	22,490	4,030	2,240
21	12,660	23,040	29,120	33,370	36,370	38,490	40,250	38,210	32,650	22,180	3,590	2,140
22	13,040	23,280	29,290	33,450	36,460	38,580	40,280	38,020	32,600	21,930	3,230	2,070
23	13,460	23,540	29,440	33,530	36,530	38,620	40,320	37,540	32,570	21,800	2,950	1,990
24	13,810	23,790	29,620	33,670	36,620	38,650	40,350	37,070	32,500	21,760	2,690	1,890
25	14,190	24,050	29,750	33,780	36,710	38,740	40,360	36,660	32,270	21,690	2,470	1,730
26	14,570	24,340	29,910	33,890	36,780	38,830	40,390	36,110	31,950	21,630	2,380	1,580
27	14,950	24,530	30,080	33,970	36,850	38,880	40,440	35,380	31,580	21,540	2,350	1,420
28	15,310	24,750	30,260	34,100	36,940	38,960	40,450	34,500	31,170	21,360	2,350	1,320
29	15,670	25,010	30,370	34,210	------	39,010	40,450	33,630	30,780	21,140	2,350	1,200
30	16,000	25,210	30,520	34,320	------	39,060	40,460	32,890	30,390	20,830	2,390	890
31	16,320	------	30,660	34,420	------	39,140	------	32,430	------	20,400	2,450	------
MAX	16,320	25,210	30,660	34,420	36,940	39,140	40,460	40,530	33,140	30,090	19,720	3,160
MIN	9,520	16,660	25,430	30,790	34,530	37,030	39,250	32,430	30,390	20,400	2,350	890
(†)	40.71	50.52	55.57	58.78	60.84	62.57	63.59	57.10	55.33	45.51	16.59	-
(‡)	+6,840	+8,890	+5,450	+3,760	+2,520	+2,200	+1,320	-8,030	-2,040	-9,990	-17,950	-1,560

CAL YR 1972..... ‡ +4,200
WTR YR 1973..... ‡ -8,590

† 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 mi (1.6 km) downstream from head of Sharp ditch, 1.5 mi (2.4 km) downstream from Mackay Reservoir, and 2.5 mi (4 km) northwest of Mackay.

DRAINAGE AREA.--813 sq mi (2.106 sq km).

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 (1,812 m) above mean sea level. Nonrecording gage prior to May 12, 1912, and June 5, 1912, to Apr. 28, 1913, at sites within 1 mi (1.6 km) upstream at different datums, May 12 to June 4, 1912, at site 1.5 mi (2.4 km) upstream (above Sharp ditch) at different datum, Apr. 29, 1913, to Mar. 15, 1915, at site 1 mi (1.6 km) downstream (below Streeter ditch) at different datum.

AVERAGE DISCHARGE.--57 years (1904-5, 1912-14, 1919-73), 297 cfs (8.41 cu m/s), 215,200 acre-ft/yr (265 cu hm); 15-year base period (1952-67), 317 cfs (8.98 cu m/s).

EXTREMES.--Current year: Maximum discharge, 1,090 cfs (30.9 cu m/s) May 25, gage height, 3.71 ft (1.13 m); minimum, 57 cfs (1.61 cu m/s) Oct. 19, gage height, 1.44 ft (0.44 m).
Period of record: Maximum discharge, 2,990 cfs (94.7 cu m/s) June 10, 1921, gage height, 5.79 ft (1.76 m); minimum, 16 cfs (0.45 cu m/s) Oct. 27, 1967, gage height, 1.11 ft (0.34 m).

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 (4,140 sq hm) of land are irrigated by diversions from river and tributaries above reservoir by surface diversions, and 10,200 acres (4,130 sq hm) irrigated by subirrigation. Records of chemical analyses for the water year 1973 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)

1.4	52	3.0	633
1.7	93	3.5	957
2.0	162	4.0	1,300
2.5	356		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	234	77	99	120	130	140	146	135	857	708	544	186
2	230	78	101	121	130	141	145	135	818	652	585	180
3	225	79	101	121	130	141	145	135	766	645	621	162
4	223	80	101	122	131	141	146	135	714	609	664	165
5	224	81	102	124	133	142	146	135	664	579	676	165
6	225	81	103	124	133	142	146	135	676	538	683	168
7	225	82	105	124	133	142	143	135	721	504	695	169
8	225	82	105	124	131	142	143	135	766	487	676	171
9	225	83	106	124	132	143	143	134	792	422	664	168
10	228	84	107	124	133	143	143	172	824	411	689	197
11	228	84	108	124	133	143	143	189	837	427	714	221
12	228	85	109	124	133	144	143	190	864	427	695	220
13	226	85	110	124	133	144	146	190	870	459	670	224
14	226	86	110	124	133	144	148	214	890	476	652	239
15	227	87	111	124	135	144	147	306	857	476	617	256
16	151	88	112	124	135	145	148	561	785	443	596	257
17	78	88	114	130	135	145	148	772	721	470	580	253
18	73	88	115	131	135	145	146	864	676	556	515	252
19	62	90	117	132	135	146	146	903	652	591	478	252
20	65	90	116	133	135	146	146	924	597	550	460	246
21	60	90	117	133	135	146	146	950	521	448	430	244
22	62	91	117	132	138	146	146	1,000	493	406	395	242
23	63	92	117	131	140	146	146	1,070	527	347	371	238
24	65	93	117	130	141	146	146	1,070	561	301	350	250
25	70	93	117	131	143	146	146	1,070	615	297	327	271
26	71	95	118	132	143	146	144	1,070	658	297	273	276
27	71	95	118	131	140	146	141	1,070	714	306	237	274
28	71	96	119	130	140	146	141	1,070	753	333	217	273
29	73	97	119	130	------	146	137	1,030	792	351	215	276
30	76	98	119	130	------	146	135	964	792	386	195	266
31	76	------	119	130	------	146	------	917	------	448	186	------
TOTAL	4,586	2,618	3,449	3,938	3,778	4,469	4,335	17,780	21,773	14,350	15,670	6,761
MEAN	148	87.3	111	127	135	144	145	574	726	463	505	225
MAX	234	98	119	133	143	146	148	1,070	890	708	714	276
MIN	60	77	99	120	130	140	135	134	493	297	186	162
AC-FT	9,100	5,190	6,840	7,810	7,490	8,860	8,600	35,270	43,190	28,460	31,080	13,410

CAL YR 1972 TOTAL 127,028 MEAN 347 MAX 1,400 MIN 60 AC-FT 252,000
WTR YR 1973 TOTAL 103,507 MEAN 284 MAX 1,070 MIN 60 AC-FT 205,300

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 (305 m) upstream from the heading of Nielson diversion, and 3.9 mi (6.3 km) northeast of Mackay.

DRAINAGE AREA.--8.26 sq mi (21.4 sq km).

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 September 1973 (discontinued). 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 or 2,073 m (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 (6.1 m) downstream at datum 9.32 ft (2.841 m) lower.

AVERAGE DISCHARGE.--7 years, 19.4 cfs (0.549 cu m/s), 31.89 in/yr (810 mm/yr), 14,060 acre-feet/yr (17.3 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 140 cfs (3.96 cu m/s) May 19 (gage height, 2.50 ft or 0.762 m); minimum, 2.8 cfs (79.3 cu dm/s) Apr. 3, 4.
Period of record: Maximum discharge, 297 cfs (8.41 cu m/s) June 7, 1921 (gage height, 2.8 ft or 0.85 m, datum then in use, Clark ditch reported dry). Minimum discharge observed, 0.4 cfs (11.3 cu dm/s) Nov. 21 to Dec. 1, 1921 (gage height, 0.18 ft or 0.055 m), site and datum then in use).

REMARKS.--Records poor. No regulation or diversion above station.

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

1.1	2.0	1.7	39
1.3	10	2.0	70
1.5	23	2.3	109

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	12	7.8	5.8	4.5	4.3	3.6	6.9	59	48	25	21
2	11	12	7.8	5.7	4.4	4.1	3.4	7.0	48	38	24	20
3	11	12	7.8	5.8	4.4	4.0	3.1	8.0	38	36	23	20
4	11	12	7.5	5.8	4.5	4.0	3.2	7.7	32	36	24	19
5	11	11	7.0	5.5	4.5	4.0	3.6	8.1	34	36	24	19
6	11	11	6.4	5.6	4.5	4.0	3.8	9.3	50	36	24	19
7	11	11	6.6	5.8	4.5	4.1	3.6	13	65	34	24	19
8	11	11	6.8	5.4	4.4	4.3	3.4	15	82	30	24	19
9	11	11	7.0	5.3	4.2	4.5	3.4	13	88	27	24	18
10	12	10	6.8	5.4	4.4	4.3	3.4	12	84	28	24	18
11	12	10	6.4	5.2	4.7	4.1	3.5	12	61	29	23	17
12	12	10	6.4	5.2	4.5	4.0	3.6	23	57	27	23	17
13	12	9.8	6.4	5.2	4.4	3.9	3.9	41	62	26	23	16
14	12	9.6	6.2	5.2	4.4	3.8	4.2	52	77	24	23	15
15	14	9.6	6.0	5.2	4.4	3.8	4.7	63	76	23	22	15
16	14	9.6	5.8	5.0	4.7	3.8	4.8	79	53	23	22	15
17	13	9.6	5.8	5.0	4.6	3.8	4.6	85	41	23	21	15
18	12	9.2	5.8	5.0	4.4	3.8	4.5	95	34	22	21	15
19	14	9.2	6.0	5.0	4.2	3.8	4.4	98	30	22	20	14
20	14	9.2	6.4	5.0	4.1	3.8	4.1	61	33	36	20	14
21	15	8.7	6.4	5.0	3.9	3.9	4.1	48	42	47	20	14
22	15	8.7	6.4	4.7	3.9	4.2	4.1	45	52	45	20	14
23	15	8.7	6.4	4.8	4.0	3.8	4.2	50	52	43	20	13
24	15	8.7	6.4	4.8	3.9	3.8	4.5	50	41	36	19	13
25	14	8.4	6.4	4.7	4.0	3.8	4.5	41	44	33	19	13
26	14	8.4	6.2	4.7	4.1	4.1	5.2	33	51	30	18	13
27	14	8.3	6.0	4.8	4.3	4.1	8.5	26	52	29	18	13
28	14	8.3	6.0	4.5	4.5	4.0	9.1	30	52	27	18	12
29	13	8.3	6.2	4.5	------	3.8	9.2	44	53	26	17	12
30	13	7.8	6.0	4.6	------	3.8	7.4	52	58	26	17	12
31	12	------	5.7	4.6	------	3.8	------	56	------	26	18	------
TOTAL	393	293.1	200.8	158.8	121.3	123.3	137.6	1,184.0	1,601	972	662	474
MEAN	12.7	9.77	6.48	5.12	4.33	3.98	4.59	38.2	53.4	31.4	21.4	15.8
MAX	15	12	7.8	5.8	4.7	4.5	9.2	98	88	48	25	21
MIN	10	7.8	5.7	4.5	3.9	3.8	3.1	6.9	30	22	17	12
CFSM	1.54	1.18	.78	.62	.52	.48	.56	4.62	6.46	3.80	2.59	1.91
IN.	1.77	1.32	.90	.72	.55	.56	.62	5.33	7.21	4.38	2.98	2.13
AC-FT	780	581	398	315	241	245	273	2,350	3,180	1,930	1,310	940

CAL YR 1972 TOTAL 7,458.0 MEAN 20.4 MAX 198 MIN 3.0 CFSM 2.47 IN 33.59 AC-FT 14,790
WTR YR 1973 TOTAL 6,320.9 MEAN 17.3 MAX 98 MIN 3.1 CFSM 2.09 IN 28.47 AC-FT 12,540

NOTE.--No gage-height record Nov. 27 to Mar. 13 and Aug. 23 to Sept. 30.

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 mi (0.3 km) upstream from Willow Creek, and 14 mi (22.5 km) southwest of Darlington.

DRAINAGE AREA.--93.4 sq mi (241.9 sq km). Mean altitude, 7,960 ft (2,426 km).

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 (1,902 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 76.7 cfs (2.17 cu m/s) 11.15 in/yr (283.2 mm/yr), 55,570 acre-ft/yr (68.5 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 327 cfs (9.26 cu m/s) May 19, gage height, 3.81 ft (1.16 m); minimum daily, 16 cfs (9.453 cu m/s) Dec. 9.
Period of record: Maximum discharge, 829 cfs (23.5 cu m/s) May 24, 1967, gage height, 6.86 ft (2.09 m); minimum, 13 cfs (0.368 cu m/s) Feb. 19, 20, Mar. 7, 1967, gage height, 1.88 ft (0.57 m).

REMARKS.--Records good except those for period of no gage-height record, which are fair. Diversions above station for irrigation of about 800 acres (320 sq hm).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Nov. 21-23, 28-29, Dec. 5-17, Dec. 29 to Jan. 1, Jan. 4-10, 20, 22-29, Feb. 1-3, 8-9, 14-15, 19-22)

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	27	19	22	21	22	22	68	197	53	39	34
2	27	27	20	22	21	22	22	65	165	47	39	31
3	27	27	21	22	21	20	22	75	135	44	39	29
4	27	32	21	18	21	21	23	81	122	43	40	29
5	34	30	18	17	21	22	26	81	116	42	42	27
6	31	26	18	18	21	21	31	90	129	41	39	27
7	29	25	17	18	21	21	30	101	152	41	38	30
8	28	27	17	18	20	22	27	117	170	39	36	29
9	27	25	16	19	21	22	29	124	172	36	35	29
10	32	27	17	21	22	22	31	116	174	35	35	27
11	30	27	17	18	22	22	36	112	142	35	34	26
12	29	27	17	18	21	21	44	120	123	34	35	25
13	28	25	17	18	22	22	56	140	124	35	33	24
14	27	27	17	18	21	22	56	163	152	39	32	23
15	27	27	17	19	20	20	50	186	146	40	31	24
16	27	27	18	19	22	20	48	206	113	39	30	26
17	28	26	22	19	22	21	47	247	96	39	29	26
18	28	25	19	20	22	20	46	279	83	39	29	25
19	32	25	19	21	20	20	41	298	74	39	28	24
20	38	24	20	21	21	22	40	279	68	45	27	25
21	33	19	22	21	21	21	41	250	70	51	28	28
22	32	17	24	21	21	20	50	208	75	62	29	27
23	31	18	23	21	21	20	66	196	77	58	28	27
24	31	19	23	21	21	20	65	199	71	50	27	28
25	31	19	22	21	21	20	64	216	70	46	27	27
26	30	20	22	21	21	22	74	187	72	44	26	27
27	28	20	22	21	22	22	91	155	70	42	25	27
28	28	18	23	20	22	22	99	140	64	41	25	26
29	25	18	22	21	------	20	90	141	63	42	25	25
30	22	19	20	21	------	21	75	142	60	45	24	25
31	23	------	21	21	------	22	------	149	------	43	27	------
TOTAL	897	720	611	616	593	655	1,442	4,931	3,345	1,329	981	807
MEAN	28.9	24.0	19.7	19.9	21.2	21.1	48.1	159	112	42.9	31.6	26.9
MAX	38	32	24	22	22	22	99	298	197	62	42	34
MIN	22	17	16	17	20	20	22	65	60	34	24	23
CFSM	.31	.26	.21	.21	.23	.23	.52	1.70	1.20	.46	.34	.29
IN.	.36	.29	.24	.25	.24	.26	.57	1.96	1.33	.53	.39	.32
AC-FT	1,780	1,430	1,210	1,220	1,180	1,300	2,860	9,780	6,630	2,640	1,950	1,600

CAL YR 1972 TOTAL 20,807 MEAN 56.8 MAX 348 MIN 16 CFSM .61 IN 8.29 AC-FT 41,270
WTR YR 1973 TOTAL 16,927 MEAN 46.4 MAX 298 MIN 16 CFSM .50 IN 6.74 AC-FT 33,570

PEAK DISCHARGE (BASE, 220 CFS).--May 19 (0100) 327 cfs (3.81 ft).

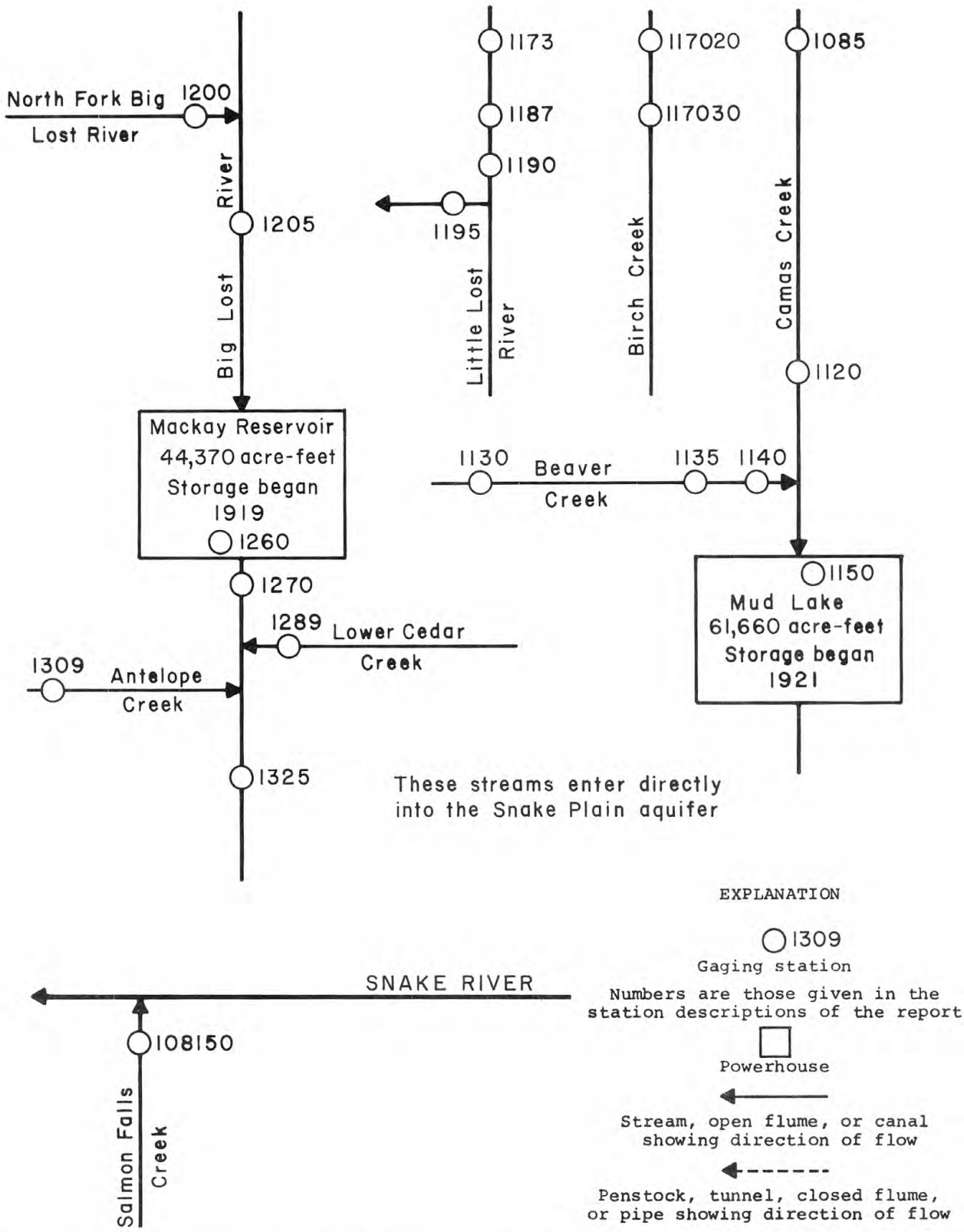

FIGURE 7. Schematic diagram showing gaging stations, diversions, and storage in Mud Lake-Lost River basins.

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 mi (0.6 km) downstream from slough entering from left bank, and 4 mi (6.4 km) southeast of Arco.

DRAINAGE AREA.--1,410 sq mi (3,650 sq km), 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 (1,597 m) by barometer. Prior to Oct. 14, 1952, at site 800 ft (244 m) upstream at datum 3.08 ft (0.94 m) higher.

AVERAGE DISCHARGE.--22 years, 98.0 cfs (2.78 cu m/s), 71,000 acre-ft/yr (87.5 cu hm).

EXTREMES.--Current year: Maximum discharge, 194 cfs (5.49 cu m/s) Apr. 13, gage height, 4.06 ft (1.24 m); maximum gage height, 5.18 ft (1.58 m) Feb. 3 (backwater from ice); minimum, 4.9 cfs (139 cu dm/s) Aug. 12 gage height, 2.27 ft (0.69 m).
Period of record: Maximum discharge, 1,890 cfs (53.5 cu m/s) July 5, 1967, gage height, 7.68 ft (2.34 m); no flow on many days.
Flood of June 29, 1965, reached a stage of 8.03 ft (2.45 m), from floodmarks, discharge, 2,500 cfs (70.8 cu m/s).

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 (23.300 cu hm) of land irrigated by diversions from river and tributaries and by ground-water withdrawals above station. About 10,200 acres (4,100 cu hm) irrigated by subirrigation above Mackay Reservoir. Records of chemical analysis for the water year 1973 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. 4-20, 23-30, Jan. 11 to Feb. 24)

2.2	4.3	3.5	80
2.5	10	4.0	158
2.7	18	4.5	293
3.0	34		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	97	112	91	101	102	139	70	22	19	19	19
2	92	95	115	92	108	102	135	64	24	20	17	20
3	91	95	117	92	115	102	139	59	29	20	19	21
4	91	99	115	86	118	103	148	52	33	19	19	23
5	90	101	105	80	118	103	158	44	31	19	16	25
6	93	97	84	85	118	103	174	41	27	21	14	22
7	94	96	92	87	114	102	172	38	22	18	11	22
8	100	101	104	87	110	102	165	36	20	14	10	20
9	113	100	92	87	105	102	158	34	17	13	9.1	15
10	128	101	94	87	112	103	158	32	16	15	9.6	16
11	134	102	96	88	112	104	163	30	17	17	9.7	17
12	135	101	102	91	110	103	168	28	18	15	9.0	17
13	133	101	100	104	114	104	182	25	19	17	9.7	18
14	131	112	98	101	113	103	170	20	19	20	9.8	21
15	133	114	97	98	107	105	163	16	23	16	10	24
16	133	113	95	100	110	105	157	12	25	14	11	23
17	130	115	94	96	110	107	149	5.6	31	14	11	24
18	117	112	95	95	116	107	133	14	38	14	12	28
19	117	99	98	94	120	109	124	7.6	46	16	13	33
20	130	104	103	94	120	109	118	7.4	44	18	15	36
21	128	104	107	93	121	111	112	13	42	23	17	34
22	118	103	106	91	123	113	102	16	32	26	19	33
23	111	99	108	90	122	110	99	12	26	35	19	33
24	110	105	106	91	115	112	99	10	25	38	16	31
25	109	104	102	92	111	116	93	9.7	24	33	16	29
26	113	108	98	92	106	120	81	14	22	27	17	29
27	98	102	97	91	104	122	76	15	21	24	17	33
28	94	99	96	92	103	122	73	16	22	26	15	33
29	93	99	90	94	------	124	75	17	20	28	15	32
30	93	103	94	106	------	126	76	18	19	27	15	30
31	95	------	92	110	------	133	------	21	------	20	14	------
TOTAL	3,433	3,081	3,104	2,877	3,156	3,389	3,959	797.3	774	646	433.9	761
MEAN	111	103	100	92.8	113	109	132	25.7	25.8	20.8	14.0	25.4
MAX	135	115	117	110	123	133	182	70	46	38	19	36
MIN	86	95	84	80	101	102	73	5.6	16	13	9.0	15
AC-FT	6,810	6,110	6,160	5,710	6,260	6,720	7,850	1,580	1,540	1,280	861	1,510

CAL YR 1972 TOTAL 35,295.4 MEAN 96.4 MAX 204 MIN 8.2 AC-FT 70,010
WTR YR 1973 TOTAL 26,411.2 MEAN 72.4 MAX 182 MIN 5.6 AC-FT 52,390

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 mi (0.8 km) downstream from Lower Salmon Falls powerplant, 1 mi (1.6 km) upstream from Big Wood River, 2.2 mi (3.5 km) north of Hagerman, and at mile 572.4 (921 km).

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 (831.401 m) above mean sea level (stadia levels). Prior to Jan. 3, 1950, at site 340 ft (103.6 m) upstream.

AVERAGE DISCHARGE.--36 years, 8,889 cfs (252 cu m/s), 6,440,000 acre-ft/yr (7,940 cu hm/yr); 15-year base period (1952-67), 8,092 cfs (229 cu m/s).

EXTREMES.--Current year: Maximum discharge, 18,800 cfs (532 cu m/s) Nov. 8 (gage height, 11.84 ft or 3.609 m); minimum, 3,560 cfs (101 cu m/s) July 14 (gage height, 5.23 ft or 1.594 m); minimum daily, 5,060 cfs (143 cu m/s) May 17.
Period of record: Maximum discharge, 31,200 cfs (884 cu m/s) June 24, 1964 (gage height, 15.73 ft or 4.795 m); minimum, probably less than 100 cfs (2.83 cu m/s) Jan. 10, 11, 1950, when river was below intake pipes; minimum daily, 3,970 cfs (112 cu m/s) July 8, 1951.

REMARKS.--Records excellent. Flow regulated by American Falls Reservoir 141.6 mi (227.8 km) 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 (943,000 sq hm) of which about 665,000 acres (269,000 sq hm) are by withdrawals from ground water and about 83,000 acres (33,600 sq hm) are irrigated below station.

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

6.0	4,820	10.0	13,800
7.0	6,760	12.0	19,300
8.0	8,930		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,660	14,900	14,400	15,600	13,600	15,100	10,600	9,440	5,830	5,480	6,070	6,810
2	9,140	16,100	16,800	15,500	13,600	15,400	11,100	7,660	5,760	5,570	6,000	6,920
3	8,650	16,200	16,600	15,300	13,500	14,900	10,900	6,770	5,940	5,650	6,060	7,030
4	8,750	16,800	15,800	14,600	13,600	15,500	10,200	6,470	6,010	5,500	6,070	6,930
5	10,000	16,600	15,900	12,800	14,200	15,500	11,100	6,220	5,790	5,530	6,070	7,020
6	11,600	16,300	14,900	12,200	14,200	15,300	11,900	5,810	5,790	5,560	6,060	6,930
7	14,600	14,200	13,800	14,400	14,400	15,400	11,500	5,760	5,660	5,530	6,070	6,780
8	15,000	17,300	14,800	15,100	14,500	14,800	10,700	5,610	5,640	5,550	6,080	6,880
9	15,000	17,400	14,200	13,100	14,500	14,700	11,700	5,650	5,590	5,540	6,110	6,970
10	15,900	13,500	15,400	13,000	14,800	13,100	11,800	5,470	5,620	5,540	5,970	6,940
11	15,000	14,900	14,800	14,000	15,100	13,100	12,200	5,550	5,900	5,400	6,080	7,020
12	14,900	14,300	14,100	14,300	15,300	13,500	11,800	5,500	5,780	5,660	6,080	6,960
13	15,000	15,300	14,900	14,500	15,300	13,100	12,500	5,370	5,690	5,670	6,070	6,930
14	16,300	16,700	13,500	14,400	14,700	13,400	13,500	5,380	6,000	5,880	6,030	6,980
15	16,700	16,700	14,000	14,000	14,700	13,800	15,200	5,280	6,150	5,840	5,930	7,090
16	16,700	15,600	12,900	14,100	14,600	14,500	17,300	5,250	6,250	5,900	5,960	7,170
17	16,700	15,900	13,500	15,700	14,600	14,300	17,000	5,060	6,280	5,830	5,880	7,180
18	16,900	15,800	13,900	16,900	14,400	14,400	14,400	5,200	6,390	5,720	5,990	7,210
19	17,000	15,600	13,800	17,000	14,500	14,400	12,300	5,280	6,380	5,880	6,030	7,310
20	17,300	15,500	14,800	16,200	14,700	13,800	11,800	5,420	6,180	6,000	6,090	7,440
21	17,100	15,400	15,300	16,500	14,700	12,900	12,100	5,450	5,890	6,020	6,100	7,540
22	16,900	15,000	16,100	16,700	14,700	13,100	12,300	5,440	5,660	6,130	6,190	7,670
23	16,300	14,900	17,100	16,500	14,400	13,100	12,400	5,450	5,530	6,320	6,220	7,750
24	15,400	14,900	17,400	15,500	14,300	12,800	10,800	5,350	5,680	6,250	6,200	8,020
25	13,900	14,600	17,000	14,300	14,200	12,500	9,080	5,550	5,680	6,140	6,230	7,680
26	10,600	14,700	17,300	14,500	14,300	12,200	7,990	5,660	5,540	6,100	6,420	7,940
27	8,310	14,100	17,100	13,900	14,400	9,140	7,520	5,680	5,600	6,120	6,380	7,300
28	9,580	15,000	16,900	13,800	14,900	8,710	7,530	5,700	5,490	6,030	6,380	7,500
29	13,400	14,800	16,200	12,800	------	8,540	8,400	5,690	5,430	6,080	6,300	7,230
30	14,100	11,300	16,200	13,500	------	8,350	9,330	5,820	5,500	6,100	6,350	7,270
31	15,700	------	16,000	14,900	------	9,170	------	5,630	------	6,060	6,430	------
TOTAL	431,090	460,300	475,400	455,600	404,700	408,510	346,950	179,570	174,630	180,580	189,900	216,400
MEAN	13,910	15,340	15,340	14,700	14,450	13,180	11,570	5,793	5,821	5,825	6,126	7,213
MAX	17,300	17,400	17,400	17,000	15,300	15,500	17,300	9,440	6,390	6,320	6,430	8,020
MIN	8,310	11,300	12,900	12,200	13,500	8,350	7,520	5,060	5,430	5,400	5,880	6,780
AC-FT	855,100	913,000	943,000	903,700	802,700	810,300	688,200	356,200	346,400	358,200	376,700	429,200

CAL YR 1972 TOTAL 4,910,120 MEAN 13,420 MAX 26,200 MIN 5,450 AC-FT 9,739,000
WTR YR 1973 TOTAL 3,923,630 MEAN 10,750 MAX 17,400 MIN 5,060 AC-FT 7,783,000

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 (1,660 sq km), approximately. Mean altitude, 7,620 ft (2,323 m).

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 (1,614.044 m) above mean sea level, unadjusted. Nov. 16, 1934, to Oct. 15, 1970, at datum 2.00 ft (0.610 m) 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 (11 m) upstream at different datum. Nov. 10, 1971, to Sept. 30, 1972, nonrecording gages at different sites at same datum.

AVERAGE DISCHARGE.--58 years, 443 cfs (12.54 cu m/s), 321,000 acre-ft/yr (396 cu hm/yr); 15-year base period (1952-67), 462 cfs (13.08 cu m/s).

EXTREMES (Combined flow).--Current year: Maximum daily discharge, 1,650 cfs (46.7 cu m/s) May 19; minimum daily, 117 cfs (3.31 cu m/s) Dec. 9.
Period of record: Maximum daily discharge, 4,520 cfs (128 cu m/s) May 25, 1958; minimum daily, 15 cfs (0.42 cu m/s) Dec. 27, 1931.
(River only).--Current year: Maximum discharge, 1,830 cfs (51.8 cu m/s) May 19 (gage height, 4.40 ft or 1.341 m); minimum discharge, 105 cfs (2.97 cu m/s) Feb. 15 (gage height, 1.17 ft or 0.357 m).
Period of record: Maximum discharge, 4,790 cfs (136 cu m/s) May 25, 1967; maximum gage height, 10.66 ft (3.249 m), 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 or 4,000 sq hm (1966 determination) of which about 1,200 acres (490 sq hm) are below stations. Storage above stations is negligible.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280	254	202	175	164	165	187	454	984	496	243	176
2	280	253	216	181	163	159	180	433	899	441	234	178
3	278	251	222	181	169	146	183	445	790	414	236	169
4	281	265	211	146	182	151	193	458	716	398	235	162
5	304	268	172	148	182	156	213	458	697	389	237	160
6	287	249	144	146	181	149	248	471	785	379	224	157
7	275	252	130	145	178	150	253	500	906	369	214	174
8	264	255	122	145	161	159	245	571	1,000	355	205	182
9	262	246	117	151	156	155	259	624	1,060	334	197	175
10	285	246	120	150	175	161	258	608	1,110	330	191	170
11	289	246	122	149	184	165	279	580	918	322	184	162
12	289	244	125	145	181	148	302	604	827	321	179	158
13	285	244	128	155	169	161	362	729	827	343	177	153
14	280	244	133	162	155	154	382	899	1,130	344	172	149
15	282	244	139	175	142	151	378	1,050	1,080	328	170	153
16	287	241	133	188	155	151	368	1,230	809	313	166	162
17	290	241	138	189	163	165	357	1,400	699	299	161	159
18	284	238	148	188	172	146	349	1,570	614	291	156	153
19	278	238	159	184	148	146	332	1,650	526	301	153	149
20	308	229	159	151	143	168	321	1,420	508	354	151	154
21	293	200	169	149	151	164	306	1,330	517	334	152	163
22	286	179	184	146	156	162	315	1,200	573	360	159	158
23	278	176	213	154	163	157	334	1,100	595	337	166	158
24	275	182	213	166	161	159	374	1,060	529	320	161	162
25	268	192	198	182	167	161	412	1,040	524	303	162	165
26	263	234	187	180	161	174	446	928	557	289	165	164
27	257	219	184	166	161	180	510	831	593	285	161	160
28	254	190	198	155	161	178	565	739	563	273	163	164
29	250	173	187	171	------	173	545	740	593	265	158	169
30	243	193	150	175	------	175	489	783	550	263	152	168
31	240	------	166	175	------	189	------	881	------	255	155	------
TOTAL	8,575	6,886	5,089	5,073	4,604	4,978	9,945	26,786	22,479	10,405	5,639	4,886
MEAN	277	230	164	164	164	161	332	864	749	336	182	163
MAX	308	268	222	189	184	189	565	1,650	1,130	496	243	182
MIN	240	173	117	145	142	146	180	433	508	255	151	149
AC-FT	17,010	13,660	10,090	10,060	9,130	9,870	19,730	53,130	44,590	20,640	11,180	9,690

CAL YR 1972 TOTAL 211,744 MEAN 579 MAX 4,400 MIN 117 AC-FT 420,000
WTR YR 1973 TOTAL 115,345 MEAN 316 MAX 1,650 MIN 117 AC-FT 228,800

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 mi (2.4 km) upstream from maximum flow line of Magic Reservoir, 2.8 mi (4.5 km) upstream from Camas Creek, 10.5 mi (16.9 km) southwest of Bellevue, and at mile 65.7 (105.7 km).

DRAINAGE AREA.--824 sq mi (2,134 sq km).

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 (1,463 m) (from topographic map). Prior to July 8, 1921, at site 0.1 mi (0.2 km) downstream at different datum. July 8, 1921, to Oct. 5, 1954, at site 0.2 mi (0.3 km) upstream at different datum. Oct. 6, 1954, to Oct. 25, 1965, at site 1 mi (1.6 km) upstream at different datum.

AVERAGE DISCHARGE.--35 years (1915-16, 1921-22, 1939-41, 1942-73), 301 cfs (8.52 cu m/s), 218,100 acre-ft/yr (269 cu hm); 15-year base period (1952-67), 280 cfs (7.93 cu m/s).

EXTREMES.--Current year: Maximum discharge, 602 cfs (17.0 cu m/s) May 20, gage height, 4.30 ft (1.31 m); minimum, 58 cfs (1.64 cu m/s) Sept. 19, gage height, 2.89 ft (0.88 m).
Period of record: Maximum discharge, 4,130 cfs (117 cu m/s) May 25, 1956; maximum gage height, 6.43 ft (1.96 m) May 12, 1958, site and datum then in use; minimum discharge recorded, 7 cfs (0.20 cu m/s) Apr. 14, 1932 (gage height, 1.10 ft (0.34 m), site and datum then in use).

REMARKS.--Records fair. Diversions above station for irrigation of about 21,800 acres (8.800 sq hm) of which about 400 acres (160 sq hm) are by withdrawals from ground water (1966 determination). Storage above station is negligible. Records of chemical analysis for the water year 1973 are published in Part 2 of this report.

COOPERATION.--Recorder inspected by employees of Water District 37.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 9-11, Jan. 1, 7, 20, 22-24, 28, Feb. 2, 8, 9, 15, 16, 19-22)

2.9	59	3.9	335
3.2	110	4.3	595
3.5	179		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	151	131	76	86	100	156	353	314	172	91	93
2	143	154	134	83	79	103	154	341	324	162	89	95
3	147	149	138	89	76	102	166	341	298	143	88	97
4	149	172	137	82	86	99	177	347	278	138	88	95
5	169	184	113	71	91	99	193	319	253	133	84	89
6	172	169	91	67	95	99	199	314	253	123	79	84
7	172	162	83	66	95	97	187	314	269	102	77	81
8	172	163	76	64	89	98	179	319	303	106	76	81
9	172	159	72	64	86	99	177	341	330	102	71	79
10	199	157	68	62	92	102	177	324	359	99	73	74
11	190	158	68	62	99	107	177	303	335	99	76	72
12	182	162	68	65	100	105	193	287	309	102	81	71
13	162	156	67	64	99	103	217	287	293	108	82	71
14	157	153	67	62	98	104	265	341	335	114	79	67
15	154	157	67	63	95	102	269	408	402	114	81	62
16	156	160	67	64	92	102	274	434	341	108	81	62
17	161	158	68	66	96	106	293	473	309	102	81	62
18	159	154	70	76	102	110	274	499	282	95	82	62
19	156	153	74	83	100	106	269	532	248	91	83	62
20	165	150	72	81	96	104	265	567	217	97	84	61
21	161	142	74	77	88	116	257	546	190	104	83	64
22	152	131	88	72	92	118	253	499	182	110	82	62
23	144	123	99	68	95	123	261	460	187	116	81	62
24	137	121	99	70	99	129	269	428	190	116	76	62
25	142	129	93	73	99	138	293	421	172	114	77	65
26	141	135	89	81	98	149	324	395	174	106	81	64
27	140	142	89	79	97	154	341	353	182	102	86	64
28	138	139	95	75	97	154	365	330	182	97	86	64
29	147	132	93	69	------	156	377	282	182	97	86	62
30	150	130	77	81	------	154	371	274	177	99	86	62
31	148	------	72	84	------	157	------	274	------	95	88	------
TOTAL	4,875	4,505	2,699	2,239	2,617	3,595	7,372	11,706	7,870	3,466	2,538	2,151
MEAN	157	150	87.1	72.2	93.5	116	246	378	262	112	81.9	71.7
MAX	199	184	138	89	102	157	377	567	402	172	91	97
MIN	137	121	67	62	76	97	154	274	172	91	71	61
AC-FT	9,670	8,940	5,350	4,440	5,190	7,130	14,620	23,220	15,610	6,870	5,030	4,270

CAL YR 1972 TOTAL 128,831 MEAN 352 MAX 2,730 MIN 61 AC-FT 255,500
WTR YR 1973 TOTAL 55,633 MEAN 152 MAX 567 MIN 61 AC-FT 110,300

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 mi (0.3 km) north of Macon siding on Hill City branch of Union Pacific Railroad, 0.2 mi (0.3 km) downstream from Willow Creek, 2.6 mi (4.2 km) upstream from maximum flow line of Magic Reservoir, 4 mi (6.4 km) southeast of Blaine, and at mile 7.1 (11.4 km).

DRAINAGE AREA.--648 sq mi (1,678 km). Mean altitude, 5,600 ft (1,707 m).

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 (1,484 m) (by barometer). Prior to June 22, 1966, at site 600 ft (183 m) downstream at datum 0.66 ft (0.20 m) lower.

AVERAGE DISCHARGE.--29 years, 187 cfs (5.30 cu m/s), 135,500 acre-ft/yr (167 cu hm/yr); 15-year base period (1952-67), 165 cfs (4.67 cu m/s).

EXTREMES.--Current year: Maximum discharge, 1,730 cfs (49.0 cu m/s) Apr. 15, gage height, 8.30 ft (2.53 m); minimum, 3.7 cfs (104 cu dm/s) Sept. 13, gage height, 3.03 ft (0.92 m).
Period of record: Maximum discharge recorded, 9,780 cfs (277 cu m/s) Apr. 8, 1943; maximum gage height, 16.2 ft (4.9 m), site and datum then in use, Feb. 3, 1963, from floodmark; minimum discharge recorded, 1.2 cfs (34 cu dm/s) Aug. 11, 12, 1959; minimum gage height, 1.04 ft (0.32 m), site and datum then in use, Aug. 23, 25, 1963.

REMARKS.--Records good. Flow regulated by Mormon Reservoir on McKinney Creek, capacity, 31,240 acre-ft (38.5 cu hm), and three minor reservoirs, combined capacity, 580 acre-ft (0.72 cu hm). Diversions above station for irrigation of about 9,400 acres (3,800 sq hm) of which about 1,500 acres (610 sq hm) are by withdrawals from ground water (1966 determination). Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WSP 1217: Drainage area.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Nov. 27-30, Dec. 1, Jan. 20, 21)

3.2	8.2	4.5	183	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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	26	32	30	34	43	227	296	78	13	5.5	4.4
2	13	27	38	32	33	45	222	275	71	11	5.2	4.4
3	12	30	40	34	35	46	262	266	67	9.7	5.0	4.4
4	13	38	32	30	37	47	327	269	66	9.7	5.0	4.3
5	18	43	27	29	37	46	564	269	59	9.0	4.8	4.3
6	18	47	27	31	37	45	1,310	266	55	8.4	4.4	4.3
7	16	40	26	30	38	46	1,230	256	46	8.0	4.8	4.3
8	15	36	24	30	35	47	1,010	248	39	8.2	4.8	4.3
9	18	35	21	29	34	47	995	240	31	7.6	4.8	4.3
10	20	35	21	30	39	49	1,110	232	26	6.8	4.8	4.3
11	24	36	21	30	37	51	1,150	224	22	6.8	5.0	4.3
12	22	38	22	31	37	50	1,250	218	25	7.2	4.8	4.1
13	27	37	23	32	37	52	1,470	212	24	7.6	4.6	4.1
14	24	36	23	34	35	51	1,640	207	27	8.0	4.6	4.1
15	24	37	22	35	34	53	1,550	207	32	8.0	4.8	4.3
16	27	38	23	37	35	55	1,180	199	33	7.2	4.4	4.3
17	27	40	24	37	36	59	909	202	41	6.6	4.4	4.3
18	26	41	24	37	38	56	884	207	43	6.2	4.3	4.3
19	27	40	26	36	34	58	757	207	37	5.5	4.3	4.2
20	29	38	28	31	34	65	633	199	29	5.5	3.9	4.3
21	27	36	30	31	34	69	511	179	25	6.1	3.9	4.4
22	27	33	35	30	35	71	446	156	21	7.0	3.9	4.6
23	27	31	37	32	39	76	407	130	17	6.7	3.9	4.6
24	27	29	39	33	37	89	384	90	14	6.1	3.9	4.8
25	26	29	39	36	39	110	366	104	13	5.8	4.1	4.8
26	25	32	38	37	39	128	345	115	13	6.7	4.1	4.8
27	26	32	40	33	40	153	338	109	14	6.1	4.1	4.8
28	26	32	42	33	41	183	334	93	15	6.7	3.9	4.8
29	26	30	38	35	------	188	338	78	15	6.1	3.9	4.6
30	27	30	32	36	------	196	324	77	14	5.8	3.9	4.6
31	26	------	32	36	------	223	------	76	------	5.8	4.3	------
TOTAL	703	1,052	926	1,017	1,020	2,497	22,473	5,906	1,012	228.9	138.1	132.4
MEAN	22.7	35.1	29.9	32.8	36.4	80.5	749	191	33.7	7.38	4.45	4.41
MAX	29	47	42	37	41	223	1,640	296	78	13	5.5	4.8
MIN	12	26	21	29	33	43	222	76	13	5.5	3.9	4.1
AC-FT	1,390	2,090	1,840	2,020	2,020	4,950	44,580	11,710	2,010	454	274	263

CAL YR 1972 TOTAL 98,379.2 MEAN 269 MAX 3,490 MIN 8.6 AC-FT 195,100
WTR YR 1973 TOTAL 37,105.4 MEAN 102 MAX 1,640 MIN 3.9 AC-FT 73,600

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 mi (29 km) northwest of Richfield, and at mile 60.0 (96.5 km).

DRAINAGE AREA.--1,600 sq mi (4,140 sq km), 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 (1,463 m) above datum of Idaho Irrigation Co., which is reported to be about 137 ft (42 m) below mean sea level. Datum of gages prior to Oct. 1, 1942, was 4,800 ft (1,463 m) lower.

EXTREMES.--Current year: Maximum contents observed, 192,700 acre-ft (238 cu hm) Apr. 25, 29, 30 (gage height, 135.3 ft or 41.2 m); minimum observed, 19,200 acre-ft (23.7 cu hm) Sept. 30.
Period of record: Maximum contents observed, 195,400 acre-ft (241 cu hm) May 11-13, 1969 (gage height, 136.0 ft or 41.5 m); 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 (1.5 m) in 1917. Capacity is 191,500 acre-ft (236 cu hm) between gage heights 21.4 ft or 6.5 m (2.9 ft above bottom of outlet pipe) and 135.0 ft or 41.1 m (top of 5-ft flashboards). Dead storage unknown. Water is used for irrigation of about 68,000 acres (27,500 sq hm) of land in Carey Act project of Big Wood Canal Co. Diversions above station for irrigation of about 32,600 acres (13,200 sq hm) of which about 1,900 acres (769 sq hm) 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)

60.0	18,400
80.0	47,700
100.0	87,700
120.0	139,500
136.0	195,400

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79,500	91,600	100,600	108,800	116,600	124,700	139,200	192,300	180,000	146,600	98,200	49,300
2	79,900	92,100	101,100	109,000	116,800	124,700	140,400	192,300	178,900	145,300	96,700	48,100
3	80,300	92,300	101,300	109,300	117,100	125,200	141,600	191,900	177,700	143,800	95,100	47,000
4	80,700	92,800	101,600	109,600	117,400	125,800	142,800	191,900	176,600	142,200	93,400	45,600
5	81,200	93,200	102,000	109,800	117,600	126,000	145,000	191,900	175,500	140,700	92,100	44,300
6	81,400	93,700	102,300	110,100	117,900	126,300	147,200	191,500	174,400	139,200	90,200	43,100
7	81,800	94,100	102,500	110,300	118,400	126,600	150,700	191,500	173,000	137,700	88,600	42,100
8	82,200	94,600	102,800	110,600	118,700	126,900	153,300	191,100	171,900	136,500	87,100	41,000
9	82,700	95,100	103,000	110,800	119,000	127,200	155,600	190,700	170,800	134,800	85,500	39,900
10	83,100	95,600	103,300	111,100	119,200	127,400	158,300	190,700	169,700	133,300	84,000	38,900
11	83,500	95,800	103,300	111,400	119,500	128,000	161,000	189,900	169,000	131,900	82,500	37,800
12	84,000	96,300	103,500	111,600	119,800	128,300	163,700	189,500	168,000	130,200	80,700	36,800
13	84,400	96,700	103,800	111,900	120,000	128,500	166,500	188,800	166,900	128,500	79,200	35,600
14	84,800	97,200	104,000	112,100	120,300	129,100	170,100	188,400	165,800	127,200	77,600	34,600
15	85,300	97,000	104,300	112,400	120,600	129,400	173,700	187,600	164,800	125,500	75,900	33,300
16	85,700	96,500	104,500	112,600	120,900	129,700	177,000	187,200	164,100	123,800	74,500	32,300
17	86,200	96,300	104,800	112,900	121,400	130,200	180,000	187,200	163,000	122,200	72,800	31,200
18	86,400	96,000	105,000	113,200	121,700	130,500	182,600	186,800	162,000	120,600	71,200	30,200
19	86,800	96,500	105,300	113,400	121,900	130,800	184,900	186,800	161,000	119,000	-	29,100
20	87,300	96,700	105,500	113,700	122,200	131,400	186,800	187,600	160,000	117,400	67,800	28,100
21	87,700	97,200	105,800	113,900	122,500	131,900	188,800	187,600	158,600	115,800	66,200	27,100
22	88,200	97,700	106,000	114,200	122,700	132,200	190,300	188,000	157,600	114,200	64,800	26,200
23	88,400	97,900	106,500	114,500	123,000	132,800	191,500	187,600	156,300	112,600	63,200	25,300
24	88,900	98,400	106,800	114,500	123,300	133,100	191,900	187,200	155,300	111,100	61,700	24,300
25	89,100	98,700	107,000	114,700	123,600	133,600	192,700	186,800	154,000	109,600	60,100	23,500
26	89,500	98,900	107,300	115,000	123,800	134,500	191,900	186,400	152,600	107,800	58,400	22,600
27	89,800	99,100	107,500	115,300	124,100	135,100	192,300	185,700	151,700	106,300	56,800	21,700
28	90,200	99,600	107,800	115,500	124,400	136,000	192,300	184,500	150,400	104,800	55,300	20,900
29	90,500	99,900	108,000	115,800	------	136,800	192,700	183,000	149,100	103,300	53,600	20,100
30	90,700	100,100	108,300	116,000	------	137,400	192,700	181,900	147,800	101,300	52,100	19,200
31	91,100	------	108,500	116,300	------	138,300	------	180,700	------	99,900	50,600	------
MAX	91,100	100,100	108,500	116,300	124,400	138,300	192,700	192,300	180,000	146,600	98,200	49,300
MIN	79,500	91,600	100,600	108,800	116,600	124,700	139,200	180,700	147,800	99,900	50,600	19,200
(†)	101.3	105.3	108.7	111.7	114.7	119.6	135.3	132.2	122.7	105.2	81.6	-
(‡)	+11,900	+9,000	+8,400	+7,800	+8,100	+13,900	+54,400	-12,000	-32,900	-47,900	-49,300	-31,400

CAL YR 1972..... ‡ -39,000
WTR YR 1973..... ‡ -60,000

† 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 mi (0.8 km) downstream from Magic Dam, 18 mi (28.9 km) northwest of Richfield, and at mile 59.5 (95.7 m).

DRAINAGE AREA.--1,600 sq mi (4,140 sq km), approximately.

PERIOD OF RECORD.--April 1911 to current year (no winter records 1912).

GAGE.--Water-stage recorder. Altitude of gage is 4,665 ft (1,422 m) (by barometer).

AVERAGE DISCHARGE.--61 years (1912-73), 458 cfs (13.0 cu m), 331,800 acre-ft/yr (409 cu hm/yr); 15-year base period (1952-67), 480 cfs (13.6 cu m).

EXTREMES.--Current year: Maximum discharge, 1,140 cfs (32.3 cu m/s) July 7, gage height, 4.93 ft (1.50 m); minimum, 4.0 cfs (1.13 cu m/s) Sept. 30.
Period of record: Maximum discharge, 10,000 cfs (283 cu m/s) Apr. 26, 1952, gage height, 15.68 ft (4.78 m), from floodmark; no flow Feb. 3, 1915.

REMARKS.--Records good. Flow regulated by Magic Reservoir 0.5 mi (0.8 km) upstream (see sta 13142000), Mormon Reservoir on tributary of Camas Creek, capacity, 31,240 acre-ft (38.5 cu hm), and smaller reservoirs having combined capacity of about 680 acre-ft (0.838 cu hm). Diversions above station for irrigation of about 32,600 acres (13,190 sq hm) of which about 1,900 acres (770 sq hm) 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
2.0	15	3.5	359
2.2	33	4.0	607
2.5	74	5.0	1,260

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	5.6	7.7	7.7	8.2	8.9	8.1	787	852	833	871	718
2	5.3	5.6	7.6	7.8	8.3	8.4	8.1	743	852	826	867	694
3	5.4	5.6	7.6	7.9	8.4	8.6	8.2	700	859	846	863	688
4	5.6	6.1	7.8	7.8	8.6	8.6	8.2	682	872	859	861	653
5	5.3	4.8	7.8	7.7	8.7	8.8	8.2	670	872	852	857	641
6	5.6	5.2	7.8	7.8	8.6	8.7	8.2	670	872	852	851	630
7	6.0	5.2	7.8	7.7	8.8	8.6	8.4	700	885	865	846	618
8	6.6	5.2	8.1	7.8	8.1	8.5	8.5	730	892	865	842	613
9	7.0	5.2	7.7	7.9	8.3	8.8	8.8	700	892	878	838	613
10	7.3	5.2	7.7	7.8	8.7	9.0	9.3	730	892	885	860	607
11	7.3	5.2	7.7	7.9	8.9	8.8	9.9	712	892	878	871	602
12	7.6	5.2	7.7	8.1	8.4	8.5	10	743	892	878	866	591
13	8.2	5.2	7.7	8.0	8.7	8.8	11	762	898	898	861	596
14	8.5	72	7.7	8.0	8.3	8.7	12	807	898	898	855	596
15	8.5	343	7.7	8.3	8.1	8.7	12	852	898	898	850	591
16	8.5	417	7.7	8.5	8.3	8.7	13	872	898	918	861	591
17	8.5	417	7.7	8.2	8.3	8.7	15	898	905	911	866	591
18	8.8	168	7.8	8.7	8.5	8.4	15	911	878	905	862	585
19	8.4	7.7	7.7	8.0	8.2	8.6	15	911	852	911	856	585
20	8.2	7.7	7.5	8.1	8.1	8.6	19	918	859	931	867	580
21	8.2	7.7	7.6	8.2	7.8	8.8	30	911	859	903	872	574
22	8.2	7.3	7.7	7.8	8.0	8.5	45	911	807	898	839	569
23	7.7	7.5	7.6	7.8	8.5	8.5	262	911	826	900	826	563
24	7.7	7.7	7.6	7.8	9.0	8.3	441	905	820	896	833	547
25	7.7	7.7	7.4	8.0	8.9	8.4	820	905	820	892	813	526
26	6.9	7.1	7.4	8.2	9.2	8.3	724	905	820	890	820	510
27	6.5	7.3	7.6	8.1	9.5	8.3	607	905	813	886	807	505
28	6.1	7.7	7.9	8.3	9.0	8.2	658	892	833	883	794	495
29	6.1	7.7	7.7	8.3	------	8.2	787	872	839	880	787	490
30	6.1	7.7	7.8	8.3	------	8.2	833	859	833	878	768	282
31	6.1	------	7.8	8.3	------	8.1	------	859	------	875	762	------
TOTAL	219.3	1,577.1	238.6	248.8	238.4	265.2	5,422.9	25,333	25,880	27,368	26,092	17,444
MEAN	7.07	52.6	7.70	8.03	8.51	8.55	181	817	863	883	842	581
MAX	8.8	417	8.1	8.7	9.5	9.0	833	918	905	931	872	718
MIN	5.3	4.8	7.4	7.7	7.8	8.1	8.1	670	807	826	762	282
AC-FT	435	3,130	473	493	473	526	10,760	50,250	51,330	54,280	51,750	34,600

CAL YR 1972 TOTAL 256,612.8 MEAN 701 MAX 3,450 MIN 4.8 AC-FT 509,000
WTR YR 1973 TOTAL 130,327.3 MEAN 357 MAX 931 MIN 4.8 AC-FT 258,500

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 mi (0.6 km) downstream from Copper Creek, 0.6 mi (1 km) upstream from High Five Creek, 13.5 mi (21.7 km) northwest of Carey, and at mile 73.0 (117.5 km).

DRAINAGE AREA.--248 sq mi (642 sq km). Mean altitude, 7,220 ft (2,200 m).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,320 ft (1,620 m) (by barometer).

AVERAGE DISCHARGE.--15 years, 156 cfs (4.42 cu m/s), 113,000 acre-ft/yr (139 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 659 cfs (18.7 cu m/s) Apr. 13, gage height, 3.95 ft (1.20 m); minimum, 27 cfs (0.76 cu m/s) Nov. 23, gage height, 1.17 ft (0.36 m).
Period of record: Maximum discharge, 2,480 cfs (70.2 cu m/s) Apr. 22, 1969, gage height, 7.01 ft (2.14 m); minimum, 16 cfs (0.45 cu m/s) Aug. 20, 1961, gage height, 1.38 ft (0.42 m); minimum gage height, 1.17 ft (0.36 m) Nov. 23, 1972.

REMARKS.--Records good except those for December to February, which are fair. Diversions above station for irrigation of about 1,300 acres (526 sq hm) (1966 determination).

ıting table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 5-17, Dec. 25 to Jan. 10, Jan. 20 to Feb. 3, Feb. 8-10, 15-24)

1.2	27	2.5	219
1.4	45	3.0	340
1.7	80	4.0	695
2.0	124		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	71	62	61	52	58	64	277	346	138	54	46
2	61	69	63	58	53	56	67	261	293	119	51	47
3	59	69	62	58	56	60	68	275	250	110	51	44
4	65	101	58	48	59	62	80	273	226	105	55	42
5	76	92	42	50	58	62	110	266	215	101	57	41
6	69	77	50	56	58	63	170	272	241	100	50	40
7	66	74	54	58	56	63	140	287	276	97	47	43
8	66	76	51	57	50	60	120	327	301	89	45	45
9	66	73	46	58	54	61	140	346	308	84	44	42
10	88	71	47	60	58	61	180	328	306	78	44	41
11	80	72	53	57	58	63	250	315	255	78	42	42
12	80	71	54	58	56	59	339	332	230	78	41	42
13	78	69	54	59	55	61	489	372	232	80	41	40
14	76	69	54	59	48	59	501	420	296	80	39	39
15	83	71	54	58	47	58	469	447	327	76	39	40
16	81	72	57	60	54	61	407	481	243	74	38	41
17	82	72	60	59	57	64	454	497	204	69	38	39
18	80	70	60	59	56	61	367	535	172	65	36	39
19	85	70	61	54	57	64	282	547	149	98	36	38
20	101	67	60	47	58	67	267	493	142	102	35	40
21	90	58	62	54	58	67	281	444	150	89	36	41
22	86	54	71	54	60	67	336	388	164	103	38	40
23	84	45	65	54	62	65	368	370	169	94	36	41
24	80	63	64	54	61	67	345	346	145	82	35	42
25	80	59	55	57	60	70	318	343	149	75	35	44
26	77	71	56	56	57	66	320	306	158	70	36	42
27	73	56	62	50	56	66	362	271	164	69	35	41
28	73	43	64	54	55	66	383	239	159	68	35	43
29	70	47	54	55	------	62	357	246	169	66	35	43
30	65	53	54	58	------	65	307	255	156	68	35	43
31	67	------	60	56	------	66	------	276	------	60	40	------
TOTAL	2,349	2,025	1,769	1,736	1,569	1,950	8,341	10,835	6,595	2,665	1,279	1,251
MEAN	75.8	67.5	57.1	56.0	56.0	62.9	278	350	220	86.0	41.3	41.7
MAX	101	101	71	61	62	70	501	547	346	138	57	47
MIN	59	43	42	47	47	56	64	239	142	60	35	38
AC-FT	4,660	4,020	3,510	3,440	3,110	3,870	16,540	21,490	13,080	5,290	2,540	2,480

CAL YR 1972 TOTAL 48,404 MEAN 132 MAX 610 MIN 42 AC-FT 96,010
WTR YR 1973 TOTAL 42,364 MEAN 116 MAX 547 MIN 35 AC-FT 84,030

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 mi (13.7 km) northwest of Carey, and at mile 71.0 (114.2 km).

DRAINAGE AREA.--279 sq mi (723 sq km).

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

GAGE.--Nonrecording gage. Datum of gage is 5,100 ft (1,554 m) above mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents observed, 30,100 acre-ft (37.1 cu hm) May 14-20, gage height, 137.62 ft (41.95 m); minimum contents observed, 2,560 acre-ft (3.16 cu hm) Sept. 30, gage height, 60.48 ft (18.43 m).
Period of record: Maximum contents observed, 30,940 acre-ft (38.1 cu hm) June 10, 1963, gage height, 138.99 ft (42.36 m); minimum observed, 66 acre-ft (0.081 cu hm) Aug. 17, 1959, gage height, 30.22 ft (9.21 m), 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 (12.2 m) in 1959. Storage began Feb. 12, 1941. Capacity of reservoir is 29,960 acre-ft (36.9 cu hm) between gage heights 27.4 (8.4 m) (0.4 ft (0.1 m) below bottom of outlet gates) and 137.3 ft (41.8 m) (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)

60.0	2,490	100.0	12,500
70.0	4,150	120.0	20,900
80.0	6,370	138.0	30,400
90.0	9,160		

CONTENTS, IN ACRE-FEET, FOR STATISTIC 00011, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,260	7,710	11,200	14,800	17,800	19,900	20,600	29,400	27,900	23,000	-	4,760
2	-	-	-	-	-	-	20,600	29,700	27,900	-	-	-
3	-	-	-	-	-	-	20,600	29,700	27,900	22,400	12,200	-
4	5,330	-	-	-	-	-	20,700	30,000	27,800	22,100	-	-
5	-	-	-	-	-	-	20,700	30,000	27,500	-	11,400	-
6	-	-	-	15,400	-	20,100	20,900	30,000	27,300	-	-	-
7	-	-	-	-	-	-	21,100	29,900	27,300	21,200	-	4,200
8	-	-	12,100	-	-	-	21,400	30,000	27,100	20,900	9,970	-
9	-	8,090	-	-	-	-	21,600	30,000	27,000	20,600	9,020	-
10	-	8,240	-	-	19,100	-	21,800	30,000	26,800	20,200	-	-
11	5,570	-	-	15,900	-	-	22,000	30,000	26,700	19,800	-	-
12	-	-	-	15,900	-	-	22,500	30,000	26,400	19,400	-	-
13	6,080	-	-	-	-	-	23,600	30,000	26,300	19,000	8,180	-
14	-	-	-	-	-	20,300	24,600	30,100	26,100	18,700	8,030	3,770
15	-	9,510	-	-	-	-	25,400	30,100	25,900	18,300	7,750	-
16	-	-	-	-	-	20,400	26,200	30,100	25,700	18,000	7,480	-
17	-	-	13,100	-	-	-	26,800	30,100	25,500	17,700	7,150	3,290
18	6,280	-	13,100	-	-	-	27,400	30,100	25,300	17,300	6,890	-
19	-	10,100	-	-	-	-	27,900	30,100	25,100	17,200	-	-
20	-	-	-	16,600	-	-	28,000	30,100	24,800	17,000	6,490	-
21	-	-	-	-	19,700	-	28,200	30,000	24,600	-	6,230	3,100
22	-	-	-	-	-	20,700	28,300	30,000	24,500	-	-	-
23	7,040	-	-	-	-	20,700	28,500	30,000	24,200	-	-	-
24	-	-	-	-	-	-	28,600	29,700	24,100	-	5,870	-
25	7,060	-	-	17,100	-	-	28,700	29,500	24,000	15,900	-	2,730
26	-	-	-	-	-	-	28,700	29,400	23,700	15,400	-	-
27	-	-	-	-	-	-	28,700	29,200	23,500	15,000	-	-
28	-	-	14,400	-	19,900	-	28,800	29,000	23,500	14,700	-	-
29	-	-	-	-	------	20,600	28,900	28,700	23,300	14,300	-	-
30	-	11,200	-	-	------	-	29,000	28,500	23,100	13,900	4,910	2,560
31	7,710	------	14,600	17,700	------	20,500	------	28,200	------	13,500	4,760	------
MAX	7,710	11,200	14,600	17,700	19,900	-	29,000	30,100	27,900	23,000	-	4,760
MIN	5,260	7,710	11,200	14,800	17,800	19,900	20,600	28,200	23,100	13,500	4,760	2,560
(†)	85.05	96.27	105.67	113.07	117.86	119.30	135.64	134.14	124.60	102.86	73.07	60.48
(‡)	+2,450	+3,490	+3,400	+3,100	+2,200	+600	+8,500	-800	-5,100	-9,600	-8,740	-2,200

CAL YR 1972..... ‡ -5,700
WTR YR 1973..... ‡ -2,700

† 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 mi (0.5 km) upstream from West Canal, 1.3 mi (2.1 km) upstream from East Canal, 2 mi (3.2 km) downstream from Little Fish Creek, 3 mi (4.8 km) downstream from Little Wood Reservoir, 6 mi (9.7 km) northwest of Carey, and at mile 68.0 (109.4 km).

DRAINAGE AREA.--312 sq mi (808 sq km).

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 mi (9.7 km) upstream not equivalent owing to diversion and inflow.

GAGE.--Water-stage recorder. Datum of gage is 4,990.59 ft (1,521 m) 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 (0.23 m) higher.

AVERAGE DISCHARGE.--46 years (1926-42, 1943-73), 149 cfs (4.22 cu m/s), 108,000 acre-ft/yr (133 cu hm/yr); 15-year base period (1952-67), 156 cfs (4.42 cu m/s).

EXTREMES.--Current year: Maximum discharge, 612 cfs (17.3 cu m/s) May 19, gage height, 4.88 ft (1.49 m); minimum, 3.0 cfs (85 cu dm/s) Feb. 8, gage height, 1.53 ft (0.47 m).
Period of record: Maximum discharge, 6,000 cfs (170 cu m/s) (due to failure of reservoirs on Little Fish Creek) Apr. 20, 1938, gage height, 12.81 ft, (3.90 m) present datum, from floodmark), from rating curve extended above 1,800 cfs (51.0 cu m/s); minimum, 1 cfs (28 cu dm/s) Jan. 26, 1945, Jan. 20, 1948.

REMARKS.--Records good. Flow regulated by Little Wood Reservoir 3 mi (4.8 km) upstream (see sta 13148200) and Campbell, Cameron, and Howard Reservoirs on South Fork Muldoon and Little Fish Creeks, combined capacity, 690 acre-ft (0.85 cu hm). Diversions above station for irrigation of about 1,500 acres (610 sq hm) (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 4-16, 25-27, Dec. 30 to Jan. 1, Jan. 4-9, 21-24, 28-29, Feb. 1-3, 8-9, 11-12, 15, 19-21)

1.5	2.5	3.0	125
1.7	6.5	3.5	220
1.9	12	4.0	340
2.2	28	4.8	584
2.5	57		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	4.7	4.2	4.4	4.4	49	128	168	373	222	258	94
2	82	19	4.1	4.5	4.7	47	129	227	327	272	256	93
3	82	22	4.2	4.7	4.9	47	132	195	294	272	254	91
4	83	24	4.1	4.5	4.9	47	134	222	292	263	254	90
5	84	23	3.6	4.0	4.9	47	135	314	292	238	242	88
6	84	22	4.0	4.4	4.7	47	138	307	317	238	216	79
7	56	24	4.3	4.4	4.7	47	136	272	332	233	214	79
8	25	23	4.1	4.5	4.7	47	136	256	332	224	231	79
9	25	22	3.8	4.2	4.8	47	136	314	343	235	242	79
10	25	22	4.0	4.7	6.2	49	137	324	351	282	229	76
11	26	23	4.1	4.5	27	49	138	317	351	282	207	76
12	26	23	4.4	4.7	26	49	130	314	351	272	205	76
13	26	23	4.2	4.5	26	49	125	335	351	265	201	76
14	26	23	4.2	4.5	26	80	128	404	351	242	187	84
15	26	23	4.3	4.5	27	140	153	412	351	240	185	90
16	27	24	4.4	4.7	26	146	149	430	307	240	183	89
17	27	23	4.5	4.7	26	128	162	436	304	238	179	88
18	27	19	4.5	4.7	26	122	220	495	284	235	179	88
19	28	5.8	4.7	4.9	27	122	240	553	272	233	177	86
20	28	4.9	4.5	8.4	27	137	263	530	238	233	166	86
21	29	4.2	4.7	4.9	32	138	263	479	216	203	149	86
22	28	4.5	6.5	4.5	46	138	307	427	216	189	128	85
23	28	4.2	8.6	4.8	46	135	401	427	235	187	125	86
24	27	4.5	7.0	5.1	46	136	442	442	247	187	128	85
25	21	4.2	5.6	4.9	46	138	424	430	247	210	137	79
26	21	4.2	5.1	4.7	46	135	415	378	256	267	125	57
27	21	4.1	4.8	4.5	46	133	407	359	238	265	114	57
28	21	4.1	4.7	4.3	46	132	398	364	205	263	114	57
29	21	4.1	4.5	4.5	------	126	330	387	214	263	111	56
30	17	4.2	4.4	4.7	------	130	218	392	212	260	105	56
31	5.3	------	4.4	4.7	------	132	------	404	------	258	97	------
TOTAL	1,135.3	439.7	144.5	146.0	666.9	2,969	6,654	11,314	8,699	7,511	5,598	2,391
MEAN	36.6	14.7	4.66	4.71	23.8	95.8	222	365	290	242	181	79.7
MAX	84	24	8.6	8.4	46	146	442	553	373	282	258	94
MIN	5.3	4.1	3.6	4.0	4.4	47	125	168	205	187	97	56
AC-FT	2,250	872	287	290	1,320	5,890	13,200	22,440	17,250	14,900	11,100	4,740

CAL YR 1972 TOTAL 57,331.5 MEAN 157 MAX 668 MIN 3.6 AC-FT 113,700
WTR YR 1973 TOTAL 47,668.4 MEAN 131 MAX 553 MIN 3.6 AC-FT 94,550

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 mi (5.0 km) downstream from bridge on Bliss-Gooding highway, 4.2 mi (6.8 km) downstream from Little Wood River, 5.5 mi (8.8 km) upstream from diversion dam for King Hill project, 6 mi (9.7 km) southwest of Gooding, and at mile 7.8 (12.6 km).

DRAINAGE AREA.--2,990 sq mi (7,740 sq km), 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 (1,020 m) (from topographic map). Prior to Apr. 13, 1921, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--41 years (1916-22, 1937-41, 1942-73), 267 cfs (7.56 cu m/s), 193,400 acre-ft/yr (238 cu hm); 15-year base period (1952-67), 250 cfs (7.08 cu m/s).

EXTREMES.--Current year: Maximum discharge, 1,120 cfs (31.7 cu m/s) Apr. 26, gage height, 5.89 ft (1.80 m); minimum, 3.9 cfs (0.11 cu m/s) Dec. 10, gage height, 0.64 ft (0.20 m).
Period of record: Maximum discharge, 8,860 cfs (251 cu m/s) Dec. 22, 1964, gage height, 12.15 ft (3.70 m), from floodmarks; no flow at times in many years.

REMARKS.--Records good except those for winter period, which are poor. 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 (58,300 sq hm) of which about 4,000 acres (1,620 sq hm) are by withdrawals from ground water (1966 determination). Records of chemical analyses for the water year 1973 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. 4-8, 12, 13, 18, 19, Dec. 26 to Jan. 10, Jan. 12-15. Jan. 17 to Feb. 22, Feb. 26 to Mar. 1)

0.7	5	2.0	109
.8	8	3.0	253
1.0	15	4.0	450
1.2	26	5.0	752
1.5	50	6.0	1,170

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	889	249	240	92	40	360	146	818	179	120	66	139
2	850	251	225	90	43	414	128	537	201	122	82	166
3	794	252	166	90	45	286	223	402	194	137	86	158
4	757	260	75	70	50	229	468	449	210	133	79	160
5	803	262	20	50	60	200	331	415	220	116	79	168
6	855	262	17	55	70	166	334	291	210	99	89	158
7	815	276	14	65	90	141	322	270	200	101	85	120
8	776	285	12	60	80	129	319	220	179	111	81	95
9	728	299	8.9	55	60	128	340	177	191	96	68	112
10	801	307	5.5	45	65	138	268	109	168	76	74	120
11	766	272	7.7	35	70	146	229	102	170	71	65	146
12	283	264	12	40	75	153	213	113	197	70	65	163
13	107	256	22	90	80	137	244	99	212	93	53	165
14	50	252	25	210	75	126	237	78	206	127	43	159
15	103	282	27	180	70	117	492	55	224	136	44	153
16	143	262	29	186	81	114	671	25	231	108	52	181
17	167	259	31	240	82	114	644	26	267	104	49	193
18	174	354	38	190	80	120	661	29	268	95	58	199
19	192	373	42	150	82	113	641	77	282	83	79	216
20	207	349	58	120	82	126	746	137	258	61	90	236
21	215	287	59	90	83	124	797	152	247	97	75	258
22	198	256	58	70	85	138	775	155	218	99	57	281
23	196	247	84	50	88	145	798	131	211	97	43	290
24	202	243	104	45	98	158	754	110	178	106	41	313
25	223	235	147	42	98	160	660	127	176	131	44	323
26	236	252	140	45	125	169	825	148	150	108	66	330
27	231	239	115	42	230	171	890	171	121	76	89	366
28	242	217	100	40	310	175	777	185	112	57	80	375
29	251	223	90	45	------	156	905	180	106	51	64	369
30	249	228	90	45	------	148	981	189	121	43	73	363
31	261	------	95	50	------	148	------	188	------	41	93	------
TOTAL	12,764	8,053	2,157.1	2,677	2,497	5,149	15,819	6,165	5,907	2,965	2,112	6,475
MEAN	412	268	69.6	86.4	89.2	166	527	199	197	95.6	68.1	216
MAX	889	373	240	240	310	414	981	818	282	137	93	375
MIN	50	217	5.5	35	40	113	128	25	106	41	41	95
AC-FT	25,320	15,970	4,280	5,310	4,950	10,210	31,380	12,230	11,720	5,880	4,190	12,840

CAL YR 1972 TOTAL 186,178.1 MEAN 509 MAX 3,360 MIN 5.5 AC-FT 369,300
WTR YR 1973 TOTAL 72,740.1 MEAN 199 MAX 981 MIN 5.5 AC-FT 144,300

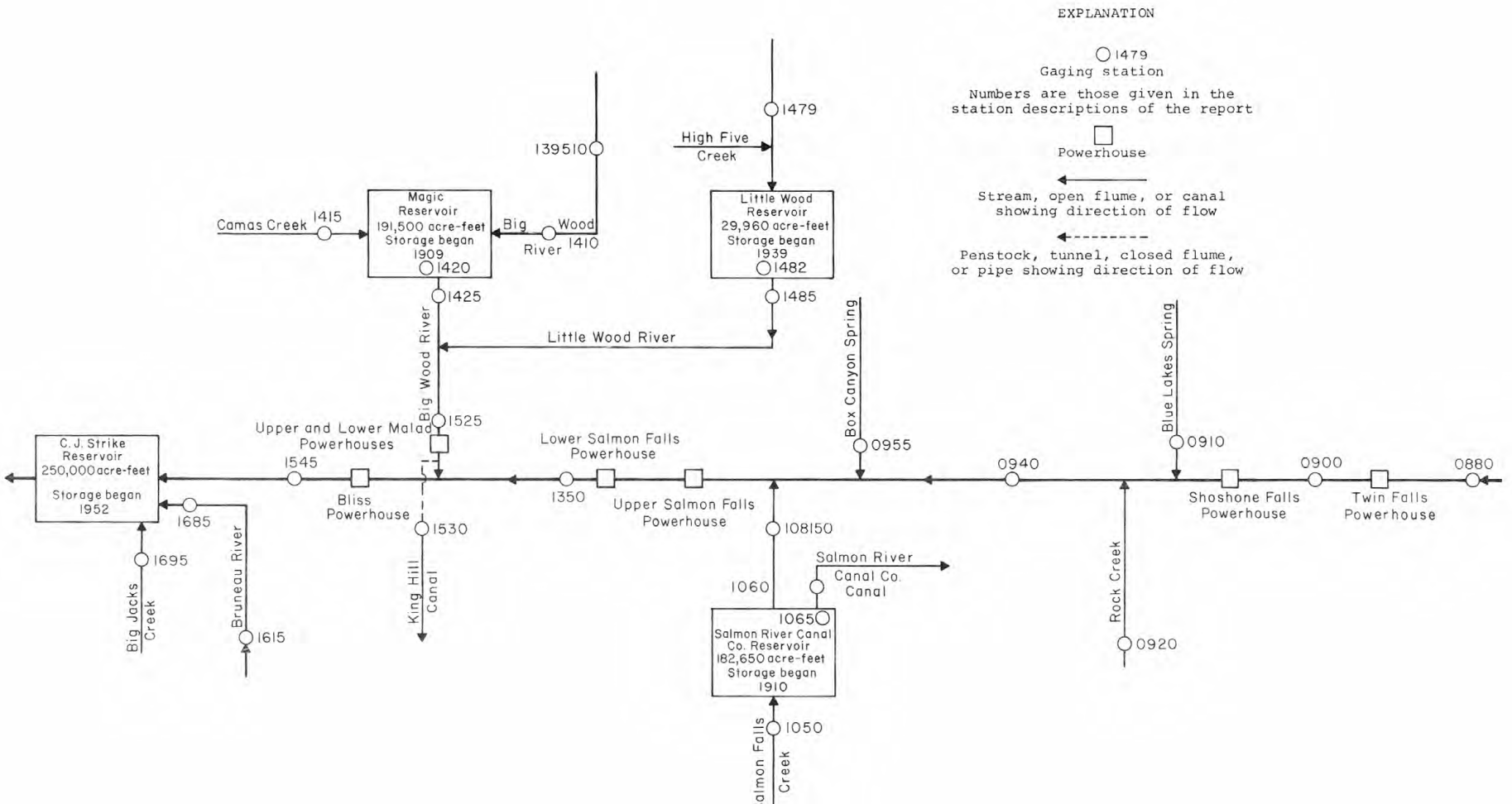

FIGURE 8. Schematic diagram showing gaging stations, diversions, and storage in Snake River basin between Milner and C. J. Strike Reservoir.

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 (183 m) below outlet of inverted siphon crossing Snake River, 0.8 mi (1.3 km) west of highway bridge over Big Wood River, and 3.6 mi (5.8 km) 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 (869 m) (from topographic map). Prior to June 1, 1949, nonrecording gages at several sites within 0.6 mi (1.0 km) 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 mi (0.8 km) upstream at different datum. Oct. 1, 1961, to Mar. 24, 1971, water-stage recorder 125 ft (38 m) downstream at different datum.

EXTREMES.--Period of record: Maximum daily discharge, 376 cfs (10.6 cu m/s) June 14, 1973; no flow or minor leakage at headgate during nonirrigation seasons and other periods when gates are closed.

REMARKS.--Records good. This canal, which is operated by King Hill Irrigation District to provide water for irrigation of about 10,000 acres (4,050 sq hm), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	330						141	322	362	367	0	360
2	330						224	322	364	366	0	284
3	330						226	322	364	366	135	0
4	340						227	322	366	366	359	0
5	346						227	323	364	366	359	81
6	338						228	323	363	368	359	355
7	338						226	321	365	366	359	357
8	339						227	321	366	366	360	357
9	340						260	321	368	368	360	355
10	184						280	325	371	369	360	355
11	0						281	339	369	369	360	356
12	0						281	350	371	370	360	356
13	0						280	349	373	370	361	356
14	0						281	349	376	373	361	357
15	0						279	350	0	373	361	357
16	0						279	350	0	373	361	357
17	0						279	352	0	373	361	358
18	0						279	351	289	372	362	358
19	0						279	352	366	372	362	355
20	0						279	353	365	372	362	353
21	0						278	354	361	372	362	349
22	0						278	357	358	372	361	346
23	0						279	357	358	372	362	347
24	0						304	358	357	371	362	347
25	0						321	360	356	371	360	348
26	0						320	359	356	371	360	347
27	0						321	358	357	371	360	347
28	0						323	359	364	371	359	348
29	0				------		323	359	366	370	359	348
30	0				------		322	360	367	370	359	348
31	0	------			------		------	361	------	370	360	------
TOTAL	3,215	0	0	0	0	0	8,132	10,659	9,762	11,466	10,226	9,542
MEAN	104	0	0	0	0	0	271	344	325	370	330	318
MAX	346	0	0	0	0	0	323	361	376	373	362	360
MIN	0	0	0	0	0	0	141	321	0	366	0	0
AC-FT	6,380	0	0	0	0	0	16,130	21,140	19,360	22,740	20,280	18,930

CAL YR 1972 TOTAL 60,451.00 MEAN 165 MAX 365 MIN 0 AC-FT 119,900
WTR YR 1973 TOTAL 63,002.00 MEAN 173 MAX 376 MIN 0 AC-FT 125,000

13154500 Snake River at King Hill, Idaho

LOCATION.--Lat 43°00'08", long 115°12'06", in N½NW¼SW¼ sec.7, T.5 S., R.11 E., Elmore County, on right bank 300 ft (90 m) east of railroad station at King Hill, 20 mi (32 km) downstream from Big Wood River, and at mile 545.6 (877.9 km).

DRAINAGE AREA.--35,800 sq mi (92,700 sq km), approximately. Mean altitude, 6,040 ft (1,841 m).

PERIOD OF RECORD.--May 1909 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,492.3 ft (759.65 m) 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 (6.671 m) higher, Mar. 7 to Aug. 16, 1910, 0.8 mi (1.3 m) upstream at different datum, and Aug. 17, 1910, to Oct. 7, 1928, at present site and datum.

AVERAGE DISCHARGE.--64 years, 10,680 cfs (302 cu m/s), 7,738,000 acre-ft/yr (9,541 cu hm/yr); 15-year base period (1952-67), 9,723 cfs (275 cu m/s).

EXTREMES.--Current year: Maximum discharge, 20,800 cfs (589 cu m/s) Nov. 8 (gage height, 10.28 ft or 3.133 m); minimum, 6,310 cfs (179 cu m/s) June 29 (gage height, 5.39 ft or 1.643 m); minimum daily, 6,400 cfs (181 cu m/s) May 17.
Period of record: Maximum discharge observed, 47,200 cfs (1,340 cu m/s) June 22, 1918 (gage height, 16.3 ft or 4.97 m), from rating curve extended above 30,000 cfs (850 cu m/s); minimum observed, 1,250 cfs (35.4 cu m/s) Jan. 10, 1950 (gage height, 1.75 ft or 533 m); minimum daily, 4,760 cfs (135 cu m/s) June 7-9, Aug. 15, 16, 1910.

REMARKS.--Records excellent except those for May and June, which are good. Flow regulated by American Falls Reservoir 168.4 mi (271.0 km) 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 (992,000 sq hm) of which about 675,000 acres (273,000 sq hm) are by withdrawals from ground water (1966 determination). Records of chemical analysis and water temperatures for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1317: 1935(M).

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

5.4	6,330	8.0	13,000
5.7	6,970	10.0	19,800
6.0	7,630		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,900	16,900	15,100	17,300	15,400	17,400	12,300	11,200	7,190	6,880	7,760	8,360
2	11,600	17,900	18,500	17,200	15,100	18,000	13,000	9,800	7,210	6,930	7,770	8,460
3	10,900	18,200	18,600	17,000	15,100	16,900	13,000	8,800	7,320	6,980	7,770	8,980
4	11,100	18,700	17,900	16,400	15,200	17,400	12,700	8,200	7,480	6,970	7,480	8,870
5	12,200	18,700	17,400	14,700	15,800	17,400	13,000	8,000	7,210	6,980	7,490	8,980
6	13,500	18,200	16,800	13,800	15,900	17,200	14,100	7,400	7,320	6,940	7,510	8,590
7	16,500	16,700	15,300	15,300	16,000	17,300	13,700	7,400	7,150	6,940	7,470	8,430
8	17,200	18,500	16,400	16,800	16,300	16,700	13,000	7,200	7,080	6,920	7,510	8,450
9	17,200	19,400	16,200	15,000	16,100	16,600	13,600	7,300	7,150	6,950	7,460	8,550
10	18,200	16,200	16,200	14,700	16,400	15,100	13,300	7,000	7,120	6,940	7,490	8,570
11	17,700	16,500	16,300	15,500	16,700	15,000	14,100	7,000	7,320	6,800	7,450	8,640
12	17,200	16,100	14,800	15,800	17,000	15,200	13,600	7,000	7,260	6,970	7,470	8,730
13	16,800	17,200	14,900	16,500	16,900	15,100	14,500	6,900	7,240	7,050	7,480	8,700
14	17,900	18,500	16,500	16,500	16,500	15,100	15,300	6,900	7,560	7,330	7,400	8,770
15	18,500	18,700	15,400	16,000	16,400	15,500	17,600	6,800	7,970	7,300	7,370	8,790
16	18,600	17,500	14,600	16,100	16,100	16,300	19,800	6,800	8,020	7,400	7,370	8,910
17	18,600	17,800	15,100	17,800	16,300	16,300	19,700	6,400	8,200	7,250	7,360	8,980
18	18,800	17,800	15,500	19,000	16,200	16,200	16,600	6,600	8,130	7,170	7,420	9,020
19	18,900	17,600	15,400	19,100	16,100	16,200	14,500	6,520	7,950	7,200	7,460	9,120
20	19,200	17,600	16,300	18,200	16,300	15,800	13,600	6,710	7,710	7,410	7,570	9,250
21	19,100	17,400	16,900	18,100	16,300	14,900	14,000	6,840	7,460	7,460	7,560	9,390
22	18,800	17,100	17,600	18,400	16,500	15,100	14,200	6,770	7,190	7,570	7,580	9,540
23	18,500	16,800	18,700	18,100	15,900	15,200	14,300	6,710	7,080	7,790	7,630	9,660
24	17,400	16,700	19,200	17,500	16,000	14,800	12,400	6,750	7,080	7,750	7,660	9,960
25	16,400	16,600	18,900	16,100	15,900	14,600	10,700	6,840	7,140	7,640	7,700	9,750
26	13,100	16,500	19,100	16,200	16,000	14,300	10,000	6,990	7,010	7,500	7,820	9,900
27	10,600	16,200	18,900	15,900	16,300	11,800	9,600	7,040	6,990	7,500	7,960	9,470
28	10,800	16,700	18,800	15,100	17,200	10,800	9,400	7,080	6,800	7,390	7,880	9,570
29	15,200	16,700	18,000	14,700	------	10,500	10,200	7,080	6,780	7,420	7,790	9,300
30	16,000	14,200	17,900	14,600	------	10,300	10,800	7,150	6,920	7,470	7,850	9,370
31	17,500	------	17,600	16,500	------	10,900	------	7,060	------	7,370	7,870	------
TOTAL	494,900	519,600	524,800	509,900	451,900	469,900	406,600	226,240	220,040	224,170	235,360	271,060
MEAN	15,960	17,320	16,930	16,450	16,140	15,160	13,550	7,298	7,335	7,231	7,592	9,035
MAX	19,200	19,400	19,200	19,100	17,200	18,000	19,800	11,200	8,200	7,790	7,960	9,960
MIN	10,600	14,200	14,600	13,800	15,100	10,300	9,400	6,400	6,780	6,800	7,360	8,360
AC-FT	981,600	1,031M	1,041M	1,011M	896,300	932,000	806,500	448,700	436,400	444,600	466,800	537,600

CAL YR 1972 TOTAL 5,634,170 MEAN 15,390 MAX 28,100 MIN 7,100 AC-FT 11,180,000
WTR YR 1973 TOTAL 4,554,470 MEAN 12,480 MAX 19,800 MIN 6,400 AC-FT 9,034,000

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 mi (3 km) upstream from McDonald Creek and 0.5 mi (0.8 km) south of Rowland.

DRAINAGE AREA.--382 sq mi (989 sq km). Area at crest-stage site, 380 sq mi (984 sq km).

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 or 1,372 m (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 mi (5 km) upstream at different datum.

AVERAGE DISCHARGE.--12 years, 120 cfs (3.398 cu m/s), 86,940 acre-ft/yr (107 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 582 cfs (16.5 cu m/s) Apr. 13 (gage height, 5.54 ft or 1.689 m); minimum daily, 9.1 cfs (0.26 cu m/s) Aug. 17, 19-22.
Period of record: Maximum discharge, 2,120 cfs (60.0 cu m/s) Feb. 11, 1962 (gage height, 13.0 ft or 3.96 m, site and datum then in use); minimum, 5 cfs (0.14 cu m/s) Aug. 12, 13, 1918.

REMARKS.--Records good except those for winter months, which are poor. Minor diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	40	41	29	44	73	148	357	217	56	16	17
2	27	38	41	30	42	74	136	320	207	55	15	18
3	27	38	45	28	45	70	141	332	187	51	15	16
4	27	39	41	25	46	77	162	324	168	48	14	14
5	34	43	35	25	46	77	210	362	149	44	13	13
6	35	41	31	26	47	68	310	365	143	40	12	12
7	33	40	28	27	46	72	338	337	141	38	12	12
8	31	40	26	27	46	74	276	340	138	35	12	15
9	30	40	24	29	45	78	266	362	134	34	12	16
10	34	39	23	38	45	84	301	370	130	32	12	13
11	35	38	23	65	46	85	385	380	125	30	12	13
12	33	38	25	116	46	80	462	384	120	31	11	12
13	33	38	28	181	45	90	542	411	114	30	10	12
14	32	38	33	135	40	85	485	417	143	30	11	11
15	32	38	41	78	38	79	394	411	148	42	11	11
16	32	39	43	76	38	80	369	405	129	33	10	11
17	32	39	53	76	40	85	382	403	122	29	9.4	11
18	32	41	82	70	37	79	325	431	120	28	9.4	11
19	37	39	114	65	38	82	287	429	110	29	9.4	11
20	49	39	126	51	42	94	256	413	97	32	9.1	12
21	53	30	111	47	46	104	237	364	88	33	9.4	16
22	44	27	108	50	50	108	226	311	84	35	9.4	16
23	40	27	65	45	51	99	248	278	82	34	11	15
24	38	30	60	45	49	106	291	269	80	30	11	17
25	37	36	57	48	59	124	332	298	76	26	10	22
26	36	40	48	54	58	162	388	258	71	24	11	24
27	34	37	55	50	65	210	438	224	68	21	12	21
28	33	36	40	45	67	212	490	203	66	21	15	20
29	31	37	37	47	------	174	493	192	63	20	13	18
30	31	39	32	50	------	154	417	186	61	21	12	18
31	32	------	30	47	------	144	------	189	------	18	12	------
TOTAL	1,061	1,124	1,546	1,725	1,307	3,183	9,735	10,325	3,581	1,030	361.1	448
MEAN	34.2	37.5	49.9	55.6	46.7	103	325	333	119	33.2	11.6	14.9
MAX	53	43	126	181	67	212	542	431	217	56	16	24
MIN	27	27	23	25	37	68	136	186	61	18	9.1	11
AC-FT	2,100	2,230	3,070	3,420	2,590	6,310	19,310	20,480	7,100	2,040	716	889

CAL YR 1972 TOTAL 64,165.0 MEAN 175 MAX 862 MIN 12 AC-FT 127,300
WTR YR 1973 TOTAL 35,426.1 MEAN 97.1 MAX 542 MIN 9.1 AC-FT 70,270

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-13	1900	3.94	230	4-28	2200	5.42	546
3-28	0300	4.26	260	5-18	2200	5.06	455
4-13	1800	5.54	582				

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 mi (1.6 km) downstream from Hot Creek, 1.5 mi (2.4 km) south of Hot Spring, 9 mi (14.5 km) southeast of Bruneau, 16 mi (25.7 km) downstream from East Fork, and at mile 22.0 (35.4 km).

DRAINAGE AREA.--2,630 sq mi (6,810 sq km), approximately. Mean altitude, 5,600 ft (1,710 m).

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 (792.02 m) above mean sea level. Prior to Mar. 12, 1910, nonrecording gage at site 0.2 mi (0.3 km) upstream at different datum. Mar. 12, 1910, to Mar. 15, 1915, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--35 years (1909-14, 1943-73), 393 cfs (11.13 cu m/s), 284,700 acre-ft/yr (351 cu hm/yr); 15-year base period (1952-67), 318 cfs (9.01 cu m/s).

EXTREMES.--Current year: Maximum discharge, 1,860 cfs (52.7 cu m/s) May 20 (gage height, 7.26 ft or 2.213 m); minimum gage height, 7.40 ft (2.256 m) ice jam; minimum discharge, 64 cfs (1.81 cu m/s) Aug. 28, 29 (gage height, 3.26 ft or 0.994 m).
Period of record: Maximum discharge, 6,500 cfs (184 cu m/s) Mar. 1, 1910 (gage height, 13.0 ft or 3.96 m, from floodmark, present site and datum), from rating curve extended above 1,200 cfs (34 cu m/s); minimum daily, 25 cfs (0.71 cu m/s) Dec. 18, 1964.

REMARKS.--Records good. Several small reservoirs on tributaries above station. Diversions above station for irrigation of about 12,900 acres (5,200 sq hm) (1966 determination). Records of chemical analyses for the water year 1973 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)
(Stage-discharge relation affected by ice Dec, 8, 9, 20, 21, Jan. 7, 8)

3.3	60	6.0	1,080
3.6	111	7.0	1,690
4.0	217	8.0	2,390
5.0	588		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	142	186	152	196	261	390	1,150	1,020	329	99	73
2	126	168	181	163	147	314	395	1,020	1,150	301	96	79
3	122	172	179	142	139	279	376	962	1,070	275	92	84
4	128	183	179	111	175	239	361	988	920	253	92	82
5	164	186	126	101	193	228	392	1,020	818	237	93	78
6	185	207	73	76	200	222	531	1,130	761	221	93	74
7	221	220	70	82	190	207	752	1,130	770	207	90	73
8	199	197	70	92	179	199	816	1,050	808	195	86	73
9	175	188	70	110	165	199	727	1,080	828	187	84	80
10	173	179	68	144	175	204	718	1,150	843	179	80	83
11	193	174	68	181	184	216	779	1,220	833	170	78	82
12	192	176	71	242	175	234	929	1,280	765	156	75	77
13	185	179	82	300	171	239	1,120	1,380	695	151	74	74
14	171	178	96	737	169	236	1,270	1,490	682	153	72	74
15	163	176	124	544	159	230	1,120	1,560	799	159	70	74
16	157	176	137	451	154	212	991	1,600	789	162	70	73
17	154	178	158	397	164	216	948	1,640	682	151	70	72
18	153	177	187	345	166	231	1,040	1,750	610	141	69	71
19	164	173	219	292	151	228	922	1,820	567	133	68	71
20	194	188	290	243	149	224	795	1,820	511	133	69	70
21	249	176	540	175	125	237	713	1,710	454	146	68	70
22	296	145	477	177	144	290	668	1,510	426	150	68	76
23	240	99	458	166	166	297	658	1,370	426	167	67	84
24	202	93	399	153	187	265	760	1,290	434	156	66	85
25	185	157	336	193	180	289	890	1,290	414	145	66	88
26	171	187	290	238	191	362	958	1,340	406	133	65	96
27	165	201	248	192	212	500	1,070	1,180	414	122	66	112
28	162	200	237	123	232	576	1,200	1,000	399	114	65	106
29	162	217	223	109	------	526	1,310	915	383	111	64	99
30	160	220	147	197	------	441	1,290	915	357	105	70	94
31	147	------	129	217	------	404	------	930	------	102	73	------
TOTAL	5,488	5,312	6,118	6,845	4,838	8,805	24,889	39,690	20,034	5,344	2,358	2,427
MEAN	177	177	197	221	173	284	830	1,280	668	172	76.1	80.9
MAX	296	220	540	737	232	576	1,310	1,820	1,150	329	99	112
MIN	122	93	68	76	125	199	361	915	357	102	64	70
AC-FT	10,890	10,540	12,140	13,580	9,600	17,460	49,370	78,730	39,740	10,600	4,680	4,810

CAL YR 1972 TOTAL 213,560 MEAN 583 MAX 2,300 MIN 68 AC-FT 423,600
WTR YR 1973 TOTAL 132,148 MEAN 362 MAX 1,820 MIN 64 AC-FT 262,100

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 mi (0.3 km) upstream from confluence with Little Jacks Creek and 11.5 mi (18.5 km) southwest of Bruneau.

DRAINAGE AREA.--253 sq mi (655 sq km).

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 (856 m) (by barometer). December 1938 to October 1949 at site 145 ft (44.2 m) upstream at different datum.

AVERAGE DISCHARGE.--18 years (1939-49, 1965-73), 3.26 cfs (92.32 cu dm/s), 2,360 acre-ft/yr (2.91 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 324 cfs (9.18 cu m/s) Jan. 14 (gage height, 3.43 ft or 1.046 m); no flow for many days.
Period of record: Maximum discharge, 2,100 cfs (59.5 cu m/s) Jan. 22, 1943 (gage height, 12.4 ft or 3.780 m, 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 1973 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)

1.59	0.0	2.2	8.6
1.70	.14	2.4	33
1.8	.52	2.7	94
1.9	1.4	3.0	174
2.0	3.0	3.3	270

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	5.3	3.8	0	.32	182	4.7	.81				
2	5.3	5.0	3.7	0	0	144	4.7	.81				
3	5.0	5.0	3.9	0	.50	75	4.4	.65				
4	5.8	5.0	1.7	0	3.1	41	3.7	.73				
5	12	5.3	.23	0	3.0	19	3.2	.98				
6	12	5.3	0	0	3.1	9.5	2.8	2.0				
7	8.6	4.9	0	0	2.4	7.9	3.3	2.3				
8	7.4	4.8	0	0	1.2	12	3.2	2.1				
9	6.7	4.8	0	0	1.4	21	2.6	2.0				
10	6.4	4.7	0	0	2.0	31	2.1	1.8				
11	6.1	4.7	0	0	1.7	84	1.5	1.4				
12	5.8	4.8	0	0	1.6	58	1.2	1.1				
13	5.6	4.8	0	23	1.0	19	1.2	.73				
14	5.3	4.6	0	194	.78	11	1.7	.30				
15	5.3	4.7	0	135	.53	6.8	1.4	.07				
16	5.3	4.8	0	95	.50	5.4	1.2	0				
17	5.3	4.7	0	110	.39	22	1.3	0				
18	5.3	4.6	0	72	.60	24	1.4	0				
19	5.8	4.7	0	29	.33	7.5	1.7	0				
20	8.6	4.7	3.6	3.2	.19	7.6	1.7	0				
21	6.4	4.4	8.6	4.8	.05	22	1.2	0				
22	5.8	3.5	1.9	3.6	.04	20	.81	0				
23	5.6	2.9	.29	.79	1.4	9.0	.81	0				
24	5.3	3.7	2.8	1.9	.55	10	.98	0				
25	5.3	4.2	2.9	5.9	29	44	.73	0				
26	5.3	4.4	1.6	4.6	163	42	.58	0				
27	5.3	4.4	.69	.32	179	19	.42	0				
28	5.3	4.2	.35	0	184	9.7	.47	0				
29	6.1	4.1	.01	0	------	6.6	.42	0				
30	5.6	3.9	0	3.1	------	5.0	.42	0				
31	5.3	------	0	3.3	------	4.7	------	0	------			------
TOTAL	194.5	136.9	36.07	689.51	581.68	979.7	55.84	17.78	0	0	0	0
MEAN	6.27	4.56	1.16	22.2	20.8	31.6	1.86	.57	0	0	0	0
MAX	12	5.3	8.6	194	184	182	4.7	2.3	0	0	0	0
MIN	5.0	2.9	0	0	0	4.7	.42	0	0	0	0	0
AC-FT	386	272	72	1,370	1,150	1,940	111	35	0	0	0	0

CAL YR 1972 TOTAL 7,292.98 MEAN 19.9 MAX 246 MIN 0 AC-FT 14,470
WTR YR 1973 TOTAL 2,691.98 MEAN 7.38 MAX 194 MIN 0 AC-FT 5,340

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 mi (6.8 km) downstream from Swan Falls powerplant, 7.5 mi (12.1 km) northeast of Murphy, and at mile 453.5 (729.7 km).

DRAINAGE AREA.--41,900 sq mi (108,500 sq km), 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 (692.253 m) above mean sea level. Prior to Sept. 7, 1914, nonrecording gage and Sept. 7, 1914, to Sept. 30, 1935, water-stage recorder at site 3.5 mi (5.6 km) upstream at datum 9.79 ft (2.984 m) higher.

AVERAGE DISCHARGE.--60 years, 10,940 cfs (309.8 cu m/s) 7,926,000 acre-ft/yr (9,770 cu hm/yr); 15-year base period (1952-67), 10,070 cfs (285.2 cu m/s).

EXTREMES.--Current year: Maximum discharge, 21,900 cfs (620 cu m/s) Oct. 20 (gage height, 8.25 ft or 2.515 m); maximum gage height, 8.42 ft (2.566 m); minimum discharge, 5,040 cfs (143 cu m/s) July 14 (gage height, 2.80 ft or 0.853 m); minimum daily, 5,910 cfs (167 cu m/s) July 6, 12.
Period of record: Maximum discharge, 47,300 (1,340 cu m/s) cfs June 22, 1918 (gage height, 13.95 ft or 4.242 m, site and datum then in use); minimum recorded, 3,900 cfs (110 cu m/s) July 9, 1949 (gage height, 2.53 ft or 0.771 m); minimum daily, 5,440 cfs (154 cu m/s) Aug. 4, 1914.

REMARKS.--Records good. Major regulation by American Falls Reservoir 260.5 mi (419.1 km) upstream (see sta 13076500). Diurnal fluctuation caused by hydroelectric plants upstream. Diversions above station for irrigation of about 2,590,000 acres (1,050,000 sq hm) of which about 701,000 acres (284,000 sq hm) are by withdrawals from ground water (1966 determination).

REVISIONS (WATER YEARS).--WSP 1737: 1933(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Feb. 24)

3.0	5,560	8.0	20,400
4.0	8,240	10.0	27,300
6.0	13,900		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,200	19,000	13,900	18,100	17,600	17,700	11,300	11,600	7,440	6,060	6,720	7,060
2	12,100	18,200	16,800	18,300	16,600	18,200	12,200	12,600	7,430	6,170	6,740	7,380
3	11,100	18,700	19,500	17,200	15,300	19,200	14,000	9,600	7,430	6,150	6,660	8,700
4	11,700	19,100	19,400	17,400	15,400	16,700	13,200	9,400	7,450	6,110	6,830	8,050
5	12,000	19,000	18,900	17,100	15,400	17,800	13,200	9,130	7,390	6,060	6,800	8,300
6	12,700	18,700	18,000	14,200	16,500	18,500	12,800	9,060	7,420	5,910	6,830	8,580
7	14,800	17,900	17,500	13,700	16,600	17,800	13,800	7,320	7,170	5,920	6,700	8,010
8	17,400	18,100	15,400	16,800	16,500	17,400	14,600	7,920	7,420	5,930	6,650	7,790
9	18,200	19,000	16,800	18,000	18,100	16,800	13,300	8,160	7,200	5,940	6,730	7,490
10	18,300	18,500	17,600	14,600	19,000	17,300	14,400	7,580	7,230	5,920	6,730	7,880
11	19,100	17,100	17,400	15,200	19,000	15,800	14,300	7,930	6,750	5,920	6,640	8,150
12	18,600	16,800	17,800	15,900	19,000	15,500	15,000	7,700	6,700	5,910	6,540	7,550
13	18,700	17,800	17,500	16,700	18,900	15,500	14,400	7,840	6,670	5,960	6,460	8,110
14	17,700	18,900	17,000	18,300	18,400	15,600	16,200	7,690	6,710	6,020	6,270	8,090
15	19,200	19,100	16,300	18,600	17,300	15,900	15,900	7,970	6,830	6,200	6,540	7,820
16	19,900	18,800	16,100	17,200	16,400	15,900	18,700	7,820	7,670	6,070	6,410	7,990
17	19,300	18,600	16,200	16,900	16,900	16,900	20,600	7,520	8,370	6,210	6,200	8,890
18	19,600	18,600	15,500	19,400	16,700	16,000	19,000	7,780	8,320	6,150	6,200	8,200
19	19,600	18,600	16,400	19,800	15,500	17,000	18,500	7,320	7,940	6,150	6,320	8,420
20	21,100	18,500	16,100	19,400	15,200	16,300	13,700	7,800	7,730	6,250	6,610	8,550
21	20,300	18,800	17,600	19,000	15,300	15,900	15,300	7,860	7,350	6,690	6,710	8,860
22	20,200	18,300	17,800	18,600	15,300	15,400	14,900	8,280	7,200	6,870	6,680	8,620
23	19,400	17,800	18,000	19,100	15,500	15,600	14,700	7,910	6,640	7,170	6,740	8,640
24	19,400	17,400	20,300	19,200	15,400	15,500	14,400	7,510	6,740	7,130	6,830	10,100
25	18,900	17,100	20,500	17,100	15,400	15,500	14,000	7,790	6,780	7,360	6,560	9,910
26	16,600	17,300	19,800	16,200	16,000	14,400	10,900	7,740	6,600	7,030	6,840	9,500
27	12,300	18,000	19,700	17,400	16,700	14,400	10,300	7,460	6,500	6,990	7,200	10,300
28	10,900	16,800	19,400	16,200	17,300	12,200	10,500	8,070	6,210	6,800	7,330	9,290
29	13,000	18,100	18,800	15,600	------	12,100	10,500	7,350	6,050	6,820	7,090	8,470
30	16,400	17,500	19,700	15,300	------	11,500	12,200	7,410	6,070	6,830	6,860	9,460
31	17,400	------	18,500	14,800	------	10,900	------	7,470	------	6,760	7,100	------
TOTAL	517,100	546,100	550,200	531,300	467,200	491,200	426,800	254,590	213,410	197,460	207,520	254,160
MEAN	16,680	18,200	17,750	17,140	16,690	15,850	14,230	8,213	7,114	6,370	6,694	8,472
MAX	21,100	19,100	20,500	19,800	19,000	19,200	20,600	12,600	8,370	7,360	7,330	10,300
MIN	10,900	16,800	13,900	13,700	15,200	10,900	10,300	7,320	6,050	5,910	6,200	7,060
AC-FT	1,026M	1,083M	1,091M	1,054M	926,700	974,300	846,600	505,000	423,300	391,700	411,600	504,100

CAL YR 1972 TOTAL 5,977,300 MEAN 16,330 MAX 29,200 MIN 7,050 AC-FT 11,860,000
WTR YR 1973 TOTAL 4,657,040 MEAN 12,760 MAX 21,100 MIN 5,910 AC-FT 9,237,000

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 (305 m) downstream from Skull Creek, 1 mi (1.6 km) upstream from China diversion dam, and 2 mi (3.2 km) southeast of Owyhee, and at mile 262.0 (422 km).

DRAINAGE AREA.--458 sq mi (1,186 sq km).

PERIOD OF RECORD.--March 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,425 ft (1,654 m) above mean sea level, unadjusted. Prior to Oct. 1, 1939, at datum 1.48 ft (0.451 m) higher.

AVERAGE DISCHARGE.--34 years, 141 cfs (3.993 cu m/s), 102,200 acre-ft/yr (126 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 718 cfs (20.3 cu m/s) Apr. 30 (gage height, 7.63 ft or 2.326 m); minimum, 24 cfs (0.68 cu m/s) July 9.
Period of record: Maximum discharge, 2,710 cfs (76.7 cu m/s) May 3 or 4, 1952 (gage height, 10.07 ft or 3.069 m); minimum, 1.8 cfs (0.051 cu m/s) Nov. 16, 1961.

REMARKS.--Records good except those for winter months, which are poor. Numerous diversions above station for irrigation. Flow partly regulated by Wild Horse Reservoir.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	33	44	54	58	103	139	605	230	173	55	104
2	41	34	43	52	54	106	123	572	207	174	55	109
3	35	36	43	50	52	85	121	573	191	116	77	107
4	31	38	46	45	54	81	135	561	175	98	81	106
5	38	39	42	40	53	76	175	603	162	94	85	105
6	34	40	36	40	52	68	220	605	196	53	87	104
7	31	40	35	42	54	68	210	582	182	32	106	105
8	29	39	32	44	54	67	190	598	167	27	112	107
9	29	38	30	50	55	71	180	631	187	25	111	107
10	43	36	26	60	57	77	220	651	188	32	104	107
11	40	36	24	75	55	107	300	652	186	62	104	88
12	34	37	26	90	57	83	350	659	183	84	105	76
13	31	35	30	130	54	87	400	665	180	90	109	74
14	30	38	35	165	53	75	350	652	230	90	132	73
15	29	40	45	175	52	70	300	607	239	104	140	74
16	29	41	50	160	50	79	290	565	203	95	140	65
17	29	41	55	140	50	92	320	511	205	92	141	64
18	29	39	67	125	49	75	280	500	212	94	141	68
19	35	38	90	105	49	80	270	499	189	94	141	69
20	46	39	120	95	48	90	250	468	177	99	138	73
21	45	37	150	80	48	118	210	431	165	103	138	77
22	38	34	180	70	48	97	200	384	159	101	142	76
23	34	30	179	57	50	94	250	344	155	98	144	84
24	31	32	155	50	55	111	340	318	158	79	148	88
25	30	35	108	55	69	148	450	372	154	68	148	97
26	30	37	85	60	77	178	530	328	152	66	149	91
27	30	35	94	47	77	178	590	283	180	65	152	62
28	31	35	77	45	96	149	620	257	184	64	68	45
29	31	37	66	50	------	130	630	237	179	59	51	42
30	31	40	60	55	------	127	640	220	176	56	54	40
31	32	------	58	60	------	132	------	218	------	55	88	------
TOTAL	1,047	1,109	2,131	2,366	1,580	3,102	9,283	15,151	5,551	2,542	3,446	2,487
MEAN	33.8	37.0	68.7	76.3	56.4	100	309	489	185	82.0	111	82.9
MAX	46	41	180	175	96	178	640	665	239	174	152	109
MIN	29	30	24	40	48	67	121	218	152	25	51	40

WTR YR 1973 TOTAL 49,795 MEAN 136 MAX 665 MIN 24

NOTE.--No gage-height record Apr. 6-30.

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 (152 m) downstream from Rye Grass Creek, 1.8 mi (2.9 km) upstream from Chimney Creek, and 17 mi (27 km) northwest of Whiterock, and at mile 54.0 (87.0 km).

DRAINAGE AREA.--1,080 sq mi (2,800 sq km), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,900 ft or 1,490 m (from topographic map).

AVERAGE DISCHARGE.--18 years, 161 cfs (4,560 cu m/s), 116,600 acre-ft/yr (144 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, about 1,260 cfs (35.7 cu m/s) Jan. 14 (gage height, 5.74 ft or 1.750 m, backwater from ice); minimum, 26 cfs (0.74 cu m/s) Aug. 2-6.
Period of record: Maximum discharge, 3,830 cfs (108 cu m/s) June 5, 1963 (gage height, 7.55 ft or 2.301 m); no flow Oct. 1-12, 1955, part of Sept. 17, 28, 1960, Aug. 27, 31, 1961.

REMARKS.--Records good except those for winter months, which are poor. Many diversions for irrigation of hay meadows above station. Flow partly regulated by four small reservoirs (total capacity, about 16,100 acre-ft or 19.8 cu hm).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	60	71	77	101	198	303	584	186	52	29	59
2	41	74	71	74	103	194	268	534	200	61	31	58
3	44	73	74	72	107	178	260	474	175	57	29	56
4	51	76	70	70	110	165	258	486	168	56	28	54
5	62	90	66	69	117	157	261	582	148	51	27	53
6	60	87	64	68	120	143	290	659	128	45	28	54
7	54	80	62	68	117	136	296	545	110	39	32	54
8	51	77	60	68	118	134	279	480	85	41	33	57
9	49	72	59	69	120	132	284	456	75	39	44	57
10	65	72	58	74	133	136	306	445	69	44	69	61
11	71	71	57	90	128	156	375	418	72	39	74	63
12	58	73	57	150	130	150	464	427	67	36	70	56
13	52	71	57	300	119	156	580	429	52	36	68	53
14	52	70	58	800	126	140	676	463	61	35	67	53
15	51	72	61	600	126	141	657	472	252	36	64	52
16	50	75	66	400	125	147	619	481	252	37	60	52
17	49	75	74	281	128	156	634	476	209	31	59	55
18	46	74	86	242	131	146	620	474	204	31	57	63
19	56	78	110	214	118	147	574	553	130	44	56	65
20	72	77	150	163	109	153	519	595	97	40	56	65
21	84	70	250	129	106	176	476	559	77	67	59	61
22	72	68	225	120	109	190	459	502	50	58	56	65
23	63	69	180	115	113	174	445	456	38	52	56	70
24	60	70	156	115	133	230	454	408	45	45	55	76
25	58	73	140	114	174	328	467	465	58	41	53	85
26	58	80	125	112	174	389	479	547	59	49	53	81
27	57	76	120	107	178	386	491	455	60	53	63	76
28	56	72	100	107	199	335	538	367	56	54	62	73
29	56	72	92	107	------	297	580	291	51	48	58	72
30	56	69	84	105	------	288	595	229	48	40	58	70
31	58	------	79	100	------	282	------	179	------	31	58	------
TOTAL	1,752	2,216	2,982	5,180	3,572	6,140	13,507	14,491	3,282	1,388	1,612	1,869
MEAN	56.5	73.9	96.2	167	128	198	450	467	109	44.8	52.0	62.3
MAX	84	90	250	800	199	389	676	659	252	67	74	85
MIN	40	60	57	68	101	132	258	179	38	31	27	52
AC-FT	3,480	4,400	5,910	10,270	7,090	12,180	26,790	28,740	6,510	2,750	3,200	3,710

CAL YR 1972 TOTAL 85,593.9 MEAN 234 MAX 1,720 MIN 9.1 AC-FT 169,800
WTR YR 1973 TOTAL 57,991.0 MEAN 159 MAX 800 MIN 27 AC-FT 115,000

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-14	unknown	5.74	a1,260	5-20	0200	3.65	610
4-14	1700	3.83	700	5-26	0300	3.56	567
5- 6	0600	3.81	690				

a About.

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 mi (0.8 km) downstream from Jordan Creek, 2.6 mi (4.2 km) north of Rome, and at mile 117.0 (188.3 km).

DRAINAGE AREA.--About 8,000 sq mi (20,700 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 3,344.20 ft (1,019.312 m) above mean sea level. Prior to Feb. 10, 1960, at datum 0.24 ft (0.073 m) lower.

AVERAGE DISCHARGE.--24 years, 889 cfs (25.2 cu m/s), 644,100 acre-ft/yr (794 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 4,270 cfs (121 cu m/s) Apr. 7 (gage height, 6.47 ft or 1.972 m); minimum, 109 cfs (3.09 cu m/s) Aug. 12.
Period of record: Maximum discharge, 33,500 cfs (949 cu m/s) Dec. 24, 1964 (gage height, 16.7 ft or 5.09 m, from floodmark); minimum, 42 cfs (1.19 cu m/s) Aug. 12, 1954, July 28, Aug. 5, 1961, July 31, 1968.

REMARKS.--Records excellent. Flow regulated by Antelope Reservoir (capacity, 70,000 acre-ft (86.3 cu hm), increased in 1970), Wild Horse Reservoir (capacity, 32,690 acre-ft or 40.3 cu hm), and numerous small reservoirs. Diversions above station for irrigation. Records of water temperatures for the water year 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193	234	370	370	464	2,080	1,360	1,800	670	218	171	202
2	202	238	354	338	414	2,380	1,480	1,700	610	205	165	209
3	208	230	342	270	366	2,160	1,370	1,630	570	199	150	209
4	202	244	300	230	370	1,700	1,180	1,550	555	189	142	196
5	205	283	250	240	394	1,290	1,420	1,510	531	186	131	193
6	255	318	240	250	454	1,090	2,640	1,670	495	189	125	183
7	238	318	220	250	528	1,010	3,790	1,920	464	196	125	183
8	238	334	180	240	536	1,000	3,080	1,820	428	199	131	193
9	244	342	140	250	522	1,080	2,280	1,590	401	189	131	186
10	244	338	120	270	508	1,390	2,220	1,450	369	196	120	186
11	238	322	140	300	513	1,460	2,440	1,380	329	189	120	189
12	230	314	170	430	544	2,080	2,700	1,340	268	168	120	180
13	217	302	160	640	562	1,600	2,800	1,260	243	153	115	174
14	230	298	160	1,250	504	1,440	2,610	1,260	232	147	136	180
15	244	338	190	2,750	486	1,140	2,440	1,240	243	139	159	171
16	241	334	240	2,360	464	926	2,520	1,270	250	156	162	156
17	234	366	300	2,320	459	986	2,310	1,270	254	174	156	147
18	238	346	330	2,480	477	1,240	2,850	1,260	454	168	162	145
19	248	318	370	1,650	558	1,110	2,620	1,240	490	165	156	142
20	252	322	430	1,180	660	956	2,200	1,210	477	165	150	147
21	258	326	510	896	580	1,080	2,010	1,290	454	174	147	147
22	252	326	700	760	504	1,840	1,920	1,280	393	177	153	156
23	262	310	1,440	608	459	1,670	1,840	1,200	357	174	150	174
24	290	269	1,820	540	446	1,370	2,190	1,140	329	162	156	186
25	294	266	1,570	518	482	1,370	1,910	1,060	309	171	165	189
26	276	258	1,210	562	1,170	1,900	1,830	1,000	274	177	171	196
27	258	286	938	544	1,450	2,500	1,800	1,060	246	177	171	202
28	248	310	770	438	1,560	2,610	1,820	1,160	240	174	168	209
29	244	330	665	414	------	2,000	1,930	1,010	243	165	171	215
30	234	394	508	386	------	1,580	1,910	888	232	174	174	215
31	238	------	426	430	------	1,350	------	768	------	174	193	------
TOTAL	7,455	9,214	15,563	24,164	16,434	47,388	65,470	41,226	11,410	5,489	4,646	5,460
MEAN	240	307	502	779	587	1,529	2,182	1,330	380	177	150	182
MAX	294	394	1,820	2,750	1,560	2,610	3,790	1,920	670	218	193	215
MIN	193	230	120	230	366	926	1,180	768	232	139	115	142
AC-FT	14,790	18,280	30,870	47,930	32,600	93,990	129,900	81,770	22,630	10,890	9,220	10,830

CAL YR 1972 TOTAL 637,106 MEAN 1,741 MAX 21,900 MIN 113 AC-FT 1,264,000
WTR YR 1973 TOTAL 253,919 MEAN 696 MAX 3,790 MIN 115 AC-FT 503,600

PEAK DISCHARGE (BASE, 5,400 CFS).--No peaks above base.

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 mi (1.1 km) upstream from Birch Creek, 1.8 mi (2.9 km) upstream from maximum flow line of Arrowrock Reservoir, 3.2 mi (5.1 km) downstream from Twin Springs, 13 mi (20.9 km) upstream from Arrowrock Dam, and at mile 98.1 (157.8 km).

DRAINAGE AREA.--830 sq mi (5.1 km), approximately. Mean altitude, 6,350 ft (1,935 m).

PERIOD OF RECORD.--March 1911 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,256.34 ft or 992.532 m (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 mi (0.5 km) downstream at datum 5.26 ft (1.603 m) lower.

AVERAGE DISCHARGE.--62 years, 1,197 cfs (33.90 cu m/s), 19.58 in/yr (497 mm/yr), 867,200 acre-ft/yr (1,070 cu hm/yr); 15-year base period (1952-67), 1,252 cfs (35.46 cu m/s).

EXTREMES.--Current year: Maximum discharge, 5,760 cfs (163 cu m/s) May 19 (gage height, 7.53 ft or 2.295 m); minimum daily, 220 cfs (6.23 cu m/s) Dec. 6.
Period of record: Maximum discharge, 18,800 cfs (532 cu m/s) Dec. 23, 1964 (gage height, 12.20 ft or 3.719 m, from floodmark, site and datum then in use); minimum, 109 cfs (3.09 cu m/s) Dec. 10, 1944; minimum gage height, 1.48 ft (0.451 m) 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 June 6 to July 3; stage-discharge relation affected by ice Dec. 6, 7, 9-12, 14-17, Jan. 8-11)

Oct. 1 to Feb. 25				Feb. 26 to Sept. 30			
3.2	203	4.0	584	3.5	371	6.0	2,870
3.4	280	4.5	935	4.0	671	7.0	4,570
3.7	418			4.5	1,070	8.0	6,640
				5.0	1,560		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	460	439	394	364	394	617	707	1,600	2,690	1,260	413	371
2	454	454	444	418	364	657	678	1,570	2,690	1,140	413	366
3	444	444	449	384	374	590	664	1,680	2,410	1,060	429	342
4	439	492	403	297	403	577	700	1,770	2,160	989	451	327
5	444	543	270	268	403	565	828	1,790	2,070	956	418	313
6	439	470	220	379	398	539	972	1,900	2,220	916	397	304
7	434	444	394	434	403	539	964	2,040	2,570	884	387	317
8	434	444	394	400	398	539	916	2,330	2,840	844	381	397
9	428	439	290	360	379	521	932	2,290	2,860	797	376	347
10	470	428	250	370	398	533	924	2,160	2,980	758	371	327
11	498	428	300	400	408	552	989	2,040	2,440	729	366	313
12	487	428	330	434	403	509	1,090	2,080	2,200	714	361	308
13	454	418	369	487	398	521	1,440	2,400	2,200	707	351	299
14	460	413	340	566	389	497	1,860	2,930	2,950	707	337	299
15	509	413	340	537	374	497	1,750	3,450	3,080	721	332	304
16	509	413	420	701	389	509	1,550	3,910	2,260	651	332	342
17	470	418	470	890	394	590	1,670	4,510	2,010	617	322	322
18	460	418	481	707	418	552	1,540	5,130	1,840	590	317	313
19	454	418	597	603	384	565	1,370	5,370	1,660	584	317	308
20	476	394	603	481	364	584	1,250	4,890	1,550	657	317	342
21	470	332	555	470	403	590	1,150	4,330	1,520	617	313	392
22	454	297	778	413	418	610	1,130	3,570	1,620	637	317	351
23	449	302	785	379	465	630	1,130	3,230	1,740	590	322	347
24	439	369	660	423	476	657	1,250	3,230	1,640	565	313	402
25	434	384	566	525	481	729	1,380	3,820	1,560	533	313	457
26	434	584	503	460	485	844	1,560	3,280	1,540	503	327	418
27	423	543	476	389	509	844	1,850	2,680	1,590	485	317	381
28	423	418	465	364	539	797	2,080	2,370	1,530	468	327	361
29	413	384	289	413	------	743	1,920	2,300	1,490	451	313	351
30	389	364	341	434	------	729	1,710	2,400	1,410	440	308	342
31	369	------	398	418	------	736	------	2,690	------	429	322	------
TOTAL	13,920	12,735	13,574	14,168	11,611	18,962	37,954	89,740	63,320	21,999	10,880	10,363
MEAN	449	425	438	457	415	612	1,265	2,895	2,111	710	351	345
MAX	509	584	785	890	539	844	2,080	5,370	3,080	1,260	451	457
MIN	369	297	220	268	364	497	664	1,570	1,410	429	308	299
CFSM	.54	.51	.53	.55	.50	.74	1.52	3.49	2.54	.86	.42	.42
IN.	.62	.57	.61	.63	.52	.85	1.70	4.02	2.84	.99	.49	.46
AC-FT	27,610	25,260	26,920	28,100	23,030	37,610	75,280	178,000	125,600	43,640	21,580	20,560

CAL YR 1972 TOTAL 633,824 MEAN 1,732 MAX 9,550 MIN 220 CFSM 2.09 IN 28.41 AC-FT 1,257,000
WTR YR 1973 TOTAL 319,226 MEAN 875 MAX 5,370 MIN 220 CFSM 1.05 IN 14.31 AC-FT 633,200

PEAK DISCHARGE (BASE, 3,700 CFS).--May 19 (0400) 5,760 cfs (7.53 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 mi (4.0 km) upstream from Deer Creek, 8 mi (12.9 km) southwest of Featherville, and at mile 59.0 (94.9 km).

DRAINAGE AREA.--635 sq mi. Mean altitude, 6,840 ft (2,085 m).

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.--28 years, 798 cfs (22.6 cu m/s), 17.07 in/yr (433.6 mm/yr), 578,200 acre-ft/yr (713 cu hm); 15-year base period (1952-67), 765 cfs (21.7 cu m/s).

EXTREMES.--Current year: Maximum discharge, 3,300 cfs (93.5 cu m/s) May 19, gage height, 5.28 ft (1.61 m); minimum, 127 cfs (3.60 cu m/s) Dec. 6, gage height, 1.23 ft (0.37 m).
Period of record: Maximum discharge, 7,580 cfs (215 cu m/s) May 24, 1956, gage height, 8.62 ft (2.63 m); minimum, 30 cfs (0.85 cu m/s) Feb. 10, 1949, gage height, 0.60 ft (0.18 m), result of snowslide upstream.

REMARKS.--Records good. No regulation. Diversions above station for irrigation of about 450 acres (180 sq hm) (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 14-17)

1.3	149	3.0	962
1.4	176	4.0	1,780
1.6	237	6.0	4,160
2.0	398		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	284	284	251	210	234	272	365	990	1,650	660	237	193
2	280	284	276	235	208	272	358	962	1,650	610	237	198
3	276	276	284	220	215	255	365	1,030	1,490	570	241	191
4	288	345	258	190	234	255	412	1,040	1,360	540	241	183
5	367	349	176	180	244	255	499	1,050	1,300	520	237	172
6	336	295	154	220	244	255	602	1,100	1,340	500	224	169
7	299	288	221	205	244	251	580	1,180	1,450	485	218	183
8	288	284	231	190	234	258	560	1,350	1,550	470	209	206
9	284	272	202	210	208	255	550	1,380	1,550	455	204	193
10	332	269	179	285	211	262	575	1,310	1,580	435	203	176
11	332	272	182	295	244	265	629	1,250	1,350	420	197	169
12	328	272	190	250	241	251	702	1,300	1,230	410	193	163
13	299	265	210	265	234	262	895	1,510	1,190	400	188	163
14	288	265	205	284	218	251	976	1,720	1,490	400	180	158
15	292	269	200	272	196	258	922	2,040	1,430	410	178	158
16	292	265	245	292	202	265	856	2,260	1,170	375	170	167
17	288	272	280	292	224	288	863	2,570	1,090	360	155	169
18	280	272	299	284	234	265	774	2,970	1,050	350	157	169
19	276	269	307	265	224	269	691	3,170	915	345	156	172
20	319	248	315	231	196	288	657	2,950	856	375	157	193
21	303	221	307	205	199	284	624	2,680	830	355	158	207
22	288	188	353	211	215	284	646	2,290	837	360	162	199
23	280	165	367	205	234	299	697	2,100	856	340	163	206
24	280	248	324	218	248	315	818	2,080	811	330	158	224
25	272	248	288	258	244	362	889	2,160	774	311	161	241
26	272	371	255	258	248	417	969	1,890	756	292	167	226
27	265	340	251	231	248	422	1,120	1,660	770	280	171	213
28	265	248	272	215	255	394	1,230	1,520	750	265	173	206
29	255	221	245	218	------	371	1,180	1,490	740	258	169	201
30	237	231	200	248	------	366	1,050	1,500	700	251	169	196
31	237	------	225	248	------	376	------	1,600	------	248	173	------
TOTAL	8,982	8,096	7,752	7,390	6,380	9,142	22,054	54,102	34,515	12,380	5,806	5,664
MEAN	290	270	250	238	228	295	735	1,745	1,151	399	187	189
MAX	367	371	367	295	255	422	1,230	3,170	1,650	660	241	241
MIN	237	165	154	180	196	251	358	962	700	248	155	158
CFSM	.46	.43	.39	.37	.36	.46	1.16	2.75	1.81	.63	.29	.30
IN.	.53	.47	.45	.43	.37	.54	1.29	3.17	2.02	.73	.34	.33
AC-FT	17,820	16,060	15,380	14,660	12,650	18,130	43,740	107,300	68,460	24,560	11,520	11,230

CAL YR 1972 TOTAL 363,710 MEAN 994 MAX 6,090 MIN 154 CFSM 1.57 IN 21.31 AC-FT 721,400
WTR YR 1973 TOTAL 182,263 MEAN 499 MAX 3,170 MIN 154 CFSM .79 IN 10.68 AC-FT 361,500

PEAK DISCHARGE (BASE, 2,000 CFS).--May 19 (0400) 5.28 ft (3,300 cfs).

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 (122 m) downstream from Little Camas Reservoir, 4 mi (6.4 km) northeast of Bennett, and 22 mi (35.4 km) northeast of Mountain Home.

PERIOD OF RECORD.--June to November 1917, October 1923 to September 1973 (discontinued).

GAGE.--Nonrecording gage read during periods of flow. Datum of gage is 4,926 ft (1,501 m) 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 (1.829 m) lower. May 12, 1924, to Sept. 30, 1929, water-stage recorder at present datum.

EXTREMES.--Period of record: Maximum daily discharge, 57 cfs (1.61 cu m/s) 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 (12.2 m) upstream (capacity, 22,300 acre-ft or 27.5 cu hm). 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 (2,024 sq hm) of land near Mountain Home.

COOPERATION.--Gage readings furnished by Mountain Home Irrigation District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0	41	56	57	53	57	50
2						0	42	57	57	53	57	50
3						0	42	57	57	55	57	50
4						0	50	57	57	57	57	50
5						0	57	57	57	57	57	50
6						0	57	57	57	57	57	50
7						0	57	57	57	57	57	50
8						0	57	57	57	57	57	50
9						0	57	57	57	57	57	50
10						0	57	57	57	57	57	50
11						0	57	57	57	57	57	50
12						0	57	57	57	57	57	50
13						0	56	57	57	57	26	23
14						0	54	56	57	57	0	0
15						0	54	56	54	57	0	0
16						0	54	56	53	57	27	0
17						0	54	56	54	57	50	0
18						0	54	56	55	57	50	0
19						0	53	56	53	57	50	0
20						0	53	56	52	57	50	0
21						0	53	57	52	57	50	0
22						0	54	57	52	57	50	0
23						0	54	57	52	57	50	0
24						0	54	57	52	57	50	0
25						0	54	57	52	57	50	0
26						0	54	57	52	57	50	0
27						21	54	57	24	57	50	0
28						41	54	57	0	57	50	0
29					------	41	54	57	0	57	50	0
30					------	41	54	57	29	57	50	0
31		------			------	41	------	57	------	57	50	------
TOTAL	0	0	0	0	0	185	1,602	1,759	1,484	1,757	1,487	623
MEAN	0	0	0	0	0	5.97	53.4	56.7	49.5	56.7	48.0	20.8
MAX	0	0	0	0	0	41	57	57	57	57	57	50
MIN	0	0	0	0	0	0	41	56	0	53	0	0
AC-FT	0	0	0	0	0	367	3,180	3,490	2,940	3,490	2,950	1,240

CAL YR 1972 TOTAL 6,819.00 MEAN 18.6 MAX 59 MIN 0 AC-FT 13,530
WTR YR 1973 TOTAL 8,897.00 MEAN 24.4 MAX 57 MIN 0 AC-FT 17,650

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 mi (2.4 km) downstream from Camas Creek, 3 mi (4.8 km) northwest of Bennett, and at mile 43.5 (70.0 km).

DRAINAGE AREA.--980 sq mi (2,540 sq km), 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, 464,900 acre-ft (573 cu hm) June 14 (elevation, 4,196.15 ft or 1,278.986 m); minimum, 302,500 acre-ft (373 cu hm) Sept. 20-22 (elevation, 4,156.70 ft or 1,266.962 m).
Period of record: Maximum contents observed, 472,800 acre-ft (583 cu hm) June 26, 1971 (elevation, 4,197.82 ft or 1,279.495 m); no usable contents prior to Jan. 27, 1946; minimum since full capacity was attained June 21, 1951, 63,830 acre-ft (78.7 cu hm) Jan. 6, 1962 (elevation, 4,058.35 ft or 1,236.985 cu hm).

REMARKS.--Reservoir is formed by earth-fill dam. Storage began Dec. 15, 1945. Usable contents, 464,200 acre-ft (572 cu hm) between elevations 3,992 (1,216.8) and 4,196 ft (1,278.9 m) (top of spillway gates). Elevation of spillway crest, 4,174 ft (1,272.2 m), and of top of dam, 4,206 ft (1,281.9 m). Dead storage below 3,992 ft (1,216.8 m) is 28,980 acre-ft (35.7 cu hm). 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)

4,150.0	279,100	4,180.0	392,400
4,160.0	314,400	4,190.0	436,300
4,170.0	352,000	4,200.0	483,400

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	430,500	441,900	423,000	361,100	336,400	331,400	343,000	357,300	447,100	455,700	400,200	319,700
2	430,900	441,900	421,300	360,100	335,400	331,500	343,500	359,300	449,300	454,800	397,800	317,200
3	431,100	441,800	420,700	359,100	335,100	332,000	343,700	360,500	451,300	453,600	395,500	315,200
4	431,800	442,400	418,900	357,800	335,400	332,600	344,400	361,900	453,700	452,500	393,100	313,700
5	432,400	442,900	416,900	356,900	335,000	332,600	345,300	363,300	455,300	451,300	390,600	312,800
6	432,800	443,000	414,900	356,100	334,500	332,600	346,500	364,900	456,800	450,000	388,200	311,900
7	433,300	443,200	413,200	355,600	333,900	332,600	348,200	366,600	458,200	448,700	385,700	310,800
8	433,500	443,500	411,400	354,400	333,300	332,700	349,600	368,200	459,300	447,400	383,400	310,000
9	434,100	443,400	409,400	353,500	332,500	332,700	350,800	370,400	460,300	446,000	380,700	309,100
10	434,500	443,200	407,300	352,600	332,600	333,200	352,000	372,300	461,500	444,700	378,300	308,600
11	434,600	442,900	404,900	351,900	332,900	333,800	353,500	374,100	462,100	443,200	375,800	308,000
12	434,500	443,200	402,500	351,300	332,500	333,800	355,100	376,000	462,900	441,800	373,400	307,400
13	434,600	442,500	400,100	350,700	331,900	333,900	357,500	378,500	464,100	440,400	370,700	306,700
14	434,900	441,400	397,600	350,600	331,200	333,900	359,400	381,200	464,900	439,000	368,300	306,100
15	435,300	441,000	395,400	349,800	330,400	333,800	360,100	384,600	464,300	437,700	365,700	305,400
16	435,900	440,700	393,200	349,400	329,800	333,600	359,800	388,700	464,000	435,600	363,000	304,800
17	436,500	440,800	391,500	-	330,100	334,200	359,600	393,500	463,600	433,300	360,200	304,400
18	437,200	441,200	389,500	347,800	330,700	334,800	359,100	399,100	463,100	431,300	357,600	303,700
19	437,800	441,500	387,500	347,000	330,500	334,800	358,200	405,500	462,900	429,100	354,900	303,100
20	438,200	439,800	385,400	346,100	330,400	335,000	357,300	411,100	462,600	427,100	352,400	302,500
21	438,600	437,900	383,400	-	330,200	335,100	356,200	415,900	462,200	425,000	349,600	302,500
22	438,900	436,100	381,600	344,900	330,100	335,500	355,200	420,000	461,600	422,900	346,800	302,600
23	439,200	435,000	380,000	343,700	330,100	335,900	354,200	423,500	461,100	420,800	344,000	302,600
24	439,500	433,300	377,900	342,800	330,600	336,800	353,600	427,100	460,500	418,600	341,300	302,700
25	440,000	431,700	375,800	342,000	331,100	337,700	353,200	430,800	459,900	416,400	338,600	302,900
26	440,200	431,100	373,300	341,100	331,100	338,400	353,100	433,500	459,400	414,200	335,900	302,900
27	440,500	429,900	371,000	340,300	331,100	339,200	353,300	436,000	458,800	412,000	333,100	303,000
28	440,700	428,100	368,800	340,000	331,200	339,900	353,600	438,200	458,200	409,700	330,500	303,200
29	441,000	426,300	366,500	339,000	------	340,500	353,800	440,300	457,600	407,300	327,900	303,200
30	441,100	424,600	364,100	338,200	------	341,200	355,300	442,400	456,700	405,000	325,000	303,500
31	441,400	------	361,800	337,400	------	342,100	------	444,700	------	402,600	322,300	------
MAX	441,400	443,500	423,000	361,100	336,400	342,100	360,100	444,700	464,900	455,700	400,200	319,700
MIN	430,500	424,600	361,800	337,400	329,800	331,400	343,000	357,300	447,100	402,600	322,300	302,500
(†)	4,191.13	4,187.43	4,172.50	4,166.20	4,164.57	4,167.44	4,170.85	4,191.84	4,194.41	4,182.40	4,162.18	4,156.98
(‡)	+11,200	-16,800	-62,800	-24,400	-6,200	+10,900	+13,200	+89,400	+12,000	-54,100	-80,300	-18,800

CAL YR 1972..... ‡ -26,900
WTR YR 1973..... ‡ -126,700

† 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 (180 m) upstream from Dixie Creek, 1.8 mi (2.9 km) downstream from Anderson Ranch Reservoir, 2.2 mi (3.5 km) northwest of Bennett, and at mile 41.5 (66.8 km).

DRAINAGE AREA.--982 sq mi (2,543 sq km).

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 (1,173 m) (from topographic map of Bureau of Reclamation).

AVERAGE DISCHARGE.--30 years, 1,006 cfs (28.49 cu m/s), 728,800 acre-ft/yr (89.9 cu hm/yr); 15-year base period (1952-67), 977 cfs (27.67 cu m/s).

EXTREMES.--Current year: Maximum discharge, 2,590 cfs (23.3 cu m/s) June 15 (gage height, 5.77 ft or 1.759 m); minimum, 22 cfs (0.62 cu m/s) Oct. 18 (gage height, 1.70 ft or 0.518 m).
Period of record: Maximum discharge, 9,850 cfs (279 cu m/s) May 25, 1956 (gage height, 10.56 ft or 3.219 m); minimum, 0.1 cfs (0.003 cu m/s) Nov. 13, 1959; minimum gage height, 0.99 ft (0.302 m) Feb. 16, 1950.

REMARKS.--Records excellent. Flow regulated by Anderson Ranch Reservoir 1.8 mi (2.9 km) upstream (see sta 13190000) beginning Dec. 15, 1945. Flow of Little Camas Creek is stored in Little Camas Reservoir (capacity, 22,300 acre-ft or 27.5 cu hm, no spill most years) and diverted out of basin through Little Camas Canal (see sta 13189000) for irrigation of about 5,000 acres (20.2 sq km) of land in vicinity of Mountain Home. Diversions above station for irrigation of about 600 acres (240 sq hm) (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Feb. 9-16)

1.6	17	3.5	593
1.8	37	4.0	900
2.1	86	5.0	1,780
2.5	188	6.0	2,840
3.0	367		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	139	1,180	525	812	372	133	377	679	1,080	1,460	1,550
2	228	345	1,180	847	823	374	359	371	678	1,090	1,470	1,550
3	227	417	699	849	440	145	570	728	678	1,090	1,470	1,560
4	228	266	1,190	849	284	140	362	726	676	1,090	1,470	688
5	230	200	1,190	855	639	372	362	727	666	1,090	1,480	668
6	230	353	1,230	721	642	376	363	728	661	1,100	1,480	669
7	231	256	1,240	449	643	378	137	725	906	1,100	1,480	672
8	224	199	1,240	795	643	373	133	728	1,200	1,110	1,480	674
9	228	440	1,240	803	640	374	359	716	1,150	1,110	1,480	670
10	227	440	1,260	803	388	142	362	718	1,160	1,120	1,490	490
11	443	438	1,480	804	233	139	362	715	1,190	1,120	1,490	485
12	456	197	1,480	812	633	389	363	716	1,000	1,120	1,480	485
13	382	691	1,480	729	648	376	361	714	682	1,130	1,490	485
14	221	856	1,490	451	648	374	552	715	1,270	1,130	1,500	487
15	220	572	1,480	809	650	490	1,040	714	2,010	1,130	1,500	487
16	80	443	1,480	810	639	488	1,540	711	1,410	1,470	1,500	487
17	23	297	1,500	808	134	141	1,550	710	1,410	1,460	1,510	482
18	48	194	1,500	807	130	137	1,550	707	1,420	1,460	1,500	478
19	96	214	1,510	818	363	292	1,550	700	1,170	1,430	1,510	480
20	132	1,150	1,500	728	373	395	1,560	697	1,160	1,440	1,510	481
21	204	1,170	1,510	451	376	358	1,570	696	1,160	1,430	1,520	219
22	209	1,170	1,510	806	376	294	1,570	694	1,160	1,430	1,520	210
23	206	733	1,510	807	376	293	1,570	693	1,170	1,430	1,530	212
24	206	1,170	1,520	808	144	139	1,570	691	1,170	1,440	1,530	212
25	207	1,170	1,510	809	136	130	1,570	691	1,160	1,450	1,530	212
26	214	724	1,520	816	368	291	1,560	689	1,090	1,440	1,530	212
27	219	1,180	1,520	730	373	294	1,560	687	1,080	1,450	1,530	224
28	203	1,180	1,520	452	365	293	1,560	681	1,080	1,450	1,550	222
29	203	1,180	1,530	813	------	291	1,550	681	1,090	1,460	1,560	212
30	210	1,190	1,540	813	------	293	742	677	1,060	1,460	1,540	124
31	160	------	1,550	806	------	147	------	650	------	1,470	1,510	------
TOTAL	6,619	18,974	43,289	23,183	12,919	9,090	28,390	21,173	32,396	39,780	46,600	16,087
MEAN	214	632	1,396	748	461	293	946	683	1,080	1,283	1,503	536
MAX	456	1,190	1,550	855	823	490	1,570	728	2,010	1,470	1,560	1,560
MIN	23	139	699	449	130	130	133	371	661	1,080	1,460	124
AC-FT	13,130	37,630	85,860	45,980	25,620	18,030	56,310	42,000	64,260	78,900	92,430	31,910

CAL YR 1972 TOTAL 541,025 MEAN 1,478 MAX 4,430 MIN 23 AC-FT 1,073,000
WTR YR 1973 TOTAL 298,500 MEAN 818 MAX 2,010 MIN 23 AC-FT 592,100

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 mi (23 km) east of Boise, and at mile 74.0 (119.1 km).

DRAINAGE AREA.--2,210 sq mi (5,724 sq km), 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, 282,700 acre-ft (349 cu hm) Apr. 30 (elevation, 3,214.72 ft or 979.847 m); minimum observed, 1,660 acre-ft (2.05 cu hm) Sept. 20 (elevation, 3,005.22 ft or 915.991 m).
Period of record: Maximum contents observed, 301,200 acre-ft (371 cu hm) May 29, 1948 (elevation, 3,219.1 ft or 981.18 m); 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 (1.5 m) in 1937; storage began in 1915. Capacity, 286,600 acre-ft (353 cu hm) between elevations 2,974 ft or 906.5 m (9.5 ft or 3.00 m above sluice gate sill) and 3,216 ft or 980.2 m (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 (0.428 cu hm) at elevation 2,974 ft (906.5 m) to 5,000 acre-ft (6.16 cu hm) at elevation 3,085 ft (940.3 m) 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)

3,005.0	1,640	3,080.0	30,000
3,010.0	2,210	3,100.0	49,000
3,020.0	3,800	3,130.0	90,500
3,030.0	5,870	3,160.0	146,000
3,040.0	8,270	3,190.0	214,000
3,060.0	16,800	3,215.0	283,500

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36,100	84,900	156,500	276,900	275,800	278,200	278,600	281,000	249,700	179,300	23,400	4,710
2	37,900	86,200	158,900	276,100	275,800	279,000	278,400	278,500	248,100	174,500	20,700	4,710
3	39,400	88,100	161,200	277,100	276,200	278,800	278,400	274,800	245,600	170,200	18,800	4,760
4	40,900	90,000	165,600	277,900	276,700	278,600	277,500	272,200	242,200	165,200	17,400	4,740
5	42,300	92,000	168,700	278,600	277,100	278,300	275,900	269,600	239,400	160,400	16,500	4,200
6	43,800	94,000	171,700	278,700	277,600	278,300	274,800	267,500	236,900	155,600	15,500	4,150
7	45,300	95,900	174,700	278,800	278,100	278,300	273,700	265,000	234,800	149,900	14,600	4,180
8	46,800	97,600	177,900	278,800	278,200	278,400	272,300	263,400	233,300	144,800	13,300	4,220
9	48,300	99,200	181,000	279,000	278,600	278,300	270,600	262,300	232,700	139,100	12,600	4,230
10	49,700	101,100	184,200	279,100	278,400	278,100	269,400	260,700	232,200	133,300	11,800	4,190
11	51,400	103,000	187,300	279,400	278,200	278,000	268,400	259,100	231,400	128,300	11,100	4,020
12	53,400	104,800	190,900	279,000	278,000	277,800	267,500	256,200	229,900	122,800	10,400	4,000
13	55,400	106,600	195,000	278,900	278,200	277,800	265,200	253,800	227,300	117,600	9,760	3,990
14	57,500	109,000	197,900	277,900	278,000	277,900	262,700	252,100	224,100	109,800	9,160	3,990
15	59,300	111,800	202,300	276,900	278,600	278,000	260,200	251,300	224,300	106,500	8,640	4,000
16	61,000	114,100	206,400	276,800	278,700	278,100	258,500	251,500	224,900	101,200	8,160	3,980
17	62,500	116,100	210,400	278,000	278,300	278,000	259,500	252,300	223,400	96,000	7,690	4,020
18	64,600	117,700	214,600	278,200	278,000	277,900	262,500	254,300	221,700	91,100	7,250	3,980
19	65,700	119,300	218,800	277,900	277,600	277,800	265,100	256,500	219,400	85,200	6,830	2,080
20	67,100	120,900	223,600	277,300	277,200	277,600	267,300	258,400	216,600	80,100	6,400	1,660
21	68,500	124,100	228,100	276,700	277,200	278,000	269,100	259,500	213,500	74,900	6,020	3,940
22	70,000	127,400	232,700	276,200	277,200	278,200	270,500	259,300	210,600	70,600	5,670	6,040
23	71,500	130,200	237,400	276,000	277,300	278,200	272,400	258,800	207,500	66,700	5,310	7,420
24	73,100	133,000	242,200	275,900	277,200	278,200	274,100	258,100	204,800	61,200	4,950	8,860
25	74,500	136,400	247,300	276,100	277,100	278,200	276,000	257,600	201,500	57,700	4,800	10,700
26	76,000	139,800	252,300	276,200	277,000	278,200	277,300	258,000	198,400	54,100	4,700	12,600
27	77,600	143,200	256,400	275,900	277,300	278,700	279,000	257,300	195,200	47,900	4,700	14,200
28	79,100	146,600	260,600	275,700	277,900	278,900	280,400	256,300	191,300	41,400	4,690	15,700
29	80,600	149,900	264,700	275,400	------	279,000	281,700	254,800	187,400	36,300	4,700	17,200
30	82,100	153,200	268,700	275,600	------	279,000	282,700	253,400	183,500	31,200	4,700	18,400
31	83,500	------	272,800	275,800	------	278,800	------	251,300	------	27,200	4,690	------
MAX	83,500	153,200	272,800	279,400	278,700	279,000	282,700	281,000	249,700	179,300	23,400	18,400
MIN	36,100	84,900	156,500	275,400	275,800	277,600	258,500	251,300	183,500	27,200	4,690	1,660
(†)	3,125.62	3,163.43	3,211.44	3,212.45	3,213.13	3,213.43	3,214.72	3,204.04	3,177.37	3,076.36	3,024.47	3,063.02
(‡)	+49,300	+69,700	+119,600	+3,000	+2,100	+900	+3,900	-31,400	-67,800	-156,300	-22,510	+13,710

CAL YR 1972..... ‡ -2,700
WTR YR 1973..... ‡ -15,800

† 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 mi (2.7 km) upstream from Robie Creek, 5.0 mi (8.0 km) northwest of Arrowrock Dam, and at mile 5.8 (9.3 km).

DRAINAGE AREA.--399 sq mi (1,033 sq km).

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 (951 m) (from topographic map).

AVERAGE DISCHARGE.--23 years, 300 cfs (8.496 cu m/s), 10.21 in/yr (259 mm/yr), 217,400 acre-ft/yr (268 cu hm/yr); 15-year base period (1952-67), 277 cfs (7.845 cu m/s).

EXTREMES.--Current year: Maximum discharge, 813 cfs (23.0 cu m/s) Apr. 14 (gage height, 4.42 ft or 1.347 m); minimum, 12 cfs (0.340 cu m/s) Aug. 1 (gage height, 1.81 ft or 0.552 m).
Period of record: Maximum discharge, 5,440 cfs (154 cu m/s) Dec. 23, 1955 (gage height, 9.55 ft or 2.911 m); minimum, 8.9 cfs (0.242 cu m/s) Aug. 9, 1968 (gage height, 2.00 ft or 0.610 m).

REMARKS.--Records good except those for winter period, which are fair. Diversions above station and from Robie Creek for irrigation of about 900 acres (360 cu hm). Records of water temperatures for the water year 1973 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 Nov. 21, 22, Dec. 4-23, Jan. 6-10, 16, 17, 19, Feb. 14-23)

1.8	11	3.0	185
1.9	16	3.5	348
2.0	25	4.0	568
2.2	46	4.5	824
2.6	102		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	82	105	111	121	308	283	438	313	86	20	22
2	69	86	109	134	116	311	269	426	303	83	20	25
3	69	86	107	97	121	266	269	433	288	80	25	24
4	67	117	84	82	129	246	287	457	272	76	34	22
5	69	134	49	86	132	234	322	452	251	72	29	19
6	69	109	54	115	134	216	356	451	236	67	25	18
7	69	97	68	128	136	216	348	450	231	63	23	18
8	69	102	82	126	132	210	330	493	224	61	21	29
9	69	104	74	114	119	207	330	500	222	58	22	27
10	80	96	70	124	132	213	330	474	213	54	21	27
11	83	94	86	125	129	231	352	446	193	51	20	25
12	83	92	94	136	126	210	380	434	186	48	20	23
13	77	91	88	185	129	216	479	449	174	47	20	22
14	79	89	86	234	120	202	718	477	177	47	20	21
15	91	89	85	216	118	205	632	504	213	49	16	22
16	94	89	90	304	110	210	573	524	198	47	15	25
17	86	94	104	456	112	266	693	552	187	44	14	30
18	82	96	150	322	104	246	607	575	194	41	14	27
19	82	96	260	250	102	237	530	587	179	38	14	25
20	92	89	380	180	105	246	474	575	158	37	14	34
21	85	74	350	210	110	266	437	520	144	39	14	44
22	80	71	420	140	116	269	420	465	133	39	15	43
23	79	86	360	142	134	283	420	426	125	39	14	40
24	77	83	311	147	136	301	430	409	123	38	15	46
25	77	83	256	178	151	322	438	500	117	36	16	62
26	79	207	205	153	163	352	458	440	111	34	18	58
27	77	180	183	116	188	341	501	386	106	31	19	50
28	77	130	168	121	225	315	540	356	101	29	18	45
29	77	105	127	132	------	294	507	334	96	26	18	43
30	71	100	117	142	------	287	461	322	92	24	16	41
31	71	------	136	138	------	297	------	320	------	23	17	------
TOTAL	2,400	3,051	4,858	5,144	3,650	8,023	13,174	14,175	5,560	1,507	587	957
MEAN	77.4	102	157	166	130	259	439	457	185	48.6	18.9	31.9
MAX	94	207	420	456	225	352	718	587	313	86	34	62
MIN	67	71	49	82	102	202	269	320	92	23	14	18
CFSM	.19	.26	.39	.42	.33	.65	1.10	1.15	.46	.12	.05	.08
IN.	.22	.28	.45	.48	.34	.75	1.23	1.32	.52	.14	.05	.09
AC-FT	4,760	6,050	9,640	10,200	7,240	15,910	26,130	28,120	11,030	2,990	1,160	1,900

CAL YR 1972 TOTAL 167,118 MEAN 457 MAX 2,390 MIN 40 CFSM 1.15 IN 15.58 AC-FT 331,500
WTR YR 1973 TOTAL 63,086 MEAN 173 MAX 718 MIN 14 CFSM .43 IN 5.88 AC-FT 125,100

PEAK DISCHARGE (BASE, 800 CFS).--Apr. 14 (1130) 813 cfs (4.42 ft).

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 mi (3 km) upstream from diversion dam for New York Canal, 7 mi (11 km) downstream from Mores Creek, 9 mi (14 km) southeast of Boise, and at mile 63.8 (102.7 km).

DRAINAGE AREA.--2,680 sq mi (6,940 sq km), 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, 296,400 acre-ft (365 cu hm) July 29 (elevation, 3,056.19 ft or 931.527 m); minimum, 64,700 acre-ft (79.8 cu hm) May 1 (elevation, 2,940.05 ft or 896.127 m).
Period of record: Maximum contents, 305,130 acre-ft (376 cu hm) June 25, 1955 (elevation, 3,059.32 ft or 932.481 m); minimum since near-full capacity was attained on June 25, 1955, 28,630 acre-ft (35.3 cu hm) Dec. 21, 1961 (elevation, 2,904.83 ft or 885.392 m).

REMARKS.--Reservoir is formed by earth-fill dam. Storage began Oct. 16, 1954. Dam completed in February 1955. Capacity, 307,040 acre-ft (378.6 cu hm) between elevations 2,827.0 ft or 861.67 m (sill of outlet gates) and 3,060.0 ft or 932.69 m (spillway crest). Minimum proposed operating level, 2,905.0 ft or 885.44 m (28,770 acre-ft or 35.5 cu hm), 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)

2,940.0	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
3,000.0	162,800		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165,200	123,600	118,600	65,300	156,800	207,300	257,900	275,300	291,400	293,700	292,500	176,000
2	162,200	123,500	117,000	67,000	158,900	208,200	258,600	275,700	292,200	293,800	289,600	173,700
3	158,300	123,500	115,600	68,800	160,500	208,900	259,400	276,200	293,100	293,600	286,200	171,500
4	154,400	123,500	113,700	70,800	162,300	209,400	260,600	276,700	293,600	293,400	282,600	168,700
5	150,500	123,600	111,700	72,900	164,100	209,700	261,600	277,200	293,400	293,200	278,700	165,100
6	146,800	123,600	109,700	75,100	166,000	209,900	262,400	277,600	293,100	293,400	274,700	162,200
7	142,900	123,600	107,700	77,300	168,100	210,100	263,200	277,900	293,000	293,700	270,600	157,900
8	139,000	123,600	105,700	79,600	170,300	210,300	264,000	278,200	293,100	293,800	266,600	154,800
9	135,600	123,600	103,700	81,800	172,500	210,500	264,700	278,400	293,100	293,700	262,600	151,900
10	132,500	123,600	101,700	84,200	174,900	210,800	265,300	278,500	293,100	293,600	258,600	148,900
11	129,500	123,600	99,700	86,700	176,900	210,900	265,200	278,800	293,200	293,500	254,500	145,800
12	126,300	123,500	97,800	90,800	179,100	212,300	266,000	279,200	293,200	293,100	250,500	142,700
13	124,400	123,500	95,900	95,000	181,200	214,400	268,000	279,700	293,600	293,100	246,400	139,500
14	124,300	123,500	94,000	98,900	183,300	216,600	271,400	280,200	294,100	293,400	242,300	136,400
15	124,400	123,500	92,000	102,300	185,600	218,800	274,800	280,500	294,200	293,200	238,200	133,300
16	124,400	123,400	90,000	106,100	187,800	221,100	277,000	280,900	294,200	293,100	233,900	130,300
17	124,400	123,500	88,300	110,900	190,000	223,500	277,700	281,400	294,200	293,000	229,700	127,400
18	124,300	123,500	86,400	115,400	192,100	225,800	277,700	282,700	294,200	293,200	225,500	125,400
19	124,300	123,400	84,800	119,400	193,900	228,000	277,400	284,000	294,100	293,300	221,400	122,500
20	124,300	123,400	83,300	123,000	195,700	230,100	277,300	285,500	294,000	293,200	217,400	118,900
21	124,300	123,400	81,700	126,300	197,400	233,600	277,000	286,900	293,800	293,400	213,400	114,900
22	124,300	123,200	80,300	129,200	199,100	234,700	276,500	287,800	293,800	292,700	209,500	110,600
23	124,200	123,200	79,000	132,000	201,100	237,200	276,000	288,200	293,800	293,200	205,600	106,300
24	124,100	123,200	77,700	134,800	202,900	239,700	275,300	288,600	293,800	293,700	201,700	102,200
25	124,100	123,200	76,200	137,800	204,700	242,200	275,000	289,400	293,600	292,800	197,900	98,500
26	124,000	123,400	74,600	140,800	205,700	244,700	274,700	290,200	293,300	295,600	194,200	95,100
27	123,900	123,600	72,900	143,700	206,300	247,500	274,700	290,400	293,300	295,200	190,800	91,700
28	123,900	123,100	71,100	146,300	206,700	250,100	274,800	290,600	293,600	296,200	187,600	88,400
29	123,800	121,800	69,200	148,700	------	252,800	274,700	290,800	293,700	296,400	184,500	85,200
30	123,700	120,200	67,400	151,400	------	254,600	275,000	290,900	293,600	295,700	181,500	82,000
31	123,600	------	65,600	156,100	------	256,300	------	291,100	------	294,600	178,700	------
MAX	165,200	123,600	118,600	156,100	206,700	256,300	277,700	291,100	294,200	296,400	292,500	176,000
MIN	123,600	120,200	65,600	65,300	156,800	207,300	257,900	275,300	291,400	292,700	178,700	82,000
(†)	2,979.17	2,977.18	2,940.76	2,996.64	3,020.49	3,041.08	3,048.26	3,054.26	3,055.17	3,055.54	3,007.71	2,952.92
(‡)	-46,600	-3,400	-54,600	+90,500	+50,600	+49,600	+18,700	+16,100	+2,500	+1,000	-115,900	-96,700

CAL YR 1972..... ‡ +53,300
WTR YR 1973..... ‡ -88,200

† 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 mi (2.9 km) upstream from diversion dam for New York Canal, 7.5 mi (12.1 km) downstream from mouth of Mores Creek, 9 mi (14.5 km) southeast of Boise, and at mile 63.6 (102.3 km).

DRAINAGE AREA.--2,680 sq mi (6,940 sq km), approximately. Mean altitude, 5,910 ft (1,801 m).

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 or 861.670 m (levels by Corps of Engineers). Prior to Mar. 18, 1905, nonrecording gages at sites about 1 mi (1.6 km) 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 mi (8 to 11 km) upstream at different datums.

AVERAGE DISCHARGE.--36 years (1895-96, 1897-1903, 1905-6, 1907-16, 1954-73), 2,981 cfs (84.42 cu m/s), 2,160,000 acre-ft/yr (2,660 cu hm/yr).

EXTREMES.--Current year: Maximum daily discharge, 4,760 cfs (135 cu m/s) July 2-5; minimum daily, 107 cfs (3.03 cu m/s) Oct. 17.
Period of record: Maximum discharge observed, 35,500 cfs (1,010 cu m/s) 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 200 cfs (5.66 cu m/s), which are good. Daily discharge computed from relations between discharge, head, and gate openings 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 (931 sq km) in the basin and about 5,000 acres (202 sq km) outside the basin near Mountain Home (1966 determination). Records of chemical analyses for the water year 1973 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,250	119	910	1,110	119	1,110	610	3,860	4,540	4,740	4,390	3,320
2	2,120	119	910	449	119	1,110	943	4,080	4,540	4,760	4,420	3,220
3	2,120	119	910	119	119	1,110	1,470	4,240	4,540	4,760	4,420	3,120
4	2,120	119	1,040	119	119	1,110	1,720	4,240	4,570	4,760	4,420	3,060
5	2,120	119	1,110	119	119	1,180	1,830	4,220	4,630	4,760	4,420	2,990
6	2,120	119	1,110	119	119	1,210	1,920	4,280	4,660	4,730	4,400	2,960
7	2,120	119	1,110	119	119	1,210	1,950	4,300	4,660	4,680	4,390	2,930
8	2,120	119	1,110	119	119	1,210	1,950	4,350	4,680	4,660	4,360	2,770
9	1,870	119	1,110	119	119	1,210	1,950	4,380	4,700	4,680	4,320	2,660
10	1,740	119	1,110	119	119	1,210	2,050	4,400	4,700	4,720	4,310	2,600
11	1,740	119	1,110	119	119	1,210	2,320	4,560	4,700	4,690	4,310	2,550
12	1,740	119	1,110	119	119	483	2,610	4,580	4,670	4,680	4,290	2,500
13	1,200	119	1,110	119	119	119	3,090	4,560	4,660	4,660	4,280	2,490
14	119	119	1,110	119	119	119	2,900	4,600	4,630	4,640	4,280	2,470
15	119	119	1,110	119	119	119	2,800	4,670	4,620	4,640	4,280	2,460
16	119	119	1,110	119	119	119	2,820	4,710	4,620	4,640	4,300	2,460
17	107	119	1,110	119	119	119	2,670	4,710	4,620	4,640	4,310	2,440
18	119	119	1,110	119	119	119	2,600	4,710	4,620	4,620	4,270	2,420
19	119	119	1,110	119	119	119	2,600	4,710	4,570	4,620	4,230	2,420
20	119	119	1,110	119	119	119	2,530	4,710	4,540	4,590	4,170	2,410
21	119	119	1,110	119	119	119	2,600	4,660	4,540	4,580	4,120	2,330
22	119	119	1,110	119	119	119	2,650	4,640	4,560	4,480	4,100	2,280
23	119	119	1,110	119	119	119	2,690	4,640	4,570	4,180	4,100	2,260
24	119	119	1,110	119	119	119	2,780	4,620	4,570	3,860	4,040	2,190
25	119	119	1,110	119	119	119	2,930	4,560	4,600	4,080	3,960	2,020
26	119	119	1,110	119	592	119	3,120	4,380	4,650	4,250	3,880	1,860
27	119	119	1,110	119	810	119	3,390	4,190	4,670	4,320	3,770	1,780
28	119	402	1,110	119	1,040	119	3,520	4,160	4,670	4,330	3,620	1,740
29	119	810	1,110	119	------	119	3,590	4,200	4,710	4,340	3,540	1,710
30	119	910	1,110	119	------	550	3,720	4,480	4,740	4,340	3,500	1,700
31	119	------	1,110	119	------	610	------	4,540	------	4,330	3,420	------
TOTAL	27,510	5,335	33,740	5,010	5,417	16,546	74,323	137,940	138,750	140,760	128,620	74,120
MEAN	887	178	1,088	162	193	534	2,477	4,450	4,625	4,541	4,149	2,471
MAX	2,250	910	1,110	1,110	1,040	1,210	3,720	4,710	4,740	4,760	4,420	3,320
MIN	107	119	910	119	119	119	610	3,860	4,540	3,860	3,420	1,700
AC-FT	54,570	10,580	66,920	9,940	10,740	32,820	147,400	273,600	275,200	279,200	255,100	147,000

CAL YR 1972 TOTAL 1,617,794 MEAN 4,420 MAX 10,200 MIN 107 AC-FT 3,209,000
WTR YR 1973 TOTAL 788,071 MEAN 2,159 MAX 4,760 MIN 107 AC-FT 1,563,000

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 mi (8.8 km) 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 mi (8 km) 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 (762.2 km) above mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents observed, 169,200 acre-ft (209 cu hm) Apr. 26, gage height, 29.18 ft (8.89 m); minimum observed, 34,000 acre-ft (41.9 cu hm) Sept. 2, 7, gage height, 10.18 ft (3.10 m).
Period of record: Maximum contents observed, 178,900 acre-ft (221 cu hm) Apr. 27, 28, 1922, Apr. 24, 1932, gage height, 30.18 ft (9.20 m); minimum observed, 5,390 acre-ft (6.65 cu hm) Oct. 22, 1924, gage height, 3.27 ft (1.00 m), upper pool; 0.85 ft (0.26 m), lower pool.

REMARKS.--Reservoir is formed by two earth embankments; dams were completed and storage began in 1908. Capacity, 177,150 acre-ft (218 cu hm), between gage heights 0.0 ft (0.0 m), sill of outlet gates and 30.0 ft (9.14 m), maximum operating level. Dead storage, about 13,000 acre-ft (16.0 cu hm). Below gage height 12.0 ft (3.66 m), 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)

10.0	33,200	20.0	93,000
12.0	43,100	30.0	177,200
15.0	60,000		

CONTENTS, IN ACRE-FEET, FOR STATISTIC 00011, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55,800	62,700	68,500	124,300	126,100	127,400	147,000	166,400	144,600	106,400	68,600	34,100
2	56,300	63,000	69,900	126,000	126,000	129,100	147,500	166,100	144,600	104,500	66,500	34,000
3	56,600	63,300	71,200	127,100	126,000	131,000	148,000	165,200	144,600	103,000	65,700	34,100
4	56,600	63,500	72,800	127,100	126,000	132,700	149,400	164,200	144,800	101,400	64,100	34,400
5	56,600	63,600	74,900	127,000	126,000	134,300	150,800	162,800	144,800	99,500	62,900	34,400
6	56,700	63,700	77,100	126,900	126,000	136,100	151,900	161,900	143,100	98,100	61,600	34,400
7	57,100	63,900	78,600	126,800	125,900	138,200	153,100	161,900	142,000	98,100	60,500	34,000
8	57,300	63,900	80,300	126,700	125,900	140,100	154,700	160,700	140,100	98,000	58,900	34,400
9	57,500	64,100	82,200	126,700	125,800	142,000	156,000	159,800	137,900	96,900	56,900	34,700
10	57,700	64,200	84,000	126,700	125,800	143,900	157,300	158,700	136,600	95,100	55,300	34,900
11	57,900	64,400	85,900	126,600	125,800	145,800	158,100	157,700	135,600	93,300	53,900	34,900
12	58,000	64,600	87,700	126,600	125,800	147,600	158,500	157,100	134,200	91,600	52,600	34,900
13	58,300	64,700	89,700	126,600	125,700	148,800	159,100	156,700	132,800	89,500	51,300	35,000
14	58,600	64,800	91,500	126,600	125,600	149,100	161,900	155,000	131,100	87,800	50,000	34,800
15	59,700	64,900	93,300	126,600	125,600	149,100	163,000	153,700	129,900	86,400	48,600	34,700
16	60,300	65,000	95,200	126,700	125,500	149,100	163,500	151,400	129,500	85,000	47,100	35,000
17	60,400	65,200	97,100	126,700	125,500	149,000	164,500	150,100	129,300	83,000	45,500	35,300
18	60,600	65,300	99,100	126,700	125,400	148,800	165,100	148,600	128,600	80,800	44,000	35,200
19	60,800	65,400	100,700	126,700	125,400	148,600	165,300	147,700	128,800	79,700	42,900	35,600
20	61,000	65,600	103,000	126,600	125,300	148,400	165,600	146,600	128,200	78,400	41,800	36,000
21	61,200	65,700	104,800	126,600	125,300	148,200	166,600	145,300	127,700	78,100	40,900	36,400
22	61,300	65,800	107,000	126,600	125,300	148,100	167,300	144,400	126,000	78,700	39,700	36,900
23	61,500	65,900	108,700	126,500	125,200	147,900	167,900	142,700	123,700	77,800	38,500	37,300
24	61,600	66,000	110,400	126,500	125,200	147,700	168,500	141,800	122,500	78,200	37,400	38,000
25	61,800	66,200	112,100	126,400	125,100	147,500	168,900	141,800	121,300	77,500	36,800	38,700
26	61,900	66,300	113,900	126,400	125,000	147,400	169,200	141,900	118,900	76,800	36,300	39,500
27	62,100	66,400	115,100	126,300	124,900	147,200	168,500	142,600	116,100	76,100	36,000	40,800
28	62,100	66,500	117,000	126,300	125,700	147,000	168,000	142,900	113,300	74,500	36,100	41,500
29	62,200	66,600	118,900	126,200	------	146,800	168,000	143,300	110,600	73,400	35,900	42,100
30	62,300	67,200	120,700	126,200	------	146,700	167,800	144,100	108,300	71,800	35,300	42,600
31	62,500	------	122,500	126,100	------	146,500	------	144,500	------	70,300	34,700	------
MAX	62,500	67,200	122,500	127,100	126,100	149,100	169,200	166,400	144,800	106,400	68,600	42,600
MIN	55,800	62,700	68,500	124,300	124,900	127,400	147,000	141,800	108,300	70,300	34,700	34,000
(†)	2,515.41	2,516.18	2,523.85	2,524.29	2,524.24	2,526.69	2,529.03	2,526.46	2,522.05	2,516.66	2,510.33	2,511.90
(‡)	+7,100	+4,700	+55,300	+3,600	-400	+20,800	+21,300	-23,300	-36,200	-38,000	-35,600	+7,900

CAL YR 1972 MAX 122,500 MIN 0 ‡ -6,600
WTR YR 1973 MAX 169,200 MIN 34,000 ‡ -12,800

† 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 1968-73 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 1916-73 are on file in office of the Idaho Department of Water Resources. Prior to October 1967, there was no record of October to March diversions except for New York Canal. Miscellaneous diversions or pumping from Boise between "near Boise" and "at Notus" was reported by watermaster to be approximately as follows in acre-ft (cu m): October, 32 (39,500); April, 59 (72,700); May, 103 (127,000); June, 113 (139,000); July, 147 (181,000); August, 128 (158,000); and September, 103 (127,000).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,690	0	800	1,000	0	1,000	500	2,650	3,310	3,500	3,220	2,700
2	1,700	0	800	1,000	0	1,000	500	2,650	3,310	3,490	3,270	2,620
3	1,590	0	800	0	0	1,000	1,000	2,750	3,310	3,490	3,300	2,540
4	1,590	0	800	0	0	1,000	1,150	3,010	3,330	3,480	3,300	2,470
5	1,580	0	1,000	0	0	1,000	1,200	3,000	3,370	3,470	3,290	2,420
6	1,570	0	1,000	0	0	1,100	1,390	3,000	3,350	3,410	3,290	2,380
7	1,570	0	1,000	0	0	1,100	1,420	3,010	3,370	3,410	3,250	2,350
8	1,570	0	1,000	0	0	1,100	1,450	2,990	3,380	3,440	3,240	2,340
9	1,570	0	1,000	0	0	1,100	1,460	2,990	3,380	3,430	3,250	2,190
10	1,190	0	1,000	0	0	1,100	1,570	2,890	3,360	3,430	3,230	2,150
11	1,190	0	1,000	0	0	1,100	1,690	3,300	3,390	3,420	3,250	2,080
12	1,190	0	1,000	0	0	1,100	1,870	3,270	3,370	3,420	3,240	2,040
13	1,200	0	1,000	0	0	0	2,150	3,280	3,370	3,440	3,240	1,980
14	734	0	1,000	0	0	0	2,180	3,290	3,380	3,440	3,240	2,000
15	0	0	1,000	0	0	0	1,950	3,290	3,340	3,430	3,240	1,950
16	0	0	1,000	0	0	0	2,150	3,360	3,340	3,430	3,240	1,940
17	0	0	1,000	0	0	0	2,170	3,360	3,330	3,440	3,260	1,940
18	0	0	1,000	0	0	0	2,070	3,350	3,330	3,430	3,260	1,900
19	0	0	1,000	0	0	0	2,050	3,360	3,330	3,440	3,190	1,900
20	0	0	1,000	0	0	0	2,120	3,340	3,350	3,440	3,200	1,900
21	0	0	1,000	0	0	0	1,750	3,350	3,340	3,460	3,140	1,860
22	0	0	1,000	0	0	0	1,830	3,340	3,290	3,460	3,150	1,790
23	0	0	1,000	0	0	0	1,840	3,350	3,280	3,340	3,150	1,780
24	0	0	1,000	0	0	0	1,920	3,350	3,290	3,200	3,130	1,760
25	0	0	1,000	0	0	0	1,970	3,360	3,290	3,080	3,060	1,630
26	0	0	1,000	0	0	0	2,080	2,820	3,330	3,240	3,010	1,510
27	0	0	1,000	0	646	0	2,350	3,110	3,390	3,170	3,000	1,410
28	0	0	1,000	0	800	0	2,490	3,170	3,400	3,170	2,890	1,340
29	0	454	1,000	0	------	0	2,550	3,200	3,510	3,160	2,790	1,310
30	0	797	1,000	0	------	0	2,540	3,310	3,500	3,140	2,800	1,300
31	0	------	1,000	0	------	604	------	3,320	------	3,170	2,810	------
TOTAL	19,934	1,251	30,200	2,000	1,446	13,304	53,360	97,820	100,620	104,470	97,930	59,480
MEAN	643	41.7	974	64.5	51.6	429	1,779	3,155	3,354	3,370	3,159	1,983
MAX	1,700	797	1,000	1,000	800	1,100	2,550	3,360	3,510	3,500	3,300	2,700
MIN	0	0	800	0	0	0	500	2,650	3,280	3,080	2,790	1,300
AC-FT	39,540	2,480	59,900	3,970	2,870	26,390	105,800	194,000	199,600	207,200	194,200	118,000

CAL YR 1972 TOTAL 568,105.00 MEAN 1,552 MAX 3,490 MIN 0 AC-FT 1,127,000
WTR YR 1973 TOTAL 581,815.00 MEAN 1,594 MAX 3,510 MIN 0 AC-FT 1,154,000

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 (85.0 km).

DRAINAGE AREA.--2,760 sq mi (7,150 sq km), 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 (815.480 m) above mean sea level (datum of Corps of Engineers, Boise River Surveys). Prior to Apr. 30, 1943, at site 1 mi (1.6 m) upstream at datum 13.69 ft (4.173 m) higher. Apr. 30 to July 10, 1943, at site 400 ft (120 m) downstream at present datum.

AVERAGE DISCHARGE.--19 years (1954-73), 1,298 cfs (36.76 cu m/s), 967,200 acre-ft/yr (1,193 cu hm/yr), since completion of Lucky Peak Dam.

EXTREMES.--Current year: Maximum discharge, 1,680 cfs (47.6 cu m/s) May 26 (gage height, 4.54 ft or 1.384 m); minimum, 90 cfs (2.55 cu m/s) Feb. 26-27 (gage height, 2.88 ft or 0.878 m).
Period of record: Maximum discharge, 21,000 cfs (595 cu m/s) Apr. 20, 1943 (gage height, 10.00 ft or 3.048 m, site and datum then in use); minimum, 1.3 cfs (0.037 cu m/s) Feb. 3, 1955 (gage height, 2.21 ft or 0.674 m); minimum daily, 3.5 cfs (0.099 cu m/s) Jan. 19-23, 1961.

REMARKS.--Records good except those for December and January, which are fair. 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 (82,200 sq hm) of which about 5,000 acres (2,020 sq hm) are outside the basin near Mountain Home, about 130,000 acres (52,600 sq hm) are inside the basin below station, and about 50,000 acres (20,200 sq hm) are outside the basin near Lake Lowell.

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

3.0	90	4.0	816
3.2	159	4.5	1,520
3.5	334	5.0	2,400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	590	151	184	169	120	136	136	1,150	1,330	1,360	1,150	805
2	594	147	188	169	124	128	143	1,240	1,330	1,380	1,180	794
3	590	147	184	160	117	132	286	1,330	1,330	1,380	1,180	771
4	580	155	179	138	117	124	551	1,320	1,330	1,380	1,180	749
5	580	147	164	132	120	128	610	1,280	1,330	1,380	1,180	726
6	580	143	164	134	117	140	610	1,300	1,360	1,350	1,180	704
7	580	147	164	132	124	136	642	1,300	1,390	1,270	1,180	704
8	580	151	162	128	117	132	610	1,320	1,420	1,240	1,170	642
9	600	143	160	126	114	136	561	1,320	1,440	1,260	1,130	590
10	580	143	158	120	120	143	502	1,230	1,410	1,290	1,110	571
11	580	143	162	124	117	140	571	1,360	1,410	1,290	1,130	571
12	571	143	164	136	117	147	738	1,460	1,390	1,260	1,110	580
13	512	143	165	147	120	193	1,020	1,440	1,380	1,260	1,100	580
14	243	143	165	140	120	140	1,110	1,410	1,380	1,240	1,100	590
15	179	140	168	136	120	136	938	1,420	1,360	1,240	1,100	610
16	174	140	169	132	120	136	938	1,420	1,380	1,240	1,130	590
17	169	140	174	132	124	132	901	1,420	1,380	1,240	1,140	610
18	169	140	179	136	124	132	914	1,420	1,360	1,240	1,170	621
19	169	140	174	132	120	128	1,000	1,440	1,350	1,240	1,150	610
20	169	136	179	136	120	132	978	1,440	1,320	1,210	1,130	610
21	169	136	164	140	124	132	964	1,390	1,290	1,180	1,110	590
22	169	136	174	128	120	128	991	1,360	1,290	1,150	1,080	600
23	169	136	179	124	128	132	978	1,360	1,300	1,170	1,080	590
24	162	136	188	124	128	128	964	1,360	1,300	1,210	1,060	590
25	160	136	179	128	128	128	1,000	1,330	1,300	1,150	1,030	600
26	158	136	179	124	117	124	1,000	1,330	1,300	1,110	1,000	541
27	156	132	174	125	108	128	1,070	1,290	1,300	1,140	964	501
28	156	128	174	127	124	128	1,110	1,150	1,300	1,150	914	495
29	158	128	169	128	------	128	1,130	1,060	1,350	1,180	877	489
30	160	179	174	124	------	124	1,140	1,260	1,360	1,180	828	481
31	158	------	174	128	------	120	------	1,300	------	1,140	816	------
TOTAL	10,564	4,265	5,334	4,159	3,369	4,151	24,106	41,210	40,470	38,510	33,659	18,505
MEAN	341	142	172	134	120	134	804	1,329	1,349	1,242	1,086	617
MAX	600	179	188	169	128	193	1,140	1,460	1,440	1,380	1,180	805
MIN	156	128	158	120	108	120	136	1,060	1,290	1,110	816	481
AC-FT	20,950	8,460	10,580	8,250	6,680	8,230	47,810	81,740	80,270	76,380	66,760	36,700

CAL YR 1972 TOTAL 1,002,962 MEAN 2,740 MAX 6,710 MIN 74 AC-FT 1,989,000
WTR YR 1973 TOTAL 228,302 MEAN 625 MAX 1,460 MIN 108 AC-FT 452,800

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 1968-73 are published in reports of Geological Survey. Records of daily diversions for each canal 1916-73 are on file in office of the Idaho Department of Water Resources. Prior to October 1967, no record available of diversions that are usually made during October and March. Miscellaneous diversions or pumping from Boise River below "at Boise" was reported by watermaster to be approximately as follows in acre-ft (cu m): October, 32 (39,500); April, 59 (72,700); May, 103 (127,000); June, 113 (139,000); July, 147 (181,000); August, 129 (159,000); September, 102 (126,000).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,300						148	1,870	2,040	2,320	2,120	1,610
2	1,260						148	1,910	2,060	2,350	2,130	1,560
3	1,300						164	2,050	2,090	2,400	2,140	1,550
4	1,300						287	2,070	2,120	2,350	2,120	1,510
5	1,260						466	2,110	2,170	2,320	2,110	1,540
6	1,240						479	2,100	2,250	2,270	2,100	1,540
7	1,230						577	2,160	2,330	2,080	2,110	1,520
8	1,220						522	2,170	2,340	2,240	2,100	1,540
9	1,210						583	2,190	2,350	2,250	2,060	1,470
10	1,160						762	2,160	2,340	2,270	2,060	1,420
11	1,120						918	2,150	2,360	2,280	2,070	1,390
12	1,100						1,010	2,220	2,370	2,250	2,070	1,380
13	1,100						1,130	2,200	2,320	2,240	2,360	1,370
14	956						1,220	2,180	2,310	2,270	2,050	1,360
15	0						1,180	2,230	2,350	2,300	2,020	1,370
16	0						1,300	2,230	2,310	2,270	2,020	1,350
17	0						1,260	2,300	2,310	2,250	2,050	1,370
18	0						1,270	2,320	2,290	2,260	2,050	1,370
19	0						1,260	2,370	2,270	2,220	2,070	1,360
20	0						1,230	2,340	2,230	2,180	2,060	1,360
21	0						1,270	2,330	2,210	2,170	1,980	1,330
22	0						1,320	2,300	2,220	2,130	1,970	1,310
23	0						1,340	2,260	2,230	2,110	1,940	1,270
24	0						1,360	2,260	2,220	2,070	1,940	1,250
25	0						1,450	2,320	2,230	2,000	1,910	1,150
26	0						1,560	2,120	2,270	1,980	1,880	1,140
27	0						1,580	2,100	2,260	2,040	1,830	1,050
28	0						1,680	2,040	2,310	2,100	1,760	1,040
29	0				------		1,750	1,740	2,330	2,100	1,730	980
30	0				------		1,810	1,980	2,380	2,120	1,670	960
31	0	------			------		------	1,990	------	2,130	1,670	------
TOTAL	16,756	0	0	0	0	0	31,034	66,770	67,870	68,320	62,150	40,420
MEAN	541	0	0	0	0	0	1,034	2,154	2,262	2,204	2,005	1,347
MAX	1,300	0	0	0	0	0	1,810	2,370	2,380	2,400	2,360	1,610
MIN	0	0	0	0	0	0	148	1,740	2,040	1,980	1,670	960
AC-FT	33,240	0	0	0	0	0	61,560	132,400	134,600	135,500	123,300	80,170

CAL YR 1972 TOTAL 350,468.00 MEAN 958 MAX 2,410 MIN 0 AC-FT 695,200
WTR YR 1973 TOTAL 353,320.00 MEAN 968 MAX 2,400 MIN 0 AC-FT 700,800

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 (335 m) upstream from county road bridge, 0.4 mi (0.6 km) southeast of Notus, 7 mi (11 km) northwest of Caldwell, and at mile 14.0 (23 km).

DRAINAGE AREA.--3,820 sq mi (9,890 sq km), 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 (697.550 m) above mean sea level (levels by Corps of Engineers, Boise River Surveys). Prior to Aug. 26, 1936, nonrecording gage at site 1,100 ft (335 m) downstream at same datum.

AVERAGE DISCHARGE.--51 years (1920-22, 1924-73), 1,227 cfs or 34.75 cu m/s (unadjusted for storage), 889,000 acre-ft/yr (1,100 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 1,420 cfs (40.2 cu m/s) Dec. 19 (gage height, 3.71 ft or 1.131 m); minimum, 62 cfs (1.76 cu m/s) May 2 (gage height, 1.10 ft or 0.335 m).
Period of record: Maximum discharge, 20,500 cfs (581 cu m/s) Apr. 20, 1943 (gage height, 10.43 ft or 3.179 m); minimum observed, 10 cfs (0.28 cu m/s) Aug. 18, 21, 1920.

REMARKS.--Records fair. 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 mi (80.1 km) upstream beginning October 1954 (see sta 13201500). Diversions above station for irrigation of about 347,000 acres (140,000 sq hm) of which about 4,100 acres (1,660 sq hm) are by withdrawals from ground water; an undetermined acreage is below station, and about 5,000 acres (2,020 sq hm) near Mountain Home, about 50,000 acres (20,200 sq hm) near Lake Lowell, and sizable areas near the mouth of Boise River are outside the basin. About 19,000 acres (7,690 sq hm) are irrigated above the station with water diverted from Payette River. Records of chemical analysis and water temperatures for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1347: 1930.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Jan. 20 to Feb. 26, Apr. 29 to May 17)

1.3	90	3.0	885
1.5	152	4.0	1,625
2.0	345		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	754	903	831	799	722	681	412	136	665	183	311	528
2	748	896	838	809	708	686	389	99	610	249	294	596
3	700	885	845	800	713	673	323	120	564	282	324	613
4	700	924	843	787	712	664	375	183	533	218	358	559
5	748	915	801	745	758	664	560	256	468	249	376	518
6	790	876	780	755	773	661	471	249	412	282	380	464
7	840	871	821	743	762	660	480	276	332	282	389	454
8	892	900	767	744	754	653	551	276	332	306	417	564
9	911	889	749	727	733	653	539	265	331	349	389	554
10	971	875	736	737	750	665	381	242	356	298	354	533
11	971	869	744	732	750	688	215	205	397	208	341	533
12	985	847	742	773	745	652	169	261	350	218	358	498
13	1,030	834	750	1,030	731	670	120	307	280	245	376	469
14	1,030	846	761	944	721	681	754	284	341	269	315	459
15	1,120	837	741	844	716	640	655	197	472	294	298	469
16	1,040	845	781	849	707	635	547	176	521	298	286	483
17	957	851	829	883	711	636	660	172	640	294	286	513
18	911	838	902	869	696	626	656	184	700	306	311	533
19	955	830	1,250	834	705	624	696	186	624	354	363	513
20	1,080	818	1,060	799	702	632	725	353	518	421	412	569
21	1,030	815	984	785	696	679	594	399	354	503	376	670
22	999	807	965	772	696	632	480	343	273	624	376	718
23	978	807	919	763	696	623	465	328	238	635	371	760
24	955	805	979	749	695	623	402	375	306	629	394	840
25	956	802	919	762	685	610	308	796	328	498	483	1,130
26	961	821	878	756	689	614	239	903	230	376	564	1,060
27	953	816	892	727	673	604	159	956	208	349	596	1,020
28	945	806	877	716	678	602	96	786	166	345	564	1,030
29	917	792	850	728	------	594	130	751	172	354	549	1,020
30	896	794	833	739	------	506	159	622	176	394	538	1,010
31	899	------	821	727	------	408	------	659	------	358	493	------
TOTAL	28,622	25,414	26,488	24,427	20,077	19,639	12,710	11,345	11,897	10,670	12,242	19,680
MEAN	923	847	854	788	717	634	424	366	397	344	395	656
MAX	1,120	924	1,250	1,030	773	688	754	956	700	635	596	1,130
MIN	700	792	736	716	673	408	96	99	166	183	286	454
AC-FT	56,770	50,410	52,540	48,450	39,820	38,950	25,210	22,500	23,600	21,160	24,280	39,040

CAL YR 1972 TOTAL 1,078,314 MEAN 2,946 MAX 7,740 MIN 311 AC-FT 2,139,000
WTR YR 1973 TOTAL 223,211 MEAN 612 MAX 1,250 MIN 96 AC-FT 442,700

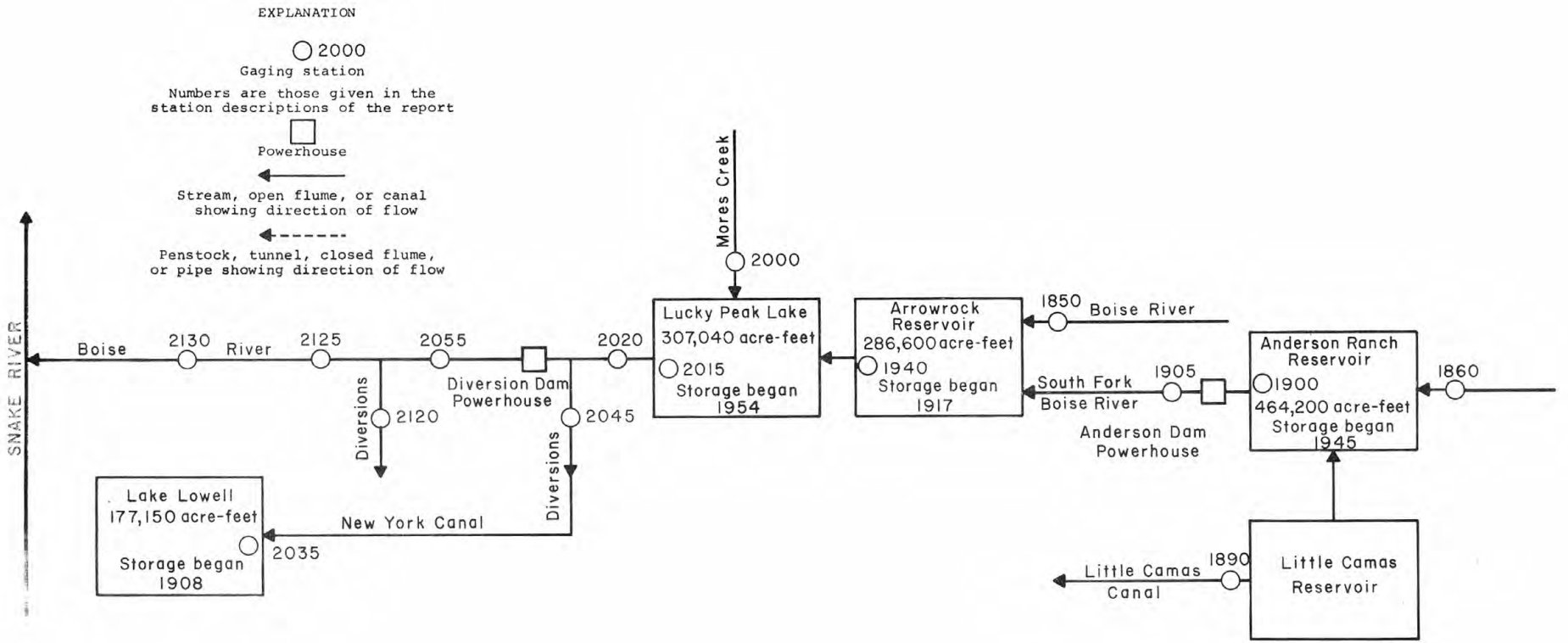

FIGURE 9. Schematic diagram showing gaging stations, diversions, and storage in Boise River basin.

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 mi (1.9 km) west of Parma, and at mile 3.8 (6.1 km).

DRAINAGE AREA.--3,970 sq mi (10,300 sq km), 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 (669 m) from topographic map. March 1938 to June 1939, nonrecording gage 1.4 mi (2.3 km) upstream at different datum.

EXTREMES.--Current year: Maximum discharge, 1,550 cfs (43.9 cu m/s) Sept. 25 (gage height, 8.77 ft or 2.673 m); maximum gage height, 8.85 ft (2.697 m) Oct. 15; minimum discharge, 264 cfs (7.48 cu m/s) Apr. 28 (gage height, 6.61 ft or 2.015 m).
Period of record: Maximum discharge, 7,840 cfs (222 cu m/s) Mar. 3, 1972 (gage height, 13.01 ft or 3.965 m); minimum, 264 cfs (7.48 cu m/s) Apr. 28, 1973 (gage height, 6.61 ft or 2.015 m).
Flood of Apr. 20, 1943, reached a discharge of about 20,000 cfs (566 cu m/s).

REMARKS.--Records good. Records of water temperature and chemical analysis for the water year 1973 are published in Part 2 of this report.

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

6.6	252	8.0	920
7.0	411	8.5	1,250
7.5	640	9.0	1,690

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,190	1,030	950	950	818	761	666	362	974	497	630	806
2	1,160	1,030	962	944	812	761	606	318	950	548	567	878
3	1,080	1,020	968	938	806	750	520	318	896	620	591	908
4	1,050	1,050	968	920	818	744	520	386	890	548	645	848
5	1,100	1,050	926	878	848	744	702	479	794	557	655	794
6	1,150	1,010	890	890	872	739	666	488	739	739	666	750
7	1,200	1,000	950	884	860	744	660	493	640	553	640	750
8	1,240	1,020	890	872	842	739	739	466	630	562	671	836
9	1,230	1,020	938	854	830	739	728	488	645	596	681	842
10	1,290	1,000	926	866	830	744	567	466	666	572	625	711
11	1,310	998	944	866	848	772	445	440	755	520	620	685
12	1,310	986	1,100	890	830	744	366	432	728	534	635	654
13	1,370	968	1,110	1,100	818	744	330	543	676	543	681	638
14	1,350	968	1,200	1,150	800	750	783	525	681	616	572	643
15	1,410	968	1,260	986	794	728	890	419	860	650	543	659
16	1,260	974	938	992	783	718	723	395	938	666	538	717
17	1,150	986	974	1,010	789	723	830	399	1,030	650	525	728
18	1,100	980	1,020	992	783	718	830	403	1,150	645	567	695
19	1,080	968	1,310	962	783	707	806	415	1,090	686	606	680
20	1,190	956	1,240	926	783	723	866	611	968	761	676	739
21	1,190	950	1,120	902	778	772	794	676	744	842	611	832
22	1,160	938	1,110	890	778	723	660	671	601	974	611	880
23	1,130	938	1,070	872	772	712	625	666	553	1,020	616	925
24	1,110	938	1,130	860	766	707	553	671	640	956	655	977
25	1,100	938	1,090	872	761	702	449	1,080	681	854	778	1,330
26	1,100	950	1,030	860	761	707	395	1,220	577	696	908	1,330
27	1,080	926	1,030	830	755	696	346	1,270	520	655	926	1,250
28	1,080	926	1,020	824	744	691	275	1,150	475	640	866	1,230
29	1,060	920	998	830	------	686	303	1,050	440	650	806	1,220
30	1,030	902	974	836	------	666	358	926	462	691	783	1,200
31	1,030	------	968	830	------	655	------	920	------	666	766	------
TOTAL	36,290	29,308	32,004	28,276	22,462	22,509	18,001	19,146	22,393	20,707	20,660	26,135
MEAN	1,171	977	1,032	912	802	726	600	618	746	668	666	871
MAX	1,410	1,050	1,310	1,150	872	772	890	1,270	1,150	1,020	926	1,330
MIN	1,030	902	890	824	744	655	275	318	440	497	525	638
AC-FT	71,980	58,130	63,480	56,090	44,550	44,650	35,700	37,980	44,420	41,070	40,980	51,840

CAL YR 1972 TOTAL 1,158,611 MEAN 3,166 MAX 7,740 MIN 623 AC-FT 2,298,000
WTR YR 1973 TOTAL 297,891 MEAN 816 MAX 1,410 MIN 275 AC-FT 590,900

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 (366 m) upstream from Rock Creek, 0.5 mi (0.8 km) northwest of Lowman, 4,100 ft (1,249.68 m) downstream from Clear Creek, and at mile 28.2 (45.4 km).

DRAINAGE AREA.--456 sq mi (1,181 sq km). Mean altitude, 6,780 ft (2,066.5 m).

PERIOD OF RECORD.--May 1941 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,790 ft (1,155 m) (from river-profile map). Prior to Dec. 18, 1941, nonrecording gage at site 900 ft (274 m) upstream at different datum.

AVERAGE DISCHARGE.--32 years, 880 cfs (24.9 cu m/s), 26.21 in/yr, 637,600 acre-ft/yr (786 cu hm) 15-year base period (1952-67), 852 cfs (24.1 cu m/s).

EXTREMES.--Current year: Maximum discharge, 3,180 cfs (90.1 cu m/s) May 19, gage height, 5.63 ft (1.716 m); minimum daily, 190 cfs (5.38 cu m/s).
Period of record: Maximum discharge, 7,190 cfs (204 cu m/s) June 11, 1972, gage height, 7.49 ft (2.283 m); minimum, 135 cfs (3.8 cu m/s) Sept. 10, 1966, gage height, 2.22 ft (0.677 m).

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 Nov. 24, Dec. 1, 6, 7, 14-21, Jan. 5-10, 21, 23, Feb. 3, 4, 9, 10, 20-23)

2.5	190	4.0	1,120
2.7	247	5.0	2,320
3.0	378	6.0	3,940
3.5	705		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	422	368	328	287	304	349	343	736	1,960	1,080	441	353
2	419	377	330	339	290	346	333	728	1,940	975	434	348
3	412	365	329	321	295	334	333	782	1,740	896	471	328
4	405	405	310	255	308	331	352	846	1,600	850	478	319
5	403	405	190	265	313	329	423	862	1,520	826	453	310
6	399	368	220	330	313	327	459	912	1,620	814	428	306
7	395	363	260	305	306	325	433	979	1,850	787	423	324
8	391	380	240	295	291	323	410	1,100	2,070	750	406	373
9	387	359	220	290	275	320	417	1,100	2,130	716	400	333
10	419	358	220	350	305	329	417	1,050	2,190	691	395	319
11	453	353	235	364	301	328	446	997	1,890	677	389	310
12	430	348	280	379	294	314	502	1,030	1,710	667	378	302
13	410	347	270	433	287	317	638	1,200	1,690	645	368	302
14	439	342	275	428	279	306	767	1,490	2,180	636	358	297
15	490	342	280	354	281	306	736	1,790	2,250	625	353	306
16	457	338	295	419	285	311	675	2,110	1,740	590	348	315
17	429	338	320	442	282	350	690	2,490	1,590	577	343	310
18	414	337	370	392	290	320	617	2,900	1,410	560	338	302
19	406	332	430	366	275	325	568	3,060	1,280	575	338	297
20	424	312	400	305	268	327	535	2,920	1,210	711	333	378
21	408	290	460	335	290	330	502	2,600	1,180	655	328	368
22	401	279	637	268	296	336	502	2,240	1,230	635	348	333
23	392	282	490	285	315	337	515	2,080	1,330	590	343	333
24	387	325	441	321	312	347	561	2,120	1,290	560	333	396
25	381	322	385	362	317	381	610	2,550	1,240	531	333	416
26	379	379	359	331	311	431	683	2,190	1,220	509	338	374
27	367	336	349	291	320	410	806	1,830	1,280	495	328	352
28	371	311	340	295	325	378	887	1,650	1,260	480	338	341
29	356	294	315	332	------	361	838	1,610	1,240	468	324	331
30	341	301	275	330	------	355	767	1,710	1,210	456	315	325
31	348	------	331	315	------	363	------	1,920	------	451	333	------
TOTAL	12,535	10,256	10,184	10,384	8,328	10,546	16,765	51,582	48,050	20,478	11,536	10,001
MEAN	404	342	329	335	297	340	559	1,664	1,602	661	372	333
MAX	490	405	637	442	325	431	887	3,060	2,250	1,080	478	416
MIN	341	279	190	255	268	306	333	728	1,180	451	315	297
CFSM	.89	.75	.72	.73	.65	.75	1.23	3.65	3.51	1.45	.82	.73
IN.	1.02	.84	.83	.85	.68	.86	1.37	4.21	3.92	1.67	.94	.82
AC-FT	24,860	20,340	20,200	20,600	16,520	20,920	33,250	102,300	95,310	40,620	22,880	19,840

CAL YR 1972 TOTAL 427,615 MEAN 1,168 MAX 6,920 MIN 190 CFSM 2.56 IN 34.88 AC-FT 848,200
WTR YR 1973 TOTAL 220,645 MEAN 605 MAX 3,060 MIN 190 CFSM 1.33 IN 18.00 AC-FT 437,600

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 mi (24 km) north of Lowman, and at mile 24.4 (39.3 km).

DRAINAGE AREA.--112 sq mi (290 sq km).

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 (6.95 m) higher. Prior to July 1, 1964, nonrecording gage.

EXTREMES.--Current year: Maximum elevation, 5,329.23 ft (1,624.349 m) June 19, 20; minimum observed, 5,205 ft (1,586.5 m) Aug. 30 to Sept. 30.
Period of record: Maximum elevation observed, 5,337.31 ft (1,626.812 m) June 27, 1971; minimum observed, about 5,205 ft (1,586.5 m) Sept. 18 to Oct. 11, 1951, Aug. 30 to Sept. 30, 1973, 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 (198 cu hm) between elevations 5,230.0 ft or 1,594.104 m (minimum operating level because of fish protections, 27 ft (8.2 m) above sill of emergency gate in front of needle valve) and 5,334.0 ft or 1,625.803 m (crest of spillway). Storage below elevation 5,230 ft (1,594.1 m), about 1,500 acre-ft (1.85 cu hm). 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.

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	294.65	301.88	303.78	306.16	308.38	309.96	311.63	310.47	323.21	323.89	295.30	205
2	299.67	301.97	303.83	306.21	308.48	310.00	311.69	310.13	323.63	323.17	294.01	205
3	299.70	302.04	303.89	306.29	308.53	310.07	311.74	309.88	324.02	322.46	292.77	205
4	299.73	302.17	303.95	306.35	308.60	310.11	311.79	309.73	324.40	321.70	291.52	205
5	299.80	302.23	303.97	306.37	308.67	310.17	311.86	309.56	324.76	320.96	290.15	205
6	299.88	302.28	303.99	306.41	308.72	310.20	311.90	309.45	325.11	320.20	288.79	205
7	299.95	302.37	304.08	306.50	308.77	310.25	312.01	309.39	325.50	319.41	287.43	205
8	300.02	302.45	304.14	306.57	308.81	310.30	312.08	309.67	325.89	318.68	285.98	205
9	300.11	302.52	304.18	306.62	308.85	310.34	312.17	310.04	326.30	317.88	284.49	205
10	300.15	302.58	304.25	306.66	308.96	310.45	312.26	310.43	326.65	317.02	282.98	205
11	300.38	302.65	304.28	306.72	309.00	310.50	312.35	310.77	326.97	316.20	281.47	205
12	300.48	302.71	304.33	306.86	309.06	310.55	312.46	311.15	327.26	315.35	279.88	205
13	300.55	302.75	304.39	307.00	309.15	310.60	312.61	311.62	327.58	314.49	278.23	205
14	300.65	302.82	-	307.07	-	310.65	312.75	312.11	327.95	313.60	276.57	205
15	300.77	302.89	304.51	307.15	-	310.69	312.89	312.72	328.22	312.71	274.80	205
16	300.86	302.96	304.58	307.37	-	310.73	313.08	313.42	328.56	311.81	272.96	205
17	300.95	303.02	304.65	307.50	-	310.81	313.24	314.18	328.86	310.90	271.04	205
18	301.01	303.08	304.79	307.68	-	310.86	313.37	315.00	329.10	310.00	268.98	205
19	301.10	303.13	304.95	307.74	309.41	310.92	313.44	315.89	329.21	309.08	266.82	205
20	301.17	303.16	305.08	-	309.46	311.00	313.41	316.64	329.20	308.13	264.48	205
21	301.22	303.19	305.15	-	309.51	311.04	313.02	317.35	329.02	307.19	261.91	205
22	301.29	303.22	305.36	-	309.56	311.08	312.72	317.99	328.71	306.20	-	205
23	301.36	303.28	305.53	307.84	309.62	311.13	312.42	318.54	328.37	305.21	-	205
24	301.41	303.32	305.64	307.89	309.69	311.18	312.13	319.13	328.08	304.28	-	205
25	301.48	303.41	305.76	307.94	309.75	311.25	311.84	319.84	327.79	303.10	-	205
26	301.53	303.26	305.83	307.99	309.80	311.31	311.66	320.39	326.30	302.09	-	205
27	301.59	-	305.88	308.07	309.84	311.36	311.48	320.88	326.65	301.00	-	205
28	-	303.61	305.91	308.14	309.89	311.41	311.33	321.32	325.99	299.90	-	205
29	301.69	303.67	305.98	308.21	------	311.45	311.12	321.76	325.30	298.80	-	205
30	301.74	303.72	306.02	308.25	------	311.51	310.85	322.23	324.61	297.64	205	205
31	301.81	------	306.06	308.35	------	311.58	------	322.73	------	296.49	205	------
MEAN	-	-	-	-	-	310.76	312.24	314.66	-	311.28	-	
MAX	301.81	303.72	306.06	306.35	309.89	311.58	313.44	322.73	329.21	323.89	295.30	205
MIN	294.65	301.88	303.78	306.16	308.38	309.96	310.85	309.39	323.21	296.49	205	205

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 (91 m) upstream from Wilson Creek, 0.2 mi (0.3 km) downstream from Deadwood Dam, 15 mi (24 km) north of Lowman, and at mile 23.4 (37.7 km).

DRAINAGE AREA.--112 sq mi (290 sq km). Mean altitude, 6,630 ft (2,020 m).

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 (1,579.022 m) above mean sea level (levels by Bureau of Reclamation). Datum of 1929, supplementary adjustment of 1947, is 29.19 ft (8.897 m) higher. Prior to June 22, 1935, at site 600 ft (183 m) upstream at datum 5.85 ft (1.783 m) higher and Oct. 1, 1935, to Aug. 3, 1955, at present site at datum 1.00 ft (0.305 m) higher. June 22 to Sept. 30, 1935, nonrecording gage at site 20 ft (6 m) upstream at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--47 years, 234 cfs (6.63 cu m/s), 169,500 acre-ft/yr (209 cu hm/yr); 15-year base period (1952-67), 249 cfs (7.05 cu m/s).

EXTREMES.--Current year: Maximum discharge, 1,290 cfs (36.5 cu m/s) July 10, 19, Aug. 3, 4 (gage height, 6.82 or 2.079 m); minimum, 0.83 cfs (23.5 cu dm/s) Oct. 5 (gage height, 0.82 ft or 0.25 m).
Period of record: Maximum discharge, 2,580 cfs (73.1 cu m/s) July 14, 1953, maximum gage height, 8.93 ft (2.722 m) 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 (1.4 cu m/s), 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)
(Shifting-control method used Apr. 21 to May 7, June 21 to Aug. 29)

0.8	0.9	3.0	171
1.0	2.0	4.0	325
1.2	5.8	5.0	574
1.5	19	6.0	903
2.0	58	7.0	1,300
2.5	110		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	2.1	1.9	3.1	1.9	1.2	1.2	742	1.9	1,260	1,260	82
2	69	2.2	1.9	3.1	1.8	1.2	1.2	739	1.9	1,260	1,260	80
3	58	2.1	1.9	3.0	1.8	1.2	1.2	658	1.8	1,250	1,280	77
4	36	2.2	1.9	2.9	1.8	1.2	1.2	539	1.8	1,250	1,280	75
5	9.2	2.1	1.9	2.2	1.7	1.2	1.3	539	1.8	1,240	1,270	73
6	1.9	2.0	1.9	1.9	1.7	1.2	1.5	539	1.8	1,240	1,260	72
7	1.9	2.0	1.9	1.9	1.7	1.2	1.5	539	1.8	1,230	1,260	79
8	1.9	2.1	1.9	1.9	1.6	1.2	1.5	212	1.8	1,230	1,270	85
9	2.0	2.1	2.1	1.9	1.6	1.2	1.6	2.8	1.8	1,240	1,260	75
10	2.0	2.1	2.7	1.9	1.6	1.2	1.6	2.7	1.8	1,280	1,270	72
11	2.0	2.0	3.2	1.9	1.6	1.2	1.7	2.5	1.8	1,270	1,250	73
12	2.0	2.0	3.2	1.9	1.6	1.2	1.9	2.5	1.9	1,270	1,240	70
13	2.0	2.0	3.3	1.9	1.6	1.2	2.6	2.7	1.8	1,260	1,230	68
14	2.1	2.0	3.3	2.1	1.6	1.2	2.5	3.0	1.9	1,270	1,210	68
15	2.2	2.0	3.3	2.3	1.5	1.2	2.3	3.3	1.9	1,270	1,200	69
16	2.2	2.0	3.2	2.5	1.5	1.2	2.3	3.6	1.9	1,270	1,190	69
17	2.2	2.0	2.5	3.3	1.4	1.2	2.4	4.0	1.9	1,260	1,190	68
18	2.3	1.9	2.0	2.5	1.4	1.2	2.4	4.2	19	1,260	1,190	67
19	2.3	1.9	2.0	2.1	1.4	1.2	68	3.4	160	1,270	1,180	72
20	2.3	1.9	2.1	2.0	1.4	1.2	279	2.9	327	1,270	1,190	111
21	2.3	1.9	2.2	2.0	1.3	1.2	456	2.4	576	1,260	1,200	100
22	2.3	1.9	2.8	2.0	1.3	1.2	536	2.1	729	1,260	1,170	81
23	2.3	1.9	3.3	2.0	1.3	1.2	539	2.1	729	1,260	1,170	81
24	2.3	1.9	3.3	2.0	1.3	1.2	539	2.1	729	1,260	1,170	106
25	2.3	1.9	3.3	2.0	1.3	1.2	539	2.0	765	1,270	1,140	106
26	2.2	1.9	3.3	2.0	1.3	1.2	539	2.0	1,050	1,270	1,080	89
27	2.1	1.9	3.3	1.9	1.3	1.2	539	2.0	1,260	1,260	1,000	82
28	2.0	1.9	3.3	1.9	1.3	1.2	539	2.0	1,260	1,250	915	78
29	2.1	1.9	3.2	1.9	------	1.2	539	2.0	1,270	1,260	745	76
30	2.2	1.9	3.2	1.9	------	1.2	615	1.9	1,260	1,270	182	74
31	2.2	------	3.1	1.9	------	1.2	------	1.9	------	1,260	85	------
TOTAL	315.8	59.7	82.4	67.8	42.6	37.2	5,758.9	4,567.1	10,165.3	39,030	34,597	2,378
MEAN	10.2	1.99	2.66	2.19	1.52	1.20	192	147	339	1,259	1,116	79.3
MAX	88	2.2	3.3	3.3	1.9	1.2	615	742	1,270	1,280	1,280	111
MIN	1.9	1.9	1.9	1.9	1.3	1.2	1.2	1.9	1.8	1,230	85	67
AC-FT	626	118	163	134	84	74	11,420	9,060	20,160	77,420	68,620	4,720

CAL YR 1972 TOTAL 100,902.2 MEAN 276 MAX 1,210 MIN 1.0 AC-FT 200,100
WTR YR 1973 TOTAL 97,101.8 MEAN 266 MAX 1,280 MIN 1.2 AC-FT 192,600

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 mi (1.6 km) upstream from North Fork Payette River, 1.5 mi (2.4 km) northeast of Banks, and at mile 73.8 (118.7 km).

DRAINAGE AREA.--1,200 sq mi (3,100 sq km), approximately. Mean altitude, 6,020 ft (1,835 m).

PERIOD OF RECORD.--August 1921 to September 1973 (discontinued). Prior to October 1960, published as South Fork Payette River near Banks.

GAGE.--Water-stage recorder. Altitude of gage is 2,805 ft (855 m) (from river-profile map). Prior to Sept. 12, 1922, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--52 years, 1,809 cfs (51.23 cu m/s), 1,311,000 acre-ft/yr (1,620 cu hm/yr); 15-year base period (1952-67), 1,921 cfs (54.36 cu m/s).

EXTREMES.--Current year: Maximum discharge, 5,550 cfs (157 cu m/s) May 19, gage height, 7.45 ft (2.271 m); minimum, 340 cfs (9.63 cu m/s) Dec. 6, gage height, 0.56 ft (0.17 m).
Period of record: Maximum discharge, 20,800 cfs (589 cu m/s) Dec. 23, 1964, gage height, 15.46 ft (4.712 m), from floodmark; minimum daily, 220 cfs (6.23 cu m/s) Dec. 15, 1967; minimum recorded gage height, 0.09 ft (0.027 m) Dec. 17, 1967.

REMARKS.--Records good. Flow partly regulated since November 1930 by Deadwood Reservoir 55.6 miles (89.5 km) upstream (see sta 13236000). Diversions above station for irrigation of about 3,800 acres (1,540 sq hm) (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 6-8, 22)

0.6	353	4.0	2,240
.9	457	6.0	3,990
1.4	655	8.0	6,240
2.0	942		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	804	679	633	637	664	937	953	2,550	3,320	2,750	1,790	630
2	772	691	660	680	619	990	906	2,530	3,270	2,610	1,790	613
3	745	677	664	646	622	900	895	2,630	3,020	2,490	1,820	593
4	729	750	604	539	650	860	937	2,680	2,750	2,420	1,880	576
5	706	811	442	526	659	835	1,080	2,740	2,620	2,380	1,840	560
6	681	713	370	687	678	806	1,200	2,840	2,640	2,340	1,790	548
7	672	674	420	675	667	786	1,170	2,930	2,860	2,300	1,760	552
8	672	703	540	631	644	777	1,120	3,120	3,100	2,240	1,760	668
9	668	697	500	590	615	768	1,130	2,700	3,160	2,190	1,740	605
10	740	666	460	654	646	801	1,130	2,540	3,200	2,180	1,740	572
11	809	667	490	669	653	845	1,200	2,340	2,900	2,160	1,720	560
12	795	658	540	677	645	777	1,350	2,340	2,620	2,140	1,700	550
13	726	647	550	813	647	777	1,740	2,600	2,550	2,110	1,670	540
14	721	644	580	1,040	630	753	2,080	3,060	2,960	2,080	1,640	537
15	794	643	600	963	626	749	1,950	3,550	3,290	2,090	1,620	545
16	801	642	640	1,220	621	753	1,820	4,000	2,710	2,040	1,610	557
17	741	654	690	1,600	626	895	1,960	4,530	2,500	2,000	1,600	554
18	718	652	760	1,210	642	855	1,750	5,050	2,300	1,970	1,600	542
19	705	651	850	1,050	605	830	1,580	5,360	2,160	1,970	1,580	541
20	713	620	992	841	580	830	1,600	5,160	2,170	2,140	1,580	670
21	706	556	1,040	825	613	845	1,720	4,730	2,300	2,080	1,590	781
22	693	523	1,650	714	626	865	1,860	4,150	2,520	2,050	1,580	649
23	685	528	1,550	650	681	870	1,940	3,840	2,620	1,990	1,560	614
24	678	609	1,280	721	673	895	2,050	3,830	2,620	1,970	1,560	698
25	672	618	1,040	814	699	974	2,170	4,550	2,520	1,940	1,540	857
26	670	818	895	763	717	1,090	2,340	4,080	2,650	1,910	1,510	730
27	661	748	829	653	758	1,100	2,600	3,500	2,920	1,880	1,450	662
28	656	625	798	612	820	1,030	2,860	3,160	2,950	1,860	1,380	634
29	648	605	711	693	------	979	2,710	3,020	2,920	1,840	1,270	615
30	616	570	616	713	------	953	2,490	3,030	2,890	1,840	990	601
31	610	------	674	690	------	984	------	3,250	------	1,810	597	------
TOTAL	22,007	19,739	23,068	24,196	18,326	27,109	50,291	106,390	83,010	65,770	49,257	18,354
MEAN	710	658	744	781	655	874	1,676	3,432	2,767	2,122	1,589	612
MAX	809	818	1,650	1,600	820	1,100	2,860	5,360	3,320	2,750	1,880	857
MIN	610	523	370	526	580	749	895	2,340	2,160	1,810	597	537
AC-FT	43,650	39,150	45,760	47,990	36,350	53,770	99,750	211,000	164,700	130,500	97,700	36,410

CAL YR 1972 TOTAL 886,118 MEAN 2,421 MAX 11,200 MIN 370 AC-FT 1,758,000
WTR YR 1973 TOTAL 507,517 MEAN 1,390 MAX 5,360 MIN 370 AC-FT 1,007,000

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 (121.3 km).

DRAINAGE AREA.--144 sq mi (373 sq km).

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 (1,518.74 m) above mean sea level, unadjusted. Prior to Aug. 26, 1931, nonrecording gage at site 25 ft (8 m) downstream at datum 2.0 ft (0.61 m) higher. Aug. 26, 1931, to Nov. 22, 1943, nonrecording gage at site 75 ft (23 m) downstream at present datum.

EXTREMES.--Current year: Maximum gage height, 7.08 ft (2.158 m) June 23; minimum recorded gage height, 1.67 ft (0.509 m) Dec. 5.
Period of record: Maximum gage height observed, 8.75 ft (2.667 m) July 13, 1935; minimum observed, 0.95 ft (0.289 m) 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 (2,020 sq hm). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	2.51	1.70	2.13	2.24	2.17	2.17	3.17	4.85	6.85	5.72	4.74
2	-	2.47	1.69	2.14	2.23	2.16	2.17	3.24	5.00	6.86	5.71	4.69
3	-	2.44	1.70	2.14	2.22	2.16	2.17	3.38	5.21	6.81	5.72	4.67
4	-	2.47	1.69	-	2.22	2.15	2.18	3.58	5.41	6.75	5.71	4.63
5	-	2.44	1.67	-	2.24	2.15	2.18	3.70	5.73	6.68	5.69	4.60
6	-	2.40	-	-	2.23	2.14	2.20	3.88	6.10	6.62	5.67	4.56
7	-	2.38	-	-	2.22	2.14	2.19	4.03	6.55	6.53	5.64	4.53
8	-	2.37	-	-	2.21	2.14	2.20	4.26	6.77	6.45	5.62	4.50
9	-	-	-	-	2.20	2.14	2.21	4.36	6.71	6.38	5.60	4.49
10	-	-	-	2.10	2.21	2.18	2.22	4.38	6.47	6.32	5.55	4.47
11	-	-	-	2.14	2.21	2.17	2.23	4.37	6.27	6.20	5.52	4.46
12	-	-	-	2.19	2.20	2.17	2.27	4.38	6.17	6.10	5.50	4.44
13	-	-	-	2.22	2.20	2.17	2.32	4.40	6.18	5.98	5.46	4.42
14	-	-	-	2.23	2.20	2.16	2.37	4.53	6.43	5.90	5.43	4.43
15	-	-	-	2.27	2.18	2.15	2.40	4.77	6.63	5.85	5.40	4.38
16	-	-	-	2.35	2.17	2.14	2.49	5.08	6.76	5.84	5.35	4.28
17	-	-	-	2.35	2.17	2.19	2.54	5.41	6.87	5.84	5.31	4.20
18	2.96	-	1.73	2.37	2.16	2.19	2.55	5.66	6.89	5.84	5.27	4.12
19	2.96	-	1.75	2.36	2.16	2.18	2.57	5.78	6.83	5.84	5.23	4.12
20	2.95	-	1.80	2.36	2.14	2.19	2.57	5.79	6.77	5.85	5.20	4.09
21	2.95	-	1.88	2.35	2.14	2.18	2.57	5.57	6.82	5.85	5.18	4.03
22	2.94	-	1.96	2.33	2.13	2.17	2.58	5.33	7.02	5.85	5.16	3.95
23	2.93	-	2.02	2.32	2.13	2.17	2.59	5.21	6.99	5.84	5.11	3.92
24	2.92	-	2.07	2.31	2.13	2.17	2.62	5.24	6.81	5.84	5.05	3.89
25	2.88	-	2.08	2.34	2.14	2.16	2.67	5.49	6.67	5.83	5.02	3.85
26	2.83	-	2.08	2.32	2.13	2.16	2.74	5.27	6.63	5.82	4.98	3.76
27	2.77	-	2.12	2.30	2.13	2.16	2.86	4.97	6.60	5.80	4.94	3.69
28	2.71	-	2.13	2.29	2.13	2.16	2.97	4.77	6.70	5.78	4.91	3.62
29	2.65	-	2.13	2.27	------	2.15	3.05	4.71	6.78	5.75	4.87	3.53
30	2.59	1.70	2.13	2.27	------	2.16	3.12	4.75	6.83	5.74	4.83	3.42
31	2.54	------	2.14	2.27	------	2.17	------	4.86	------	5.73	4.80	------
MEAN	-	-	-	-	2.18	2.16	2.47	4.66	6.42	6.11	5.33	4.22
MAX	-	2.51	2.14	2.37	2.24	2.19	3.12	5.79	7.02	6.86	5.72	4.74
MIN	2.54	1.70	-	-	2.13	2.14	2.17	3.17	4.85	5.73	4.80	3.42

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 mi (0.3 km) downstream from outlet of Payette Lake, and at mile 75.2 (121 km).

DRAINAGE AREA.--144 sq mi (373 sq km). Mean altitude, 6,520 ft (1,987 m).

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 (1,515 m) (by barometer). Nonrecording gage at site 1 mi (1.6 km) 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.--62 years (1908-16, 1919-73), 364 cfs (10.3 cu m/s), 263,700 acre-ft/yr (325 cu hm/yr); 15-year base period (1952-67), 377 cfs (10.7 cu m/s).

EXTREMES.--Current year: Maximum discharge, 2,500 cfs (70.8 cu m/s) May 20 (gage height, 6.02 ft or 1.835 m); minimum, 32 cfs (0.91 cu m/s) Sept. 14 (gage height, 1.83 ft or 0.558 m).
Period of record: Maximum discharge, 4,260 cfs (121 cu m/s) June 10, 1933, June 4, 1948; maximum gage height, 7.71 ft (2.350 m) 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 mi (0.3 km) 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)

1.8	30	3.5	475
2.0	48	4.0	740
2.5	129	5.0	1,490
3.0	273	6.1	2,570

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	137	45	58	89	72	62	290	1,550	250	52	77
2	46	136	44	58	88	72	62	320	1,130	250	52	77
3	46	134	44	57	86	72	61	360	383	240	52	75
4	44	134	42	57	87	70	61	450	291	234	57	75
5	42	134	39	56	91	68	62	560	58	273	74	83
6	42	134	39	56	92	67	63	610	164	240	69	83
7	42	132	40	54	90	66	63	710	371	237	69	83
8	42	132	38	53	88	65	63	860	979	253	70	82
9	42	159	38	51	87	64	64	930	1,450	247	74	80
10	42	220	38	51	86	67	66	1,080	1,600	243	73	80
11	42	199	37	54	86	69	69	1,060	1,490	240	74	80
12	42	182	37	62	84	65	73	1,100	1,140	257	74	80
13	41	165	36	69	84	65	81	1,170	916	240	74	75
14	40	151	36	71	83	64	91	1,240	694	250	74	32
15	39	139	35	73	81	63	99	1,420	538	212	73	158
16	39	129	35	86	80	62	109	1,580	553	47	72	251
17	39	123	36	95	78	67	127	1,830	573	47	73	247
18	38	116	36	98	75	67	134	2,160	584	47	74	247
19	38	112	37	102	74	66	136	2,420	578	47	73	249
20	38	105	36	99	72	65	136	2,470	494	47	72	249
21	38	96	38	99	71	65	136	2,350	391	44	78	246
22	38	91	42	96	70	65	137	2,080	260	42	83	242
23	36	87	45	95	68	63	138	1,920	867	46	83	238
24	33	83	51	92	68	62	142	1,880	1,080	45	83	237
25	80	82	53	98	68	61	152	2,070	794	52	82	235
26	152	86	54	97	68	61	165	2,040	504	51	82	232
27	151	84	55	96	67	61	196	1,780	383	51	82	225
28	148	82	60	93	66	61	225	1,550	237	52	81	249
29	146	80	59	92	------	60	250	1,450	180	51	80	275
30	142	64	59	90	------	59	275	1,450	247	51	80	280
31	137	------	58	91	------	62	------	1,520	------	52	80	------
TOTAL	1,932	3,708	1,342	2,399	2,227	2,016	3,498	42,710	20,479	4,438	2,269	4,922
MEAN	62.3	124	43.3	77.4	79.5	65.0	117	1,378	683	143	73.2	164
MAX	152	220	60	102	92	72	275	2,470	1,600	273	83	280
MIN	33	64	35	51	66	59	61	290	58	42	52	32
AC-FT	3,830	7,350	2,660	4,760	4,420	4,000	6,940	84,720	40,620	8,800	4,500	9,760

CAL YR 1972 TOTAL 150,225 MEAN 410 MAX 3,730 MIN 33 AC-FT 298,000
WTR YR 1973 TOTAL 91,940 MEAN 252 MAX 2,470 MIN 32 AC-FT 182,400

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 (30.5 m) upstream from abandoned powerplant, 0.2 mi (0.3 km) upstream from Jumbo Creek, 3.5 mi (5.6 km) upstream from Lake Fork Reservoir dam, 5.5 mi (8.8 km) east of McCall, and at mile 21.0 (33.8 km).

DRAINAGE AREA.--48.9 sq mi (127 sq km). Mean altitude, 6,950 ft (2,118.4 m).

PERIOD OF RECORD.--October 1945 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,140 ft (1,566.7 m) (from topographic map). Prior to Nov. 10, 1945, nonrecording gage at site 200 ft (60.9 m) downstream at different datum.

AVERAGE DISCHARGE.--28 years, 147 cfs (4.16 cu m/s), 40.82 in/yr (1,037 mm/yr), 106,500 acre-ft/yr (131 cu hm/yr); 15-year base period (1952-67), 143 cfs (4.05 cu m/s).

EXTREMES.--Current year: Maximum discharge, 1,020 cfs (28.9 cu m/s) May 19 (gage height, 7.22 ft or 2.201 m); minimum, 3.9 cfs (110 cu dm/s) Oct. 19 (gage height, 1.39 ft or 0.424 m).
Period of record: Maximum discharge, 2,770 cfs (78.4 cu m/s) June 26, 1971 (gage height, 9.15 ft or 2.709 m), from rating curve extended above 1,200 cfs (34.0 cu m/s); minimum, 1.2 cfs (34 cu dm/s) Dec. 3, 1967; minimum gage height, 1.05 ft (0.320 m) part of each day Nov. 8-9, 1969.

REMARKS.--Records good except those for winter period, which are fair, and those below 8 cfs (1.8 cu m/s), which are poor. No diversion above station. Flow regulated by Cruzen Reservoir, capacity 1,230 acre-ft (1.52 cu hm).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Nov. 27, 29, 30, Dec. 4-16, Dec. 29 to Jan. 4, Jan. 19-23, Feb. 9, 19-22, Mar. 3, 6)

1.4	4.2	3.5	64
1.6	5.9	4.0	104
2.0	11	5.0	224
2.5	21	6.0	464
3.0	37	7.1	950

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	18	18	19	19	25	25	141	554	137	26	13
2	18	19	18	19	19	24	25	154	488	118	25	13
3	18	19	18	18	19	22	25	191	365	110	25	12
4	18	23	17	14	21	23	27	241	312	114	25	12
5	17	26	12	17	23	23	31	230	371	102	24	11
6	17	22	15	17	23	22	33	274	480	95	23	11
7	17	20	17	16	20	22	32	285	602	88	22	12
8	17	21	17	16	21	22	32	351	644	80	21	17
9	17	20	14	15	20	22	33	300	644	76	20	15
10	29	20	15	17	23	23	35	232	488	71	20	13
11	54	20	16	19	22	22	41	195	394	68	20	11
12	39	19	16	22	22	22	55	224	371	64	20	11
13	30	19	16	27	22	23	74	346	434	59	18	9.9
14	28	19	17	46	21	21	87	523	658	56	17	11
15	26	19	16	44	21	22	84	658	481	52	17	14
16	24	19	17	48	21	22	83	803	322	34	16	14
17	23	19	17	52	21	23	85	914	307	29	16	12
18	15	19	18	43	21	22	77	942	257	111	15	11
19	4.2	19	21	30	20	22	75	914	235	310	15	13
20	4.7	16	21	21	19	23	67	903	111	171	15	49
21	4.8	16	27	18	20	23	64	698	40	58	15	44
22	4.8	16	75	18	20	22	66	578	322	49	15	27
23	11	16	59	19	21	22	73	602	332	43	14	23
24	17	18	42	21	21	23	80	684	261	40	14	40
25	18	18	34	22	21	24	88	855	241	37	14	50
26	18	19	30	20	21	26	102	558	228	34	15	39
27	18	19	29	18	22	26	136	409	249	33	14	30
28	18	18	27	19	22	25	178	397	237	31	13	28
29	17	17	22	19	------	24	157	447	202	30	13	25
30	17	18	20	20	------	25	141	520	166	28	12	23
31	16	------	20	20	------	25	------	619	------	27	12	------
TOTAL	594.5	571	721	734	586	715	2,111	15,188	10,796	2,355	551	613.9
MEAN	19.2	19.0	23.3	23.7	20.9	23.1	70.4	490	360	76.0	17.8	20.5
MAX	54	26	75	52	23	26	178	942	658	310	26	50
MIN	4.2	16	12	14	19	21	25	141	40	27	12	9.9
CFSM	.39	.39	.48	.48	.43	.47	1.44	10.0	7.36	1.55	.36	.42
IN.	.45	.43	.55	.56	.45	.54	1.61	11.55	8.21	1.79	.42	.47
AC-FT	1,180	1,130	1,430	1,460	1,160	1,420	4,190	30,130	21,410	4,670	1,090	1,220

CAL YR 1972 TOTAL 57,654.5 MEAN 158 MAX 1,540 MIN 4.2 CFSM 3.23 IN 43.86 AC-FT 114,400
WTR YR 1973 TOTAL 35,536.4 MEAN 97.4 MAX 942 MIN 4.2 CFSM 1.99 IN 27.03 AC-FT 70,490

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 mi (5 km) east of McCall, and at mile 18.0 (29.0 km).

DRAINAGE AREA.--64 sq mi (166 sq km), 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, 20,600 acre-ft (25.4 cu hm) June 14; maximum elevation observed, 5,119.26 ft (1,560.350 m) July 1; minimum observed, 1,070 acre-ft (1.32 cu hm) Nov. 15 (elevation, 5,103.19 ft or 1,555.452 m).
Period of record: Maximum contents observed, 21,060 acre-ft (26.0 cu hm) June 21, 1961 (elevation, 5,119.56 ft or 1,560.442 m); no storage above elevation 5,101.0 ft (1,554.78 m) for long periods during fall and winter of most years. Minimum elevation observed below 5,101.0 ft (1,554.78 m), 5,099.04 ft (1,554.187 m) Dec. 9, 1936.

REMARKS.--Reservoir is formed by earth- and rock-fill dam completed in 1926. Capacity, 16,940 acre-ft (20.9 cu hm) between elevations 5,101.0 ft or 1,554.78 m (lower limit of capacity table, 4.0 ft or 1.22 m above gate sill of outlet) and 5,117.0 ft or 1,559.66 m (top of flashboards, 5.0 ft or 1.52 m above spillway crest). Dead storage unknown. Water is used for irrigation of about 6,800 acres (2,750 sq hm) of land near McCall and Norwood. Figures given herein represent contents above 5,101.0 ft (1,554.78 m). There is some usable storage below elevation 5,101.0 ft (1,554.78 m), 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 (1,554.78 m) during current year.

COOPERATION.--Elevation record and capacity table furnished by Lake Irrigation District.

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

5,103.0	970	5,110.0	6,770
5,104.0	1,500	5,112.0	9,380
5,106.0	2,810	5,116.0	15,400
5,108.0	4,550	5,119.5	21,000

CONTENTS, IN ACRE-FEET, FOR STATISTIC 00011, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								-	20,100	19,000	10,400	2,640
2								-	19,900	18,800	10,000	2,570
3								-	19,800	18,600	9,670	2,510
4								-	19,700	18,400	9,320	2,440
5								-	19,700	18,100	8,950	2,370
6								-	19,900	17,800	8,600	2,330
7								-	20,100	17,500	8,220	2,240
8								4,550	20,300	17,200	7,850	2,250
9								-	20,500	16,900	7,500	2,220
10								-	20,500	16,500	7,120	2,200
11								-	20,500	16,400	6,770	2,070
12								6,460	20,400	16,000	6,420	2,050
13								-	20,500	15,700	6,070	2,000
14								7,700	20,600	15,400	5,770	1,920
15								8,680	20,500	-	5,460	1,880
16	1,070							-	20,500	14,800	5,180	-
17								11,700	20,500	14,400	4,890	-
18								13,100	20,400	14,100	4,550	-
19								14,800	20,300	14,200	4,360	-
20								16,100	20,100	14,300	4,010	-
21								16,900	19,600	14,200	3,800	-
22								17,500	19,500	13,800	3,620	-
23								17,900	19,600	13,500	3,500	-
24								18,300	19,600	13,000	3,370	-
25								19,100	19,600	12,900	3,260	-
26								19,600	19,500	12,500	3,150	-
27								19,500	19,400	12,200	3,050	-
28								19,400	19,400	11,900	2,950	-
29					------			19,500	19,200	11,500	2,870	-
30					------			19,700	19,200	11,200	2,710	-
31		------			------		------	19,900	------	10,800	2,680	------
MAX	-	-	-	-	-	-	-	19,900	20,600	19,000	10,400	2,640
MIN	-	-	-	-	-	-	-	-	19,200	10,800	2,680	-
(†)	-	-	-	-	-	-	-	5,118.84	5,118.42	5,113.00	5,105.82	-
(‡)	-	-	-	-	-	-	-	-	-700	-8,400	-8,120	-

† 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 (183 m) downstream from head of canal, 0.5 mi (0.8 km) south of Lake Fork Reservoir, and 3 mi (4.8 km) southeast of McCall.

PERIOD OF RECORD.--May 1926 to September 1973 (discontinued) (irrigation seasons only 1927-34, 1942-46).

GAGE.--Nonrecording gage. Altitude of gage is 5,090 ft or 1,551 m (from topographic map). Prior to May 1947, at different datum.

EXTREMES.--Period of record: Maximum daily discharge, 213 cfs (6.03 cu m/s) 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 SW sec.13, T.18 N., R.3 E., for irrigation of 6,800 acres (2,750 sq hm) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	5.0						0	170	153	118	23
2	15	5.0						0	170	152	121	22
3	15	5.0						0	166	151	122	22
4	15	5.0						0	159	147	122	22
5	15	5.0						0	164	146	122	22
6	15	5.0						0	182	141	122	21
7	15	5.0						0	193	143	117	21
8	15	5.0						0	196	146	114	19
9	15	5.0						0	196	146	111	18
10	15	5.0						0	196	144	110	18
11	15	0						0	196	142	108	16
12	15	0						3.3	196	139	106	15
13	15	0						9.3	196	137	106	15
14	15	0						9.3	198	136	100	15
15	15	0						12	198	136	93	15
16	15	0						15	194	136	92	15
17	15	0						35	195	136	92	15
18	15	0						66	193	138	91	15
19	15	0						99	192	140	87	15
20	15	0						116	193	141	85	15
21	15	0						124	187	142	73	15
22	15	0						133	191	144	65	15
23	13	0						153	193	141	53	15
24	5.0	0						164	191	137	44	15
25	5.0	0						167	191	135	42	15
26	5.0	0						172	190	135	40	15
27	5.0	0						170	184	127	39	15
28	5.0	0						172	177	116	36	15
29	5.0	0			------			169	164	116	35	15
30	5.0	0			------			168	156	118	33	15
31	5.0	------			------		------	170	------	118	27	------
TOTAL	383.0	50.0	0	0	0	0	0	2,126.9	5,567	4,279	2,626	509
MEAN	12.4	1.67	0	0	0	0	0	68.6	186	138	84.7	17.0
MAX	15	5.0	0	0	0	0	0	172	198	153	122	23
MIN	5.0	0	0	0	0	0	0	0	156	116	27	15
AC-FT	760	99	0	0	0	0	0	4,220	11,040	8,490	5,210	1,010

CAL YR 1972 TOTAL 18,285.00 MEAN 50.0 MAX 210 MIN 0 AC-FT 36,270
WTR YR 1973 TOTAL 15,540.90 MEAN 42.6 MAX 198 MIN 0 AC-FT 30,830

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 (91 m) downstream from diversion dam for Lake Irrigation District Canal, 0.5 mi (0.8 km) downstream from Lake Fork Reservoir, 3 mi (4.8 km) southeast of McCall, and at mile 17.5 (28.2 km).

DRAINAGE AREA.--64 sq mi (166 sq km), approximately.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,080 ft (1,548 m) (from topographic map).

AVERAGE DISCHARGE.--33 years, 125 cfs (3.54 cu m/s), 90,560 acre-ft/yr (112 cu hm/yr); 15-year base period (1952-67), 120 cfs (3.40 cu m/s).

EXTREMES.--Current year: Maximum recorded discharge, 418 cfs (11.8 cu m/s) June 14, 15 (gage height, 4.46 ft or 1.359 m); minimum, 10 cfs (0.28 cu m/s) Aug. 22 (gage height, 2.33 ft or 0.710 m).
Period of record: Maximum discharge, 2,120 cfs (600 cu m/s) June 3, 1948 (gage height, 7.09 ft or 2.161 m), from rating curve extended above 1,200 cfs (34.0 cu m/s); minimum daily, 0.29 cfs (0.008 cu m/s) Dec. 15-19, 1971; minimum gage height, 1.70 ft (0.52 m) Dec. 15-19, 1971.

REMARKS.--Records good. Flow regulated by McDowell Reservoir (capacity about 600 acre-ft or 0.74 cu hm) 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 (27.5 sq km) 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 Dec. 5, 8-12, Jan. 3, 4, 7-9, 26, 27, 29, Feb. 1-3, 7-9, 16, 19-22, 24, Mar. 3, 4, 6, 11, 12, 15, 18)

2.3	10	3.5	157
2.5	20	4.0	282
2.7	35	4.5	447
3.0	70		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	38	28	39	38	28	32	64	331	81	80	17
2	28	39	27	38	36	29	32	66	338	84	78	17
3	28	37	27	36	36	28	32	67	256	89	76	17
4	28	37	26	35	36	28	32	70	161	89	75	17
5	27	37	23	36	36	29	33	70	104	91	73	16
6	27	36	25	34	36	29	35	71	115	90	76	16
7	27	35	24	31	34	29	36	74	190	89	81	16
8	27	35	23	28	33	29	37	60	237	89	79	14
9	27	34	21	25	32	29	39	37	276	90	77	14
10	27	40	21	24	32	29	34	38	322	92	77	14
11	27	47	22	24	32	29	31	38	273	89	74	13
12	27	44	23	24	31	29	32	35	194	93	69	12
13	39	41	23	26	31	29	35	30	186	91	67	12
14	39	39	21	29	31	29	38	31	271	90	65	12
15	39	37	20	34	30	28	41	36	378	92	60	12
16	35	36	20	40	28	28	44	41	267	92	50	12
17	34	54	20	44	28	30	48	98	187	89	48	12
18	34	42	20	47	29	29	49	99	127	87	50	12
19	34	40	21	49	28	29	50	168	108	87	51	12
20	33	38	22	49	28	29	51	231	74	85	55	12
21	32	36	24	48	27	30	51	209	70	82	48	12
22	32	36	31	47	27	30	53	194	93	81	25	12
23	34	36	38	46	27	29	55	201	90	83	27	12
24	45	34	42	43	27	29	55	204	90	81	21	13
25	45	33	43	44	27	29	56	248	90	83	22	13
26	43	33	43	42	27	30	57	344	86	84	23	13
27	42	32	43	41	27	31	59	303	87	81	24	13
28	41	31	44	42	27	31	60	199	94	75	23	13
29	39	30	42	40	------	31	63	183	93	70	22	13
30	38	29	41	40	------	31	63	192	87	74	25	13
31	36	------	40	40	------	31	------	242	------	79	22	------
TOTAL	1,042	1,116	888	1,165	861	908	1,333	3,943	5,275	2,652	1,643	406
MEAN	33.6	37.2	28.6	37.6	30.8	29.3	44.4	127	176	85.5	53.0	13.5
MAX	45	54	44	49	38	31	63	344	378	93	81	17
MIN	27	29	20	24	27	28	31	30	70	70	21	12
AC-FT	2,070	2,210	1,760	2,310	1,710	1,800	2,640	7,820	10,460	5,260	3,260	805

CAL YR 1972 TOTAL 48,031.0 MEAN 131 MAX 1,220 MIN 3.0 AC-FT 95,270
WTR YR 1973 TOTAL 21,232.0 MEAN 58.2 MAX 378 MIN 12 AC-FT 42,110

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 mi (0.8 km) downstream from Willow Creek, 0.8 mi (1.3 km) northwest of Cascade, and at mile 39.9 (64.2 km).

DRAINAGE AREA.--620 sq mi (1,600 sq km). Mean altitude, 5,960 ft (1,817 m).

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 (0.201 m) 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, 614,800 acre-ft (758 cu hm) June 28 (elevation, 4,824.55 ft or 1,470.523 m); minimum, 286,300 acre-ft (353 cu hm) Sept. 30 (elevation, 4,808.38 ft or 1,465.594 m).
Period of record: Maximum contents observed, 727,000 acre-ft (896 cu hm) June 10, 11, 1957 (elevation, 4,828.89 ft or 1,471.846 m); 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 (238 cu hm) Feb. 8, 1962 (elevation, 4,802.15 ft or 1,463.695 m).

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 (867 cu hm) between elevations 4,766 ft or 1,452.7 m (4.0 ft or 1.22 m above sill of outlet tunnel) and 4,828 ft or 1,471.6 m (top of spillway gates). Figures given herein represent contents above elevation 4,766 ft (1,452.7 m). The Bureau of Reclamation attempts to limit withdrawal to elevation 4,787.5 ft (1,459.23 m), retaining 50,000 acre-ft (61.6 cu hm) 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)

4,808.0	280,100	4,820.0	508,500
4,810.0	313,500	4,825.0	626,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	452,700	412,000	411,800	424,800	420,900	402,400	422,300	445,600	567,500	611,600	530,400	411,000
2	449,700	412,800	412,200	424,500	419,900	402,900	423,100	446,200	572,200	610,700	527,000	404,700
3	446,600	413,000	412,800	423,700	418,900	403,500	423,700	447,400	574,800	609,400	524,100	398,800
4	443,600	414,500	412,600	422,700	418,300	404,100	424,500	449,300	577,000	607,700	520,500	393,200
5	440,100	415,300	412,200	421,700	418,100	404,700	426,000	450,300	578,200	606,000	517,600	387,500
6	436,500	415,300	412,600	420,700	417,700	405,100	427,000	451,100	579,400	604,300	514,000	382,100
7	433,300	415,700	413,000	419,700	416,700	405,700	427,800	452,300	580,800	602,100	510,700	377,000
8	430,000	416,900	412,800	418,500	415,900	406,100	428,400	455,600	582,700	600,100	507,200	-
9	426,200	417,300	412,200	417,500	414,900	406,500	428,800	457,700	586,800	597,700	504,100	365,700
10	423,900	418,100	411,800	416,500	414,700	408,000	428,600	459,800	591,100	596,500	500,400	360,900
11	422,700	418,700	411,400	415,900	413,700	408,200	428,800	461,800	595,000	592,800	497,100	355,400
12	420,300	419,300	411,200	416,500	413,000	408,600	429,400	463,900	598,700	590,200	493,600	350,200
13	418,100	419,700	410,800	418,500	412,400	409,000	430,000	466,700	601,800	587,500	490,200	345,500
14	416,900	420,300	410,600	419,500	411,600	409,400	430,400	469,800	605,300	585,100	486,300	340,400
15	415,300	420,500	410,000	420,100	410,800	409,600	430,400	473,600	606,700	582,500	482,800	334,900
16	413,900	420,900	409,800	423,700	409,800	409,800	432,200	478,300	610,400	579,800	479,000	329,800
17	413,200	420,500	410,800	425,800	409,000	411,400	434,300	483,500	610,900	577,000	474,700	325,100
18	412,200	420,100	411,200	427,600	408,000	411,800	435,300	489,300	611,900	574,100	470,900	320,200
19	411,800	419,900	411,600	428,000	407,100	412,200	435,900	496,400	612,400	571,500	466,900	316,900
20	411,600	419,300	411,600	427,800	406,100	413,200	435,900	503,700	612,900	568,500	-	314,000
21	411,000	417,900	415,900	427,400	405,300	413,700	436,300	509,400	612,600	565,900	458,700	310,400
22	410,600	416,500	423,500	427,000	404,100	414,300	437,100	515,600	610,400	562,400	455,200	306,800
23	410,600	415,300	425,200	426,600	403,300	414,900	438,300	521,200	611,600	559,100	452,300	303,400
24	410,400	413,500	426,200	426,000	402,600	415,700	439,100	527,200	613,100	556,300	447,600	301,100
25	410,400	412,200	426,400	426,200	402,400	416,700	440,100	534,000	613,900	553,500	444,000	298,900
26	410,600	412,200	426,400	425,800	401,600	417,700	441,100	539,700	613,900	550,500	440,100	296,200
27	410,000	411,000	427,000	424,600	401,400	418,500	442,500	545,000	614,400	547,100	436,500	293,700
28	411,400	411,400	427,000	423,900	401,000	419,300	443,200	550,100	614,600	543,900	432,400	290,900
29	411,600	411,600	426,800	422,900	------	419,900	445,000	554,200	613,900	540,400	427,800	288,400
30	411,600	411,800	426,000	422,300	------	420,700	445,400	558,400	612,600	537,500	422,900	286,300
31	411,800	------	425,600	421,700	------	421,900	------	563,100	------	533,800	417,500	------
MAX	452,700	420,900	427,000	428,000	420,900	421,900	445,400	563,100	614,600	611,600	-	-
MIN	410,000	411,000	409,800	415,900	401,000	402,400	422,300	445,600	567,500	533,800	-	-
(†)	4,815.35	4,815.35	4,816.05	4,815.85	4,814.80	4,815.86	4,817.03	4,822.40	4,824.46	4,821.13	4,815.64	4,808.38
(‡)	-44,000	0	+13,800	-3,900	-20,700	+20,900	+23,500	+117,700	+49,500	-78,800	-116,300	-131,200

CAL YR 1972..... ‡ -16,300
WTR YR 1973..... ‡ -169,500

† 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 mi (0.8 km) upstream from Beaver Creek, 1.6 mi (2.6 km) downstream from Cascade Dam, and at mile 38.3 (61.6 km).

DRAINAGE AREA.--626 sq mi (1,621 sq km). Mean altitude, 5,960 ft (1,820 m).

PERIOD OF RECORD.--May 1941 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,730 ft (1,442 m) (from topographic map). Prior to Jan. 28, 1947, nonrecording gages at present or nearby sites at present datum. Nov. 6, 1958, to Sept. 30, 1965, water-stage recorder at site 1.5 mi (2.4 km) upstream at datum 4,734.59 ft (1,443.103 m) 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.--32 years, 1,034 cfs (29.28 cu m/s), 749,100 acre-ft/yr (924 cu hm/yr); 15-year base period (1952-67), 993 cfs (28.12 cu m/s).

EXTREMES.--Current year: Maximum discharge, 3,090 cfs (87.5 cu m/s) Aug. 31 (gage height, 3.33 ft or 1.015 m); minimum, 13 cfs (0.37 cu m/s) May 19 (gage height, 0.18 ft or 0.055 m).
Period of record: Maximum discharge, 7,320 cfs (207 cu m/s) May 10, 1947 (gage height, 6.29 ft or 1.917 m); 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 mi (2.6 km) upstream beginning November 1947 (see sta 13244500). Diversions above station for irrigation of about 39,000 acres (16,000 sq hm) (1966 determination).

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

0.6	66	2.0	988
.8	126	3.0	2,420
1.0	228	4.0	4,220
1.5	525		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,790	136	169	634	750	312	159	477	136	778	1,710	3,050
2	1,820	136	166	634	750	158	156	477	136	856	1,700	2,980
3	1,840	136	166	668	748	153	157	471	136	992	1,700	2,910
4	1,840	137	166	747	747	151	161	491	136	1,070	1,700	3,000
5	1,840	136	165	827	744	151	161	484	136	1,150	1,700	2,910
6	1,830	136	172	808	740	152	157	484	136	1,190	1,720	2,800
7	1,820	137	199	808	740	151	149	287	141	1,260	1,720	2,730
8	1,840	139	296	805	740	151	223	136	136	1,290	1,730	2,820
9	1,840	136	435	799	740	151	634	136	136	1,370	1,720	2,780
10	1,810	136	432	798	740	153	731	136	136	1,370	1,720	2,780
11	1,750	136	432	798	735	153	618	136	127	1,420	1,760	2,740
12	1,710	136	429	627	731	151	540	136	136	1,470	1,840	2,710
13	1,420	136	426	430	731	151	540	136	244	1,470	1,840	2,730
14	1,050	136	426	443	731	149	539	136	511	1,470	1,840	2,730
15	993	131	426	430	731	151	540	136	511	1,460	1,860	2,730
16	849	305	425	410	731	153	404	136	511	1,460	1,920	2,740
17	783	578	428	202	731	164	182	136	600	1,470	1,920	2,670
18	650	580	433	174	731	159	222	71	770	1,470	1,920	2,590
19	597	585	446	324	730	158	498	81	862	1,490	1,920	2,520
20	484	672	446	608	727	160	418	146	868	1,560	1,870	2,470
21	438	837	489	608	722	166	184	136	868	1,570	1,820	2,320
22	333	928	516	605	722	163	172	126	868	1,570	1,860	2,110
23	283	995	454	602	722	165	146	126	868	1,560	1,870	2,110
24	147	1,040	453	601	722	176	136	126	868	1,550	1,900	2,060
25	136	976	451	600	723	176	136	126	929	1,550	1,950	1,850
26	133	971	448	666	539	173	136	126	908	1,540	1,940	1,730
27	136	590	448	759	536	166	136	131	636	1,610	1,970	1,700
28	137	171	447	759	542	163	136	131	582	1,700	2,050	1,670
29	134	169	516	754	------	161	136	131	726	1,700	2,300	1,650
30	132	169	641	751	------	163	336	131	770	1,700	2,640	1,650
31	131	------	636	750	------	163	------	136	------	1,710	2,980	------
TOTAL	30,696	11,606	12,182	19,429	19,976	5,067	8,843	6,255	14,528	43,826	59,090	74,240
MEAN	990	387	393	627	713	163	295	202	484	1,414	1,906	2,475
MAX	1,840	1,040	641	827	750	312	731	491	929	1,710	2,980	3,050
MIN	131	131	165	174	536	149	136	71	127	778	1,700	1,650
AC-FT	60,890	23,020	24,160	38,540	39,620	10,050	17,540	12,410	28,820	86,930	117,200	147,300

CAL YR 1972 TOTAL 445,595 MEAN 1,217 MAX 2,620 MIN 23 AC-FT 883,800
WTR YR 1973 TOTAL 305,738 MEAN 838 MAX 3,050 MIN 71 AC-FT 606,400

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 (12 m) downstream from highway bridge, 2.5 mi (4.0 km) north of Banks, and at mile 2.8 (4.5 km).

DRAINAGE AREA.--933 sq mi (2,420 sq km). Mean altitude, 5,800 ft (1,770 km).

PERIOD OF RECORD.--April 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,081.13 ft (939.128 m) above mean sea level, unadjusted.

AVERAGE DISCHARGE.--26 years, 1,358 cfs (38.46 cu m/s), 983,900 acre-ft/yr (1,210 cu hm/s); 15-year base period (1952-67), 1,299 cfs (36.79 cu m/s).

EXTREMES.--Current year: Maximum discharge, 3,010 cfs (85.2 cu m/s) Sept. 1, gage height, 8.98 ft (2.737 m); minimum, 96 cfs (2.72 cu m/s) Dec. 6, gage height, 3.41 ft (1.039 m).
Period of record: Maximum discharge, 8,830 cfs (250 cu m/s) May 11, 1947, gage height, about 13.5 ft (4.11 m), estimated on basis of records for station near Smiths Ferry; minimum recorded, 36 cfs (1.02 cu m/s) Dec. 21, 1947, gage height, 3.01 ft (0.917 m).

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 (20,600 sq hm) (1966 determination). Record of water temperatures for the water year 1973 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. 22 to Feb. 25; stage-discharge relation affected by ice Dec. 5-15)

3.7	140	6.0	915
4.0	203	7.0	1,470
5.0	496	9.0	3,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,880	212	262	809	931	734	392	782	515	827	1,670	2,980
2	1,880	224	255	822	919	484	357	827	493	822	1,670	2,960
3	1,910	219	260	791	913	417	370	859	451	934	1,670	2,870
4	1,910	244	211	813	928	362	417	968	427	1,060	1,670	2,910
5	1,910	264	140	939	936	332	467	978	427	1,130	1,660	2,920
6	1,910	241	150	973	928	315	464	968	437	1,160	1,670	2,810
7	1,910	227	185	944	918	307	401	968	458	1,220	1,680	2,690
8	1,910	239	240	946	910	303	380	831	454	1,260	1,680	2,780
9	1,920	239	290	920	899	294	546	751	451	1,330	1,670	2,780
10	1,950	230	490	967	919	303	927	658	437	1,380	1,680	2,760
11	1,950	225	500	977	909	312	982	602	394	1,380	1,680	2,740
12	1,850	222	525	991	901	303	836	583	366	1,480	1,760	2,690
13	1,780	219	585	771	898	298	906	618	369	1,480	1,780	2,710
14	1,270	219	660	1,030	891	281	910	675	583	1,470	1,780	2,710
15	1,140	219	754	947	884	278	877	720	818	1,460	1,790	2,690
16	1,010	217	791	1,250	880	280	896	764	751	1,460	1,830	2,750
17	934	462	675	1,270	878	335	831	804	764	1,480	1,850	2,690
18	809	654	618	700	876	370	598	836	906	1,480	1,850	2,610
19	737	663	804	496	859	331	675	746	1,030	1,480	1,860	2,550
20	630	655	978	671	850	332	795	777	1,050	1,550	1,850	2,570
21	556	797	1,250	857	854	353	618	729	1,030	1,570	1,780	2,490
22	479	927	2,140	818	852	380	489	642	1,030	1,580	1,790	2,240
23	407	1,020	1,260	810	851	368	496	618	1,010	1,570	1,810	2,170
24	339	1,110	915	812	847	456	482	630	1,000	1,550	1,810	2,210
25	241	1,080	786	819	855	509	493	831	1,000	1,550	1,900	2,080
26	224	1,150	716	805	844	545	507	675	1,070	1,540	1,910	1,860
27	217	1,080	691	899	629	487	552	567	939	1,530	1,880	1,810
28	215	456	666	940	692	444	587	533	679	1,640	1,960	1,770
29	215	279	618	936	------	393	556	526	708	1,670	2,070	1,730
30	205	268	729	942	------	399	522	529	827	1,650	2,390	1,730
31	201	------	831	944	------	430	------	533	------	1,670	2,720	------
TOTAL	34,499	14,261	19,975	27,609	24,451	11,735	18,329	22,528	20,874	43,363	56,770	75,260
MEAN	1,113	475	644	891	873	379	611	727	696	1,399	1,831	2,509
MAX	1,950	1,150	2,140	1,270	936	734	982	978	1,070	1,670	2,720	2,980
MIN	201	212	140	496	629	278	357	526	366	822	1,660	1,730
AC-FT	68,430	28,290	39,620	54,760	48,500	23,280	36,360	44,680	41,400	86,010	112,600	149,300

CAL YR 1972 TOTAL 606,512 MEAN 1,657 MAX 3,980 MIN 140 AC-FT 1,203,000
WTR YR 1973 TOTAL 369,654 MEAN 1,013 MAX 2,980 MIN 140 AC-FT 733,200

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 mi (0.8 km) downstream from Porter Creek, on left bank 0.6 mi (1 km) upstream from concrete highway bridge on State Highway 55, 2 mi (3.2 km) north of Horseshoe Bend, and at mile 60.7 (97.7 km).

DRAINAGE AREA.--2,230 sq mi (5,780 sq km), approximately. Mean altitude, 5,850 ft (1,783.1 m).

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 (800.286 m) above mean sea level, unadjusted. Prior to Nov. 23, 1912, nonrecording gage at site 1.8 mi (2.9 km) upstream at different datum. Nov. 23, 1912, to Apr. 16, 1953, water-stage recorder at site 1,000 ft (304.8 m) downstream at datum 2.1 ft (0.613 m) lower.

AVERAGE DISCHARGE.--64 years, 3.241 cfs (91.8 cu m/s), 2,348,000 acre-ft/yr (2,895 cu hm/yr); 15-year base period (1952-67), 3,320 cfs (94.0 cu m/s).

EXTREMES.--Current year: Maximum discharge, 6,300 cfs (178 cu m/s) May 19 (gage height, 8.67 ft or 2.643 m); minimum daily, 500 cfs (14.2 cu m/s) Dec. 7.
Period of record: Maximum discharge, 27,000 cfs (764 cu m/s) Dec. 23, 1964 (gage height, 16.35 ft or 4.983 m); minimum, 350 cfs (9.9 cu m/s) Dec. 17, 1935 (gage height, 0.26 ft or 0.792 m, site and datum then in use), from rating curve extended below 600 cfs (17.0 cu m/s).

REMARKS.--Records excellent. Flow regulated Deadwood Reservoir beginning November 1930 (see sta 13236000), and Cascade Reservoir 51.9 mi (83.5 km) upstream, beginning November 1947 (see sta 13244500), and other reservoirs upstream. Diversions above station for irrigation of about 55,100 acres (22,300 sq hm) (1966 determination). Records of water temperatures for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WSP 533: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,710	954	963	1,500	1,630	1,710	1,420	3,240	3,760	3,500	3,430	3,550
2	2,680	990	1,000	1,550	1,570	1,620	1,320	3,310	3,690	3,360	3,420	3,530
3	2,690	983	1,010	1,400	1,560	1,420	1,320	3,410	3,440	3,330	3,440	3,430
4	2,670	1,050	934	1,500	1,610	1,310	1,390	3,570	3,160	3,380	3,500	3,430
5	2,660	1,170	740	1,380	1,630	1,250	1,570	3,660	3,020	3,410	3,470	3,460
6	2,630	1,060	580	1,440	1,660	1,210	1,710	3,730	3,030	3,410	3,430	3,330
7	2,610	986	540	1,720	1,640	1,180	1,640	3,840	3,220	3,430	3,430	3,230
8	2,610	1,010	720	1,680	1,600	1,160	1,560	3,940	3,460	3,420	3,420	3,400
9	2,620	1,030	780	1,630	1,560	1,150	1,660	3,450	3,530	3,430	3,390	3,360
10	2,710	977	940	1,520	1,600	1,170	2,050	3,190	3,580	3,470	3,400	3,300
11	2,800	976	1,000	1,650	1,610	1,260	2,200	2,960	3,300	3,450	3,390	3,270
12	2,700	966	1,080	1,700	1,590	1,170	2,220	2,920	2,990	3,510	3,430	3,210
13	2,570	950	1,150	1,710	1,590	1,150	2,600	3,150	2,910	3,510	3,450	3,210
14	2,090	944	1,260	2,090	1,560	1,120	2,980	3,640	3,340	3,480	3,420	3,210
15	1,970	943	1,370	2,030	1,560	1,100	2,880	4,120	4,060	3,480	3,400	3,210
16	1,890	941	1,460	2,370	1,540	1,110	2,760	4,600	3,450	3,430	3,430	3,260
17	1,730	1,100	1,420	3,100	1,540	1,260	2,890	5,160	3,220	3,410	3,460	3,220
18	1,610	1,350	1,410	2,090	1,570	1,320	2,480	5,730	3,170	3,380	3,460	3,130
19	1,490	1,370	1,660	1,690	1,510	1,240	2,290	6,090	3,130	3,360	3,440	3,060
20	1,420	1,330	1,960	1,550	1,470	1,230	2,440	5,890	3,160	3,560	3,440	3,180
21	1,320	1,360	2,320	1,760	1,510	1,260	2,420	5,400	3,250	3,590	3,380	3,280
22	1,260	1,460	3,780	1,620	1,520	1,300	2,390	4,740	3,430	3,560	3,380	2,940
23	1,160	1,560	3,110	1,530	1,580	1,310	2,480	4,370	3,530	3,500	3,380	2,790
24	1,110	1,720	2,450	1,600	1,570	1,390	2,570	4,340	3,540	3,460	3,390	2,900
25	1,000	1,750	2,000	1,700	1,600	1,520	2,690	5,200	3,440	3,430	3,430	2,970
26	975	2,020	1,750	1,630	1,640	1,670	2,840	4,740	3,590	3,390	3,430	2,650
27	964	1,940	1,640	1,580	1,470	1,650	3,100	4,050	3,750	3,360	3,340	2,490
28	948	1,290	1,580	1,600	1,570	1,540	3,400	3,660	3,570	3,440	3,340	2,420
29	951	977	1,430	1,700	------	1,440	3,260	3,490	3,530	3,460	3,330	2,350
30	909	915	1,380	1,700	------	1,410	3,030	3,490	3,620	3,450	3,390	2,320
31	887	------	1,570	1,670	------	1,460	------	3,680	------	3,440	3,250	------
TOTAL	58,344	36,072	44,987	53,390	44,060	41,090	69,560	126,760	101,870	106,790	105,690	93,090
MEAN	1,882	1,202	1,451	1,722	1,574	1,325	2,319	4,089	3,396	3,445	3,409	3,103
MAX	2,800	2,020	3,780	3,100	1,660	1,710	3,400	6,090	4,060	3,590	3,500	3,550
MIN	887	915	540	1,380	1,470	1,100	1,320	2,920	2,910	3,330	3,250	2,320
AC-FT	115,700	71,550	89,230	105,900	87,390	81,500	138,000	251,400	202,100	211,800	209,600	184,600

CAL YR 1972 TOTAL 1,528,303 MEAN 4,176 MAX 13,800 MIN 540 AC-FT 3,031,000
WTR YR 1973 TOTAL 881,703 MEAN 2,416 MAX 6,090 MIN 540 AC-FT 1,749,000

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 mi (0.5 km) downstream from Black Canyon Dam, 5 mi (8.0 km) northeast of Emmett, and at mile 38.4 (61.8 km).

DRAINAGE AREA.--2,680 sq mi (6,940 sq km), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 2,400 ft (730 m) (from topographic map).

AVERAGE DISCHARGE.--48 years, 2,993 cfs (84.76 cu m/s), 2,168,000 acre-ft/yr (2,670 cu hm/yr); 15-year base period (1952-67), 2,916 cfs (82.58 cu m/s).

EXTREMES.--Current year: Maximum discharge, 6,170 cfs (175 cu m/s) May 19 (gage height, 6.08 ft or 1.853 m); minimum daily, 614 cfs (17.4 cu m/s) Dec. 7.
Period of record: Maximum discharge, 32,700 cfs (926 cu m/s) Dec. 23, 1964 (gage height, 15.88 ft or 4.840 m); minimum daily discharge, 0.7 cfs (19.8 cu dm/s) Jan. 7, 1957 (gage height, -1.49 ft or -0.454 m), 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 mi (0.5 km) upstream where flow is regulated by diversion and gate operation at dam. Diversions above station for irrigation of about 160,000 acres (65,000 sq hm), of which about 43,700 acres (18,000 sq hm) are below station and about 53,000 acres (21,000 sq hm) 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)

1.90	564	4.00	2,920
2.50	1,110	5.00	4,380
3.00	1,660	6.00	6,030

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,970	905	972	1,700	1,800	2,090	1,730	1,960	2,810	2,130	1,990	2,070
2	1,970	952	1,240	1,650	1,740	2,270	1,510	2,200	2,740	1,980	1,990	2,130
3	1,940	991	1,220	1,640	1,670	1,760	1,530	2,280	2,450	1,920	2,020	2,070
4	1,950	1,060	1,140	1,400	1,840	1,700	1,540	2,550	2,070	1,960	2,100	2,010
5	1,970	1,240	769	1,320	1,870	1,520	1,770	2,710	1,890	1,980	2,050	2,170
6	1,950	1,140	724	1,720	2,060	1,500	1,940	2,750	1,860	2,010	1,990	2,110
7	1,910	962	614	1,770	2,080	1,430	1,960	2,860	2,080	1,980	2,000	1,940
8	1,900	1,010	778	1,650	1,990	1,250	1,770	3,020	2,340	2,010	1,970	2,130
9	1,940	1,190	962	1,540	1,820	1,140	1,610	2,710	2,450	1,990	1,960	2,140
10	2,030	1,000	905	1,680	1,940	1,420	1,980	2,220	2,480	2,040	1,950	2,080
11	2,220	1,000	952	1,790	2,040	1,650	2,150	1,920	2,190	2,020	1,950	2,090
12	2,170	991	1,160	1,850	1,960	1,540	2,140	1,820	1,770	2,070	1,980	2,030
13	2,040	962	1,180	2,370	1,930	1,390	2,410	2,270	1,640	2,100	2,000	2,050
14	2,080	943	1,130	2,770	1,770	1,440	2,950	2,950	1,920	2,060	1,960	2,050
15	2,030	952	1,230	2,710	1,520	1,340	2,900	3,270	3,040	2,070	1,950	2,120
16	1,950	962	1,280	3,190	1,480	1,340	2,640	3,790	2,390	2,020	1,970	2,150
17	1,770	1,140	1,440	4,030	1,400	1,330	3,010	4,510	2,000	1,980	1,980	2,250
18	1,680	1,590	1,560	3,300	1,340	1,500	2,490	5,160	1,980	1,960	2,000	2,200
19	1,510	1,580	1,980	2,650	1,520	1,450	2,050	5,560	1,850	1,940	1,970	2,140
20	1,460	1,470	2,750	2,050	1,480	1,400	2,170	5,420	1,860	2,090	1,990	2,320
21	1,210	1,290	2,600	2,230	1,440	1,500	2,180	4,860	1,920	2,240	1,920	2,550
22	1,190	1,460	4,320	2,070	1,430	1,600	1,960	4,060	2,100	2,160	1,920	2,310
23	1,160	1,550	4,590	1,710	1,410	1,620	1,950	3,550	2,230	2,130	1,910	2,080
24	1,180	1,680	3,970	1,630	1,610	1,640	1,920	3,480	2,270	2,050	1,920	2,220
25	1,030	1,700	2,820	1,930	1,600	1,840	1,940	4,600	2,130	2,040	1,960	2,420
26	1,150	2,080	2,280	1,880	1,580	2,000	2,020	4,200	2,220	1,980	2,010	2,160
27	1,160	2,340	2,020	1,680	1,560	2,040	2,270	3,260	2,440	1,930	1,920	1,940
28	981	1,670	2,100	1,680	1,600	1,940	2,540	2,740	2,270	2,000	1,900	1,880
29	952	1,060	1,820	1,790	------	1,750	2,450	2,520	2,120	2,020	1,880	1,870
30	905	952	1,590	1,890	------	1,730	2,010	2,510	2,230	2,010	1,970	1,830
31	886	------	1,770	1,930	------	1,770	------	2,710	------	1,990	1,820	------
TOTAL	50,244	37,822	53,866	63,200	47,480	49,890	63,490	100,420	65,740	62,860	60,900	63,510
MEAN	1,621	1,261	1,738	2,039	1,696	1,609	2,116	3,239	2,191	2,028	1,965	2,117
MAX	2,220	2,340	4,590	4,030	2,080	2,270	3,010	5,560	3,040	2,240	2,100	2,550
MIN	886	905	614	1,320	1,340	1,140	1,510	1,820	1,640	1,920	1,820	1,830
AC-FT	99,660	75,020	106,800	125,400	94,180	98,960	125,900	199,200	130,400	124,700	120,800	126,000

CAL YR 1972 TOTAL 1,451,012 MEAN 3,965 MAX 13,700 MIN 614 AC-FT 2,878,000
WTR YR 1973 TOTAL 719,422 MEAN 1,971 MAX 5,560 MIN 614 AC-FT 1,427,000

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 (19 m) downstream from bridge on Emmett-Council road, 500 ft (152.4 m) upstream from mouth of Four-Mile Creek, 13.5 mi (21.7 km) north of Emmett, and at mile 19.0 (30.6 km).

DRAINAGE AREA.--47.4 sq mi (123 sq km).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,810 ft (856.5 m) (from topographic map).

AVERAGE DISCHARGE.--11 years, 23.1 cfs (0.654 cu m/s), 16,740 acre-ft/yr (20.6 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 797 cfs (22.6 cu m/s) Dec. 24 (gage height, 5.68 ft or 1.731 m); minimum daily, 3.0 cfs Dec. 8; minimum gage height, 2.07 ft (0.63 m) July 12, 13.
Period of record: Maximum discharge, 1,860 cfs (52.7 cu m/s) Dec. 22, 1964 (gage height, 7.61 ft or 2.319 m); minimum, 1.2 cfs (34 cu dm/s) July 16, 1968 (gage height, 2.13 ft or 0.649 m).
Flood of Feb. 24 or 25, 1957, reached a peak of 2,100 cfs or 59.5 cu m/s (gage height not determined).

REMARKS.--Records good.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 4-15, Jan. 9, Jan. 27 to Feb. 5)

2.1	2.7	3.0	68
2.3	9.9	3.5	145
2.5	21	4.0	250

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	7.0	6.2	19	12	85	18	7.4	5.4	4.4	4.5	4.2
2	4.3	7.0	6.2	20	11	67	16	7.2	5.6	4.4	4.4	4.3
3	4.2	7.0	6.6	13	11	54	14	7.3	5.4	4.7	4.3	4.3
4	4.9	8.7	5.8	15	16	47	13	8.8	5.3	4.6	4.1	4.5
5	5.2	7.9	4.2	13	69	39	12	7.8	5.5	4.4	4.3	4.8
6	5.2	7.0	4.0	12	68	34	12	7.2	5.5	4.4	4.3	4.6
7	5.5	6.6	3.4	12	45	30	11	7.0	5.5	4.3	4.2	4.4
8	5.2	7.0	3.0	12	38	27	11	8.1	5.6	4.1	4.2	4.8
9	4.3	6.2	4.0	9.3	34	25	11	7.8	5.6	3.9	4.1	4.6
10	5.8	6.6	5.0	10	69	36	11	7.2	6.1	3.9	3.9	4.6
11	6.6	6.6	5.2	10	53	50	10	5.4	6.2	3.7	4.1	4.6
12	5.5	6.2	5.2	13	43	41	10	5.6	6.2	3.6	4.3	4.6
13	4.6	6.2	5.3	16	64	36	10	5.0	6.4	3.6	4.4	4.5
14	5.2	6.2	5.2	61	51	29	10	4.6	7.2	3.9	4.4	4.8
15	5.8	6.2	5.3	60	40	26	9.5	4.0	7.7	4.0	4.4	4.9
16	5.5	6.2	5.8	180	35	25	11	4.2	7.7	4.0	4.3	5.2
17	5.5	7.4	9.1	260	35	27	20	3.9	8.5	3.9	4.2	5.4
18	5.8	7.0	26	150	37	24	14	4.1	7.9	3.8	3.6	5.4
19	6.6	6.6	134	95	30	22	12	4.1	7.1	3.6	3.8	5.0
20	6.6	6.2	52	58	25	25	11	3.9	6.7	3.6	4.1	6.8
21	6.2	6.2	50	40	24	40	10	4.0	5.6	3.4	4.0	6.4
22	6.2	5.8	78	31	23	33	9.8	4.4	5.3	3.2	4.5	6.0
23	6.2	6.2	46	26	23	27	10	4.8	5.8	3.2	4.5	5.8
24	6.2	6.2	190	23	25	25	9.7	4.9	6.5	3.4	4.1	7.2
25	6.2	6.6	54	23	33	25	8.8	8.6	6.3	3.5	4.5	6.6
26	6.2	10	40	17	39	24	8.4	6.1	5.5	3.9	4.7	6.0
27	6.2	7.4	49	20	50	22	8.3	6.0	5.5	4.2	4.7	5.8
28	6.2	6.6	113	16	52	20	8.0	5.8	5.2	4.0	3.9	5.7
29	6.2	6.2	42	14	------	18	7.9	5.3	5.0	3.9	3.8	5.6
30	6.2	6.2	31	14	------	17	7.8	4.9	4.8	4.0	3.9	5.5
31	6.2	------	25	13	------	25	------	4.8	------	4.3	3.9	-----
TOTAL	175.1	203.2	1,019.5	1,275.3	1,055	1,025	335.2	180.2	182.6	121.8	130.4	156.9
MEAN	5.65	6.77	32.9	41.1	37.7	33.1	11.2	5.81	6.09	3.93	4.21	5.23
MAX	6.6	10	190	260	69	85	20	8.8	8.5	4.7	4.7	7.2
MIN	4.2	5.8	3.0	9.3	11	17	7.8	3.9	4.8	3.2	3.6	4.2
AC-FT	347	403	2,020	2,530	2,090	2,030	665	357	362	242	259	311

CAL YR 1972 TOTAL 11,010.5 MEAN 30.1 MAX 897 MIN 2.7 AC-FT 21,840
WTR YR 1973 TOTAL 5,860.2 MEAN 16.1 MAX 260 MIN 3.0 AC-FT 11,620

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

NOTE.--No gage-height record Jan. 11-20, July 16 to Aug. 17.

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 mi (2.9 km) south of Payette, and at mile 4.1 (6.6 km).

DRAINAGE AREA.--3,240 sq mi (8,390 sq km), 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 (651.797 m) above mean sea level, unadjusted. Aug. 1, 1935, to Aug. 7, 1939, nonrecording gage at site 50 ft (15 m) downstream at present datum.

AVERAGE DISCHARGE.--38 years, 3,084 cfs (87.34 cu m/s) 2,234,000 acre-ft/yr (2,750 cu hm/yr); 15-year base period (1952-67), 2,934 cfs (83.09 cu m/s).

EXTREMES.--Current year: Maximum discharge, 5,240 cfs (148 cu m/s) Dec. 23 (gage height, 7.05 ft or 2.149 m); minimum daily, 900 cfs (25.49 cu m/s) Dec. 8; minimum gage height, 4.25 ft (1.295 m) Dec. 8.
Period of record: Maximum discharge, 30,900 cfs (875 cu m/s) Dec. 24, 1964 (gage height, 13.80 ft or 4.206 m); minimum, 180 cfs (5.10 cu m/s) Oct. 13, 20, 1935 (gage height, 2.04 ft or 0.622 m); minimum daily, 220 cfs (6.23 cu m/s) 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 mi (55.7 km) upstream where flow is regulated by diversion and gate operation at dam. Diversions above station for irrigation of about 196,000 acres (79,000 sq hm) of which about 100 acres (40 sq hm) are by withdrawals from ground water, about 5,100 acres (2,100 sq hm) are located below station, and about 53,000 acres (21,000 sq hm) are in adjacent basins (1966 determination). Records of chemical analyses for the water year 1973 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)
(Stage-discharge relation affected by ice Dec. 7-18)

4.4	830	6.0	3,260
4.7	1,240	7.0	5,130
5.0	1,670		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,160	1,250	1,280	2,100	2,110	2,140	1,910	1,440	2,230	1,540	1,420	1,640
2	2,150	1,260	1,410	1,980	2,000	2,590	1,740	1,500	2,270	1,430	1,420	1,820
3	2,110	1,340	1,510	1,950	1,940	2,150	1,650	1,570	2,190	1,300	1,440	1,900
4	2,120	1,390	1,550	1,750	2,040	2,000	1,620	1,830	1,890	1,320	1,490	1,810
5	2,140	1,510	1,230	1,650	2,210	1,910	1,760	2,080	1,590	1,370	1,540	1,890
6	2,130	1,590	1,040	1,850	2,470	1,790	1,970	2,090	1,480	1,370	1,530	1,960
7	2,100	1,370	940	2,020	2,460	1,740	2,050	2,180	1,450	1,340	1,500	1,900
8	2,080	1,340	900	1,940	2,340	1,670	1,930	2,410	1,630	1,370	1,480	1,840
9	2,120	1,400	1,150	1,800	2,180	1,440	1,770	2,280	1,780	1,360	1,460	1,990
10	2,210	1,480	1,220	1,880	2,140	1,600	1,660	1,850	1,820	1,380	1,420	1,920
11	2,420	1,350	1,350	2,010	2,460	1,920	1,960	1,600	1,840	1,340	1,440	1,920
12	2,480	1,330	1,540	2,070	2,280	1,940	1,910	1,360	1,460	1,360	1,440	1,900
13	2,400	1,320	1,570	2,420	2,260	1,820	1,900	1,380	1,190	1,450	1,510	1,860
14	2,390	1,290	1,500	3,310	2,350	1,740	2,370	1,910	1,160	1,440	1,450	1,920
15	2,360	1,300	1,600	3,110	1,910	1,680	2,550	2,250	1,910	1,430	1,420	1,990
16	2,350	1,310	1,660	3,470	1,900	1,690	2,390	2,630	2,150	1,450	1,430	2,030
17	2,190	1,260	2,100	4,450	1,780	1,630	2,520	3,150	1,660	1,400	1,460	2,090
18	2,030	1,790	2,480	4,130	1,730	1,910	2,510	3,730	1,630	1,350	1,470	2,060
19	1,860	1,880	2,730	3,150	1,760	1,840	2,050	4,290	1,470	1,360	1,510	2,090
20	1,800	1,890	3,440	2,640	1,800	1,750	1,930	4,370	1,410	1,420	1,520	2,200
21	1,600	1,640	3,540	2,400	1,760	1,850	1,960	4,120	1,350	1,690	1,540	2,410
22	1,470	1,680	4,010	2,450	1,740	1,830	1,840	3,500	1,420	1,740	1,590	2,500
23	1,470	1,800	4,850	2,080	1,720	1,870	1,760	2,950	1,570	1,730	1,570	2,230
24	1,520	1,930	4,440	1,990	1,800	1,810	1,620	2,760	1,660	1,630	1,530	2,250
25	1,510	1,970	3,430	2,030	1,900	1,950	1,560	3,390	1,640	1,570	1,530	2,530
26	1,440	2,090	2,780	2,170	1,910	2,090	1,480	4,000	1,500	1,520	1,610	2,500
27	1,580	2,540	2,430	1,990	1,880	2,220	1,540	3,170	1,670	1,430	1,600	2,170
28	1,420	2,280	2,560	1,920	1,860	2,100	1,830	2,600	1,710	1,380	1,480	2,110
29	1,310	1,570	2,350	2,000	------	1,910	2,030	2,290	1,470	1,440	1,510	2,110
30	1,300	1,320	2,070	2,090	------	1,880	1,750	2,160	1,480	1,460	1,550	2,030
31	1,250	------	2,030	2,170	------	1,860	------	2,300	------	1,440	1,570	------
TOTAL	59,470	47,470	66,690	72,970	56,690	58,320	57,520	79,140	49,680	44,810	46,430	61,570
MEAN	1,918	1,582	2,151	2,354	2,025	1,881	1,917	2,553	1,656	1,445	1,498	2,052
MAX	2,480	2,540	4,850	4,450	2,470	2,590	2,550	4,370	2,270	1,740	1,610	2,530
MIN	1,250	1,250	900	1,650	1,720	1,440	1,480	1,360	1,160	1,300	1,420	1,640
AC-FT	118,000	94,160	132,300	144,700	112,400	115,700	114,100	157,000	98,540	88,880	92,090	122,100

CAL YR 1972 TOTAL 1,446,690 MEAN 3,953 MAX 14,000 MIN 900 AC-FT 2,870,000
WTR YR 1973 TOTAL 700,760 MEAN 1,920 MAX 4,850 MIN 900 AC-FT 1,390,000

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 mi (0.2 km) upstream from East Branch Weiser River, and 5.2 mi (8.4 km) northwest of Tamarack.

DRAINAGE AREA.--3.96 sq mi (10.26 sq km). Mean altitude, 4,900 ft (1,490 m).

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,200 ft (1,280 m) (from topographic map).

AVERAGE DISCHARGE.--14 years, 5.14 cfs (0.146 cu m/s), 17.63 in/yr (448 mm/yr), 3,720 acre-ft/yr (4.59 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 26 cfs (0.74 cu m/s) Dec. 21 (gage height, 3.14 ft or 0.957 m); minimum discharge, 0.70 cfs (0.020 cu m/s) July 11-13 (gage height, 2.09 ft or 0.637 m); minimum gage height, 2.01 ft (0.613 m) Dec. 3.
Period of record: Maximum discharge, 87 cfs (2.46 cu m/s) May 4, 1971 (gage height, 4.56 ft or 1.390 m); maximum gage height, 4.59 ft (1.399 m) Apr. 21, 1965; minimum daily discharge, 0.4 cfs (0.011 cu m/s) Nov. 22, 1964.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures for the water year 1973 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. 27 to Dec. 4; stage-discharge relation affected by ice Dec. 5-10, Jan. 7-11, 20, 22, 27-30, Feb. 20-22)

2.1	0.7	2.4	4.0
2.2	1.3	2.6	9.7
2.3	2.3	3.0	22

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.4	2.1	1.9	1.7	3.4	5.8	13	2.8	1.1	1.0	1.3
2	1.5	1.5	2.1	1.9	1.7	3.2	5.6	12	2.7	1.1	1.0	1.3
3	1.5	1.7	2.0	1.9	1.7	2.7	6.1	13	2.7	1.0	1.1	1.3
4	1.5	2.7	2.1	1.9	1.7	2.4	7.0	16	2.6	1.0	1.1	1.3
5	1.4	2.3	1.6	1.9	1.6	2.1	8.5	16	2.4	.90	1.0	1.3
6	1.4	1.9	1.7	1.8	1.5	2.3	9.1	16	2.4	.90	1.0	1.2
7	1.3	1.8	1.7	1.7	1.5	3.0	8.8	15	2.3	.90	1.0	1.3
8	1.3	1.8	1.7	1.7	1.5	2.6	9.1	16	2.2	.80	1.0	1.3
9	1.5	1.8	1.7	1.6	1.4	2.4	9.1	15	2.1	.80	1.0	1.2
10	1.6	1.9	1.7	1.6	1.5	2.8	9.7	14	2.1	.80	1.1	1.2
11	1.6	1.9	1.7	1.6	1.4	2.7	12	12	2.0	.70	1.0	1.1
12	1.5	1.9	1.7	1.6	1.4	2.6	14	12	1.9	.70	1.0	1.0
13	1.3	1.9	1.7	2.1	1.4	2.6	18	12	1.9	.70	1.0	1.0
14	1.3	1.9	1.7	2.1	1.4	2.3	19	12	1.9	.80	1.0	1.1
15	1.4	1.9	1.7	2.1	1.4	2.3	16	13	1.8	.80	.90	1.2
16	1.3	2.0	1.7	6.1	1.4	2.3	15	13	1.7	.90	.90	1.1
17	1.3	2.0	1.6	4.2	1.3	2.7	15	12	1.8	.90	.90	1.0
18	1.3	2.0	1.6	3.2	1.3	2.7	13	11	1.7	.90	1.0	1.0
19	1.3	2.0	1.8	2.7	1.3	2.7	12	10	1.6	1.0	1.0	1.4
20	1.3	1.9	2.0	2.5	1.3	3.0	11	8.8	1.4	1.1	1.0	1.6
21	1.2	1.8	11	2.3	1.3	4.2	11	7.3	1.4	1.7	1.1	1.3
22	1.3	1.9	7.9	2.2	1.3	4.2	11	6.1	1.3	1.4	1.0	1.2
23	1.3	2.0	3.0	2.1	1.3	4.7	11	5.0	1.3	1.3	1.0	1.3
24	1.3	2.0	2.7	2.0	1.3	5.2	12	5.6	1.3	1.3	1.1	1.5
25	1.2	2.0	2.3	2.0	1.5	6.1	12	7.3	1.3	1.1	1.2	1.4
26	1.3	2.1	2.3	1.9	1.4	6.4	13	5.2	1.3	1.1	1.2	1.3
27	1.3	2.1	2.2	1.7	1.6	7.0	15	4.7	1.3	1.1	1.2	1.3
28	1.3	2.1	1.9	1.7	1.8	6.7	16	4.0	1.3	1.0	1.2	1.3
29	1.3	2.1	1.9	1.8	------	6.4	15	3.4	1.2	1.0	1.2	1.3
30	1.3	2.1	1.9	1.8	------	6.4	14	3.2	1.2	1.0	1.3	1.3
31	1.3	------	1.9	1.8	------	6.1	------	3.0	------	1.0	1.3	------
TOTAL	42.4	58.4	74.6	67.4	40.9	116.2	353.8	316.6	54.9	30.80	32.80	37.4
MEAN	1.37	1.95	2.41	2.17	1.46	3.75	11.8	10.2	1.83	.99	1.06	1.25
MAX	1.7	2.7	11	6.1	1.8	7.0	19	16	2.8	1.7	1.3	1.6
MIN	1.2	1.4	1.6	1.6	1.3	2.1	5.6	3.0	1.2	.70	.90	1.0
CFSM	.35	.49	.61	.55	.37	.95	2.98	2.58	.46	.25	.27	.32
IN.	.40	.55	.70	.63	.38	1.09	3.32	2.97	.52	.29	.31	.35
AC-FT	84	116	148	134	81	230	702	628	109	61	65	74

CAL YR 1972 TOTAL 2,235.82 MEAN 6.11 MAX 36 MIN .93 CFSM 1.54 IN 21.00 AC-FT 4,430
WTR YR 1973 TOTAL 1,226.20 MEAN 3.36 MAX 19 MIN .70 CFSM .85 IN 11.52 AC-FT 2,430

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 (30.5 m) upstream from road bridge, 2.2 mi (3.5 km) northeast of Cambridge, 2.5 mi (4.0 km) upstream from Rush Creek, and at mile 50.31 (80.95 km).

DRAINAGE AREA.--605 sq mi (1,567 sq km). Mean altitude, 4,650 ft (1,420 m).

PERIOD OF RECORD.--March 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,650.00 ft (807.720 m) above mean sea level (levels by Bureau of Reclamation). Aug. 29, 1956, to Aug. 19, 1966, at datum 2.0 ft (0.61 m) higher. Apr. 23, 1939, to Dec. 21, 1955, at site 135 ft (41.1 m) downstream at different datum. Nonrecording gage at different datum, prior to Apr. 23, 1939, at site 135 ft (41.1 m) downstream and Dec. 22, 1955, to Aug. 28, 1956, at bridge 2.5 mi (4.0 km) downstream.

AVERAGE DISCHARGE.--34 years, 657 cfs (18.6 cu m/s), 476,000 acre-ft/yr (587 cu hm/yr); 15-year base period (1952-67), 623 cfs (17.6 cu m/s).

EXTREMES.--Current year: Maximum discharge, 8,300 cfs (235 cu m/s) Jan. 16 (gage height, 9.63 ft or 2.935 m); minimum, 35 cfs (0.99 cu m/s) Dec. 4, 5 (gage height, -0.30 ft or -0.091 m).
Period of record: Maximum discharge, 10,100 cfs (286 cu m/s) Dec. 22, 1955 (gage height, 13.9 ft or 4.24 m, from floodmark, site and datum then in use); minimum, 8.0 cfs (0.23 cu m/s) Nov. 16, 1958 (gage height, 1.12 ft or 0.341 m, ice jam upstream, datum then in use).

REMARKS.--Records good except those for November and January, which are fair. Flow regulated to some extent by Lost Valley Reservoir about 57 mi (92 km) upstream (capacity reported to be 11,000 acre-ft or 13.6 cu hm) and other smaller reservoirs. Diversions above station for irrigation of about 12,200 acres or 4,940 sq hm (1966 determination).

Rating tables (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 5-17, Jan. 5-11)

Oct. 1 to Jan. 16				Jan. 17 to Sept. 30			
0.2	55	3.0	785	0.1	35	3.0	885
.6	89	4.0	1,390	.5	77	4.0	1,515
1.0	139	5.0	2,150	1.0	155	5.0	2,320
1.5	227	6.4	3,540	1.5	273	6.2	3,540
2.0	362			2.0	433		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	101	112	212	234	2,330	691	1,010	853	179	65	62
2	126	111	111	210	207	1,820	626	990	784	161	67	57
3	122	111	107	164	207	1,340	604	1,020	700	147	73	56
4	120	156	61	119	244	1,160	631	1,240	649	142	84	55
5	119	193	45	100	265	1,170	744	1,270	622	138	87	48
6	116	151	52	85	314	1,040	800	1,340	617	129	86	46
7	116	128	60	100	302	968	754	1,300	644	121	85	44
8	113	139	70	95	276	973	710	1,390	644	113	81	43
9	116	132	80	92	268	891	719	1,360	644	115	80	41
10	144	122	85	110	279	1,220	729	1,250	591	106	78	40
11	168	117	80	150	270	1,250	810	1,040	537	98	80	38
12	154	116	85	164	275	990	979	984	501	93	80	36
13	136	111	86	441	280	869	1,160	1,040	493	89	78	42
14	132	107	86	825	290	749	1,250	1,150	497	89	76	44
15	136	107	82	577	285	676	1,150	1,220	490	87	75	45
16	126	107	82	3,500	270	640	1,110	1,310	398	89	73	54
17	120	110	90	3,520	280	729	1,220	1,410	388	87	72	58
18	111	113	115	1,550	290	672	1,040	1,420	364	89	71	58
19	105	124	135	1,240	300	626	913	1,360	329	89	70	48
20	102	113	221	754	270	644	810	1,350	302	89	73	71
21	98	100	973	649	250	1,240	729	1,150	282	94	72	89
22	99	96	1,690	474	249	1,040	719	1,030	260	94	71	71
23	98	101	885	419	279	918	784	995	251	87	67	65
24	97	100	1,930	384	293	907	826	1,090	244	91	66	70
25	96	100	650	398	351	907	891	1,590	221	82	66	131
26	96	116	409	348	541	957	973	1,170	207	78	69	103
27	96	117	340	244	885	929	1,100	995	197	75	70	80
28	96	92	455	260	1,130	842	1,230	913	182	73	70	72
29	96	98	340	254	------	759	1,120	885	169	72	67	66
30	96	99	260	288	------	705	1,060	869	165	69	65	64
31	92	------	250	288	------	779	------	891	------	67	63	------
TOTAL	3,570	3,488	10,027	18,014	9,384	30,740	26,882	36,032	13,225	3,132	2,280	1,797
MEAN	115	116	323	581	335	992	896	1,162	441	101	73.5	59.9
MAX	168	193	1,930	3,520	1,130	2,330	1,250	1,590	853	179	87	131
MIN	92	92	45	85	207	626	604	869	165	67	63	36
AC-FT	7,080	6,920	19,890	35,730	18,610	60,970	53,320	71,470	26,230	6,210	4,520	3,560

CAL YR 1972 TOTAL 296,339 MEAN 810 MAX 6,470 MIN 45 AC-FT 587,800
WTR YR 1973 TOTAL 158,571 MEAN 434 MAX 3,520 MIN 36 AC-FT 314,500

PEAK DISCHARGE (BASE, 3,300 CFS).--Dec. 24 (0345) 3,800 cfs (6.64 ft); Jan. 16 (2145) 8,300 cfs (9.63 ft).

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 (0.3 km), and 10 mi (16.1 km) northeast of Weiser.

DRAINAGE AREA.--288 sq mi (746 sq km).

PERIOD OF RECORD.--July to September 1920, February 1921 to September 1973 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 2,240 ft or 683 m (by barometer).

AVERAGE DISCHARGE.--52 years (1921-73), 84.0 cfs (2.38 cu m/s), 60,860 acre-ft/yr (75.0 cu hm/yr); 15-year base period (1952-67), 82.5 cfs (2.34 cu m/s).

EXTREMES.--Current year: Maximum discharge, 457 cfs (12.9 cu m/s) Mar. 21 (gage height, 4.14 ft or 1.262 m); minimum, 3.3 cfs (93.5 cu m/s) May 10 (gage height, 1.96 ft or 0.597 m).
Period of record: Maximum discharge, 3,170 cfs (89.8 cu m/s) Feb. 26, 1957 (gage height, 6.23 ft or 1.899 m); maximum gage height, 6.24 ft (1.902 m Jan. 21, 1970; no flow for part of May 1, 1956, Apr. 19-21, 1967, Apr. 21-22, 1968; minimum daily, 0.11 cfs (3.12 cu dm/s) Apr. 20, 1967.
A major flood occurred Dec. 3 or 4, 1910.

REMARKS.--Records good except those for flow under 30 cfs (0.85 cu m/s), which are fair. Flow regulated by Crane Creek Reservoir 12.3 mi (19.8 km) upstream (see sta 13264000). Diversions above station for irrigation of about 820 acres or 332 sq hm (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. 4 to Jan. 18; shifting-control method used Oct. 1 to Dec. 19, Mar. 3 to July 6, Sept. 18-30)

1.7	3.0	2.6	62
1.8	5.1	3.0	122
1.9	7.8	3.5	245
2.0	11	4.0	442
2.3	30		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	13	13	10	175	262	56	14	12	142	235	161
2	78	13	13	10	170	186	55	12	13	136	234	159
3	60	13	13	12	165	32	44	10	14	122	229	157
4	52	14	12	13	120	27	42	14	14	122	232	157
5	52	14	9.5	12	30	25	37	14	12	128	235	155
6	51	12	9.0	12	33	22	35	12	11	151	234	141
7	50	12	8.0	11	32	22	34	11	10	191	231	121
8	52	13	6.5	11	31	22	28	10	10	236	231	128
9	40	13	8.0	12	30	21	26	7.8	13	227	224	128
10	25	12	9.0	12	31	45	26	5.2	12	215	226	125
11	24	12	10	15	70	70	22	5.3	12	215	222	126
12	22	12	10	13	173	34	18	5.3	11	230	201	125
13	20	12	9.0	14	175	26	16	6.9	12	233	202	126
14	18	12	8.5	13	174	27	17	8.8	12	227	189	121
15	16	11	9.0	13	173	27	15	9.4	11	227	171	123
16	14	11	11	15	172	33	19	14	11	226	194	126
17	12	13	15	45	173	41	27	15	11	228	198	125
18	11	14	12	70	174	50	26	13	11	228	198	124
19	11	14	12	66	173	55	26	13	8.8	227	199	122
20	10	14	12	63	172	61	25	14	11	214	203	124
21	11	13	13	70	172	252	26	14	11	207	203	125
22	12	13	14	84	173	126	21	15	11	209	196	116
23	12	13	17	117	176	110	22	13	11	205	195	91
24	12	13	20	122	183	98	17	13	12	190	188	89
25	12	14	13	139	191	91	15	19	9.5	191	176	71
26	12	15	12	159	204	86	14	15	9.5	185	184	66
27	12	14	12	172	212	78	17	11	45	184	183	50
28	12	13	17	179	210	72	16	12	106	190	176	47
29	12	13	13	179	------	63	17	10	109	200	158	46
30	13	13	11	181	------	57	18	12	128	204	160	45
31	13	------	10	179	------	57	------	13	------	231	162	------
TOTAL	833	388	361.5	2,023	3,967	2,178	777	361.7	683.8	6,121	6,269	3,420
MEAN	26.9	12.9	11.7	65.3	142	70.3	25.9	11.7	22.8	197	202	114
MAX	82	15	20	181	212	262	56	19	128	236	235	161
MIN	10	11	6.5	10	30	21	14	5.2	8.8	122	158	45
AC-FT	1,650	770	717	4,010	7,870	4,320	1,540	717	1,360	12,140	12,430	6,780

CAL YR 1972 TOTAL 37,277.8 MEAN 102 MAX 1,250 MIN 4.6 AC-FT 73,940
WTR YR 1973 TOTAL 27,383.0 MEAN 75.0 MAX 262 MIN 5.2 AC-FT 54,310

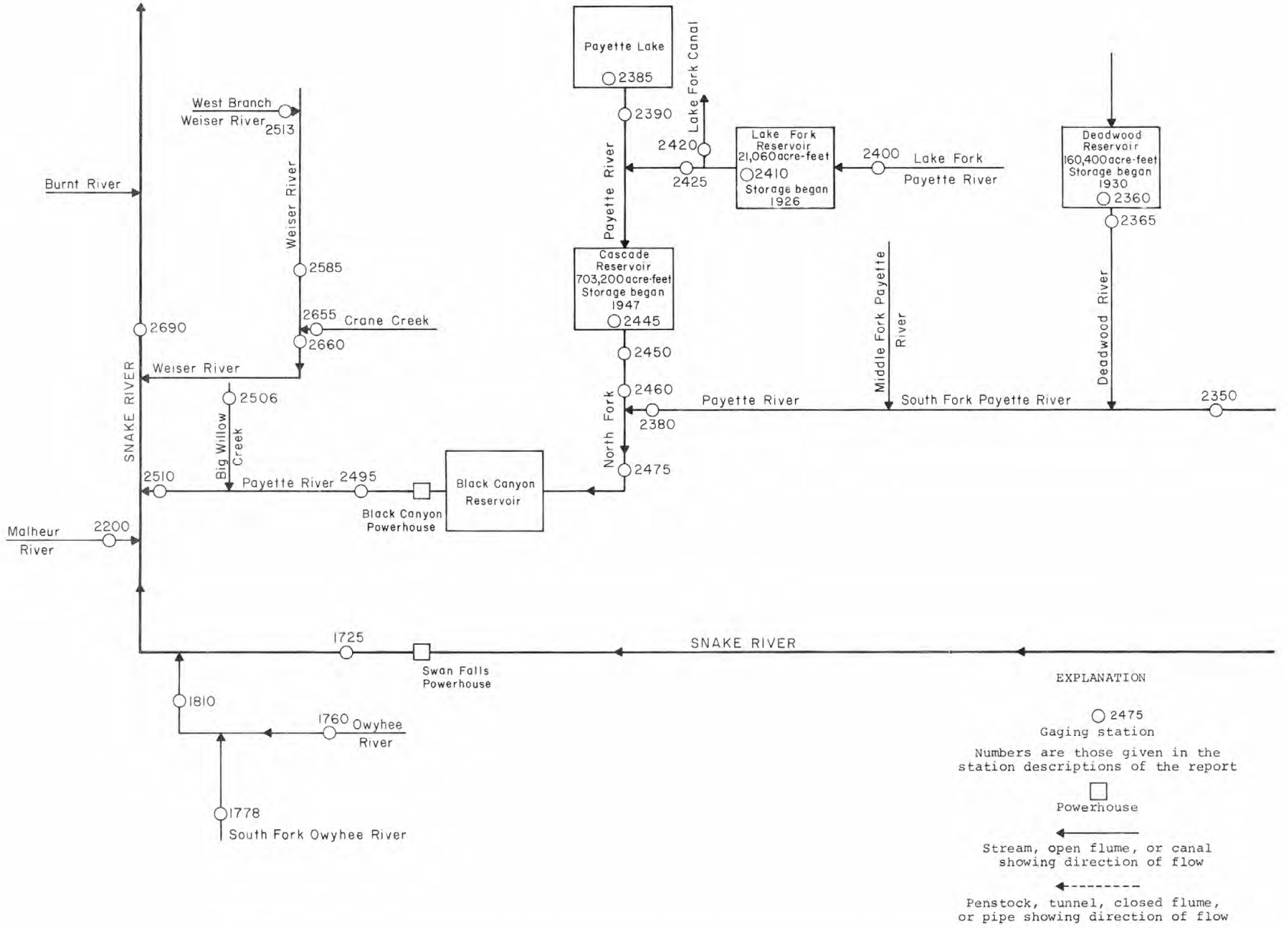

FIGURE 10. Schematic diagram showing gaging stations, diversions, and storage in Payette and Weiser River basins.

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 mi (0.6 km) upstream from county road bridge, 1.8 mi (2.9 km) downstream from Crane Creek, 10 mi (16 km) east of Weiser, and at mile 15.1 (24.3 km).

DRAINAGE AREA.--1,460 sq mi (3,780 sq km), 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 (677 m) (by barometer). Prior to October 1952, non-recording gages at several sites downstream within 1.5 mi (2.4 km) of present site at various datums.

AVERAGE DISCHARGE.--30 years (1895-96, 1898-99, 1900-4, 1911-14, 1952-73), 1,148 cfs (32.51 cu m/s), 831,700 acre-ft/yr (1,030 cu hm/yr); 15-year base period 1952-67, 1,030 cfs (29.17 cu m/s).

EXTREMES.--Current year: Maximum discharge, 13,500 cfs (382 cu m/s) Jan. 17 (gage height, 9.28 ft or 2.829 m); minimum, 39 cfs (1.10 cu m/s) Nov. 8, result of freezeup (gage height, 1.14 ft or 0.347 m).
Period of record: Maximum discharge observed, 19,900 cfs (564 cu m/s) Dec. 23, 1955 (gage height, 11.06 ft or 3.371 m); maximum gage height, 12.83 ft (3.911 m) Jan. 31, 1961 (ice jam); minimum observed, 14 cfs (0.40 cu m/s) Aug. 7, 1911 (gage height, 2.80 ft or 0.853 m, site and datum then in use); minimum gage height, 1.45 ft (0.442 m) Nov. 29, 1970.
Flood of Mar. 19, 1932, reached a discharge of about 17,500 cfs (496 cu m/s).

REMARKS.--Records excellent except those for winter period, which are fair. Flow slightly regulated since 1911 by Crane Creek Reservoir 14.3 mi (23.0 km) upstream (capacity about 51,700 acre-ft or 63.7 cu hm) and other small reservoirs. Diversions above station for irrigation of about 30,400 acres (12,300 sq hm) (1966 determination). Records of chemical analyses for the water year 1973 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. 5-22, Jan. 4-14, Feb. 2-4)

1.5	94	3.0	690
1.8	163	4.0	1,530
2.0	220	6.0	4,660
2.5	420	8.0	9,490

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	283	166	187	455	364	4,800	1,080	1,310	1,490	355	289	218
2	278	182	199	425	308	4,290	964	1,270	1,360	329	268	213
3	240	187	199	356	300	2,750	878	1,290	1,210	295	263	215
4	232	205	156	230	365	2,200	870	1,490	1,090	277	264	211
5	229	290	110	195	490	2,320	956	1,650	996	264	286	212
6	225	283	135	170	619	2,110	1,050	1,710	980	283	295	194
7	228	227	150	200	654	1,860	1,040	1,710	1,020	302	292	170
8	223	220	162	199	531	1,790	964	1,750	1,050	343	282	173
9	200	233	170	195	510	1,790	940	1,870	1,030	325	273	181
10	217	217	180	220	537	1,810	948	1,700	932	312	277	171
11	268	208	175	280	548	2,660	988	1,510	818	302	276	169
12	299	199	180	320	592	1,850	1,140	1,390	742	309	264	170
13	269	196	182	440	619	1,530	1,370	1,440	703	305	263	170
14	243	193	185	1,600	625	1,270	1,520	1,600	684	302	243	167
15	243	187	180	1,430	636	1,130	1,470	1,760	723	295	225	173
16	243	190	180	5,480	619	1,050	1,400	1,890	654	294	247	174
17	229	190	190	8,260	648	1,080	1,600	2,150	581	297	254	176
18	212	199	210	2,950	614	1,130	1,430	2,240	585	291	254	180
19	193	208	280	2,380	581	1,020	1,260	2,240	522	288	255	192
20	182	211	410	1,410	553	1,000	1,110	2,200	461	281	251	200
21	177	193	1,200	1,100	553	2,910	1,010	1,930	423	268	249	223
22	179	177	2,900	790	559	1,950	956	1,700	385	277	241	243
23	179	174	2,080	642	586	1,590	1,000	1,610	353	279	247	204
24	177	182	4,720	586	660	1,470	1,050	1,640	351	262	240	196
25	177	182	1,730	614	690	1,420	1,120	2,560	331	265	224	190
26	177	202	964	531	1,260	1,430	1,210	2,040	296	245	234	239
27	177	237	736	420	1,880	1,400	1,370	1,680	302	242	239	196
28	177	211	1,130	356	2,620	1,290	1,560	1,520	341	243	232	171
29	177	190	863	382	------	1,170	1,480	1,460	320	248	213	161
30	174	177	597	411	------	1,080	1,390	1,450	334	249	215	156
31	171	------	526	445	------	1,150	------	1,500	------	267	220	------
TOTAL	6,678	6,116	21,266	33,472	19,521	56,300	35,124	53,260	21,067	8,894	7,875	5,708
MEAN	215	204	686	1,080	697	1,816	1,171	1,718	702	287	254	190
MAX	299	290	4,720	8,260	2,620	4,800	1,600	2,560	1,490	355	295	243
MIN	171	166	110	170	300	1,000	870	1,270	296	242	213	156
AC-FT	13,250	12,130	42,180	66,390	38,720	111,700	69,670	105,600	41,790	17,640	15,620	11,320

CAL YR 1972 TOTAL 488,327 MEAN 1,334 MAX 12,700 MIN 110 AC-FT 968,600
WTR YR 1973 TOTAL 275,281 MEAN 754 MAX 8,260 MIN 110 AC-FT 546,000

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 mi (1.1 km) downstream from Weiser River, and at mile 351.3 (565.2 km).

DRAINAGE AREA.--69,200 sq mi (179,230 sq km), approximately. Mean altitude, 5,400 ft (1,646 m).

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 (636.008 m) above mean sea level. Prior to Oct. 1, 1914, nonrecording gage 0.2 mi (0.3 km) 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 mi (0.5 km) upstream at same datum.

AVERAGE DISCHARGE.--63 years, 17,990 cfs (509 cu m/s), 13,030,000 acre-ft/yr (16,070 cu hm/yr); 15-year base period (1952-67), 16,720 cfs (4,735 cu m/s).

EXTREMES.--Current year: Maximum discharge, 28,500 cfs (807 cu m/s) Apr. 18 (gage height, 6.28 ft or 1.914 m); maximum gage height, 15.55 ft (4.740 m) Dec. 20 (backwater from ice); minimum, 8,580 cfs (243 cu m/s) July 7, 8, 11, 12, 13 (gage height, 2.22 ft or 0.677 m).

Period of record: Maximum discharge, 84,500 cfs (2,390 cu m/s) Apr. 29, 1952 (gage height, 14.67 ft or 4.471 m, site and datum then in use); minimum observed, 5,100 cfs (144 cu m/s) Aug. 5, 1924 (gage height, 1.35 ft or 0.411 m, site and datum then in use).

Flood of Mar. 3, 1910, reached a stage of 17.1 ft (5.21 m) at site and datum 0.3 mi (0.5 km) upstream, from reading on old U.S. Weather Bureau gage (discharge, 120,000 cfs or 3,398 cu m/s). 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 (1,477,200 sq hm) of which about 742,000 acres (300,300 sq hm) are by withdrawals from ground water. In addition, approximately 7,300 acres (2,954 sq hm) are irrigated below station by diversion from Weiser River (1966 determination). Records of water temperatures and chemical analyses for the water year 1973 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)

2.2	8,500	6.0	26,900
3.0	11,700	8.0	39,000
4.0	16,400		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16,400	20,200	20,300	23,000	18,300	24,200	14,900	15,700	13,200	8,830	9,850	11,400
2	16,400	21,100	17,600	22,100	19,600	25,700	14,800	15,300	12,900	9,050	9,740	11,800
3	16,700	20,600	18,100	22,500	19,900	24,200	15,400	16,100	12,800	9,060	9,790	12,300
4	16,000	22,000	18,800	21,100	18,700	23,900	17,400	14,200	12,400	8,960	9,920	13,500
5	16,400	22,400	20,900	21,000	19,300	22,400	17,100	14,300	11,800	8,990	10,300	13,100
6	16,900	22,700	21,100	21,000	20,000	22,500	17,700	14,300	11,300	9,000	10,400	13,000
7	17,500	22,700	20,300	19,000	20,700	22,900	18,100	14,300	11,200	8,810	10,200	13,300
8	19,100	22,200	19,700	17,900	20,700	22,300	20,500	14,600	11,000	8,760	9,960	12,900
9	21,200	20,800	17,600	19,200	20,600	21,600	21,900	14,800	11,400	8,880	9,890	13,000
10	23,000	22,200	18,100	21,600	21,400	21,100	19,900	13,600	11,300	8,910	9,830	12,600
11	23,100	23,400	19,000	19,500	21,500	22,600	19,500	11,900	11,500	8,690	9,840	12,800
12	23,800	20,600	19,000	19,000	22,200	20,900	19,500	11,800	10,600	8,620	9,790	13,000
13	23,800	19,000	18,500	20,200	22,600	19,900	20,400	11,500	10,000	8,630	9,970	12,300
14	23,400	20,300	18,000	22,700	22,800	19,500	21,200	12,200	9,760	9,020	9,680	12,800
15	22,300	21,200	17,800	23,800	22,100	19,400	24,000	12,500	10,500	9,460	9,270	12,900
16	23,200	21,800	17,700	26,000	21,000	19,500	23,700	12,900	11,400	9,520	9,490	12,800
17	23,900	22,500	18,000	35,500	20,000	19,400	25,900	13,600	11,700	9,230	9,470	13,100
18	23,000	21,500	18,500	27,200	20,900	20,400	27,300	14,000	12,700	9,080	9,490	13,800
19	22,900	21,900	19,000	26,400	20,200	19,900	25,000	14,800	12,300	9,130	9,570	13,400
20	23,100	22,100	20,000	25,200	19,300	20,400	24,600	15,000	11,600	9,420	10,000	13,700
21	24,000	21,500	22,000	23,600	19,000	22,100	21,000	15,300	11,100	9,960	10,100	14,200
22	23,300	21,500	25,000	23,300	19,000	20,600	21,400	14,500	10,200	10,500	10,300	14,700
23	23,000	21,500	28,700	22,200	19,000	19,900	20,600	14,000	10,300	11,200	10,200	14,700
24	22,400	21,000	29,200	22,400	19,400	19,900	19,400	13,800	9,930	11,000	10,200	14,400
25	22,200	21,200	27,900	22,500	19,500	19,900	18,400	15,300	10,200	10,700	10,500	16,600
26	21,800	20,900	26,300	21,400	20,000	19,900	18,400	16,900	9,920	10,900	10,900	16,700
27	20,200	21,400	25,000	19,500	21,000	19,100	16,400	15,700	9,620	10,200	11,500	15,800
28	16,800	21,800	25,200	19,500	22,500	18,800	14,900	14,500	9,690	10,100	11,400	16,200
29	14,800	20,200	24,600	19,400	------	16,900	15,300	14,300	9,070	9,900	11,400	15,800
30	15,900	20,700	23,100	19,300	------	15,900	14,900	13,400	8,710	10,100	11,600	14,800
31	18,700	------	23,800	19,000	------	15,800	------	12,900	------	9,940	11,300	------
TOTAL	635,200	642,900	658,800	686,000	571,200	641,500	589,500	438,000	330,100	294,550	315,850	411,400
MEAN	20,490	21,430	21,250	22,130	20,400	20,690	19,650	14,130	11,000	9,502	10,190	13,710
MAX	24,000	23,400	29,200	35,500	22,800	25,700	27,300	16,900	13,200	11,200	11,600	16,700
MIN	14,800	19,000	17,600	17,900	18,300	15,800	14,800	11,500	8,710	8,620	9,270	11,400
AC-FT	1,260M	1,275M	1,307M	1,361M	1,133M	1,272M	1,169M	868,800	654,800	584,200	626,500	816,000

CAL YR 1972 TOTAL 9,755,930 MEAN 26,660 MAX 62,500 MIN 9,490 AC-FT 19,350,000
WTR YR 1973 TOTAL 6,215,000 MEAN 17,030 MAX 35,500 MIN 8,620 AC-FT 12,330,000

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 mi (1.8 km) upstream from Wildhorse River, 3.5 mi (5.6 km) downstream from Brownlee Creek, 10.5 mi (16.9 km) east of Halfway, Oreg., and at mile 285.0 (458.6 km).

DRAINAGE AREA.--72,590 sq mi (188,000 sq km), 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 (1,780 cu hm) Sept. 3, 19, 20 (elevation, 2,078.12 ft or 633.411 m); minimum, 911,100 acre-ft (1,120 cu hm) Mar. 16 (elevation, 2,033.19 ft or 619.716 m).
Period of record: Maximum contents, 1,453,500 acre-ft (1,792 cu hm) Aug. 6, 1962 (elevation, 2,078.91 ft or 633.652 m); minimum since full capacity was attained June 23, 1959, 441,200 acre-ft (544 cu hm) Apr. 25, 1971 (elevation, 1,975.20 ft or 602.041 m).

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 (633 m). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,423	1,404	1,325	1,225	1,065	919.9	1,032	1,280	1,433	1,371	1,428	1,434
2	1,422	1,402	1,321	1,218	1,053	924.5	1,027	1,281	1,435	1,373	1,430	1,441
3	1,421	1,402	1,320	1,210	1,043	928.8	1,026	1,284	1,438	1,373	1,429	1,438
4	1,417	1,407	1,323	1,200	1,029	932.7	1,027	1,283	1,435	1,377	1,430	1,439
5	1,417	1,412	1,320	1,186	1,020	932.7	1,031	1,288	1,432	1,377	1,436	1,438
6	1,411	1,417	1,316	1,172	1,012	931.6	1,033	1,296	1,426	1,376	1,437	1,434
7	1,403	1,411	1,307	1,155	1,008	930.4	1,034	1,298	1,424	1,377	1,435	1,431
8	1,397	1,401	1,295	1,133	1,002	926.7	1,039	1,295	1,420	1,375	1,430	1,431
9	1,393	1,395	1,278	1,113	1,001	922.4	1,050	1,294	1,427	1,369	1,427	1,430
10	1,390	1,384	1,262	1,108	996.6	916.9	1,061	1,292	1,436	1,362	1,424	1,430
11	1,388	1,380	1,248	1,099	997.7	917.7	1,073	1,291	1,436	1,361	1,424	1,429
12	1,392	1,376	1,234	1,087	997.5	918.7	1,084	1,296	1,435	1,362	1,427	1,428
13	1,401	1,362	1,217	1,082	998.7	919.1	1,097	1,305	1,433	1,365	1,424	1,426
14	1,400	1,357	1,199	1,089	998.2	914.8	1,111	1,306	1,434	1,370	1,421	1,426
15	1,402	1,354	1,183	1,097	993.1	911.9	1,135	1,305	1,433	1,376	1,417	1,428
16	1,400	1,355	1,171	1,108	981.0	915.9	1,158	1,305	1,435	1,378	1,413	1,433
17	1,410	1,357	1,162	1,140	968.9	922.1	1,184	1,305	1,437	1,379	1,411	1,436
18	1,418	1,359	1,161	1,153	959.6	932.6	1,209	1,315	1,436	1,381	1,413	1,439
19	1,420	1,359	1,160	1,157	948.7	939.0	1,220	1,329	1,435	1,387	1,417	1,442
20	1,417	1,362	1,156	1,159	940.3	943.2	1,235	1,346	1,434	1,393	1,416	1,440
21	1,418	1,362	1,158	1,157	930.6	957.1	1,242	1,356	1,432	1,400	1,413	1,439
22	1,414	1,358	1,169	1,156	923.5	970.4	1,250	1,367	1,424	1,408	1,409	1,439
23	1,413	1,357	1,193	1,152	921.8	986.9	1,256	1,376	1,421	1,411	1,408	1,439
24	1,411	1,355	1,215	1,145	922.1	1,007	1,258	1,381	1,423	1,419	1,407	1,436
25	1,411	1,352	1,233	1,139	927.2	1,024	1,258	1,388	1,415	1,419	1,410	1,440
26	1,411	1,348	1,241	1,131	930.7	1,025	1,257	1,401	1,407	1,418	1,417	1,440
27	1,413	1,341	1,241	1,122	927.1	1,026	1,263	1,419	1,395	1,420	1,421	1,439
28	1,411	1,338	1,242	1,110	921.5	1,028	1,268	1,430	1,385	1,420	1,424	1,438
29	1,404	1,333	1,239	1,103	------	1,031	1,275	1,437	1,373	1,423	1,428	1,436
30	1,397	1,329	1,236	1,091	------	1,033	1,277	1,436	1,368	1,427	1,430	1,431
31	1,401	------	1,231	1,078	------	1,031	------	1,433	------	1,428	1,433	------
MAX	1,423	1,417	1,325	1,225	1,065	1,033	1,277	1,437	1,438	1,428	1,437	1,442
MIN	1,388	1,329	1,156	1,078	921.5	911.9	1,026	1,280	1,368	1,361	1,407	1,426
(†)	2,075.12	2,069.88	2,062.55	2,049.82	2,034.27	2,045.37	2,066.06	2,077.42	2,072.80	2,077.10	2,077.42	2,077.30
(‡)	-23	+72	-98	-153	-156.5	+109.5	+246	+156	-65	+60	+5	-2

CAL YR 1972..... ‡ -100
WTR YR 1973..... ‡ +7

† 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 mi (2.9 km) south of Oxbow, and at mile 1.9 (3.1 km).

DRAINAGE AREA.--230 sq mi (596 sq km), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 1,850.48 ft (564.026 m) above mean sea level (levels by Idaho Power Co.). Prior to Aug. 24, 1967, nonrecording gage at site 1.7 mi (2.7 km) downstream at different datum.

AVERAGE DISCHARGE.--6 years, 384 cfs (10.9 cu m/s), 278,200 acre-ft/yr (343 cu hm/yr); 5-year base period (1968-72), 407 cfs (11.5 cu m/s).

EXTREMES.--Current year: Maximum discharge, 2,290 cfs (64.9 cu m/s) May 25 (gage height, 6.90 ft or 2.103 m); minimum, 23 cfs (0.65 cu m/s) Aug. 23, 24 (gage height, 2.94 ft or 0.896 m).
Period of record: Maximum discharge, 7,110 cfs (201 cu m/s) Feb. 21, 1968 (gage height, 9.82 ft or 2.993 m); minimum, 23 cfs (0.65 cu m/s) Aug. 23, 24, 1973 (gage height, 2.94 ft or 0.896 m).

REMARKS.--Records good except those for December, which are fair. Diversions above station for irrigation of about 19,000 acres (7,690 sq hm) (1966 determination).

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

2.8	19	4.5	331
3.0	30	5.0	563
3.2	45	6.0	1,330
3.5	82	7.0	2,540
4.0	180		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	62	93	221	162	877	335	426	813	116	28	29
2	55	65	93	213	145	879	313	417	691	114	29	29
3	54	67	93	140	151	713	299	547	580	93	29	29
4	53	152	81	110	153	614	324	724	508	85	28	29
5	53	144	52	171	179	600	399	792	498	82	26	28
6	53	104	70	157	195	576	440	806	547	75	27	26
7	53	96	84	142	195	565	404	764	613	69	27	26
8	53	107	94	105	199	580	374	813	630	69	27	31
9	53	100	75	122	213	576	366	785	648	62	25	31
10	54	101	80	159	218	622	358	685	514	51	26	29
11	56	101	86	155	226	605	408	618	483	44	26	29
12	58	99	94	155	218	546	503	607	449	44	27	28
13	58	92	98	224	217	522	654	672	453	46	26	27
14	57	87	93	288	224	475	654	813	488	44	25	28
15	60	88	97	309	228	439	591	936	478	39	25	31
16	60	88	95	1,080	235	417	552	1,100	399	37	24	32
17	60	93	93	1,140	246	422	547	1,240	378	36	24	31
18	60	92	90	743	231	387	478	1,300	343	32	26	31
19	60	95	110	596	217	362	430	1,180	302	37	26	37
20	60	88	190	454	205	368	370	1,130	272	46	26	62
21	60	84	380	393	203	427	343	858	262	51	25	72
22	60	82	540	282	203	398	343	711	250	44	24	56
23	60	87	536	278	212	382	366	691	262	39	23	53
24	60	84	1,120	250	229	401	370	1,080	241	39	25	56
25	60	84	585	251	254	443	412	1,790	238	36	27	64
26	61	132	421	227	290	469	453	1,030	219	33	29	59
27	62	132	378	178	433	463	514	757	213	32	29	56
28	62	105	426	184	574	418	558	678	205	31	28	56
29	62	103	339	171	------	381	493	666	173	31	29	53
30	60	95	285	187	------	354	449	737	140	30	28	52
31	60	------	253	178	------	374	------	873	------	28	29	------
TOTAL	1,793	2,909	7,124	9,263	6,455	15,655	13,100	26,226	12,290	1,615	823	1,200
MEAN	57.8	97.0	230	299	231	505	437	846	410	52.1	26.5	40.0
MAX	62	152	1,120	1,140	574	879	654	1,790	813	116	29	72
MIN	53	62	52	105	145	354	299	417	140	28	23	26
AC-FT	3,560	5,770	14,130	18,370	12,800	31,050	25,980	52,020	24,380	3,200	1,630	2,380

CAL YR 1972 TOTAL 158,968 MEAN 434 MAX 2,330 MIN 35 AC-FT 315,300
WTR YR 1973 TOTAL 98,453 MEAN 270 MAX 1,790 MIN 23 AC-FT 195,300

PEAK DISCHARGE (BASE, 1,450 CFS, REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-24	0400	6.14	1,450	5-25	0600	6.90	2,290
1-16	2000	6.46	1,800				

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 mi (0.3 km) upstream from Hells Canyon Creek, 0.4 mi (0.6 km) downstream from Deep Creek, 0.6 mi (1.0 km) downstream from Hells Canyon Dam, 15.5 mi (24.9 km) northeast of Homestead, Oreg., and at mile 247.0 (397.4 km).

DRAINAGE AREA.--73,300 sq mi (190,000 sq km), approximately.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,400.00 ft (426.720 m) above mean sea level (levels by Idaho Power Co.).

AVERAGE DISCHARGE.--8 years, 21,310 cfs (603.5 cu m/s), 15,440,000 acre-ft/yr (19,000 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 31,600 cfs (895 cu m/s) Jan. 7 (gage height, 72.14 ft or 21.988 m); minimum, 4,890 cfs (138 cu m/s) Mar. 25 (gage height, 62.34 ft or 19.001 m); minimum daily discharge, 6,380 cfs (181 cu m/s) Mar. 24.
Period of record: Maximum discharge, 75,800 cfs (2,150 cu m/s) Apr. 15, 1971 (gage height, 81.55 ft or 24.856 m); minimum, 1,580 cfs (44.7 cu m/s) Mar. 19, 1967 (gage height, 59.9 ft or 18.26 m); minimum daily, 4,950 cfs (140 cu m/s) May 26, 1968.

REMARKS.--Records good. Flow regulated by many reservoirs above station with a total usable capacity of more than 10,000,000 acre-feet (12,300 cu hm), the most effective of which is Brownlee Reservoir 38 mi (6 km) upstream (see sta 13289700). Diurnal fluctuations caused by Hells Canyon powerplant. Diversions above station for irrigation of about 3,820,000 acres (1,550,000 sq hm) of which 742,000 acres (300,000 sq hm) are by withdrawals from ground water (1966 determination). Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

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

63.0	5,940	70.0	23,600
64.0	7,710	73.0	35,000
66.0	11,900	76.0	48,100
68.0	17,000	81.0	72,900

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17,500	19,700	23,100	27,100	27,700	27,800	16,500	15,600	15,500	9,010	10,300	10,300
2	18,900	21,300	20,000	27,900	27,600	27,600	18,400	16,200	14,400	9,010	9,930	9,510
3	20,000	21,600	19,700	27,900	27,700	26,200	18,500	16,300	11,900	9,130	9,950	9,510
4	18,800	19,900	25,300	28,600	27,500	24,900	18,200	16,100	17,200	9,150	9,660	12,700
5	18,000	21,300	24,800	28,300	27,500	27,300	18,200	15,600	15,900	9,200	9,380	14,600
6	19,500	23,700	24,800	29,000	26,300	25,500	18,700	13,500	16,200	9,280	9,550	14,900
7	23,000	26,000	26,100	29,200	26,100	27,200	18,900	15,200	15,700	9,090	9,450	14,700
8	23,100	27,500	25,300	31,200	25,700	26,800	17,500	16,900	14,900	9,050	11,200	11,700
9	23,700	27,500	26,200	28,300	25,300	27,700	18,300	16,200	11,300	11,000	12,600	12,900
10	25,600	28,000	25,200	26,900	24,400	26,500	17,000	15,700	10,300	11,700	11,900	13,200
11	27,000	26,900	25,000	26,500	24,900	25,500	15,100	14,800	10,900	10,900	10,900	13,700
12	25,300	26,000	25,100	25,100	24,900	24,400	14,900	11,800	11,700	8,190	9,470	12,700
13	23,300	27,800	24,900	25,600	26,700	23,700	14,900	10,500	13,300	8,070	12,000	13,800
14	23,600	23,500	24,600	22,700	26,500	24,100	15,300	13,700	11,700	8,190	11,700	13,100
15	22,900	23,400	25,800	26,700	27,700	22,100	15,100	14,800	11,600	8,110	11,000	10,900
16	24,200	24,100	25,000	26,500	28,800	19,300	15,200	16,600	12,000	8,050	11,600	9,890
17	20,500	24,100	24,000	28,000	28,900	16,500	15,200	16,600	12,300	8,070	11,300	13,100
18	22,000	22,900	24,200	28,400	28,800	16,000	17,500	14,300	14,900	8,050	9,400	11,600
19	23,500	20,800	25,300	28,300	28,800	23,000	20,900	11,000	14,800	8,070	9,470	14,200
20	25,900	23,600	26,600	28,200	26,000	24,500	21,300	10,300	13,000	7,980	9,400	13,900
21	24,700	23,700	26,300	27,900	26,300	22,400	21,500	13,600	13,800	7,900	9,640	16,400
22	25,700	24,300	26,900	28,400	25,400	15,100	21,000	11,300	15,900	7,840	11,900	14,200
23	25,800	22,700	25,900	27,700	23,200	9,960	20,500	12,100	12,400	7,880	11,600	14,600
24	25,200	24,400	25,500	28,000	17,900	6,380	20,300	14,600	10,200	7,900	10,200	15,300
25	23,300	23,100	23,200	28,300	17,800	12,000	20,300	15,000	15,400	8,090	10,000	16,200
26	23,900	23,000	26,300	28,400	23,600	21,500	18,800	11,800	17,000	8,950	9,990	17,200
27	22,000	25,300	27,600	27,600	24,600	19,700	17,300	10,300	16,600	11,100	9,930	17,600
28	19,500	24,200	28,600	27,800	25,900	20,200	14,000	10,100	16,900	10,600	9,570	18,400
29	19,100	24,600	26,700	28,000	------	17,900	14,000	15,500	15,500	8,690	9,720	17,800
30	18,700	24,600	28,100	27,500	------	17,400	16,000	15,700	10,500	9,260	9,550	16,200
31	18,900	------	27,700	28,000	------	18,500	------	17,400	------	10,600	9,530	------
TOTAL	693,100	719,500	783,800	858,000	722,500	667,640	529,300	439,100	413,700	278,110	321,790	414,810
MEAN	22,360	23,980	25,280	27,680	25,800	21,540	17,640	14,160	13,790	8,971	10,380	13,830
MAX	27,000	28,000	28,600	31,200	28,900	27,800	21,500	17,400	17,200	11,700	12,600	18,400
MIN	17,500	19,700	19,700	22,700	17,800	6,380	14,000	10,100	10,200	7,840	9,380	9,510
AC-FT	1,375M	1,427M	1,555M	1,702M	1,433M	1,324M	1,050M	871,000	820,600	551,600	638,300	822,800

CAL YR 1972 TOTAL 10,885,400 MEAN 29,740 MAX 73,100 MIN 10,200 AC-FT 21,590,000
WTR YR 1973 TOTAL 6,841,350 MEAN 18,740 MAX 31,200 MIN 6,380 AC-FT 13,570,000

M Expressed in thousands.

13297330 Thompson Creek near Clayton, Idaho

LOCATION.--Lat 44°16'01", long 114°30'48", in NE¼NE¼SE¼ sec.24, T.11 N., R.16 E., Custer County, on right bank 2.2 mi (3.5 km) below Pat Hughes Creek, 1.2 mi (1.9 km) upstream from mouth, 5.7 mi (9.2 km) west of Clayton, and at mile 354.8 (570.9 km).

DRAINAGE AREA.--29.1 sq mi (75.4 sq km).

PERIOD OF RECORD.--November 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is about 5,700 ft (1,737 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 84 cfs (2.38 cu m/s) May 18 (gage height, 5.51 ft or 1.679 m); minimum daily, 3.0 cfs (0.085 cu m/s) Dec. 5.

REMARKS.--Records good except those for October to January, which are poor. Records of chemical analysis and suspended-sediment loads for the water year 1973 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. 22, 28, 29, Feb. 2, 3, 8, 9, 15)

4.5	2.3	4.9	18
4.6	4.6	5.1	35
4.7	7.8	5.3	56
4.8	12	5.5	82

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	5.0	5.8	4.7	4.2	3.9	4.8	14	38	16	5.2	4.9
2	5.7	5.0	5.6	4.7	4.2	3.9	4.6	13	37	15	5.3	5.5
3	5.7	5.0	5.6	4.0	4.2	3.7	4.6	17	34	14	7.7	4.9
4	5.7	5.0	5.2	3.3	4.2	4.0	5.1	20	31	13	7.9	4.7
5	5.6	5.2	3.0	3.7	4.1	4.0	6.3	19	29	12	6.7	4.5
6	5.5	5.3	4.2	3.8	4.1	3.7	6.9	21	29	12	5.9	4.2
7	5.4	5.5	4.8	3.8	4.0	3.7	6.4	26	32	11	5.6	4.8
8	5.4	5.2	4.3	3.8	3.9	4.2	6.4	28	33	11	5.3	5.8
9	5.7	5.1	4.0	3.8	3.9	4.1	6.8	25	34	10	5.0	5.2
10	5.8	5.1	3.9	3.9	4.1	4.1	6.6	24	34	9.9	5.0	4.6
11	6.0	5.1	4.3	4.0	4.1	4.1	6.8	25	31	9.8	4.9	4.5
12	6.2	5.3	4.7	4.2	4.1	3.7	7.8	30	29	9.4	4.7	4.4
13	6.4	5.2	4.7	4.4	3.9	4.2	9.2	38	27	9.1	4.4	4.6
14	6.5	5.2	4.6	4.4	3.9	3.9	10	45	29	8.9	4.3	4.5
15	6.5	5.2	4.6	4.2	4.0	4.1	11	53	28	8.6	4.2	4.8
16	6.8	5.2	4.7	4.1	3.8	4.4	9.2	61	26	7.8	4.2	5.0
17	6.8	5.2	4.8	4.1	3.9	4.6	8.7	67	27	7.7	4.0	4.9
18	6.6	5.2	5.0	4.2	3.9	4.1	8.7	74	26	7.5	3.9	4.9
19	6.4	5.2	5.0	4.4	3.7	4.1	8.7	73	25	7.7	4.0	4.9
20	6.2	5.1	5.0	3.9	3.4	4.4	7.5	68	24	8.5	4.0	5.7
21	6.0	5.0	4.9	4.3	3.4	4.4	7.5	60	23	9.3	4.0	6.1
22	6.0	5.0	4.9	3.8	3.2	4.4	7.4	49	22	9.6	5.1	5.6
23	6.0	4.9	4.9	4.6	3.7	4.4	8.1	47	21	8.5	4.8	5.6
24	5.6	4.8	4.8	4.5	3.9	4.4	9.2	47	21	7.4	4.3	5.6
25	5.5	5.0	4.8	4.6	3.9	4.9	11	48	20	7.0	4.1	5.8
26	5.5	5.4	4.9	4.4	3.7	5.3	12	45	19	6.6	4.2	5.9
27	5.4	5.2	5.0	4.4	3.7	5.3	15	40	18	6.3	4.0	5.6
28	5.3	4.8	5.0	4.4	3.8	4.8	18	36	18	6.0	4.3	5.6
29	5.2	4.6	4.9	4.4	------	4.6	17	34	18	5.9	4.1	5.3
30	5.2	5.5	4.8	4.4	------	4.7	15	35	16	5.9	4.0	6.1
31	5.1	------	4.7	4.4	------	4.9	------	37	------	5.6	4.2	------
TOTAL	181.4	153.5	147.4	129.6	108.9	133.0	266.3	1,219	799	287.0	149.3	154.5
MEAN	5.85	5.12	4.75	4.18	3.89	4.29	8.88	39.3	26.6	9.26	4.82	5.15
MAX	6.8	5.5	5.8	4.7	4.2	5.3	18	74	38	16	7.9	6.1
MIN	5.1	4.6	3.0	3.3	3.2	3.7	4.6	13	16	5.6	3.9	4.2
CFSM	.20	.18	.16	.14	.13	.15	.31	1.35	.91	.32	.17	.18
IN.	.23	.20	.19	.17	.14	.17	.34	1.56	1.02	.37	.19	.20
AC-FT	360	304	292	257	216	264	528	2,420	1,580	569	296	306

WTR YR 1973 TOTAL 3,728.9 MEAN 10.2 MAX 74 MIN 3.0 CFSM .35 IN 4.77 AC-FT 7,400

NOTE.--No gage-height record Oct. 1 to Nov. 11, Dec. 4 to Jan. 16.

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 mi (0.3 km) upstream from mouth and 4.8 mi (7.7 km) northwest of Clayton.

DRAINAGE AREA.--6.29 sq mi (16.29 sq km).

PERIOD OF RECORD.--April to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,837 ft (1,779.1 m).

EXTREMES.--Current year: Maximum discharge, 9.4 cfs (0.27 cu m/s) May 18 (gage height, 1.89 ft or 0.576 m); minimum,, 0.04 cfs (1.13 cu dm/s) Aug. 20 (gage height, 1.25 ft or 0.381 m).
Period of record: Maximum discharge, 42 cfs (1.19 cu m/s) May 31, 1972 (gage height, 2.45 ft or 0.747 m); minimum, 0.04 cfs (1.13 cu dm/s) Aug. 20, 1973 (gage height, 1.25 ft or 0.381 m).

REMARKS.--Records fair. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.84	.69	.62	.48	.56	.41	.43	1.3	3.3	1.1	.45	.16
2	.84	.69	.62	.48	.56	.45	.37	1.1	3.2	1.1	.45	.16
3	.84	.69	.62	.40	.53	.45	.38	.96	3.1	1.1	.50	.18
4	.84	.70	.56	.30	.50	.45	.43	.97	2.8	.99	.56	.16
5	.81	.76	.25	.35	.50	.45	.65	1.1	2.6	.96	.62	.14
6	.79	.76	.35	.39	.50	.45	.75	1.3	2.3	.92	.56	.14
7	.76	.84	.40	.39	.50	.45	.68	1.5	2.1	.89	.53	.18
8	.76	.80	.34	.38	.51	.45	.65	1.9	1.8	.84	.44	.23
9	.84	.76	.29	.37	.48	.45	.65	2.3	1.7	.84	.40	.23
10	.84	.76	.30	.39	.44	.45	.64	2.2	1.6	.76	.39	.20
11	.90	.76	.33	.41	.43	.50	.62	2.1	1.6	.69	.37	.18
12	.93	.76	.42	.44	.45	.50	.67	2.0	1.6	.69	.31	.16
13	1.0	.76	.39	.45	.45	.50	.76	2.4	1.6	.69	.26	.18
14	.97	.76	.36	.45	.44	.50	.89	4.3	1.9	.76	.23	.20
15	1.0	.76	.36	.44	.43	.51	.92	5.5	2.0	.76	.18	.18
16	1.1	.76	.39	.44	.35	.49	.93	6.3	1.8	.69	.14	.16
17	1.1	.76	.47	.45	.33	.53	.92	7.0	2.2	.69	.12	.20
18	1.1	.76	.54	.45	.33	.50	.85	7.8	2.0	.62	.09	.26
19	1.0	.76	.54	.44	.33	.50	.79	7.8	1.8	.62	.08	.26
20	.96	.72	.53	.42	.36	.50	.73	7.4	1.7	.62	.09	.35
21	.92	.69	.52	.44	.32	.50	.62	6.7	1.5	.62	.14	.37
22	.92	.69	.52	.47	.30	.50	.58	6.1	1.6	.69	.20	.36
23	.91	.66	.52	.50	.32	.44	.61	5.7	1.4	.76	.23	.33
24	.84	.62	.49	.53	.33	.44	.59	5.6	1.3	.76	.23	.33
25	.84	.62	.48	.56	.35	.49	.68	5.8	1.3	.69	.20	.35
26	.84	.69	.50	.56	.37	.64	.78	5.5	1.2	.62	.18	.33
27	.82	.65	.52	.56	.37	.68	.94	5.0	1.2	.56	.16	.33
28	.76	.64	.52	.56	.37	.57	1.1	4.4	1.1	.50	.16	.33
29	.73	.62	.50	.56	------	.52	1.4	4.0	1.1	.50	.12	.32
30	.71	.62	.49	.55	------	.49	1.5	3.7	1.1	.50	.10	.31
31	.69	------	.48	.56	------	.46	------	3.4	------	.50	.10	------
TOTAL	27.20	21.51	14.22	14.17	11.71	15.22	22.51	123.13	55.5	23.03	8.59	7.27
MEAN	.88	.72	.46	.46	.42	.49	.75	3.97	1.85	.74	.28	.24
MAX	1.1	.84	.62	.56	.56	.68	1.5	7.8	3.3	1.1	.62	.37
MIN	.69	.62	.25	.30	.30	.41	.37	.96	1.1	.50	.08	.14
CFSM	.14	.11	.07	.07	.07	.08	.12	.63	.29	.12	.04	.04
IN.	.16	.13	.08	.08	.07	.09	.13	.73	.33	.14	.05	.04
AC-FT	54	43	28	28	23	30	45	244	110	46	17	14

CAL YR 1972 TOTAL 1,086.08 MEAN 2.97 MAX 32 MIN .25 CFSM .47 IN 6.42 AC-FT 2,150
WTR YR 1973 TOTAL 344.06 MEAN .94 MAX 7.8 MIN .08 CFSM .15 IN 2.03 AC-FT 682

NOTE.--No gage-height record Dec. 4 to Jan. 25.

13297355 Squaw Creek below Bruno Creek, near Clayton, Idaho

LOCATION.--Lat 44°17'26", long 114°28'14", in SW¼SW¼SW¼ sec.9, T.11 N., R.17 E., Custer County, on left bank 3 mi (4.8 km) upstream from mouth, and 4.5 mi (7.2 km) northwest of Clayton.

DRAINAGE AREA.--79.0 sq mi (205 sq km).

PERIOD OF RECORD.--November 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,710 ft or 1,740.40 m (from topographic map).

EXTREMES.--Current year: Maximum discharge, 266 cfs (7.53 cu m/s) May 18 (gage height, 7.09 ft or 2.134 m); minimum daily, 7.0 cfs (1.982 cu m/s) Dec. 5.

REMARKS.--Records good except those for October to February, August and September, which are poor. Chemical analysis and suspended sediment loads for water year 1973 are published in Part 2 of this report.

Rating tables (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used May 14-16; stage-discharge relation affected by ice Nov. 21-23, 27-30, Dec. 4, Mar. 16, 18-20, 22-26, 28-30)

Oct. 1 to May 15				May 16 to Sept. 30			
5.1	7.9	5.5	31.9	5.6	5.6	6.2	40.6
5.2	11.1	5.9	71.5	5.7	8.6	6.5	84.0
5.3	15.8	6.3	117	5.8	12.3	6.8	157
				5.9	17.2	7.1	270
				6.0	23.4		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	10	13	12	11	10	12	33	72	25	10	11
2	11	9.8	13	12	11	10	12	32	67	23	9.7	10
3	11	9.8	13	10	11	10	13	37	59	22	13	9.5
4	11	9.8	11	8.0	11	11	17	39	54	21	14	9.2
5	11	10	7.0	9.4	11	11	22	40	52	20	12	8.8
6	10	10	10	9.6	11	10	19	42	52	20	11	8.4
7	10	11	12	9.8	10	10	17	50	54	18	10	9.8
8	10	11	11	9.8	8.8	11	18	54	56	18	10	12
9	10	10	10	9.8	9.6	11	18	49	55	17	9.7	11
10	10	12	9.6	10	10	11	19	48	53	16	10	10
11	10	12	11	10	10	11	21	49	48	16	9.7	9.8
12	11	12	12	11	10	11	23	56	44	16	9.4	9.6
13	12	12	12	11	10	12	25	69	43	16	9.0	9.3
14	12	12	12	11	10	11	27	79	51	15	8.6	9.6
15	12	13	12	11	11	11	24	87	49	14	8.6	11
16	13	13	12	10	10	11	23	104	43	13	9.0	11
17	13	13	12	10	10	12	23	137	46	13	8.6	11
18	12	13	13	10	10	11	21	180	43	13	8.3	11
19	12	12	13	11	9.8	11	20	170	43	13	8.3	11
20	12	9.9	13	10	9.6	11	19	157	41	14	8.3	13
21	11	9.2	13	11	9.4	11	18	126	38	15	8.6	13
22	11	10	13	10	9.0	11	20	112	37	17	10	12
23	11	11	13	12	9.8	11	24	109	35	15	11	12
24	11	12	12	12	11	12	27	106	34	14	9.7	12
25	11	12	12	12	11	13	28	104	33	13	9.4	11
26	11	13	12	11	10	14	33	88	31	12	9.4	9.4
27	11	12	13	11	10	14	42	77	30	12	9.0	8.8
28	10	12	13	11	10	12	44	72	29	11	9.0	9.2
29	10	12	13	11	------	12	42	70	30	10	9.0	9.0
30	10	12	12	11	------	12	36	70	28	11	8.6	7.8
31	10	------	12	11	------	13	------	72	------	10	9.8	------
TOTAL	341	340.5	369.6	328.4	285.0	352	707	2,518	1,350	483	300.7	310.2
MEAN	11.0	11.4	11.9	10.6	10.2	11.4	23.6	81.2	45.0	15.6	9.70	10.3
MAX	13	13	13	12	11	14	44	180	72	25	14	13
MIN	10	9.2	7.0	8.0	8.8	10	12	32	28	10	8.3	7.8
CFSM	.14	.14	.15	.13	.13	.14	.30	1.03	.57	.20	.12	.13
IN.	.16	.16	.17	.15	.13	.17	.33	1.19	.64	.23	.14	.15
AC-FT	676	675	733	651	565	698	1,400	4,990	2,680	958	596	615

WTR YR 1973 TOTAL 7,685.4 MEAN 21.1 MAX 180 MIN 7.0 CFSM .27 IN 3.62 AC-FT 15,240

PEAK DISCHARGE (BASE, 180 CFS).--May 18 (2130) 266 cfs (7.09 ft).

NOTE.--No gage-height record Oct. 1 to Nov. 8 and Dec. 5 to Mar. 15.

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 (290 m) upstream from mouth and 11 mi (17.7 km) south of Clayton.

DRAINAGE AREA.--18.4 sq mi (47.6 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,200 ft or 1,890 m (from topographic map).

EXTREMES.--Current year: Maximum discharge, 78 cfs (2.21 cu m/s) May 19, 20 (gage height, 4.81 ft or 1.466 m); minimum, 2.5 cfs (70.8 cu dm/s) Apr. 28 (gage height, 3.45 ft or 1.052 m).
Period of record: Maximum discharge, 570 cfs June 1, 1972 (gage height, 5.84 ft or 1.780 m); minimum, 2.5 cfs (70.8 cu dm/s) Apr. 28, 1973 (gage height, 3.45 ft or 1.052 m).

REMARKS.--Records fair. Records for water temperature, suspended-sediment load, and chemical analysis for the water year 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	11	8.2	6.1	4.0	4.6	4.4	6.2	46	36	11	7.6
2	9.0	10	8.0	6.1	4.1	4.6	4.3	6.5	45	33	11	7.6
3	8.7	9.2	8.0	6.1	4.2	4.6	4.4	8.5	37	29	11	7.4
4	8.7	9.7	7.8	6.0	4.3	4.6	4.6	7.2	29	27	11	7.0
5	10	9.2	5.0	5.9	4.3	4.5	4.7	7.2	27	26	11	6.7
6	9.2	8.5	6.6	5.8	4.2	4.5	4.6	7.9	30	25	10	6.7
7	9.2	8.8	7.7	5.6	4.2	4.5	4.4	9.7	38	26	10	7.2
8	9.0	8.6	7.7	5.6	3.9	4.6	4.5	10	50	25	9.4	7.6
9	8.7	8.4	7.4	5.5	4.0	4.5	4.5	9.2	52	24	9.0	7.4
10	9.1	8.6	7.2	5.4	4.2	4.5	4.5	9.4	54	23	8.8	7.2
11	9.8	8.6	7.2	5.4	4.1	4.6	4.6	10	48	22	8.7	7.2
12	9.6	8.5	7.0	5.5	4.1	4.5	5.0	13	41	23	8.5	6.9
13	9.4	8.2	6.9	5.6	4.2	4.7	5.1	17	38	24	8.1	6.6
14	9.4	8.7	6.7	5.7	4.2	4.6	5.1	23	46	23	7.8	6.6
15	11	8.4	6.7	5.6	4.3	4.6	5.1	30	48	22	7.6	6.8
16	11	8.1	6.6	5.6	4.3	4.5	5.1	39	40	20	7.3	7.0
17	11	8.3	6.6	5.7	4.3	4.5	5.1	50	34	20	7.0	6.6
18	10	8.3	6.7	5.7	4.3	4.5	5.0	60	30	19	6.9	6.5
19	10	7.6	6.7	5.6	4.1	4.5	4.8	70	27	18	6.7	6.4
20	12	7.3	6.6	5.5	3.9	4.6	5.0	70	25	19	6.7	7.3
21	11	5.2	6.8	5.5	4.2	4.5	5.0	56	25	18	6.8	7.1
22	10	7.0	7.3	5.2	4.2	4.5	5.2	43	26	18	7.5	7.0
23	10	7.4	7.9	5.2	4.4	4.6	5.6	40	29	17	7.6	7.1
24	9.9	8.0	7.8	5.0	4.5	4.6	5.8	41	32	16	7.1	7.1
25	9.8	8.1	7.5	4.9	4.7	4.7	6.1	42	33	15	7.1	7.2
26	9.8	8.7	7.3	4.8	4.7	4.6	6.6	36	34	13	6.9	7.0
27	8.3	8.2	7.2	4.7	4.6	4.5	8.0	31	40	13	6.8	7.0
28	8.2	8.4	6.9	4.7	4.6	4.5	7.8	30	43	12	7.1	6.7
29	7.0	8.2	6.5	4.3	------	4.5	6.9	27	43	12	6.7	6.5
30	6.2	8.2	6.2	4.2	------	4.5	6.4	30	41	11	6.5	6.5
31	8.1	------	6.3	4.2	------	4.4	------	35	------	11	6.7	------
TOTAL	292.1	251.4	219.0	166.7	119.1	141.0	158.2	874.8	1,131	640	254.3	209.5
MEAN	9.42	8.38	7.06	5.38	4.25	4.55	5.27	28.2	37.7	20.6	8.20	6.98
MAX	12	11	8.2	6.1	4.7	4.7	8.0	70	54	36	11	7.6
MIN	6.2	5.2	5.0	4.2	3.9	4.4	4.3	6.2	25	11	6.5	6.4
CFSM	.51	.46	.38	.29	.23	.25	.29	1.53	2.05	1.12	.45	.38
IN.	.59	.51	.44	.34	.24	.29	.32	1.77	2.29	1.29	.51	.42
AC-FT	579	499	434	331	236	280	314	1,740	2,240	1,270	504	416

CAL YR 1972 TOTAL 9,862.4 MEAN 26.9 MAX 322 MIN 5.0 CFSM 1.46 IN 19.94 AC-FT 19,560
WTR YR 1973 TOTAL 4,457.1 MEAN 12.2 MAX 70 MIN 3.9 CFSM .66 IN 9.01 AC-FT 8,840

PEAK DISCHARGE (BASE, 100 CFS).--No peaks above base.

13298000 East Fork Salmon River near Clayton, Idaho

LOCATION.--Lat 44°13'29", long 114°17'06", in NW¼NE¼SW¼ sec.1, T.10 N., R.18 E., Custer County, on right bank at county road crossing, 6 mi (9.7 km) southeast of Clayton, and at mile 3.9 (6.3 km).

DRAINAGE AREA.--532 sq mi or 1,379 sq km (revised).

PERIOD OF RECORD.--September 1928 to September 1939 (gage heights and discharge measurements only), May to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 5,510 ft or 1,680 m (from topographic map). September 1928 to September 1939, nonrecording gage at present site and at datum approximately 5 ft (1.5 m) higher.

AVERAGE DISCHARGE.--11 years (1928-39), 198 cfs (5.607 cu m/s), 143,500 acre-ft/yr (177 cu hm/yr).

EXTREMES.--Maximum discharge during period May to September 1973, 1,370 cfs (38.8 cu m/s) June 14 (gage height, 8.80 ft or 2.682 m); minimum, 98 cfs (2.78 cu m/s) Aug. 28, 30, 31 (gage height, 6.61 ft or 2.015 m).
Period of record: Maximum discharge observed, 3,580 cfs (101 cu m/s) June 6, 1938 (gage height, 5.00 ft or 1.52 m, datum then in use), from rating curve extended above 1,400 cfs; minimum discharge observed, 29 cfs (0.821 cu m/s) Dec. 3, 1928; minimum gage height observed, 0.38 ft or 0.116 m (datum then in use) Nov. 23, 1931.

REMARKS.--Records good. No regulation. Small diversions for irrigation upstream from station. Records of chemical analysis for the water year 1973 are published in Part 2 of this report.

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

6.6	96	8.0	676
6.8	138	8.5	1,090
7.0	193	9.0	1,540
7.5	385		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									696	489	153	121
2									680	400	148	139
3									558	338	152	132
4									474	330	144	121
5									436	332	133	112
6									487	323	139	110
7									653	314	145	124
8									819	297	143	155
9									850	280	147	152
10									1,010	264	145	134
11									734	265	135	114
12									646	272	137	109
13									650	273	134	107
14									1,030	263	129	102
15									1,020	253	121	103
16									681	241	114	107
17									560	229	106	105
18									487	217	105	108
19									427	213	105	106
20									365	219	109	120
21									376	277	113	141
22									463	287	130	137
23								629	528	268	144	138
24								649	459	249	138	140
25								662	451	229	130	139
26								571	509	218	123	136
27								476	616	204	121	132
28								421	594	188	122	120
29					------			422	601	176	107	115
30					------			479	563	174	101	107
31		------			------		------	593	------	164	100	------
TOTAL									18,423	8,246	3,973	3,686
MEAN									614	266	128	123
MAX									1,030	489	153	155
MIN									365	164	100	102
CFSM									1.24	.54	.26	.25
IN.									1.38	.62	.30	.28
AC-FT									36,540	16,360	7,880	7,310

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 (300 m) downstream from island, 0.4 mi (0.6 km) upstream from Lemhi River, 0.5 mi (0.8 km) downstream from highway bridge at Salmon, and at mile 258.9 (416.6 km).

DRAINAGE AREA.--3,760 sq mi (9,740 sq km), approximately. Mean altitude, 7,380 ft (2,250 m).

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 (1,192.115 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 21, 1929, nonrecording gage at site 700 ft (210 m) upstream at different datum.

AVERAGE DISCHARGE.--58 years, 1,957 cfs (55.42 cu m/s), 1,418,000 acre-ft/yr (1,750 cu hm/yr); 15-year base period (1952-67), 2,061 cfs (58.37 cu m/s).

EXTREMES.--Current year: Maximum discharge, 5,420 cfs (153 cu m/s) May 20 (gage height, 4.63 ft or 1.411 m); maximum gage height, 9.60 ft (2.926 m) Jan. 12 (ice jam); minimum discharge, 661 cfs (18.7 cu m/s) Aug. 18.
Period of record: Maximum discharge, 16,500 cfs (467 cu m/s) May 25, 1956 (gage height, 8.25 ft or 2.515 m); maximum gage height, 9.62 ft (2.932 m) Jan. 8, 1942 (ice jam); minimum discharge, 242 cfs (6.85 cu m/s) Jan. 8, 1937 (gage height, 1.50 ft or 0.457 m).

REMARKS.--Records good except those for no winter period, which are fair. Diversions above station for irrigation of about 83,800 acres (33,900 sq hm) of which about 900 acres (360 sq hm) are by withdrawals from ground water (1966 determination). Records of chemical analysis for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1043: Drainage area. WSP 1317: 1916.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,490	1,480	1,220	1,030	1,230	1,160	1,070	1,440	3,130	2,340	852	776
2	1,490	1,590	1,440	1,020	1,200	1,170	1,060	1,330	3,310	2,130	817	838
3	1,490	1,590	1,420	1,010	1,160	1,150	1,040	1,230	3,200	1,940	831	888
4	1,460	1,580	1,250	940	1,160	1,120	1,040	1,300	2,910	1,790	925	881
5	1,470	1,620	1,140	910	1,230	1,110	1,060	1,330	2,620	1,690	978	845
6	1,460	1,630	960	890	1,220	1,110	1,110	1,340	2,530	1,600	910	817
7	1,460	1,530	910	870	1,180	1,100	1,110	1,340	2,660	1,530	881	838
8	1,470	1,520	980	850	1,140	1,100	1,080	1,380	2,990	1,470	852	933
9	1,470	1,560	1,000	860	1,050	1,130	1,040	1,500	3,280	1,400	804	978
10	1,440	1,500	930	910	1,030	1,150	1,070	1,440	3,530	1,350	797	994
11	1,510	1,520	900	980	1,090	1,160	1,070	1,360	3,570	1,280	797	970
12	1,520	1,530	1,080	1,100	1,150	1,140	1,070	1,300	3,240	1,300	817	918
13	1,510	1,510	1,220	1,220	1,160	1,110	1,170	1,360	3,030	1,260	797	867
14	1,490	1,490	1,280	1,440	1,130	1,120	1,320	1,630	3,130	1,240	756	845
15	1,610	1,490	1,320	1,650	1,110	1,110	1,370	2,040	4,260	1,250	770	845
16	1,810	1,500	1,360	1,700	1,080	1,100	1,280	2,500	4,020	1,230	750	910
17	1,730	1,490	1,400	1,680	1,120	1,110	1,260	3,220	3,610	1,200	724	970
18	1,720	1,490	1,350	1,600	1,140	1,140	1,250	4,020	3,420	1,180	692	978
19	1,690	1,490	1,420	1,500	1,120	1,090	1,190	4,860	3,100	1,170	673	963
20	1,690	1,470	1,550	1,400	1,090	1,080	1,130	5,280	2,750	1,160	680	1,010
21	1,720	1,380	1,700	1,300	1,040	1,120	1,130	5,160	2,460	1,240	680	1,050
22	1,690	1,300	1,880	1,220	1,060	1,150	1,100	4,640	2,290	1,280	718	1,120
23	1,670	1,250	1,850	1,160	1,080	1,130	1,110	4,200	2,260	1,320	783	1,110
24	1,660	1,280	1,730	1,190	1,110	1,100	1,150	4,020	2,320	1,260	783	1,130
25	1,640	1,390	1,450	1,230	1,130	1,080	1,260	4,240	2,220	1,210	763	1,170
26	1,620	1,440	1,340	1,270	1,140	1,090	1,350	4,280	2,160	1,140	776	1,200
27	1,590	1,490	1,260	1,250	1,140	1,100	1,430	3,840	2,220	1,150	776	1,180
28	1,540	1,420	1,220	1,200	1,150	1,070	1,590	3,400	2,310	1,060	770	1,150
29	1,530	1,260	1,200	1,150	------	1,050	1,710	3,030	2,380	963	763	1,130
30	1,470	1,200	1,160	1,190	------	1,040	1,610	2,840	2,440	925	756	1,100
31	1,450	------	1,050	1,210	------	1,050	------	2,890	------	888	750	------
TOTAL	48,560	43,990	39,970	36,930	31,640	34,440	36,230	83,740	87,350	41,946	24,421	29,404
MEAN	1,566	1,466	1,289	1,191	1,130	1,111	1,208	2,701	2,912	1,353	788	980
MAX	1,810	1,630	1,880	1,700	1,230	1,170	1,710	5,280	4,260	2,340	978	1,200
MIN	1,440	1,200	900	850	1,030	1,040	1,040	1,230	2,160	888	673	776
AC-FT	96,320	87,250	79,280	73,250	62,760	68,310	71,860	166,100	173,300	83,200	48,440	58,320

CAL YR 1972 TOTAL 969,480 MEAN 2,649 MAX 15,700 MIN 900 AC-FT 1,923,000
WTR YR 1973 TOTAL 538,621 MEAN 1,476 MAX 5,280 MIN 673 AC-FT 1,068,000

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 (10.7 m) upstream from bridge on State Highway 28, 1.4 mi (2.3 km) south of Tendoy, 1.8 mi (2.9 km) upstream from Agency Creek, 6.2 mi (10.0 km) north of Lemhi, and at mile 28.8 (46.3 km).

DRAINAGE AREA.--895 sq mi (2,320 sq km), 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 (1,512 m) (from topographic map). Prior to Aug. 25, 1967, at site 1.5 mi (2.4 km) 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.--14 years (1955-63, 1967-73), 270 cfs (7.646 cu m/s), 195,600 acre-ft/yr (241 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 644 cfs (182 cu m/s) June 15 (gage height, 4.67 ft or 1.423 m); maximum gage height, 5.65 ft (1.722 m) Dec. 20 (ice jam); minimum, 91 cfs (2.57 cu m/s) Aug. 20 (gage height, 2.90 ft or 0.884 m).
Period of record: Maximum discharge, 1,960 cfs (55.5 cu m/s) June 27, 1971 (gage height, 6.01 ft or 1.832 m); minimum, 63 cfs (1.78 cu m/s) Aug. 25, 1967 (gage height, 2.56 ft or 0.780 cu m/s).

REMARKS.--Records good except those for winter period, 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 (10,300 sq hm) of which about 200 acres (811 sq hm) are by withdrawals from ground water (1966 determination).

REVISIONS (WATER YEARS).--WSP 1397: 1939.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 4-19, Jan. 22-23)

3.0	92	4.2	400
3.4	143	4.6	595
3.8	249		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	332	259	236	241	263	259	259	396	328	147	126
2	230	332	283	232	245	263	249	243	380	273	135	145
3	221	332	287	230	240	259	266	249	344	237	141	141
4	237	340	230	220	236	256	276	269	320	224	158	133
5	243	360	185	206	238	256	309	269	290	227	151	128
6	243	336	208	200	240	256	344	256	290	215	145	123
7	237	324	220	195	238	252	302	256	348	184	141	138
8	237	328	235	190	230	252	266	273	450	172	136	154
9	234	320	215	200	232	256	273	256	490	169	135	136
10	234	320	200	210	236	263	283	224	510	164	128	133
11	237	324	210	220	240	259	328	206	414	167	115	131
12	240	328	220	230	238	259	368	189	372	187	118	135
13	249	316	200	238	234	259	414	179	372	167	108	141
14	263	328	190	245	234	256	427	177	486	164	105	141
15	287	356	195	252	234	256	356	182	584	158	108	167
16	294	352	210	260	234	252	320	206	477	154	104	201
17	287	344	225	254	237	259	316	263	525	154	105	189
18	283	332	230	250	240	256	298	313	472	162	102	204
19	283	328	235	246	243	252	280	352	414	154	97	209
20	320	320	243	243	243	259	266	360	372	164	95	224
21	313	287	255	243	243	269	263	348	356	187	97	224
22	294	259	270	236	246	273	283	287	368	195	103	234
23	290	252	262	230	249	266	336	263	368	192	110	234
24	294	269	257	237	249	266	360	266	348	189	110	238
25	287	269	252	246	249	269	340	332	324	192	109	241
26	290	294	248	243	249	269	324	316	344	177	112	245
27	283	280	246	246	252	256	352	273	352	167	108	243
28	283	252	245	242	259	252	356	243	352	158	107	237
29	280	243	251	236	------	249	320	224	388	147	100	234
30	287	246	244	232	------	252	287	221	376	145	100	224
31	302	------	240	234	------	252	------	269	------	147	101	------
TOTAL	8,286	9,303	7,250	7,182	6,749	8,016	9,421	8,023	11,882	5,720	3,631	5,453
MEAN	267	310	234	232	241	259	314	259	396	185	117	182
MAX	320	360	287	260	259	273	427	360	584	328	158	245
MIN	221	243	185	190	230	249	249	177	290	145	95	123
AC-FT	16,440	18,450	14,380	14,250	13,390	15,900	18,690	15,910	23,570	11,350	7,200	10,820

CAL YR 1972 TOTAL 105,753 MEAN 289 MAX 1,130 MIN 122 AC-FT 209,800
WTR YR 1973 TOTAL 90,916 MEAN 249 MAX 584 MIN 95 AC-FT 180,300

NOTE.--No gage-height record Dec. 20 to Jan. 18.

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 (30 m) downstream from bridge on private road, at mile 1.0 (1.6 km), and 7 mi (11 km) southwest of Shoup.

DRAINAGE AREA.--529 sq mi (1,370 sq km). Mean altitude, 7,030 ft (2,143 m).

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,264.96 ft (995.160 m) above mean sea level, unadjusted (planetable survey). Prior to Nov. 6, 1959, nonrecording gage 75 ft (23 m) upstream at datum 0.94 ft (0.287 m) higher.

AVERAGE DISCHARGE.--29 years, 253 cfs (7.165 cu m/s) 6.49 in/yr (165 mm/yr), 183,300 acre-ft/yr (226 cu hm/yr); 15-year base period (1952-67), 250 cfs (7.08 cu m/s).

EXTREMES.--Current year: Maximum discharge, 774 cfs (21.9 cu m/s) May 19 (gage height, 2.97 ft or 0.905 m); minimum daily, 58 cfs (1.643 cu m/s) Dec. 5.
Period of record: Maximum discharge, 3,030 cfs (85.8 cu m/s) May 13, 1971 (gage height, 5.86 ft or 1.786 m); minimum observed, 22 cfs (0.62 cu m/s) Nov. 17 1958 (gage height, 0.57 ft or 0.174 m, present datum).

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 1,100 acres (445 sq hm) (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)
(Stage-discharge relation affected by ice Nov. 19 to Dec. 25, Jan. 15, 16, Feb. 15-27)

0.8	54	2.0	327
1.0	80	3.0	763
1.5	178		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	120	92	78	93	88	84	134	486	244	98	93
2	114	132	112	77	90	87	83	132	465	227	94	98
3	116	120	107	77	86	79	82	151	419	212	96	91
4	116	118	84	71	84	86	87	166	372	203	109	86
5	114	120	58	68	92	85	98	185	349	193	100	82
6	114	107	72	66	88	79	109	190	342	183	93	80
7	114	110	88	63	84	81	87	213	366	177	90	88
8	114	120	82	62	78	84	86	233	396	169	88	162
9	116	109	83	64	81	82	97	245	405	164	88	132
10	118	110	84	70	82	86	92	211	392	157	90	112
11	122	112	85	78	87	84	95	186	357	149	90	103
12	122	109	87	85	90	79	109	193	330	147	98	96
13	120	103	89	95	88	88	122	233	318	142	91	91
14	118	112	91	108	85	82	123	296	403	136	85	90
15	134	110	95	130	83	79	113	368	466	134	83	96
16	136	109	100	140	81	83	112	465	391	130	80	94
17	128	107	103	135	84	89	112	573	374	126	79	91
18	124	101	98	127	86	80	103	669	355	122	77	88
19	122	100	106	120	84	81	95	722	324	124	76	86
20	120	82	120	110	82	85	101	732	318	142	76	107
21	118	66	135	102	80	88	97	693	309	167	74	116
22	118	64	150	85	78	91	101	591	306	157	79	105
23	118	76	130	86	80	88	115	560	303	145	94	101
24	120	94	115	98	82	84	133	578	294	132	93	103
25	116	107	102	106	84	90	123	659	281	126	86	109
26	118	120	96	100	86	98	128	587	276	120	86	107
27	114	103	92	94	86	83	155	499	269	114	85	101
28	114	90	90	89	85	84	181	448	257	110	85	98
29	98	76	88	86	------	83	159	428	286	107	80	94
30	91	80	83	92	------	79	140	432	269	105	77	93
31	83	------	78	98	------	89	------	469	------	105	79	------
TOTAL	3,606	3,087	2,995	2,860	2,369	2,624	3,322	12,241	10,478	4,669	2,699	2,993
MEAN	116	103	96.6	92.3	84.6	84.6	111	395	349	151	87.1	99.8
MAX	136	132	150	140	93	98	181	732	486	244	109	162
MIN	83	64	58	62	78	79	82	132	257	105	74	80
CFSM	.22	.19	.18	.17	.16	.16	.21	.75	.66	.29	.16	.19
IN.	.25	.22	.21	.20	.17	.18	.23	.86	.74	.33	.19	.21
AC-FT	7,150	6,120	5,940	5,670	4,700	5,200	6,590	24,280	20,780	9,260	5,350	5,940

CAL YR 1972 TOTAL 109,338 MEAN 299 MAX 2,540 MIN 49 CFSM .57 IN 7.69 AC-FT 216,900
WTR YR 1973 TOTAL 53,943 MEAN 148 MAX 732 MIN 58 CFSM .28 IN 3.79 AC-FT 107,000

PEAK DISCHARGE (BASE, 1,200 CFS).--No peaks above base.

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 mi (1.0 km) upstream from Owl Creek, 2.3 mi (3.7 km) downstream from Panther Creek, 9 mi (14.5 km) southwest of Shoup, and at mile 207.8 (334.4 km).

DRAINAGE AREA.--6,270 sq mi (16,240 sq km), approximately. Mean altitude, 7,140 ft (2,176 m).

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,153.7 ft (961.25 m) above mean sea level, unadjusted. Prior to Sept. 18, 1951, nonrecording gage at different sites approximately 1.3 mi (2.1 km) upstream at different datums.

AVERAGE DISCHARGE.--29 years, 3,024 cfs (85.64 cu m/s), 2,191,000 acre-ft/yr (2,700 cu hm/yr); 15-year base period (1952-67), 2,941 cfs (83.29 cu m/s).

EXTREMES.--Current year: Maximum discharge, 7,330 cfs May 21 (gage height, 6.37 ft or 1.942 m); minimum, 820 cfs (23.22 cu m/s) Aug. 19, 21 (gage height, 1.80 ft or 0.552 m).
Period of record: Maximum discharge, 24,900 cfs (705.2 cu m/s) May 26, 1956 (gage height, 13.00 ft or 3.962 m); minimum, 710 cfs (20.11 cu m/s) Aug. 20, 21, 1966.

REMARKS.--Records good exceot those for winter period, which are fair. Diversions above station for irrigation of about 149,000 acres (60,300 sq hm) of which about 1,200 acres (486 sq hm) are by withdrawals from ground water (1966 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,010	2,090	1,780	1,450	1,800	1,670	1,570	2,080	4,240	3,450	1,210	1,040
2	2,020	2,220	2,120	1,440	1,740	1,690	1,590	1,880	4,630	3,180	1,160	1,110
3	2,010	2,310	2,120	1,420	1,700	1,650	1,570	1,750	4,620	2,870	1,140	1,200
4	2,000	2,290	1,660	1,310	1,680	1,630	1,580	1,730	4,260	2,660	1,250	1,210
5	1,970	2,360	1,480	1,280	1,740	1,620	1,610	1,810	3,770	2,460	1,360	1,160
6	1,960	2,380	1,320	1,250	1,770	1,610	1,710	1,840	3,460	2,340	1,310	1,130
7	1,980	2,270	1,260	1,230	1,700	1,600	1,730	1,850	3,490	2,200	1,240	1,100
8	2,000	2,210	1,350	1,190	1,640	1,600	1,670	1,920	3,800	2,070	1,220	1,360
9	2,000	2,210	1,400	1,200	1,520	1,630	1,620	1,960	4,280	1,950	1,180	1,410
10	2,010	2,190	1,300	1,280	1,500	1,680	1,600	2,010	4,550	1,830	1,110	1,420
11	2,120	2,140	1,280	1,380	1,600	1,710	1,650	1,820	4,800	1,720	1,100	1,400
12	2,180	2,170	1,490	1,550	1,660	1,680	1,700	1,760	4,410	1,680	1,100	1,340
13	2,180	2,140	1,700	1,730	1,690	1,650	1,840	1,810	4,040	1,690	1,100	1,240
14	2,170	2,120	1,760	2,020	1,650	1,620	2,040	2,070	4,210	1,630	1,030	1,170
15	2,260	2,110	1,820	2,320	1,610	1,630	2,170	2,570	5,510	1,620	996	1,190
16	2,570	2,120	1,860	2,500	1,580	1,620	2,020	3,190	5,770	1,650	967	1,220
17	2,620	2,120	1,950	2,460	1,620	1,640	1,950	4,030	5,180	1,540	920	1,310
18	2,480	2,090	1,870	2,300	1,650	1,660	1,890	5,090	4,900	1,480	882	1,350
19	2,410	2,070	2,000	2,150	1,630	1,630	1,820	6,240	4,450	1,420	838	1,360
20	2,380	2,030	2,120	2,020	1,580	1,580	1,720	7,090	4,000	1,490	838	1,440
21	2,430	1,950	2,350	1,900	1,530	1,620	1,650	7,110	3,600	1,710	838	1,550
22	2,440	1,760	2,600	1,750	1,520	1,720	1,640	6,460	3,330	1,820	864	1,630
23	2,380	1,650	2,520	1,680	1,540	1,750	1,670	5,750	3,200	1,870	977	1,650
24	2,370	1,710	2,300	1,720	1,580	1,690	1,740	5,460	3,210	1,800	1,030	1,660
25	2,330	1,870	2,000	1,800	1,620	1,660	1,840	5,860	3,160	1,740	986	1,730
26	2,310	1,990	1,900	1,860	1,630	1,670	1,910	6,010	3,050	1,640	986	1,790
27	2,270	2,060	1,830	1,800	1,640	1,640	2,020	5,500	2,980	1,570	1,010	1,760
28	2,230	2,000	1,760	1,750	1,650	1,620	2,200	4,840	3,090	1,440	1,020	1,740
29	2,140	1,780	1,700	1,670	------	1,570	2,390	4,290	3,310	1,360	1,040	1,710
30	2,110	1,680	1,660	1,710	------	1,540	2,320	3,930	3,610	1,320	1,010	1,660
31	2,030	------	1,470	1,760	------	1,560	------	3,900	------	1,260	996	------
TOTAL	68,370	62,090	55,730	52,880	45,770	50,840	54,430	113,610	120,910	58,460	32,708	42,040
MEAN	2,205	2,070	1,798	1,706	1,635	1,640	1,814	3,665	4,030	1,886	1,055	1,401
MAX	2,620	2,380	2,600	2,500	1,800	1,750	2,390	7,110	5,770	3,450	1,360	1,790
MIN	1,960	1,650	1,260	1,190	1,500	1,540	1,570	1,730	2,980	1,260	838	1,040
AC-FT	135,600	123,200	110,500	104,900	90,780	100,800	108,000	225,300	239,800	116,000	64,880	83,390

CAL YR 1972 TOTAL 1,390,470 MEAN 3,799 MAX 21,900 MIN 1,260 AC-FT 2,758,000
WTR YR 1973 TOTAL 757,838 MEAN 2,076 MAX 7,110 MIN 838 AC-FT 1,503,000

13309220 Middle Fork Salmon River at Middle Fork Lodge, near Yellow Pine, Idaho

LOCATION.--Lat 44°43'11", long 115°00'48", in NW¼SW¼SW¼ sec.16, T.16 N., R.12 E., Valley County, Boise National Forest, on left bank, at Middle Fork Lodge, 325 ft (99.1 m) downstream from Middle Fork Lodge bridge, 0.4 mi (0.6 km) upstream from Thomas Creek, 1.8 mi (2.9 km) downstream from Marble Creek, 29 mi (46.7 km) southeast of Yellow Pine, and at mile 61.0 (98.1 km).

DRAINAGE AREA.--770 sq mi (1,990 sq km).

PERIOD OF RECORD.--April 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,380 ft (1,340 m) from topographic map.

EXTREMES.--Maximum discharge during period, 5,560 cfs (158 cu m/s) May 19 (gage height, 5.60 ft or 1.707 m); minimum daily, 470 cfs (13.3 cu m/s) Apr. 2, 3; minimum gage height recorded, 1.54 ft (0.469 m) Apr. 4.

REMARKS.--Records good.

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

1.5	434	3.0	1,930
1.8	683	4.0	3,200
2.2	1,050	5.6	5,560

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							480	1,120	3,540	1,420	615	588
2							470	1,110	3,420	1,330	664	576
3							470	1,270	3,120	1,250	703	551
4							480	1,480	2,850	1,190	739	532
5							541	1,560	2,720	1,130	713	517
6							576	1,720	2,770	1,080	680	502
7							547	1,930	2,990	1,040	659	521
8							520	2,220	3,160	1,010	644	632
9							561	2,210	3,250	972	627	593
10							562	2,080	3,200	938	627	550
11							583	1,900	2,890	912	619	530
12							661	2,020	2,670	887	618	514
13							803	2,440	2,600	867	597	499
14							874	2,960	3,350	845	579	498
15							845	3,440	3,460	844	568	509
16							811	4,050	2,840	818	558	514
17							821	4,630	2,700	783	547	507
18							729	5,150	2,590	759	535	499
19							658	5,460	2,380	758	531	509
20							647	5,220	2,170	1,010	526	718
21							615	4,800	2,050	1,020	522	799
22							631	4,290	2,000	928	544	673
23							700	4,080	1,980	862	596	609
24							797	4,110	1,920	806	555	666
25							900	4,570	1,840	766	542	753
26							985	4,210	1,770	732	568	715
27							1,220	3,550	1,710	708	551	650
28							1,480	3,260	1,640	686	559	607
29					------		1,400	3,190	1,640	670	540	582
30					------		1,210	3,240	1,530	654	519	563
31		------			------		------	3,480	------	637	534	------
TOTAL							22,577	96,750	76,750	28,312	18,379	17,476
MEAN							753	3,121	2,558	913	593	583
MAX							1,480	5,460	3,540	1,420	739	799
MIN							470	1,110	1,530	637	519	498
CFSM							.73	3.01	2.46	.88	.57	.56
IN.							.81	3.47	2.75	1.01	.66	.63
AC-FT							44,780	191,900	152,200	56,160	36,450	34,660

PEAK DISCHARGE (BASE, 4,000 CFS).--May 19 (0230) 5,560 cfs (5.60 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 mi (1.0 km) upstream from Fitsum Creek, 1.4 mi (2.3 km) downstream from Krassel ranger station, 2 mi (3.2 km) upstream from mouth of East Fork of South Fork Salmon River, 20 mi (32 km) east of McCall, and at mile 39.2 (63.1 km).

DRAINAGE AREA.--330 sq mi (850 sq km), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,750 ft or 1,143 m (from topographic map).

AVERAGE DISCHARGE.--7 years, 567 cfs (16.06 cu m/s), 23.33 in/yr (592.6 mm/yr), 410,800 acre-ft/yr (507 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 2,460 cfs (69.7 cu m/s) May 19 (gage height, 6.08 ft or 1.853 m); minimum daily, 94 cfs (2.66 cu m/s) Nov. 22.
Period of record: Maximum discharge, 5,630 cfs (159 cu m/s) June 10, 1972 (gage height, 8.83 ft or 2.691 m); minimum, 71 cfs Nov. 28, 1969 (gage height, 1.48 ft or 0.451 m), result of freezeup.
Flood of May 28, 1948, reached a discharge of 5,200 cfs (147 cu m/s) by slope-area measurement at site 2.3 mi (3.7 km) 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 Nov. 21-25, 29-30, Dec. 4-9, 11-19, 30-31, Jan. 1, 3-4, Feb. 1-3, 8-9, 13-14, 17, Mar. 3-9)

1.6	87	4.0	920
2.0	163	5.0	1,540
2.5	290	6.0	2,340
3.0	454	6.5	2,840
3.5	664		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143	152	165	225	152	181	168	465	1,370	454	152	110
2	141	152	150	225	162	179	161	469	1,280	418	152	114
3	139	150	141	190	165	152	161	520	1,120	391	152	108
4	137	165	125	170	145	150	168	641	1,010	371	156	103
5	137	188	102	198	145	148	196	650	1,000	354	152	101
6	135	161	115	249	143	142	215	698	1,080	336	143	98
7	133	150	132	196	141	140	210	722	1,200	317	139	98
8	133	156	128	181	124	140	200	844	1,250	302	137	123
9	132	154	118	193	132	136	210	833	1,280	287	133	119
10	151	148	112	265	139	152	218	757	1,170	276	131	110
11	246	148	130	336	135	152	240	688	1,010	262	133	105
12	233	145	170	368	135	141	276	712	942	251	129	101
13	184	143	155	418	131	145	345	844	953	243	125	98
14	175	143	150	488	128	139	377	1,050	1,310	235	119	101
15	181	143	165	465	131	135	358	1,310	1,170	225	117	110
16	170	143	200	605	131	139	348	1,630	942	218	114	106
17	163	141	270	664	130	163	384	1,940	909	210	112	103
18	159	145	320	481	129	150	348	2,200	828	203	110	101
19	154	143	365	384	125	145	308	2,250	757	208	108	107
20	154	135	348	305	119	150	293	2,240	707	299	107	207
21	150	102	418	287	131	152	276	1,920	698	259	105	233
22	145	94	757	243	135	156	284	1,650	707	246	106	159
23	145	130	614	233	137	152	314	1,580	702	223	106	142
24	143	160	443	265	137	154	342	1,620	650	208	105	171
25	141	148	381	302	135	163	374	1,980	623	198	105	220
26	141	163	323	268	137	184	404	1,570	596	188	114	183
27	139	161	302	223	141	186	488	1,320	583	181	112	156
28	137	137	293	223	148	177	583	1,220	557	175	106	144
29	135	125	251	238	------	170	528	1,220	532	170	105	139
30	129	127	195	254	------	168	484	1,250	500	163	101	133
31	114	------	235	196	------	170	------	1,390	------	159	101	------
TOTAL	4,719	4,352	7,773	9,338	3,843	4,811	9,261	38,183	27,436	8,030	3,787	3,903
MEAN	152	145	251	301	137	155	309	1,232	915	259	122	130
MAX	246	188	757	664	165	186	583	2,250	1,370	454	156	233
MIN	114	94	102	170	119	135	161	465	500	159	101	98
CFSM	.46	.44	.76	.91	.42	.47	.94	3.73	2.77	.78	.37	.39
IN.	.53	.49	.88	1.05	.43	.54	1.04	4.30	3.09	.91	.43	.44
AC-FT	9,360	8,630	15,420	18,520	7,620	9,540	18,370	75,740	54,420	15,930	7,510	7,740

CAL YR 1972 TOTAL 235,702 MEAN 644 MAX 5,230 MIN 90 CFSM 1.95 IN 26.57 AC-FT 467,500
WTR YR 1973 TOTAL 125,436 MEAN 344 MAX 2,250 MIN 94 CFSM 1.04 IN 14.14 AC-FT 248,800

PEAK DISCHARGE (BASE, 1,500 CFS).--May 19 (0130) 2,460 cfs (6.08 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 (213 m) upstream from mouth and 0.2 mi (0.3 km) southwest of Yellow Pine.

DRAINAGE AREA.--213 sq mi (552 sq km). Mean altitude, 7,170 ft (2,185 m).

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

GAGE.--Water-stage recorder. Datum of gage is 4,657.70 ft (1,419.667 m) above mean sea level.

AVERAGE DISCHARGE.--45 years, 347 cfs (9.83 cu m/s), 22.12 in/yr (562 mm/yr), 251,400 acre-ft/yr (310 cu hm/yr); 15-year base period (1952-67), 371 cfs (10.5 cu m/s).

EXTREMES.--Current year: Maximum discharge, 2,110 cfs (59.8 cu m/s) May 18 (gage height, 4.83 ft or 1.472 m); minimum, 43 cfs (1.2 cu m/s) Feb. 20, 21 (gage height, 0.91 ft or 0.277 m).
Period of record: Maximum discharge, 5,440 cfs (154 cu m/s) May 27, 1956 (gage height, 7.64 ft or 2.329 m); minimum, 21 cfs (0.59 cu m/s) Nov. 30, 1954 (gage height, 0.66 ft or 0.201 m).

REMARKS.--Records good except for January, which are fair. 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)

0.9	40	2.5	509
1.1	60	3.0	769
1.5	138	4.0	1,440
2.0	296	5.0	2,260

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	91	79	80	78	74	72	243	1,130	322	93	67
2	91	89	80	84	84	71	72	264	1,020	294	91	66
3	89	86	79	72	86	67	72	308	859	271	92	65
4	87	93	59	58	76	69	75	360	774	251	96	61
5	87	99	47	70	76	70	80	368	786	236	92	59
6	86	82	57	88	75	66	82	419	858	222	87	57
7	84	82	69	74	74	69	77	463	938	210	84	58
8	84	95	65	68	63	68	79	552	960	200	81	71
9	89	80	59	71	69	67	87	514	954	188	78	70
10	101	89	62	80	71	69	86	486	862	178	79	64
11	146	86	66	88	70	69	89	454	741	168	78	61
12	146	82	69	93	68	65	97	523	689	161	75	58
13	119	80	68	103	67	69	110	681	699	155	72	56
14	110	80	68	113	66	66	114	887	1,130	149	70	58
15	114	84	68	110	69	66	112	1,120	948	142	68	61
16	114	82	69	130	68	70	126	1,370	749	135	66	60
17	105	80	74	140	68	73	128	1,620	719	129	64	58
18	101	82	79	112	69	67	116	1,820	672	124	63	57
19	97	79	87	102	63	68	105	1,820	635	127	62	59
20	95	63	82	96	66	72	110	1,850	583	239	61	118
21	93	52	101	93	67	70	105	1,540	553	212	60	139
22	93	51	143	92	67	70	110	1,320	540	182	61	101
23	91	58	114	90	68	70	121	1,330	522	158	64	91
24	89	79	101	97	67	70	131	1,380	489	143	62	102
25	87	75	91	105	68	74	154	1,680	461	132	62	124
26	87	86	89	96	67	77	177	1,220	441	124	66	111
27	82	79	87	88	69	74	233	1,010	419	116	64	94
28	84	72	87	88	68	71	282	974	391	110	62	85
29	72	66	80	93	------	72	271	1,020	391	104	60	78
30	77	69	72	98	------	74	246	1,070	359	101	59	74
31	71	------	87	87	------	75	------	1,170	------	97	59	------
TOTAL	2,964	2,371	2,438	2,859	1,967	2,172	3,719	29,836	21,272	5,380	2,231	2,283
MEAN	95.6	79.0	78.6	92.2	70.3	70.1	124	962	709	174	72.0	76.1
MAX	146	99	143	140	86	77	282	1,850	1,130	322	96	139
MIN	71	51	47	58	63	65	72	243	359	97	59	56
AC-FT	5,880	4,700	4,840	5,670	3,900	4,310	7,380	59,180	42,190	10,670	4,430	4,530

CAL YR 1972 TOTAL 153,784 MEAN 420 MAX 4,010 MIN 47 AC-FT 305,000
WTR YR 1973 TOTAL 79,492 MEAN 218 MAX 1,850 MIN 47 AC-FT 157,700

PEAK DISCHARGE (BASE, 1,800 CFS).--May 18 (2300) 2,110 cfs (4.83 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 (76.2 m) upstream from highway bridge, at mile 0.5 (0.8 km), and 0.8 mi (1.3 km) southwest of Riggins.

DRAINAGE AREA.--576 sq mi (1,492 sq km). Mean altitude, 5,430 ft (1,655 m).

PERIOD OF RECORD.--February 1951 to February 1955, September 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,760 ft or 536 m (from topographic map). Prior to Feb. 25, 1966, at datum 5.00 ft (1.52 m) higher.

AVERAGE DISCHARGE.--20 years (1951-54, 1956-73), 829 cfs (23.5 cu m/s), 600,600 acre-ft/yr (741 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 4,190 cfs (119 cu m/s) May 25 (gage height, 7.77 ft or 2.37 m); minimum, 104 cfs (2.95 cu m/s) Sept. 13, 14 (gage height, 2.80 ft or 0.853 m).
Period of record: Maximum discharge, 7,500 cfs (212 cu m/s) May 28, 1971; maximum gage height, 12.39 ft (3.78 m) June 13, 1953; minimum discharge 104 cfs (2.95 cu m/s) Sept. 13, 14, 1973 (gage height, 2.80 ft or 0.853 m).
Flood about June 1, 1948, reached an undetermined stage (discharge, 9,200 cfs or 261 cu m/s by slope-area measurement).

REMARKS.--Records fair. Diversions above station for irrigation of about 15,300 acres or 6,190 sq hm (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Nov. 8 to Dec. 19)

2.8	101	5.0	1,220
3.0	153	6.0	2,100
3.5	330	7.0	3,190
4.0	560	8.8	5,680

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	213	215	274	236	394	584	936	2,110	540	162	121
2	209	215	212	266	229	495	525	960	1,860	495	159	124
3	209	216	212	233	226	460	495	1,070	1,540	445	162	124
4	205	287	171	215	229	425	500	1,270	1,400	406	171	121
5	199	326	125	219	236	406	540	1,280	1,550	398	165	116
6	196	271	136	212	236	386	560	1,420	1,830	374	162	111
7	196	246	159	193	233	378	540	1,310	1,980	358	159	111
8	196	249	128	168	226	354	510	1,550	2,000	334	153	118
9	196	242	128	180	219	354	520	1,490	1,920	326	150	118
10	250	240	171	205	229	366	525	1,240	1,570	310	153	118
11	282	235	212	222	229	440	550	1,150	1,420	290	153	114
12	258	230	240	233	222	402	662	1,230	1,400	274	150	111
13	240	227	226	250	219	386	800	1,570	1,520	266	147	106
14	233	224	199	314	215	366	888	1,960	1,680	262	142	106
15	233	222	199	318	215	358	848	2,250	1,440	254	131	118
16	226	222	240	596	212	358	830	2,590	1,150	243	131	118
17	222	222	222	806	215	475	854	2,770	1,120	236	129	118
18	218	235	226	716	215	515	800	3,050	1,050	236	131	114
19	209	237	258	560	199	460	680	3,030	951	219	131	118
20	208	223	247	435	199	460	595	2,900	916	240	129	174
21	205	213	374	398	209	614	549	2,310	965	240	126	222
22	202	207	758	334	205	734	563	2,150	1,030	240	126	185
23	203	206	752	314	215	716	619	2,210	1,010	233	129	170
24	203	218	716	302	205	836	676	2,570	888	222	124	178
25	205	219	540	298	229	836	741	3,260	842	209	129	227
26	205	241	410	278	233	888	835	2,180	806	193	131	214
27	202	229	366	240	250	895	958	1,800	794	186	131	185
28	202	209	350	258	278	746	1,090	1,730	752	177	124	171
29	203	209	326	243	------	650	998	1,880	692	171	118	161
30	202	209	286	250	------	602	953	2,080	608	171	118	151
31	199	------	282	247	------	626	------	2,250	------	165	113	------
TOTAL	6,630	6,942	9,086	9,777	6,263	16,381	20,788	59,446	38,794	8,713	4,344	4,243
MEAN	214	231	293	315	224	528	693	1,918	1,293	281	140	141
MAX	282	326	758	806	278	895	1,090	3,260	2,110	540	171	227
MIN	196	206	125	168	199	354	495	936	608	165	118	106
AC-FT	13,150	13,770	18,020	19,390	12,420	32,490	41,230	117,900	76,950	17,280	8,620	8,420

CAL YR 1972 TOTAL 324,824 MEAN 887 MAX 5,670 MIN 125 AC-FT 644,300
WTR YR 1973 TOTAL 191,407 MEAN 524 MAX 3,260 MIN 106 AC-FT 379,700

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-18	2315	7.27	3,570	6- 8	2300	6.31	2,370
5-25	0130	7.77	4,190				

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 mi (0.2 km) upstream from White Bird Creek, 0.6 mi (1.0 km) downstream from Canfield-Joseph highway bridge, 1 mi (1.6 km) southwest of White Bird, and at mile 53.7 (86.4 km). Records include flow of White Bird Creek.

DRAINAGE AREA.--13,550 sq mi (35,090 sq km), approximately, includes that of White Bird Creek. Mean altitude, 6,720 ft (2,048 m).

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 (430.575 m) 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 (182.88 m) downstream at different datum. Sept. 14, 1920, to Jan. 2, 1931, nonrecording gage on highway bridge 200 ft (60.96 m) upstream at datum 10 ft (3.048 m) higher.

AVERAGE DISCHARGE.--61 years, 11,150 cfs (316 cu m/s), 11.17 in/yr (283.7 mm/yr), 8,078,000 acre-ft/yr (9,960 cu hm/yr); 15-year base period (1952-67), 11,880 cfs (336 cu m/s).

EXTREMES.--Current year: Maximum discharge, 38,400 cfs (1,090 cu m/s) May 20 (gage height, 22.88 ft or 6.974 m); minimum, 2,700 cfs (75.0 cu m/s) Jan. 10 (gage height, 11.48 ft or 3.499 m).
Period of record: Maximum discharge, 106,000 cfs (3,000 cu m/s) May 24, 1956 (gage height, 33.05 ft or 10.074 m); minimum, 1,580 cfs (44.7 cu m/s) Dec. 11, 1932 (gage height, 10.23 ft or 3.181 m), from rating curve extended below 2,200 cfs (623 mm/s).
Maximum stage known, about 37.5 ft (11.43 m), June 1894, present datum (discharge, 120,000 cfs or 3,400 cu m/s).

REMARKS.--Records excellent except those for November to January, which are good. Diversions above station for irrigation of about 165,000 acres (66,800 sq hm) of which about 1,200 acres (490 sq hm) are by withdrawals from ground water (1966 determination). Records of water temperatures and chemical analysis for the water year 1973 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 Dec. 8-17, Jan. 4-14)

11.0	2,050	16.0	11,400
12.0	3,280	18.0	17,600
13.0	4,840	20.0	25,400
14.0	6,760	23.0	39,100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,420	4,970	4,360	4,470	4,100	4,470	4,650	8,940	24,600	11,800	4,470	3,130
2	5,360	5,160	4,480	4,370	4,130	4,770	4,550	8,480	24,200	11,000	4,200	3,250
3	5,360	5,400	5,150	4,150	4,100	4,820	4,450	8,730	22,600	10,300	4,070	3,420
4	5,290	5,550	5,060	4,080	3,980	4,650	4,420	9,620	20,500	9,650	4,080	3,450
5	5,250	5,780	4,120	3,800	4,000	4,520	4,550	10,400	19,400	9,100	4,160	3,380
6	5,220	5,820	3,100	3,400	4,120	4,470	4,790	11,000	19,400	8,620	4,260	3,290
7	5,220	5,660	2,860	3,170	4,200	4,340	4,950	11,600	20,500	8,160	4,160	3,240
8	5,200	5,490	2,900	3,100	4,150	4,260	4,950	12,500	21,700	7,760	3,990	3,280
9	5,250	5,360	3,600	2,850	3,940	4,240	4,860	13,400	22,800	7,480	3,840	3,660
10	5,460	5,360	3,860	2,700	3,690	4,260	4,820	12,800	21,800	7,140	3,810	3,980
11	5,700	5,340	3,800	3,100	3,690	4,400	4,950	11,800	20,700	6,800	3,760	3,780
12	6,110	5,240	3,960	3,500	3,870	4,390	5,290	11,400	19,400	6,470	3,720	3,620
13	6,130	5,270	4,100	4,220	3,940	4,310	5,910	12,300	18,600	6,210	3,680	3,500
14	5,890	5,220	4,380	4,640	3,990	4,230	6,720	15,000	20,100	6,090	3,570	3,360
15	5,720	5,180	4,600	5,290	3,930	4,180	7,120	19,100	24,600	5,930	3,480	3,380
16	5,860	5,160	4,480	5,760	3,900	4,130	7,100	24,000	22,800	5,780	3,350	3,450
17	6,250	5,160	4,800	6,090	3,880	4,280	7,100	29,000	20,600	5,680	3,240	3,450
18	6,250	5,090	4,420	6,030	3,820	4,450	6,890	33,600	19,300	5,480	3,170	3,420
19	5,930	5,020	4,840	5,550	3,870	4,400	6,510	36,700	18,000	5,270	3,100	3,500
20	5,760	4,950	5,530	5,180	3,880	4,360	6,030	38,100	16,800	5,310	3,060	3,640
21	5,660	4,880	5,910	4,880	3,740	4,520	5,780	35,400	16,000	5,950	2,970	4,150
22	5,680	4,820	6,530	4,570	3,680	4,770	5,610	31,700	15,500	6,490	2,940	4,640
23	5,680	4,750	7,160	4,280	3,760	4,910	5,760	29,400	15,100	6,330	2,940	4,440
24	5,650	4,620	7,140	3,990	3,880	5,040	6,010	29,000	14,600	5,950	3,070	4,280
25	5,610	4,490	6,530	4,100	3,980	5,060	6,410	32,100	14,000	5,700	3,270	4,470
26	5,550	5,000	5,930	4,230	4,050	5,110	6,890	30,600	13,400	5,400	3,210	4,790
27	5,550	5,310	5,510	4,310	4,200	5,270	7,610	26,700	13,000	5,220	3,200	4,820
28	5,480	5,250	5,310	4,280	4,290	5,130	8,820	23,800	12,500	4,980	3,220	4,580
29	5,420	4,910	5,110	4,070	------	4,910	9,530	22,600	12,200	4,760	3,170	4,440
30	5,240	4,620	4,890	3,900	------	4,740	9,430	22,500	12,100	4,550	3,170	4,310
31	5,160	------	4,700	4,050	------	4,640	------	23,800	------	4,420	3,080	------
TOTAL	173,310	154,830	149,120	132,110	110,760	142,030	182,460	646,070	556,800	209,780	109,410	114,100
MEAN	5,591	5,161	4,810	4,262	3,956	4,582	6,082	20,840	18,560	6,767	3,529	3,803
MAX	6,250	5,820	7,160	6,090	4,290	5,270	9,530	38,100	24,600	11,800	4,470	4,820
MIN	5,160	4,490	2,860	2,700	3,680	4,130	4,420	8,480	12,100	4,420	2,940	3,130
CFSM	.41	.38	.36	.31	.29	.34	.45	1.54	1.37	.50	.26	.28
IN.	.48	.43	.41	.36	.30	.39	.50	1.77	1.53	.58	.30	.31
AC-FT	343,800	307,100	295,800	262,000	219,700	281,700	361,900	1,281M	1,104M	416,100	217,000	226,300

CAL YR 1972 TOTAL 5,126,200 MEAN 14,010 MAX 98,500 MIN 2,860 CFSM 1.03 IN 14.07 AC-FT 10,170,000
WTR YR 1973 TOTAL 2,680,780 MEAN 7,345 MAX 38,100 MIN 2,700 CFSM .54 IN 7.36 AC-FT 5,317,000

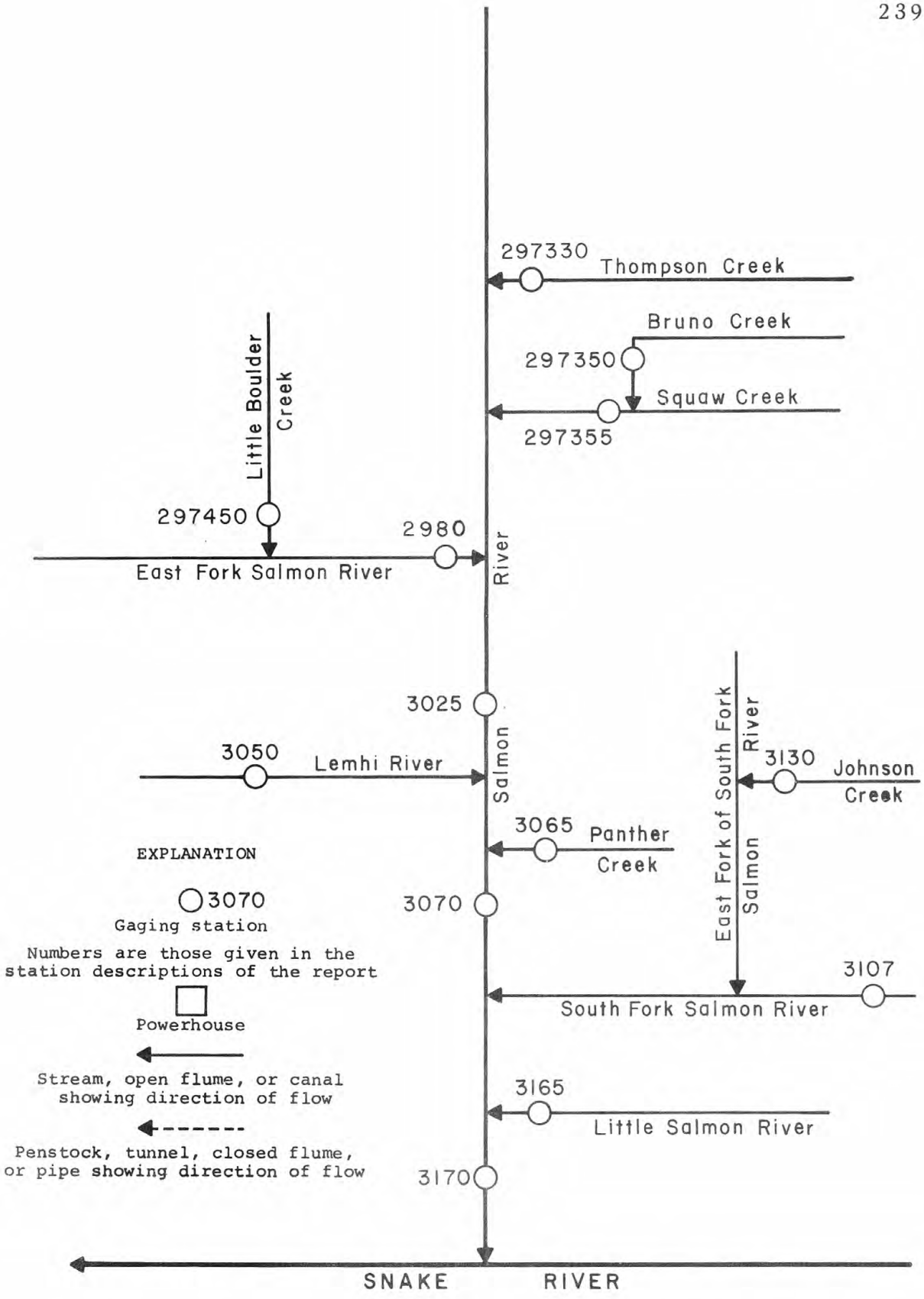

FIGURE 11. Schematic diagram showing Salmon River basin.

SNAKE RIVER MAIN STEM

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 mi (1.9 km) downstream from Grande Ronde River, 7.8 mi (12.6 km) east of Anatone, 22 mi (35.4 km) south of Clarkston, and at mile 167.2 (269.0 km).

DRAINAGE AREA.--92,960 sq mi (241,000 sq km), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 806.78 ft (245.907 m) above mean sea level.

AVERAGE DISCHARGE.--15 years, 35,820 cfs (1,014 cu m/s), 25,560 acre-ft/yr (31,500 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 63,700 cfs (1,800 cu m/s) May 18 (gage height, 10.84 ft or 3.304 m); minimum, 11,600 cfs (329 cu m/s) Mar. 25 (gage height, 3.34 ft or 1.018 m).
Period of record: Maximum discharge, 151,000 cfs (4,280 cu m/s) May 29, 1971 (gage height, 19.98 ft or 6.090 m); minimum, 6,010 cfs (170 cu m/s) Sept. 2, 1958 (gage height, 1.29 ft or 0.393 m).

REMARKS.--Records excellent. Diversions above station for irrigation of about 4,090,000 acres (1,660 sq hm) of which about 750,000 acres (304 sq hm) 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 (12,300 cu hm), the most effective of which is Brownlee Reservoir 106.3 mi (171.0 km) upstream (see sta 13289700). Diurnal fluctuations caused by Hells Canyon powerplant. Records of water temperatures, bed load, and sediment for the water year 1973 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 15 to Sept. 30)

3.4	11,800	10.0	52,200
4.0	14,200	14.0	85,400
6.0	24,800		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23,900	24,600	27,700	33,300	32,700	33,400	24,200	28,200	49,000	24,900	14,100	12,400
2	22,600	24,900	26,300	31,900	32,200	35,400	23,600	27,600	48,100	23,100	13,600	12,800
3	24,600	27,300	24,600	32,900	32,400	34,500	24,100	28,100	42,800	21,900	13,300	12,400
4	25,000	25,900	27,400	33,000	32,000	33,100	24,100	28,800	42,100	21,000	13,100	13,000
5	23,800	25,900	28,900	32,800	32,000	33,000	24,000	30,200	43,600	20,200	12,800	16,200
6	22,900	28,900	28,100	32,400	31,300	33,300	25,400	29,300	40,700	19,700	12,800	17,400
7	27,300	30,100	28,000	31,300	30,700	32,700	25,700	29,900	44,200	19,100	13,000	17,600
8	28,100	32,100	27,200	33,000	30,400	33,500	25,300	32,500	43,300	18,300	13,300	16,800
9	28,400	32,800	27,400	32,400	29,900	33,700	24,900	34,400	43,200	17,700	15,000	14,700
10	29,400	32,100	27,500	28,500	29,400	33,400	25,000	33,200	39,900	20,500	14,800	15,400
11	32,500	32,300	26,600	30,300	29,000	32,700	22,800	32,800	38,000	21,000	15,000	16,900
12	31,500	30,600	27,000	29,500	29,400	32,200	22,200	27,900	36,200	16,100	13,600	16,700
13	30,400	31,500	27,800	29,900	30,000	29,500	24,000	26,800	37,900	15,000	13,100	15,700
14	30,000	30,300	27,300	31,000	31,200	30,800	25,100	29,200	36,900	14,800	14,900	16,800
15	29,900	28,000	28,000	33,300	31,600	29,300	26,100	37,500	40,500	14,500	14,600	15,400
16	29,400	28,500	28,500	35,000	32,700	27,700	25,600	45,200	41,300	14,100	14,000	13,300
17	29,800	29,200	28,200	41,600	33,500	23,600	25,900	55,100	40,200	13,800	14,000	13,100
18	27,500	27,500	28,300	39,700	33,200	22,700	25,800	61,200	38,200	13,700	13,400	16,000
19	30,800	26,200	29,200	38,500	33,300	26,000	30,100	61,800	38,300	13,400	12,000	15,000
20	30,300	27,100	33,200	36,200	31,700	28,800	29,800	61,300	36,700	13,300	12,100	17,500
21	30,600	27,900	34,600	35,200	30,500	31,900	29,700	60,600	34,300	13,400	12,000	17,200
22	30,200	27,800	39,300	35,000	30,400	24,500	29,000	56,400	35,300	14,000	12,800	19,600
23	30,300	27,800	37,600	34,000	29,200	18,800	28,600	50,900	35,700	14,200	13,900	17,800
24	31,000	26,100	40,600	33,200	24,900	14,500	28,400	51,500	31,500	14,000	13,700	20,400
25	29,500	28,100	35,400	33,400	22,900	12,100	28,700	58,100	30,500	13,900	12,800	19,600
26	28,600	27,300	33,900	33,300	25,800	26,700	28,100	57,400	34,700	14,200	12,600	21,500
27	28,400	30,400	35,300	33,400	29,300	28,000	28,000	48,500	34,700	14,600	12,600	22,300
28	25,900	30,000	35,700	32,200	30,900	27,600	27,000	42,700	35,100	16,200	12,600	22,700
29	24,300	29,900	35,100	32,800	------	26,200	26,800	42,900	33,300	13,800	12,400	21,800
30	24,300	30,300	32,700	31,900	------	24,400	27,300	44,600	29,800	12,500	12,500	20,800
31	23,400	------	33,300	32,300	------	23,500	------	49,300	------	13,700	12,300	------
TOTAL	864,600	861,400	950,700	1,033.2M	852,500	877,500	785,300	1,303.9M	1,156.0M	510,600	412,700	508,800
MEAN	27,890	28,710	30,670	33,330	30,450	28,310	26,180	42,060	38,530	16,470	13,310	16,960
MAX	32,500	32,800	40,600	41,600	33,500	35,400	30,100	61,800	49,000	24,900	15,000	22,700
MIN	22,600	24,600	24,600	28,500	22,900	12,100	22,200	26,800	29,800	12,500	12,000	12,400
AC-FT	1,715M	1,709M	1,886M	2,049M	1,691M	1,741M	1,558M	2,586M	2,293M	1,013M	818,600	1,009M

CAL YR 1972 TOTAL 17,841,600 MEAN 48,750 MAX 135,000 MIN 15,500 AC-FT 35,390,000
WTR YR 1973 TOTAL 10,117,200 MEAN 27,720 MAX 61,800 MIN 12,000 AC-FT 20,070,000

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 mi (0.5 km) downstream from Kearney Gulch, 2.2 mi (3.5 km) upstream from George Creek, 5.0 mi (8.0 km) west of Asotin, and at mile 5.3 (8.5 km).

DRAINAGE AREA.--170 sq mi (440 sq km).

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,090 ft or 332 m (from topographic map).

AVERAGE DISCHARGE.--14 years, 72.6 cfs (2.056 cu m/s), 52,600 acre-ft/yr (64.9 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 236 cfs (6.68 cu m/s) Jan. 16 (gage height, 3.16 ft or 0.963 m); maximum gage height, 4.02 ft (1.225 m) Jan. 8 (backwater from ice); minimum daily discharge, 20 cfs (0.57 cu m/s) Dec. 9.
Period of record: Maximum discharge, 2,720 cfs (77.0 cu m/s) Dec. 23, 1964 (gage height, 7.95 ft or 2.423 m, from rating curve extended above 300 cfs or 8.50 cu m/s on basis of slope-area measurement of peak flow); minimum, 13 cfs (0.37 cu m/s) Jan. 11, 1963 (gage height, 1.41 ft or 0.430 m), result of freezeup.

REMARKS.--Records good. No regulation. Several diversions for irrigation. Prior to Nov. 20, 1959, at a point 3.3 mi (5.3 km) upstream, the city of Clarkston diverted about 30 cfs (0.85 cu m/s) for municipal use and irrigation. Natural low flows nearly equivalent to those of former station 3.3 mi (5.3 km) upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	48	54	52	55	61	54	58	64	37	32	34
2	42	48	61	54	55	61	54	57	63	37	32	34
3	40	47	35	48	55	59	52	64	61	37	31	32
4	39	52	30	42	54	59	54	103	59	36	31	32
5	39	52	25	42	54	60	55	97	57	36	31	33
6	40	50	23	40	52	59	60	92	55	36	32	32
7	41	48	22	30	52	57	57	86	54	36	32	37
8	41	48	21	25	50	57	56	102	52	33	32	38
9	41	47	20	35	51	57	56	95	52	32	32	37
10	50	47	22	50	52	64	59	86	51	32	32	36
11	70	47	24	80	52	65	60	80	50	32	33	34
12	51	47	26	109	51	64	68	79	49	32	32	34
13	47	47	28	119	50	63	77	82	49	32	32	34
14	46	47	32	112	50	59	80	93	49	32	32	35
15	46	47	36	109	50	57	74	112	48	33	32	37
16	45	46	42	172	49	57	71	130	48	33	32	40
17	45	47	50	197	49	57	73	132	48	32	32	42
18	88	47	61	151	49	57	70	125	45	33	32	45
19	44	47	61	121	49	56	67	114	44	33	32	47
20	45	47	51	102	49	57	64	107	42	34	32	49
21	44	46	86	92	48	59	61	95	41	36	32	52
22	44	45	128	82	46	56	63	86	40	36	32	55
23	45	45	114	77	46	55	67	83	41	34	32	57
24	45	46	136	74	48	55	65	93	41	34	33	58
25	46	46	108	71	50	55	63	97	41	33	36	59
26	46	63	93	68	51	56	61	85	41	33	34	58
27	46	60	82	64	50	56	70	79	40	33	33	57
28	47	57	74	63	51	56	73	73	39	32	33	54
29	47	54	66	60	------	55	68	70	38	32	33	52
30	47	54	61	57	------	55	63	67	38	32	33	50
31	47	------	57	57	------	56	------	65	------	32	34	------
TOTAL	1,446	1,472	1,729	2,455	1,418	1,800	1,915	2,787	1,440	1,045	1,003	1,294
MEAN	46.6	49.1	55.8	79.2	50.6	58.1	63.8	89.9	48.0	33.7	32.4	43.1
MAX	88	63	136	197	55	65	80	132	64	37	36	59
MIN	39	45	20	25	46	55	52	57	38	32	31	32
AC-FT	2,870	2,920	3,430	4,870	2,810	3,570	3,800	5,530	2,860	2,070	1,990	2,570

CAL YR 1972 TOTAL 36,836 MEAN 101 MAX 397 MIN 20 AC-FT 73,060
WTR YR 1973 TOTAL 19,804 MEAN 54.3 MAX 197 MIN 20 AC-FT 39,280

PEAK DISCHARGE (BASE, 220 CFS).--Jan. 16 (1530) 236 cfs (3.16 ft).

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 mi (0.3 km) upstream from O'Hara Creek, 7 mi (11.3 km) upstream from Lowell, 7.6 mi (12.2 km) upstream from confluence with Lochsa River, and 150.2 mi (241.7 km) upstream from mouth of Clearwater River.

DRAINAGE AREA.--1,910 sq mi (4,950 sq km), approximately. Mean altitude, 5,640 ft (1,719 m).

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 or 469 m (from river-profile map). Apr. 11 to Sept. 2, 1911, nonrecording gage at site 2 mi (3.2 km) 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.--44 years (1929-73), 3,759 cfs (106.5 cu m/s), 26.73 in/yr (679 mm/yr), 2,723,000 acre-ft/yr (3,360 cu hm/yr); 15-year base period (1952-67), 3,914 cfs (110.8 cu m/s).

EXTREMES.--Current year: Maximum discharge, 19,000 cfs (538 cu m/s) May 18 (gage height, 9.73 ft or 2.966 m); minimum daily, 220 cfs (6.23 cu m/s) Dec. 5.
Period of record: Maximum discharge, 48,900 cfs (1,380 cu m/s) May 29, 1948 (gage height, 16.04 ft or 4.889 m); minimum, probably less than 100 cfs (2.83 cu m/s) 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. 5-22, Jan. 5-17)

2.3	240	5.0	3,410
2.6	399	6.0	5,630
3.0	650	8.0	12,000
3.5	1,070	10.0	20,700
4.0	1,660		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	708	570	610	921	809	1,030	1,020	3,370	8,820	3,190	738	513
2	693	730	657	903	769	1,180	987	3,630	8,340	2,880	708	513
3	686	738	630	792	772	1,090	980	4,310	6,990	2,630	693	482
4	672	777	332	617	775	1,030	1,000	4,800	6,090	2,470	693	458
5	657	930	220	520	805	1,020	1,080	5,240	5,960	2,350	679	446
6	643	868	320	420	787	973	1,240	6,010	6,790	2,210	672	429
7	637	738	290	350	741	945	1,220	6,460	7,840	2,080	650	429
8	630	722	330	370	588	926	1,180	7,020	7,930	1,940	623	489
9	630	708	370	380	609	918	1,250	6,250	8,600	1,820	603	610
10	700	672	380	385	815	930	1,410	5,510	7,160	1,700	590	557
11	753	664	430	420	816	949	1,680	4,860	6,110	1,610	603	501
12	761	643	500	520	767	905	2,200	4,800	5,630	1,540	623	464
13	708	637	630	740	716	899	2,690	5,760	5,710	1,480	603	440
14	679	616	760	1,560	697	877	3,010	8,120	8,990	1,410	564	434
15	657	637	780	1,680	705	854	2,740	11,300	9,120	1,300	538	495
16	650	623	900	1,720	703	852	2,730	14,900	6,630	1,250	519	513
17	643	616	980	1,830	714	880	2,840	17,100	6,360	1,190	507	476
18	630	603	1,200	1,670	725	871	2,560	17,400	5,910	1,140	507	458
19	623	623	1,500	1,480	704	856	2,280	16,900	5,460	1,100	495	464
20	617	590	1,580	1,320	682	852	2,130	16,000	5,380	1,100	489	590
21	610	545	2,200	1,200	672	916	2,010	12,300	5,310	1,380	476	795
22	610	464	2,700	1,090	682	1,070	2,000	10,900	5,510	1,400	476	754
23	610	327	2,400	1,020	723	1,070	2,080	11,000	5,560	1,190	495	663
24	623	428	2,180	1,020	735	1,070	2,080	11,700	5,120	1,100	482	737
25	623	693	1,730	1,000	767	1,090	2,160	13,400	4,750	1,040	482	992
26	637	885	1,410	957	796	1,200	2,420	10,300	4,500	985	495	1,070
27	679	834	1,280	868	832	1,200	3,150	8,410	4,330	939	507	834
28	657	650	1,270	834	889	1,140	3,760	7,690	4,160	894	482	732
29	637	617	1,130	843	------	1,100	3,550	7,450	3,970	843	464	678
30	596	610	1,000	868	------	1,050	3,510	8,000	3,570	800	452	635
31	583	------	966	851	------	1,050	------	9,350	------	769	470	------
TOTAL	20,242	19,758	31,665	29,149	20,795	30,793	62,947	280,240	186,600	47,730	17,378	17,651
MEAN	653	659	1,021	940	743	993	2,098	9,040	6,220	1,540	561	588
MAX	761	930	2,700	1,830	889	1,200	3,760	17,400	9,120	3,190	738	1,070
MIN	583	327	220	350	588	852	980	3,370	3,570	769	452	429
CFSM	.34	.35	.53	.49	.39	.52	1.10	4.73	3.26	.81	.29	.31
IN.	.39	.38	.62	.57	.41	.60	1.23	5.46	3.63	.93	.34	.34
AC-FT	40,150	39,190	62,810	57,820	41,250	61,080	124,900	555,900	370,100	94,670	34,470	35,010

CAL YR 1972 TOTAL 1,945,626 MEAN 5,316 MAX 40,800 MIN 220 CFSM 2.78 IN 37.89 AC-FT 3,859,000
WTR YR 1973 TOTAL 764,948 MEAN 2,096 MAX 17,400 MIN 220 CFSM 1.10 IN 14.90 AC-FT 1,517,000

PEAK DISCHARGE (BASE, 18,000 CFS).--May 18 (0400) 19,000 cfs (9.73 ft).

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 mi (1.1 km) upstream from Lowell, 0.9 mi (1.4 km) upstream from confluence with Selway River, 1.2 mi (1.9 km) downstream from Pete King Creek, and 19 mi (30.6 km) east of Kooskia.

DRAINAGE AREA.--1,180 sq mi (3,060 sq km), approximately. Mean altitude, 5,250 ft (1,600 m).

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 (442.868 m) above mean sea level, unadjusted. Prior to Nov. 21, 1930, nonrecording gages at site 1 mi (1.6 km) upstream at different datums.

AVERAGE DISCHARGE.--46 years, 2,876 cfs (81.45 cu m/s), 33.10 in/yr (841 mm/yr), 2,084,000 acre-ft/yr (2.57 cu km/yr); 15-year base period (1952-67), 3,047 cfs (86.29 cu m/s).

EXTREMES.--Current year: Maximum discharge, 13,100 cfs (371 cu m/s) May 18 (gage height, 8.13 ft or 2.478 m); minimum, 142 cfs (4.02 cu m/s) Dec. 4, but may have been less during period of ice effect (gage height, 1.43 ft or 0.436 m).
Period of record: Maximum discharge, 35,100 cfs (994 cu m/s) June 8, 1964 (gage height, 13.50 ft or 4.115 m), from rating curve extended above 17,000 cfs (481 cu m/s); minimum, probably less than 100 cfs (2.8 cu m/s) Jan. 8, 1937, during period of ice effect.

REMARKS.--Records good.

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 5-21, Jan. 4-14)

1.4	150	3.0	1,420
1.7	300	4.0	2,920
2.0	486	6.0	7,190
2.5	886	8.0	12,700

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	522	446	493	868	754	990	971	2,940	6,580	2,340	550	367
2	522	601	535	850	712	1,080	933	3,100	6,200	2,140	528	367
3	516	656	487	720	712	990	924	3,560	5,380	1,980	514	345
4	504	632	191	550	712	924	962	3,950	4,730	1,850	521	325
5	490	841	170	430	720	924	1,060	4,250	4,600	1,750	514	311
6	477	771	160	350	688	878	1,200	4,710	5,050	1,660	507	297
7	469	632	180	310	586	850	1,160	4,990	5,720	1,590	500	305
8	464	609	220	300	564	832	1,110	5,430	5,880	1,480	473	354
9	465	609	270	305	601	841	1,180	4,880	6,110	1,390	459	371
10	601	557	300	320	696	868	1,340	4,420	5,700	1,310	446	380
11	680	542	380	510	696	896	1,610	3,950	4,710	1,220	433	344
12	624	521	570	770	656	841	2,100	3,830	4,290	1,170	440	316
13	572	500	710	1,400	609	841	2,600	4,350	4,250	1,110	440	294
14	535	473	800	1,520	609	815	2,780	5,810	6,440	1,050	420	282
15	528	514	840	1,570	601	789	2,480	7,790	7,660	1,000	401	305
16	514	507	920	1,970	601	789	2,480	10,400	5,470	952	383	332
17	507	487	1,050	2,270	609	850	2,650	11,700	5,340	915	370	329
18	493	473	1,500	1,910	616	824	2,340	12,200	4,970	878	364	317
19	480	487	1,700	1,650	579	806	2,110	12,100	4,520	841	358	324
20	473	459	2,100	1,400	579	789	1,980	11,500	4,310	824	353	413
21	473	433	2,900	1,270	572	933	1,880	8,970	4,050	887	342	569
22	466	346	3,620	1,090	586	1,020	1,920	8,070	4,010	887	336	509
23	262	262	2,530	1,050	601	1,040	2,010	8,150	3,990	806	344	502
24	273	273	2,520	1,000	609	1,050	1,970	8,570	3,750	763	337	631
25	473	535	1,840	1,000	664	1,090	2,060	10,100	3,480	728	339	919
26	500	737	1,440	933	712	1,260	2,270	7,870	3,300	688	350	791
27	550	664	1,290	815	763	1,220	2,890	6,460	3,110	664	342	627
28	535	500	1,290	806	850	1,140	3,390	5,970	2,950	640	328	518
29	514	480	1,100	806	------	1,070	3,130	5,790	2,830	609	315	465
30	466	480	962	824	------	1,020	3,040	5,990	2,560	594	307	432
31	446	------	924	806	------	1,020	------	6,850	------	572	330	------
TOTAL	15,394	16,027	33,992	30,373	18,257	29,280	58,530	208,650	141,940	35,288	12,644	12,641
MEAN	497	534	1,097	980	652	945	1,951	6,731	4,731	1,138	408	421
MAX	680	841	3,620	2,270	850	1,260	3,390	12,200	7,660	2,340	550	919
MIN	262	262	160	300	564	789	924	2,940	2,560	572	307	282
CFSM	.42	.45	.93	.83	.55	.80	1.65	5.70	4.01	.96	.35	.36
IN.	.49	.51	1.07	.96	.58	.92	1.85	6.58	4.47	1.11	.40	.40
AC-FT	30,530	31,790	67,420	60,240	36,210	58,080	116,100	413,900	281,500	69,990	25,080	25,070

CAL YR 1972 TOTAL 1,592,571 MEAN 4,351 MAX 30,500 MIN 160 CFSM 3.69 IN 50.21 AC-FT 3,159,000
WTR YR 1973 TOTAL 613,016 MEAN 1,679 MAX 12,200 MIN 160 CFSM 1.42 IN 19.33 AC-FT 1,216,000

PEAK DISCHARGE (BASE, 12,000 CFS).--May 18 (0430) 13,100 cfs (8.13 ft).

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 mi (0.3 km) upstream from Crooked River, 4.5 mi (7.2 km) west of Elk City, and at mile 58.6 (94.3 km).

DRAINAGE AREA.--261 sq mi (676 sq km). Mean altitude, 5,150 ft (1,570 m).

PERIOD OF RECORD.--September 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,816.27 ft (1,163.199 m) above mean sea level. Prior to June 23, 1949, nonrecording gage at site 24 ft (7.3 m) downstream at datum 6.14 ft (1.872 m) lower.

AVERAGE DISCHARGE.--29 years, 271 cfs (7.675 cu m/s), 14.10 in/yr (358 mm/yr), 196,300 acre-ft/yr (242 cu hm/yr); 15-year base period (1952-67), 260 cfs (7.363 cu m/s).

EXTREMES.--Current year: Maximum discharge, 706 cfs (20.0 cu m/s) June 14 (gage height, 3.61 ft or 1.100 m); minimum, 23 cfs (0.651 cu m/s) Nov. 22 (gage height, 1.30 ft or 0.396 m).
Period of record: Maximum discharge, 4,040 cfs (114 cu m/s) June 8, 1964 (gage height, 7.48 ft or 2.280 m); minimum daily, 10 cfs (0.283 cu m/s) Nov. 28, 29, 1952.

REMARKS.--Records good except those for winter period, 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 Nov. 21 to Dec. 7, Dec. 17 to Jan. 19, Mar. 3-26)

1.3	23	2.5	220
1.6	48	3.0	394
2.0	104	3.7	755

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	61	83	95	86	110	129	347	224	127	40	29
2	55	79	91	92	80	94	125	350	209	121	39	32
3	53	83	76	84	77	90	131	434	206	113	41	31
4	52	90	58	80	75	87	156	573	190	108	41	29
5	51	138	42	72	74	85	190	536	175	102	40	26
6	50	94	30	65	73	83	201	536	165	97	38	25
7	49	75	36	60	66	82	163	515	156	97	38	25
8	49	78	40	70	60	80	165	557	151	92	37	33
9	49	68	42	75	54	79	185	530	142	86	35	40
10	69	70	45	78	62	80	206	470	144	81	34	37
11	80	66	52	82	80	83	251	416	131	77	36	33
12	65	64	74	90	72	78	321	408	123	72	36	29
13	59	56	88	105	66	85	387	429	123	70	33	27
14	56	63	98	160	61	80	403	461	412	68	31	25
15	55	62	104	170	57	76	336	490	434	64	29	34
16	54	61	113	190	58	87	336	510	263	61	29	40
17	53	57	125	210	59	106	387	510	343	58	27	37
18	52	61	145	185	60	102	332	490	328	56	27	33
19	51	57	210	155	59	108	286	456	283	54	27	32
20	51	54	280	140	56	130	270	434	244	58	26	37
21	51	36	310	125	57	175	251	382	221	117	26	67
22	50	28	270	115	59	210	276	347	204	123	25	63
23	51	33	235	110	61	120	325	321	190	78	29	52
24	57	48	200	107	62	158	300	307	185	68	31	48
25	54	76	165	122	64	165	314	408	177	62	29	94
26	57	170	140	105	70	190	354	336	177	57	29	106
27	62	120	130	87	78	172	443	289	165	52	30	74
28	60	90	140	76	90	151	470	260	151	50	29	66
29	54	86	122	90	------	142	399	241	146	47	26	58
30	56	84	108	98	------	133	374	226	135	45	25	52
31	43	------	98	92	------	138	------	221	------	44	25	------
TOTAL	1,705	2,208	3,750	3,385	1,876	3,559	8,466	12,790	6,197	2,405	988	1,314
MEAN	55.0	73.6	121	109	67.0	115	282	413	207	77.6	31.9	43.8
MAX	80	170	310	210	90	210	470	573	434	127	41	106
MIN	43	28	30	60	54	76	125	221	123	44	25	25
CFSM	.21	.28	.46	.42	.26	.44	1.08	1.58	.79	.30	.12	.17
IN.	.24	.31	.53	.48	.27	.51	1.21	1.82	.88	.34	.14	.19
AC-FT	3,380	4,380	7,440	6,710	3,720	7,060	16,790	25,370	12,290	4,770	1,960	2,610

CAL YR 1972 TOTAL 141,595 MEAN 387 MAX 2,950 MIN 28 CFSM 1.48 IN 20.18 AC-FT 280,900
WTR YR 1973 TOTAL 48,643 MEAN 133 MAX 573 MIN 25 CFSM .51 IN 6.93 AC-FT 96,480

PEAK DISCHARGE (BASE, 1,300 CFS).--No peaks above base.

NOTE.--No gage-height record Jan. 20 to Mar. 2.

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 mi (0.6 km) upstream from county road bridge, 0.4 mi (0.6 km) downstream from Cottonwood Creek, and at mile 4.0 (6.4 km).

DRAINAGE AREA.--1,150 sq mi (2,980 sq km), 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 (396 m) (from topographic map). October 1910 to April 1912, nonrecording gage 3.6 mi (5.8 km) downstream at different datum.

AVERAGE DISCHARGE.--10 years (1910-1911, 1964-73), 1,046 cfs (29.62 cu m/s), 12.35 in/yr (313.7 mm/yr), 757,800 acre-ft/yr (934.4 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 2,270 cfs (64.3 cu m/s) May 18 (gage height, 4.74 ft or 1.445 m); minimum, 93 cfs (2.63 cu m/s) Dec. 6 (gage height, 2.51 ft or 0.765 m).
Period of record: Maximum discharge observed, 10,700 cfs (303 cu m/s) May 29, 1912 (gage height, 6.00 ft or 1.829 m, site and datum then in use); minimum, 93 cfs (2.63 cu m/s) Dec. 6, 1972 (gage height, 2.51 ft or 0.765 m); minimum gage height, 2.40 ft (0.732 m) Dec. 18, 1965 (ice affected).
Flood of June 8, 1964, reached a stage of 10.3 ft (3.14 m), present site and datum (discharge, 17,500 cfs or 496 cu m/s).

REMARKS.--Records excellent except those for December to February, which are poor. 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. 6-21, Jan. 4-16)

2.5	96	3.5	699
2.7	169	4.0	2,670
3.0	324	5.0	2,670

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	200	274	325	310	390	522	966	1,190	537	173	135
2	236	245	294	323	290	413	484	944	1,090	507	165	146
3	228	313	261	296	280	368	470	1,090	1,000	477	161	138
4	222	295	206	255	275	343	492	1,500	912	441	169	131
5	217	414	143	210	280	335	561	1,470	890	421	169	120
6	213	394	108	175	290	325	620	1,430	912	407	161	117
7	205	301	126	140	250	307	578	1,430	933	394	157	127
8	203	278	140	148	220	307	522	1,510	944	374	153	205
9	202	284	155	160	200	301	553	1,560	955	355	150	196
10	266	256	160	170	240	307	578	1,380	859	337	146	169
11	344	256	180	190	290	313	672	1,240	787	319	150	146
12	291	245	210	230	270	295	838	1,210	738	301	153	135
13	254	240	280	320	250	307	1,060	1,320	728	289	146	124
14	236	230	340	490	240	307	1,190	1,520	1,100	284	138	120
15	228	235	360	540	235	289	1,010	1,770	1,630	272	131	150
16	224	235	390	560	240	295	955	1,990	1,120	256	124	187
17	221	230	420	578	250	368	1,030	2,100	1,210	245	120	161
18	217	225	490	514	255	368	1,000	2,100	1,250	235	120	142
19	214	235	660	445	250	381	869	2,020	1,080	230	120	138
20	210	215	760	390	240	407	797	1,930	977	230	120	169
21	210	200	880	370	235	586	728	1,620	890	307	117	278
22	210	153	836	350	235	690	747	1,470	859	455	117	256
23	205	127	814	340	245	594	838	1,450	817	331	117	196
24	215	150	650	330	255	561	828	1,450	777	272	120	187
25	215	235	536	360	270	569	828	1,780	738	250	124	272
26	215	484	461	330	285	646	901	1,520	728	230	124	455
27	230	620	431	310	298	620	1,090	1,250	699	220	135	307
28	230	368	439	290	340	545	1,280	1,140	654	205	127	230
29	230	300	393	310	------	499	1,130	1,120	620	196	120	200
30	220	281	351	350	------	462	1,030	1,120	578	187	117	178
31	215	------	328	330	------	514	------	1,200	------	178	117	------
TOTAL	7,066	8,244	12,076	10,129	7,318	13,012	24,201	45,600	27,665	9,742	4,261	5,515
MEAN	228	275	390	327	261	420	807	1,471	922	314	137	184
MAX	344	620	880	578	340	690	1,280	2,100	1,630	537	173	455
MIN	202	127	108	140	200	289	470	944	578	178	117	117
CFSM	.20	.24	.34	.28	.23	.37	.70	1.28	.80	.27	.12	.16
IN.	.23	.27	.39	.33	.24	.42	.78	1.48	.89	.32	.14	.18
AC-FT	14,020	16,350	23,950	20,090	14,520	25,810	48,000	90,450	54,870	19,320	8,450	10,940

CAL YR 1972 TOTAL 503,099 MEAN 1,375 MAX 7,940 MIN 108 CFSM 1.20 IN 16.27 AC-FT 997,900
WTR YR 1973 TOTAL 174,829 MEAN 479 MAX 2,100 MIN 108 CFSM .42 IN 5.66 AC-FT 346,800

PEAK DISCHARGE (BASE, 3,300 CFS).--No peaks above base.

NOTE.--No gage-height record Jan. 20 to Mar. 1.

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 (107 m) upstream from State Highway 7 bridge, 5.0 mi (8.0 km) south of Nezperce, and at mile 15.6 (25.1 km.

DRAINAGE AREA.--150 sq mi (388 sq km), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 2,675 ft or 815 m (from topographic map).

AVERAGE DISCHARGE.--6 years, 45.0 cfs (1.274 cu m/s), 4.07 in/yr (103 mm/yr), 32,600 acre-ft/yr (40.2 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 217 cfs (6.15 cu m/s) Jan. 16 (gage height, 4.42 ft or 1.347 m); maximum gage height, 4.50 ft (1.372 m) Jan. 15 (backwater from ice); minimum discharge, 1.3 cfs (36.8 cu dm/s) July 15 (gage height, 2.40 ft or 0.732 m).
Period of record: Maximum discharge, 2,430 cfs (68.8 cu m/s) Mar. 18, 1972 (gage height, 7.85 ft or 2.393 m); minimum, 1.2 cfs (34.0 cu dm/s) Aug. 16-23, 1967, July 29 to Aug. 4, 1968 (gage height, 1.33 ft or 0.405 m).

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. 1-22, Sept. 25-30; stage-discharge relation affected by ice Dec. 4-15, Jan. 11-13, Feb. 7-9)

2.3	0.90	3.0	16
2.4	1.4	3.5	57
2.5	2.1	4.0	124
2.6	3.0	4.5	232
2.8	7.0		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	11	14	24	20	102	40	13	3.8	2.4	1.5	1.7
2	6.3	12	17	20	18	70	39	12	3.5	2.4	1.7	1.7
3	6.3	12	11	17	17	50	38	12	3.5	2.2	1.7	1.7
4	6.3	14	7.4	14	17	43	33	19	3.4	2.0	1.5	1.7
5	6.0	22	6.3	10	17	41	33	18	3.2	1.9	1.5	1.7
6	6.0	17	5.6	8.2	17	36	33	14	3.1	1.9	1.5	1.7
7	6.0	13	5.2	7.6	13	39	28	12	3.1	1.9	1.6	2.0
8	6.3	14	4.8	7.8	17	40	33	15	3.4	1.8	1.6	2.2
9	6.5	14	4.4	8.3	18	42	30	20	3.7	1.8	1.5	2.2
10	9.4	14	4.3	10	19	46	29	15	3.6	1.7	1.5	2.1
11	17	13	4.5	12	18	51	27	14	3.6	1.8	1.4	2.0
12	11	13	5.0	18	18	38	28	12	3.7	1.8	1.7	2.0
13	9.4	12	5.5	80	17	36	59	9.8	3.7	1.8	1.4	2.0
14	9.8	12	6.8	137	17	33	54	8.2	4.5	1.7	1.8	2.1
15	9.8	12	16	111	17	29	36	6.8	4.7	1.4	1.8	2.3
16	9.4	12	30	131	18	30	33	6.0	4.8	1.5	1.4	2.3
17	9.0	12	40	104	20	40	41	5.3	5.8	1.8	1.4	2.3
18	8.6	12	51	54	22	34	34	4.8	6.0	2.0	1.4	2.2
19	8.6	13	62	45	20	40	31	4.5	5.1	2.0	1.3	2.5
20	8.6	12	84	32	20	42	29	4.3	4.5	2.0	1.5	3.0
21	9.0	13	130	26	20	54	24	4.3	4.2	1.9	1.5	3.0
22	8.6	6.8	114	24	20	47	21	3.8	3.7	1.9	1.5	2.9
23	9.0	9.0	102	23	24	43	19	3.5	3.4	1.9	1.5	3.0
24	8.6	13	89	26	31	43	18	6.8	3.2	1.9	1.5	3.4
25	8.6	13	77	26	39	45	18	18	3.0	1.9	1.5	3.7
26	8.6	27	66	22	43	44	17	9.4	3.0	1.8	1.5	3.2
27	9.4	18	59	23	59	36	17	5.8	3.0	1.7	1.5	3.1
28	9.8	15	46	18	66	30	15	4.3	2.7	1.5	1.5	3.0
29	11	13	37	22	------	28	14	3.8	2.5	1.5	1.5	2.9
30	10	14	32	20	------	29	13	3.7	2.4	1.4	1.5	2.8
31	10	------	28	20	------	33	------	3.8	------	1.4	1.7	------
TOTAL	269.4	407.8	1,164.8	1,100.9	662	1,314	884	292.9	111.8	56.6	47.4	72.4
MEAN	8.69	13.6	37.6	35.5	23.6	42.4	29.5	9.45	3.73	1.83	1.53	2.41
MAX	17	27	130	137	66	102	59	20	6.0	2.4	1.8	3.7
MIN	6.0	6.8	4.3	7.6	13	28	13	3.5	2.4	1.4	1.3	1.7
CFSM	.06	.09	.25	.24	.16	.28	.20	.06	.02	.01	.01	.02
IN.	.07	.10	.29	.27	.16	.33	.22	.07	.03	.01	.01	.02
AC-FT	534	809	2,310	2,180	1,310	2,610	1,750	581	222	112	94	144

CAL YR 1972 TOTAL 36,828.1 MEAN 101 MAX 1,370 MIN 2.6 CFSM .67 IN 9.13 AC-FT 73,050
WTR YR 1973 TOTAL 6,384.0 MEAN 17.5 MAX 137 MIN 1.3 CFSM .12 IN 1.58 AC-FT 12,660

PEAK DISCHARGE (BASE, 300 CFS).--No peaks above base.

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 (17 m) upstream from State Highway 7 bridge at Orofino, and at mile 44.6 (71.8 km).

DRAINAGE AREA.--5,580 sq mi (14,450 sq km), 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 (301.996 m) above mean sea level (levels by Idaho Department of Highways). Prior to Sept. 30, 1938, nonrecording gage at site 0.1 mi (0.2 km) downstream at different datum.

AVERAGE DISCHARGE.--17 years, 8,607 cfs (243.8 cu m/s), 20.95 in/yr (532 mm/yr), 6,236,000 acre-ft/yr (7,690 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 36,100 cfs (1,020 cu m/s) May 18 (gage height, 11.79 ft or 3.594 m); minimum, 573 cfs (16.2 cu m/s) Dec. 7 (gage height, 2.11 ft or 0.643 m).
Period of record: Maximum discharge, 87,300 cfs (2,470 cu m/s) June 2, 1972 (gage height, 18.84 ft or 5.742 m, present datum); minimum observed, probably less than 250 cfs (7.08 cu m/s) Jan. 8, 1937, during period of ice effect; minimum gage height, 2.75 ft (0.838 m) Dec. 29, 1971.
Flood of June 8, 1964, reached a stage of 20.32 ft (6.194 m) present site and datum (discharge, 99,700 cfs or 2,820 cu m/s).

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,700	1,440	1,650	2,900	2,490	4,080	4,010	8,700	18,500	6,900	1,670	1,010
2	1,660	1,510	1,710	2,820	2,320	4,980	3,790	8,700	17,200	6,340	1,610	1,110
3	1,660	2,050	1,830	2,570	2,270	4,560	3,690	9,580	15,500	5,830	1,570	1,120
4	1,640	2,040	1,260	2,050	2,250	4,060	3,670	11,500	13,500	5,450	1,530	1,070
5	1,600	2,460	940	1,650	2,300	3,750	3,960	12,500	12,600	5,150	1,530	1,020
6	1,570	2,920	800	1,350	2,320	3,580	4,420	13,400	13,300	4,880	1,520	969
7	1,390	2,300	790	1,100	2,160	3,400	4,650	14,400	15,100	4,680	1,500	955
8	1,390	1,980	920	980	1,830	3,320	4,290	15,500	15,800	4,400	1,470	1,050
9	1,510	1,960	1,040	1,020	1,680	3,340	4,240	15,300	16,600	4,120	1,400	1,230
10	1,630	1,890	1,050	1,040	2,100	3,340	4,580	13,600	15,700	3,880	1,370	1,290
11	2,080	1,780	1,200	1,120	2,350	3,480	5,180	12,300	13,300	3,650	1,340	1,230
12	2,070	1,750	1,550	1,600	2,280	3,340	6,320	11,300	11,900	3,440	1,330	1,100
13	1,940	1,690	2,180	2,400	2,130	3,240	8,130	12,100	11,500	3,280	1,350	1,010
14	1,810	1,630	2,560	5,400	2,040	3,160	9,120	15,600	13,700	3,140	1,330	956
15	1,690	1,570	2,630	6,100	2,020	3,020	8,550	20,600	21,800	3,020	1,250	933
16	1,660	1,650	2,860	6,320	2,040	2,980	7,950	26,900	15,800	2,860	1,180	1,060
17	1,640	1,620	3,100	7,560	2,050	3,200	8,640	32,000	14,200	2,720	1,130	1,130
18	1,600	1,600	3,620	6,500	2,130	3,320	8,310	33,500	14,100	2,590	1,100	1,070
19	1,560	1,590	4,900	5,400	2,120	3,300	7,350	33,000	12,700	2,480	1,090	1,040
20	1,390	1,600	5,320	4,630	2,040	3,260	6,680	31,700	11,800	2,400	1,090	1,100
21	1,500	1,490	6,850	4,100	2,010	3,630	6,320	26,000	11,300	2,460	1,070	1,550
22	1,500	1,360	10,600	3,600	2,010	4,330	6,140	22,400	11,200	3,140	1,050	1,930
23	1,470	1,100	9,550	3,220	2,050	4,520	6,320	21,800	11,300	2,880	1,020	1,700
24	1,460	944	8,100	3,180	2,150	4,420	6,400	22,700	10,900	2,490	1,040	1,610
25	1,500	1,170	6,660	3,240	2,210	4,470	6,340	26,400	10,100	2,300	1,050	2,170
26	1,530	1,960	5,050	3,100	2,480	4,770	6,660	23,200	9,440	2,180	1,050	2,970
27	1,610	3,080	4,290	2,680	2,700	4,910	7,770	18,600	9,060	2,070	1,060	2,450
28	1,690	2,270	4,380	2,390	3,180	4,490	9,690	16,500	8,580	1,990	1,060	1,900
29	1,690	1,780	3,960	2,510	------	4,170	9,510	15,900	8,310	1,900	1,030	1,640
30	1,620	1,680	3,360	2,640	------	3,900	9,030	16,000	7,680	1,820	990	1,490
31	1,500	------	3,060	2,630	------	3,900	------	18,000	------	1,760	972	------
TOTAL	50,260	53,864	107,770	97,800	61,710	118,220	191,710	579,680	392,470	106,200	38,752	40,863
MEAN	1,621	1,795	3,476	3,155	2,204	3,814	6,390	18,700	13,080	3,426	1,250	1,362
MAX	2,080	3,080	10,600	7,560	3,180	4,980	9,690	33,500	21,800	6,900	1,670	2,970
MIN	1,390	944	790	980	1,680	2,980	3,670	8,700	7,680	1,760	972	933
CFSM	.29	.32	.62	.57	.40	.68	1.15	3.35	2.34	.61	.22	.24
IN.	.34	.36	.72	.65	.41	.79	1.28	3.86	2.62	.71	.26	.27
AC-FT	99,690	106,800	213,800	194,000	122,400	234,500	380,300	1,150M	778,500	210,600	76,860	81,050

CAL YR 1972 TOTAL 4,797,544 MEAN 13,110 MAX 81,200 MIN 790 CFSM 2.35 IN 31.98 AC-FT 9,516,000
WTR YR 1973 TOTAL 1,839,299 MEAN 5,039 MAX 33,500 MIN 790 CFSM .90 IN 12.26 AC-FT 3,648,000

PEAK DISCHARGE (BASE, 12,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-22	1630	7.97	16,000	5-18	1130	11.79	36,100
5- 8	1900	8.04	16,300	6-15	0430	9.70	24,200

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 mi (0.2 km) upstream from Beaver Creek, 1.7 mi (2.7 km) downstream from Canyon ranger station, and at mile 58.0 (93.3 km).

DRAINAGE AREA.--1,360 sq mi (3,520 sq km), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 1,660.00 ft (505.968 m) above mean sea level.

AVERAGE DISCHARGE.--6 years (1967-73), 3,771 cfs (106.8 cu m/s), 37.65 in/yr (956 mm/yr), 2,732,000 acre-ft/yr (3,370 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 10,300 cfs (292 cu m/s) May 18 (gage height, 11.31 ft or 3.447 m); minimum, 200 cfs (5.66 cu m/s) Dec. 5 (gage height, 5.00 ft or 1.524 m).
Period of record: Maximum discharge, 31,800 cfs (901 cu m/s) June 1, 1972 (gage height, 17.04 ft or 5.194 m); minimum, 200 cfs (5.66 cu m/s) Dec. 5, 1972 (gage height, 5.00 ft or 1.524 m).

REMARKS.--Records good except those for December and January, which are fair. No regulation or diversion above station. Records of water temperature for the water year 1973 are published in Part 2 of this report.

Rating tables (gage height, in feet, and discharge, in cubic feet per second)
(Stage-discharge relation affected by ice Dec. 6-12, Jan. 5-14)

Oct. 1 to Dec. 18				Dec. 19 to Sept. 30			
5.0	200	7.0	1,430	5.7	521	9.0	4,800
5.5	426	8.0	2,680	6.0	730	10.0	6,900
6.0	710	9.0	4,660	6.5	1,150	11.0	9,400
6.5	1,020	10.0	7,110	7.0	1,700	11.5	10,800
				8.0	3,100		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	905	842	813	1,510	1,430	2,100	1,650	4,010	4,840	2,160	847	664
2	898	1,050	950	1,480	1,280	2,350	1,600	4,080	4,670	2,040	831	636
3	884	1,120	878	1,300	1,280	1,920	1,620	4,340	4,360	1,950	815	608
4	874	1,080	426	1,100	1,350	1,750	1,700	4,690	4,030	1,860	823	587
5	869	1,460	253	1,040	1,250	1,700	1,930	4,880	3,870	1,800	799	574
6	853	1,170	280	980	1,220	1,620	2,130	5,170	3,910	1,720	815	554
7	848	985	420	880	1,040	1,560	1,950	5,350	4,450	1,690	799	560
8	848	944	540	760	879	1,520	1,880	5,760	4,400	1,600	768	629
9	843	938	580	820	1,010	1,550	2,030	5,370	4,500	1,550	753	629
10	961	896	620	920	1,360	1,600	2,290	5,030	4,080	1,490	738	601
11	1,300	878	740	1,200	1,240	1,700	2,710	4,630	3,690	1,420	730	567
12	1,030	854	860	1,700	1,200	1,560	3,410	4,430	3,480	1,370	730	547
13	938	830	944	2,200	1,100	1,540	3,860	4,630	3,380	1,340	715	521
14	918	812	944	2,700	1,060	1,480	4,030	5,410	4,400	1,300	700	528
15	887	842	902	3,000	1,100	1,420	3,560	6,720	4,760	1,270	708	580
16	872	830	902	3,700	1,100	1,420	3,590	8,460	3,910	1,230	671	587
17	866	818	992	4,100	1,080	1,560	4,010	9,320	4,180	1,200	650	567
18	855	806	1,230	3,500	1,070	1,490	3,520	9,610	4,060	1,170	650	554
19	844	830	1,800	2,900	1,010	1,460	3,210	9,400	3,770	1,130	650	594
20	842	800	2,900	2,600	989	1,420	3,050	8,920	3,510	1,110	643	871
21	844	776	4,200	2,350	972	1,570	2,910	7,300	3,350	1,180	622	1,100
22	842	692	6,200	2,000	1,010	1,750	3,070	6,610	3,270	1,140	622	879
23	837	528	4,600	1,900	1,100	1,800	3,240	6,360	3,190	1,100	643	784
24	846	626	4,200	1,850	1,100	1,860	3,080	6,430	3,130	1,050	643	980
25	841	890	3,200	1,930	1,190	1,930	3,190	7,090	2,930	1,010	636	1,340
26	904	938	2,600	1,800	1,310	2,240	3,380	5,970	2,850	989	643	1,210
27	975	964	2,300	1,490	1,360	2,120	4,340	5,270	2,710	963	629	839
28	944	758	2,260	1,360	1,550	1,930	4,800	4,950	2,540	937	601	715
29	902	746	1,930	1,470	------	1,820	4,310	4,730	2,410	912	587	664
30	842	824	1,700	1,560	------	1,760	4,200	4,730	2,240	887	580	636
31	806	------	1,620	1,580	------	1,720	------	4,950	------	871	608	------
TOTAL	27,718	26,527	52,784	57,680	32,640	53,220	90,250	184,600	110,870	41,439	21,649	21,105
MEAN	894	884	1,703	1,861	1,166	1,717	3,008	5,955	3,696	1,337	698	704
MAX	1,300	1,460	6,200	4,100	1,550	2,350	4,800	9,610	4,840	2,160	847	1,340
MIN	806	528	253	760	879	1,420	1,600	4,010	2,240	871	580	521
CFSM	.66	.65	1.25	1.37	.86	1.26	2.21	4.38	2.72	.98	.51	.52
IN.	.76	.73	1.44	1.58	.89	1.46	2.47	5.05	3.03	1.13	.59	.58
AC-FT	54,980	52,620	104,700	114,400	64,740	105,600	179,000	366,200	219,900	82,190	42,940	41,860

CAL YR 1972 TOTAL 1,928,414 MEAN 5,269 MAX 30,300 MIN 253 CFSM 3.87 IN 52.75 AC-FT 3,825,000
WTR YR 1973 TOTAL 720,482 MEAN 1,974 MAX 9,610 MIN 253 CFSM 1.45 IN 19.71 AC-FT 1,429,000

PEAK DISCHARGE (BASE, 12,000 CFS).--No peaks above base.

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 (110 m) upstream from former bridge site, 1.2 mi (1.9 km) upstream from maximum pool elevation of Dworshak Reservoir, 4.0 mi (6.5 km) upstream from Breakfast Creek, 8.0 mi (13.5 km) above mouth, and 18 mi (29 km) northeast of Elk River.

DRAINAGE AREA.--260 sq mi (670 sq km), approximately.

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

GAGE.--Water-stage and temperature recorders. Altitude of gage is 1,670 ft (509.0 m) (from topographic map).

EXTREMES.--Current year: Maximum discharge, 2,580 cfs (73.1 cu m/s) May 17 (gage height, 7.29 ft or 2.222 m); minimum daily discharge, 100 cfs (2.83 cu m/s) Dec. 5.
Period of record: Maximum daily discharge, 6,800 cfs (193 cu m/s) June 1, 1972, by hydrologic study of runoff characteristics; maximum gage height, 12.75 ft or 3.886 m May 28, 1971 (backwater from log jam); minimum daily discharge, 100 cfs (2.83 cu m/s) Dec. 5, 1972.

REMARKS.--Records fair, except those for December to February, which are poor.

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

4.6	74	6.0	900
4.8	134	6.5	1,450
5.1	258	7.2	2,440
5.5	492		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	204	230	280	290	542	343	949	1,340	500	195	131
2	204	253	310	265	280	459	332	1,010	1,270	479	191	131
3	200	263	210	240	275	389	332	1,080	1,170	446	187	128
4	196	355	150	210	270	360	343	1,180	1,090	427	187	125
5	183	450	100	180	255	354	395	1,170	1,090	414	183	122
6	179	343	110	150	250	337	408	1,250	1,130	395	187	121
7	179	299	120	130	230	326	377	1,310	1,390	383	179	121
8	175	284	130	140	220	321	395	1,440	1,260	366	175	121
9	175	273	145	145	240	321	439	1,310	1,330	354	172	121
10	246	263	150	150	290	360	514	1,250	1,120	337	168	121
11	459	253	160	170	285	377	609	1,140	1,030	321	168	118
12	278	244	170	200	265	348	764	1,130	988	310	168	115
13	249	235	185	270	245	343	827	1,270	969	305	160	112
14	263	240	200	420	250	332	864	1,520	1,170	294	156	112
15	240	240	210	720	250	321	800	1,840	1,020	294	149	112
16	230	244	225	1,070	245	315	845	2,130	920	284	149	112
17	226	240	250	1,040	240	348	920	2,290	949	269	145	112
18	217	235	290	880	235	321	791	2,360	864	264	145	112
19	212	235	360	730	232	315	721	2,280	791	254	145	124
20	208	235	540	620	230	315	688	2,070	755	249	145	208
21	208	221	1,120	550	228	332	671	1,790	747	249	138	252
22	204	193	1,080	480	230	343	721	1,700	755	249	138	212
23	200	190	840	450	235	354	755	1,670	773	240	138	184
24	200	216	680	430	250	366	721	1,710	818	235	142	295
25	196	223	620	410	280	383	738	1,740	730	221	149	257
26	241	290	520	360	300	433	827	1,480	764	221	142	195
27	237	220	430	320	330	395	1,040	1,350	688	221	142	159
28	228	180	410	360	410	371	1,060	1,330	639	217	135	146
29	212	225	380	350	------	354	978	1,290	594	208	128	138
30	192	233	320	340	------	354	959	1,330	535	204	128	133
31	192	------	300	310	------	348	------	1,450	------	199	129	------
TOTAL	6,833	7,579	10,945	12,370	7,340	11,137	20,177	46,819	28,689	9,409	4,863	4,450
MEAN	220	253	353	399	262	359	673	1,510	956	304	157	148
MAX	459	450	1,120	1,070	410	542	1,060	2,360	1,390	500	195	295
MIN	175	180	100	130	220	315	332	949	535	199	128	112
CFSM	.85	.97	1.36	1.53	1.01	1.38	2.59	5.81	3.68	1.17	.60	.57
IN.	.98	1.08	1.57	1.77	1.05	1.59	2.89	6.70	4.10	1.35	.70	.64
AC-FT	13,550	15,030	21,710	24,540	14,560	22,090	40,020	92,870	56,900	18,660	9,650	8,830

CAL YR 1972 TOTAL 377,438 MEAN 1,031 MAX 6,800 MIN 100 CFSM 3.97 IN 54.00 AC-FT 748,600
WTR YR 1973 TOTAL 170,611 MEAN 467 MAX 2,360 MIN 100 CFSM 1.80 IN 24.41 AC-FT 338,400

PEAK DISCHARGE (BASE, 3,500 CFS).--No peaks above base.

NOTE.--No gage-height record Nov. 26 to Feb. 28.

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 (396 m) above maximum pool elevation of Dworshak Reservoir, 0.4 mi (0.6 km) downstream from Floodwood Creek, and 13 mi (20.9 km) northeast of Elk River.

DRAINAGE AREA.--130 sq mi (337 sq km), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,690 ft or 515 m (from topographic map).

EXTREMES.--Current year: Maximum discharge, 1,700 cfs (48.1 cu m/s) May 17 (gage height, 4.72 ft or 1.439 m); maximum gage height, 12.73 ft (2.743 m) Dec. 16 (backwater from ice jam); minimum daily discharge, 3.0 cfs (85.0 cu dm/s) Dec. 8, 9.
Period of record: Maximum discharge, 2,820 cfs (79.9 cu m/s) May 4, 1971 (gage height, 5.36 ft or 1.634 m); maximum gage height, 5.42 ft (1.652 m) May 17, 1972; minimum daily discharge, 3.0 cfs (85.0 cu dm/s) Dec. 8, 9, 1973 (gage height, 2.27 ft or 0.692 m); minimum gage height, 1.45 ft (0.442 m) Dec. 8, 9, 1973.

REMARKS.--Records good except those for winter period, which are fair.

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

2.2	29	3.3	367
2.4	61	3.6	560
2.6	103	4.0	890
2.9	190		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	92	88	177	157	341	209	414	368	151	67	52
2	113	148	128	164	151	306	205	426	362	145	67	51
3	106	139	69	134	148	265	187	445	336	139	65	49
4	104	205	60	130	148	244	170	491	316	136	65	47
5	99	232	54	126	139	220	256	471	301	131	63	47
6	99	151	53	124	136	213	261	477	297	128	69	46
7	99	128	57	124	126	205	240	484	326	128	61	46
8	99	118	62	126	120	202	248	546	306	123	59	47
9	99	113	65	132	125	202	278	491	321	118	58	49
10	131	109	66	140	145	232	326	491	283	111	56	47
11	220	106	74	150	140	244	385	451	265	106	58	46
12	116	101	78	172	130	228	433	439	261	104	58	44
13	109	99	84	205	126	224	458	464	248	101	54	43
14	109	99	94	280	123	205	439	504	283	99	52	43
15	101	101	100	354	123	195	408	590	252	97	51	44
16	97	101	115	891	123	195	433	675	248	94	49	46
17	97	99	140	863	121	217	445	715	265	92	49	46
18	94	99	175	553	121	198	390	723	256	90	51	46
19	92	101	230	433	118	195	357	699	228	88	51	58
20	92	94	347	352	116	195	341	635	213	85	49	130
21	92	90	890	311	116	209	341	568	202	90	49	126
22	90	83	854	269	118	232	357	525	195	88	47	95
23	90	83	590	248	121	244	362	497	195	85	49	101
24	90	90	659	236	123	256	352	511	202	83	52	140
25	90	90	420	224	148	283	362	539	198	79	56	137
26	126	109	321	202	154	306	396	458	205	75	51	89
27	109	90	278	174	154	278	464	420	184	75	51	75
28	104	77	265	198	184	256	451	402	170	73	47	70
29	97	90	228	198	------	240	426	379	164	71	47	67
30	90	90	205	187	------	228	420	379	154	69	47	65
31	88	------	191	174	------	220	------	396	------	69	49	------
TOTAL	3,255	3,327	7,040	8,051	3,754	7,278	10,400	15,705	7,604	3,123	1,697	1,992
MEAN	105	111	227	260	134	235	347	507	253	101	54.7	66.4
MAX	220	232	890	891	184	341	464	723	368	151	69	140
MIN	88	77	53	124	116	195	170	379	154	69	47	43
CFSM	.81	.85	1.75	2.00	1.03	1.81	2.67	3.90	1.95	.78	.42	.51
IN.	.93	.95	2.01	2.30	1.07	2.08	2.98	4.49	2.18	.89	.49	.57
AC-FT	6,460	6,600	13,960	15,970	7,450	14,440	20,630	31,150	15,080	6,190	3,370	3,950

CAL YR 1972 TOTAL 186,709 MEAN 510 MAX 2,490 MIN 53 CFSM 3.92 IN 53.43 AC-FT 370,300
WTR YR 1973 TOTAL 73,226 MEAN 201 MAX 891 MIN 43 CFSM 1.55 IN 20.95 AC-FT 145,200

PEAK DISCHARGE (BASE, 1,300 CFS).--Dec. 21 (2200) 1,700 cfs (4.72 ft); Jan. 16 (1900) 1,400 cfs (4.49 ft).

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 mi (2.4 km) northeast of Ahsahka, and at mile 2.0 (3.2 km).

DRAINAGE AREA.--2,440 sq mi (6,320 sq km), approximately. Mean altitude, 4,220 ft (1,286 m).

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 3,435,000 acre-ft (4,235 cu hm) July 2-4 (elevation, 1,598.2 ft or 487.13 m); minimum observed, 2,209,000 acre-ft (2,724 cu hm) Dec. 13 (elevation, 1,517.7 ft or 462.60 m).

REMARKS.--Reservoir is formed by straight-axis concrete gravity dam. Total capacity is 3,495,000 acre-ft (4,309 cu hm) between elevations 970.0 ft or 295.67 m (bottom of bypass valve) and 1,599.5 ft or 487.53 m (maximum pool elevation). Inactive storage for minimum power head is 1,452,000 acre-ft or 1,790 cu hm (elevation, 1,445.0 ft or 440.44 m). Storage began Sept. 27, 1971. Dworshak Dam is used to regulate annual floodwaters of the North Fork Clearwater River and for power generation.

COOPERATION.--Gage-height record and capacity table furnished by Corps of Engineers.

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,494	2,492	2,363	2,291	2,281	2,349	2,508	2,741	3,211	3,433	3,314	3,164
2	2,494	2,494	2,352	2,291	2,281	2,359	2,512	2,750	3,223	3,435	3,310	3,149
3	2,492	2,495	2,342	2,291	2,281	2,365	2,516	2,760	3,235	3,435	3,305	3,137
4	2,492	2,495	2,334	2,294	2,281	2,371	2,520	2,775	3,244	3,435	3,302	3,122
5	2,492	2,497	2,322	2,292	2,281	2,377	2,526	2,788	3,254	3,433	3,296	3,106
6	2,494	2,497	2,305	2,292	2,282	2,382	2,531	2,803	3,263	3,431	3,293	3,091
7	2,494	2,495	2,288	2,292	2,283	2,386	2,537	2,812	3,275	3,430	3,289	3,085
8	2,495	2,494	2,273	2,291	2,285	2,392	2,541	2,829	3,286	3,426	3,284	3,080
9	2,495	2,492	2,257	2,288	2,287	2,396	2,545	2,845	3,296	3,421	3,280	3,075
10	2,498	2,491	2,240	2,283	2,291	2,402	2,552	2,855	3,307	-	3,275	3,066
11	2,499	2,491	2,224	2,278	2,294	2,408	2,560	2,868	3,316	3,417	3,272	3,061
12	2,499	2,491	2,211	2,273	2,299	2,412	2,568	2,879	3,325	3,417	3,268	3,037
13	2,498	2,491	2,209	2,274	2,300	2,411	2,579	2,893	3,332	3,415	3,265	3,023
14	2,497	2,490	2,210	2,282	2,303	2,421	2,591	2,907	3,344	3,408	3,259	3,009
15	2,495	2,485	2,210	2,285	2,304	2,425	2,601	2,926	3,355	3,406	3,256	3,001
16	2,492	2,476	2,210	2,294	2,308	2,429	2,611	2,950	3,364	3,406	3,249	2,992
17	2,491	2,468	2,213	2,303	2,309	2,433	2,624	2,978	3,375	3,400	3,245	2,978
18	2,491	2,459	2,214	2,304	2,310	2,439	2,633	3,005	3,382	3,393	3,240	2,963
19	2,491	2,451	2,216	2,299	2,326	2,444	2,641	3,032	3,389	3,384	3,237	2,949
20	2,492	2,443	2,225	2,287	2,314	2,447	2,650	3,056	3,395	3,375	3,231	2,936
21	2,492	2,435	2,249	2,281	2,317	2,452	2,659	3,075	3,400	3,366	3,226	2,925
22	2,491	2,425	2,269	2,279	2,319	2,458	2,666	3,096	3,404	3,357	-	2,922
23	2,491	2,421	2,277	2,278	2,323	2,463	2,675	3,112	3,408	3,350	3,217	2,920
24	2,491	2,417	2,287	2,276	2,326	2,469	2,684	3,127	3,411	3,348	3,214	2,911
25	2,491	2,412	2,292	2,274	2,330	2,474	2,688	3,142	3,415	3,344	3,214	2,899
26	2,491	2,408	2,294	2,273	2,332	2,481	2,697	3,156	3,419	3,339	3,212	2,887
27	2,492	2,402	2,294	2,274	2,336	2,488	2,709	3,166	3,421	3,335	3,207	2,873
28	2,492	2,396	2,294	2,276	2,340	2,492	2,720	3,176	3,422	3,332	3,204	2,859
29	2,492	2,385	2,294	2,277	------	2,498	2,730	3,185	3,426	3,328	3,198	2,855
30	2,492	2,374	2,292	2,278	------	2,502	2,735	3,193	3,430	3,323	3,190	2,851
31	2,492	------	2,292	2,279	------	2,505	------	3,202	------	3,319	3,178	------
MAX	2,499	2,497	2,363	2,304	2,340	2,505	2,735	3,202	3,430	3,435	3,314	3,164
MIN	2,491	2,374	2,209	2,273	2,281	2,349	2,508	2,741	3,211	3,319	3,178	2,851
(†)	1,539.3	1,530.6	1,524.3	1,523.3	1,528.0	1,540.0	1,556.1	1,585.1	1,597.9	1,591.8	1,583.7	1,563.7
(‡)	-3	-118	-82	-13	+61	+165	+230	+467	+228	-111	-141	-327

CAL YR 1972..... ‡ +2,029.6
WTR YR 1973..... ‡ +356

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

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 mi (3.2 km) upstream from Big Canyon Creek, 2.2 mi (3.5 km) northeast of Peck, 3 mi (4.8 km) downstream from North Fork Clearwater River, and at mile 37.4 (60.2 km).

DRAINAGE AREA.--8,040 sq mi (20,800 sq km), approximately.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 930 ft (283 m) (from topographic map).

AVERAGE DISCHARGE.--9 years, 15,230 cfs (431.3 cu m/s), 11,030,000 acre-ft/yr (13,600 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 36,900 cfs (1,040 cu m/s) May 18 (gage height, 12.46 ft or 3.798 m); minimum, 2,070 cfs (58.6 cu m/s) Dec. 14 (gage height, 3.00 ft or 0.914 m).
Period of record: Maximum discharge, 107,200 cfs (3,040 cu m/s) May 13, 1971 (gage height, 21.67 ft or 6.605 m); maximum gage height, 25.00 ft (7.620 m) Dec. 28, 1967 (ice jam); minimum discharge, 1,260 cfs (35.7 cu m/s) Oct. 31, 1971 (gage height, 2.24 ft or 0.683 m).
Flood of June 8, 1964, reached a stage of 23.95 ft (7.300 m), from floodmark (discharge, 118,000 cfs or 3,340 cu m/s), from rating extended above 89,100 cfs (2,520 cu m/s).

REMARKS.--Records excellent. Flow partly regulated by Dworshak Reservoir beginning September 1971. Records of water temperatures for the water year 1973 are published in Part 2 of this report.

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

2.7	1,760	7.0	11,180
3.0	2,120	9.0	19,060
4.0	3,650	11.0	28,600
5.0	5,690	13.0	40,100
6.0	8,300		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,560	2,700	8,570	5,990	4,650	4,910	5,480	12,400	21,000	8,060	4,630	8,570
2	3,530	2,750	8,680	5,870	4,760	5,710	5,100	10,200	18,200	7,980	4,550	8,680
3	3,530	3,720	8,190	4,950	4,620	5,210	4,890	10,600	16,500	8,380	4,390	8,060
4	3,060	4,220	6,360	3,980	4,590	4,640	4,760	12,100	14,400	8,070	4,430	8,250
5	2,620	4,590	6,080	3,580	3,890	4,470	5,150	13,100	13,400	7,860	4,390	8,650
6	2,550	5,190	8,970	3,740	3,960	4,220	5,550	13,700	14,100	7,800	4,370	8,570
7	2,490	4,780	8,820	3,520	3,190	4,020	5,500	16,400	15,900	8,100	4,250	5,540
8	2,490	4,350	9,110	3,040	2,730	4,060	5,170	16,400	16,800	8,180	4,210	4,430
9	2,420	4,200	9,310	3,520	2,480	4,310	5,120	16,400	17,500	8,240	4,170	4,490
10	2,660	3,690	9,170	5,080	2,820	4,140	5,600	15,300	16,700	7,620	4,120	5,580
11	3,760	3,630	9,250	6,610	3,030	4,430	6,160	13,100	14,200	5,870	4,100	8,930
12	4,240	3,260	7,750	7,080	2,980	4,290	7,190	11,900	12,600	5,460	4,120	8,810
13	3,960	3,000	3,580	7,830	2,780	4,240	8,910	12,500	12,400	5,870	4,120	8,040
14	3,990	3,110	2,200	10,100	2,750	4,120	9,780	16,200	14,200	7,750	4,120	8,560
15	3,990	5,250	2,250	11,200	2,980	4,020	9,280	21,700	23,000	5,590	4,040	5,700
16	3,850	6,950	2,380	12,400	3,030	3,850	8,740	27,400	17,200	4,350	4,000	5,830
17	3,690	7,030	2,600	13,300	3,060	3,890	9,280	32,800	14,900	5,900	3,990	7,890
18	3,090	6,920	3,520	13,700	3,190	4,140	9,050	34,200	16,000	8,070	3,970	8,800
19	2,650	6,900	5,030	14,400	3,080	4,020	8,180	33,600	14,900	8,020	3,950	8,710
20	2,810	6,950	5,080	15,100	2,920	4,020	7,540	32,400	13,000	7,940	3,990	8,840
21	2,820	6,820	7,270	12,700	2,660	4,590	7,140	27,100	13,600	7,990	3,910	8,830
22	2,820	6,660	14,200	8,100	2,580	5,250	6,960	23,300	13,500	8,540	3,890	4,510
23	2,810	4,550	15,400	7,610	2,600	5,380	7,240	23,500	13,600	7,640	3,870	4,190
24	2,760	3,620	12,600	7,590	2,680	5,390	7,540	25,100	13,100	5,460	3,800	7,310
25	2,820	5,210	11,000	7,510	3,010	5,390	8,600	29,100	12,300	5,300	2,460	9,330
26	2,820	5,980	9,280	6,740	3,510	5,780	7,560	26,000	11,700	5,100	2,460	10,500
27	2,820	6,920	8,600	5,390	3,630	5,940	8,910	21,500	11,300	5,020	3,470	10,000
28	2,920	6,850	8,820	4,410	4,100	5,460	10,800	19,300	11,000	4,930	3,930	9,510
29	2,920	8,380	7,940	4,180	------	5,320	10,700	18,600	9,890	4,950	3,910	4,790
30	2,840	8,400	6,460	4,660	------	5,300	12,400	18,700	8,710	4,970	4,760	4,570
31	2,760	------	6,130	4,970	------	5,730	------	20,600	------	4,780	7,270	------
TOTAL	96,050	156,580	234,600	228,850	92,260	146,240	224,280	625,200	435,600	209,790	127,640	224,470
MEAN	3,098	5,219	7,568	7,382	3,295	4,717	7,476	20,170	14,520	6,767	4,117	7,482
MAX	4,240	8,400	15,400	15,100	4,760	5,940	12,400	34,200	23,000	8,540	7,270	10,500
MIN	2,420	2,700	2,200	3,040	2,480	3,850	4,760	10,200	8,710	4,350	2,460	4,190
AC-FT	190,500	310,600	465,300	453,900	183,000	290,100	444,900	1,240M	864,000	416,100	253,200	445,200

CAL YR 1972 TOTAL 7,176,680 MEAN 19,610 MAX 95,700 MIN 2,200 AC-FT 14,230,000
WTR YR 1973 TOTAL 2,801,560 MEAN 7,676 MAX 34,200 MIN 2,200 AC-FT 5,557,000

M Expressed in thousands.

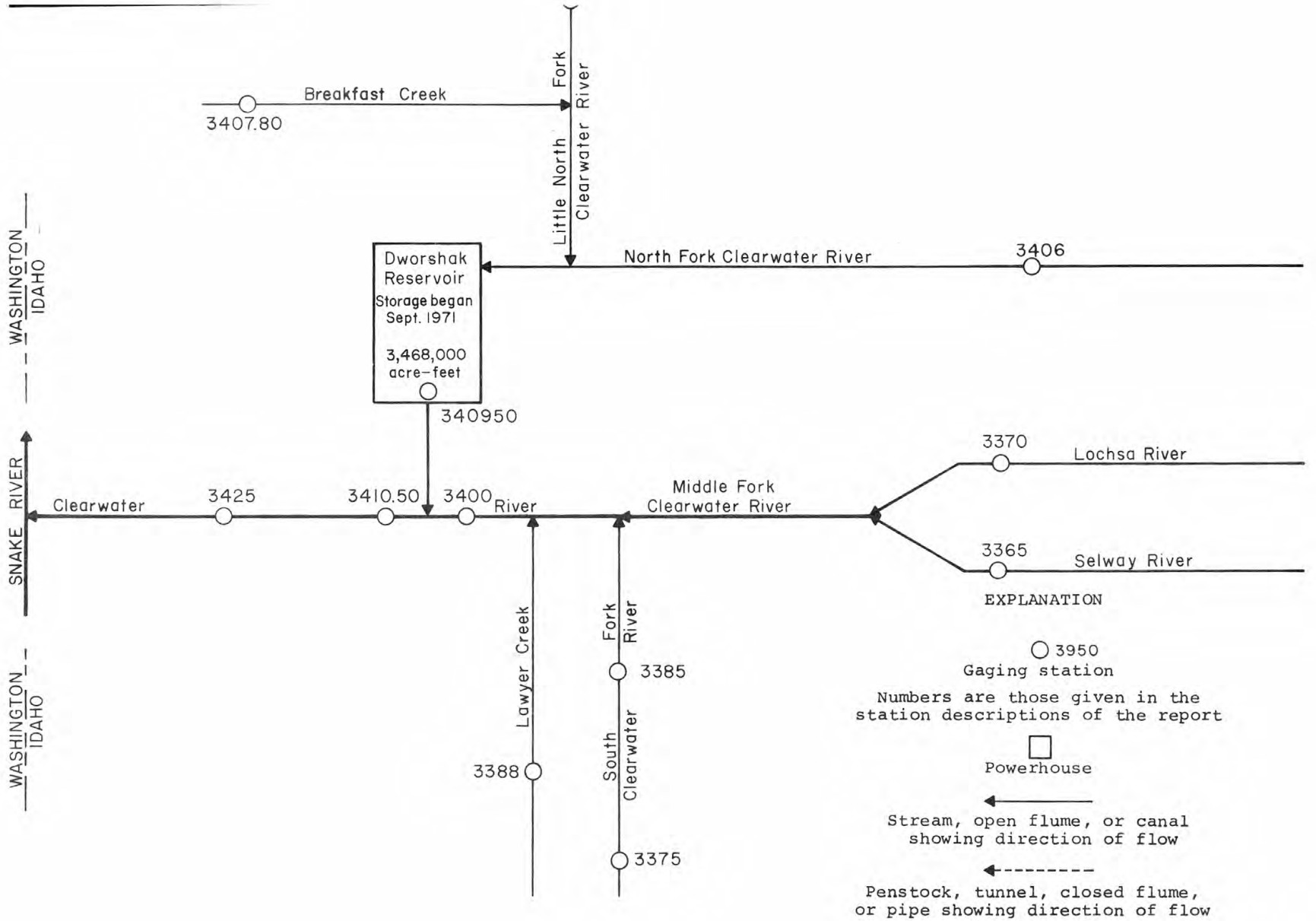

FIGURE 12. Schematic diagram showing Clearwater River basin.

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 mi (0.6 km) downstream from Lapwai Creek, 0.5 mi (0.8 km) west of Spalding Post Office, 3,100 ft (940 m) downstream from bridge on U.S. Highway 12, and at mile 11.6 (18.7 km).

DRAINAGE AREA.--9,570 sq mi (24,790 sq km), approximately. Mean altitude, 4,360 ft (1,329 m).

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 or 234.85 (estimated from datum of gage 3,100 ft or 945 m upstream). See WRD for Idaho 1966-68 for history of changes prior to Oct. 1, 1962.

AVERAGE DISCHARGE.--51 years (1910-13, 1925-73), 15,360 cfs (435.0 cu m/s), 11,130,000 acre-ft/yr (13,700 cu hm/yr); 15-year base period (1952-67), 15,970 cfs (452.3 cu m/s).

EXTREMES.--Current year: Maximum discharge, 36,900 cfs (1,040 cu m/s) May 18 (gage height, 10.30 ft or 3.139 m); minimum, 1,710 cfs (48.4 cu m/s) Dec. 14 (gage height, 2.39 ft or 0.728 m).
Period of record: Maximum discharge, 177,000 cfs (5,010 cu m/s) May 29, 1948 (gage height, 23.76 ft or 7.242 m); maximum gage height, 27.77 ft (8.464 m) Feb. 5, 1963, from floodmark (ice jam); minimum daily discharge, 500 cfs (14.2 cu m/s) Jan. 9, 1937, Dec. 1, 1952.
Flood of June 1894 reached a stage of 20.8 ft (6.34 m), site and datum in use 1924-26 (discharge, 136,000 cfs or 3,850 cu m/s).

REMARKS.--Records excellent. Diversions above station for irrigation of about 130 acres or 53 sq hm (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, water temperatures, and suspended- and bed-sediment loads for the water year 1973 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 May 17 to June 26)

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	12,800	17.0	100,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,610	2,610	8,660	6,210	5,010	6,370	5,930	13,500	20,900	8,240	4,530	8,640
2	3,560	2,590	8,800	6,110	4,790	7,540	5,570	10,400	18,200	7,750	4,570	8,770
3	3,490	3,150	8,550	5,500	4,660	6,660	5,040	10,600	16,700	8,480	4,430	8,150
4	3,280	4,270	6,880	4,040	4,630	5,730	4,920	12,000	14,500	8,100	4,400	8,370
5	2,570	4,420	4,980	3,510	4,340	5,240	5,180	13,300	13,400	7,820	4,330	8,730
6	2,490	5,270	9,140	3,490	4,340	4,920	5,660	14,000	13,600	7,920	4,320	8,670
7	2,420	5,060	8,950	3,410	3,190	4,530	5,890	15,900	15,400	8,200	4,200	6,600
8	2,360	4,500	9,060	2,990	2,750	4,450	5,540	16,800	16,600	8,480	4,180	4,050
9	2,300	4,110	9,440	2,970	2,360	4,760	5,340	17,100	17,100	8,380	4,130	4,180
10	2,360	3,770	9,330	4,420	2,550	4,810	5,640	15,400	17,100	8,030	4,070	4,340
11	3,320	3,440	9,370	6,270	2,930	5,470	6,370	14,600	14,700	6,660	4,020	8,860
12	4,370	3,490	8,950	7,290	2,910	5,060	7,120	12,500	12,900	5,880	4,020	8,940
13	4,010	2,730	4,290	8,800	2,800	4,920	9,060	12,600	12,500	5,530	4,040	8,190
14	3,870	2,990	1,760	11,400	2,530	4,730	10,100	15,700	13,000	7,540	4,040	8,460
15	3,970	4,040	1,850	12,700	2,880	4,500	10,100	21,200	22,800	6,530	3,980	6,330
16	3,890	7,220	1,960	15,800	2,880	4,340	9,160	26,900	18,000	4,320	3,920	5,670
17	3,700	7,290	2,170	16,700	3,020	4,290	9,750	32,400	14,900	5,120	3,850	7,150
18	3,350	7,190	2,650	15,300	3,190	4,600	9,860	34,200	15,700	8,270	3,830	8,890
19	2,420	7,120	5,990	15,600	3,190	4,630	8,900	34,000	15,800	8,270	3,840	8,820
20	2,710	7,190	5,120	15,900	2,950	4,370	8,100	32,600	13,000	8,170	3,830	8,880
21	2,750	7,050	9,030	14,900	2,770	4,870	7,600	28,000	13,800	8,060	3,820	8,880
22	2,710	6,910	15,400	8,800	2,570	5,670	7,310	23,300	13,600	8,550	3,760	5,540
23	2,690	6,180	18,000	8,200	2,650	5,960	7,410	22,700	13,700	8,340	3,740	3,990
24	2,630	2,610	14,700	8,060	2,670	5,870	7,840	24,400	13,400	5,790	3,730	5,670
25	2,690	5,060	12,900	8,030	2,950	5,820	8,890	28,200	12,600	5,350	2,700	9,260
26	2,670	5,820	10,300	7,430	3,770	6,030	7,780	27,100	12,000	5,200	2,250	10,600
27	2,670	6,880	9,220	5,990	4,060	6,300	8,770	21,600	11,600	5,050	2,770	10,400
28	2,840	6,470	9,250	4,580	4,450	5,880	10,700	19,100	11,100	4,970	3,760	9,860
29	2,800	8,660	8,840	4,210	------	5,590	11,200	18,200	10,100	4,940	3,770	5,760
30	2,770	8,480	6,910	4,580	------	5,300	12,100	18,100	8,990	4,870	3,920	4,420
31	2,690	------	6,430	5,150	------	6,130	------	19,700	------	4,960	6,810	------
TOTAL	93,960	156,570	248,880	248,340	93,790	165,340	232,830	626,100	437,690	213,770	123,560	225,270
MEAN	3,031	5,219	8,028	8,011	3,350	5,334	7,761	20,200	14,590	6,896	3,986	7,509
MAX	4,370	8,660	18,000	16,700	5,010	7,540	12,100	34,200	22,800	8,550	6,810	10,600
MIN	2,300	2,590	1,760	2,970	2,360	4,290	4,920	10,400	8,990	4,320	2,250	3,990
AC-FT	186,400	310,600	493,700	492,600	186,000	328,000	461,800	1,242M	868,200	424,000	245,100	446,800

CAL YR 1972 TOTAL 7,581,570 MEAN 20,710 MAX 92,200 MIN 1,760 AC-FT 15,040,000
WTR YR 1973 TOTAL 2,866,100 MEAN 7,852 MAX 34,200 MIN 1,760 AC-FT 5,685,000

M Expressed in thousands.

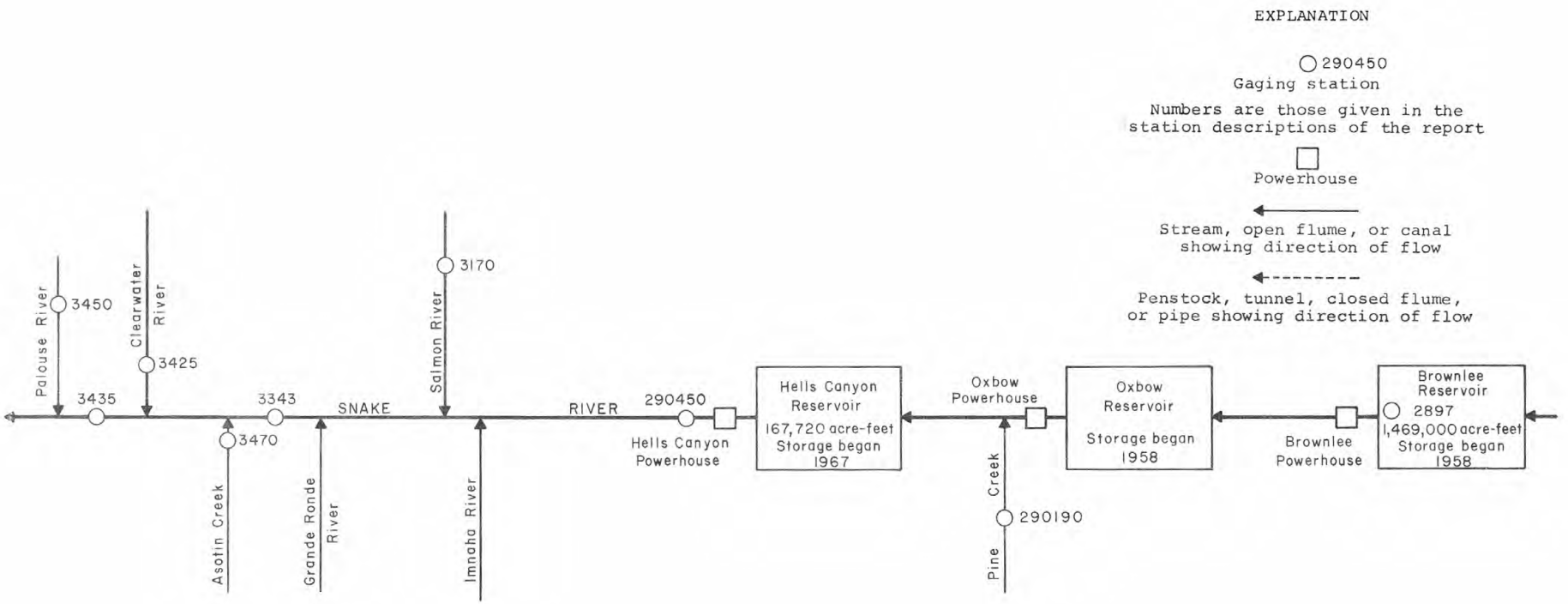

FIGURE 13. Schematic diagram showing gaging stations and storage in Snake River basin between Brownlee Reservoir and Clarkston, Wash.

13343500 Snake River near Clarkston, Wash.
(International hydrologic decade station)

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 mi (3.7 km) upstream from Alpowa Creek, 7.0 mi (11.3 km) downstream from Clarkston, and at mile 132.9 (213.8 km).

DRAINAGE AREA.--103,200 sq mi (267,288 sq km), approximately.

PERIOD OF RECORD.--October 1915 to January 1973 (discontinued). 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 (204 m) above mean sea level (Corps of Engineers bench mark). Prior to Oct. 1, 1935, nonrecording gage at Riparia 65.8 mi (105.9 km) downstream at different datum.

AVERAGE DISCHARGE.--57 years, 50,030 cfs (1,417 cu m/s), 36,800,000 acre-ft/yr (45,400 cu hm/yr); 15-year base period (1952-67), 50,970 cfs (1,443 cu m/s).

EXTREMES.--Maximum discharge during period October 1972 to January 1973, 62,900 cfs (1,780 cu m/s) Dec. 23 (gage height, 18.24 ft or 5.56 m); minimum, 22,400 cfs (634 cu m/s) Oct. 2 (gage height, 11.88 ft or 3.621 m).
Period of record: Maximum discharge, 369,000 cfs (10,500 cu m/s) May 29, 1948 (gage height, 40.36 ft or 12.302 m, from high-water in well); minimum, 6,660 cfs (189 cu m/s) Sept. 2, 1958 (gage height, 6.79 ft or 2.070 m).
Flood of June 5, 1894, reached a stage of 24.7 ft (7.53 m), Riparia site and datum, determined from flood-marks by U.S. Weather Bureau (discharge, 409,000 cfs or 11,600 cu m/s).

REMARKS.--Records excellent. Diversions above station for irrigation of 4,090,000 acres (166,000 sq hm), of which about 750,000 acres (304,000 sq hm) 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 mi (183.6 km) upstream. Records of chemical analyses for water year 1973 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28,600	27,600	37,300	40,400								
2	26,500	28,000	36,700	38,900								
3	28,500	30,700	33,800	39,700								
4	29,400	31,200	32,800	37,500								
5	27,300	30,900	35,100	37,600								
6	26,300	33,500	37,300	36,200								
7	29,200	35,200	37,200	36,000								
8	31,100	37,100	37,400	36,500								
9	31,200	37,600	36,900	36,700								
10	32,100	36,900	37,400	34,500								
11	35,800	36,800	36,400	-								
12	36,700	35,500	36,800	-								
13	34,700	34,600	33,700	-								
14	33,600	35,600	30,200	-								
15	33,700	32,100	30,000	-								
16	33,200	35,900	31,400	-								
17	33,300	36,900	31,100	-								
18	30,900	35,700	31,400	-								
19	31,100	35,000	34,800	-								
20	33,700	33,800	38,300	-								
21	34,400	35,800	42,600	-								
22	33,200	35,600	53,500	-								
23	33,600	35,600	58,000	-								
24	34,500	29,600	55,900	-								
25	33,500	33,900	51,300	-								
26	31,900	33,300	45,100	-								
27	32,000	36,900	45,200	-								
28	30,100	37,900	45,800	-								
29	28,200	38,600	45,800	-	------							
30	28,000	39,300	40,200	-	------							
31	27,100	------	41,000	-	------		------		------			------
TOTAL	973,400	1,037.1M	1,220.4M	-								
MEAN	31,400	34,570	39,370	-								
MAX	36,700	39,300	58,000	-								
MIN	26,300	27,600	30,000	-								
AC-FT	1,931M	2,057M	2,421M	-								

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 (6.1 m) downstream from bridge on U.S. Highway 95, 1.0 mi (1.6 km) downstream from Deep Creek, 2.0 mi (3.22 km) west of Potlatch, and at mile 132.2 (213 km).

DRAINAGE AREA.--317 sq mi (821 sq km).

PERIOD OF RECORD.--October 1914 to September 1919, December 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,455.11 ft (748.318 m) above mean sea level (Idaho Department of Highways bench mark). October 1914 to September 1919 water-stage recorder at site 0.2 mi (0.31 km) upstream at different datum.

AVERAGE DISCHARGE.--11 years (1914-19, 1967-73), 273 cfs (7.73 cu m/s), 11.68 in/yr (297 mm/yr), 197,800 acre-ft/yr (244 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 1,850 cfs (52.4 cu m/s) Dec. 22 (gage height, 11.10 ft or 3.383 m); minimum, 0.07 cfs (0.002 cu m/s) Sept. 24; minimum gage height, 3.97 ft (1.210 m) Dec. 15, 16.
Period of record: Maximum discharge, 6,100 cfs (173 cu m/s) Jan. 21, 1972 (gage height, 18.29 ft or 5.575 m); minimum daily, 0.07 cfs (0.002 cu m/s) Sept. 24, 1973.

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)

4.0	1.4	5.5	80
4.2	3.5	6.0	146
4.4	8.5	7.0	380
4.6	17	8.0	695
5.0	40	10.0	1,390

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	18	17	130	101	404	199	104	48	21	2.7	1.6
2	16	19	22	105	76	496	191	79	46	15	3.0	1.6
3	15	39	27	80	75	318	162	94	43	9.3	2.8	1.6
4	14	51	37	50	76	278	155	93	30	5.2	3.1	1.6
5	13	63	40	40	72	244	162	94	39	2.9	2.8	1.5
6	9.7	81	18	30	77	201	181	92	41	2.5	3.2	1.5
7	11	43	13	35	59	203	157	77	36	2.5	3.2	1.6
8	11	41	13	50	69	166	150	99	30	2.2	3.1	1.6
9	12	33	13	44	37	185	146	179	32	1.9	3.2	1.6
10	13	19	13	32	64	354	146	141	34	2.2	2.5	1.6
11	15	22	14	38	64	597	144	120	33	2.2	2.4	1.5
12	19	23	10	104	70	366	168	121	31	2.5	2.5	1.3
13	27	23	1.3	1,070	69	318	172	104	30	1.9	3.0	1.3
14	32	23	1.2	850	83	268	157	84	29	1.5	3.0	1.5
15	29	22	1.1	530	90	233	162	94	29	1.7	3.2	1.7
16	43	22	1.3	782	56	239	157	87	26	2.5	3.2	1.7
17	15	22	120	1,070	99	340	258	70	28	3.2	3.4	1.9
18	15	22	380	636	97	318	207	73	38	3.2	3.0	2.1
19	15	22	310	452	88	288	191	76	44	3.2	2.4	2.0
20	16	38	180	231	77	280	183	52	38	3.2	2.0	2.1
21	16	25	462	258	74	380	148	62	30	3.0	1.7	2.0
22	16	16	1,020	205	78	366	148	56	23	3.0	.95	2.0
23	15	18	610	151	80	318	132	55	17	3.0	.43	2.3
24	15	19	946	148	80	273	133	55	23	3.0	.36	.09
25	15	21	500	155	91	278	140	92	24	2.5	.47	.15
26	14	24	390	132	121	270	108	110	25	2.5	.47	3.5
27	14	50	280	127	127	233	126	75	26	2.7	.47	8.9
28	16	28	200	86	168	231	106	43	26	2.8	.59	4.8
29	19	18	190	99	------	199	113	57	26	2.7	.84	3.2
30	33	39	130	93	------	181	98	49	24	2.8	1.4	2.3
31	19	------	100	87	------	189	------	50	------	2.8	1.6	------
TOTAL	549.7	904	6,059.9	7,900	2,318	9,014	4,700	2,637	949	120.6	66.98	62.14
MEAN	17.7	30.1	195	255	82.8	291	157	85.1	31.6	3.89	2.16	2.07
MAX	43	81	1,020	1,070	168	597	258	179	48	21	3.4	8.9
MIN	9.7	16	1.1	30	37	166	98	43	17	1.5	.36	.09
CFSM	.06	.10	.62	.80	.26	.92	.50	.27	.10	.01	.007	.007
IN.	.06	.11	.71	.93	.27	1.06	.55	.31	.11	.01	.007	.007
AC-FT	1,090	1,790	12,020	15,670	4,600	17,880	9,320	5,230	1,880	239	133	123

CAL YR 1972 TOTAL 181,678.60 MEAN 496 MAX 5,680 MIN 1.1 CFSM 1.56 IN 21.32 AC-FT 360,400
WTR YR 1973 TOTAL 35,281.32 MEAN 96.7 MAX 1,070 MIN .09 CFSM .31 IN 4.14 AC-FT 69,980

PEAK DISCHARGE (BASE, 2,000 CFS).--No peaks above base.

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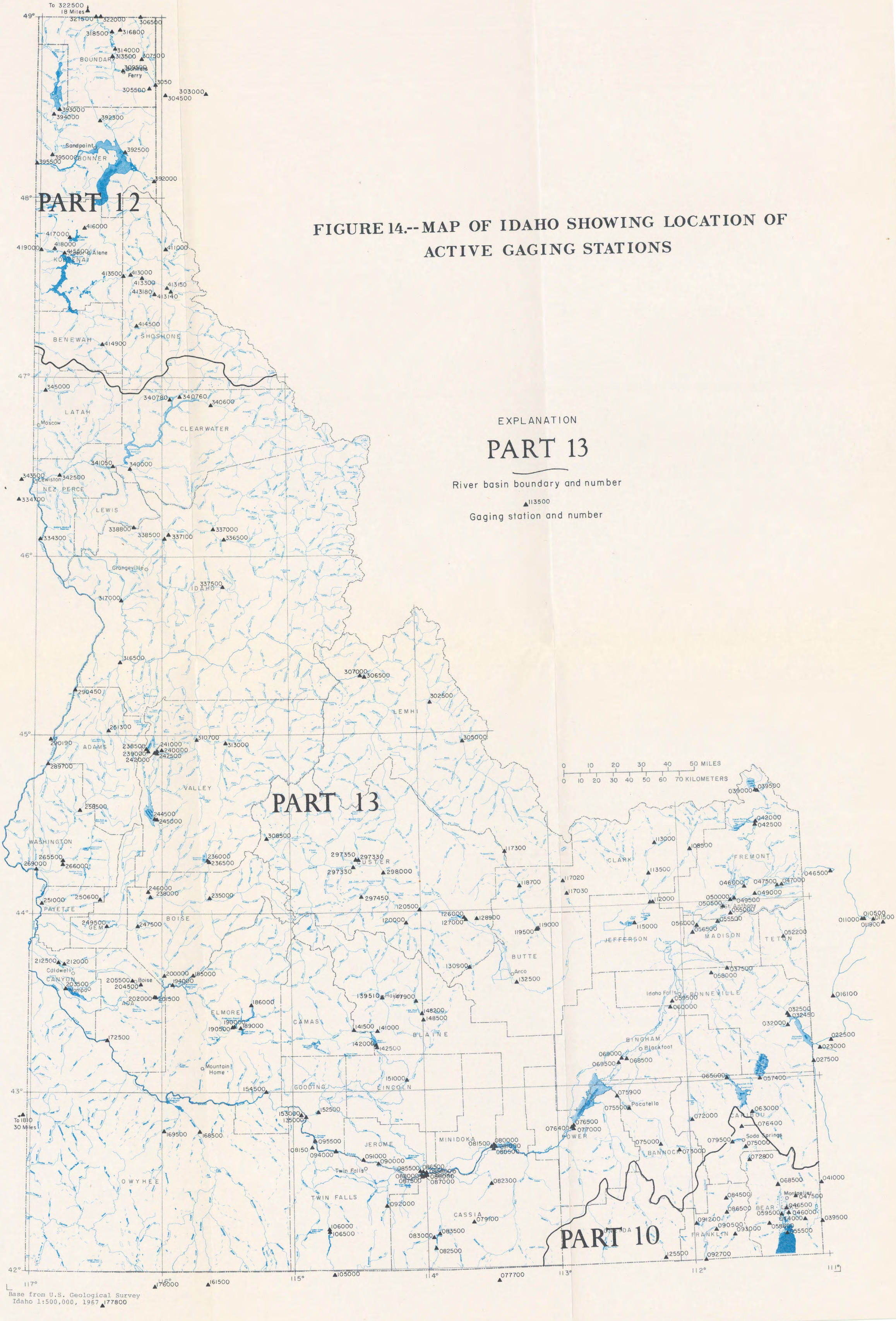

FIGURE 14.--MAP OF IDAHO SHOWING LOCATION OF ACTIVE GAGING STATIONS

EXPLANATION

PART 13

River basin boundary and number

▲113500

Gaging station and number

Base from U.S. Geological Survey
Idaho 1:500,000, 1967

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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 a 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 presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both high and low flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Bear River basin				
10091130	Swan Lake Creek near Swan Lake	Lat 42°20'31", long 111°59'05", in NE¼NW¼ sec.35, T.12 S., R.38 E., Bannock County, at road culvert on county road and 2.2 mi (3.5 km) north of Swan Lake.	-	1973	8-29-73	1.01
		Tributaries between Great Salt Lake Desert and Bear River				
10172970	Rock Creek near Holbrook	Lat 42°13'51", long 112°43'45", in NW¼ sec.9, T. 14 S., R.32 E., Oneida County, at county road crossing 6.0 mi (9.7 km) northwest of Holbrook.	a44	1962-71b, 1973	8-30-73	1.23
		Kootenai River basin				
12310800	Trail Creek at Naples	Lat 48°34'28", long 116°23'20", in SW¼SW¼ sec.6, T.60 N., R.1 E., Boundary County, at railroad culvert 0.4 mi (0.6 km) upstream from mouth at Naples.	a16	1961-71b, 1973	9-13-73	0
12321000	Smith Creek near Porthill	Lat 48°57'40", long 116°33'20", in SE¼NW¼NE¼ sec. 26, T.65 N., R.2 W., Boundary County, Kaniksu National Forest, at forest bridge, 1 mi (1.6 km) south of Smith Creek ranger station, and 4 mi (6.4 km) southwest of Porthill.	a70	1928-61‡, 1973	8-23-73	11.5
		Pend Oreille River basin				
12392800	Hornby Creek near Dover	Lat 48°15'10", long 116°37'50", in SW¼SW¼ sec.30, T.57 N., R.2 W., Bonner County, at U.S. Highway 2 and 1.2 mi (1.9 km) west of Dover.	a2.2	1961-71b, 1973	8-22-73	.03
12392854	Brickel Creek near Spirit Lake	Lat 47°56'10", long 116°56'59", in NW¼SE¼SW¼ sec. 15, T.53 N., R.5 W., Kootenai County, tributary to Spirit Lake, 0.7 mi (1.1 km) upstream from mouth, and 4.5 mi (7.2 km) southwest of Spirit Lake.	-	1973	9- 5-73	2.69
12392892	Blanchard Creek near Blanchard	Lat 47°59'32", long 117°04'14", in NE¼SE¼ sec.23, T.29 N., R.45 E. (Willamette meridian), Spokane County, Wash., at confluence with North Fork, 1.3 mi (2.1 km) west of Idaho-Washington State line, and 5.8 mi (9.3 km) southwest of Blanchard.	-	1973	9- 5-73	1.21
12392950	Indian Creek near Coolin	Lat 48°37'37", long 116°49'14", in NW¼SE¼NW¼ sec. 23, T.61 N., R.4 W., Bonner County, Kaniksu National Forest, tributary to Priest Lake, 1.5 mi (2.4 km) upstream from mouth, and 11 mi (17.7 km) north of Coolin.	20	1948,1973	8-22-73	7.83
12393600	Binarch Creek near Coolin	Lat 48°28'10", long 116°55'20", in NE¼ sec.13, T. 59 N., R.5 W., Bonner County, Kaniksu National Forest, tributary to Priest Lake, at State Highway 57, and 3 mi (4.8 km) west of Coolin.	c10.7	1962-71, 1973	8-22-73	2.91
		Spokane River basin				
12411200	Shoshone Creek near Prichard	Lat 47°43'00", long 115°53'20", near line between sec.32, T.51 N., R.4 E., and sec.5, T.50 N., R. 4 E., Shoshone County, Coeur d'Alene National Forest, 1.1 mi (1.8 km) upstream from mouth and 4 mi (6.4 km) north of Prichard.	-	1911,1934, 1948,1973	9- 6-73	d23.1
12412600	North Fork Coeur d'Alene River near Enaville	Lat 47°36'39", long 116°14'22", in SW¼NW¼ sec.8, T.49 N., R.2 E., Shoshone County, Coeur d'Alene National Forest, 150 ft (46 m) upstream from mouth and 3 mi (4.8 km) north of Enaville.	-	1914,1934, 1939,1940, 1973	9- 6-73	24.6
12413100	Boulder Creek at Mullan	Lat 47°28'10", long 115°47'44", in NE¼ sec.34, T. 48 N., R.5 E., Shoshone County, at alley crossing and 150 ft (46 m) upstream from U.S. Highway 10 crossing in Mullan.	3.13	1961-71b, 1973	9- 7-73	.31

See footnotes at end of table, p. 270.

Discharge measurements made at low-flow partial-record stations during water year 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Spokane River basin--Continued				
12413120	Canyon Creek at Gem	Lat 47°30'30", long 115°51'56", in SW¼NE¼ sec.18, T.48 N., R.5 E., Shoshone County, 0.1 mi (0.2 km) upstream from Bell Gulch, 0.1 mi (0.2 km) northeast of Gem, and 3.6 mi (5.8 km) upstream from mouth.	18.1	1964,1973	9- 7-73	9.44
12413170	McFarren Gulch near Osburn	Lat 47°29'20", long 116°00'56", in NW¼SW¼SE¼ sec. 24, T.48 N., R.3 E., Shoshone County, about 1.2 mi (1.9 km) south-southwest of Osburn.	1.25	1971-73	9- 7-73	.34
12413183	West Fork Big Creek near Kellogg	Lat 47°29'25", long 116°04'29", in SE¼NE¼SE¼ sec. 21, T.48 N., R.3 E., Shoshone County, about 3.5 mi (5.6 km) east of Kellogg.	5.60	1971-73	9- 7-73	1.91
12413200	Montgomery Creek near Kellogg	Lat 47°33'10", long 116°04'17", in SE¼NE¼ sec.33, T.49 N., R.3 E., Shoshone County, Coeur d'Alene National Forest, at forest road crossing 2.5 mi (4.0 km) northeast of Kellogg.	4.53	1962-71b, 1973	9- 7-73	e.1
12413700	Latour Creek near Cataldo	Lat 47°28'10", long 116°26'15", in NE¼ sec.34, T. 48 N., R.1 W., Kootenai County, 5 ft (1.5 m) upstream from BLM road bridge, 0.4 mi (0.6 km) upstream from Baldy Creek, at mile 6.5 mi (10.5 km), and 7.8 mi (12.6 km) southwest of Cataldo.	24.8	1967-71‡, 1973	9- 7-73	8.42
12413800	Fourth of July Creek near Cataldo	Lat 47°34'00", long 116°26'30", in SE¼ sec.22, T. 49 N., R.1 W., Kootenai County, at road crossing on State Highway 3, 2.2 mi (3.5 km) upstream from mouth, 3 mi (4.8 km) northeast of Rose Lake, and 5.5 mi (8.8 km) northwest of Cataldo.	16.5	1959,1973	9- 5-73	.36
12414800	Bond Creek at St. Joe	Lat 47°18'30", long 116°20'30", in N½ sec.28, T. 46 N., R.1 E., Benewah County, at road crossing 0.5 mi (0.8 km) southeast of St. Joe and 0.8 mi (1.3 km) upstream from mouth.	2.43	1959,1973	9-22-73	4.16
12415300	Mica Creek near Coeur d'Alene	Lat 47°36'00", long 116°53'00", in S½ sec.8, T.49 N., R.4 W., Kootenai County, at road crossing 1 mi (1.6 km) upstream from mouth and 7 mi (11.3 km) southwest of Coeur d'Alene.	23.1	1959,1973	9- 5-73	.75
12415350	Wolf Lodge Creek near Coeur d'Alene	Lat 47°38'30", long 116°37'00", in NE¼ sec.32, T. 50 N., R.2 W., Kootenai County, at road crossing 0.8 mi (1.3 km) upstream from Cedar Creek and 8 mi (12.9 km) southeast of Coeur d'Alene.	39.4	1959,1973	9- 5-73	3.15
12415400	Cougar Creek near Coeur d'Alene	Lat 47°39'20", long 116°50'30", in NE¼NW¼ sec.28, T.50 N., R.4 W., Kootenai County, at road crossing on U.S. Highway 95 and 3.2 mi (5.1 km) southwest of Coeur d'Alene.	14.8	1959,1973	9- 5-73	.02
12419100	Fish Creek near Rathdrum	Lat 47°53'08", long 116°57'06", in NW¼SE¼NW¼ sec. 3, T.52 N., R.5 W., Kootenai County, at road crossing 1.5 mi (2.4 km) upstream from Twin Lakes and 6 mi (9.7 km) northwest of Rathdrum.	14.2	1959,1973	9- 5-73	2.83
		Salt River basin				
13027200	Bear Canyon Creek near Freedom, Wyo.	Lat 42°58'38", long 111°11'44", in SW¼ sec.16, T. 5 S., R.45 E., Boise meridian, Caribou County, 0.2 mi (0.3 km) upstream from confluence with Tincup River at State Highway 34, and 8 mi (13 km) west of Freedom.	a3.3	1961-71b, 1973	9- 7-73	.70
		McCoy Creek basin				
13029500	McCoy Creek above reservoir, near Alpine	Lat 43°10'50", long 111°06'55", in SW¼ sec.6, T. 3 S., R.46 E., Bonneville County, at mile 1.5 (2.4 km) and 5 mi (8 km) west of Alpine.	108	1917-18‡, 1934‡, 1953-61‡, 1962-71b, 1973	9- 7-73	20.2
		Bear Creek basin				
13032000	Bear Creek above reservoir, near Irwin	Lat 43°17'00", long 111°13'17", in SE¼SE¼ sec.31, T.1 S., R.45 E., Bonneville County, Caribou National Forest, on left bank 0.5 mi (0.8 km) downstream from Elk Creek, 0.2 mi (0.3 km) upstream from maximum flow line of Palisades Reservoir, and 6.4 mi (10.3 km) south of Irwin.	77.1	1917-18‡, 1934-36‡, 1953-71‡, 1973	9- 7-73	32.1
		Birch Creek basin				
13037600	Birch Creek near Heise	Lat 43°36'00", long 111°43'10", in SW¼ sec.11, T. 3 N., R.40 E., Bonneville County, 3.5 mi (5.6 km) southwest of Heise.	21	1962,1973	8-27-73	.99
		Lyons Creek basin				
13038410	Lyons Creek near Ririe	Lat 43°40'54", long 111°44'06", in NW¼ sec.15, T. 4 N., R.40 E., Madison County, 4.5 mi (7.2 km) northeast of Ririe.	18	1904,1962, 1963,1973	8-11-73	.20

Discharge measurements made at low-flow partial-record stations during water year 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Henrys Fork basin				
13038900	Targhee Creek near Macks Inn	Lat 44°38'50", long 111°20'30", in NW¼NE¼ sec.11, T.15 N., R.43 E., Fremont County, at State Highway 87 crossing, 1.5 mi (2.4 km) west of junction of State Highway 87 and U.S. Highway 191, and 10.4 mi (16.7 km) north of Macks Inn.	20.8	1904,1924, 1929-34, 1962-71b, 1973	9-12-73	8.20
13054300	Bitch Creek near Tetonia	Lat 43°56'21", long 111°10'41", in NE¼ sec.17, T. 7 N., R.45 E., Fremont County, at highway bridge 5 mi (8 km) north of Felt and 9 mi (14 km) north of Tetonia.	-	1937,1940, 1973	9-28-73	69.8
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 mi (16.9 km) northwest of Tetonia.	17.9	1962-73b	8-27-73	0
13054500	Canyon Creek near Newdale	Lat 43°48'00", long 111°26'00", in NW¼ sec.6, T. 5 N., R.43 E., Madison County, above mouth of Pincock Hot Springs, 0.8 mi (1.3 km) downstream from mouth of Warm Creek, and 10.5 mi (16.9 km) southeast of Newdale.	a68	1920-25‡, 1932, 1938-39‡, 1973	8-27-73	11
13055320	Moody Creek near Newdale	Lat 43°49'50", long 111°38'10", in NW¼SW¼ sec.21, T.6 N., R.41 E., Fremont County, 0.4 mi (0.6 km) south of Moody and 4 mi (6 km) southwest of Newdale.	a88	1962,1963, 1973	9-11-73	3.7
		Willow Creek basin				
13057600	Homer Creek near Herman	Lat 43°11'35", long 111°37'20", in NW¼ sec.2, T. 3 S., R.41 E., Bingham County, at road crossing, 11 mi (18 km) west of Herman, and 12 mi (19 km) southwest of Bone.	26.4	1963-71b, 1973	8-28-73	.34
		Tributaries to Snake River between Shelley and Blackfoot				
13062600	Snake River tributary No. 6 near Moreland	Lat 43°31'00", long 112°28'00", in NW¼NW¼ sec.9, T.2 S., R.34 E., Bonneville County, along U.S. Highway 26 and 4 mi (6 km) northwest of Moreland.	63.5	1962,1973	8-31-73	0
		Blackfoot River basin				
13062700	Angus Creek near Henry	Lat 42°49'43", long 111°20'15", in center of sec. 8, T.7 S., R.44 E., Caribou County, at road crossing, 1.1 mi (1.8 km) northeast of Trail guard station, and 11 mi (18 km) southeast of Henry.	13.9	1962-71b, 1973	8-28-73	.53
13065940	Wolverine Creek near Goshen	Lat 43°15'02", long 112°00'59", in NW¼NW¼ sec.16, T.2 S., R.38 E., Bingham County, at county road bridge 5.1 mi (8.2 km) southeast of Goshen.	-	1973	9-20-73	8.62
13066900	Cedar Creek near Goshen	Lat 43°18'30", long 112°03'20", in NW¼ sec.30, T. 1 S., R.38 E., Bingham County, 1.2 mi (1.9 km) east of Goshen.	10.5	1962,1973	8-31-73	0
		Portneuf River basin				
13072100	Portneuf River tributary at Bancroft	Lat 42°43'30", long 111°54'25", in SE¼ sec.16, T. 8 S., R.39 E., Caribou County, at Union Pacific Railroad crossing 1 mi (1.6 km) northwest of Bancroft.	a130	1962-63, 1973	8-28-73	0
13073700	Robbers Roost Creek near McCammon	Lat 42°42'20", long 112°12'10", in SE¼ sec.23, T. 8 S., R.36 E., Bannock County, at culvert on U.S. Highway 30N, 3.5 mi (5.6 km) north of McCammon, and 6.5 mi (10.5 km) south of Inkom.	a5.7	1961-71b, 1973	8-29-73	.08
13075300	East Fork Mink Creek near Pocatello	Lat 42°44'20", long 112°23'30", in sec.8, T.8 S., R.35 E., Bannock County, 9 mi (14 km) southeast of Pocatello.	14.7	1912, 1963-71b, 1973	8-31-73	1.51
13075600	North Fork Pocatello Creek near Pocatello	Lat 42°53'10", long 112°23'45", in NW¼ sec.20, T. 6 S., R.35 E., Bannock County, 300 ft (91 m) upstream from confluence with South Fork Pocatello Creek, 2 mi (3.2 km) northeast of Idaho State University, and 3.5 mi (5.6 km) East of Pocatello.	14	1961-71b, 1973	8-31-73	1.16
		Bannock Creek basin				
13076000	Bannock Creek below Moonshine Creek, near Pauline	Lat 42°41'40", long 112°35'40", in NE¼SE¼ sec.28, T.8 S., R.33 E., Power County, on Fort Hall Indian Reservation, 0.3 mi (0.5 km) upstream from Rattlesnake Creek, 9.5 mi (15.3 km) north of Pauline, and 14 mi (23 km) southwest of Pocatello.	227	1955-58‡, 1962-63, 1965,1973	9-28-73	30.4
13076100	Rattlesnake Creek near Pocatello	Lat 42°42'00", long 112°33'40", in NE¼ sec.26, T. 8 S., R.33 E., Power County, 2 mi (3.2 km) upstream from mouth and 12 mi (19 km) southwest of Pocatello.	77	1955-59, 1962,1973	9-28-73	11.7
		Warm Creek basin				
13077400	Rock Creek near Rockland	Lat 42°30'40", long 112°50'30", in NE¼NW¼ sec.33, T.10 S., R.31 E., Power County, 1.9 mi (3.1 km) upstream from former gage site and 4.6 mi (7.4 km) southeast of Rockland.	156	1947,1963, 1965,1973	8-30-73	3.08

Discharge measurements made at low-flow partial-record stations during water year 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Raft Fork basin				
13077659	Raft River near Yost, Utah	Lat 41°56'50", long 113°42'00", in NE¼NE¼ sec.17, T.14 N., R.16 W., Box Elder County, at road crossing 8 mi (13 km) west of Yost, Utah.	146	1965-67, 1973	9-18-73	7.37
13079800	Heglar Canyon tributary near Rockland	Lat 42°28'30", long 113°08'40", in SE¼SW¼ sec.11, T.11 S., R.28 E., Cassia County, 600 ft (183 m) upstream from Heglar Canyon road crossing and 16 mi (26 km) southwest of Rockland.	7.72	1958, 1961-71b, 1973	9-18-73	0
		Dry Creek basin				
13088500	Big Cottonwood Creek near Oakley	Lat 42°16'50", long 114°02'10", in SE¼NE¼ sec.19, T.13 S., R.21 E., Cassia County, Sawtooth National Forest, about 1 mi (1.6 km) upstream from diversion of Twin Falls-Oakley Land and Water Co. canal and about 10 mi (16.1 km) northeast of Oakley.	a29	1909-15‡, 1916,1973	9-11-73	1.67
		Rock Creek basin				
13092520	McMullen Creek near Rock Creek	Lat 42°25'05", long 114°22'18", on line between sec.32, T.11 S., R.18 E., and sec.5, T.12 S., R. 18 E., Twin Falls County, at road crossing, 3.6 mi (5.8 km) southwest of Rock Creek, and 8 mi (12.9 km) south of Kimberly.	-	1973	9-18-73	0
		Salmon Falls Creek basin				
13104800	Shoshone Creek at mouth, near San Jacinto	Lat 41°56'36", long 114°41'02", in SE¼ sec.23, T. 47 N., R.64 E., Elko County, at mouth and 5 mi (8.0 km) north of San Jacinto.	-	1909,1914, 1938,1942, 1969-73	9-20-73	f18.5
		Mud Lake-Lost River basins				
13108200	West Camas Creek near Kilgore	Lat 44°28'40", long 112°02'40", on SE section line of sec.1, T.13 N., R.37 E., Clark County, at Frazier Dam, 1.5 mi (2.4 km) downstream from Pete Creek, 9 mi (14 km) northwest of Kilgore, and 11 mi (18 km) northeast of Spencer.	-	1957-58, 1973	9- 4-73	8.62
13112300	Beaver Creek at Humphrey	Lat 44°28'40", long 112°13'30", in SE¼ sec.4, T. 13 N., R.36 E., Clark County, at Union Pacific Railroad bridge, 0.3 mi (0.5 km) downstream from Humphrey, and 8.4 mi (13.5 km) north of Spencer.	-	1957-58, 1973	9- 4-73	4.08
13112900	Huntley Canyon at Spencer	Lat 44°21'50", long 112°11'00", in SW¼ sec.14, T. 12 N., R.36 E., Clark County, at railroad crossing opposite the Spencer Mercantile Store at Spencer.	3.9	1961-71b, 1973	9- 4-73	.44
13116000	Medicine Lodge Creek at Ellis Ranch, near Argora	Lat 44°17'30", long 112°30'05", in SW¼SE¼ sec.7, T.11 N., R.34 E., Clark County, on left bank 4 mi (7 km) upstream from Middle Creek, 6.5 mi (10.5 km) southeast of Argora, and 16 mi (26 km) northwest of Dubois (revised).	165	1940-69‡, 1973	9-22-73	53.1
13117200	Main Fork near Goldburg	Lat 44°24'06", long 113°24'18", in SW¼NE¼ sec.6, T.12 N., R.26 E., Lemhi County, Challis National Forest, at road crossing, 0.5 mi (0.8 km) upstream from confluence with Timber Creek, and 12 mi (19 km) east of Goldburg.	15.6	1960-71b, 1973	9-18-73	7.57
13117600	Dry Creek below Dry Creek Reservoir, near Clyde	Lat 44°09'30", long 113°31'45", in NW¼ sec.31, T. 10 N., R.25 E., Custer County, at old road crossing upstream from Taylor No. 1 diversion, 1.6 mi (2.6 km) downstream from old damsite, 14.3 mi (23.0 km) west of Clyde, and 36.5 mi (58.7 km) northwest of Howe.	42.2	1932, 1935-36, 1938, 1959-62, 1973	9-18-73	16.7
13118400	Wet Creek below Coal Creek, near Mackay	Lat 44°02'49", long 113°27'00", in SW¼ sec.2, T. 8 N., R.25 E., Butte County, Challis National Forest, at Pass Creek road crossing, 12.1 mi (19.5 km) northeast of Mackay, and 12.3 mi (19.8 km) southwest of Clyde.	-	1959-71b, 1973	9-18-73	4.35
13119800	North Fork Big Lost River near Chilly	Lat 43°55'35", long 114°11'00", in NW¼ sec.23, T. 7 N., R.19 E. (unsurveyed), Custer County, Challis National Forest, at narrows, 0.5 mi (0.8 km) downstream from Burnt Creek, 0.8 mi (1.3 km) upstream from Bartlett Creek, 4.9 mi (7.9 km) northwest of Wild Horse guard station, and 18.7 mi (30.1 km) southwest of Chilly.	a54.6	1957-59, 1966-68, 1973	9-14-73	11.3
13120240	East Fork Big Lost River near Chilly	Lat 43°53'45", long 113°59'00", in NW¼ sec.33, T. 7 N., R.21 E. (unsurveyed), Custer County, Challis National Forest, at Rosenkance Ranch bridge, 0.2 mi (0.3 km) downstream from Banana Gulch, 5.8 mi (9.3 km) east of Wild Horse guard station, and 13.8 mi (22.2 km) south of Chilly.	-	1957-59, 1973	9-14-73	55.9
13129800	Alder Creek below South Fork, near Mackay	Lat 43°49'40", long 113°36'10", in NW¼NW¼ sec.27, T.6 N., R.24 E., Custer County, Challis National Forest, 20 ft (6.1 m) downstream from South Fork, and 6 mi (9.7 km) south of Mackay.	27.6	1966-68‡, 1973	9-14-73	5.88

Discharge measurements made at low-flow partial-record stations during water year 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Mud Lake-Lost River basins--Continued				
13131500	Pass Creek near Leslie	Lat 43°56'05", long 113°26'50", in SW¼ sec.14, T. 7 N., R.25 E., on line between Butte and Custer County, Challis National Forest, at road bridge, 0.2 mi (0.3 km) north of forest boundary, 4.8 mi (7.7 km) northwest of Leslie, and 18.3 mi (29.4 km) east of Mackay.	23.6	1920-22‡, 1959, 1966-68, 1973	9-28-73	4.52
		Big Wood River basin				
13135200	Prairie Creek near Ketchum	Lat 43°49'00", long 114°35'50", in NW¼ sec.31, T. 6 N., R.16 E., Blaine County, Sawtooth National Forest, at U.S. Highway 93 and 15 mi (24.1 km) northwest of Ketchum.	a18	1962-71b, 1973	9-19-73	11.7
13135800	Adams Gulch near Ketchum	Lat 43°42'20", long 114°23'50", in SW¼ sec.2, T.4 N., R.17 E., Blaine County, Sawtooth National Forest, 2.5 mi (4.0 km) northwest of Ketchum.	10.9	1962-71b, 1973	9-19-73	.25
13137000	Warm Springs Creek at Guyer Hot Springs, near Ketchum	Lat 43°40'58", long 114°24'24", at W section line of NW¼SW¼NW¼ sec.14, T.4 N., R.17 E., Blaine County, Sawtooth National Forest, at road crossing, about 2.3 mi (3.7 km) upstream from mouth, and 2.2 mi (3.5 km) west of U.S. Highway 93 and State Highway 75 junction in Ketchum.	a97	1920-21‡, 1973	9-19-73	31.8
13141350	Soldier Creek near Fairfield	Lat 43°26'44", long 114°48'27", in NE¼SE¼SE¼ sec. 5, T.1 N., R.14 E., Camas County, at county bridge, 0.2 mi (0.3 km) downstream from Phillips Creek, and 7 mi (11.3 km) north of Fairfield.	-	1973	9-17-73	2.62
13149000	Fish Creek above Fish Creek Dam, near Carey	Lat 43°26'20", long 113°48'00", in sec.2, T.1 N., R.22 E., Blaine County, at Cipolletti weir, 1.2 mi (1.9 km) above West Fork Fish Creek, 1.5 mi (2.4 km) above Fish Creek Dam, and about 12 mi (19 km) northeast of Carey.	a32	1904, 1920-39‡, 1973	9-18-73	8.95
		Little Canyon Creek basin				
13155200	Burns Gulch near Glenns Ferry	Lat 43°11'42", long 115°19'59", in NE¼NW¼ sec.1, T.3 S., R.9 E., Elmore County, at road crossing 16 mi (25.7 km) north of Glenns Ferry.	.76	1961-71b, 1973	9-22-73	0
13155300	Little Canyon Creek at Stout Crossing, near Glenns Ferry	Lat 43°09'14", long 115°18'32", in NE¼NW¼NE¼ sec. 19, T.3 S., R.10 E., Elmore County, at county road crossing 13.8 mi (22.2 km) north of Glenns Ferry.	14.2	1961-65b, 1966-71‡, 1973	9-22-73	.58
		Bruneau River basin				
13162300	Jarbidge River near Murphy Hot Springs	Lat 42°00'30", long 115°25'00", in sec.28, T.16 S., R.9 E., Owyhee County, at Buck Creek bridge 3 mi (4.8 km) southwest of Murphy Hot Springs.	-	1961-66b, 1973	9-20-73	f10.8
13162410	Buck Creek near Murphy Hot Springs	Lat 42°00'30", long 115°25'00", in SW¼ sec.28, T. 16 S., R.9 E., Owyhee County, 400 ft (122 m) upstream from mouth and 3.2 mi (5.1 km) southwest of Murphy Hot Springs.	-	1961-62, 1973	9-20-73	f.62
		Payette River basin				
13234300	Fivemile Creek near Lowman	Lat 44°06'20", long 115°27'30", in NE¼ sec.24, T. 9 N., R.8 E., Boise County, Boise National Forest, at State Highway 21 crossing and 8.5 mi (13.7 km) east of Lowman.	a7.8	1961-71b, 1973	9-10-73	5.61
13234500	Clear Creek at Lowman	Lat 44°04'55", long 115°36'40", in SW¼SE¼ sec.27, T.9 N., R.7 E., Boise County, Boise National Forest, at State Highway 21 bridge in Lowman and 550 ft (168 m) upstream from mouth.	59.6	1921-22, 1925, 1941-49‡, 1973	9-10-73	34.4
13235100	Rock Creek at Lowman	Lat 44°04'50", long 115°37'30", in NE¼ sec.33, T. 9 N., R.7 E., Boise County, Boise National Forest, at road bridge 0.5 mi (0.8 km) west of Lowman.	14.6	1961-71b, 1973	9-10-73	6.51
13237300	Danskin Creek near Grimes Pass	Lat 44°03'36", long 115°49'06", in NW¼ sec.1, T.8 N., R.5 E., Boise County, Boise National Forest, at Banks-Lowman road crossing and 2 mi (3.2 km) northeast of Grimes Pass.	10.1	1961-71b, 1973	9-10-73	.13
13237600	Cabin Creek near Smiths Ferry	Lat 44°20'53", long 115°47'21", in NE¼SE¼NW¼ sec. 30, T.12 N., R.6 E., Valley County, Boise National Forest, 0.2 mi (0.3 km) upstream from mouth, 1.2 mi (1.9 km) downstream from Silver Creek guard station, and 13 mi (20.9 km) east of Smiths Ferry.	.42	1960-67‡, 1973	9-10-73	.10
13238300	Deep Creek near McCall	Lat 45°06'00", long 116°02'18", in NW¼NE¼SW¼ sec. 1, T.20 N., R.3 E., Valley County, Payette National Forest, at forest road crossing 13 mi (20.9 km) north of McCall.	a.40	1961-71b, 1973	9-28-74	ef.1
13250650	Fourmile Creek near Emmett	Lat 44°04'42", long 116°29'20", in NW¼ sec.32, T. 9 N., R.1 W., Payette County, 300 ft (91 m) upstream from mouth and 14 mi (22.5 km) north of Emmett.	a6.5	1962-71b, 1973	9-13-73	0

Discharge measurements made at low-flow partial-record stations during water year 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Payette River basin--Continued				
13250700	Langley Gulch near New Plymouth	Lat 43°53'59", long 116°48'30", in SE¼NW¼SW¼ sec. 34, T.7 N., R.4 W., Payette County, at U.S. Highway I-80N and 5 mi (8.0 km) south of New Plymouth.	3.88	1961-71b, 1973	9-14-73	0
		Weiser River basin				
13253500	Weiser River at Starkey	Lat 44°51'00", long 116°26'40", in NE¼SW¼ sec.34, T.18 N., R.1 W., Adams County, 200 ft (61 m) upstream from Warm Springs Creek, 8.5 mi (13.7 km) north of Council, and at mile 80.0 (128.7 km).	106	1920,1922, 1939-49‡, 1955,1973	9-21-73	20.0
13261000	Little Weiser River near Indian Valley	Lat 44°29'22", long 116°23'24", in NW¼SW¼ sec.6, T.13 N., R.1 E., Adams County, 1 mi (1.6 km) upstream from diversion feeding C. Ben Ross Reservoir, 4.8 mi (7.7 km) southeast of Indian Valley, and at mile 21.0 (33.8 km).	81.9	1920-21‡, 1923-27‡, 1938-71‡, 1973	9-21-73	7.30
13261880	Keithly Creek near Midvale	Lat 44°31'02", long 116°49'53", in SE¼NW¼SW¼ sec. 28, T.14 N., R.4 W., Washington County, 5.5 mi (8.8 km) northwest of Midvale, and 8.5 mi (13.7 km) southwest of Cambridge.	-	1973	9-26-73	3.92
13263700	Crane Creek above Crane Creek Reservoir, near Midvale (formerly "near Crane")	Lat 44°24'16", long 116°31'30" (revised), in NW¼ SW¼ sec.1, T.12 N., R.2 W., Washington County, 0.1 mi (0.2 km) downstream from county road bridge, 2 mi (3.2 km) northwest of Crane Creek Reservoir, and 11 mi (17.7 km) southwest of Midvale.	a120	1955,1973	9-26-73	g.71
13268500	Monroe Creek above Sheep Creek, near Weiser	Lat 44°19'50", long 116°55'50", in NE¼SW¼ sec.34, T.12 N., R.5 W., Washington County, at farm road bridge, 200 ft (61.0 m) west of U.S. Highway 95, and 6 mi (9.7 km) north of Weiser.	a32	1938, 1940-44, 1945-49‡, 1955,1970, 1973	9-25-73	1.04
		Salmon River basin				
13292200	Salmon River at head, near Obsidian	Lat 43°53'03", long 114°45'47", in NE¼NE¼NE¼ sec. 1, T.6 N., R.14 E. (unsurveyed), Blaine County, Sawtooth National Forest, at U.S. Highway 93 crossing, 0.3 mi (4.8 km) upstream from Frenchman Creek, and 14 mi (22.5 km) south of Obsidian.	17.5	1971-73	9-11-73	6.48
13292400	Beaver Creek near Obsidian (formerly near Stanley)	Lat 43°55'10", long 114°48'48", in NE¼NE¼NE¼ sec. 21, T.7 N., R.14 E., Blaine County (revised), at U.S. Highway 93 crossing, about 0.3 mi (4.8 km) north of Beaver Creek store, and 11 mi (18 km) south of Obsidian.	15.0	1962-71b, 1972-73	9-11-73	5.91
13292500	Salmon River near Obsidian	Lat 43°57'57", long 114°48'01", in SW¼NE¼ sec.3, T.7 N., R.14 E., Custer County, 1 mi (1.6 km) upstream from Lost Creek and 2.5 mi (4.0 km) southeast of Obsidian.	94.7	1940-53‡, 1973	9-11-73	18.8
13293000	Alturas Lake Creek near Obsidian	Lat 43°56'34", long 114°49'58", in SW¼SW¼ sec.9, T.7 N., R.14 E., Blaine County, Sawtooth National Forest, 1 mi (1.6 km) downstream from mouth of Perkins Lake, 1.5 mi (2.4 km) downstream from outlet of Alturas Lake, and 4 mi (6.4 km) south of Obsidian.	35.7	1940-53‡, 1973	9-11-73	16.4
13293800	Salmon River above Redfish Creek, near Stanley	Lat 44°09'50", long 114°53'10", in NE¼ sec.25, T.10 N., R.13 E., Custer County, Sawtooth National Forest, at U.S. Highway 93 crossing and 4.5 mi (7.2 km) southeast of Stanley.	-	1957,1958, 1973	9-11-73	195
13293900	Redfish Lake Creek below Redfish Lake, near Stanley	Lat 44°09'20", long 114°54'40", in NE¼SW¼NW¼ sec. 35, T.10 N., R.13 E., Custer County, Sawtooth National Forest, at bridge 1.1 mi (1.8 km) downstream from store at Redfish Lake and 4.5 mi (7.2 km) south of Stanley.	-	1957-59, 1973	9-11-73	43.8
13295000	Valley Creek at Stanley	Lat 44°13'21", long 114°55'49", in SE¼NW¼SW¼ sec. 3, T.10 N., R.13 E., Custer County, at mile 0.2 (0.3 km), 0.5 mi (0.8 km) northeast of Stanley, and 0.8 mi (1.3 km) southwest of Lower Stanley.	147	1910‡, 1911-13‡, 1921-73‡	9-17-73	81.4
13295500	Salmon River below Valley Creek, near Stanley	Lat 44°14'00", long 114°35'01", in SE¼SE¼SE¼ sec. 34, T.11 N., R.13 E., Custer County, Challis National Forest, 0.8 mi (1.2 km) downstream from Valley Creek, and 1.2 mi (2.0 km) northeast of Upper Stanley.	501	1925-61‡, 1973	9-17-73	339
13296000	Yankee Fork Salmon River near Clayton	Lat 44°17'15", long 114°43'11", in NE¼SW¼ sec.17 T.11 N., R.15 E. (unsurveyed), Custer County, Challis National Forest, at Sunbeam-Custer bridge, 1.8 mi (2.8 km) north of Sunbeam, 1.9 mi (3.1 km) upstream from mouth, and 12 mi (19.3 km) northeast of Stanley.	195	1921-49‡, 1971-73	9-12-73	63.5

Discharge measurements made at low-flow partial-record stations during water year 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Salmon River basin--Continued				
13296500	Salmon River below Yankee Fork, near Clayton	Lat 44°16'06", long 114°43'55", in sec.20, T.11 N., R.15 E. (unsurveyed), Custer County, Challis National Forest, 700 ft (213 m) downstream from Yankee Fork, 18 mi (29.0 km) upstream from Clayton, and at mile 366.9 (590.3 km).	802	1922-72‡, 1973	9-24-73	f484
13297000	Warm Springs Creek at Robinson Bar, near Clayton	Lat 44°14'50", long 114°40'11", in SW¼ sec.27, T. 11 N., R.15 E. (unsurveyed), Custer County, Challis National Forest, 160 ft (25.7 m) upstream from Robinson Bar bridge, 0.6 mi (1.0 km) upstream from mouth, and 13.7 mi (22.0 km) west of Clayton.	79	1921-23‡, 1971-73	9-12-73	51.5
13297100	Peach Creek near Clayton	Lat 44°15'50", long 114°28'50", in SE¼SW¼ sec.24, T.11 N., R.15 E., Custer County, Challis National Forest, 12.5 mi (20.1 km) west of Clayton.	7.62	1962-71b, 1972-73	9-12-73	2.72
13297300	Holman Creek near Clayton	Lat 44°14'52", long 114°21'43", in SE¼SW¼SW¼ sec. 25, T.11 N., R.16 E., Custer County, Challis National Forest, in Holman Creek Campground and 6.5 mi (10.5 km) west of Clayton.	6.10	1962-71b, 1972-73	9-12-73	.33
13297500	Big Boulder Creek near Clayton	Lat 44°05'58", long 114°26'24", in SW¼NW¼NE¼ sec. 15, T.9 N., R.17 E., Custer County, at bridge, 0.4 mi (0.6 km) upstream from mouth, and 10 mi (16.1 km) southwest of Clayton.	c24.7	1926-30‡, 1971-73	9-12-73	13.5
13298300	Malm Gulch near Clayton	Lat 44°21'18", long 114°15'45", in NE¼NE¼SW¼ sec. 19, T.12 N., R.19 E., Custer County, at U.S. Highway 95 and 9.5 mi (15.3 km) northeast of Clayton.	g.38	1962-71b, 1972-73	9-21-73	0
13298400	Bayhorse Creek near Challis	Lat 44°22'53", long 114°15'52", in SE¼SW¼NE¼ sec. 7, T.12 N., R.19 E., Custer County, 0.5 mi (0.8 km) upstream from mouth, and 9 mi (14.5 km) south of Challis.	-	1973	9-21-73	7.74
13298500	Salmon River near Challis	Lat 44°22'43", long 114°15'18", in SE¼SE¼ sec.7, T.12 N., R.19 E., Custer County, 250 ft (76 m) downstream from Bayhorse Creek, 9 mi (14.5 km) south of Challis, and at mile 334.8 (538.7 km).	a1,800	1928-72‡, 1973	9-21-73	762
13301500	Big Creek near Patterson	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 mi (4.8 km) upstream from old staff gage site, 0.4 mi (6.4 km) downstream from confluence of North and South Forks, and 7 mi (11.3 km) southeast of Patterson.	54.8	1910-13‡, 1938, 1971-73	9-13-73	30.6
13302180	Lake Creek above Williams Lake, near Salmon	Lat 45°01'00", long 113°59'38", in NW¼SW¼ sec.33, T.20 N., R.21 E., Lemhi County, Salmon National Forest, 0.2 mi (0.4 km) upstream from Williams Lake, 3.2 mi (5.1 km) upstream from mouth, and 12 mi (19.3 km) southwest of Salmon.	-	1973	9-27-73	2.79
13303000	Texas Creek near Leadore	Lat 44°35'10", long 113°19'45", in NW¼SW¼ sec.35, T.15 N., R.26 E., Lemhi County, 50 ft (15 m) downstream from Nez Perce Creek, 0.5 mi (0.8 km) upstream from county road bridge, and 6.5 mi (10.5 km) south of Leadore.	71.4	1938-39‡, 1955-63‡, 1965,1973	9-27-73	24.4
13304875	Hayden Creek below Bear Valley Creek, near Lemhi	Lat 44°46'43", long 113°42'21", in SE¼NW¼NE¼ sec. 27, T.17 N., R.23 E., Lemhi County, Salmon National Forest, 0.2 mi (0.3 km) upstream from forest boundary, 0.4 mi (0.6 km) downstream from Bear Valley Creek, and 6.7 mi (10.8 km) southwest of Lemhi.	-	1973	9-27-73	51.0
13305700	Dahlonega Creek at Gibbonsville	Lat 45°32'50", long 113°55'40", in NW¼ sec.36, T. 26 N., R.21 E., Lemhi County, Salmon National Forest, at U.S. Highway 93 and 0.2 mi (0.3 km) southwest of Gibbonsville.	a32	1962-71b, 1973	9-26-73	5.73
13306000	North Fork Salmon River at North Fork	Lat 45°24'26", long 113°59'37", in NW¼SW¼SW¼ sec. 16, T.24 N., R.21 E., Lemhi County, Salmon National Forest, at U.S. Highway 93, 0.1 mi (0.2 km) upstream from mouth, and at North Fork.	214	1928, 1929-39‡, 1973	9-18-73	35.4
13306320	Panther Creek at Copper Creek ranger station, near Cobalt	Lat 45°04'07", long 114°16'11", in NE¼NE¼NW¼ sec. 18, T.20 N., R.19 E. (unsurveyed), Lemhi County, Salmon National Forest, at Copper Creek ranger station, 60 ft (18.3 m) downstream from road bridge, 600 ft (183 m) upstream from Copper Creek, about 0.8 mi (12.9 km) upstream from Blackbird Creek, about 2.5 mi (4.0 km) southwest of Blackbird Townsite, and 20 (32.2 km) southwest of Salmon.	-	1971,1973	9-18-73	30.0

Discharge measurements made at low-flow partial-record stations during water year 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Salmon River basin--Continued				
13306330	Blackbird Creek below Mill, near Blackbird Townsite	Lat 45°06'59", long 114°20'30", in NE¼SE¼SE¼ sec. 28, T.21 N., R.18 E. (unsurveyed), Lemhi County, Salmon National Forest, below Meadow Creek, 5.6 mi (9.0 km) northwest of Blackbird Townsite, and about 22 mi (35.4 km) west of Salmon.	-	1971,1973	9-18-73	0.71
13306440	Panther Creek below Big Deer Creek, near Blackbird Townsite	Lat 45°10'38", long 114°18'53", in SW¼NE¼SW¼ sec. 2, T.21 N., R.18 E. (unsurveyed), Lemhi County, Salmon National Forest, just below Big Deer Creek, 7.0 mi (11.3 km) northwest of Blackbird Townsite, and 20.2 mi (32.5 km) west of Salmon.	-	1971,1973	9-18-73	62.9
13307050	Owl Creek near Shoup	Lat 45°19'07", long 114°26'52", in SE¼NW¼ sec.14, T.23 N., R.17 E. (unsurveyed), Lemhi County, Salmon National Forest, at forest road and 9.3 mi (15.0 km) southwest of Shoup.	-	1973	9-18-73	9.27
13308500	Middle Fork Salmon River near Cape Horn	Lat 44°24'30", long 115°10'20", in NW¼ sec.3, T. 12 N., R.11 E., Custer County, Challis National Forest, 1,100 ft (335 m) downstream from Little Beaver Creek, 0.5 mi (0.8 km) downstream from confluence of Marsh and Beaver Creeks, 2 mi (3.2 km) northwest of Cape Horn, and at mile 110.3 (177.5 km).	138	1928-72‡, 1973	9-17-73	90.6
13309000	Bear Valley Creek near Cape Horn	Lat 44°25'44", long 115°17'22", in sec.29, T.13 N., R.10 E., Valley County, Boise National Forest, 250 ft (76.2 m) downstream from Fir Creek, 3 mi (4.8 km) upstream from mouth, and 7 mi (11.3 km) northwest of Cape Horn.	a180	1921-61‡, 1973	9-10-73	84.7
13310500	South Fork Salmon River near Knox	Lat 44°39'15", long 115°42'05", in NW¼ sec.11, T. 15 N., R.6 E., Valley County, Boise National Forest, 800 ft (244 m) downstream from Curtis Creek, 1 mi (1.6 km) upstream from Warm Lake Creek, 1.5 mi (2.4 km) southwest of Knox, and 21 mi (33.8 km) northeast of Cascade.	a92	1928-61‡, 1973	9-17-73	32.4
13311500	East Fork of South Fork Salmon River near Stibnite	Lat 44°56'11", long 115°20'10", in NW¼SE¼SE¼ sec. 34, T.19 N., R.9 E., Valley County, on boundary between Boise and Payette National Forests, 75 ft (22.9 m) downstream from Sugar Creek, 3 mi (4.8 km) north of Stibnite, and 25.6 mi (41.2 km) upstream from mouth.	42.5	1928-41‡, 1973	9-18-73	17.5
13312500	Johnson Creek near Landmark ranger station	Lat 44°40'56", long 115°32'24", in SW¼NW¼ sec.31, T.16 N., R.8 E., Valley County, Boise National Forest, at Buck Mountain Campground, 0.3 mi (4.8 km) upstream from Lunch Creek, 1.0 mi (1.6 km) downstream from Bobcat Creek, 1.5 mi (2.4 km) north of Landmark ranger station, and 20 mi (32.2 km) south of Yellow Pine.	54.7	1942-49‡, 1973	9-17-73	10.3
13313500	Secesh River near Burgdorf	Lat 45°13'59", long 115°48'36", in SE¼SE¼NW¼ sec. 23, T.22 N., R.5 E., Idaho County, Payette National Forest, at Warren Wagon Road, 0.9 mi (1.4 km) upstream from Long Gulch, and 5.8 mi (9.3 km) southeast of Burgdorf.	104	1929, 1943-52‡, 1973	9-20-73	64.3
13314000	South Fork Salmon River near Warren	Lat 45°10'30", long 115°34'45", in SE¼SE¼NE¼ sec. 10, T.21 N., R.7 E., Valley County, Payette National Forest, at forest road bridge at South Fork guard station, 1.3 mi (2.1 km) upstream from Pony Creek, 1.5 mi (2.4 km) downstream from old gage site, 7.8 mi (12.6 km) southeast of Warren, and at mile 19.8 (31.9 km).	a1,160	1931-43‡, 1948,1973	9-20-73	f1,090
13314500	Warren Creek near Warren	Lat 45°16'35", long 115°41'46", in SE¼SE¼NE¼ sec. 3, T.22 N., R.6 E., Idaho County, Payette National Forest 500 ft (152 m) downstream from Warren Wagon Road bridge, 0.1 mi (0.2 km) downstream from Steamboat Creek, and 1.3 mi (20.9 km) northwest of Warren.	a37	1943-50‡, 1973	9-20-73	11.4
13315500	Mud Creek near Tamarack	Lat 44°59'48", long 116°20'54", in NW¼SW¼ sec.9, T.19 N., R.1 E., Adams County, 0.5 mi (0.8 km) upstream from Little Mud Creek, and 3.2 mi (5.1 northeast of Tamarack.	15.1	1937-38‡, 1939-43‡, 1945-59‡, 1961-71b, 1973	9-21-73	2.73
13316000	Boulder Creek near Tamarack	Lat 45°05'04", long 116°26'54", in NE¼NE¼SW¼ sec. 10, T.20 N., R.1 W., Adams County, Payette National Forest, 125 ft (38.1 km) upstream from Yantis ditch, and 8.0 mi (12.9 km) northwest of Tamarack.	a6.5	1937, 1938-45‡, 1973	9-21-73	2.50
13316300	Indian Creek near Pollock	Lat 45°16'50", long 116°21'12", in SE¼NE¼NE¼ sec. 5, T.22 N., R.1 E., Idaho County, Nez Perce National Forest, at forest road crossing and 2.5 mi (4.0 km) south of Pollock.	2.66	1961-71b, 1973	9-26-73	.47

Discharge measurements made at low-flow partial-record stations during water year 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Salmon River basin--Continued				
13316390	Rapid River above Fish Hatchery, near Riggins	Lat 45°21'05", long 116°23'52", in SE¼NW¼NE¼ sec. 12, T.23 N., R.1 W., Idaho County, Nez Perce National Forest, 500 ft (168 m) above diversion for Rapid River Fish Hatchery, 0.5 mi (0.8 km) downstream from Thorn Gulch, 0.5 mi (0.8 km) upstream from Shingle Creek, 2.8 mi (4.5 km) upstream from mouth, and 6.0 mi (9.7 km) southwest of Riggins.	-	1973	9-26-73	76.2
13316600	Slate Creek at mouth, at Slate Creek	Lat 45°38'25", long 116°16'56", in NE¼NW¼NW¼ sec. 36, T.27 N., R.1 E., Idaho County, 200 ft (61 m (upstream from U.S. Highway 95 (new bridge), 300 ft (91 m) upstream from mouth, 0.2 mi (0.3 km) northwest of Slate Creek, and 8.7 mi (14.0 km) south of White Bird.	127	1948,1973	9-27-73	44.8
13317045	White Bird Creek near White Bird	Lat 45°47'23", long 116°15'17", in NE¼SE¼SW¼ sec. 6, T.28 N., R.2 E., Idaho County, at private road crossing, 0.2 mi (0.3 km) upstream from Magpie Gulch, and 3.0 mi (4.8 km) northeast of White Bird.	-	1973	9-27-73	10.4
		Clearwater River basin				
13336000	Selway River above Meadow Creek, near Lowell	Lat 46°02'46", long 115°17'27", in sec.11, T.31 N., R.9 E. (unsurveyed), Idaho County, Nez Perce National Forest, 0.2 mi (0.3 km) upstream from Meadow Creek, 0.9 mi (1.4 km) upstream from Selway Falls, 12.2 mi (19.6 km) upstream from gaging station Selway River near Lowell, and 15.5 mi (24.9 km) southeast of Lowell.	a1,550	1944-49‡, 1973	9- 9-73	544
13336100	Meadow Creek near Lowell	Lat 46°01'51", long 115°17'23", in NE¼ sec.14, T. 31 N., R.9 E. (unsurveyed), Idaho County, Nez Perce National Forest, attached to bridge pier, at mile 1.1 (1.8 km), and 16.5 mi (26.5 km) southeast of Lowell.	241	1910,1924, 1963-70‡, 1973	9- 9-73	94.3
13336600	Swiftwater Creek near Lowell	Lat 46°06'55", long 115°34'21", in SE¼SE¼NE¼ sec. 16, T.32 N., R.7 E., Idaho County, Nez Perce National Forest, at mouth at forest road and 2.5 mi (4.0 km) southeast of Lowell.	6.19	1961-71b, 1973	9- 9-73	1.92
13336650	East Fork Papoose Creek near Powell ranger station	Lat 46°32'07", long 114°45'52", in SE¼SW¼NE¼ sec. 24, T.37 N., R.13 E., Idaho County, Clearwater National Forest, at forest road 3 mi (4.8 km) northwest of Powell ranger station.	a4.51	1961-71b, 1973	9- 8-73	1.44
13336800	Warm Springs Creek near Powell ranger station	Lat 46°28'20", long 114°53'10", in sec.7, T.36 N., R.13 E. (unsurveyed), Idaho County, Clearwater National Forest, at mouth 9 mi (14.5 km) west of Powell ranger station.	a74.7	1911,1924, 1956-59‡, 1973	9- 8-73	21.6
13336850	Weir Creek near Powell ranger station	Lat 46°27'31", long 115°02'01", near W¼ cor. sec. 13, T.36 N., R.11 E. (unsurveyed), Idaho County, Clearwater National Forest, 200 ft (61 m) upstream from U.S. Highway 12 and 16 mi (25.7 km) west of Powell ranger station.	a12.2	1961-71b, 1973	9- 8-73	3.64
13336900	Fish Creek near Lowell	Lat 46°20'01", long 115°20'50", in sec.33, T.35 N., R.9 E. (unsurveyed), Idaho County, Clearwater National Forest, at mile 0.2 (0.3 km), 1.3 mi (2.1 km) southwest of Lochsa ranger station, and 18 mi (29.0 km) northeast of Lowell.	89.2	1924, 1957-67‡, 1973	9- 8-73	24.5
13337100	Clear Creek near Kooskia	Lat 46°07'56", long 115°57'55", in SE¼SE¼NW¼NW¼ sec.10, T.32 N., R.4 E., Idaho County, at county road, 0.1 mi (0.2 km) upstream from mouth, 1.5 mi (2.4 km) east of Kooskia.	a102	1924, 1962‡, 1968‡, 1971-73‡	8-30-73	10.2
13337200	Red Horse Creek near Elk City	Lat 45°47'39", long 115°23'59", in SW¼SW¼NW¼ sec. 6, T.28 N., R.9 E. (unsurveyed), Idaho County, Nez Perce National Forest, 75 ft (22.9 m) upstream from Elk City to Dixie road and 3.0 mi (4.8 km) southeast of Elk City.	9.13	1961-71b, 1973	9-16-73	.74
13337700	Peasley Creek near Golden	Lat 45°49'05", long 115°49'01", in SE¼ sec.27, T. 29 N., R.5 E. (unsurveyed), Idaho County, Nez Perce National Forest, at State Highway 14 and 6.6 mi (10.6 km) west of Golden.	14.2	1962-71b, 1973	9-16-73	2.23
13338000	South Fork Clearwater River near Grangeville	Lat 45°54'49", 116°00'17", in SW¼NW¼NE¼ sec.30, T.30 N., R.4 E., Idaho County, Nez Perce National Forest, at mouth of Schwartz Creek, 300 ft (91 m) downstream from old gage site, 6 mi (9.7 km) east of Grangeville, and at mile 21.7 (34.9 km).	865	1910-16‡, 1923-63‡, 1973	9-16-73	176
13338200	Sally Ann Creek near Stites	Lat 46°00'40", long 115°57'40", in SE¼ sec.21, T. 31 N., R.4 E., Idaho County, at State Highway 13 and 5.8 mi (9.3 km) south of Stites.	13.9	1961-71b, 1973	9-16-73	.32

Discharge measurements made at low-flow partial-record stations during water year 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Clearwater River basin--Continued				
13339500	Lolo Creek near Greer	Lat 46°22'30", long 116°08'30", in SW¼ sec.13, T. 35 N., R.2 E., on line between Clearwater and Idaho County, 300 ft (91 m) downstream from powerplant of Nez Perce Power Co. and 1.5 mi (2.4 km) south of Greer.	243	1912-13‡, 1964,1973	9-15-73	20.7
13339900	Deer Creek near Orofino	Lat 46°29'30", long 116°10'30", in SW¼ sec.3, T. 36 N., R.2 E., Clearwater County, at dirt road and 3.0 mi (4.8 km) east of Orofino.	a6.8	1962-71b, 1973	9-15-73	0
13341100	Cold Springs Creek near Craigmont	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 mi (4.3 km) west of Craigmont.	8.07	1961-71b, 1973	9- 5-73	.02
13341400	East Fork Potlatch River near Bovill	Lat 46°50'08", long 116°23'26", in SW¼SW¼ sec.6, T.40 N., R.1 E., Latah County, 60 ft (18.3 m) upstream from highway bridge and 1.5 mi (2.4 km) south of Bovill.	41.6	1959-71‡, 1973	9-22-73	f10.7
13342000	Mission Creek near Winchester	Lat 46°11'20", long 116°38'49", in SW¼NE¼ sec.24, T.33 N., R.3 W., Lewis County, at county road and 4 mi (6.4 km) southwest of Winchester.	a16	1940-45‡, 1948,1956,	9- 5-73	.02
13342150	Lapwai Creek above Sweetwater Creek, near Sweetwater	Lat 46°21'28", long 116°46'01", in NE¼SW¼SW¼ sec. 19, T.35 N., R.3 W., Nez Perce County, at bridge, 400 ft (122 m) downstream from Thiessen Gulch, 1.9 mi (3.1 km) upstream from Sweetwater Creek, and 1.7 mi (2.7 km) southeast of Sweetwater.	-	1973	9-12-73	.71

‡ Operated as a continuous-record gaging station.
a Approximately.
b Operated as a crest-stage station.
c Revised.
d Discharge measurement made near mouth.
e Estimated.
f Raining most of day.
g Rained prior to discharge measurement.

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)
		Bear River basin					
10090800	Battle Creek tributary near Treasureton	Lat 42°16'40", long 111°48'50", in SW¼ sec.20, T. 13 S., R.40 E., Franklin County, at mile 1.5 (2.4 km), on side road from State Highway 34, and 2 mi (3.2 km) northeast of Treasureton.	a4.5	1961-71, 1973	4-13-73	9.89	52
10091130	Swan Lake Creek near Swan Lake	Lat 42°20'31", long 111°59'05", in NE¼NW¼ sec.35, T.12 S., R.38 E., Bannock County, at culvert on county road and 2.2 mi (3.5 km) north of Swan Lake.	-	1973	-	-	(b)
10172970	Rock Creek near Holbrook	Lat 42°14', long 112°44', in NW¼ sec.9, T.14 S., R.32 E., Oneida County, at county road crossing 6.0 mi (9.7 km) northwest of Holbrook.	44	1962-71, 1973	7-22-73	c21.37	155
		Kootenai River basin					
12310800	Trail Creek at Naples	Lat 48°34'28", long 116°23'20", in SW¼SW¼ sec.6, T.60 N., R.1 E., Boundary County, at culvert crossing of Spokane International Railroad and 0.2 mi (0.3 km) north of Naples School.	16.1	1961-71, 1973	5-17-73	-	d85
		Pend Oreille River basin					
12392100	Trapper Creek near Clark Fork	Lat 48°15'57", long 116°07'00", in NE¼ sec.30, T. 57 N., R.1 E., Bonner County, at forest road and 9.8 mi (15.8 km) north of Clark Fork.	1.12	1962-73	5-15-72 5-17-73	16.13 14.23	102 33
12393600	Binarch Creek near Coolin	Lat 48°28'10", long 116°55'20", in NE¼ sec.13, T. 59 N., R.5 W., Bonner County, at State Highway 57 and 3 mi (4.8 km) west of Coolin.	10.7	1962-71, 1973	5-17-73	-	d40
		Spokane River basin					
12413100	Boulder Creek at Mullan	Lat 47°28'08", long 115°47'40", in NE¼SE¼NE¼ sec. 34, T.48 N., R.5 E., Shoshone County, at crossing of U.S. Highway I-90 in Mullan.	3.13	1961-71, 1973	5-16-73	e11.75	69
12413700	Latour Creek near Cataldo	Lat 47°28'10", long 116°26'15", in NE¼ sec.34, T. 48 N., R.1 W., Kootenai County, at BLM road bridge, 0.4 mi (0.6 km) upstream from Baldy Creek, at mile 6.5 (10.5 km), and 7.8 mi (12.6 km) southwest of Cataldo.	24.8	1967-71‡, 1973	(f)	(f)	(g)
12414400	East Fork Big Creek near Calder	Lat 47°18'07", long 116°07'05", in SW¼NE¼SE¼ sec. 30, T.48 N., R.3 E., Shoshone County, at road bridge 3.7 mi (6.0 km) northeast of Calder.	15.4	1973	5-17-73	e9.62	d94
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 mi (0.3 km) north of Plummer.	2.10	1961-73	1-16-73	9.19	76
		Lyons Creek basin					
13038410	Lyons Creek near Ririe	Lat 43°40'54", long 111°44'50", in NE¼NE¼ sec.16, T.4 N., R.40 E., Madison County, in flood control channel and 0.7 mi (1.1 km) south of Byone.	-	1973	4-14-73	12.81	282
		Henrys Fork basin					
13038900	Targhee Creek near Macks Inn	Lat 44°38'50", long 111°20'30", in NW¼NE¼ sec.11, T.15 N., R.43 E., Fremont County, at State Highway 87 crossing 1.5 mi (2.4 km) west of junction of State Highway 87 and U.S. Highway 191 and 10.4 mi (16.7 km) north of Macks Inn.	20.8	1963-73	6- 1-72 6- 9-73	8.32 8.13	246 230
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 mi (16.9 km) northwest of Tetonia.	17.9	1962-73	4-24-74	6.69	168
		Snake River basin					
13061100	Snake River tributary near Osgood.	Lat 43°23'07", long 112°08'47", 0.2 mi (0.3 km) west of northeast corner sec.30, T.3 N., R.37 E., Bonneville County, 2.2 mi (3.5 km) west of Osgood and 9 mi (14 km) northwest of Idaho Falls.	7.64	1961-73	4- 5-73	13.41	180
13062650	Snake River tributary No. 9 near Rockford	Lat 43°12'25", long 112°34'24", in SE¼SE¼ sec.22, T.2 S., R.33 E., Bingham County, at county road crossing and 3.2 mi (5.2 km) northwest of Rockland.	-	1973	9-8-73a	11.70	12
		Blackfoot River basin					
13065950	Blackfoot River tributary near Goshen	Lat 43°15'30", long 112°02'06", in NE¼SW¼ sec.8, T.2 S., R.38 E., Bingham County, at county road crossing and 4.2 mi (6.8 km) southeast of Goshen.	-	1973	3- 2-73	25.83	116
		Portneuf River basin					
13072890	Dempsey Creek near Lava Hot Springs	Lat 42°35'57", long 112°01'12", in SW¼NW¼ sec.33, T.9 S., R.28 E., Bannock County, at road crossing and 1.0 mi (1.6 km) south of Lava Hot Springs.	-	1973	5- 9-73	12.46	58
13075090	Inman Creek near Inkom	Lat 47°49'17", long 112°12'57", in SE¼SW¼ sec.11, T.7 S., R.36 E., Bannock County, at county road crossing and 2.5 mi (4.0 km) northeast of Inkom.	-	-	3-27-73	16.82	136

See footnotes at end of table, p. 273.

Annual minimum 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)
		Portneuf River basin--Continued					
13076125	Bannock Creek tributary near Pocatello	Lat 42°44'27", long 112°36'46", in SW¼NW¼ sec.9, T.8 S., R.33 E., Power County, at road crossing and 12.5 mi (20 km) north of Pauline.	-	-	3- 2-73	13.77	34
		Raft River basin					
13079800	Heglar Canyon tributary near Rockland	Lat 42°28'25", long 113°08'47", in SE¼SW¼ sec.11, T.11 S., R.28 E., Cassia County, 600 ft (183 m) upstream from Heglar Canyon road crossing and 16 mi (26 km) southwest of Rockland.	7.72	1958, 1962-71, 1973	3- 3-73	11.47	78
		Goose Creek basin					
13084400	Birch Creek above diversions, near Oakley	Lat 42°10'40", long 113°49'05", in SE¼SW¼NE¼ sec. 25, T.14 S., R.22 E., Cassia County, at county road crossing, 0.3 mi (0.5 km) downstream from North Carson Creek, and 5.3 mi (8.5 km) southeast of Oakley.	-	1973	5- 8-73	9.85	82
		Snake River basin					
13084850	"F" Main Drain near Rupert	Lat 42°42'14", long 113°40'45", in SE¼NE¼NW¼ sec. 29, T.8 S., R.24 E., Minidoka County, at 600 North Road crossing, 1.5 mi (2.4 km) northwest of Rupert Cemetery, and 5.9 mi (9.5 km) north of Rupert.	-	1973	2-28-73	13.55	620
		Salmon Falls Creek basin					
13106535	Soldier Creek near Rogerson	Lat 42°13'20", long 114°14'45", in SE¼NE¼ sec.7, T.14 S., R.17 E., Twin Falls County, at county road crossing, 100 ft (30 m) upstream from unnamed tributary, and 5 mi (8 km) east of Rogerson.	-	1973	5- 8-73	-	(h)
		Mud Lake-Lost River basins					
13132555	Big Lost River tributary No. 2 near Idaho Falls	Lat 43°22'10", long 112°37'30", in NW¼NE¼ sec.31, T.3 N., R.33 E., Bingham County, at U.S. Highway 20 crossing, 24.6 mi (39.6 km) southeast of Howe, 28.5 mi (45.9 km) northwest of Blackfoot, and 30.0 mi (48.3 km) west of Idaho Falls.	-	1973	3-22-73	12.78	182
		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 mi (29 km) north of Gooding.	2.22	1961-73	4- 6-73	3.20	21
		Snake River basin					
13153777	Snake River tributary No. 10 near King Hill	Lat 42°53'34", long 115°08'39", in NW¼NW¼NW¼ sec. 22, T.6 S., R.11 E., Elmore County, at Shoestring crossing, about 0.4 mi (0.6 km) above mouth, and 8.5 mi (13.7 km) southeast of King Hill.	-	1973	-	-	0
		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 mi (10.5 km) northwest of Bliss.	140	1938-43‡, 1957-62‡, 1963-73	1-17-73	13.15	1,000
		Snake River basin					
13155530	Little Canyon Creek at Stout Crossing, near Glenns Ferry	Lat 43°09'14", long 115°18'32", in NE¼NW¼NE¼ sec. 19, T.3 S., R.10 E., Elmore County, on left bank at county road crossing and 13.8 mi (22.2 km) north of Glenns Ferry.	14.2	1961-65, 1966-71‡, 1973	-	-	(i)
		Sailor Creek basin					
13157005	Pot Hole Creek tributary near Winter Camp Butte	Lat 42°38'15", long 115°21'25", in SE¼ sec.26, T. 9 S., R.9 E., Owyhee County, at road crossing 4.4 mi (7.1 km) east of Winter Camp Butte.	-	1973	-	-	0
		Bruneau River basin					
13170100	Sugar Creek tributary near Grasmere	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 mi (21.7 km) north of Grasmere.	4.50	1961-71, 1973	-	-	0
13170200	Sugar Creek near Bruneau	Lat 42°40'36", long 115°53'30", in NW¼SW¼NE¼ sec. 5, T.9 S., R.5 E., Owyhee County, at road crossing to missile site and 15 mi (24 km) south of Bruneau.	33.6	1973	-	-	0
		Squaw Creek basin					
13172800	Little Squaw Creek tributary near Marsing	Lat 43°21'50", long 116°55'17", in SW¼ sec.3, T. 1 S., R.5 W., Owyhee County, at Highway 95 and 14 mi (23 km) southwest of Marsing.	1.81	1961-71, 1973	-	-	0
		Boise River basin					
13184200	Roaring River near Rocky Bar	Lat 43°42'20", long 115°27'50", in sec.2, T.4 N., R.8 E., Elmore County, 6 mi (10 km) upstream from mouth and 9 mi (14 km) northwest of Rocky Bar.	23.3	1958, 1963-71, 1973	5-14-73	15.77	150
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 mi (24 km) southeast of Boise.	7.94	1961-73	1-13-73	9.68	10

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)
		Payette River basin					
13234300	Fivemile Creek near Lowman	Lat 44°06'20", long 115°27'30", in NE¼ sec.24, T. 9 N., R.8 E., Boise County, at State Highway 21 and 8.5 mi (13.7 km) east of Lowman.	a7.8	1962-71, 1973	5-19-73	16.50	130
13245400	Tripod Creek at Smiths Ferry	Lat 44°17'55", long 116°05'17", in SW¼ sec.10, T. 11 N., R.3 E., Valley County, at State Highway 15 at Smiths Ferry.	8.63	1962-71, 1973	5-17-73	4.53	67
13248900	Cottonwood Creek near Horseshoe Bend	Lat 43°53'35", long 116°12'09", in NW¼NE¼ sec.3, T.6 N., R.2 E., Boise County, at Harris Creek road and 1.5 mi (2.4 km) south of Horseshoe Bend.	6.53	1961-71, 1973	12-24-72	11.74	50
		Salmon River basin					
13296500	Salmon River below Yankee Fork, near Clayton	Lat 44°16'06", long 114°43'55", in sec.20, T.11 N., R.15 E. (unsurveyed), Custer County, 700 ft (213 m) downstream from Yankee Fork, 18 mi (29 km) upstream from Clayton, and at mile 366.9 590 km).	802	1921-72‡, 1973	5-20-73	6.44	3,310
13298500	Salmon River near Challis	Lat 44°22'43", long 114°15'18", in SE¼SE¼ sec.7, T.12 N., R.19 E., Custer County, 250 ft (76 m) downstream from Bayhorse Creek, 9 mi (14 km) south of Challis, and at mile 334.8 (539 km).	a1,800	1928-72‡, 1973	5-20-73	6.10	4,710
13301700	Morse Creek above diversions, near May	Lat 44°36'55", long 113°48'25", in SW¼ sec.24, T. 15 N., R.22 E., Custer County, 0.6 mi (1.0 km) upstream from mouth of canyon and 5.2 mi (8.4 km) east of May.	18.0	1962-71, 1973	5-19-73	5.69	140
13305800	Hughes Creek near North Fork	Lat 45°31'12", long 114°01'59", in SW¼NW¼SW¼ sec. 6, T.25 N., R.21 E., Lemhi County, just upstream from West Fork Hughes Creek and Allen Creek and 8.0 mi (13 km) northwest of North Fork.	15.7	1962-73	6- 8-72 5-19-73	3.47 -	200 60
		Clearwater River basin					
13339700	Canal Gulch Creek at Pierce ranger station	Lat 46°29'50", long 115°47'30", in NW¼ sec.2, T. 36 N., R.5 E., Clearwater County, at Pierce ranger station 0.5 mi (0.8 km) north of Pierce.	a6.0	1962-71, 1973	5-18-73	12.06	33
13341300	Bloom Creek near Bovill	Lat 46°51'30", long 116°17'30", in NE¼ sec.35, T. 41 N., R.1 E., Clearwater County, 200 ft (67 m) upstream from mouth and 4.8 mi (7.7 km) east of Bovill.	3.66	1959-71‡, 1973	5-18-73	3.18	50
13343010	Lindsay Creek tributary No. 4 near Lewiston	Lat 46°22'10", long 116°53'28", in NE¼NW¼NW¼ sec. 19, T.35 N., R.4 W., Nez Perce County, at road crossing, 1.5 mi (2.4 km) east of Lewiston Orchards, and 6 mi (10 km) southeast of Lewiston.	2.96	1973	-	-	0

‡ Operated as a continuous-record gaging station.
a Approximately.
b Peak discharge was less than 10 cfs and occurred sometime in May.
c Downstream gage.
d Estimated.
e Gage set to new datum.
f Undetermined.
g Greater than 26 cfs but less than 250 cfs.
h Greater than 3 cfs but less than 15 cfs.
i Peak discharge less than 39 cfs but greater than 16 cfs.

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FIGURE 15.--MAP OF IDAHO SHOWING LOCATION OF LOW-FLOW AND CREST-STAGE PARTIAL-RECORD STATIONS

EXPLANATION

PART 13

River basin boundary and number

■ 305800
Crest-stage partial-record station and number

▲ 305700
Low-flow measurement station and number

0 10 20 30 40 50 MILES
0 10 20 30 40 50 60 70 KILOMETERS

Base from U.S. Geological Survey
Idaho 1:500,000, 1967

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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 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Bear River basin						
Battle Creek tributary 10090800	Battle Creek	Operated as a crest-stage station.	a4.5	1961-71	4-23-73	29.7
Swan Lake Creek 10091130	Deep Creek	Operated as a crest-stage station.	-	-	8- 1-73	b1
					8-29-73	1.01
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 mi (1.6 km) above dam on Samaria Reservoir No. 2, 5.8 mi (9.3 km) northwest of Malad City, and 8.8 mi (14.2 km) upstream from Little Malad River.	ab3.3	1932‡, 1941-47‡, 1948-72	12-14-72	9.17
					3-28-73	7.67
					5-23-73	9.22
					9-27-73	10.9
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 mi (0.5 km) west of gaging station 10125500 Malad River at Woodruff.	-	1970-72	11- 1-72	2.47
					12-14-72	0
					5-23-73	0
					8-29-73	13.0
					9-26-73	15.6
Kootenai River basin						
Trail Creek 12310800	Deep Creek	Operated as a crest-stage station.	c16.1	1961-71	9-13-73	0
Drainage District No. 11 12313350	Kootenai River	Lat 48°45'49", long 116°22'17", in SE¼SE¼ sec. 31, T.63 N., R.1 E., Boundary County, near north end of district, 5.5 mi (8.8 km) northwest of Bonners Ferry, and at mile 143.6 (231.1 km).	-	1972	1-18-73	12.65
					3-21-73	2.68
Drainage District No. 6 12319900	.....do.....	Lat 48°57'42", long 116°28'20", in NW¼SW¼ sec. 28, T.65 N., R.1 W., Boundary County near northwest end of district, 2.8 mi (4.5 km) south of Porthill, and at mile 113.0 (258.9 km).	-	-	3-21-73	5.15
Pend Oreille River basin						
Trapper Creek 12392100	Lightning Creek	Operated as a crest-stage station.	1.12	1961-71	10- 5-73	0
Binarch Creek 12393600	Priest River	Operated as a crest-stage station.	10.4	1953,1958, 1961-71	8-27-73	2.91
Spokane River basin						
South Fork Coeur d'Alene River 12413080	Coeur d'Alene River	Lat 47°28'15", long 115°46'22", in NE¼NE¼ sec. 35, T.48 N., R.5 E., Shoshone County, at Highway 10 crossing, 0.9 mi (1.4 km) east of Mullan, and 1 mi (1.6 km) upstream from mouth of Boulder Creek.	-	1972	10-10-72	22.0
					6- 6-73	62.7
Boulder Creek 12413100	South Fork Coeur d'Alene River	Operated as a crest-stage station.	3.13	1961-71	5-15-73	44.3
					9- 7-73	.31
South Fork Coeur d'Alene River 12413105	Coeur d'Alene River	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 mi (0.8 km) east of Shoshone County Court House in Wallace.	-	1972	10-12-72	32.8
					6- 7-73	141
Canyon Creek 12413125	South Fork Coeur d'Alene River	Lat 47°28'24", long 115°54'50", in SE¼SW¼ sec. 24, T.48 N., R.4 E., Shoshone County, at concrete bridge 200 ft (61 m) upstream from mouth, at Wallace.	-	1972	10-12-72	22.4
					6- 7-73	89.6
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 footbridge 100 ft (30 m) upstream from entrance of covered stream (mouth of creek located under covered section), at Wallace.	-	1972	10-12-72	4.64
					6- 7-73	17.0
South Fork Coeur d'Alene River 12413152	Coeur d'Alene River	Lat 47°29'22", long 115°56'58", in SW¼SE¼ sec. 21, T.48 N., R.4 E., Shoshone County, just below mouth of Lake Creek at Silverton.	-	1972	10-12-72	.90
					6- 6-73	5.75
Shields Gulch 12413165	South Fork Coeur d'Alene River	Lat 47°28'55", long 115°59'40", in NW¼SW¼NE¼ sec.30, T.48 N., R.4 E., Shoshone County, about 2 mi (3.2 km) southeast of Osburn.	.68	1971-72	10-12-72	.42
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 mi (1.9 km) south-southwest of Osburn.	1.25	1971-72	10-12-72	.54
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.	-	1972	10-12-72	72.4
					6- 6-73	258
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 mi (5.6 km) east and 3.4 mi (5.5 km) south of Kellogg.	5.60	1971-72	10-13-72	2.50
South Fork Coeur d'Alene River 12413250	Coeur d'Alene River	Lat 49°32'49", long 116°08'09", in SE¼ sec.36, T.49 N., R.2 E., Shoshone County, at concrete bridge crossing to Junior High School just above Bunker Hill pond near Kellogg.	-	1972	10-11-72	118
					6- 6-73	314
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.	-	1972	10-11-72	171
					6- 7-73	510

See footnotes at end of table, p. 285.

Discharge measurements made at miscellaneous sites during water year 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Spokane River basin--Continued				
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.	-	1972	10-11-72 6- 7-73 8-21-73	459 1,560 283
Latour Creek 12413700	Coeur d'Alene River	Operated as a crest-stage station.		1967-71	6- 7-73 9- 7-73	39.5 8.42
East Fork Big Creek 12414400	Big Creek	Operated as a crest-stage station.	-	-	5-15-73	70.5
Plummer Creek tributary 12415200	Spokane River	Operated as a crest-stage station.	2.10	1961-72	1-14-73	40.4
		Henrys Fork basin				
Targhee Creek 13038900	Henrys Lake	Operated as a crest-stage station.	20.8	1904,1924, 1929-34, 1962-72	7- 9-73	b30
Teton River tributary 13053900	Teton River	Lat 43°49'59", long 111°14'59", in SE¼NW¼ sec.22, T.6 N., R.44 E., Teton County, at State Highway 33 crossing, 0.8 mi (1.3 km) upstream from mouth, and 4.8 mi (7.7 km) northwest of Tetonia.	-	-	8-21-73	†115
Milk Creek 13054400	.....do.....	Operated as a crest-stage station.	17.9	1962-72	10-13-72 5-15-73 5-16-73 8-24-73	0 0 0 0
		Snake River basin				
Snake River tributary 13061100	Snake River	Operated as a crest-stage station.	7.64	1961-72	4- 5-73 4-10-73 5-14-73	16.6 b.6 0
		Blackfoot River basin				
Blackfoot River tributary 13065950	Blackfoot River	Operated as a crest-stage station.	-	-	5-14-73	0
		Snake River basin				
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 mi (6.4 km) south of Pingree.	-	1926-29, 1932-72	10- 3-72 5- 4-73 5-28-73 6-20-73 7-13-73 8- 9-73 8-25-73 9- 8-73 9-26-73	6.0 6.9 8.8 5.2 2.6 6.6 4.9 5.2 7.4
McTucker Springs 13069515	.....do.....	Lat 43°02'03", long 112°37'33", in NW¼ sec.32, T.4 S., R.33 E., Bingham County, 6 mi (9.7 km) south of Pingree.	-	1926-29, 1932-72	4- 2-68 5-16-68 7-25-68 8- 5-68 8-31-68 8-21-68 9-14-68 5-13-69 6-16-69 6-26-69 7-11-69 7-25-69 8-15-69 8-30-69 9-20-69 7-16-70 7-31-70 8-21-70 9- 5-70 9-26-70 8- 5-71 8-23-71 9- 7-71 9-30-71 8-11-72 9- 2-72 10- 3-72 7-13-73 8- 9-73 8-25-73 9- 8-73 9-26-73	26.9 42.6 25.6 27.4 58.9 29.9 27.3 26.0 38.9 39.9 28.0 29.5 30.4 31.3 32.8 27.4 24.9 28.6 31.4 32.6 28.4 25.5 80.6 30.8 26.1 26.7 70.5 24.5 27.4 25.3 21.3 28.0
Hull Springs 13069520	.....do.....	Lat 43°02'49", long 112°39'39", in NE¼ sec.25, T.4 S., R.32 E., Bingham County, 2.5 mi (4 km) southeast of Springfield.	-	1926-29, 1932-67, 1971-72	10- 3-72 5- 4-73 5-28-73 6-20-73 7-13-73	10.7 11.4 5.4 8.3 10.4

Discharge measurements made at miscellaneous sites during water year 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Snake River basin--Continued						
Hull Springs--Continued					8- 9-73	11.0
					8-25-73	12.3
					9- 8-73	7.4
					9-26-73	7.4
Danielson Creek 13069540	Snake River	Lat 43°03'32", long 112°41'24", in NW¼SW¼ sec.23 T.4 S., R.32 E., Bingham County, 2.5 mi (4 km) south of Springfield.	-	1926-29, 1932-72	10- 2-72	67.2
					5- 4-73	52.6
					5-28-73	51.8
					6-20-73	70
					7-13-73	54.6
					8- 9-73	70.6
					8-25-73	63.9
					9- 8-73	60.4
					9-26-73	71.8
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 mi (0.8 km) north of Pebble.	-	1923-25, 1968-72	10-31-72	129
					12-12-72	126
					1-17-73	139
					2-20-73	135
					3-26-73	130
					4-24-73	217
					5-22-73	277
					6-26-73	183
					7-31-73	156
					8-29-73	134
					9-25-73	115
Inman Creek 13075090	Rapid Creek	Operated as a crest-stage station.	-	-	5-16-73	38.7
Sorrelle Creek 13075155	Portneuf River	Lat 42°47'30", long 112°15'10", in NE¼NW¼ sec.21, T.7 S., R.36 E., Bannock County, about 0.2 mi (0.4 km) upstream from U.S. Highway I-15 and 0.5 mi (0.8 km) north of Inkom.	-	-	7-20-73	†389
Portneuf River 13075909	Snake River	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 mi (0.3 km) east of Fort Hall Michaud pumping station, and 6 mi (9.7 km) northwest of Pocatello.	-	-	10-31-72	749
					11-29-72	604
					12-27-72	776
					1-24-73	710
Do..... 13075910	.....do.....	Lat 42°56'40", long 112°32'40", in NE¼ sec.36, T.5 S., R.33 E., Bannock-Power County line, 4 mi (6 km) west of Tyhee.	-	1926-29, 1932-72	10- 3-72	594
					5- 5-73	1,090
					5-29-73	586
					6-21-73	324
					7-13-73	187
					8- 9-73	306
					8-24-73	332
					9- 8-73	447
					9-27-73	601
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 mi (12.9 km) northwest of Pocatello.	-	1926-29, 1932-72	10- 3-72	57.8
					5- 5-73	52.1
					5-29-73	53.1
					6-21-73	49.3
					7-13-73	54.0
					8- 9-73	50.5
					8-24-73	52.6
					9- 8-73	56.2
					9-27-73	57.2
Clear Creek 15075930	.....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 mi (11.3 km) west of Fort Hall.	-	1926-29, 1932-72	10- 3-72	139
					5- 5-73	136
					5-28-73	128
					6-21-73	139
					7-13-73	122
					8- 9-73	136
					8-24-73	132
					9- 8-73	144
					9-27-73	137
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 mi (11.3 km) west of Fort Hall.	-	1926-29, 1932-72	10- 3-72	6.3
					5- 5-73	6.0
					5-28-73	6.4
					6-21-73	6.8
					7-13-73	5.9
					8- 9-73	5.8
					8-24-73	5.5
					9- 8-73	7.4
					9-27-73	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 mi (11.3 km) southwest of Fort Hall.	-	1926-29 1932-72	10- 3-72	113
					5- 5-73	127
					5-28-73	82.5
					6-21-73	121
					7-13-73	73.4
					8- 9-73	104
					8-24-73	106
					9- 8-73	118
					9-27-73	111

Discharge measurements made at miscellaneous sites during water year 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Portneuf River basin--Continued				
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 mi (12.9 km) west of Fort Hall.	-	1926-29, 1932-72	10- 3-72	27.6
					5- 5-73	29.5
					5-28-73	26.5
					6-21-73	28.2
					7-13-73	26.7
					8- 9-73	26.9
					8-24-73	26.0
					9- 8-73	29.0
					9-27-73	31.2
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 mi (12.9 km) west of Fort Hall.	-	1926-29, 1932-72	10- 3-72	524
					5- 5-73	528
					5-28-73	512
					6-21-73	493
					7-13-73	445
					8- 9-73	464
					8-24-73	472
					9- 8-73	493
					9-27-73	495
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 mi (12.9 km) west of Fort Hall.	-	1926-29, 1932-72	10- 3-72	31.5
					5- 5-73	34.8
					5-28-73	32.1
					6-21-73	30.2
					7-13-73	25.2
					8- 9-73	27.0
					8-24-73	26.7
					9- 8-73	31.0
					9-27-73	29.3
Bannock Creek tributary 13076125	Bannock Creek	Operated as a crest-stage station.	-		5-17-73	0
					8- 3-73	0
					9-28-73	0
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 and 10 mi (16.1 km) west of Pocatello.	413	1962-63, 1965, 1968-72	10- 3-72	23.4
					5- 5-73	79.6
					5-29-73	26.4
					6-21-73	32.7
					7-13-73	3.2
					8- 9-73	44.7
					8-24-73	7.2
					9- 8-73	33.4
					9-27-73	26.0
		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 mi (2.4 km) southeast of Aberdeen.	-	1970-72	10- 2-72	57.0
					5- 4-73	86.7
					5-28-73	81.2
					6-20-73	89.6
					7-12-73	34.9
					8- 8-73	45.1
					8-25-73	57.0
					9- 7-73	77.6
					9-26-73	99.4
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 mi (1.4 km) downstream from American Falls Dam.	-	1927-29, 1932-53, 1961-72	10- 3-72	19.1
					5- 5-73	18.6
					5-28-73	12.9
					7-12-73	16.8
					8- 8-73	18.0
					9- 8-73	19.8
		Raft River basin				
Heglar Canyon tributary 13079800	Raft River	Operated as a crest-stage station.	7.72	1958, 1961-71	3-19-73	0
					9-18-73	0
		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 mi (0.8 km) downstream from State Highway 28 bridge south of Blue Dome Inn, and 33.4 mi (53.7 km) west of Dubois.	-	1968-72	7-19-73	3.6
					8-29-73	2.5
					9-19-73	3.7
		Goose Creek basin				
Birch Creek 13084400	Goose Creek	Operated as a crest-stage station.	-	1912-13	4-10-73	32.5
					9-11-73	3.12
		Snake River basin				
"F" Main Drain 13084805	(Camp Holly Lake) Snake River	Operated as a crest-stage station.	-	-	2-12-73	0
					3-16-73	0
					5- 8-73	.44

Discharge measurements made at miscellaneous sites during water year 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
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 mi (0.3 km) upstream from mouth on right bank of Snake River, 0.5 mi (0.8 km) upstream from Twin Falls, and 3.5 mi (5.6 km) north of Kimberly.	-	1902,1917, 1923-24, 1950-59, 1963-72	3-30-73	*e14.1
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 (30.5 m) above point where flow cascades into right bank of Snake River at mile 617.1 (992.9 km), about 2 mi (3.2 km) upstream from Shoshone Falls and powerplant, and 4 mi (6.4 km) north of Kimberly	-	1902, 1923-24, 1939, 1950-59, 1963-72	3-26-73	*e45.5
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 mi (0.2 km) upstream from mouth on right bank of Snake River, 0.7 mi (1.1 km) northwest of upper outlet, and 4.5 mi (7.2 km) north of Kimberly.	-	1902,1923, 1950-59, 1963-72	3-26-73	*7.67
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 mi (0.8 km) upstream from Shoshone powerplant, and 4 mi (6.4 km) northeast of Twin Falls.	-	1950-59, 1963-72	3-26-73	*e3.59
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 mi (6.4 km) northeast of Twin Falls.	-	1950-59, 1963-72	3-26-73	*1.97
Blue Lakes Spring Outlet 13091500	.....do.....	Lat 42°36'30", long 114°28'34", in SW¼SW¼ sec.28, T.9 S., R.17 E., Jerome County, at point of entry to right bank of Snake River at mile 610.3 (981.9 km) and 4 mi (6.4 km) north of Twin Falls.	-	1902, 1913-14, 1917-20‡, 1921-47, 1950-59, 1963-71	4- 4-73	de210
Warm Creek 13091700	.....do.....	Lat 42°37'15", long 114°29'55", in NW¼NW¼ sec.29, T.9 S., R.17 E., Jerome County, 0.6 mi (0.9 km) upstream from point of entry to right bank of Snake River, 1.5 mi (2.4 km) northwest of Blue Lakes Spring Outlet, and 4.6 mi (7.4 km) northwest of Twin Falls.	-	1902,1917 1931, 1950-59, 1963-71	4- 4-73	d13.4
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 mi (2.1 km) downstream from Rock Creek, and 6.5 mi (10.5 km) south of Jerome.	-	1950-59, 1963-72	4- 5-73	a2.1
Crystal Springs 13093400	.....do.....	Lat 42°37'36", long 114°38'32", sec.12, T.9 S., R.15 E., Gooding County, a series of springs along a 0.6 mi (1.0 km) reach of the right bank of Snake River, 1 mi (1.6 km) upstream from Niagara Springs, and 6.5 mi (10.5 km) north of Filer.	-	1902,1917, 1919, 1924-25, 1931, 1950-59, 1963-71	3-29-73	*479
Niagara Springs 13093700	.....do.....	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 (37 m) upstream from mouth, 880 ft (268 m) downstream from source, 6 mi (9.7 km) northeast of Buhl, and 599.1 mi (963.9 km) upstream from mouth of Snake River.	-	1958-72‡	3-27-73	d295
Clear Lakes Spring Outlet 13094500	.....do.....	Lat 42°40'01", long 114°46'45", in SW¼SE¼ sec.2, T.9 S., R.14 E., Gooding County, at Clear Lakes powerplant of Idaho Power Co. and 4.5 mi (7.2 km) north of Buhl.	-	1902, 1913-14, 1917-21‡, 1924,1926, 1937, 1950-59, 1963-71	3-27-73	*d474
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 (152 m) upstream from mouth on right bank of Snake River, 2 mi (3.2 km) downstream from Clear Lakes Spring Outlet, and 6 mi (9.7 km) northwest of Buhl.	-	1902,1913, 1917-20, 1924-25, 1931, 1950-59, 1963-72	3-27-73	*d108
Banbury Springs 13095300	.....do.....	Lat 42°41'31", long 114°49'11", in SE¼NW¼ sec.33, T.8 S., R.14 E., Gooding County, at outlet on right bank of Snake River and 7 mi (11 km) northwest of Buhl.	-	1902,1913, 1917, 1919-20, 1924-25, 1950-59, 1963-71	3-28-73	*114

Discharge measurements made at miscellaneous sites during water year 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Tributaries between Snake River at Milner and Salmon Falls Creek--Continued						
Unnamed Spring 13095350	Snake River	Lat 42°41'51", long 114°49'21", in SE¼SW¼ sec.28, T.8 S., R.14 E., Gooding County, on right bank of Snake River, 0.4 mi (0.6 km) south of Blind Canyon Spring, and 7.5 mi (12.1 km) northwest of Buhl.	-	1950-59, 1963-71	3-28-73	*4.59
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 (396 m) upstream from Box Canyon Springs outlet, and 8 mi (12.9 km) northwest of Buhl.	-	1902,1917, 1919, 1950-59, 1963-72	3-28-73	*10.9
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 mi (8 km) north of San Jacinto, Nev.	-	1969-72	3-27-73 4-17-73 5-15-73	125 284 407
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 mi (8 km) north of San Jacinto, Nev.	-	1909,1914, 1938,1942, 1969-71	3-27-73 4-17-73 5-15-73	307 292 146
Soldier Creek 13106535	Deep Creek	Operated as a crest-stage station.	-	-	5-15-73	1.45
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 mi (0.8 km) upstream from mouth, on right bank of Snake River, and 7 mi (11.3 km) southeast of Hagerman.	-	1902, 1912-13, 1917-21, 1924-25, 1932, 1954-59, 1963-72	4- 5-73	d91.9
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 mi (0.3 km) upstream from mouth on right bank of Snake River and 4.6 mi (7.4 km) southeast of Hagerman.	-	1917,1921, 1924,1925, 1931,1968 1970-72	4- 5-73	*19.5
Thousand Springs 13132800	.....do.....	Lat 42°45', long 114°51'. Springs enter right bank of Snake River between mile 154.05 (247.87 km) near line between secs. 17 and 20, T.8 S., R.14 E., and mile 151.15 (243.2 km), about 200 ft (61 m) upstream from line between sec.1, T.8 S., R.13 E., and sec.6, T.8 S., R. 18 E., Gooding County, 6 mi (9.7 km) southwest of Hagerman.	-	1950-59, 1963-71	3-28-73	*1,100
Riley Creek 13133800	.....do.....	Lat 42°45'46", long 114°51'31", in SE¼NE¼ sec.6, T.8 S., R.14 E., Gooding County, at Hagerman Hatchery of U.S. Fish & Wildlife Service, 100 ft (30 m) downstream from small unnamed spring entering from right, 260 ft (79.2 m) upstream from site of Riley Creek below Lewis Spring discontinued gaging station, 300 ft (91.4 m) downstream from mouth of Lewis Creek, about 2 mi (3.2 km) upstream from mouth, and 4.2 mi (6.8 km) southeast of Hagerman.	-	1950-59, 1963-72	4- 5-73	*d58.1
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 mi (0.2 km) downstream from head of creek, 3.8 mi (6.1 km) southeast of Hagerman, and about 7.5 mi (12.1 km) upstream from mouth.	-	1902, 1917,1931, 1950-59, 1963-72	4- 5-73	*d44.0
Do..... 13134800	.....do.....	Lat 42°50'10", long 114°53'40", in SW¼NE¼ sec.11, T.7 S., R.13 E., Gooding County, 700 ft (213 m) northwest of U.S. Highway 30 bridge and 1.4 mi (2.3 km) north of Hagerman.	-	1902,1917, 1919, 1924-25, 1932, 1956-59, 1963-72	4- 5-73	206
Big Wood River basin						
Schooler Creek 13145700	Thorn Creek	Operated as a crest-stage station.	2.22	1961-72	3-20-73 4-10-73 5-17-73 5-25-73 9-17-73	0 1.34 0 0 0
Snake River basin						
Snake River tributary No. 10 13153777	Snake River	Operated as a crest-stage station.	-	-	5- 1-73 6- 6-73	0 0
Clover Creek basin						
Clover Creek 13154000	Snake River	Operated as a crest-stage station.	140	1938-43‡, 1957-62‡, 1963-66, 1969-72	4- 9-73 9-22-73	57.0 3.67

Discharge measurements made at miscellaneous sites during water year 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Little Canyon Creek basin						
Little Canyon Creek 13155300	Snake River	Operated as a crest-stage station.	14.2	1961-64†, 1965-71‡	4- 9-73	16.2
Sailor Creek basin						
Pothole Creek tributary 13157005	Pothole Creek	Operated as a crest-stage station.	-	-	5- 1-73 6- 6-73	0 0
Bruneau River basin						
Sugar Creek tributary 13170100	Sugar Creek	Operated as a crest-stage station.	4.50	1961-72	4-23-73 6- 7-73	0 0
Sugar Creek 13170200	Bruneau River	Operated as a crest-stage station.	-	-	4-30-73 6- 7-73	0 0
East Fork Jarbidge River 13162500	Jarbidge River	Lat 42°02'00", long 115°22'10", in SE¼SE¼ sec.14, T.16 S., R.9 E., Owyhee County, on left bank 0.2 mi (0.3 km) downstream from Murphy Hot Springs, 2 mi (3.2 km) upstream from mouth, and 11 mi (17.7 km) southwest of Three Creek.	84.6	1928-33‡, 1953-71‡	9-20-73	12.5
Squaw Creek basin						
Little Squaw Creek tributary 13172800	Little Squaw Creek	Operated as a crest-stage station.	1.81	1961-71	4-23-73 5-18-73 6- 8-73	0 0 0
Snake River basin						
Snake River 13172850	Columbia River	Lat 43°32'54", long 116°47'57", in NW¼SW¼SE¼ sec. 34, T.3 N., R.4 W., Owyhee County, at State Highway 72 crossing at Marsing.	-	1969-71	11-10-71 1-11-72 5-22-72 7- 9-73 8-28-73	21,700 17,200 16,000 5,370 7,210
Boise River basin						
Roaring River 13184200	Middle Fork Boise River	Operated as a crest-stage station.	23.3	1958, 1963-71	3-27-73	16.6
Grimes Creek 13199800	Mores Creek	Lat 43°43'36", long 115°57'09", in SW¼SW¼NW¼ sec 35, T.5 N., R.4 E., Boise County, 200 ft (61 m) upstream from mouth and 9 mi (14.5 km) southwest of Idaho City.	-	-	9-25-73	33.7
Robie Creek 13200500	Mores Creek	Lat 43°37'49", long 115°59'55", in NE¼ sec.5, T.3 N., R.4 E., Boise County, on left bank at mile 0.5 (0.8 km) and 5 mi (8 km) northwest of Arrowrock Dam.	15.8	1950-71‡	9-25-73	1.68
Cottonwood Creek 13204800	Boise River	Operated as a crest-stage station.	12.0	1959	9-25-73	0
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 mi (8 km) northwest of Boise, and at mile 47.1 (75.8 km).	c2,800	1938-40‡, 1972	10-16-72 11-13-72 12-19-72	222 183 233
Bryans Run 13210300	Blacks Creek	Operated as a crest-stage station.	7.03	1961-68, 1972	4-26-73 6- 8-73	0 0
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 mi (3.1 km) southeast of Caldwell.	-	1972	10-18-72 11-13-72	e102 e70.3
Payette River basin						
Fivemile Creek 13234300	South Fork Payette River	Operated as a crest-stage station.	g7.8	1961-71	5-15-73	79.8
Tripod Creek 13245400	North Fork Payette River	Operated as a crest-stage station.	8.63	1961-68, 1970-71	4-23-73 9-17-73	25.9 *.22
Cottonwood Creek 13248900	Harris Creek	Operated as a crest-stage station.	6.53	1961-71	11- 7-72 2-14-73	0 a3.0
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 mi (0.3 km) downstream from Black Canyon Dam and 5 mi (8 km) northeast of Emmett.	-	1925-31, 1950,1955, 1957-72	4-12-73 5- 8-73 7-10-73 9-12-73	310 1,220 1,230 1,020
Weiser River basin						
Dixie Creek 13261670	Weiser River	Operated as a crest-stage station.	-	-	4-16-73 5-14-73	1.60 0
Salmon River basin						
Salmon River 13296500	Snake River	Operated as a crest-stage station.	802	1921-72‡	6- 4-73	1,740
Pat Hughes Creek 13297320	Thompson Creek	Lat 44°17'18", long 114°21'49", in NW¼NE¼NW¼ sec. 14, T.11 N., R.16 E., Custer County, 0.1 mi (0.2 km) upstream from mouth and 7.6 mi (12.2 km) west of Clayton.	f2.5	1971-72	5- 4-73	7.03
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 mi (0.3 km) upstream from East Fork, and 3.4 mi (5.5 km) east of Clayton.	1,170	1971-72	10- 4-72 5- 1-73 6- 7-73	e983 1,040 e2,180

Discharge measurements made at miscellaneous sites during water year 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Salmon River basin--Continued				
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 (30 m) upstream from West Fork and 24 mi (39 km) southwest of Clayton.	18.0	1971-72	5- 5-73	e13.4
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 (30 m) upstream from South Fork and 24 mi (39 km) southwest of Clayton.	8.62	1971-72	5- 5-73	e6.36
East Fork Salmon River 13297394	Salmon River	Lat 43°58'02", long 114°30'32", Custer County, at ford crossing, 1.2 mi (1.9 km) downstream from Ibex Creek, and 20 mi (32 km) southwest of Clayton.	41.2	-	5- 5-73	e34.3
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 mi (0.3 km) upstream from mouth, at bridge crossing, 0.6 mi (0.9 km) northeast of Bowery guard station, and 19.5 mi (31.4 km) south of Clayton.	26.1	1971-72	10- 4-72	e8.09
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 mi (2.6 km) downstream from West Pass Creek, and 18 mi (29 km) south of Clayton.	75.6	1971-72	10- 4-72 5- 6-73	e38.8 e54.2
Germania Creek 13297402	East Fork Salmon River	Lat 43°58'42", long 114°38'33", Custer County, 0.3 mi (0.5 km) upstream from Galena Gulch and 21 mi (34 km) southwest of Clayton.	4.10	-	5- 3-73	e3.37
Do..... 13297404	.....do.....	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 mi (0.9 km) downstream from Bowery Creek, and 15.5 mi (24.9 km) south of Clayton.	48.9	1971-72	10- 4-72 5- 6-73	e35.7 e34.7
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 mi (1.9 km) upstream from Little Boulder Creek, and 12.5 mi (20.1 km) south of Clayton.	164	1971-72	10- 4-72 5- 1-73 6- 5-73	94.2 74.4 e286
Little Boulder Creek 13297434	East Fork Salmon River	Lat 44°03'13", long 114°26'08", Custer County, just upstream from avalanche dam at Four Lakes Basin and 17 mi (27 km) southwest of Clayton.	.36	-	10- 2-72	e.32
Do..... 13297436	.....do.....	Lat 44°03'15", long 114°36'04", Custer County, just below avalanche dam at Four Lakes Basin and 17 mi (27 km) southwest of Clayton.	.38	-	10- 2-72	ae.4
Do..... 13297438	.....do.....	Lat 44°03'06", long 114°35'39", Custer County, 0.1 mi (0.2 km) upstream from Quiet Lake and 17 mi (27 km) southwest of Clayton.	1.01	-	10- 2-72	e.46
Do..... 13297440	.....do.....	Lat 44°03'30", long 114°23'17", in SE¼SE¼ sec.33, T.9 N., R.16 E. (unsurveyed), Custer County, at narrow constriction between two meadows, 0.4 mi (0.6 km) downstream from unnamed lake, 0.5 mi (0.8 km) upstream from mouth of Castle Creek, 0.6 mi (0.9 km) west of Baker Lake, 8.5 mi (13.7 km) upstream from mouth, and 16.5 mi (26.5 km) southwest of Clayton.	2.83	1970-72	10- 3-72 5- 2-73 6- 5-73 7-10-73 9- 5-73	e1.46 ae.5 e8.00 e7.22 e1.60
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 mi (9.6 km) upstream from mouth, and 15.6 mi (25.1 km) southwest of Clayton.	9.94	1970-72	10- 3-72 5- 2-73 6- 5-73 7-10-73 9- 5-73	e7.39 e4.46 e28.1 e23.6 e6.24
Mountain Goat Basin Lake outlet 13297460	Big Boulder Creek	Lat 44°06'43", long 114°37'04", Custer County, 0.5 mi (0.9 km) upstream from Walter Lake and 15 mi (24 km) southwest of Clayton.	.16	-	10- 3-72	e.07
Snowbank tributary 13297462	.....do.....	Lat 44°06'47", long 114°37'00", Custer County, 0.4 mi (0.6 km) upstream from Walter Lake and 15 mi (24 km) southwest of Clayton.	.18	-	10- 3-72	a.07
Tin Cup Lake Creek 13297466	.....do.....	Lat 44°07'03", long 114°35'04", Custer County, 1.4 mi (2.3 km) downstream from Tin Cup Lake and 14 mi (23 km) southwest of Clayton.	1.65	-	10- 3-72 5- 2-73	e1.75 e.62
Big Boulder Creek 13297470	East Fork Salmon River	Lat 44°06'39", long 114°34'13", Custer County, 0.4 mi (0.6 km) downstream from Tin Cup Lake Creek and 14 mi (23 km) southwest of Clayton.	7.20	-	10- 3-72 5- 2-73	e7.82 e3.45
Slack Creek 13297474	Big Boulder Creek	Lat 44°06'39", long 114°31'56", Custer County, 0.3 mi (0.5 km) upstream from Little Redfish Lake Creek and 13 mi (21 km) southwest of Clayton.	.72	-	10- 3-72 5- 2-73	e.31 e.37
Big Boulder Creek 13297480	East Fork Salmon River	Lat 44°07'47", long 114°31'33", in NW¼NE¼ sec.12, T.9 N., R.16 E. (unsurveyed), Custer County, 0.4 mi (0.6 km) upstream from mouth of Jim Creek, 5.2 mi (8.4 km) upstream from mouth, and 10 mi (16.1 km) southwest of Clayton.	12.7	1970-72	10- 3-72 5- 2-73 6- 6-73 7-11-73	e11.0 6.24 e34.9 e25.5

Discharge measurements made at miscellaneous sites during water year 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Salmon River basin--Continued				
Jim Creek 13297485	Big Boulder Creek	Lat 44°07'54", long 114°21'43", in SW¼SW¼ sec.1, T.9 N., R.16 E. (unsurveyed), Custer County, 0.2 mi (0.3 km) upstream from crossing at Livingston Mill, 0.6 mi (0.9 km) upstream from mouth, and 10 mi (16.1 km) southwest of Clayton.	53.4	1970-72	10- 3-72 5- 2-73 6- 6-73 7-11-73 9- 6-73	e3.51 1.84 e4.65 2.95 e2.57
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 mi (0.6 km) upstream from mouth.	27.4	1926-30, 1971-72	10- 2-72 5- 1-73 6- 6-73 7-11-73	e15.6 e9.63 e40.1 27.8
Herd Creek 13297580	.....do.....	Lat 44°06'01", long 114°14'47", Custer County, 0.5 mi (0.9 km) upstream from Lake Creek and 13 mi (21 km) southeast of Clayton.	85.4	-	10- 4-72 5- 3-73	e23.4 e23.0
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 mi (0.8 km) downstream from mouth of Herd Lake, 3.8 mi (6.1 km) upstream from mouth, and 15.2 mi (24.5 km) southeast of Clayton.	10.4	-	5- 6-73	e3.90
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 (152 m) upstream from mouth and 8.8 mi (14.2 km) southeast of Clayton.	112	1971-72	10- 4-72 5- 6-73 7-11-73	e26.1 e31.8 e37.9
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 mi (0.3 km) upstream from Horse Basin Creek and 11 mi (18 km) southeast of Clayton.	37.9	1971-72	5- 7-73	e6.85
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 mi (18 km) southeast of Clayton.	32.6	1971-72	9-28-72 5- 7-73	1.27 e3.99
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 (91 m) upstream from bridge crossing, 0.3 mi (0.5 km) upstream from mouth, and 7.5 mi (12.1 km) southeast of Clayton.	85.0	1971-72	9-28-72 5- 7-73	4.31 e11.2
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 mi (8.4 km) southeast of Clayton.	532	1928-39‡, 1971-72	10- 4-72 5- 1-73	e183 e141
Bayhorse Creek 13298400	.....do.....	Lat 44°22'41", long 114°15'21", in NW¼SW¼SE¼SE¼ sec.7, T.12 N., R.19 E., Custer County, 200 ft (61 m) upstream from mouth and 2.2 mi (3.5 km) southwest of Challis.	-	-	5- 7-73 6- 8-73 7- 9-73	e15.9 e22.6 e.91
Salmon River 13298500	Snake River	Operated as a crest-stage station.	1,800	1928-72‡	5-24-73	3,610
Morse Creek 13301700	Patterson Creek	Operated as a crest-stage station.	18.0	1962-72	5- 8-73 6- 6-73 9-13-73	23.0 48.0 8.67
Hughes Creek 13305800	North Fork Salmon River	Operated as a crest-stage station.	15.7	1962-71	5- 9-73 6- 5-73 9-25-73	9.85 23.7 4.06
		Clearwater River basin				
Rockcliff Creek 13336450	Selway River	Operated as a crest-stage station.	8.44	-	5-10-73 6-13-73	18.9 a5.0
Leggett Creek 13337540	South Fork Clearwater River	Operated as a crest-stage station.	7.78	-	5- 9-73 6-12-73	16.1 a2.5
Peasley Creek 13337700	.....do.....	Operated as a crest-stage station.	14.2	1961-71	6-12-73	a5.0
Canal Gulch Creek 13339700	Orofino Creek	Operated as a crest-stage station.	g6.0	1961-71	6-13-73	a1.0
Deer Creek 13339900	Whiskey Creek	Operated as a crest-stage station.	g6.8	1962-71	3- 1-73	a2.0
		Potlatch River basin				
Bloom Creek 13341300	Potlatch Creek	Operated as a crest-stage station.	3.66	1959-71‡	6-14-73	a5.0
		Clearwater River basin				
Lindsay Creek tributary No. 4 13343010	Lindsay Creek	Operated as a crest-stage station.	2.96	-	4- 3-73 6-13-73	0 0
		Palouse River basin				
Deep Creek 13344800	Palouse River	Operated as a crest-stage station.	36.6	1961-71	2-26-73 6-11-73	a10.0 a.5
Paradise Creek 13346750	South Fork Palouse River	Operated as a crest-stage station.	14.0	-	2-26-73 6-11-73	a4.0 a.05

* Base flow.
† Peak flow.
‡ Operated as a continuous-record gaging station.
a Estimated.
b Flow derived largely from springs.
c Approximately.
d Discharge represents actual spring flow adjusted for diversions.
e Record of chemical analysis and/or suspended sediment of sample is published in Part 2 of this report.
f Drainage area determined at mouth of stream.

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